Final Report of the Commission for the Study of Alternatives to the Panama Canal

Volume XVI

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Volume 2 of 3:
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COMISION DE ESTUDIO
DE LAS ALTERNATIVAS
AL CANAL DE PANAMA
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SUBMITTED TO
Commission for the Study of Alternatives
to the Panama Canal

SUBMITTED BY
Nathan Associates Inc., Arlington, Virginia
Daiwa Institute of Research Ltd., Tokyo, Japan
Intercarib, S.A., Panama City, Panama
Middendorf & Co., Inc., Washington, D.C.
Port Authority of New York and New Jersey,
New York, New York
TAMS Consultants, Inc., New York, New York

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MAXIMUM NON-DIVERTING TOLL RATES

Table A-1. Summary of Estimated Revenues by Project Scenario and Year from Maximum Non-Diverting Toll Rates (1990 US$millions)

Year and Project Scenario	Laden	Ballast	Total
2020			
Status Quo a/	3,393	68	3,461
150,000 DWT	3,932	82	4,014
200,000 DWT	3,980	82	4,062
250,000 DWT	4,035	83	4,118
2060			
Status Quo a/	5,182	69	5,251
150,000 DWT	6,224	131	6,355
200,000 DWT	6,402	139	6,541
250,000 DWT	6,478	131	6,609

a/ Status Quo is a 65,000 DWT Scenario.

Source: Nathan Associates Inc., based on "no toll" forecasts of traffic and transportation costs provided by The WEFA Group.

MAXIMUM NON-DIVERTING TOLL RATES, STATUS QUO SCENARIO, 2020

Table A-2. Laden Transits, Tons Carried, and Toll Revenue, Maximum Non-Diverting Toll Rates, Status Quo Scenario, 2020, by Ship Type

	Transits				Tons Carried(thousands)				Revenue(1990 US$thousands)			
Ship Type	Canal	Diverted	Total	Diverted as a Percent of Total	Canal	Diverted	Total	Diverted as a Percent of Total	Canal	Lost a/	Total	Lost as a Percent of Total
Container-Breakbulk	1,325	0	1,325	0.00	20,519	0	20,519	0.00	500,472	0	500,472	0.00
Dry Bulk Carriers	3,477	0	3,477	0.00	123,399	0	123,399	0.00	923,795	0	923,795	0.00
Chemical Tankers	994	0	994	0.00	22,925	0	22,925	0.00	400,811	0	400,811	0.00
Full Container Ships	1,307	0	1,307	0.00	22,539	0	22,539	0.00	296,622	0	296,622	0.00
General Cargo Ships	758	0	758	0.00	7,499	0	7,499	0.00	166,380	0	166,380	0.00
Liquid Gas Carriers	172	0	172	0.00	1,947	0	1,947	0.00	81,603	0	81,603	0.00
Passenger Ships	336	0	336	0.00	0	0	0	0.00	6,145	0	6,145	0.00
Refrigerated Ships	2,847	0	2,847	0.00	10,266	0	10,266	0.00	583,646	0	583,646	0.00
Roll-On Roll-Off	213	0	213	0.00	1,762	0	1,762	0.00	77,386	0	77,386	0.00
Tankers	693	0	693	0.00	20,068	0	20,068	0.00	175,891	0	175,891	0.00
Vehicle Carriers	623	0	623	0.00	2,424	0	2,424	0.00	180,686	0	180,686	0.00
Total	12,744	0	12,744	0.00	233,349	0	233,349	0.00	3,393,437	0	3,393,437	0.00

Notes: These calculations do not include all transits and tons carried forecast by the WEFA Group. For some ship-type and trade-route combinations (accounting for a total of 18 transits and 179803 tons), vessel costs were not available for every DWT size interval. As a result, these transits and tons were excluded. In addition, for 2098 transits and 35979616 tons, the cost by way of the Panama Canal without a toll was higher than the least costly alternative route. As a result, these transits and tons were excluded. A fee of $0.40 per Panama Canal net ton has also been included to account for charges such as handling and agency fees incurred when transitting the Canal. The extra fee is only used to determine diversion status by adding it to cost per ton carried and is not included in the revenue calculations.

a/ Revenue lost from diversions is measured as the revenue generated by the maximum, nondiverting toll rate increase.

Source: Nathan Associates Inc., based on forecasts of traffic and transportation costs provided by the WEFA Group.

Table A-3. Ballast Transits, Tons Carried, and Toll Revenue, Current Toll Structure and Rates, Status Quo Scenario, 2020, by Ship Type

	Transits				Tons Carried(thousands)				Revenue(1990 US$thousands)			
Ship Type	Canal	Diverted	Total	Diverted as a Percent of Total	Canal	Diverted	Total	Diverted as a Percent of Total	Canal	Lost	Total	Lost as a Percent of Total
Container-Breakbulk	41	0	41	0.00	0	0	0	0.00	1,019	0	1,019	0.00
Dry Bulk Carriers	375	0	375	0.00	0	0	0	0.00	12,650	0	12,650	0.00
Chemical Tankers	82	0	82	0.00	0	0	0	0.00	1,758	0	1,758	0.00
Full Container Ships	10	0	10	0.00	0	0	0	0.00	307	0	307	0.00
General Cargo Ships	140	0	140	0.00	0	0	0	0.00	1,531	0	1,531	0.00
Liquid Gas Carriers	128	0	128	0.00	0	0	0	0.00	3,730	0	3,730	0.00
Passenger Ships	11	0	11	0.00	0	0	0	0.00	131	0	131	0.00
Refrigerated Ships	932	0	932	0.00	0	0	0	0.00	13,778	0	13,778	0.00
Roll-On Roll-Off	30	0	30	0.00	0	0	0	0.00	798	0	798	0.00
Tankers	333	0	333	0.00	0	0	0	0.00	10,013	0	10,013	0.00
Vehicle Carriers	383	0	383	0.00	0	0	0	0.00	22,613	0	22,613	0.00
Total	2,465	0	2,465	0.00	0	0	0	0.00	68,330	0	68,330	0.00

Note: Diversions of ballast transits are computed by diverting a proportion of ballast transits equal to lost revenue as a percent of total potential revenue for a particular laden ship type. See last column on previous table.

Source: Nathan Associates Inc., based on forecasts of traffic and transportation costs provided by the WEFA Group.

Table A-4. Laden Transits, Tons Carried, and Toll Revenue, Maximum Non-Diverting Toll Rates, Status Quo Scenario, 2020, by Ship Type, Diversion Status, and Trade Route (1990 US$, except when noted)

Ship Type, Diversion Status, and Trade Route	Transits	Cargo Tonnage Carried (thousands)	Revenue (thousands) a/	Current Toll Schedule: Toll Per Panama Canal Net Ton	Current Toll Schedule: Toll Per Cargo Ton Carried	New Toll Schedule: Toll Per Panama Canal Net Ton	New Toll Schedule: Toll Per Cargo Ton Carried	Total Transportation Costs per Ton Carried: Via Panama Canal: With Current Toll Structure	Via Panama Canal: With New Toll Structure	Via Panama Canal: Percent Increase	Via Least Costly Alternative Route
Container-Breakbulk											
Non-Diverted Transits											
Africa-C.A.W.C.	3	77	2,388	2.41	1.85	60.52	46.55	68.56	113.26	65.19	113.26
Africa-Canada W.C.	0	2	37	2.41	1.87	18.89	14.64	88.16	100.93	14.49	100.93
Africa-U.S.W.C.	1	9	198	2.41	1.87	20.10	15.58	89.16	102.87	15.38	102.87
Asia-Canada E.C.	0	4	67	2.41	1.86	12.16	9.40	88.65	96.19	8.50	96.19
Asia-C.A.E.C.	91	837	25,658	2.41	1.87	21.59	16.71	93.07	107.91	15.95	107.91
Asia-S.A.E.C.	27	175	1,722	2.41	1.87	5.03	3.90	100.20	102.23	2.03	102.23
Asia-U.S.E.C.	82	1,031	35,673	2.41	1.86	31.27	24.14	94.52	116.80	23.57	116.80
C.A.W.C.-Africa	3	70	2,755	2.41	1.87	63.64	49.37	73.06	120.56	65.02	120.56
C.A.W.C.-C.A.E.C.	7	118	5,084	2.41	1.86	51.76	40.02	49.37	87.53	77.28	87.53
C.A.W.C.-Europe	15	110	7,415	2.41	1.87	38.09	29.51	63.64	91.28	43.44	91.28
C.A.W.C.-S.A.E.C.	12	6	1,359	2.41	1.87	8.86	6.87	69.19	74.19	7.23	74.19
C.A.W.C.-U.S.E.C.	3	19	1,975	2.41	1.87	49.40	38.32	55.40	91.85	65.80	91.85
Canada E.C.-Asia	14	367	1,571	2.41	1.85	6.51	5.00	90.68	93.83	3.47	93.83
Canada E.C.-C.A.W.C.	1	9	589	2.41	1.87	51.70	40.07	54.09	92.29	70.63	92.29
Canada E.C.-Oceania	1	13	26	2.41	1.87	2.66	2.06	102.74	102.93	0.19	102.93
Canada E.C.-S.A.W.C.	1	10	143	2.41	1.85	19.40	14.92	62.78	75.85	20.81	75.85
Canada E.C.-U.S.W.C.	0	0	3	2.41	1.85	49.39	38.01	69.71	105.87	51.86	105.87
Canada W.C.-Africa	8	179	2,074	2.41	1.85	18.11	13.93	88.66	100.74	13.62	100.74
Canada W.C.-Europe	63	1,844	41,265	2.41	1.85	36.43	28.00	77.86	104.01	33.58	104.01
Canada W.C.-S.A.E.C.	11	210	6,833	2.41	1.87	50.79	39.40	71.19	108.72	52.72	108.72
Canada W.C.-U.S.E.C.	8	149	5,425	2.41	1.85	50.70	39.00	64.85	102.00	57.28	102.00
C.A.E.C.-Asia	9	196	2,521	2.41	1.87	21.35	16.54	92.37	107.04	15.89	107.04
C.A.E.C.-C.A.W.C.	7	27	4,857	2.41	1.87	54.01	41.86	50.30	90.29	79.51	90.29

(Continued)

Table A-4. Laden Transits, Tons Carried, and Toll Revenue, Maximum Non-Diverting Toll Rates, Status Quo Scenario, 2020, by Ship Type, Diversion Status, and Trade Route (1990 US$, except when noted)(continued)

Ship Type, Diversion Status, and Trade Route	Transits	Cargo Tonnage Carried (thousands)	Revenue (thousands) a/	Current Toll Schedule: Toll Per Panama Canal Net Ton	Current Toll Schedule: Toll Per Cargo Ton Carried	New Toll Schedule: Toll Per Panama Canal Net Ton	New Toll Schedule: Toll Per Cargo Ton Carried	Total Transportation Costs per Ton Carried, Via Panama Canal: With Current Toll Structure	Total Transportation Costs per Ton Carried, Via Panama Canal: With New Toll Structure	Total Transportation Costs per Ton Carried, Via Panama Canal: Percent Increase	Total Transportation Costs per Ton Carried: Via Least Costly Alternative Route
Container-Breakbulk (continued)											
Non-Diverted Transits (continued)											
C.A.E.C.-Canada W.C.	2	31	1,317	2.41	1.87	50.61	39.22	63.73	101.08	58.61	101.08
C.A.E.C.-Oceania	1	20	394	2.41	1.87	25.07	19.43	90.16	107.72	19.48	107.72
C.A.E.C.-S.A.W.C.	18	144	5,011	2.41	1.87	21.20	16.43	61.88	76.44	23.53	76.44
C.A.E.C.-U.S.W.C.	4	73	2,265	2.41	1.86	43.45	33.56	61.48	93.18	51.56	93.18
Europe-C.A.W.C.	22	137	18,207	2.41	1.87	64.26	49.80	64.73	112.66	74.05	112.66
Europe-Canada W.C.	4	123	2,690	2.41	1.85	32.54	25.00	80.14	103.29	28.88	103.29
Europe-S.A.W.C.	91	752	23,487	2.41	1.87	20.10	15.58	85.37	99.08	16.06	99.08
Europe-U.S.W.C.	24	732	15,512	2.41	1.85	33.85	26.01	79.27	103.43	30.48	103.43
Oceania-Canada E.C.	2	46	119	2.41	1.85	2.60	2.00	93.85	94.00	0.16	94.00
Oceania-C.A.E.C.	4	42	1,300	2.41	1.87	25.35	19.66	90.85	108.64	19.58	108.64
Oceania-S.A.E.C.	7	95	48	2.41	1.86	0.49	0.38	84.47	82.99	-1.76	82.99
S.A.E.C.-C.A.W.C.	9	141	1,026	2.41	1.87	8.76	6.79	68.77	73.69	7.16	73.69
S.A.E.C.-Canada W.C.	11	152	1,489	2.41	1.87	10.13	7.85	87.94	93.92	6.80	93.92
S.A.E.C.-U.S.W.C.	38	572	2,956	2.41	1.87	5.90	4.57	74.36	77.06	3.64	77.06
S.A.W.C.-Canada E.C.	1	2	260	2.41	1.87	21.48	16.66	66.27	81.06	22.32	81.06
S.A.W.C.-C.A.E.C.	13	108	3,573	2.41	1.87	21.48	16.66	62.27	77.06	23.75	77.06
S.A.W.C.-Europe	191	3,350	56,800	2.41	1.87	23.42	18.15	85.09	101.37	19.14	101.37
S.A.W.C.-U.S.E.C.	108	1,055	34,710	2.41	1.87	25.95	20.13	59.46	77.72	30.71	77.72
U.S.E.C.-Asia	172	4,347	85,953	2.41	1.86	30.43	23.43	91.67	113.24	23.54	113.24
U.S.E.C.-C.A.W.C.	10	201	7,660	2.41	1.86	57.71	44.63	46.17	88.94	92.62	88.94
U.S.E.C.-S.A.W.C.	160	1,595	53,180	2.41	1.87	25.85	20.04	59.27	77.44	30.66	77.44
U.S.E.C.-U.S.W.C.	0	0	9	2.41	1.86	50.65	39.00	56.86	94.00	65.33	94.00
U.S.W.C.-Africa	9	143	4,166	2.41	1.85	23.62	18.15	82.33	98.63	19.80	98.63

(Continued)

Table A-4. Laden Transits, Tons Carried, and Toll Revenue, Maximum Non-Diverting Toll Rates, Status Quo Scenario, 2020, by Ship Type, Diversion Status, and Trade Route (1990 US$, except when noted)(continued)

Ship Type, Diversion Status, and Trade Route	Transits	Cargo Tonnage Carried (thousands)	Revenue (thousands) a/	Current Toll Schedule: Toll Per Panama Canal Net Ton	Current Toll Schedule: Toll Per Cargo Ton Carried	New Toll Schedule: Toll Per Panama Canal Net Ton	New Toll Schedule: Toll Per Cargo Ton Carried	Total Transportation Costs per Ton Carried: Via Panama Canal: With Current Toll Structure	Via Panama Canal: With New Toll Structure	Via Panama Canal: Percent Increase	Via Least Costly Alternative Route
Container-Breakbulk (continued)											
Non-Diverted Transits (continued)											
U.S.W.C.-Canada E.C.	2	40	1,012	2.41	1.85	45.50	35.00	66.85	100.00	49.58	100.00
U.S.W.C.-C.A.E.C.	9	63	5,022	2.41	1.87	45.26	35.09	63.58	96.80	52.25	96.80
U.S.W.C.-Europe	38	1,010	22,109	2.41	1.85	33.10	25.46	80.25	103.86	29.41	103.86
U.S.W.C.-S.A.E.C.	4	79	346	2.41	1.87	6.28	4.87	76.06	79.06	3.94	79.06
U.S.W.C.-U.S.E.C.	0	3	212	2.41	1.85	52.61	40.48	58.25	96.88	66.31	96.88
Subtotal	1,325	20,519	500,472	2.41	1.86	27.05	20.91	80.94	100.64	24.34	100.64
Dry Bulk Carriers											
Non-Diverted Transits											
Africa-C.A.W.C.	15	483	5,606	2.41	1.35	22.08	12.40	15.05	26.10	73.38	26.10
Africa-Canada W.C.	36	1,354	4,239	2.41	1.32	6.19	3.40	17.69	19.77	11.73	19.77
Africa-S.A.W.C.	5	128	1,187	2.41	1.35	14.96	8.40	18.05	25.10	39.03	25.10
Africa-U.S.W.C.	7	161	1,054	2.41	1.31	7.52	4.09	16.45	19.23	16.90	19.23
Asia-Canada E.C.	9	302	775	2.41	1.29	4.10	2.20	17.41	18.32	5.21	18.32
Asia-C.A.E.C.	21	345	3,840	2.41	1.35	10.44	5.83	18.17	22.65	24.69	22.65
Asia-S.A.E.C.	6	152	125	2.41	1.35	1.25	0.70	21.95	21.30	-2.98	21.30
Asia-U.S.E.C.	259	6,345	62,617	2.41	1.32	12.38	6.76	16.82	22.26	32.37	22.26
C.A.W.C.-Africa	1	34	489	2.41	1.34	22.00	12.22	14.93	25.81	72.89	25.81
C.A.W.C.-C.A.E.C.	36	961	10,391	2.41	1.35	16.45	9.18	7.94	15.77	98.74	15.77
C.A.W.C.-Europe	17	462	4,168	2.41	1.33	12.96	7.15	12.42	18.24	46.87	18.24
C.A.W.C.-S.A.E.C.	10	136	264	2.41	1.35	1.51	0.85	12.15	11.65	-4.14	11.65
C.A.W.C.-U.S.E.C.	41	1,292	14,592	2.41	1.33	19.57	10.82	8.06	17.55	117.67	17.55
Canada E.C.-Asia	75	2,498	9,111	2.41	1.31	6.15	3.35	18.36	20.40	11.09	20.40

(Continued)

Table A-4. Laden Transits, Tons Carried, and Toll Revenue, Maximum Non-Diverting Toll Rates, Status Quo Scenario, 2020, by Ship Type, Diversion Status, and Trade Route (1990 US$, except when noted)(continued)

Ship Type, Diversion Status, and Trade Route	Transits	Cargo Tonnage Carried (thousands)	Revenue (thousands) a/	Current Toll Schedule: Toll Per Panama Canal Net Ton	Current Toll Schedule: Toll Per Cargo Ton Carried	New Toll Schedule: Toll Per Panama Canal Net Ton	New Toll Schedule: Toll Per Cargo Ton Carried	Total Transportation Costs per Ton Carried: Via Panama Canal: With Current Toll Structure	Via Panama Canal: With New Toll Structure	Via Panama Canal: Percent Increase	Via Least Costly Alternative Route
Dry Bulk Carriers (continued)											
Non-Diverted Transits (continued)											
Canada E.C.-Oceania	3	58	282	2.41	1.34	4.60	2.56	19.86	21.08	6.14	21.08
Canada E.C.-S.A.W.C.	6	163	687	2.41	1.33	6.37	3.53	12.78	14.98	17.17	14.98
Canada W.C.-Africa	104	3,500	12,536	2.41	1.32	6.20	3.40	17.34	19.42	11.98	19.42
Canada W.C.-C.A.E.C.	5	105	1,306	2.41	1.35	17.10	9.60	13.05	21.30	63.18	21.30
Canada W.C.-Europe	261	9,815	70,235	2.41	1.29	12.26	6.58	15.96	21.25	33.12	21.25
Canada W.C.-U.S.E.C.	66	1,569	22,611	2.41	1.35	20.21	11.35	13.15	23.15	76.00	23.15
C.A.E.C.-Asia	22	639	3,744	2.41	1.35	10.15	5.70	17.95	22.30	24.21	22.30
C.A.E.C.-C.A.W.C.	26	682	7,494	2.41	1.35	17.18	9.65	8.15	16.45	101.76	16.45
C.A.E.C.-Canada W.C.	2	55	592	2.41	1.35	17.63	9.90	13.05	21.60	65.47	21.60
C.A.E.C.-Oceania	1	11	64	2.41	1.35	7.12	4.00	19.95	22.60	13.26	22.60
C.A.E.C.-S.A.W.C.	13	313	1,433	2.41	1.35	6.59	3.70	11.15	13.50	21.04	13.50
C.A.E.C.-U.S.W.C.	9	236	2,654	2.41	1.35	17.10	9.60	12.05	20.30	68.42	20.30
Europe-C.A.W.C.	32	797	9,035	2.41	1.35	16.92	9.50	13.05	21.20	62.41	21.20
Europe-Canada W.C.	12	286	2,231	2.41	1.33	10.24	5.63	16.94	21.24	25.42	21.24
Europe-S.A.W.C.	12	298	292	2.41	1.35	1.42	0.80	16.05	15.50	-3.45	15.50
Europe-U.S.W.C.	126	3,102	23,438	2.41	1.32	9.86	5.42	16.00	20.10	25.59	20.10
Middle East-S.A.W.C.	1	52	167	2.41	1.27	5.71	3.00	14.27	16.00	12.15	16.00
Oceania-Canada E.C.	23	661	1,816	2.41	1.35	4.72	2.65	19.95	21.25	6.50	21.25
Oceania-C.A.E.C.	6	166	885	2.41	1.35	8.10	4.55	19.05	22.25	16.78	22.25
Oceania-U.S.E.C.	141	6,406	10,837	2.41	1.26	2.98	1.56	15.77	16.07	1.88	16.07
S.A.E.C.-Asia	73	2,384	6,723	2.41	1.32	4.85	2.66	17.06	18.40	7.84	18.40
S.A.E.C.-C.A.W.C.	8	247	210	2.41	1.35	1.51	0.85	12.15	11.65	-4.14	11.65
S.A.E.C.-Canada W.C.	3	66	139	2.41	1.35	2.94	1.65	17.05	17.35	1.74	17.35

(Continued)

Table A-4. Laden Transits, Tons Carried, and Toll Revenue, Maximum Non-Diverting Toll Rates, Status Quo Scenario, 2020, by Ship Type, Diversion Status, and Trade Route (1990 US$, except when noted)(continued)

Ship Type, Diversion Status, and Trade Route	Transits	Cargo Tonnage Carried (thousands)	Revenue (thousands) a/	Current Toll Schedule: Toll Per Panama Canal Net Ton	Current Toll Schedule: Toll Per Cargo Ton Carried	New Toll Schedule: Toll Per Panama Canal Net Ton	New Toll Schedule: Toll Per Cargo Ton Carried	Total Transportation Costs per Ton Carried: Via Panama Canal: With Current Toll Structure	Via Panama Canal: With New Toll Structure	Via Panama Canal: Percent Increase	Via Least Costly Alternative Route
Dry Bulk Carriers (continued)											
Non-Diverted Transits (continued)											
S.A.E.C.-U.S.W.C.	31	1,128	631	2.41	1.28	0.88	0.47	13.48	12.67	-6.03	12.67
S.A.W.C.-Africa	4	157	1,158	2.41	1.29	14.60	7.83	14.00	20.54	46.69	20.54
S.A.W.C.-Canada E.C.	0	10	36	2.41	1.35	6.59	3.70	13.15	15.50	17.84	15.50
S.A.W.C.-C.A.E.C.	8	144	857	2.41	1.35	6.59	3.70	11.15	13.50	21.04	13.50
S.A.W.C.-Europe	172	5,176	9,235	2.41	1.34	3.02	1.68	15.62	15.96	2.18	15.96
S.A.W.C.-U.S.E.C.	56	1,732	9,609	2.41	1.35	9.96	5.56	10.97	15.18	38.44	15.18
U.S.E.C.-Asia	1,108	48,574	460,188	2.41	1.27	16.97	8.96	15.30	22.99	50.24	22.99
U.S.E.C.-C.A.W.C.	212	6,232	74,117	2.41	1.35	20.34	11.38	8.22	18.25	122.07	18.25
U.S.E.C.-Canada W.C.	1	30	305	2.41	1.33	18.77	10.37	12.67	21.71	71.33	21.71
U.S.E.C.-Oceania	21	646	2,082	2.41	1.34	5.64	3.14	18.67	20.47	9.63	20.47
U.S.E.C.-S.A.W.C.	54	1,456	9,269	2.41	1.35	10.02	5.61	11.05	15.31	38.57	15.31
U.S.E.C.-U.S.W.C.	1	0	227	2.41	1.35	18.70	10.50	12.15	21.30	75.26	21.30
U.S.W.C.-Africa	133	4,599	19,742	2.41	1.30	6.93	3.73	16.19	18.62	15.03	18.62
U.S.W.C.-Canada E.C.	7	217	2,009	2.41	1.34	15.64	8.71	13.89	21.26	53.04	21.26
U.S.W.C.-C.A.E.C.	2	48	530	2.41	1.35	17.10	9.60	12.05	20.30	68.42	20.30
U.S.W.C.-Europe	156	6,524	33,006	2.41	1.28	8.97	4.76	14.48	17.96	24.04	17.96
U.S.W.C.-S.A.E.C.	11	279	244	2.41	1.35	1.34	0.75	16.05	15.45	-3.76	15.45
U.S.W.C.-U.S.E.C.	7	183	2,679	2.41	1.33	19.36	10.65	12.16	21.48	76.70	21.48
Subtotal	3,477	123,399	923,795	2.41	1.30	12.54	6.76	14.99	20.49	36.68	20.49
Chemical Tankers											
Non-Diverted Transits											
Africa-S.A.W.C.	1	32	528	2.41	1.34	30.60	17.00	42.34	58.00	36.99	58.00

(Continued)

Table A-4. Laden Transits, Tons Carried, and Toll Revenue, Maximum Non-Diverting Toll Rates, Status Quo Scenario, 2020, by Ship Type, Diversion Status, and Trade Route (1990 US$, except when noted)(continued)

Ship Type, Diversion Status, and Trade Route	Transits	Cargo Tonnage Carried (thousands)	Revenue (thousands) a/	Current Toll Schedule: Toll Per Panama Canal Net Ton	Current Toll Schedule: Toll Per Cargo Ton Carried	New Toll Schedule: Toll Per Panama Canal Net Ton	New Toll Schedule: Toll Per Cargo Ton Carried	Total Transportation Costs per Ton Carried, Via Panama Canal: With Current Toll Structure	Total Transportation Costs per Ton Carried, Via Panama Canal: With New Toll Structure	Total Transportation Costs per Ton Carried, Via Panama Canal: Percent Increase	Total Transportation Costs per Ton Carried: Via Least Costly Alternative Route
Chemical Tankers (continued)											
Non-Diverted Transits (continued)											
Asia-C.A.E.C.	3	34	743	2.41	1.34	32.85	18.25	52.46	69.37	32.24	69.37
Asia-S.A.E.C.	3	16	240	2.41	1.34	5.40	3.00	49.34	51.00	3.37	51.00
Asia-U.S.E.C.	32	537	11,270	2.41	1.34	30.45	16.93	44.74	60.33	34.85	60.33
C.A.W.C.-C.A.E.C.	23	139	6,596	2.41	1.34	75.60	42.00	36.34	77.00	111.89	77.00
C.A.W.C.-Europe	8	126	2,441	2.41	1.34	35.21	19.56	37.28	55.50	48.88	55.50
C.A.W.C.-U.S.E.C.	38	470	16,078	2.41	1.34	56.50	31.42	28.06	58.14	107.20	58.14
Canada W.C.-Europe	4	87	1,501	2.41	1.34	27.00	15.00	41.34	55.00	33.05	55.00
Canada W.C.-U.S.E.C.	32	744	21,028	2.41	1.34	40.28	22.40	31.74	52.80	66.35	52.80
C.A.E.C.-Asia	9	248	3,474	2.41	1.34	25.42	14.12	41.66	54.44	30.68	54.44
C.A.E.C.-C.A.W.C.	9	207	5,416	2.41	1.34	37.80	21.00	21.34	41.00	92.14	41.00
C.A.E.C.-S.A.W.C.	11	186	2,259	2.41	1.34	19.04	10.58	31.03	40.27	29.78	40.27
C.A.E.C.-U.S.W.C.	1	10	402	2.41	1.34	72.00	40.00	51.34	90.00	75.31	90.00
Europe-C.A.W.C.	6	30	1,312	2.41	1.34	55.80	31.00	56.34	86.00	52.65	86.00
Europe-S.A.W.C.	6	60	294	2.41	1.34	8.62	4.79	55.90	59.35	6.17	59.35
Europe-U.S.W.C.	9	182	2,920	2.41	1.34	27.74	15.41	42.34	56.41	33.23	56.41
Oceania-U.S.E.C.	18	455	3,559	2.41	1.34	11.05	6.16	40.54	45.36	11.88	45.36
S.A.E.C.-C.A.W.C.	8	61	433	2.41	1.34	11.32	6.29	46.87	51.82	10.56	51.82
S.A.E.C.-U.S.W.C.	2	84	90	2.41	1.35	1.78	1.00	30.35	30.00	-1.16	30.00
S.A.W.C.-C.A.E.C.	22	79	3,474	2.41	1.34	27.81	15.45	42.38	56.49	33.30	56.49
S.A.W.C.-Europe	8	92	420	2.41	1.34	7.88	4.38	51.64	54.68	5.89	54.68
S.A.W.C.-U.S.E.C.	7	47	1,413	2.41	1.34	29.26	16.27	38.35	53.28	38.93	53.28
U.S.E.C.-Asia	565	15,828	244,627	2.41	1.34	28.68	15.95	42.38	56.99	34.47	56.99
U.S.E.C.-C.A.W.C.	18	146	6,442	2.41	1.34	68.60	38.11	33.25	70.02	110.59	70.02

(Continued)

Table A-4. Laden Transits, Tons Carried, and Toll Revenue, Maximum Non-Diverting Toll Rates, Status Quo Scenario, 2020, by Ship Type, Diversion Status, and Trade Route (1990 US$, except when noted)(continued)

Ship Type, Diversion Status, and Trade Route	Transits	Cargo Tonnage Carried (thousands)	Revenue (thousands) a/	Current Toll Schedule: Toll Per Panama Canal Net Ton	Current Toll Schedule: Toll Per Cargo Ton Carried	New Toll Schedule: Toll Per Panama Canal Net Ton	New Toll Schedule: Toll Per Cargo Ton Carried	Total Transportation Costs per Ton Carried: Via Panama Canal: With Current Toll Structure	Via Panama Canal: With New Toll Structure	Via Panama Canal: Percent Increase	Via Least Costly Alternative Route
Chemical Tankers (continued)											
Non-Diverted Transits (continued)											
U.S.E.C.-Canada W.C.	5	36	1,555	2.41	1.34	75.43	41.91	55.76	96.33	72.76	96.33
U.S.E.C.-Oceania	17	409	2,888	2.41	1.34	12.45	6.93	44.76	50.35	12.49	50.35
U.S.E.C.-S.A.W.C.	45	434	8,382	2.41	1.34	30.28	16.84	39.65	55.15	39.09	55.15
U.S.E.C.-U.S.W.C.	50	1,635	34,824	2.41	1.35	33.88	18.96	25.70	43.31	68.53	43.31
U.S.W.C.-C.A.E.C.	2	38	1,129	2.41	1.34	36.00	20.00	29.34	48.00	63.61	48.00
U.S.W.C.-Europe	16	215	4,391	2.41	1.34	30.61	17.02	45.63	61.31	34.36	61.31
U.S.W.C.-S.A.E.C.	0	3	8	2.41	1.34	3.60	2.00	37.34	38.00	1.77	38.00
U.S.W.C.-U.S.E.C.	15	256	10,673	2.41	1.35	33.89	18.96	25.80	43.41	68.27	43.41
Subtotal	994	22,925	400,811	2.41	1.34	30.03	16.71	40.06	55.35	38.16	55.35
Full Container Ships											
Non-Diverted Transits											
Africa-U.S.W.C.	0	2	41	2.41	4.48	21.38	39.74	246.46	281.72	14.31	281.72
Asia-Canada E.C.	35	682	9,231	2.41	4.65	8.92	17.21	210.85	223.41	5.96	223.41
Asia-S.A.E.C.	2	7	103	2.41	4.48	4.79	8.90	274.32	278.74	1.61	278.74
Asia-U.S.E.C. (low inv. cost)	228	3,885	37,322	2.41	4.69	4.75	9.25	247.19	251.75	1.84	251.75
C.A.W.C.-C.A.E.C.	1	5	544	2.41	4.38	46.33	84.18	129.97	209.77	61.40	209.77
C.A.W.C.-Europe	2	22	1,175	2.41	4.36	32.02	57.92	153.30	206.86	34.94	206.86
C.A.W.C.-S.A.E.C.	0	4	35	2.41	4.38	6.22	11.29	163.77	170.68	4.22	170.68
C.A.W.C.-U.S.E.C.	0	3	201	2.41	4.48	52.39	97.40	157.98	250.90	58.82	250.90
Canada E.C.-Asia	32	561	3,673	2.41	4.50	5.22	9.74	230.54	235.78	2.27	235.78
Canada E.C.-Oceania	12	145	474	2.41	4.43	2.45	4.50	259.72	259.79	0.03	259.79
Canada E.C.-U.S.W.C.	5	136	6,593	2.41	4.73	35.14	69.00	160.73	225.00	39.98	225.00

(Continued)

Table A-4. Laden Transits, Tons Carried, and Toll Revenue, Maximum Non-Diverting Toll Rates, Status Quo Scenario, 2020, by Ship Type, Diversion Status, and Trade Route (1990 US$, except when noted)(continued)

Ship Type, Diversion Status, and Trade Route	Transits	Cargo Tonnage Carried (thousands)	Revenue (thousands) a/	Current Toll Schedule: Toll Per Panama Canal Net Ton	Current Toll Schedule: Toll Per Cargo Ton Carried	New Toll Schedule: Toll Per Panama Canal Net Ton	New Toll Schedule: Toll Per Cargo Ton Carried	Total Transportation Costs per Ton Carried, Via Panama Canal: With Current Toll Structure	Total Transportation Costs per Ton Carried, Via Panama Canal: With New Toll Structure	Total Transportation Costs per Ton Carried, Via Panama Canal: Percent Increase	Total Transportation Costs per Ton Carried: Via Least Costly Alternative Route
Full Container Ships (continued)											
Non-Diverted Transits (continued)											
Canada W.C.-Europe	32	491	21,126	2.41	4.46	36.62	67.81	212.22	275.57	29.85	275.57
C.A.E.C.-Asia	8	99	3,035	2.41	4.41	17.86	32.68	217.31	245.58	13.01	245.58
C.A.E.C.-C.A.W.C.	1	3	444	2.41	4.51	77.09	144.39	184.21	324.09	75.93	324.09
C.A.E.C.-Oceania	0	3	97	2.41	4.48	26.71	49.68	248.46	293.66	18.19	293.66
C.A.E.C.-S.A.W.C.	6	6	665	2.41	4.64	22.80	43.87	187.15	226.38	20.96	226.38
C.A.E.C.-U.S.W.C.	1	12	689	2.41	4.38	38.56	70.16	154.50	220.28	42.57	220.28
Europe-C.A.W.C.	0	1	88	2.41	4.36	52.98	95.90	153.30	244.84	59.71	244.84
Europe-Canada W.C.	24	311	13,558	2.41	4.43	34.53	63.45	224.73	283.75	26.26	283.75
Europe-S.A.W.C.	51	731	21,935	2.41	4.36	18.77	33.94	194.28	223.86	15.23	223.86
Europe-U.S.W.C.	167	2,735	6,941	2.41	4.55	1.85	3.50	218.21	217.16	-0.48	217.16
Middle East-U.S.W.C.	8	116	2,411	2.41	4.42	17.12	31.40	221.09	248.07	12.20	248.07
Oceania-C.A.E.C.	2	24	670	2.41	4.48	26.71	49.68	248.46	293.66	18.19	293.66
S.A.E.C.-C.A.W.C.	0	4	46	2.41	4.48	8.53	15.86	193.78	205.16	5.87	205.16
S.A.E.C.-U.S.W.C.	1	9	229	2.41	4.48	22.44	41.74	179.84	217.10	20.72	217.10
S.A.W.C.-C.A.E.C.	0	1	37	2.41	4.50	24.39	45.56	191.66	232.72	21.42	232.72
S.A.W.C.-Europe	103	1,966	44,815	2.41	4.36	18.76	33.94	194.27	223.85	15.23	223.85
S.A.W.C.-U.S.E.C.	46	483	16,439	2.41	4.48	28.31	52.66	170.90	219.08	28.19	219.08
U.S.E.C.-Asia (low inv. cost)	275	6,579	47,909	2.41	4.67	5.18	10.05	247.48	252.86	2.17	252.86
U.S.E.C.-C.A.W.C.	6	55	5,120	2.41	4.48	64.12	119.28	136.10	250.90	84.35	250.90
U.S.E.C.-S.A.W.C.	57	487	20,359	2.41	4.48	28.31	52.66	170.90	219.08	28.19	219.08
U.S.E.C.-U.S.W.C.	1	26	1,567	2.41	4.71	41.09	80.28	144.82	220.39	52.18	220.39
U.S.W.C.-Africa	0	0	0	2.41	5.04	17.20	36.00	197.04	228.00	15.71	228.00
U.S.W.C.-Canada E.C.	0	5	312	2.41	4.51	38.70	72.39	163.61	231.49	41.49	231.49

(Continued)

Table A-4. Laden Transits, Tons Carried, and Toll Revenue, Maximum Non-Diverting Toll Rates, Status Quo Scenario, 2020, by Ship Type, Diversion Status, and Trade Route (1990 US$, except when noted)(continued)

Ship Type, Diversion Status, and Trade Route	Transits	Cargo Tonnage Carried (thousands)	Revenue (thousands) a/	Current Toll Schedule: Toll Per Panama Canal Net Ton	Current Toll Schedule: Toll Per Cargo Ton Carried	New Toll Schedule: Toll Per Panama Canal Net Ton	New Toll Schedule: Toll Per Cargo Ton Carried	Total Transportation Costs per Ton Carried: Via Panama Canal: With Current Toll Structure	Via Panama Canal: With New Toll Structure	Via Panama Canal: Percent Increase	Via Least Costly Alternative Route
Full Container Ships (continued)											
Non-Diverted Transits (continued)											
U.S.W.C.-C.A.E.C.	7	42	2,930	2.41	4.46	39.63	73.29	159.01	227.84	43.29	227.84
U.S.W.C.-Europe	171	2,628	8,434	2.41	4.57	2.13	4.05	219.57	219.05	-0.24	219.05
U.S.W.C.-Middle East	8	103	984	2.41	4.42	6.76	12.40	221.46	229.44	3.60	229.44
U.S.W.C.-U.S.E.C.	13	168	16,390	2.41	4.59	42.88	81.71	145.28	222.40	53.08	222.40
Subtotal	1,307	22,539	296,622	2.41	4.59	8.73	16.64	225.94	238.42	5.53	238.42
General Cargo Ships											
Non-Diverted Transits											
Africa-C.A.W.C.	2	23	784	2.41	1.39	41.22	23.75	28.19	50.55	79.33	50.55
Africa-S.A.W.C.	2	35	568	2.41	1.39	29.16	16.80	34.14	49.55	45.14	49.55
Asia-Canada E.C.	0	2	9	2.41	1.39	8.59	4.95	38.09	41.65	9.35	41.65
Asia-C.A.E.C.	71	844	17,028	2.41	1.39	20.65	11.90	34.09	44.60	30.84	44.60
Asia-S.A.E.C.	2	13	83	2.41	1.39	3.38	1.95	41.09	41.65	1.37	41.65
Asia-U.S.E.C.	26	339	7,814	2.41	1.39	25.34	14.58	34.56	47.75	38.18	47.75
C.A.W.C.-Africa	5	94	2,336	2.41	1.39	41.22	23.75	28.19	50.55	79.33	50.55
C.A.W.C.-C.A.E.C.	25	109	7,004	2.41	1.46	72.89	44.13	10.10	52.77	422.53	52.77
C.A.W.C.-Europe	21	120	5,751	2.41	1.41	36.86	21.52	26.48	46.59	75.96	46.59
C.A.W.C.-S.A.E.C.	8	51	539	2.41	1.41	9.46	5.53	25.50	29.62	16.16	29.62
C.A.W.C.-U.S.E.C.	10	51	3,700	2.41	1.45	92.24	55.61	11.45	65.61	472.86	65.61
Canada E.C.-Asia	5	12	463	2.41	1.39	8.59	4.95	38.09	41.65	9.35	41.65
Canada E.C.-C.A.W.C.	1	15	355	2.41	1.39	34.28	19.75	19.29	37.65	95.19	37.65
Canada E.C.-Oceania	0	4	4	2.41	1.39	1.74	1.00	43.04	42.65	-0.90	42.65
Canada E.C.-S.A.W.C.	6	53	944	2.41	1.39	13.80	7.95	25.19	31.75	26.05	31.75

(Continued)

Table A-4. Laden Transits, Tons Carried, and Toll Revenue, Maximum Non-Diverting Toll Rates, Status Quo Scenario, 2020, by Ship Type, Diversion Status, and Trade Route (1990 US$, except when noted)(continued)

Ship Type, Diversion Status, and Trade Route	Transits	Cargo Tonnage Carried (thousands)	Revenue (thousands) a/	Current Toll Schedule: Toll Per Panama Canal Net Ton	Current Toll Schedule: Toll Per Cargo Ton Carried	New Toll Schedule: Toll Per Panama Canal Net Ton	New Toll Schedule: Toll Per Cargo Ton Carried	Total Transportation Costs per Ton Carried: Via Panama Canal: With Current Toll Structure	Via Panama Canal: With New Toll Structure	Via Panama Canal: Percent Increase	Via Least Costly Alternative Route
General Cargo Ships (continued)											
Non-Diverted Transits (continued)											
Canada W.C.-C.A.E.C.	6	45	2,267	2.41	1.42	59.46	35.01	28.50	62.09	117.87	62.09
Canada W.C.-Europe	1	12	169	2.41	1.39	25.77	14.85	34.09	47.55	39.49	47.55
Canada W.C.-Middle East	1	6	1	2.41	1.39	0.09	0.05	39.04	37.70	-3.43	37.70
Canada W.C.-S.A.E.C.	6	58	2,246	2.41	1.41	51.95	30.45	33.28	62.32	87.25	62.32
C.A.E.C.-Asia	22	415	5,140	2.41	1.39	20.65	11.90	34.09	44.60	30.84	44.60
C.A.E.C.-C.A.W.C.	25	89	7,912	2.41	1.45	80.93	48.84	9.12	56.51	519.34	56.51
C.A.E.C.-Oceania	0	7	83	2.41	1.39	15.45	8.90	37.09	44.60	20.25	44.60
C.A.E.C.-S.A.W.C.	24	218	3,631	2.41	1.41	20.56	12.00	20.63	31.22	51.36	31.22
C.A.E.C.-U.S.W.C.	9	28	2,628	2.41	1.51	116.34	73.00	30.51	102.00	234.29	102.00
Europe-C.A.W.C.	44	300	19,439	2.41	1.40	50.64	29.41	25.47	53.48	109.98	53.48
Europe-Canada W.C.	2	9	536	2.41	1.50	79.95	49.78	71.00	119.28	68.00	119.28
Europe-S.A.W.C.	39	385	2,326	2.41	1.39	5.55	3.20	30.83	32.64	5.87	32.64
Europe-U.S.W.C.	2	11	708	2.41	1.44	65.41	39.19	55.78	93.53	67.66	93.53
Middle East-S.A.W.C.	4	2	483	2.41	1.50	42.19	26.27	64.45	89.22	38.43	89.22
Middle East-U.S.W.C.	2	4	218	2.41	1.39	12.06	6.95	37.09	42.65	15.00	42.65
Oceania-C.A.E.C.	0	3	89	2.41	1.39	17.18	9.90	36.09	44.60	23.58	44.60
Oceania-U.S.E.C.	1	7	145	2.41	1.43	19.56	11.63	51.18	61.38	19.92	61.38
S.A.E.C.-C.A.W.C.	7	148	432	2.41	1.39	5.21	3.00	23.19	24.80	6.95	24.80
S.A.E.C.-Canada W.C.	0	1	9	2.41	1.39	6.86	3.95	32.14	34.70	7.97	34.70
S.A.E.C.-U.S.W.C.	8	36	397	2.41	1.40	5.28	3.06	34.56	36.22	4.82	36.22
S.A.W.C.-Africa	4	81	1,468	2.41	1.39	30.98	17.85	31.14	47.60	52.87	47.60
S.A.W.C.-Canada E.C.	0	6	57	2.41	1.39	13.80	7.95	25.19	31.75	26.05	31.75
S.A.W.C.-C.A.E.C.	41	177	6,581	2.41	1.45	37.41	22.46	21.94	42.95	95.79	42.95

(Continued)

Table A-4. Laden Transits, Tons Carried, and Toll Revenue, Maximum Non-Diverting Toll Rates, Status Quo Scenario, 2020, by Ship Type, Diversion Status, and Trade Route (1990 US$, except when noted)(continued)

Ship Type, Diversion Status, and Trade Route	Transits	Cargo Tonnage Carried (thousands)	Revenue (thousands) a/	Current Toll Schedule: Toll Per Panama Canal Net Ton	Current Toll Schedule: Toll Per Cargo Ton Carried	New Toll Schedule: Toll Per Panama Canal Net Ton	New Toll Schedule: Toll Per Cargo Ton Carried	Total Transportation Costs per Ton Carried: Via Panama Canal: With Current Toll Structure	Via Panama Canal: With New Toll Structure	Via Panama Canal: Percent Increase	Via Least Costly Alternative Route
General Cargo Ships (continued)											
Non-Diverted Transits (continued)											
S.A.W.C.-Europe	98	1,601	5,873	2.41	1.39	5.21	3.00	30.14	31.75	5.35	31.75
S.A.W.C.-Middle East	2	23	215	2.41	1.39	12.06	6.95	32.14	37.70	17.30	37.70
S.A.W.C.-U.S.E.C.	27	205	5,207	2.41	1.40	24.42	14.22	23.26	36.08	55.09	36.08
U.S.E.C.-Asia	48	782	14,247	2.41	1.39	25.47	14.66	34.72	47.99	38.23	47.99
U.S.E.C.-C.A.W.C.	48	352	17,535	2.41	1.43	70.52	41.83	13.42	53.82	301.06	53.82
U.S.E.C.-Oceania	3	46	362	2.41	1.39	10.33	5.95	37.09	41.65	12.30	41.65
U.S.E.C.-S.A.W.C.	86	605	16,487	2.41	1.41	25.23	14.72	23.39	36.70	56.93	36.70
U.S.E.C.-U.S.W.C.	1	0	237	2.41	1.50	122.09	76.05	32.50	107.05	229.37	107.05
U.S.W.C.-Africa	2	25	445	2.41	1.39	17.18	9.90	34.09	42.60	24.97	42.60
U.S.W.C.-C.A.E.C.	1	0	437	2.41	1.50	109.94	68.48	29.71	96.69	225.43	96.69
U.S.W.C.-Europe	3	31	718	2.41	1.42	38.08	22.47	40.73	61.78	51.67	61.78
U.S.W.C.-S.A.E.C.	6	15	269	2.41	1.45	10.21	6.14	47.38	52.07	9.90	52.07
Subtotal	758	7,499	166,380	2.41	1.40	25.33	14.71	28.74	41.84	45.59	41.84
Liquid Gas Carriers											
Non-Diverted Transits											
C.A.W.C.-C.A.E.C.	4	18	954	2.41	7.30	42.24	128.00	49.30	170.00	244.81	170.00
C.A.E.C.-Asia	15	82	3,770	2.41	4.67	25.75	49.93	107.52	152.78	42.09	152.78
C.A.E.C.-C.A.W.C.	96	1,270	60,050	2.41	3.79	32.89	51.76	23.91	71.88	200.60	71.88
C.A.E.C.-S.A.W.C.	8	119	2,357	2.41	3.83	15.12	24.00	40.83	61.00	49.42	61.00
C.A.E.C.-U.S.W.C.	1	12	497	2.41	3.83	33.39	53.00	45.83	95.00	107.31	95.00
Europe-C.A.W.C.	2	5	253	2.41	7.30	31.02	94.00	110.30	197.00	78.60	197.00
Europe-S.A.W.C.	0	1	4	2.41	3.82	5.04	8.00	67.82	72.00	6.16	72.00

(Continued)

Table A-4. Laden Transits, Tons Carried, and Toll Revenue, Maximum Non-Diverting Toll Rates, Status Quo Scenario, 2020, by Ship Type, Diversion Status, and Trade Route (1990 US$, except when noted)(continued)

Ship Type, Diversion Status, and Trade Route	Transits	Cargo Tonnage Carried (thousands)	Revenue (thousands) a/	Current Toll Schedule: Toll Per Panama Canal Net Ton	Current Toll Schedule: Toll Per Cargo Ton Carried	New Toll Schedule: Toll Per Panama Canal Net Ton	New Toll Schedule: Toll Per Cargo Ton Carried	Total Transportation Costs per Ton Carried, Via Panama Canal: With Current Toll Structure	Total Transportation Costs per Ton Carried, Via Panama Canal: With New Toll Structure	Total Transportation Costs per Ton Carried, Via Panama Canal: Percent Increase	Total Transportation Costs per Ton Carried: Via Least Costly Alternative Route
Liquid Gas Carriers (continued)											
Non-Diverted Transits (continued)											
Oceania-U.S.E.C.	6	91	1,229	2.41	3.62	8.64	12.99	66.11	75.48	14.17	75.48
S.A.E.C.-Asia	2	27	415	2.41	3.83	11.97	19.00	78.83	94.00	19.25	94.00
S.A.E.C.-C.A.W.C.	11	31	399	2.41	7.30	6.60	20.00	99.30	112.00	12.79	112.00
U.S.E.C.-Asia	23	273	11,076	2.41	3.86	26.87	43.04	82.65	121.83	47.40	121.83
U.S.E.C.-C.A.W.C.	1	2	190	2.41	7.30	46.53	141.00	57.30	191.00	233.32	191.00
U.S.E.C.-Oceania	1	11	176	2.41	3.83	10.71	17.00	86.83	100.00	15.17	100.00
U.S.E.C.-S.A.W.C.	2	6	234	2.41	7.30	21.78	66.00	94.30	153.00	62.24	153.00
Subtotal	172	1,947	81,603	2.41	3.90	28.58	46.29	41.82	84.66	102.42	84.66
Passenger Ships											
Non-Diverted Transits											
North-Bound	153	0	2,251	2.41	0.00	2.01	0.00	0.00	0.00	0.00	0.00
South-Bound	183	0	3,894	2.41	0.00	2.01	0.00	0.00	0.00	0.00	0.00
Subtotal	336	0	6,145	2.41	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Refrigerated Ships											
Non-Diverted Transits											
Africa-Asia	29	151	398	2.41	4.28	1.69	3.00	162.08	160.80	-0.79	160.80
Africa-C.A.W.C.	0	0	82	2.41	4.27	55.47	98.40	113.87	208.00	82.66	208.00
Africa-S.A.W.C.	9	9	3,213	2.41	4.15	38.75	66.78	133.93	196.56	46.76	196.56
Asia-C.A.E.C.	20	71	6,038	2.41	3.97	29.89	49.17	128.09	173.29	35.29	173.29
Asia-S.A.E.C.	5	3	188	2.41	4.28	4.40	7.80	168.08	171.60	2.10	171.60
Asia-U.S.E.C.	0	0	125	2.41	4.28	34.95	62.00	140.48	198.20	41.09	198.20

(Continued)

Table A-4. Laden Transits, Tons Carried, and Toll Revenue, Maximum Non-Diverting Toll Rates, Status Quo Scenario, 2020, by Ship Type, Diversion Status, and Trade Route (1990 US$, except when noted)(continued)

Ship Type, Diversion Status, and Trade Route	Transits	Cargo Tonnage Carried (thousands)	Revenue (thousands) a/	Current Toll Schedule: Toll Per Panama Canal Net Ton	Current Toll Schedule: Toll Per Cargo Ton Carried	New Toll Schedule: Toll Per Panama Canal Net Ton	New Toll Schedule: Toll Per Cargo Ton Carried	Total Transportation Costs per Ton Carried: Via Panama Canal: With Current Toll Structure	Via Panama Canal: With New Toll Structure	Via Panama Canal: Percent Increase	Via Least Costly Alternative Route
Refrigerated Ships (continued)											
Non-Diverted Transits (continued)											
C.A.W.C.-Africa	1	3	461	2.41	4.28	55.46	98.40	113.88	208.00	82.66	208.00
C.A.W.C.-Canada E.C.	0	2	132	2.41	4.28	44.98	79.80	76.48	152.00	98.76	152.00
C.A.W.C.-C.A.E.C.	20	132	10,401	2.41	3.88	47.91	77.06	50.94	124.12	143.67	124.12
C.A.W.C.-Europe	219	987	79,274	2.41	3.94	35.22	57.59	89.55	143.20	59.91	143.20
C.A.W.C.-S.A.E.C.	1	4	50	2.41	4.28	6.65	11.80	89.28	96.80	8.43	96.80
C.A.W.C.-U.S.E.C.	1	2	398	2.41	4.28	52.08	92.40	61.68	149.80	142.88	149.80
Canada E.C.-Asia	12	63	1,063	2.41	4.28	10.60	18.80	155.08	169.60	9.37	169.60
Canada E.C.-C.A.W.C.	5	10	2,169	2.41	3.95	46.27	75.85	70.22	142.12	102.39	142.12
Canada W.C.-Europe	3	28	1,077	2.41	4.12	34.78	59.42	131.88	187.18	41.94	187.18
C.A.E.C.-Asia	10	32	2,734	2.41	4.12	29.91	51.17	135.20	182.25	34.80	182.25
C.A.E.C.-C.A.W.C.	23	5	11,938	2.41	3.87	47.90	77.00	50.87	124.00	143.74	124.00
C.A.E.C.-S.A.W.C.	54	42	12,027	2.41	3.87	20.53	33.00	71.87	101.00	40.52	101.00
Europe-C.A.W.C.	160	13	98,228	2.41	3.89	57.02	91.97	89.41	177.49	98.52	177.49
Europe-Canada W.C.	1	1	221	2.41	4.28	32.24	57.20	136.48	189.40	38.78	189.40
Europe-S.A.W.C.	169	145	9,626	2.41	4.02	5.90	9.84	116.06	121.88	5.01	121.88
Europe-U.S.W.C.	14	10	3,561	2.41	4.28	31.45	55.80	126.88	178.40	40.61	178.40
Middle East-S.A.W.C.	2	3	223	2.41	4.28	16.12	28.60	129.48	153.80	18.79	153.80
Oceania-C.A.E.C.	3	18	519	2.41	4.28	22.21	39.40	147.28	182.40	23.85	182.40
Oceania-U.S.E.C.	33	116	3,837	2.41	4.24	14.02	24.67	148.70	169.13	13.74	169.13
S.A.E.C.-Asia	11	50	1,382	2.41	4.28	14.99	26.60	137.48	159.80	16.24	159.80
S.A.W.C.-Africa	14	50	5,276	2.41	4.15	42.24	72.78	123.33	191.96	55.64	191.96
S.A.W.C.-C.A.E.C.	21	111	4,271	2.41	3.99	20.30	33.61	75.06	104.68	39.46	104.68
S.A.W.C.-Europe	928	4,670	50,906	2.41	4.05	5.78	9.72	115.41	121.08	4.91	121.08

(Continued)

Table A-4. Laden Transits, Tons Carried, and Toll Revenue, Maximum Non-Diverting Toll Rates, Status Quo Scenario, 2020, by Ship Type, Diversion Status, and Trade Route (1990 US$, except when noted)(continued)

Ship Type, Diversion Status, and Trade Route	Transits	Cargo Tonnage Carried (thousands)	Revenue (thousands) a/	Current Toll Schedule: Toll Per Panama Canal Net Ton	Current Toll Schedule: Toll Per Cargo Ton Carried	New Toll Schedule: Toll Per Panama Canal Net Ton	New Toll Schedule: Toll Per Cargo Ton Carried	Total Transportation Costs per Ton Carried, Via Panama Canal: With Current Toll Structure	Total Transportation Costs per Ton Carried, Via Panama Canal: With New Toll Structure	Total Transportation Costs per Ton Carried, Via Panama Canal: Percent Increase	Total Transportation Costs per Ton Carried: Via Least Costly Alternative Route
Refrigerated Ships (continued)											
Non-Diverted Transits (continued)											
S.A.W.C.-Middle East	5	17	699	2.41	4.28	16.12	28.60	129.48	153.80	18.79	153.80
S.A.W.C.-U.S.E.C.	607	2,226	143,925	2.41	4.02	24.45	40.76	80.58	117.32	45.60	117.32
U.S.E.C.-Asia	32	114	11,043	2.41	4.01	35.93	59.80	134.04	189.83	41.62	189.83
U.S.E.C.-C.A.W.C.	27	66	14,766	2.41	3.93	53.56	87.35	56.28	139.70	148.22	139.70
U.S.E.C.-S.A.W.C.	282	434	67,988	2.41	3.99	24.42	40.47	79.55	116.03	45.85	116.03
U.S.W.C.-Europe	126	672	35,380	2.41	4.17	32.04	55.41	126.00	177.24	40.67	177.24
U.S.W.C.-S.A.E.C.	1	3	28	2.41	4.24	3.98	7.00	121.95	124.71	2.26	124.71
Subtotal	2,847	10,266	583,646	2.41	4.02	21.15	35.28	104.57	129.67	24.00	129.67
Roll-On Roll-Off											
Non-Diverted Transits											
Asia-Canada E.C.	2	8	203	2.41	9.35	7.65	29.67	278.31	298.63	7.30	298.63
Asia-C.A.E.C.	24	473	9,637	2.41	7.92	11.73	38.57	225.40	256.05	13.60	256.05
Asia-U.S.E.C.	40	766	23,844	2.41	7.95	17.95	59.26	237.11	288.42	21.64	288.42
C.A.W.C.-Europe	12	64	5,501	2.41	8.66	23.37	84.00	181.66	257.00	41.47	257.00
C.A.W.C.-S.A.E.C.	0	0	4	2.41	8.67	5.00	18.00	193.67	203.00	4.82	203.00
C.A.W.C.-U.S.E.C.	1	1	694	2.41	8.66	28.94	104.00	155.66	251.00	61.25	251.00
Canada E.C.-Asia	8	41	584	2.41	9.30	4.79	18.50	327.47	336.67	2.81	336.67
Canada E.C.-Oceania	1	31	108	2.41	7.77	1.86	6.00	240.88	239.11	-0.73	239.11
Canada W.C.-C.A.E.C.	0	0	78	2.41	10.19	34.25	144.89	224.84	359.54	59.91	359.54
C.A.E.C.-C.A.W.C.	0	1	193	2.41	9.72	31.72	127.86	154.90	273.04	76.27	273.04
C.A.E.C.-Oceania	2	7	719	2.41	8.66	14.75	53.00	252.66	297.00	17.55	297.00
C.A.E.C.-S.A.W.C.	46	81	7,412	2.41	10.19	13.84	58.55	217.90	266.26	22.19	266.26

(Continued)

Table A-4. Laden Transits, Tons Carried, and Toll Revenue, Maximum Non-Diverting Toll Rates, Status Quo Scenario, 2020, by Ship Type, Diversion Status, and Trade Route (1990 US$, except when noted)(continued)

Ship Type, Diversion Status, and Trade Route	Transits	Cargo Tonnage Carried (thousands)	Revenue (thousands) a/	Current Toll Schedule: Toll Per Panama Canal Net Ton	Current Toll Schedule: Toll Per Cargo Ton Carried	New Toll Schedule: Toll Per Panama Canal Net Ton	New Toll Schedule: Toll Per Cargo Ton Carried	Total Transportation Costs per Ton Carried: Via Panama Canal: With Current Toll Structure	Via Panama Canal: With New Toll Structure	Via Panama Canal: Percent Increase	Via Least Costly Alternative Route
Roll-On Roll-Off (continued)											
Non-Diverted Transits (continued)											
Europe-C.A.W.C.	18	112	13,422	2.41	8.66	38.40	138.00	181.66	311.00	71.20	311.00
Europe-S.A.W.C.	0	0	8	2.41	8.67	11.95	43.00	240.67	275.00	14.26	275.00
Europe-U.S.W.C.	0	2	172	2.41	8.66	21.70	78.00	241.66	311.00	28.69	311.00
Oceania-C.A.E.C.	0	0	3	2.41	8.01	14.06	46.75	223.21	261.95	17.35	261.95
S.A.W.C.-C.A.E.C.	12	23	1,867	2.41	10.19	13.84	58.55	217.90	266.26	22.19	266.26
S.A.W.C.-Europe	1	3	265	2.41	8.66	13.64	49.00	240.66	281.00	16.76	281.00
S.A.W.C.-U.S.E.C.	6	13	1,250	2.41	10.19	17.60	74.43	210.96	275.20	30.45	275.20
U.S.E.C.-Asia	8	56	3,324	2.41	8.64	19.68	70.56	275.58	337.50	22.47	337.50
U.S.E.C.-C.A.W.C.	2	3	1,326	2.41	8.66	35.34	127.00	132.66	251.00	89.20	251.00
U.S.E.C.-S.A.W.C.	26	45	5,247	2.41	10.19	17.59	74.43	210.96	275.20	30.45	275.20
U.S.W.C.-Canada E.C.	1	2	330	2.41	10.20	33.08	139.95	245.70	375.45	52.81	375.45
U.S.W.C.-C.A.E.C.	1	23	934	2.41	7.75	24.33	78.25	153.28	223.78	45.99	223.78
U.S.W.C.-Europe	0	0	14	2.41	7.80	18.77	60.73	203.42	256.35	26.02	256.35
U.S.W.C.-U.S.E.C.	0	5	248	2.41	7.86	31.14	101.54	151.24	244.92	61.94	244.92
Subtotal	213	1,762	77,386	2.41	8.59	17.77	63.33	228.49	279.24	22.21	279.24
Tankers											
Non-Diverted Transits											
Africa-U.S.W.C.	0	0	1	2.41	1.27	11.35	6.00	15.27	20.00	30.94	20.00
Asia-U.S.E.C.	1	30	356	2.41	1.27	20.79	10.94	22.15	31.82	43.67	31.82
C.A.W.C.-Africa	0	0	33	2.41	1.27	83.58	44.00	37.27	80.00	114.66	80.00
C.A.W.C.-Canada E.C.	0	4	60	2.41	1.27	28.30	14.90	10.23	23.86	133.26	23.86
C.A.W.C.-C.A.E.C.	14	85	5,394	2.41	1.27	40.45	21.29	8.68	28.70	230.71	28.70

(Continued)

Table A-4. Laden Transits, Tons Carried, and Toll Revenue, Maximum Non-Diverting Toll Rates, Status Quo Scenario, 2020, by Ship Type, Diversion Status, and Trade Route (1990 US$, except when noted)(continued)

Ship Type, Diversion Status, and Trade Route	Transits	Cargo Tonnage Carried (thousands)	Revenue (thousands) a/	Current Toll Schedule: Toll Per Panama Canal Net Ton	Current Toll Schedule: Toll Per Cargo Ton Carried	New Toll Schedule: Toll Per Panama Canal Net Ton	New Toll Schedule: Toll Per Cargo Ton Carried	Total Transportation Costs per Ton Carried: Via Panama Canal: With Current Toll Structure	Via Panama Canal: With New Toll Structure	Via Panama Canal: Percent Increase	Via Least Costly Alternative Route
Tankers (continued)											
Non-Diverted Transits (continued)											
C.A.W.C.-Europe	3	70	925	2.41	1.27	20.79	10.94	14.19	23.86	68.17	23.86
C.A.W.C.-U.S.E.C.	7	53	2,582	2.41	1.27	41.84	22.02	9.70	30.45	213.97	30.45
Canada E.C.-Asia	10	393	1,176	2.41	1.27	5.40	2.84	20.80	22.37	7.56	22.37
Canada W.C.-U.S.E.C.	6	253	3,369	2.41	1.29	20.61	11.00	11.44	21.15	84.94	21.15
C.A.E.C.-Asia	7	180	1,893	2.41	1.29	15.31	8.21	18.67	25.59	37.05	25.59
C.A.E.C.-C.A.W.C.	96	1,762	37,135	2.41	1.27	24.79	13.05	6.05	17.83	194.78	17.83
C.A.E.C.-S.A.W.C.	41	879	7,009	2.41	1.27	11.51	6.06	10.87	15.66	44.09	15.66
C.A.E.C.-U.S.W.C.	17	712	8,400	2.41	1.28	19.79	10.48	9.68	18.88	95.12	18.88
Europe-C.A.W.C.	12	54	1,690	2.41	1.27	32.60	17.16	20.41	36.30	77.87	36.30
Europe-S.A.W.C.	2	52	124	2.41	1.27	4.05	2.13	19.11	19.97	4.51	19.97
Europe-U.S.W.C.	6	196	2,021	2.41	1.27	17.56	9.24	18.01	25.98	44.27	25.98
Middle East-U.S.W.C.	0	0	1	2.41	1.25	11.60	6.00	23.25	28.00	20.45	28.00
Oceania-U.S.E.C.	9	153	890	2.41	1.27	8.99	4.73	23.22	26.68	14.91	26.68
S.A.E.C.-C.A.W.C.	117	4,342	7,395	2.41	1.27	2.36	1.24	9.42	9.39	-0.30	9.39
S.A.E.C.-U.S.W.C.	53	1,967	1,649	2.41	1.27	1.40	0.74	15.19	14.66	-3.50	14.66
S.A.W.C.-Canada E.C.	2	36	268	2.41	1.27	11.55	6.08	16.94	21.75	28.41	21.75
S.A.W.C.-C.A.E.C.	45	1,636	8,950	2.41	1.27	8.90	4.69	8.90	12.32	38.43	12.32
S.A.W.C.-Europe	12	106	321	2.41	1.27	5.00	2.63	22.77	24.13	5.98	24.13
S.A.W.C.-U.S.E.C.	47	1,758	13,383	2.41	1.27	12.70	6.69	10.31	15.73	52.58	15.73
U.S.E.C.-Asia	82	2,655	27,785	2.41	1.29	17.10	9.12	18.81	26.64	41.66	26.64
U.S.E.C.-C.A.W.C.	33	614	14,513	2.41	1.27	30.93	16.28	8.14	23.15	184.45	23.15
U.S.E.C.-Canada W.C.	1	4	486	2.41	1.27	28.35	14.92	15.19	28.84	89.88	28.84
U.S.E.C.-Oceania	6	192	978	2.41	1.27	8.42	4.43	21.59	24.75	14.64	24.75

(Continued)

Table A-4. Laden Transits, Tons Carried, and Toll Revenue, Maximum Non-Diverting Toll Rates, Status Quo Scenario, 2020, by Ship Type, Diversion Status, and Trade Route (1990 US$, except when noted)(continued)

Ship Type, Diversion Status, and Trade Route	Transits	Cargo Tonnage Carried (thousands)	Revenue (thousands) a/	Current Toll Schedule: Toll Per Panama Canal Net Ton	Current Toll Schedule: Toll Per Cargo Ton Carried	New Toll Schedule: Toll Per Panama Canal Net Ton	New Toll Schedule: Toll Per Cargo Ton Carried	Total Transportation Costs per Ton Carried: Via Panama Canal: With Current Toll Structure	Via Panama Canal: With New Toll Structure	Via Panama Canal: Percent Increase	Via Least Costly Alternative Route
Tankers (continued)											
Non-Diverted Transits (continued)											
U.S.E.C.-S.A.W.C.	8	147	1,451	2.41	1.27	15.24	8.02	12.12	18.87	55.71	18.87
U.S.E.C.-U.S.W.C.	30	877	15,507	2.41	1.27	27.44	14.50	12.30	25.53	107.50	25.53
U.S.W.C.-Africa	8	224	1,586	2.41	1.33	9.12	5.05	13.43	17.15	27.65	17.15
U.S.W.C.-Canada E.C.	1	21	300	2.41	1.27	24.55	12.92	16.19	27.84	71.97	27.84
U.S.W.C.-C.A.E.C.	8	301	3,971	2.41	1.30	19.00	10.22	9.68	18.60	92.22	18.60
U.S.W.C.-S.A.E.C.	2	87	121	2.41	1.27	2.68	1.41	15.34	15.48	0.92	15.48
U.S.W.C.-U.S.E.C.	8	226	4,167	2.41	1.29	25.60	13.68	11.53	23.92	107.50	23.92
Subtotal	693	20,068	175,891	2.41	1.27	12.99	6.86	12.06	17.38	44.11	17.38
Vehicle Carriers											
Non-Diverted Transits											
Asia-C.A.E.C.	13	33	3,381	2.41	29.09	7.98	96.37	392.50	459.78	17.14	459.78
Asia-S.A.E.C.	0	0	4	2.41	29.13	0.95	11.44	453.29	435.60	-3.90	435.60
Asia-U.S.E.C.	419	1,959	122,346	2.41	29.20	7.90	95.71	413.17	479.68	16.10	479.68
C.A.W.C.-C.A.E.C.	1	1	384	2.41	28.71	14.98	178.50	257.39	407.18	58.19	407.18
Canada E.C.-Asia	0	1	10	2.41	29.22	1.40	17.00	437.22	425.00	-2.79	425.00
C.A.E.C.-C.A.W.C.	4	1	1,729	2.41	29.22	12.45	151.00	263.22	385.00	46.27	385.00
C.A.E.C.-Oceania	1	0	200	2.41	29.22	5.61	68.00	409.22	448.00	9.48	448.00
Europe-Canada W.C.	5	11	1,785	2.41	30.90	7.23	92.69	368.26	430.05	16.78	430.05
Europe-U.S.W.C.	149	285	40,456	2.41	29.95	6.26	77.77	381.68	429.50	12.53	429.50
S.A.W.C.-C.A.E.C.	0	0	11	2.41	28.69	6.30	75.00	307.69	354.00	15.05	354.00
U.S.E.C.-Asia	25	114	9,355	2.41	29.67	9.11	112.20	392.18	474.71	21.04	474.71
U.S.E.C.-Oceania	7	18	1,026	2.41	29.22	3.63	44.00	408.22	423.00	3.62	423.00
Subtotal	623	2,424	180,686	2.41	29.43	7.48	91.39	407.80	472.52	15.87	472.52

(Continued)

Table A-4. Laden Transits, Tons Carried, and Toll Revenue, Maximum Non-Diverting Toll Rates, Status Quo Scenario, 2020, by Ship Type, Diversion Status, and Trade Route (1990 US$, except when noted)(continued)

Ship Type, Diversion Status, and Trade Route	Transits	Cargo Tonnage Carried (thousands)	Revenue (thousands) a/	Current Toll Schedule: Toll Per Panama Canal Net Ton	Current Toll Schedule: Toll Per Cargo Ton Carried	New Toll Schedule: Toll Per Panama Canal Net Ton	New Toll Schedule: Toll Per Cargo Ton Carried	Total Transportation Costs per Ton Carried: Via Panama Canal: With Current Toll Structure	Total Transportation Costs per Ton Carried: Via Panama Canal: With New Toll Structure	Total Transportation Costs per Ton Carried: Via Panama Canal: Percent Increase	Total Transportation Costs per Ton Carried: Via Least Costly Alternative Route
Total Non-Diverting	12,744	233,349	3,393,437	2.41	2.05	15.31	13.01	53.68	64.42	20.02	64.42

Notes: These calculations do not include all transits and tons carried forecast by the WEFA Group. For some ship-type and trade-route combinations (accounting for a total of 18 transits and 179803 tons), vessel costs were not available for every DWT size interval. As a result, these transits and tons were excluded. In addition, for 2098 transits and 35979616 tons, the cost by way of the Panama Canal without a toll was higher than the least costly alternative route. As a result, these transits and tons were excluded. Percentages may not calculate exactly as shown due to rounding. A fee of $0.40 per Panama Canal net ton has also been included to account for charges such as handling and agency fees incurred when transitting the Canal. The extra fee is only used to determine divesion status by adding it to the cost per ton carried and is not included in the revenue calculations.

a/ Revenue lost from diversions is measured as the revenue generated by the maximum, nondiverting toll rate increase.

Source: Nathan Associates Inc., based on forecasts of traffic and transportation costs provided by the WEFA Group.

MAXIMUM NON-DIVERTING TOLL RATES, 150,000-DWT SCENARIO, 2020

Table A-5. Laden Transits, Tons Carried, and Toll Revenue, Maximum Non-Diverting Toll Rates, 150,000 DWT Scenario, 2020, by Ship Type

	Transits				Tons Carried(thousands)				Revenue(1990 US$thousands)			
Ship Type	Canal	Diverted	Total	Diverted as a Percent of Total	Canal	Diverted	Total	Diverted as a Percent of Total	Canal	Lost a/	Total	Lost as a Percent of Total
Container-Breakbulk	1,325	0	1,325	0.00	20,519	0	20,519	0.00	500,517	0	500,517	0.00
Dry Bulk Carriers	3,881	0	3,881	0.00	186,253	0	186,253	0.00	1,292,748	0	1,292,748	0.00
Chemical Tankers	994	0	994	0.00	22,925	0	22,925	0.00	400,811	0	400,811	0.00
Full Container Ships	1,251	0	1,251	0.00	24,619	0	24,619	0.00	429,279	0	429,279	0.00
General Cargo Ships	758	0	758	0.00	7,499	0	7,499	0.00	166,380	0	166,380	0.00
Liquid Gas Carriers	172	0	172	0.00	1,947	0	1,947	0.00	81,603	0	81,603	0.00
Passenger Ships	336	0	336	0.00	0	0	0	0.00	6,145	0	6,145	0.00
Refrigerated Ships	2,847	0	2,847	0.00	10,266	0	10,266	0.00	583,646	0	583,646	0.00
Roll-On Roll-Off	213	0	213	0.00	1,762	0	1,762	0.00	77,386	0	77,386	0.00
Tankers	751	0	751	0.00	34,216	0	34,216	0.00	212,352	0	212,352	0.00
Vehicle Carriers	623	0	623	0.00	2,424	0	2,424	0.00	180,686	0	180,686	0.00
Total	13,150	0	13,150	0.00	312,431	0	312,431	0.00	3,931,554	0	3,931,554	0.00

Notes: These calculations do not include all transits and tons carried forecast by the WEFA Group. For some ship-type and trade-route combinations (accounting for a total of 18 transits and 179803 tons), vessel costs were not available for every DWT size interval. As a result, these transits and tons were excluded. In addition, for 2111 transits and 51867350 tons, the cost by way of the Panama Canal without a toll was higher than the least costly alternative route. As a result, these transits and tons were excluded. A fee of $0.40 per Panama Canal net ton has also been included to account for charges such as handling and agency fees incurred when transitting the Canal. The extra fee is only used to determine diversion status by adding it to cost per ton carried and is not included in the revenue calculations.

a/ Revenue lost from diversions is measured as the revenue generated by the maximum, nondiverting toll rate increase.

Source: Nathan Associates Inc., based on forecasts of traffic and transportation costs provided by The WEFA Group.

Table A-6. Ballast Transits, Tons Carried, and Toll Revenue, Current Toll Structure and Rates, 150,000 DWT Scenario, 2020, by Ship Type

	Transits				Tons Carried(thousands)				Revenue(1990 US$thousands)			
Ship Type	Canal	Diverted	Total	Diverted as a Percent of Total	Canal	Diverted	Total	Diverted as a Percent of Total	Canal	Lost	Total	Lost as a Percent of Total
Container-Breakbulk	41	0	41	0.00	0	0	0	0.00	1,019	0	1,019	0.00
Dry Bulk Carriers	400	0	400	0.00	0	0	0	0.00	15,436	0	15,436	0.00
Chemical Tankers	82	0	82	0.00	0	0	0	0.00	1,758	0	1,758	0.00
Full Container Ships	9	0	9	0.00	0	0	0	0.00	226	0	226	0.00
General Cargo Ships	140	0	140	0.00	0	0	0	0.00	1,531	0	1,531	0.00
Liquid Gas Carriers	128	0	128	0.00	0	0	0	0.00	3,730	0	3,730	0.00
Passenger Ships	11	0	11	0.00	0	0	0	0.00	131	0	131	0.00
Refrigerated Ships	932	0	932	0.00	0	0	0	0.00	13,778	0	13,778	0.00
Roll-On Roll-Off	30	0	30	0.00	0	0	0	0.00	798	0	798	0.00
Tankers	426	0	426	0.00	0	0	0	0.00	21,188	0	21,188	0.00
Vehicle Carriers	383	0	383	0.00	0	0	0	0.00	22,613	0	22,613	0.00
Total	2,582	0	2,582	0.00	0	0	0	0.00	82,209	0	82,209	0.00

Note: Diversions of ballast transits are computed by diverting a proportion of ballast transits equal to lost revenue as a percent of total potential revenue for a particular laden ship type. See last column on previous table.

Source: Nathan Associates Inc., based on forecasts of traffic and transportation costs provided by The WEFA Group.

Table A-7. Laden Transits, Tons Carried, and Toll Revenue, Maximum Non-Diverting Toll Rates, 150,000 DWT Scenario, 2020, by Ship Type, Diversion Status, and Trade Route (1990 US$, except when noted)

Ship Type, Diversion Status, and Trade Route	Transits	Cargo Tonnage Carried (thousands)	Revenue (thousands) a/	Current Toll Schedule: Toll Per Panama Canal Net Ton	Current Toll Schedule: Toll Per Cargo Ton Carried	New Toll Schedule: Toll Per Panama Canal Net Ton	New Toll Schedule: Toll Per Cargo Ton Carried	Total Transportation Costs per Ton Carried: Via Panama Canal: With Current Toll Structure	Via Panama Canal: With New Toll Structure	Via Panama Canal: Percent Increase	Via Least Costly Alternative Route
Container-Breakbulk											
Non-Diverted Transits											
Africa-C.A.W.C.	3	77	2,388	2.41	1.85	60.52	46.55	68.56	113.26	65.19	113.26
Africa-Canada W.C.	0	2	37	2.41	1.87	18.89	14.64	88.16	100.93	14.49	100.93
Africa-U.S.W.C.	1	9	198	2.41	1.87	20.10	15.58	89.16	102.87	15.38	102.87
Asia-Canada E.C.	0	4	67	2.41	1.86	12.16	9.40	88.65	96.19	8.50	96.19
Asia-C.A.E.C.	91	837	25,658	2.41	1.87	21.59	16.71	93.07	107.91	15.95	107.91
Asia-S.A.E.C.	27	175	1,722	2.41	1.87	5.03	3.90	100.20	102.23	2.03	102.23
Asia-U.S.E.C.	82	1,031	35,673	2.41	1.86	31.27	24.14	94.52	116.80	23.57	116.80
C.A.W.C.-Africa	3	70	2,755	2.41	1.87	63.64	49.37	73.06	120.56	65.02	120.56
C.A.W.C.-C.A.E.C.	7	118	5,084	2.41	1.86	51.76	40.02	49.37	87.53	77.28	87.53
C.A.W.C.-Europe	15	110	7,415	2.41	1.87	38.09	29.51	63.64	91.28	43.44	91.28
C.A.W.C.-S.A.E.C.	12	6	1,359	2.41	1.87	8.86	6.87	69.19	74.19	7.23	74.19
C.A.W.C.-U.S.E.C.	3	19	1,975	2.41	1.87	49.40	38.32	55.40	91.85	65.80	91.85
Canada E.C.-Asia	14	367	1,571	2.41	1.85	6.51	5.00	90.68	93.83	3.47	93.83
Canada E.C.-C.A.W.C.	1	9	589	2.41	1.87	51.70	40.07	54.09	92.29	70.63	92.29
Canada E.C.-Oceania	1	13	26	2.41	1.87	2.66	2.06	102.74	102.93	0.19	102.93
Canada E.C.-S.A.W.C.	1	10	143	2.41	1.85	19.40	14.92	62.78	75.85	20.81	75.85
Canada E.C.-U.S.W.C.	0	0	3	2.41	1.85	49.39	38.01	69.71	105.87	51.86	105.87
Canada W.C.-Africa	8	179	2,074	2.41	1.85	18.11	13.93	88.66	100.74	13.62	100.74
Canada W.C.-Europe	63	1,844	41,265	2.41	1.85	36.43	28.00	77.86	104.01	33.58	104.01
Canada W.C.-S.A.E.C.	11	210	6,833	2.41	1.87	50.79	39.40	71.19	108.72	52.72	108.72
Canada W.C.-U.S.E.C.	8	149	5,425	2.41	1.85	50.70	39.00	64.85	102.00	57.28	102.00
C.A.E.C.-Asia	9	196	2,521	2.41	1.87	21.35	16.54	92.37	107.04	15.89	107.04
C.A.E.C.-C.A.W.C.	7	27	4,857	2.41	1.87	54.01	41.86	50.30	90.29	79.51	90.29

(Continued)

Table A-7. Laden Transits, Tons Carried, and Toll Revenue, Maximum Non-Diverting Toll Rates, 150,000 DWT Scenario, 2020, by Ship Type, Diversion Status, and Trade Route (1990 US$, except when noted)(continued)

Ship Type, Diversion Status, and Trade Route	Transits	Cargo Tonnage Carried (thousands)	Revenue (thousands) a/	Current Toll Schedule: Toll Per Panama Canal Net Ton	Current Toll Schedule: Toll Per Cargo Ton Carried	New Toll Schedule: Toll Per Panama Canal Net Ton	New Toll Schedule: Toll Per Cargo Ton Carried	Total Transportation Costs per Ton Carried: Via Panama Canal: With Current Toll Structure	Via Panama Canal: With New Toll Structure	Via Panama Canal: Percent Increase	Via Least Costly Alternative Route
Container-Breakbulk (continued)											
Non-Diverted Transits (continued)											
C.A.E.C.-Canada W.C.	2	31	1,317	2.41	1.87	50.61	39.22	63.73	101.08	58.61	101.08
C.A.E.C.-Oceania	1	20	394	2.41	1.87	25.07	19.43	90.16	107.72	19.48	107.72
C.A.E.C.-S.A.W.C.	18	144	5,011	2.41	1.87	21.20	16.43	61.88	76.44	23.53	76.44
C.A.E.C.-U.S.W.C.	4	73	2,265	2.41	1.86	43.45	33.56	61.48	93.18	51.56	93.18
Europe-C.A.W.C.	22	137	18,207	2.41	1.87	64.26	49.80	64.73	112.66	74.05	112.66
Europe-Canada W.C.	4	123	2,690	2.41	1.85	32.54	25.00	80.14	103.29	28.88	103.29
Europe-S.A.W.C.	91	752	23,487	2.41	1.87	20.10	15.58	85.37	99.08	16.06	99.08
Europe-U.S.W.C.	24	732	15,512	2.41	1.85	33.85	26.01	79.27	103.43	30.48	103.43
Oceania-Canada E.C.	2	46	119	2.41	1.85	2.60	2.00	93.85	94.00	0.16	94.00
Oceania-C.A.E.C.	4	42	1,300	2.41	1.87	25.35	19.66	90.85	108.64	19.58	108.64
Oceania-S.A.E.C.	7	95	48	2.41	1.86	0.49	0.38	84.47	82.99	-1.76	82.99
S.A.E.C.-C.A.W.C.	9	141	1,026	2.41	1.87	8.76	6.79	68.77	73.69	7.16	73.69
S.A.E.C.-Canada W.C.	11	152	1,489	2.41	1.87	10.13	7.85	87.94	93.92	6.80	93.92
S.A.E.C.-U.S.W.C.	38	572	2,956	2.41	1.87	5.90	4.57	74.36	77.06	3.64	77.06
S.A.W.C.-Canada E.C.	1	2	260	2.41	1.87	21.48	16.66	66.27	81.06	22.32	81.06
S.A.W.C.-C.A.E.C.	13	108	3,573	2.41	1.87	21.48	16.66	62.27	77.06	23.75	77.06
S.A.W.C.-Europe	191	3,350	56,800	2.41	1.87	23.42	18.15	85.09	101.37	19.14	101.37
S.A.W.C.-U.S.E.C.	108	1,055	34,710	2.41	1.87	25.95	20.13	59.46	77.72	30.71	77.72
U.S.E.C.-Asia	172	4,347	85,999	2.41	1.85	30.44	23.43	91.66	113.24	23.54	113.24
U.S.E.C.-C.A.W.C.	10	201	7,660	2.41	1.86	57.71	44.63	46.17	88.94	92.62	88.94
U.S.E.C.-S.A.W.C.	160	1,595	53,180	2.41	1.87	25.85	20.04	59.27	77.44	30.66	77.44
U.S.E.C.-U.S.W.C.	0	0	9	2.41	1.86	50.65	39.00	56.86	94.00	65.33	94.00
U.S.W.C.-Africa	9	143	4,166	2.41	1.85	23.62	18.15	82.33	98.63	19.80	98.63

(Continued)

Table A-7. Laden Transits, Tons Carried, and Toll Revenue, Maximum Non-Diverting Toll Rates, 150,000 DWT Scenario, 2020, by Ship Type, Diversion Status, and Trade Route (1990 US$, except when noted)(continued)

Ship Type, Diversion Status, and Trade Route	Transits	Cargo Tonnage Carried (thousands)	Revenue (thousands) a/	Current Toll Schedule: Toll Per Panama Canal Net Ton	Current Toll Schedule: Toll Per Cargo Ton Carried	New Toll Schedule: Toll Per Panama Canal Net Ton	New Toll Schedule: Toll Per Cargo Ton Carried	Total Transportation Costs per Ton Carried: Via Panama Canal: With Current Toll Structure	Via Panama Canal: With New Toll Structure	Via Panama Canal: Percent Increase	Via Least Costly Alternative Route
Container-Breakbulk (continued)											
Non-Diverted Transits (continued)											
U.S.W.C.-Canada E.C.	2	40	1,012	2.41	1.85	45.50	35.00	66.85	100.00	49.58	100.00
U.S.W.C.-C.A.E.C.	9	63	5,022	2.41	1.87	45.26	35.09	63.58	96.80	52.25	96.80
U.S.W.C.-Europe	38	1,010	22,109	2.41	1.85	33.10	25.46	80.25	103.86	29.41	103.86
U.S.W.C.-S.A.E.C.	4	79	346	2.41	1.87	6.28	4.87	76.06	79.06	3.94	79.06
U.S.W.C.-U.S.E.C.	0	3	212	2.41	1.85	52.61	40.48	58.25	96.88	66.31	96.88
Subtotal	1,325	20,519	500,517	2.41	1.86	27.05	20.91	80.94	100.64	24.34	100.64
Dry Bulk Carriers											
Non-Diverted Transits											
Africa-C.A.W.C.	15	483	5,697	2.41	1.35	22.56	12.60	14.85	26.10	75.80	26.10
Africa-Canada W.C.	34	1,354	4,738	2.41	1.31	7.00	3.80	17.28	19.77	14.42	19.77
Africa-S.A.W.C.	5	128	1,222	2.41	1.35	15.49	8.65	17.80	25.10	41.04	25.10
Africa-U.S.W.C.	7	161	1,102	2.41	1.30	8.03	4.34	16.19	19.23	18.75	19.23
Asia-Canada E.C.	8	302	917	2.41	1.28	4.90	2.60	17.00	18.32	7.77	18.32
Asia-C.A.E.C.	21	345	4,108	2.41	1.33	10.77	5.95	18.03	22.65	25.62	22.65
Asia-S.A.E.C.	6	152	179	2.41	1.35	1.79	1.00	21.65	21.30	-1.60	21.30
Asia-U.S.E.C.	242	6,345	68,416	2.41	1.30	13.43	7.25	16.31	22.26	36.47	22.26
C.A.W.C.-Africa	1	34	513	2.41	1.32	22.64	12.44	14.69	25.81	75.65	25.81
C.A.W.C.-C.A.E.C.	34	961	10,440	2.41	1.33	16.83	9.29	7.81	15.77	101.90	15.77
C.A.W.C.-Europe	16	462	4,398	2.41	1.31	13.69	7.47	12.08	18.24	50.93	18.24
C.A.W.C.-S.A.E.C.	10	136	311	2.41	1.35	1.79	1.00	12.00	11.65	-2.89	11.65
C.A.W.C.-U.S.E.C.	38	1,292	15,032	2.41	1.32	20.18	11.04	7.83	17.55	124.19	17.55
Canada E.C.-Asia	87	3,754	11,916	2.41	1.26	5.33	2.80	18.86	20.40	8.14	20.40

(Continued)

Table A-7. Laden Transits, Tons Carried, and Toll Revenue, Maximum Non-Diverting Toll Rates, 150,000 DWT Scenario, 2020, by Ship Type, Diversion Status, and Trade Route (1990 US$, except when noted)(continued)

Ship Type, Diversion Status, and Trade Route	Transits	Cargo Tonnage Carried (thousands)	Revenue (thousands) a/	Current Toll Schedule: Toll Per Panama Canal Net Ton	Current Toll Schedule: Toll Per Cargo Ton Carried	New Toll Schedule: Toll Per Panama Canal Net Ton	New Toll Schedule: Toll Per Cargo Ton Carried	Total Transportation Costs per Ton Carried: Via Panama Canal: With Current Toll Structure	Via Panama Canal: With New Toll Structure	Via Panama Canal: Percent Increase	Via Least Costly Alternative Route
Dry Bulk Carriers (continued)											
Non-Diverted Transits (continued)											
Canada E.C.-Oceania	3	58	318	2.41	1.33	5.07	2.79	19.62	21.08	7.46	21.08
Canada E.C.-S.A.W.C.	6	163	719	2.41	1.33	6.68	3.68	12.63	14.98	18.63	14.98
Canada W.C.-Africa	96	3,500	13,965	2.41	1.31	7.00	3.80	16.93	19.42	14.72	19.42
Canada W.C.-C.A.E.C.	4	105	1,334	2.41	1.35	17.54	9.80	12.85	21.30	65.81	21.30
Canada W.C.-Europe	242	11,174	68,953	2.41	1.26	10.76	5.63	16.88	21.25	25.88	21.25
Canada W.C.-S.A.E.C.	24	1,374	2,469	2.41	1.22	2.97	1.51	10.63	10.92	2.68	10.92
Canada W.C.-U.S.E.C.	64	1,569	22,910	2.41	1.35	20.59	11.50	13.00	23.15	78.13	23.15
C.A.E.C.-Asia	21	639	3,909	2.41	1.35	10.65	5.95	17.70	22.30	26.02	22.30
C.A.E.C.-C.A.W.C.	25	682	7,572	2.41	1.35	17.46	9.75	8.05	16.45	104.45	16.45
C.A.E.C.-Canada W.C.	2	55	592	2.41	1.35	17.63	9.90	13.05	21.60	65.47	21.60
C.A.E.C.-Oceania	1	11	64	2.41	1.35	7.12	4.00	19.95	22.60	13.26	22.60
C.A.E.C.-S.A.W.C.	12	313	1,491	2.41	1.35	6.89	3.85	11.00	13.50	22.77	13.50
C.A.E.C.-U.S.W.C.	9	236	2,709	2.41	1.35	17.55	9.80	11.85	20.30	71.36	20.30
Columbia-Asia	3	288	2,514	2.41	1.18	16.88	8.27	17.58	24.67	40.32	24.67
Europe-C.A.W.C.	30	797	9,273	2.41	1.34	17.49	9.75	12.79	21.20	65.71	21.20
Europe-Canada W.C.	11	286	2,441	2.41	1.31	11.49	6.25	16.30	21.24	30.30	21.24
Europe-S.A.W.C.	12	298	365	2.41	1.35	1.79	1.00	15.85	15.50	-2.18	15.50
Europe-U.S.W.C.	116	3,102	25,781	2.41	1.31	11.06	6.01	15.40	20.10	30.52	20.10
Middle East-S.A.W.C.	1	52	167	2.41	1.27	5.71	3.00	14.27	16.00	12.15	16.00
Oceania-Canada E.C.	22	661	1,987	2.41	1.35	5.19	2.90	19.70	21.25	7.89	21.25
Oceania-C.A.E.C.	6	166	934	2.41	1.35	8.59	4.80	18.80	22.25	18.38	22.25
Oceania-U.S.E.C.	119	6,406	14,791	2.41	1.24	4.11	2.12	15.19	16.07	5.78	16.07
S.A.E.C.-Asia	68	2,384	7,858	2.41	1.31	5.72	3.11	16.60	18.40	10.84	18.40

(Continued)

Table A-7. Laden Transits, Tons Carried, and Toll Revenue, Maximum Non-Diverting Toll Rates, 150,000 DWT Scenario, 2020, by Ship Type, Diversion Status, and Trade Route (1990 US$, except when noted)(continued)

Ship Type, Diversion Status, and Trade Route	Transits	Cargo Tonnage Carried (thousands)	Revenue (thousands) a/	Current Toll Schedule: Toll Per Panama Canal Net Ton	Current Toll Schedule: Toll Per Cargo Ton Carried	New Toll Schedule: Toll Per Panama Canal Net Ton	New Toll Schedule: Toll Per Cargo Ton Carried	Total Transportation Costs per Ton Carried: Via Panama Canal: With Current Toll Structure	Via Panama Canal: With New Toll Structure	Via Panama Canal: Percent Increase	Via Least Costly Alternative Route
Dry Bulk Carriers (continued)											
Non-Diverted Transits (continued)											
S.A.E.C.-C.A.W.C.	8	247	247	2.41	1.35	1.79	1.00	12.00	11.65	-2.89	11.65
S.A.E.C.-Canada W.C.	3	66	160	2.41	1.35	3.40	1.90	16.80	17.35	3.30	17.35
S.A.E.C.-U.S.W.C.	28	1,128	1,383	2.41	1.26	1.91	1.00	12.93	12.67	-2.02	12.67
S.A.W.C.-Africa	4	157	1,158	2.41	1.29	14.60	7.83	14.00	20.54	46.69	20.54
S.A.W.C.-Canada E.C.	0	10	36	2.41	1.35	6.59	3.70	13.15	15.50	17.84	15.50
S.A.W.C.-C.A.E.C.	7	144	892	2.41	1.35	6.89	3.85	11.00	13.50	22.77	13.50
S.A.W.C.-Europe	175	6,221	9,403	2.41	1.31	2.62	1.42	15.85	15.96	0.72	15.96
S.A.W.C.-U.S.E.C.	54	1,732	9,849	2.41	1.34	10.28	5.71	10.81	15.18	40.45	15.18
U.S.E.C.-Asia	1,601	104,329	788,768	2.41	1.22	13.66	6.92	17.29	22.99	32.96	22.99
U.S.E.C.-C.A.W.C.	207	6,232	75,638	2.41	1.34	20.63	11.47	8.12	18.25	124.75	18.25
U.S.E.C.-Canada W.C.	1	30	314	2.41	1.32	19.53	10.67	12.36	21.71	75.69	21.71
U.S.E.C.-Oceania	21	646	2,450	2.41	1.33	6.28	3.46	18.34	20.47	11.62	20.47
U.S.E.C.-S.A.W.C.	50	1,456	9,097	2.41	1.34	10.33	5.75	10.90	15.31	40.44	15.31
U.S.E.C.-U.S.W.C.	1	0	230	2.41	1.35	19.07	10.65	12.00	21.30	77.56	21.30
U.S.W.C.-Africa	121	4,599	22,691	2.41	1.28	8.05	4.28	15.62	18.62	19.20	18.62
U.S.W.C.-Canada E.C.	7	217	2,124	2.41	1.33	16.77	9.24	13.35	21.26	59.28	21.26
U.S.W.C.-C.A.E.C.	2	48	541	2.41	1.35	17.55	9.80	11.85	20.30	71.37	20.30
U.S.W.C.-Europe	140	6,524	37,197	2.41	1.26	10.09	5.28	13.94	17.96	28.83	17.96
U.S.W.C.-S.A.E.C.	11	279	326	2.41	1.35	1.79	1.00	15.80	15.45	-2.19	15.45
U.S.W.C.-U.S.E.C.	7	183	2,882	2.41	1.31	19.73	10.74	12.05	21.48	78.23	21.48
Venezuela-Asia	15	1,778	5,258	2.41	1.18	5.71	2.80	18.28	19.90	8.86	19.90
Subtotal	3,881	186,253	1,292,748	2.41	1.25	11.97	6.22	16.19	21.15	30.65	21.15
Chemical Tankers											
Non-Diverted Transits											
Africa-S.A.W.C.	1	32	528	2.41	1.34	30.60	17.00	42.34	58.00	36.99	58.00

(Continued)

Table A-7. Laden Transits, Tons Carried, and Toll Revenue, Maximum Non-Diverting Toll Rates, 150,000 DWT Scenario, 2020, by Ship Type, Diversion Status, and Trade Route (1990 US$, except when noted)(continued)

Ship Type, Diversion Status, and Trade Route	Transits	Cargo Tonnage Carried (thousands)	Revenue (thousands) a/	Current Toll Schedule: Toll Per Panama Canal Net Ton	Current Toll Schedule: Toll Per Cargo Ton Carried	New Toll Schedule: Toll Per Panama Canal Net Ton	New Toll Schedule: Toll Per Cargo Ton Carried	Total Transportation Costs per Ton Carried: Via Panama Canal: With Current Toll Structure	Via Panama Canal: With New Toll Structure	Via Panama Canal: Percent Increase	Via Least Costly Alternative Route
Chemical Tankers (continued)											
Non-Diverted Transits (continued)											
Asia-C.A.E.C.	3	34	743	2.41	1.34	32.85	18.25	52.46	69.37	32.24	69.37
Asia-S.A.E.C.	3	16	240	2.41	1.34	5.40	3.00	49.34	51.00	3.37	51.00
Asia-U.S.E.C.	32	537	11,270	2.41	1.34	30.45	16.93	44.74	60.33	34.85	60.33
C.A.W.C.-C.A.E.C.	23	139	6,596	2.41	1.34	75.60	42.00	36.34	77.00	111.89	77.00
C.A.W.C.-Europe	8	126	2,441	2.41	1.34	35.21	19.56	37.28	55.50	48.88	55.50
C.A.W.C.-U.S.E.C.	38	470	16,078	2.41	1.34	56.50	31.42	28.06	58.14	107.20	58.14
Canada W.C.-Europe	4	87	1,501	2.41	1.34	27.00	15.00	41.34	55.00	33.05	55.00
Canada W.C.-U.S.E.C.	32	744	21,028	2.41	1.34	40.28	22.40	31.74	52.80	66.35	52.80
C.A.E.C.-Asia	9	248	3,474	2.41	1.34	25.42	14.12	41.66	54.44	30.68	54.44
C.A.E.C.-C.A.W.C.	9	207	5,416	2.41	1.34	37.80	21.00	21.34	41.00	92.14	41.00
C.A.E.C.-S.A.W.C.	11	186	2,259	2.41	1.34	19.04	10.58	31.03	40.27	29.78	40.27
C.A.E.C.-U.S.W.C.	1	10	402	2.41	1.34	72.00	40.00	51.34	90.00	75.31	90.00
Europe-C.A.W.C.	6	30	1,312	2.41	1.34	55.80	31.00	56.34	86.00	52.65	86.00
Europe-S.A.W.C.	6	60	294	2.41	1.34	8.62	4.79	55.90	59.35	6.17	59.35
Europe-U.S.W.C.	9	182	2,920	2.41	1.34	27.74	15.41	42.34	56.41	33.23	56.41
Oceania-U.S.E.C.	18	455	3,559	2.41	1.34	11.05	6.16	40.54	45.36	11.88	45.36
S.A.E.C.-C.A.W.C.	8	61	433	2.41	1.34	11.32	6.29	46.87	51.82	10.56	51.82
S.A.E.C.-U.S.W.C.	2	84	90	2.41	1.35	1.78	1.00	30.35	30.00	-1.16	30.00
S.A.W.C.-C.A.E.C.	22	79	3,474	2.41	1.34	27.81	15.45	42.38	56.49	33.30	56.49
S.A.W.C.-Europe	8	92	420	2.41	1.34	7.88	4.38	51.64	54.68	5.89	54.68
S.A.W.C.-U.S.E.C.	7	47	1,413	2.41	1.34	29.26	16.27	38.35	53.28	38.93	53.28
U.S.E.C.-Asia	565	15,828	244,627	2.41	1.34	28.68	15.95	42.38	56.99	34.47	56.99
U.S.E.C.-C.A.W.C.	18	146	6,442	2.41	1.34	68.60	38.11	33.25	70.02	110.59	70.02

(Continued)

Table A-7. Laden Transits, Tons Carried, and Toll Revenue, Maximum Non-Diverting Toll Rates, 150,000 DWT Scenario, 2020, by Ship Type, Diversion Status, and Trade Route (1990 US$, except when noted)(continued)

Ship Type, Diversion Status, and Trade Route	Transits	Cargo Tonnage Carried (thousands)	Revenue (thousands) a/	Current Toll Schedule: Toll Per Panama Canal Net Ton	Current Toll Schedule: Toll Per Cargo Ton Carried	New Toll Schedule: Toll Per Panama Canal Net Ton	New Toll Schedule: Toll Per Cargo Ton Carried	Total Transportation Costs per Ton Carried: Via Panama Canal: With Current Toll Structure	Via Panama Canal: With New Toll Structure	Via Panama Canal: Percent Increase	Via Least Costly Alternative Route
Chemical Tankers (continued)											
Non-Diverted Transits (continued)											
U.S.E.C.-Canada W.C.	5	36	1,555	2.41	1.34	75.43	41.91	55.76	96.33	72.76	96.33
U.S.E.C.-Oceania	17	409	2,888	2.41	1.34	12.45	6.93	44.76	50.35	12.49	50.35
U.S.E.C.-S.A.W.C.	45	434	8,382	2.41	1.34	30.28	16.84	39.65	55.15	39.09	55.15
U.S.E.C.-U.S.W.C.	50	1,635	34,824	2.41	1.35	33.88	18.96	25.70	43.31	68.53	43.31
U.S.W.C.-C.A.E.C.	2	38	1,129	2.41	1.34	36.00	20.00	29.34	48.00	63.61	48.00
U.S.W.C.-Europe	16	215	4,391	2.41	1.34	30.61	17.02	45.63	61.31	34.36	61.31
U.S.W.C.-S.A.E.C.	0	3	8	2.41	1.34	3.60	2.00	37.34	38.00	1.77	38.00
U.S.W.C.-U.S.E.C.	15	256	10,673	2.41	1.35	33.89	18.96	25.80	43.41	68.27	43.41
Subtotal	994	22,925	400,811	2.41	1.34	30.03	16.71	40.06	55.35	38.16	55.35
Full Container Ships											
Non-Diverted Transits											
Africa-U.S.W.C.	0	2	41	2.41	4.48	21.38	39.74	246.46	281.72	14.31	281.72
Asia-Canada E.C.	35	682	9,231	2.41	4.65	8.92	17.21	210.85	223.41	5.96	223.41
Asia-S.A.E.C.	2	7	103	2.41	4.48	4.79	8.90	274.32	278.74	1.61	278.74
Asia-U.S.E.C. (low inv. cost)	206	4,485	84,005	2.41	4.76	9.09	17.96	238.55	251.75	5.53	251.75
C.A.W.C.-C.A.E.C.	1	5	544	2.41	4.38	46.33	84.18	129.97	209.77	61.40	209.77
C.A.W.C.-Europe	2	22	1,175	2.41	4.36	32.02	57.92	153.30	206.86	34.94	206.86
C.A.W.C.-S.A.E.C.	0	4	35	2.41	4.38	6.22	11.29	163.77	170.68	4.22	170.68
C.A.W.C.-U.S.E.C.	0	3	201	2.41	4.48	52.39	97.40	157.98	250.90	58.82	250.90
Canada E.C.-Asia	32	561	3,673	2.41	4.50	5.22	9.74	230.54	235.78	2.27	235.78
Canada E.C.-Oceania	12	145	474	2.41	4.43	2.45	4.50	259.72	259.79	0.03	259.79
Canada E.C.-U.S.W.C.	5	136	6,593	2.41	4.73	35.14	69.00	160.73	225.00	39.98	225.00

(Continued)

Table A-7. Laden Transits, Tons Carried, and Toll Revenue, Maximum Non-Diverting Toll Rates, 150,000 DWT Scenario, 2020, by Ship Type, Diversion Status, and Trade Route (1990 US$, except when noted)(continued)

Ship Type, Diversion Status, and Trade Route	Transits	Cargo Tonnage Carried (thousands)	Revenue (thousands) a/	Current Toll Schedule: Toll Per Panama Canal Net Ton	Current Toll Schedule: Toll Per Cargo Ton Carried	New Toll Schedule: Toll Per Panama Canal Net Ton	New Toll Schedule: Toll Per Cargo Ton Carried	Total Transportation Costs per Ton Carried: Via Panama Canal: With Current Toll Structure	Total Transportation Costs per Ton Carried: Via Panama Canal: With New Toll Structure	Total Transportation Costs per Ton Carried: Via Panama Canal: Percent Increase	Total Transportation Costs per Ton Carried: Via Least Costly Alternative Route
Full Container Ships (continued)											
Non-Diverted Transits (continued)											
Canada W.C.-Europe	32	491	21,126	2.41	4.46	36.62	67.81	212.22	275.57	29.85	275.57
C.A.E.C.-Asia	8	99	3,035	2.41	4.41	17.86	32.68	217.31	245.58	13.01	245.58
C.A.E.C.-C.A.W.C.	1	3	444	2.41	4.51	77.09	144.39	184.21	324.09	75.93	324.09
C.A.E.C.-Oceania	0	3	97	2.41	4.48	26.71	49.68	248.46	293.66	18.19	293.66
C.A.E.C.-S.A.W.C.	6	6	665	2.41	4.64	22.80	43.87	187.15	226.38	20.96	226.38
C.A.E.C.-U.S.W.C.	1	12	689	2.41	4.38	38.56	70.16	154.50	220.28	42.57	220.28
Europe-C.A.W.C.	0	1	88	2.41	4.36	52.98	95.90	153.30	244.84	59.71	244.84
Europe-Canada W.C.	24	311	13,558	2.41	4.43	34.53	63.45	224.73	283.75	26.26	283.75
Europe-S.A.W.C.	51	731	21,935	2.41	4.36	18.77	33.94	194.28	223.86	15.23	223.86
Europe-U.S.W.C.	144	2,855	25,065	2.41	4.62	6.27	12.03	209.75	217.16	3.53	217.16
Middle East-U.S.W.C.	8	116	2,411	2.41	4.42	17.12	31.40	221.09	248.07	12.20	248.07
Oceania-C.A.E.C.	2	24	670	2.41	4.48	26.71	49.68	248.46	293.66	18.19	293.66
S.A.E.C.-C.A.W.C.	0	4	46	2.41	4.48	8.53	15.86	193.78	205.16	5.87	205.16
S.A.E.C.-U.S.W.C.	1	9	229	2.41	4.48	22.44	41.74	179.84	217.10	20.72	217.10
S.A.W.C.-C.A.E.C.	0	1	37	2.41	4.50	24.39	45.56	191.66	232.72	21.42	232.72
S.A.W.C.-Europe	103	1,966	44,815	2.41	4.36	18.76	33.94	194.27	223.85	15.23	223.85
S.A.W.C.-U.S.E.C.	46	483	16,439	2.41	4.48	28.31	52.66	170.90	219.08	28.19	219.08
U.S.E.C.-Asia (low inv. cost)	243	7,139	92,556	2.41	4.74	9.01	17.72	239.88	252.86	5.41	252.86
U.S.E.C.-C.A.W.C.	6	55	5,120	2.41	4.48	64.12	119.28	136.10	250.90	84.35	250.90
U.S.E.C.-S.A.W.C.	57	487	20,359	2.41	4.48	28.31	52.66	170.90	219.08	28.19	219.08
U.S.E.C.-U.S.W.C.	1	26	1,567	2.41	4.71	41.09	80.28	144.82	220.39	52.18	220.39
U.S.W.C.-Africa	0	0	0	2.41	5.04	17.20	36.00	197.04	228.00	15.71	228.00
U.S.W.C.-Canada E.C.	0	5	312	2.41	4.51	38.70	72.39	163.61	231.49	41.49	231.49

(Continued)

Table A-7. Laden Transits, Tons Carried, and Toll Revenue, Maximum Non-Diverting Toll Rates, 150,000 DWT Scenario, 2020, by Ship Type, Diversion Status, and Trade Route (1990 US$, except when noted)(continued)

Ship Type, Diversion Status, and Trade Route	Transits	Cargo Tonnage Carried (thousands)	Revenue (thousands) a/	Current Toll Schedule: Toll Per Panama Canal Net Ton	Current Toll Schedule: Toll Per Cargo Ton Carried	New Toll Schedule: Toll Per Panama Canal Net Ton	New Toll Schedule: Toll Per Cargo Ton Carried	Total Transportation Costs per Ton Carried: Via Panama Canal: With Current Toll Structure	Via Panama Canal: With New Toll Structure	Via Panama Canal: Percent Increase	Via Least Costly Alternative Route
Full Container Ships (continued)											
Non-Diverted Transits (continued)											
U.S.W.C.-C.A.E.C.	7	42	2,930	2.41	4.46	39.63	73.29	159.01	227.84	43.29	227.84
U.S.W.C.-Europe	194	3,428	31,635	2.41	4.64	5.76	11.10	212.59	219.05	3.04	219.05
U.S.W.C.-Middle East	8	103	984	2.41	4.42	6.76	12.40	221.46	229.44	3.60	229.44
U.S.W.C.-U.S.E.C.	13	168	16,390	2.41	4.59	42.88	81.71	145.28	222.40	53.08	222.40
Subtotal	1,251	24,619	429,279	2.41	4.65	11.25	21.69	220.97	238.34	7.86	238.34
General Cargo Ships											
Non-Diverted Transits											
Africa-C.A.W.C.	2	23	784	2.41	1.39	41.22	23.75	28.19	50.55	79.33	50.55
Africa-S.A.W.C.	2	35	568	2.41	1.39	29.16	16.80	34.14	49.55	45.14	49.55
Asia-Canada E.C.	0	2	9	2.41	1.39	8.59	4.95	38.09	41.65	9.35	41.65
Asia-C.A.E.C.	71	844	17,028	2.41	1.39	20.65	11.90	34.09	44.60	30.84	44.60
Asia-S.A.E.C.	2	13	83	2.41	1.39	3.38	1.95	41.09	41.65	1.37	41.65
Asia-U.S.E.C.	26	339	7,814	2.41	1.39	25.34	14.58	34.56	47.75	38.18	47.75
C.A.W.C.-Africa	5	94	2,336	2.41	1.39	41.22	23.75	28.19	50.55	79.33	50.55
C.A.W.C.-C.A.E.C.	25	109	7,004	2.41	1.46	72.89	44.13	10.10	52.77	422.53	52.77
C.A.W.C.-Europe	21	120	5,751	2.41	1.41	36.86	21.52	26.48	46.59	75.96	46.59
C.A.W.C.-S.A.E.C.	8	51	539	2.41	1.41	9.46	5.53	25.50	29.62	16.16	29.62
C.A.W.C.-U.S.E.C.	10	51	3,700	2.41	1.45	92.24	55.61	11.45	65.61	472.86	65.61
Canada E.C.-Asia	5	12	463	2.41	1.39	8.59	4.95	38.09	41.65	9.35	41.65
Canada E.C.-C.A.W.C.	1	15	355	2.41	1.39	34.28	19.75	19.29	37.65	95.19	37.65
Canada E.C.-Oceania	0	4	4	2.41	1.39	1.74	1.00	43.04	42.65	-0.90	42.65
Canada E.C.-S.A.W.C.	6	53	944	2.41	1.39	13.80	7.95	25.19	31.75	26.05	31.75

(Continued)

Table A-7. Laden Transits, Tons Carried, and Toll Revenue, Maximum Non-Diverting Toll Rates, 150,000 DWT Scenario, 2020, by Ship Type, Diversion Status, and Trade Route (1990 US$, except when noted)(continued)

Ship Type, Diversion Status, and Trade Route	Transits	Cargo Tonnage Carried (thousands)	Revenue (thousands) a/	Current Toll Schedule: Toll Per Panama Canal Net Ton	Current Toll Schedule: Toll Per Cargo Ton Carried	New Toll Schedule: Toll Per Panama Canal Net Ton	New Toll Schedule: Toll Per Cargo Ton Carried	Total Transportation Costs per Ton Carried: Via Panama Canal: With Current Toll Structure	Via Panama Canal: With New Toll Structure	Via Panama Canal: Percent Increase	Via Least Costly Alternative Route
General Cargo Ships (continued)											
Non-Diverted Transits (continued)											
Canada W.C.-C.A.E.C.	6	45	2,267	2.41	1.42	59.46	35.01	28.50	62.09	117.87	62.09
Canada W.C.-Europe	1	12	169	2.41	1.39	25.77	14.85	34.09	47.55	39.49	47.55
Canada W.C.-Middle East	1	6	1	2.41	1.39	0.09	0.05	39.04	37.70	-3.43	37.70
Canada W.C.-S.A.E.C.	6	58	2,246	2.41	1.41	51.95	30.45	33.28	62.32	87.25	62.32
C.A.E.C.-Asia	22	415	5,140	2.41	1.39	20.65	11.90	34.09	44.60	30.84	44.60
C.A.E.C.-C.A.W.C.	25	89	7,912	2.41	1.45	80.93	48.84	9.12	56.51	519.34	56.51
C.A.E.C.-Oceania	0	7	83	2.41	1.39	15.45	8.90	37.09	44.60	20.25	44.60
C.A.E.C.-S.A.W.C.	24	218	3,631	2.41	1.41	20.56	12.00	20.63	31.22	51.36	31.22
C.A.E.C.-U.S.W.C.	9	28	2,628	2.41	1.51	116.34	73.00	30.51	102.00	234.29	102.00
Europe-C.A.W.C.	44	300	19,439	2.41	1.40	50.64	29.41	25.47	53.48	109.98	53.48
Europe-Canada W.C.	2	9	536	2.41	1.50	79.95	49.78	71.00	119.28	68.00	119.28
Europe-S.A.W.C.	39	385	2,326	2.41	1.39	5.55	3.20	30.83	32.64	5.87	32.64
Europe-U.S.W.C.	2	11	708	2.41	1.44	65.41	39.19	55.78	93.53	67.66	93.53
Middle East-S.A.W.C.	4	2	483	2.41	1.50	42.19	26.27	64.45	89.22	38.43	89.22
Middle East-U.S.W.C.	2	4	218	2.41	1.39	12.06	6.95	37.09	42.65	15.00	42.65
Oceania-C.A.E.C.	0	3	89	2.41	1.39	17.18	9.90	36.09	44.60	23.58	44.60
Oceania-U.S.E.C.	1	7	145	2.41	1.43	19.56	11.63	51.18	61.38	19.92	61.38
S.A.E.C.-C.A.W.C.	7	148	432	2.41	1.39	5.21	3.00	23.19	24.80	6.95	24.80
S.A.E.C.-Canada W.C.	0	1	9	2.41	1.39	6.86	3.95	32.14	34.70	7.97	34.70
S.A.E.C.-U.S.W.C.	8	36	397	2.41	1.40	5.28	3.06	34.56	36.22	4.82	36.22
S.A.W.C.-Africa	4	81	1,468	2.41	1.39	30.98	17.85	31.14	47.60	52.87	47.60
S.A.W.C.-Canada E.C.	0	6	57	2.41	1.39	13.80	7.95	25.19	31.75	26.05	31.75
S.A.W.C.-C.A.E.C.	41	177	6,581	2.41	1.45	37.41	22.46	21.94	42.95	95.79	42.95

(Continued)

Table A-7. Laden Transits, Tons Carried, and Toll Revenue, Maximum Non-Diverting Toll Rates, 150,000 DWT Scenario, 2020, by Ship Type, Diversion Status, and Trade Route (1990 US$, except when noted)(continued)

Ship Type, Diversion Status, and Trade Route	Transits	Cargo Tonnage Carried (thousands)	Revenue (thousands) a/	Current Toll Schedule: Toll Per Panama Canal Net Ton	Current Toll Schedule: Toll Per Cargo Ton Carried	New Toll Schedule: Toll Per Panama Canal Net Ton	New Toll Schedule: Toll Per Cargo Ton Carried	Total Transportation Costs per Ton Carried: Via Panama Canal: With Current Toll Structure	Via Panama Canal: With New Toll Structure	Via Panama Canal: Percent Increase	Via Least Costly Alternative Route
General Cargo Ships (continued)											
Non-Diverted Transits (continued)											
S.A.W.C.-Europe	98	1,601	5,873	2.41	1.39	5.21	3.00	30.14	31.75	5.35	31.75
S.A.W.C.-Middle East	2	23	215	2.41	1.39	12.06	6.95	32.14	37.70	17.30	37.70
S.A.W.C.-U.S.E.C.	27	205	5,207	2.41	1.40	24.42	14.22	23.26	36.08	55.09	36.08
U.S.E.C.-Asia	48	782	14,247	2.41	1.39	25.47	14.66	34.72	47.99	38.23	47.99
U.S.E.C.-C.A.W.C.	48	352	17,535	2.41	1.43	70.52	41.83	13.42	53.82	301.06	53.82
U.S.E.C.-Oceania	3	46	362	2.41	1.39	10.33	5.95	37.09	41.65	12.30	41.65
U.S.E.C.-S.A.W.C.	86	605	16,487	2.41	1.41	25.23	14.72	23.39	36.70	56.93	36.70
U.S.E.C.-U.S.W.C.	1	0	237	2.41	1.50	122.09	76.05	32.50	107.05	229.37	107.05
U.S.W.C.-Africa	2	25	445	2.41	1.39	17.18	9.90	34.09	42.60	24.97	42.60
U.S.W.C.-C.A.E.C.	1	0	437	2.41	1.50	109.94	68.48	29.71	96.69	225.43	96.69
U.S.W.C.-Europe	3	31	718	2.41	1.42	38.08	22.47	40.73	61.78	51.67	61.78
U.S.W.C.-S.A.E.C.	6	15	269	2.41	1.45	10.21	6.14	47.38	52.07	9.90	52.07
Subtotal	758	7,499	166,380	2.41	1.40	25.33	14.71	28.74	41.84	45.59	41.84
Liquid Gas Carriers											
Non-Diverted Transits											
C.A.W.C.-C.A.E.C.	4	18	954	2.41	7.30	42.24	128.00	49.30	170.00	244.81	170.00
C.A.E.C.-Asia	15	82	3,770	2.41	4.67	25.75	49.93	107.52	152.78	42.09	152.78
C.A.E.C.-C.A.W.C.	96	1,270	60,050	2.41	3.79	32.89	51.76	23.91	71.88	200.60	71.88
C.A.E.C.-S.A.W.C.	8	119	2,357	2.41	3.83	15.12	24.00	40.83	61.00	49.42	61.00
C.A.E.C.-U.S.W.C.	1	12	497	2.41	3.83	33.39	53.00	45.83	95.00	107.31	95.00
Europe-C.A.W.C.	2	5	253	2.41	7.30	31.02	94.00	110.30	197.00	78.60	197.00
Europe-S.A.W.C.	0	1	4	2.41	3.82	5.04	8.00	67.82	72.00	6.16	72.00

(Continued)

Table A-7. Laden Transits, Tons Carried, and Toll Revenue, Maximum Non-Diverting Toll Rates, 150,000 DWT Scenario, 2020, by Ship Type, Diversion Status, and Trade Route (1990 US$, except when noted)(continued)

Ship Type, Diversion Status, and Trade Route	Transits	Cargo Tonnage Carried (thousands)	Revenue (thousands) a/	Current Toll Schedule: Toll Per Panama Canal Net Ton	Current Toll Schedule: Toll Per Cargo Ton Carried	New Toll Schedule: Toll Per Panama Canal Net Ton	New Toll Schedule: Toll Per Cargo Ton Carried	Total Transportation Costs per Ton Carried: Via Panama Canal: With Current Toll Structure	Via Panama Canal: With New Toll Structure	Via Panama Canal: Percent Increase	Via Least Costly Alternative Route
Liquid Gas Carriers (continued)											
Non-Diverted Transits (continued)											
Oceania-U.S.E.C.	6	91	1,229	2.41	3.62	8.64	12.99	66.11	75.48	14.17	75.48
S.A.E.C.-Asia	2	27	415	2.41	3.83	11.97	19.00	78.83	94.00	19.25	94.00
S.A.E.C.-C.A.W.C.	11	31	399	2.41	7.30	6.60	20.00	99.30	112.00	12.79	112.00
U.S.E.C.-Asia	23	273	11,076	2.41	3.86	26.87	43.04	82.65	121.83	47.40	121.83
U.S.E.C.-C.A.W.C.	1	2	190	2.41	7.30	46.53	141.00	57.30	191.00	233.32	191.00
U.S.E.C.-Oceania	1	11	176	2.41	3.83	10.71	17.00	86.83	100.00	15.17	100.00
U.S.E.C.-S.A.W.C.	2	6	234	2.41	7.30	21.78	66.00	94.30	153.00	62.24	153.00
Subtotal	172	1,947	81,603	2.41	3.90	28.58	46.29	41.82	84.66	102.42	84.66
Passenger Ships											
Non-Diverted Transits											
North-Bound	153	0	2,251	2.41	0.00	2.01	0.00	0.00	0.00	0.00	0.00
South-Bound	183	0	3,894	2.41	0.00	2.01	0.00	0.00	0.00	0.00	0.00
Subtotal	336	0	6,145	2.41	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Refrigerated Ships											
Non-Diverted Transits											
Africa-Asia	29	151	398	2.41	4.28	1.69	3.00	162.08	160.80	-0.79	160.80
Africa-C.A.W.C.	0	0	82	2.41	4.27	55.47	98.40	113.87	208.00	82.66	208.00
Africa-S.A.W.C.	9	9	3,213	2.41	4.15	38.75	66.78	133.93	196.56	46.76	196.56
Asia-C.A.E.C.	20	71	6,038	2.41	3.97	29.89	49.17	128.09	173.29	35.29	173.29
Asia-S.A.E.C.	5	3	188	2.41	4.28	4.40	7.80	168.08	171.60	2.10	171.60
Asia-U.S.E.C.	0	0	125	2.41	4.28	34.95	62.00	140.48	198.20	41.09	198.20

(Continued)

Table A-7. Laden Transits, Tons Carried, and Toll Revenue, Maximum Non-Diverting Toll Rates, 150,000 DWT Scenario, 2020, by Ship Type, Diversion Status, and Trade Route (1990 US$, except when noted)(continued)

Ship Type, Diversion Status, and Trade Route	Transits	Cargo Tonnage Carried (thousands)	Revenue (thousands) a/	Current Toll Schedule: Toll Per Panama Canal Net Ton	Current Toll Schedule: Toll Per Cargo Ton Carried	New Toll Schedule: Toll Per Panama Canal Net Ton	New Toll Schedule: Toll Per Cargo Ton Carried	Total Transportation Costs per Ton Carried, Via Panama Canal: With Current Toll Structure	Via Panama Canal: With New Toll Structure	Via Panama Canal: Percent Increase	Via Least Costly Alternative Route
Refrigerated Ships (continued)											
Non-Diverted Transits (continued)											
C.A.W.C.-Africa	1	3	461	2.41	4.28	55.46	98.40	113.88	208.00	82.66	208.00
C.A.W.C.-Canada E.C.	0	2	132	2.41	4.28	44.98	79.80	76.48	152.00	98.76	152.00
C.A.W.C.-C.A.E.C.	20	132	10,401	2.41	3.88	47.91	77.06	50.94	124.12	143.67	124.12
C.A.W.C.-Europe	219	987	79,274	2.41	3.94	35.22	57.59	89.55	143.20	59.91	143.20
C.A.W.C.-S.A.E.C.	1	4	50	2.41	4.28	6.65	11.80	89.28	96.80	8.43	96.80
C.A.W.C.-U.S.E.C.	1	2	398	2.41	4.28	52.08	92.40	61.68	149.80	142.88	149.80
Canada E.C.-Asia	12	63	1,063	2.41	4.28	10.60	18.80	155.08	169.60	9.37	169.60
Canada E.C.-C.A.W.C.	5	10	2,169	2.41	3.95	46.27	75.85	70.22	142.12	102.39	142.12
Canada W.C.-Europe	3	28	1,077	2.41	4.12	34.78	59.42	131.88	187.18	41.94	187.18
C.A.E.C.-Asia	10	32	2,734	2.41	4.12	29.91	51.17	135.20	182.25	34.80	182.25
C.A.E.C.-C.A.W.C.	23	5	11,938	2.41	3.87	47.90	77.00	50.87	124.00	143.74	124.00
C.A.E.C.-S.A.W.C.	54	42	12,027	2.41	3.87	20.53	33.00	71.87	101.00	40.52	101.00
Europe-C.A.W.C.	160	13	98,228	2.41	3.89	57.02	91.97	89.41	177.49	98.52	177.49
Europe-Canada W.C.	1	1	221	2.41	4.28	32.24	57.20	136.48	189.40	38.78	189.40
Europe-S.A.W.C.	169	145	9,626	2.41	4.02	5.90	9.84	116.06	121.88	5.01	121.88
Europe-U.S.W.C.	14	10	3,561	2.41	4.28	31.45	55.80	126.88	178.40	40.61	178.40
Middle East-S.A.W.C.	2	3	223	2.41	4.28	16.12	28.60	129.48	153.80	18.79	153.80
Oceania-C.A.E.C.	3	18	519	2.41	4.28	22.21	39.40	147.28	182.40	23.85	182.40
Oceania-U.S.E.C.	33	116	3,837	2.41	4.24	14.02	24.67	148.70	169.13	13.74	169.13
S.A.E.C.-Asia	11	50	1,382	2.41	4.28	14.99	26.60	137.48	159.80	16.24	159.80
S.A.W.C.-Africa	14	50	5,276	2.41	4.15	42.24	72.78	123.33	191.96	55.64	191.96
S.A.W.C.-C.A.E.C.	21	111	4,271	2.41	3.99	20.30	33.61	75.06	104.68	39.46	104.68
S.A.W.C.-Europe	928	4,670	50,906	2.41	4.05	5.78	9.72	115.41	121.08	4.91	121.08

(Continued)

Table A-7. Laden Transits, Tons Carried, and Toll Revenue, Maximum Non-Diverting Toll Rates, 150,000 DWT Scenario, 2020, by Ship Type, Diversion Status, and Trade Route (1990 US$, except when noted)(continued)

Ship Type, Diversion Status, and Trade Route	Transits	Cargo Tonnage Carried (thousands)	Revenue (thousands) a/	Current Toll Schedule: Toll Per Panama Canal Net Ton	Current Toll Schedule: Toll Per Cargo Ton Carried	New Toll Schedule: Toll Per Panama Canal Net Ton	New Toll Schedule: Toll Per Cargo Ton Carried	Total Transportation Costs per Ton Carried, Via Panama Canal: With Current Toll Structure	Total Transportation Costs per Ton Carried, Via Panama Canal: With New Toll Structure	Total Transportation Costs per Ton Carried, Via Panama Canal: Percent Increase	Total Transportation Costs per Ton Carried: Via Least Costly Alternative Route
Refrigerated Ships (continued)											
Non-Diverted Transits (continued)											
S.A.W.C.-Middle East	5	17	699	2.41	4.28	16.12	28.60	129.48	153.80	18.79	153.80
S.A.W.C.-U.S.E.C.	607	2,226	143,925	2.41	4.02	24.45	40.76	80.58	117.32	45.60	117.32
U.S.E.C.-Asia	32	114	11,043	2.41	4.01	35.93	59.80	134.04	189.83	41.62	189.83
U.S.E.C.-C.A.W.C.	27	66	14,766	2.41	3.93	53.56	87.35	56.28	139.70	148.22	139.70
U.S.E.C.-S.A.W.C.	282	434	67,988	2.41	3.99	24.42	40.47	79.55	116.03	45.85	116.03
U.S.W.C.-Europe	126	672	35,380	2.41	4.17	32.04	55.41	126.00	177.24	40.67	177.24
U.S.W.C.-S.A.E.C.	1	3	28	2.41	4.24	3.98	7.00	121.95	124.71	2.26	124.71
Subtotal	2,847	10,266	583,646	2.41	4.02	21.15	35.28	104.57	129.67	24.00	129.67
Roll-On Roll-Off											
Non-Diverted Transits											
Asia-Canada E.C.	2	8	203	2.41	9.35	7.65	29.67	278.31	298.63	7.30	298.63
Asia-C.A.E.C.	24	473	9,637	2.41	7.92	11.73	38.57	225.40	256.05	13.60	256.05
Asia-U.S.E.C.	40	766	23,844	2.41	7.95	17.95	59.26	237.11	288.42	21.64	288.42
C.A.W.C.-Europe	12	64	5,501	2.41	8.66	23.37	84.00	181.66	257.00	41.47	257.00
C.A.W.C.-S.A.E.C.	0	0	4	2.41	8.67	5.00	18.00	193.67	203.00	4.82	203.00
C.A.W.C.-U.S.E.C.	1	1	694	2.41	8.66	28.94	104.00	155.66	251.00	61.25	251.00
Canada E.C.-Asia	8	41	584	2.41	9.30	4.79	18.50	327.47	336.67	2.81	336.67
Canada E.C.-Oceania	1	31	108	2.41	7.77	1.86	6.00	240.88	239.11	-0.73	239.11
Canada W.C.-C.A.E.C.	0	0	78	2.41	10.19	34.25	144.89	224.84	359.54	59.91	359.54
C.A.E.C.-C.A.W.C.	0	1	193	2.41	9.72	31.72	127.86	154.90	273.04	76.27	273.04
C.A.E.C.-Oceania	2	7	719	2.41	8.66	14.75	53.00	252.66	297.00	17.55	297.00
C.A.E.C.-S.A.W.C.	46	81	7,412	2.41	10.19	13.84	58.55	217.90	266.26	22.19	266.26

(Continued)

Table A-7. Laden Transits, Tons Carried, and Toll Revenue, Maximum Non-Diverting Toll Rates, 150,000 DWT Scenario, 2020, by Ship Type, Diversion Status, and Trade Route (1990 US$, except when noted)(continued)

Ship Type, Diversion Status, and Trade Route	Transits	Cargo Tonnage Carried (thousands)	Revenue (thousands) a/	Current Toll Schedule: Toll Per Panama Canal Net Ton	Current Toll Schedule: Toll Per Cargo Ton Carried	New Toll Schedule: Toll Per Panama Canal Net Ton	New Toll Schedule: Toll Per Cargo Ton Carried	Total Transportation Costs per Ton Carried: Via Panama Canal: With Current Toll Structure	Via Panama Canal: With New Toll Structure	Via Panama Canal: Percent Increase	Via Least Costly Alternative Route
Roll-On Roll-Off (continued)											
Non-Diverted Transits (continued)											
Europe-C.A.W.C.	18	112	13,422	2.41	8.66	38.40	138.00	181.66	311.00	71.20	311.00
Europe-S.A.W.C.	0	0	8	2.41	8.67	11.95	43.00	240.67	275.00	14.26	275.00
Europe-U.S.W.C.	0	2	172	2.41	8.66	21.70	78.00	241.66	311.00	28.69	311.00
Oceania-C.A.E.C.	0	0	3	2.41	8.01	14.06	46.75	223.21	261.95	17.35	261.95
S.A.W.C.-C.A.E.C.	12	23	1,867	2.41	10.19	13.84	58.55	217.90	266.26	22.19	266.26
S.A.W.C.-Europe	1	3	265	2.41	8.66	13.64	49.00	240.66	281.00	16.76	281.00
S.A.W.C.-U.S.E.C.	6	13	1,250	2.41	10.19	17.60	74.43	210.96	275.20	30.45	275.20
U.S.E.C.-Asia	8	56	3,324	2.41	8.64	19.68	70.56	275.58	337.50	22.47	337.50
U.S.E.C.-C.A.W.C.	2	3	1,326	2.41	8.66	35.34	127.00	132.66	251.00	89.20	251.00
U.S.E.C.-S.A.W.C.	26	45	5,247	2.41	10.19	17.59	74.43	210.96	275.20	30.45	275.20
U.S.W.C.-Canada E.C.	1	2	330	2.41	10.20	33.08	139.95	245.70	375.45	52.81	375.45
U.S.W.C.-C.A.E.C.	1	23	934	2.41	7.75	24.33	78.25	153.28	223.78	45.99	223.78
U.S.W.C.-Europe	0	0	14	2.41	7.80	18.77	60.73	203.42	256.35	26.02	256.35
U.S.W.C.-U.S.E.C.	0	5	248	2.41	7.86	31.14	101.54	151.24	244.92	61.94	244.92
Subtotal	213	1,762	77,386	2.41	8.59	17.77	63.33	228.49	279.24	22.21	279.24
Tankers											
Non-Diverted Transits											
Africa-U.S.W.C.	0	0	1	2.41	1.27	11.35	6.00	15.27	20.00	30.94	20.00
Asia-U.S.E.C.	1	30	356	2.41	1.27	20.79	10.94	22.15	31.82	43.67	31.82
C.A.W.C.-Africa	0	0	33	2.41	1.27	83.58	44.00	37.27	80.00	114.66	80.00
C.A.W.C.-Canada E.C.	0	4	60	2.41	1.27	28.30	14.90	10.23	23.86	133.26	23.86
C.A.W.C.-C.A.E.C.	14	85	5,394	2.41	1.27	40.45	21.29	8.68	28.70	230.71	28.70

(Continued)

Table A-7. Laden Transits, Tons Carried, and Toll Revenue, Maximum Non-Diverting Toll Rates, 150,000 DWT Scenario, 2020, by Ship Type, Diversion Status, and Trade Route (1990 US$, except when noted)(continued)

Ship Type, Diversion Status, and Trade Route	Transits	Cargo Tonnage Carried (thousands)	Revenue (thousands) a/	Current Toll Schedule: Toll Per Panama Canal Net Ton	Current Toll Schedule: Toll Per Cargo Ton Carried	New Toll Schedule: Toll Per Panama Canal Net Ton	New Toll Schedule: Toll Per Cargo Ton Carried	Total Transportation Costs per Ton Carried: Via Panama Canal: With Current Toll Structure	Via Panama Canal: With New Toll Structure	Via Panama Canal: Percent Increase	Via Least Costly Alternative Route
Tankers (continued)											
Non-Diverted Transits (continued)											
C.A.W.C.-Europe	3	70	925	2.41	1.27	20.79	10.94	14.19	23.86	68.17	23.86
C.A.W.C.-U.S.E.C.	7	53	2,582	2.41	1.27	41.84	22.02	9.70	30.45	213.97	30.45
Canada E.C.-Asia	10	393	1,176	2.41	1.27	5.40	2.84	20.80	22.37	7.56	22.37
Canada W.C.-U.S.E.C.	5	253	3,369	2.41	1.27	20.94	11.00	11.42	21.15	85.26	21.15
C.A.E.C.-Asia	6	180	1,893	2.41	1.27	15.64	8.21	18.65	25.59	37.24	25.59
C.A.E.C.-C.A.W.C.	93	1,762	37,135	2.41	1.27	24.82	13.05	6.05	17.83	194.86	17.83
C.A.E.C.-S.A.W.C.	41	879	7,009	2.41	1.27	11.51	6.06	10.87	15.66	44.09	15.66
C.A.E.C.-U.S.W.C.	17	712	8,400	2.41	1.27	19.93	10.48	9.67	18.88	95.30	18.88
Europe-C.A.W.C.	12	54	1,690	2.41	1.27	32.60	17.16	20.41	36.30	77.87	36.30
Europe-S.A.W.C.	2	52	124	2.41	1.27	4.05	2.13	19.11	19.97	4.51	19.97
Europe-U.S.W.C.	6	196	2,021	2.41	1.27	17.56	9.24	18.01	25.98	44.27	25.98
Middle East-U.S.W.C.	0	0	1	2.41	1.25	11.60	6.00	23.25	28.00	20.45	28.00
Oceania-U.S.E.C.	9	153	890	2.41	1.27	8.99	4.73	23.22	26.68	14.91	26.68
S.A.E.C.-Asia	104	14,147	30,305	2.41	1.27	4.07	2.14	13.83	14.70	6.30	14.70
S.A.E.C.-C.A.W.C.	85	4,342	11,987	2.41	1.26	3.84	2.01	8.64	9.39	8.66	9.39
S.A.E.C.-U.S.W.C.	49	1,967	2,339	2.41	1.26	1.94	1.02	14.90	14.66	-1.64	14.66
S.A.W.C.-Canada E.C.	2	36	268	2.41	1.27	11.55	6.08	16.94	21.75	28.41	21.75
S.A.W.C.-C.A.E.C.	42	1,636	9,825	2.41	1.27	9.43	4.95	8.64	12.32	42.66	12.32
S.A.W.C.-Europe	12	106	321	2.41	1.27	5.00	2.63	22.77	24.13	5.98	24.13
S.A.W.C.-U.S.E.C.	47	1,758	13,383	2.41	1.27	12.71	6.69	10.31	15.73	52.60	15.73
U.S.E.C.-Asia	80	2,655	27,785	2.41	1.27	17.36	9.12	18.79	26.64	41.81	26.64
U.S.E.C.-C.A.W.C.	33	614	14,513	2.41	1.27	30.93	16.28	8.14	23.15	184.45	23.15
U.S.E.C.-Canada W.C.	1	4	486	2.41	1.27	28.35	14.92	15.19	28.84	89.88	28.84

(Continued)

Table A-7. Laden Transits, Tons Carried, and Toll Revenue, Maximum Non-Diverting Toll Rates, 150,000 DWT Scenario, 2020, by Ship Type, Diversion Status, and Trade Route (1990 US$, except when noted)(continued)

Ship Type, Diversion Status, and Trade Route	Transits	Cargo Tonnage Carried (thousands)	Revenue (thousands) a/	Current Toll Schedule: Toll Per Panama Canal Net Ton	Current Toll Schedule: Toll Per Cargo Ton Carried	New Toll Schedule: Toll Per Panama Canal Net Ton	New Toll Schedule: Toll Per Cargo Ton Carried	Total Transportation Costs per Ton Carried: Via Panama Canal: With Current Toll Structure	Via Panama Canal: With New Toll Structure	Via Panama Canal: Percent Increase	Via Least Costly Alternative Route
Tankers (continued)											
Non-Diverted Transits (continued)											
U.S.E.C.-Oceania	6	192	978	2.41	1.27	8.42	4.43	21.59	24.75	14.64	24.75
U.S.E.C.-S.A.W.C.	8	147	1,451	2.41	1.27	15.24	8.02	12.12	18.87	55.71	18.87
U.S.E.C.-U.S.W.C.	30	877	15,507	2.41	1.27	27.56	14.50	12.30	25.53	107.60	25.53
U.S.W.C.-Africa	7	224	1,586	2.41	1.26	9.66	5.05	13.36	17.15	28.37	17.15
U.S.W.C.-Canada E.C.	1	21	300	2.41	1.27	24.55	12.92	16.19	27.84	71.97	27.84
U.S.W.C.-C.A.E.C.	8	301	3,971	2.41	1.26	19.47	10.22	9.64	18.60	92.85	18.60
U.S.W.C.-S.A.E.C.	2	87	121	2.41	1.27	2.68	1.41	15.34	15.48	0.92	15.48
U.S.W.C.-U.S.E.C.	8	226	4,167	2.41	1.27	26.04	13.68	11.51	23.92	107.89	23.92
Subtotal	751	34,216	212,352	2.41	1.27	10.12	5.32	12.66	16.27	28.53	16.27
Vehicle Carriers											
Non-Diverted Transits											
Asia-C.A.E.C.	13	33	3,381	2.41	29.09	7.98	96.37	392.50	459.78	17.14	459.78
Asia-S.A.E.C.	0	0	4	2.41	29.13	0.95	11.44	453.29	435.60	-3.90	435.60
Asia-U.S.E.C.	419	1,959	122,346	2.41	29.20	7.90	95.71	413.17	479.68	16.10	479.68
C.A.W.C.-C.A.E.C.	1	1	384	2.41	28.71	14.98	178.50	257.39	407.18	58.19	407.18
Canada E.C.-Asia	0	1	10	2.41	29.22	1.40	17.00	437.22	425.00	-2.79	425.00
C.A.E.C.-C.A.W.C.	4	1	1,729	2.41	29.22	12.45	151.00	263.22	385.00	46.27	385.00
C.A.E.C.-Oceania	1	0	200	2.41	29.22	5.61	68.00	409.22	448.00	9.48	448.00
Europe-Canada W.C.	5	11	1,785	2.41	30.90	7.23	92.69	368.26	430.05	16.78	430.05
Europe-U.S.W.C.	149	285	40,456	2.41	29.95	6.26	77.77	381.68	429.50	12.53	429.50
S.A.W.C.-C.A.E.C.	0	0	11	2.41	28.69	6.30	75.00	307.69	354.00	15.05	354.00
U.S.E.C.-Asia	25	114	9,355	2.41	29.67	9.11	112.20	392.18	474.71	21.04	474.71

(Continued)

Table A-7. Laden Transits, Tons Carried, and Toll Revenue, Maximum Non-Diverting Toll Rates, 150,000 DWT Scenario, 2020, by Ship Type, Diversion Status, and Trade Route (1990 US$, except when noted)(continued)

Ship Type, Diversion Status, and Trade Route	Transits	Cargo Tonnage Carried (thousands)	Revenue (thousands) a/	Current Toll Schedule: Toll Per Panama Canal Net Ton	Current Toll Schedule: Toll Per Cargo Ton Carried	New Toll Schedule: Toll Per Panama Canal Net Ton	New Toll Schedule: Toll Per Cargo Ton Carried	Total Transportation Costs per Ton Carried: Via Panama Canal: With Current Toll Structure	Total Transportation Costs per Ton Carried: Via Panama Canal: With New Toll Structure	Total Transportation Costs per Ton Carried: Via Panama Canal: Percent Increase	Total Transportation Costs per Ton Carried: Via Least Costly Alternative Route
Vehicle Carriers (continued)											
Non-Diverted Transits (continued)											
U.S.E.C.-Oceania	7	18	1,026	2.41	29.22	3.63	44.00	408.22	423.00	3.62	423.00
Subtotal	623	2,424	180,686	2.41	29.43	7.48	91.39	407.80	472.52	15.87	472.52
Total Non-Diverting	13,150	312,431	3,931,554	2.41	1.85	14.69	11.29	45.54	54.88	20.49	54.88

Notes: These calculations do not include all transits and tons carried forecast by the WEFA Group. For some ship-type and trade-route combinations (accounting for a total of 18 transits and 179803 tons), vessel costs were not available for every DWT size interval. As a result, these transits and tons were excluded. In addition, for 2111 transits and 51867350 tons, the cost by way of the Panama Canal without a toll was higher than the least costly alternative route. As a result, these transits and tons were excluded. Percentages may not calculate exactly as shown due to rounding. A fee of $0.40 per Panama Canal net ton has also been included to account for charges such as handling and agency fees incurred when transitting the Canal. The extra fee is only used to determine divesion status by adding it to the cost per ton carried and is not included in the revenue calculations.

a/ Revenue lost from diversions is measured as the revenue generated by the maximum, nondiverting toll rate increase.

Source: Nathan Associates Inc., based on forecasts of traffic and transportation costs provided by The WEFA Group.

MAXIMUM NON-DIVERTING TOLL RATES, 200,000-DWT SCENARIO, 2020

Table A-8. Laden Transits, Tons Carried, and Toll Revenue, Maximum Non-Diverting Toll Rates, 200,000 DWT Scenario, 2020, by Ship Type

	Transits				Tons Carried(thousands)				Revenue(1990 US$thousands)			
Ship Type	Canal	Diverted	Total	Diverted as a Percent of Total	Canal	Diverted	Total	Diverted as a Percent of Total	Canal	Lost a/	Total	Lost as a Percent of Total
Container-Breakbulk	1,325	0	1,325	0.00	20,519	0	20,519	0.00	500,472	0	500,472	0.00
Dry Bulk Carriers	3,997	0	3,997	0.00	203,439	0	203,439	0.00	1,327,642	0	1,327,642	0.00
Chemical Tankers	994	0	994	0.00	22,925	0	22,925	0.00	400,811	0	400,811	0.00
Full Container Ships	1,251	0	1,251	0.00	24,619	0	24,619	0.00	429,279	0	429,279	0.00
General Cargo Ships	758	0	758	0.00	7,499	0	7,499	0.00	166,380	0	166,380	0.00
Liquid Gas Carriers	172	0	172	0.00	1,947	0	1,947	0.00	81,603	0	81,603	0.00
Passenger Ships	336	0	336	0.00	0	0	0	0.00	6,145	0	6,145	0.00
Refrigerated Ships	2,847	0	2,847	0.00	10,266	0	10,266	0.00	583,646	0	583,646	0.00
Roll-On Roll-Off	213	0	213	0.00	1,762	0	1,762	0.00	77,386	0	77,386	0.00
Tankers	728	0	728	0.00	34,216	0	34,216	0.00	225,664	0	225,664	0.00
Vehicle Carriers	623	0	623	0.00	2,424	0	2,424	0.00	180,686	0	180,686	0.00
Total	13,243	0	13,243	0.00	329,616	0	329,616	0.00	3,979,713	0	3,979,713	0.00

Notes: These calculations do not include all transits and tons carried forecast by the WEFA Group. For some ship-type and trade-route combinations (accounting for a total of 18 transits and 179803 tons), vessel costs were not available for every DWT size interval. As a result, these transits and tons were excluded. In addition, for 1981 transits and 37003606 tons, the cost by way of the Panama Canal without a toll was higher than the least costly alternative route. As a result, these transits and tons were excluded. A fee of $0.40 per Panama Canal net ton has also been included to account for charges such as handling and agency fees incurred when transitting the Canal. The extra fee is only used to determine diversion status by adding it to cost per ton carried and is not included in the revenue calculations.

a/ Revenue lost from diversions is measured as the revenue generated by the maximum, nondiverting toll rate increase.

Source: Nathan Associates Inc., based on forecasts of traffic and transportation costs provided by The WEFA Group.

Table A-9. Ballast Transits, Tons Carried, and Toll Revenue, Current Toll Structure and Rates, 200,000 DWT Scenario, 2020, by Ship Type

	Transits				Tons Carried(thousands)				Revenue(1990 US$thousands)			
Ship Type	Canal	Diverted	Total	Diverted as a Percent of Total	Canal	Diverted	Total	Diverted as a Percent of Total	Canal	Lost	Total	Lost as a Percent of Total
Container-Breakbulk	41	0	41	0.00	0	0	0	0.00	1,019	0	1,019	0.00
Dry Bulk Carriers	418	0	418	0.00	0	0	0	0.00	15,868	0	15,868	0.00
Chemical Tankers	82	0	82	0.00	0	0	0	0.00	1,758	0	1,758	0.00
Full Container Ships	9	0	9	0.00	0	0	0	0.00	228	0	228	0.00
General Cargo Ships	140	0	140	0.00	0	0	0	0.00	1,531	0	1,531	0.00
Liquid Gas Carriers	128	0	128	0.00	0	0	0	0.00	3,730	0	3,730	0.00
Passenger Ships	11	0	11	0.00	0	0	0	0.00	131	0	131	0.00
Refrigerated Ships	932	0	932	0.00	0	0	0	0.00	13,778	0	13,778	0.00
Roll-On Roll-Off	30	0	30	0.00	0	0	0	0.00	798	0	798	0.00
Tankers	392	0	392	0.00	0	0	0	0.00	20,791	0	20,791	0.00
Vehicle Carriers	383	0	383	0.00	0	0	0	0.00	22,613	0	22,613	0.00
Total	2,566	0	2,566	0.00	0	0	0	0.00	82,245	0	82,245	0.00

Note: Diversions of ballast transits are computed by diverting a proportion of ballast transits equal to lost revenue as a percent of total potential revenue for a particular laden ship type. See last column on previous table.

Source: Nathan Associates Inc., based on forecasts of traffic and transportation costs provided by The WEFA Group.

Table A-10. Laden Transits, Tons Carried, and Toll Revenue, Maximum Non-Diverting Toll Rates, 200,000 DWT Scenario, 2020, by Ship Type, Diversion Status, and Trade Route (1990 US$, except when noted)

Ship Type, Diversion Status, and Trade Route	Transits	Cargo Tonnage Carried (thousands)	Revenue (thousands) a/	Current Toll Schedule: Toll Per Panama Canal Net Ton	Current Toll Schedule: Toll Per Cargo Ton Carried	New Toll Schedule: Toll Per Panama Canal Net Ton	New Toll Schedule: Toll Per Cargo Ton Carried	Total Transportation Costs per Ton Carried: Via Panama Canal: With Current Toll Structure	Total Transportation Costs per Ton Carried: Via Panama Canal: With New Toll Structure	Total Transportation Costs per Ton Carried: Via Panama Canal: Percent Increase	Total Transportation Costs per Ton Carried: Via Least Costly Alternative Route
Container-Breakbulk											
Non-Diverted Transits											
Africa-C.A.W.C.	3	77	2,388	2.41	1.85	60.52	46.55	68.56	113.26	65.19	113.26
Africa-Canada W.C.	0	2	37	2.41	1.87	18.89	14.64	88.16	100.93	14.49	100.93
Africa-U.S.W.C.	1	9	198	2.41	1.87	20.10	15.58	89.16	102.87	15.38	102.87
Asia-Canada E.C.	0	4	67	2.41	1.86	12.16	9.40	88.65	96.19	8.50	96.19
Asia-C.A.E.C.	91	837	25,658	2.41	1.87	21.59	16.71	93.07	107.91	15.95	107.91
Asia-S.A.E.C.	27	175	1,722	2.41	1.87	5.03	3.90	100.20	102.23	2.03	102.23
Asia-U.S.E.C.	82	1,031	35,673	2.41	1.86	31.27	24.14	94.52	116.80	23.57	116.80
C.A.W.C.-Africa	3	70	2,755	2.41	1.87	63.64	49.37	73.06	120.56	65.02	120.56
C.A.W.C.-C.A.E.C.	7	118	5,084	2.41	1.86	51.76	40.02	49.37	87.53	77.28	87.53
C.A.W.C.-Europe	15	110	7,415	2.41	1.87	38.09	29.51	63.64	91.28	43.44	91.28
C.A.W.C.-S.A.E.C.	12	6	1,359	2.41	1.87	8.86	6.87	69.19	74.19	7.23	74.19
C.A.W.C.-U.S.E.C.	3	19	1,975	2.41	1.87	49.40	38.32	55.40	91.85	65.80	91.85
Canada E.C.-Asia	14	367	1,571	2.41	1.85	6.51	5.00	90.68	93.83	3.47	93.83
Canada E.C.-C.A.W.C.	1	9	589	2.41	1.87	51.70	40.07	54.09	92.29	70.63	92.29
Canada E.C.-Oceania	1	13	26	2.41	1.87	2.66	2.06	102.74	102.93	0.19	102.93
Canada E.C.-S.A.W.C.	1	10	143	2.41	1.85	19.40	14.92	62.78	75.85	20.81	75.85
Canada E.C.-U.S.W.C.	0	0	3	2.41	1.85	49.39	38.01	69.71	105.87	51.86	105.87
Canada W.C.-Africa	8	179	2,074	2.41	1.85	18.11	13.93	88.66	100.74	13.62	100.74
Canada W.C.-Europe	63	1,844	41,265	2.41	1.85	36.43	28.00	77.86	104.01	33.58	104.01
Canada W.C.-S.A.E.C.	11	210	6,833	2.41	1.87	50.79	39.40	71.19	108.72	52.72	108.72
Canada W.C.-U.S.E.C.	8	149	5,425	2.41	1.85	50.70	39.00	64.85	102.00	57.28	102.00
C.A.E.C.-Asia	9	196	2,521	2.41	1.87	21.35	16.54	92.37	107.04	15.89	107.04
C.A.E.C.-C.A.W.C.	7	27	4,857	2.41	1.87	54.01	41.86	50.30	90.29	79.51	90.29

(Continued)

Table A-10. Laden Transits, Tons Carried, and Toll Revenue, Maximum Non-Diverting Toll Rates, 200,000 DWT Scenario, 2020, by Ship Type, Diversion Status, and Trade Route (1990 US$, except when noted)(continued)

Ship Type, Diversion Status, and Trade Route	Transits	Cargo Tonnage Carried (thousands)	Revenue (thousands) a/	Current Toll Schedule: Toll Per Panama Canal Net Ton	Current Toll Schedule: Toll Per Cargo Ton Carried	New Toll Schedule: Toll Per Panama Canal Net Ton	New Toll Schedule: Toll Per Cargo Ton Carried	Total Transportation Costs per Ton Carried: Via Panama Canal: With Current Toll Structure	Via Panama Canal: With New Toll Structure	Via Panama Canal: Percent Increase	Via Least Costly Alternative Route
Container-Breakbulk (continued)											
Non-Diverted Transits (continued)											
C.A.E.C.-Canada W.C.	2	31	1,317	2.41	1.87	50.61	39.22	63.73	101.08	58.61	101.08
C.A.E.C.-Oceania	1	20	394	2.41	1.87	25.07	19.43	90.16	107.72	19.48	107.72
C.A.E.C.-S.A.W.C.	18	144	5,011	2.41	1.87	21.20	16.43	61.88	76.44	23.53	76.44
C.A.E.C.-U.S.W.C.	4	73	2,265	2.41	1.86	43.45	33.56	61.48	93.18	51.56	93.18
Europe-C.A.W.C.	22	137	18,207	2.41	1.87	64.26	49.80	64.73	112.66	74.05	112.66
Europe-Canada W.C.	4	123	2,690	2.41	1.85	32.54	25.00	80.14	103.29	28.88	103.29
Europe-S.A.W.C.	91	752	23,487	2.41	1.87	20.10	15.58	85.37	99.08	16.06	99.08
Europe-U.S.W.C.	24	732	15,512	2.41	1.85	33.85	26.01	79.27	103.43	30.48	103.43
Oceania-Canada E.C.	2	46	119	2.41	1.85	2.60	2.00	93.85	94.00	0.16	94.00
Oceania-C.A.E.C.	4	42	1,300	2.41	1.87	25.35	19.66	90.85	108.64	19.58	108.64
Oceania-S.A.E.C.	7	95	48	2.41	1.86	0.49	0.38	84.47	82.99	-1.76	82.99
S.A.E.C.-C.A.W.C.	9	141	1,026	2.41	1.87	8.76	6.79	68.77	73.69	7.16	73.69
S.A.E.C.-Canada W.C.	11	152	1,489	2.41	1.87	10.13	7.85	87.94	93.92	6.80	93.92
S.A.E.C.-U.S.W.C.	38	572	2,956	2.41	1.87	5.90	4.57	74.36	77.06	3.64	77.06
S.A.W.C.-Canada E.C.	1	2	260	2.41	1.87	21.48	16.66	66.27	81.06	22.32	81.06
S.A.W.C.-C.A.E.C.	13	108	3,573	2.41	1.87	21.48	16.66	62.27	77.06	23.75	77.06
S.A.W.C.-Europe	191	3,350	56,800	2.41	1.87	23.42	18.15	85.09	101.37	19.14	101.37
S.A.W.C.-U.S.E.C.	108	1,055	34,710	2.41	1.87	25.95	20.13	59.46	77.72	30.71	77.72
U.S.E.C.-Asia	172	4,347	85,953	2.41	1.86	30.43	23.43	91.67	113.24	23.54	113.24
U.S.E.C.-C.A.W.C.	10	201	7,660	2.41	1.86	57.71	44.63	46.17	88.94	92.62	88.94
U.S.E.C.-S.A.W.C.	160	1,595	53,180	2.41	1.87	25.85	20.04	59.27	77.44	30.66	77.44
U.S.E.C.-U.S.W.C.	0	0	9	2.41	1.86	50.65	39.00	56.86	94.00	65.33	94.00
U.S.W.C.-Africa	9	143	4,166	2.41	1.85	23.62	18.15	82.33	98.63	19.80	98.63

(Continued)

Table A-10. Laden Transits, Tons Carried, and Toll Revenue, Maximum Non-Diverting Toll Rates, 200,000 DWT Scenario, 2020, by Ship Type, Diversion Status, and Trade Route (1990 US$, except when noted)(continued)

Ship Type, Diversion Status, and Trade Route	Transits	Cargo Tonnage Carried (thousands)	Revenue (thousands) a/	Current Toll Schedule: Toll Per Panama Canal Net Ton	Current Toll Schedule: Toll Per Cargo Ton Carried	New Toll Schedule: Toll Per Panama Canal Net Ton	New Toll Schedule: Toll Per Cargo Ton Carried	Total Transportation Costs per Ton Carried: Via Panama Canal: With Current Toll Structure	Via Panama Canal: With New Toll Structure	Via Panama Canal: Percent Increase	Via Least Costly Alternative Route
Container-Breakbulk (continued)											
Non-Diverted Transits (continued)											
U.S.W.C.-Canada E.C.	2	40	1,012	2.41	1.85	45.50	35.00	66.85	100.00	49.58	100.00
U.S.W.C.-C.A.E.C.	9	63	5,022	2.41	1.87	45.26	35.09	63.58	96.80	52.25	96.80
U.S.W.C.-Europe	38	1,010	22,109	2.41	1.85	33.10	25.46	80.25	103.86	29.41	103.86
U.S.W.C.-S.A.E.C.	4	79	346	2.41	1.87	6.28	4.87	76.06	79.06	3.94	79.06
U.S.W.C.-U.S.E.C.	0	3	212	2.41	1.85	52.61	40.48	58.25	96.88	66.31	96.88
Subtotal	1,325	20,519	500,472	2.41	1.86	27.05	20.91	80.94	100.64	24.34	100.64
Dry Bulk Carriers											
Non-Diverted Transits											
Africa-C.A.W.C.	15	483	5,697	2.41	1.35	22.56	12.60	14.85	26.10	75.80	26.10
Africa-Canada W.C.	34	1,354	4,738	2.41	1.31	7.00	3.80	17.28	19.77	14.42	19.77
Africa-S.A.W.C.	5	128	1,222	2.41	1.35	15.49	8.65	17.80	25.10	41.04	25.10
Africa-U.S.W.C.	7	161	1,102	2.41	1.30	8.03	4.34	16.19	19.23	18.75	19.23
Asia-Canada E.C.	8	302	917	2.41	1.28	4.90	2.60	17.00	18.32	7.77	18.32
Asia-C.A.E.C.	21	345	4,108	2.41	1.33	10.77	5.95	18.03	22.65	25.62	22.65
Asia-S.A.E.C.	6	152	179	2.41	1.35	1.79	1.00	21.65	21.30	-1.60	21.30
Asia-U.S.E.C.	242	6,345	68,416	2.41	1.30	13.43	7.25	16.31	22.26	36.47	22.26
Brazil-Asia	109	14,866	20,103	2.41	1.17	2.63	1.28	18.03	18.14	0.60	18.14
C.A.W.C.-Africa	1	34	513	2.41	1.32	22.64	12.44	14.69	25.81	75.65	25.81
C.A.W.C.-C.A.E.C.	34	961	10,440	2.41	1.33	16.83	9.29	7.81	15.77	101.90	15.77
C.A.W.C.-Europe	16	462	4,398	2.41	1.31	13.69	7.47	12.08	18.24	50.93	18.24
C.A.W.C.-S.A.E.C.	10	136	311	2.41	1.35	1.79	1.00	12.00	11.65	-2.89	11.65
C.A.W.C.-U.S.E.C.	38	1,292	15,032	2.41	1.32	20.18	11.04	7.83	17.55	124.19	17.55

(Continued)

Table A-10. Laden Transits, Tons Carried, and Toll Revenue, Maximum Non-Diverting Toll Rates, 200,000 DWT Scenario, 2020, by Ship Type, Diversion Status, and Trade Route (1990 US$, except when noted)(continued)

Ship Type, Diversion Status, and Trade Route	Transits	Cargo Tonnage Carried (thousands)	Revenue (thousands) a/	Current Toll Schedule: Toll Per Panama Canal Net Ton	Current Toll Schedule: Toll Per Cargo Ton Carried	New Toll Schedule: Toll Per Panama Canal Net Ton	New Toll Schedule: Toll Per Cargo Ton Carried	Total Transportation Costs per Ton Carried, Via Panama Canal: With Current Toll Structure	Total Transportation Costs per Ton Carried, Via Panama Canal: With New Toll Structure	Total Transportation Costs per Ton Carried, Via Panama Canal: Percent Increase	Total Transportation Costs per Ton Carried: Via Least Costly Alternative Route
Dry Bulk Carriers (continued)											
Non-Diverted Transits (continued)											
Canada E.C.-Asia	89	4,219	16,063	2.41	1.25	6.42	3.33	18.32	20.40	11.35	20.40
Canada E.C.-Oceania	3	58	318	2.41	1.33	5.07	2.79	19.62	21.08	7.46	21.08
Canada E.C.-S.A.W.C.	6	163	719	2.41	1.33	6.68	3.68	12.63	14.98	18.63	14.98
Canada W.C.-Africa	96	3,500	13,965	2.41	1.31	7.00	3.80	16.93	19.42	14.72	19.42
Canada W.C.-C.A.E.C.	4	105	1,334	2.41	1.35	17.54	9.80	12.85	21.30	65.81	21.30
Canada W.C.-Europe	238	11,174	73,362	2.41	1.26	11.47	5.99	16.52	21.25	28.64	21.25
Canada W.C.-S.A.E.C.	23	1,374	2,665	2.41	1.22	3.22	1.63	10.51	10.92	3.89	10.92
Canada W.C.-U.S.E.C.	64	1,569	22,910	2.41	1.35	20.59	11.50	13.00	23.15	78.13	23.15
C.A.E.C.-Asia	21	639	3,909	2.41	1.35	10.65	5.95	17.70	22.30	26.02	22.30
C.A.E.C.-C.A.W.C.	25	682	7,572	2.41	1.35	17.46	9.75	8.05	16.45	104.45	16.45
C.A.E.C.-Canada W.C.	2	55	592	2.41	1.35	17.63	9.90	13.05	21.60	65.47	21.60
C.A.E.C.-Oceania	1	11	64	2.41	1.35	7.12	4.00	19.95	22.60	13.26	22.60
C.A.E.C.-S.A.W.C.	12	313	1,491	2.41	1.35	6.89	3.85	11.00	13.50	22.77	13.50
C.A.E.C.-U.S.W.C.	9	236	2,709	2.41	1.35	17.55	9.80	11.85	20.30	71.36	20.30
Columbia-Asia	2	295	2,868	2.41	1.17	18.86	9.19	16.65	24.67	48.13	24.67
Europe-C.A.W.C.	30	797	9,273	2.41	1.34	17.49	9.75	12.79	21.20	65.71	21.20
Europe-Canada W.C.	11	286	2,441	2.41	1.31	11.49	6.25	16.30	21.24	30.30	21.24
Europe-S.A.W.C.	12	298	365	2.41	1.35	1.79	1.00	15.85	15.50	-2.18	15.50
Europe-U.S.W.C.	116	3,102	25,781	2.41	1.31	11.06	6.01	15.40	20.10	30.52	20.10
Middle East-S.A.W.C.	1	52	167	2.41	1.27	5.71	3.00	14.27	16.00	12.15	16.00
Oceania-Canada E.C.	22	661	1,987	2.41	1.35	5.19	2.90	19.70	21.25	7.89	21.25
Oceania-C.A.E.C.	6	166	934	2.41	1.35	8.59	4.80	18.80	22.25	18.38	22.25
Oceania-U.S.E.C.	119	6,406	14,791	2.41	1.24	4.11	2.12	15.19	16.07	5.78	16.07

(Continued)

Table A-10. Laden Transits, Tons Carried, and Toll Revenue, Maximum Non-Diverting Toll Rates, 200,000 DWT Scenario, 2020, by Ship Type, Diversion Status, and Trade Route (1990 US$, except when noted)(continued)

Ship Type, Diversion Status, and Trade Route	Transits	Cargo Tonnage Carried (thousands)	Revenue (thousands) a/	Current Toll Schedule: Toll Per Panama Canal Net Ton	Current Toll Schedule: Toll Per Cargo Ton Carried	New Toll Schedule: Toll Per Panama Canal Net Ton	New Toll Schedule: Toll Per Cargo Ton Carried	Total Transportation Costs per Ton Carried: Via Panama Canal: With Current Toll Structure	Via Panama Canal: With New Toll Structure	Via Panama Canal: Percent Increase	Via Least Costly Alternative Route
Dry Bulk Carriers (continued)											
Non-Diverted Transits (continued)											
S.A.E.C.-Asia	68	2,384	7,858	2.41	1.31	5.72	3.11	16.60	18.40	10.84	18.40
S.A.E.C.-C.A.W.C.	8	247	247	2.41	1.35	1.79	1.00	12.00	11.65	-2.89	11.65
S.A.E.C.-Canada W.C.	3	66	160	2.41	1.35	3.40	1.90	16.80	17.35	3.30	17.35
S.A.E.C.-U.S.W.C.	28	1,128	1,383	2.41	1.26	1.91	1.00	12.93	12.67	-2.02	12.67
S.A.W.C.-Africa	3	157	1,198	2.41	1.28	15.41	8.17	13.65	20.54	50.50	20.54
S.A.W.C.-Canada E.C.	0	10	38	2.41	1.35	6.89	3.85	13.00	15.50	19.27	15.50
S.A.W.C.-C.A.E.C.	7	144	892	2.41	1.35	6.89	3.85	11.00	13.50	22.77	13.50
S.A.W.C.-Europe	187	8,078	11,714	2.41	1.27	2.57	1.36	15.87	15.96	0.54	15.96
S.A.W.C.-U.S.E.C.	54	1,732	9,849	2.41	1.34	10.28	5.71	10.81	15.18	40.45	15.18
U.S.E.C.-Asia	1,601	104,329	788,768	2.41	1.22	13.66	6.92	17.29	22.99	32.96	22.99
U.S.E.C.-C.A.W.C.	207	6,232	75,638	2.41	1.34	20.63	11.47	8.12	18.25	124.75	18.25
U.S.E.C.-Canada W.C.	1	30	314	2.41	1.32	19.53	10.67	12.36	21.71	75.69	21.71
U.S.E.C.-Oceania	21	646	2,450	2.41	1.33	6.28	3.46	18.34	20.47	11.62	20.47
U.S.E.C.-S.A.W.C.	50	1,456	9,097	2.41	1.34	10.33	5.75	10.90	15.31	40.44	15.31
U.S.E.C.-U.S.W.C.	1	0	230	2.41	1.35	19.07	10.65	12.00	21.30	77.56	21.30
U.S.W.C.-Africa	121	4,599	22,691	2.41	1.28	8.05	4.28	15.62	18.62	19.20	18.62
U.S.W.C.-Canada E.C.	7	217	2,124	2.41	1.33	16.77	9.24	13.35	21.26	59.28	21.26
U.S.W.C.-C.A.E.C.	2	48	541	2.41	1.35	17.55	9.80	11.85	20.30	71.37	20.30
U.S.W.C.-Europe	140	6,524	37,197	2.41	1.26	10.09	5.28	13.94	17.96	28.83	17.96
U.S.W.C.-S.A.E.C.	11	279	326	2.41	1.35	1.79	1.00	15.80	15.45	-2.19	15.45
U.S.W.C.-U.S.E.C.	7	183	2,882	2.41	1.31	19.73	10.74	12.05	21.48	78.23	21.48
Venezuela-Asia	12	1,768	8,590	2.41	1.17	9.50	4.60	16.47	19.90	20.84	19.90
Subtotal	3,997	203,439	1,327,642	2.41	1.25	11.36	5.87	16.28	20.88	28.28	20.88

(Continued)

Table A-10. Laden Transits, Tons Carried, and Toll Revenue, Maximum Non-Diverting Toll Rates, 200,000 DWT Scenario, 2020, by Ship Type, Diversion Status, and Trade Route (1990 US$, except when noted)(continued)

Ship Type, Diversion Status, and Trade Route	Transits	Cargo Tonnage Carried (thousands)	Revenue (thousands) a/	Current Toll Schedule: Toll Per Panama Canal Net Ton	Current Toll Schedule: Toll Per Cargo Ton Carried	New Toll Schedule: Toll Per Panama Canal Net Ton	New Toll Schedule: Toll Per Cargo Ton Carried	Total Transportation Costs per Ton Carried: Via Panama Canal: With Current Toll Structure	Via Panama Canal: With New Toll Structure	Via Panama Canal: Percent Increase	Via Least Costly Alternative Route
Chemical Tankers (continued)											
Non-Diverted Transits (continued)											
Africa-S.A.W.C.	1	32	528	2.41	1.34	30.60	17.00	42.34	58.00	36.99	58.00
Asia-C.A.E.C.	3	34	743	2.41	1.34	32.85	18.25	52.46	69.37	32.24	69.37
Asia-S.A.E.C.	3	16	240	2.41	1.34	5.40	3.00	49.34	51.00	3.37	51.00
Asia-U.S.E.C.	32	537	11,270	2.41	1.34	30.45	16.93	44.74	60.33	34.85	60.33
C.A.W.C.-C.A.E.C.	23	139	6,596	2.41	1.34	75.60	42.00	36.34	77.00	111.89	77.00
C.A.W.C.-Europe	8	126	2,441	2.41	1.34	35.21	19.56	37.28	55.50	48.88	55.50
C.A.W.C.-U.S.E.C.	38	470	16,078	2.41	1.34	56.50	31.42	28.06	58.14	107.20	58.14
Canada W.C.-Europe	4	87	1,501	2.41	1.34	27.00	15.00	41.34	55.00	33.05	55.00
Canada W.C.-U.S.E.C.	32	744	21,028	2.41	1.34	40.28	22.40	31.74	52.80	66.35	52.80
C.A.E.C.-Asia	9	248	3,474	2.41	1.34	25.42	14.12	41.66	54.44	30.68	54.44
C.A.E.C.-C.A.W.C.	9	207	5,416	2.41	1.34	37.80	21.00	21.34	41.00	92.14	41.00
C.A.E.C.-S.A.W.C.	11	186	2,259	2.41	1.34	19.04	10.58	31.03	40.27	29.78	40.27
C.A.E.C.-U.S.W.C.	1	10	402	2.41	1.34	72.00	40.00	51.34	90.00	75.31	90.00
Europe-C.A.W.C.	6	30	1,312	2.41	1.34	55.80	31.00	56.34	86.00	52.65	86.00
Europe-S.A.W.C.	6	60	294	2.41	1.34	8.62	4.79	55.90	59.35	6.17	59.35
Europe-U.S.W.C.	9	182	2,920	2.41	1.34	27.74	15.41	42.34	56.41	33.23	56.41
Oceania-U.S.E.C.	18	455	3,559	2.41	1.34	11.05	6.16	40.54	45.36	11.88	45.36
S.A.E.C.-C.A.W.C.	8	61	433	2.41	1.34	11.32	6.29	46.87	51.82	10.56	51.82
S.A.E.C.-U.S.W.C.	2	84	90	2.41	1.35	1.78	1.00	30.35	30.00	-1.16	30.00
S.A.W.C.-C.A.E.C.	22	79	3,474	2.41	1.34	27.81	15.45	42.38	56.49	33.30	56.49
S.A.W.C.-Europe	8	92	420	2.41	1.34	7.88	4.38	51.64	54.68	5.89	54.68
S.A.W.C.-U.S.E.C.	7	47	1,413	2.41	1.34	29.26	16.27	38.35	53.28	38.93	53.28
U.S.E.C.-Asia	565	15,828	244,627	2.41	1.34	28.68	15.95	42.38	56.99	34.47	56.99

(Continued)

Table A-10. Laden Transits, Tons Carried, and Toll Revenue, Maximum Non-Diverting Toll Rates, 200,000 DWT Scenario, 2020, by Ship Type, Diversion Status, and Trade Route (1990 US$, except when noted)(continued)

Ship Type, Diversion Status, and Trade Route	Transits	Cargo Tonnage Carried (thousands)	Revenue (thousands) a/	Current Toll Schedule: Toll Per Panama Canal Net Ton	Current Toll Schedule: Toll Per Cargo Ton Carried	New Toll Schedule: Toll Per Panama Canal Net Ton	New Toll Schedule: Toll Per Cargo Ton Carried	Total Transportation Costs per Ton Carried: Via Panama Canal: With Current Toll Structure	Via Panama Canal: With New Toll Structure	Via Panama Canal: Percent Increase	Via Least Costly Alternative Route
Chemical Tankers (continued)											
Non-Diverted Transits (continued)											
U.S.E.C.-C.A.W.C.	18	146	6,442	2.41	1.34	68.60	38.11	33.25	70.02	110.59	70.02
U.S.E.C.-Canada W.C.	5	36	1,555	2.41	1.34	75.43	41.91	55.76	96.33	72.76	96.33
U.S.E.C.-Oceania	17	409	2,888	2.41	1.34	12.45	6.93	44.76	50.35	12.49	50.35
U.S.E.C.-S.A.W.C.	45	434	8,382	2.41	1.34	30.28	16.84	39.65	55.15	39.09	55.15
U.S.E.C.-U.S.W.C.	50	1,635	34,824	2.41	1.35	33.88	18.96	25.70	43.31	68.53	43.31
U.S.W.C.-C.A.E.C.	2	38	1,129	2.41	1.34	36.00	20.00	29.34	48.00	63.61	48.00
U.S.W.C.-Europe	16	215	4,391	2.41	1.34	30.61	17.02	45.63	61.31	34.36	61.31
U.S.W.C.-S.A.E.C.	0	3	8	2.41	1.34	3.60	2.00	37.34	38.00	1.77	38.00
U.S.W.C.-U.S.E.C.	15	256	10,673	2.41	1.35	33.89	18.96	25.80	43.41	68.27	43.41
Subtotal	994	22,925	400,811	2.41	1.34	30.03	16.71	40.06	55.35	38.16	55.35
Full Container Ships											
Non-Diverted Transits											
Africa-U.S.W.C.	0	2	41	2.41	4.48	21.38	39.74	246.46	281.72	14.31	281.72
Asia-Canada E.C.	35	682	9,231	2.41	4.65	8.92	17.21	210.85	223.41	5.96	223.41
Asia-S.A.E.C.	2	7	103	2.41	4.48	4.79	8.90	274.32	278.74	1.61	278.74
Asia-U.S.E.C. (low inv. cost)	206	4,485	84,005	2.41	4.76	9.09	17.96	238.55	251.75	5.53	251.75
C.A.W.C.-C.A.E.C.	1	5	544	2.41	4.38	46.33	84.18	129.97	209.77	61.40	209.77
C.A.W.C.-Europe	2	22	1,175	2.41	4.36	32.02	57.92	153.30	206.86	34.94	206.86
C.A.W.C.-S.A.E.C.	0	4	35	2.41	4.38	6.22	11.29	163.77	170.68	4.22	170.68
C.A.W.C.-U.S.E.C.	0	3	201	2.41	4.48	52.39	97.40	157.98	250.90	58.82	250.90
Canada E.C.-Asia	32	561	3,673	2.41	4.50	5.22	9.74	230.54	235.78	2.27	235.78
Canada E.C.-Oceania	12	145	474	2.41	4.43	2.45	4.50	259.72	259.79	0.03	259.79

(Continued)

Table A-10. Laden Transits, Tons Carried, and Toll Revenue, Maximum Non-Diverting Toll Rates, 200,000 DWT Scenario, 2020, by Ship Type, Diversion Status, and Trade Route (1990 US$, except when noted)(continued)

Ship Type, Diversion Status, and Trade Route	Transits	Cargo Tonnage Carried (thousands)	Revenue (thousands) a/	Current Toll Schedule: Toll Per Panama Canal Net Ton	Current Toll Schedule: Toll Per Cargo Ton Carried	New Toll Schedule: Toll Per Panama Canal Net Ton	New Toll Schedule: Toll Per Cargo Ton Carried	Total Transportation Costs per Ton Carried, Via Panama Canal: With Current Toll Structure	Total Transportation Costs per Ton Carried, Via Panama Canal: With New Toll Structure	Total Transportation Costs per Ton Carried, Via Panama Canal: Percent Increase	Total Transportation Costs per Ton Carried: Via Least Costly Alternative Route
Full Container Ships (continued)											
Non-Diverted Transits (continued)											
Canada E.C.-U.S.W.C.	5	136	6,593	2.41	4.73	35.14	69.00	160.73	225.00	39.98	225.00
Canada W.C.-Europe	32	491	21,126	2.41	4.46	36.62	67.81	212.22	275.57	29.85	275.57
C.A.E.C.-Asia	8	99	3,035	2.41	4.41	17.86	32.68	217.31	245.58	13.01	245.58
C.A.E.C.-C.A.W.C.	1	3	444	2.41	4.51	77.09	144.39	184.21	324.09	75.93	324.09
C.A.E.C.-Oceania	0	3	97	2.41	4.48	26.71	49.68	248.46	293.66	18.19	293.66
C.A.E.C.-S.A.W.C.	6	6	665	2.41	4.64	22.80	43.87	187.15	226.38	20.96	226.38
C.A.E.C.-U.S.W.C.	1	12	689	2.41	4.38	38.56	70.16	154.50	220.28	42.57	220.28
Europe-C.A.W.C.	0	1	88	2.41	4.36	52.98	95.90	153.30	244.84	59.71	244.84
Europe-Canada W.C.	24	311	13,558	2.41	4.43	34.53	63.45	224.73	283.75	26.26	283.75
Europe-S.A.W.C.	51	731	21,935	2.41	4.36	18.77	33.94	194.28	223.86	15.23	223.86
Europe-U.S.W.C.	144	2,855	25,065	2.41	4.62	6.27	12.03	209.75	217.16	3.53	217.16
Middle East-U.S.W.C.	8	116	2,411	2.41	4.42	17.12	31.40	221.09	248.07	12.20	248.07
Oceania-C.A.E.C.	2	24	670	2.41	4.48	26.71	49.68	248.46	293.66	18.19	293.66
S.A.E.C.-C.A.W.C.	0	4	46	2.41	4.48	8.53	15.86	193.78	205.16	5.87	205.16
S.A.E.C.-U.S.W.C.	1	9	229	2.41	4.48	22.44	41.74	179.84	217.10	20.72	217.10
S.A.W.C.-C.A.E.C.	0	1	37	2.41	4.50	24.39	45.56	191.66	232.72	21.42	232.72
S.A.W.C.-Europe	103	1,966	44,815	2.41	4.36	18.76	33.94	194.27	223.85	15.23	223.85
S.A.W.C.-U.S.E.C.	46	483	16,439	2.41	4.48	28.31	52.66	170.90	219.08	28.19	219.08
U.S.E.C.-Asia (low inv. cost)	243	7,139	92,556	2.41	4.74	9.01	17.72	239.88	252.86	5.41	252.86
U.S.E.C.-C.A.W.C.	6	55	5,120	2.41	4.48	64.12	119.28	136.10	250.90	84.35	250.90
U.S.E.C.-S.A.W.C.	57	487	20,359	2.41	4.48	28.31	52.66	170.90	219.08	28.19	219.08
U.S.E.C.-U.S.W.C.	1	26	1,567	2.41	4.71	41.09	80.28	144.82	220.39	52.18	220.39
U.S.W.C.-Africa	0	0	0	2.41	5.04	17.20	36.00	197.04	228.00	15.71	228.00

(Continued)

Table A-10. Laden Transits, Tons Carried, and Toll Revenue, Maximum Non-Diverting Toll Rates, 200,000 DWT Scenario, 2020, by Ship Type, Diversion Status, and Trade Route (1990 US$, except when noted)(continued)

Ship Type, Diversion Status, and Trade Route	Transits	Cargo Tonnage Carried (thousands)	Revenue (thousands) a/	Current Toll Schedule: Toll Per Panama Canal Net Ton	Current Toll Schedule: Toll Per Cargo Ton Carried	New Toll Schedule: Toll Per Panama Canal Net Ton	New Toll Schedule: Toll Per Cargo Ton Carried	Total Transportation Costs per Ton Carried: Via Panama Canal: With Current Toll Structure	Via Panama Canal: With New Toll Structure	Via Panama Canal: Percent Increase	Via Least Costly Alternative Route
Full Container Ships (continued)											
Non-Diverted Transits (continued)											
U.S.W.C.-Canada E.C.	0	5	312	2.41	4.51	38.70	72.39	163.61	231.49	41.49	231.49
U.S.W.C.-C.A.E.C.	7	42	2,930	2.41	4.46	39.63	73.29	159.01	227.84	43.29	227.84
U.S.W.C.-Europe	194	3,428	31,635	2.41	4.64	5.76	11.10	212.59	219.05	3.04	219.05
U.S.W.C.-Middle East	8	103	984	2.41	4.42	6.76	12.40	221.46	229.44	3.60	229.44
U.S.W.C.-U.S.E.C.	13	168	16,390	2.41	4.59	42.88	81.71	145.28	222.40	53.08	222.40
Subtotal	1,251	24,619	429,279	2.41	4.65	11.25	21.69	220.97	238.34	7.86	238.34
General Cargo Ships											
Non-Diverted Transits											
Africa-C.A.W.C.	2	23	784	2.41	1.39	41.22	23.75	28.19	50.55	79.33	50.55
Africa-S.A.W.C.	2	35	568	2.41	1.39	29.16	16.80	34.14	49.55	45.14	49.55
Asia-Canada E.C.	0	2	9	2.41	1.39	8.59	4.95	38.09	41.65	9.35	41.65
Asia-C.A.E.C.	71	844	17,028	2.41	1.39	20.65	11.90	34.09	44.60	30.84	44.60
Asia-S.A.E.C.	2	13	83	2.41	1.39	3.38	1.95	41.09	41.65	1.37	41.65
Asia-U.S.E.C.	26	339	7,814	2.41	1.39	25.34	14.58	34.56	47.75	38.18	47.75
C.A.W.C.-Africa	5	94	2,336	2.41	1.39	41.22	23.75	28.19	50.55	79.33	50.55
C.A.W.C.-C.A.E.C.	25	109	7,004	2.41	1.46	72.89	44.13	10.10	52.77	422.53	52.77
C.A.W.C.-Europe	21	120	5,751	2.41	1.41	36.86	21.52	26.48	46.59	75.96	46.59
C.A.W.C.-S.A.E.C.	8	51	539	2.41	1.41	9.46	5.53	25.50	29.62	16.16	29.62
C.A.W.C.-U.S.E.C.	10	51	3,700	2.41	1.45	92.24	55.61	11.45	65.61	472.86	65.61
Canada E.C.-Asia	5	12	463	2.41	1.39	8.59	4.95	38.09	41.65	9.35	41.65
Canada E.C.-C.A.W.C.	1	15	355	2.41	1.39	34.28	19.75	19.29	37.65	95.19	37.65
Canada E.C.-Oceania	0	4	4	2.41	1.39	1.74	1.00	43.04	42.65	-0.90	42.65

(Continued)

Table A-10. Laden Transits, Tons Carried, and Toll Revenue, Maximum Non-Diverting Toll Rates, 200,000 DWT Scenario, 2020, by Ship Type, Diversion Status, and Trade Route (1990 US$, except when noted)(continued)

Ship Type, Diversion Status, and Trade Route	Transits	Cargo Tonnage Carried (thousands)	Revenue (thousands) a/	Current Toll Schedule: Toll Per Panama Canal Net Ton	Current Toll Schedule: Toll Per Cargo Ton Carried	New Toll Schedule: Toll Per Panama Canal Net Ton	New Toll Schedule: Toll Per Cargo Ton Carried	Total Transportation Costs per Ton Carried: Via Panama Canal: With Current Toll Structure	Via Panama Canal: With New Toll Structure	Via Panama Canal: Percent Increase	Via Least Costly Alternative Route
General Cargo Ships (continued)											
Non-Diverted Transits (continued)											
Canada E.C.-S.A.W.C.	6	53	944	2.41	1.39	13.80	7.95	25.19	31.75	26.05	31.75
Canada W.C.-C.A.E.C.	6	45	2,267	2.41	1.42	59.46	35.01	28.50	62.09	117.87	62.09
Canada W.C.-Europe	1	12	169	2.41	1.39	25.77	14.85	34.09	47.55	39.49	47.55
Canada W.C.-Middle East	1	6	1	2.41	1.39	0.09	0.05	39.04	37.70	-3.43	37.70
Canada W.C.-S.A.E.C.	6	58	2,246	2.41	1.41	51.95	30.45	33.28	62.32	87.25	62.32
C.A.E.C.-Asia	22	415	5,140	2.41	1.39	20.65	11.90	34.09	44.60	30.84	44.60
C.A.E.C.-C.A.W.C.	25	89	7,912	2.41	1.45	80.93	48.84	9.12	56.51	519.34	56.51
C.A.E.C.-Oceania	0	7	83	2.41	1.39	15.45	8.90	37.09	44.60	20.25	44.60
C.A.E.C.-S.A.W.C.	24	218	3,631	2.41	1.41	20.56	12.00	20.63	31.22	51.36	31.22
C.A.E.C.-U.S.W.C.	9	28	2,628	2.41	1.51	116.34	73.00	30.51	102.00	234.29	102.00
Europe-C.A.W.C.	44	300	19,439	2.41	1.40	50.64	29.41	25.47	53.48	109.98	53.48
Europe-Canada W.C.	2	9	536	2.41	1.50	79.95	49.78	71.00	119.28	68.00	119.28
Europe-S.A.W.C.	39	385	2,326	2.41	1.39	5.55	3.20	30.83	32.64	5.87	32.64
Europe-U.S.W.C.	2	11	708	2.41	1.44	65.41	39.19	55.78	93.53	67.66	93.53
Middle East-S.A.W.C.	4	2	483	2.41	1.50	42.19	26.27	64.45	89.22	38.43	89.22
Middle East-U.S.W.C.	2	4	218	2.41	1.39	12.06	6.95	37.09	42.65	15.00	42.65
Oceania-C.A.E.C.	0	3	89	2.41	1.39	17.18	9.90	36.09	44.60	23.58	44.60
Oceania-U.S.E.C.	1	7	145	2.41	1.43	19.56	11.63	51.18	61.38	19.92	61.38
S.A.E.C.-C.A.W.C.	7	148	432	2.41	1.39	5.21	3.00	23.19	24.80	6.95	24.80
S.A.E.C.-Canada W.C.	0	1	9	2.41	1.39	6.86	3.95	32.14	34.70	7.97	34.70
S.A.E.C.-U.S.W.C.	8	36	397	2.41	1.40	5.28	3.06	34.56	36.22	4.82	36.22
S.A.W.C.-Africa	4	81	1,468	2.41	1.39	30.98	17.85	31.14	47.60	52.87	47.60
S.A.W.C.-Canada E.C.	0	6	57	2.41	1.39	13.80	7.95	25.19	31.75	26.05	31.75

(Continued)

Table A-10. Laden Transits, Tons Carried, and Toll Revenue, Maximum Non-Diverting Toll Rates, 200,000 DWT Scenario, 2020, by Ship Type, Diversion Status, and Trade Route (1990 US$, except when noted)(continued)

Ship Type, Diversion Status, and Trade Route	Transits	Cargo Tonnage Carried (thousands)	Revenue (thousands) a/	Current Toll Schedule: Toll Per Panama Canal Net Ton	Current Toll Schedule: Toll Per Cargo Ton Carried	New Toll Schedule: Toll Per Panama Canal Net Ton	New Toll Schedule: Toll Per Cargo Ton Carried	Total Transportation Costs per Ton Carried: Via Panama Canal: With Current Toll Structure	Via Panama Canal: With New Toll Structure	Via Panama Canal: Percent Increase	Via Least Costly Alternative Route
General Cargo Ships (continued)											
Non-Diverted Transits (continued)											
S.A.W.C.-C.A.E.C.	41	177	6,581	2.41	1.45	37.41	22.46	21.94	42.95	95.79	42.95
S.A.W.C.-Europe	98	1,601	5,873	2.41	1.39	5.21	3.00	30.14	31.75	5.35	31.75
S.A.W.C.-Middle East	2	23	215	2.41	1.39	12.06	6.95	32.14	37.70	17.30	37.70
S.A.W.C.-U.S.E.C.	27	205	5,207	2.41	1.40	24.42	14.22	23.26	36.08	55.09	36.08
U.S.E.C.-Asia	48	782	14,247	2.41	1.39	25.47	14.66	34.72	47.99	38.23	47.99
U.S.E.C.-C.A.W.C.	48	352	17,535	2.41	1.43	70.52	41.83	13.42	53.82	301.06	53.82
U.S.E.C.-Oceania	3	46	362	2.41	1.39	10.33	5.95	37.09	41.65	12.30	41.65
U.S.E.C.-S.A.W.C.	86	605	16,487	2.41	1.41	25.23	14.72	23.39	36.70	56.93	36.70
U.S.E.C.-U.S.W.C.	1	0	237	2.41	1.50	122.09	76.05	32.50	107.05	229.37	107.05
U.S.W.C.-Africa	2	25	445	2.41	1.39	17.18	9.90	34.09	42.60	24.97	42.60
U.S.W.C.-C.A.E.C.	1	0	437	2.41	1.50	109.94	68.48	29.71	96.69	225.43	96.69
U.S.W.C.-Europe	3	31	718	2.41	1.42	38.08	22.47	40.73	61.78	51.67	61.78
U.S.W.C.-S.A.E.C.	6	15	269	2.41	1.45	10.21	6.14	47.38	52.07	9.90	52.07
Subtotal	758	7,499	166,380	2.41	1.40	25.33	14.71	28.74	41.84	45.59	41.84
Liquid Gas Carriers											
Non-Diverted Transits											
C.A.W.C.-C.A.E.C.	4	18	954	2.41	7.30	42.24	128.00	49.30	170.00	244.81	170.00
C.A.E.C.-Asia	15	82	3,770	2.41	4.67	25.75	49.93	107.52	152.78	42.09	152.78
C.A.E.C.-C.A.W.C.	96	1,270	60,050	2.41	3.79	32.89	51.76	23.91	71.88	200.60	71.88
C.A.E.C.-S.A.W.C.	8	119	2,357	2.41	3.83	15.12	24.00	40.83	61.00	49.42	61.00
C.A.E.C.-U.S.W.C.	1	12	497	2.41	3.83	33.39	53.00	45.83	95.00	107.31	95.00
Europe-C.A.W.C.	2	5	253	2.41	7.30	31.02	94.00	110.30	197.00	78.60	197.00

(Continued)

Table A-10. Laden Transits, Tons Carried, and Toll Revenue, Maximum Non-Diverting Toll Rates, 200,000 DWT Scenario, 2020, by Ship Type, Diversion Status, and Trade Route (1990 US$, except when noted)(continued)

Ship Type, Diversion Status, and Trade Route	Transits	Cargo Tonnage Carried (thousands)	Revenue (thousands) a/	Current Toll Schedule: Toll Per Panama Canal Net Ton	Current Toll Schedule: Toll Per Cargo Ton Carried	New Toll Schedule: Toll Per Panama Canal Net Ton	New Toll Schedule: Toll Per Cargo Ton Carried	Total Transportation Costs per Ton Carried, Via Panama Canal: With Current Toll Structure	Total Transportation Costs per Ton Carried, Via Panama Canal: With New Toll Structure	Total Transportation Costs per Ton Carried, Via Panama Canal: Percent Increase	Total Transportation Costs per Ton Carried: Via Least Costly Alternative Route
Liquid Gas Carriers (continued)											
Non-Diverted Transits (continued)											
Europe-S.A.W.C.	0	1	4	2.41	3.82	5.04	8.00	67.82	72.00	6.16	72.00
Oceania-U.S.E.C.	6	91	1,229	2.41	3.62	8.64	12.99	66.11	75.48	14.17	75.48
S.A.E.C.-Asia	2	27	415	2.41	3.83	11.97	19.00	78.83	94.00	19.25	94.00
S.A.E.C.-C.A.W.C.	11	31	399	2.41	7.30	6.60	20.00	99.30	112.00	12.79	112.00
U.S.E.C.-Asia	23	273	11,076	2.41	3.86	26.87	43.04	82.65	121.83	47.40	121.83
U.S.E.C.-C.A.W.C.	1	2	190	2.41	7.30	46.53	141.00	57.30	191.00	233.32	191.00
U.S.E.C.-Oceania	1	11	176	2.41	3.83	10.71	17.00	86.83	100.00	15.17	100.00
U.S.E.C.-S.A.W.C.	2	6	234	2.41	7.30	21.78	66.00	94.30	153.00	62.24	153.00
Subtotal	172	1,947	81,603	2.41	3.90	28.58	46.29	41.82	84.66	102.42	84.66
Passenger Ships											
Non-Diverted Transits											
North-Bound	153	0	2,251	2.41	0.00	2.01	0.00	0.00	0.00	0.00	0.00
South-Bound	183	0	3,894	2.41	0.00	2.01	0.00	0.00	0.00	0.00	0.00
Subtotal	336	0	6,145	2.41	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Refrigerated Ships											
Non-Diverted Transits											
Africa-Asia	29	151	398	2.41	4.28	1.69	3.00	162.08	160.80	-0.79	160.80
Africa-C.A.W.C.	0	0	82	2.41	4.27	55.47	98.40	113.87	208.00	82.66	208.00
Africa-S.A.W.C.	9	9	3,213	2.41	4.15	38.75	66.78	133.93	196.56	46.76	196.56
Asia-C.A.E.C.	20	71	6,038	2.41	3.97	29.89	49.17	128.09	173.29	35.29	173.29
Asia-S.A.E.C.	5	3	188	2.41	4.28	4.40	7.80	168.08	171.60	2.10	171.60

(Continued)

Table A-10. Laden Transits, Tons Carried, and Toll Revenue, Maximum Non-Diverting Toll Rates, 200,000 DWT Scenario, 2020, by Ship Type, Diversion Status, and Trade Route (1990 US$, except when noted)(continued)

Ship Type, Diversion Status, and Trade Route	Transits	Cargo Tonnage Carried (thousands)	Revenue (thousands) a/	Current Toll Schedule: Toll Per Panama Canal Net Ton	Current Toll Schedule: Toll Per Cargo Ton Carried	New Toll Schedule: Toll Per Panama Canal Net Ton	New Toll Schedule: Toll Per Cargo Ton Carried	Total Transportation Costs per Ton Carried: Via Panama Canal: With Current Toll Structure	Via Panama Canal: With New Toll Structure	Via Panama Canal: Percent Increase	Via Least Costly Alternative Route
Refrigerated Ships (continued)											
Non-Diverted Transits (continued)											
Asia-U.S.E.C.	0	0	125	2.41	4.28	34.95	62.00	140.48	198.20	41.09	198.20
C.A.W.C.-Africa	1	3	461	2.41	4.28	55.46	98.40	113.88	208.00	82.66	208.00
C.A.W.C.-Canada E.C.	0	2	132	2.41	4.28	44.98	79.80	76.48	152.00	98.76	152.00
C.A.W.C.-C.A.E.C.	20	132	10,401	2.41	3.88	47.91	77.06	50.94	124.12	143.67	124.12
C.A.W.C.-Europe	219	987	79,274	2.41	3.94	35.22	57.59	89.55	143.20	59.91	143.20
C.A.W.C.-S.A.E.C.	1	4	50	2.41	4.28	6.65	11.80	89.28	96.80	8.43	96.80
C.A.W.C.-U.S.E.C.	1	2	398	2.41	4.28	52.08	92.40	61.68	149.80	142.88	149.80
Canada E.C.-Asia	12	63	1,063	2.41	4.28	10.60	18.80	155.08	169.60	9.37	169.60
Canada E.C.-C.A.W.C.	5	10	2,169	2.41	3.95	46.27	75.85	70.22	142.12	102.39	142.12
Canada W.C.-Europe	3	28	1,077	2.41	4.12	34.78	59.42	131.88	187.18	41.94	187.18
C.A.E.C.-Asia	10	32	2,734	2.41	4.12	29.91	51.17	135.20	182.25	34.80	182.25
C.A.E.C.-C.A.W.C.	23	5	11,938	2.41	3.87	47.90	77.00	50.87	124.00	143.74	124.00
C.A.E.C.-S.A.W.C.	54	42	12,027	2.41	3.87	20.53	33.00	71.87	101.00	40.52	101.00
Europe-C.A.W.C.	160	13	98,228	2.41	3.89	57.02	91.97	89.41	177.49	98.52	177.49
Europe-Canada W.C.	1	1	221	2.41	4.28	32.24	57.20	136.48	189.40	38.78	189.40
Europe-S.A.W.C.	169	145	9,626	2.41	4.02	5.90	9.84	116.06	121.88	5.01	121.88
Europe-U.S.W.C.	14	10	3,561	2.41	4.28	31.45	55.80	126.88	178.40	40.61	178.40
Middle East-S.A.W.C.	2	3	223	2.41	4.28	16.12	28.60	129.48	153.80	18.79	153.80
Oceania-C.A.E.C.	3	18	519	2.41	4.28	22.21	39.40	147.28	182.40	23.85	182.40
Oceania-U.S.E.C.	33	116	3,837	2.41	4.24	14.02	24.67	148.70	169.13	13.74	169.13
S.A.E.C.-Asia	11	50	1,382	2.41	4.28	14.99	26.60	137.48	159.80	16.24	159.80
S.A.W.C.-Africa	14	50	5,276	2.41	4.15	42.24	72.78	123.33	191.96	55.64	191.96
S.A.W.C.-C.A.E.C.	21	111	4,271	2.41	3.99	20.30	33.61	75.06	104.68	39.46	104.68

(Continued)

Table A-10. Laden Transits, Tons Carried, and Toll Revenue, Maximum Non-Diverting Toll Rates, 200,000 DWT Scenario, 2020, by Ship Type, Diversion Status, and Trade Route (1990 US$, except when noted)(continued)

Ship Type, Diversion Status, and Trade Route	Transits	Cargo Tonnage Carried (thousands)	Revenue (thousands) a/	Current Toll Schedule: Toll Per Panama Canal Net Ton	Current Toll Schedule: Toll Per Cargo Ton Carried	New Toll Schedule: Toll Per Panama Canal Net Ton	New Toll Schedule: Toll Per Cargo Ton Carried	Total Transportation Costs per Ton Carried: Via Panama Canal: With Current Toll Structure	Via Panama Canal: With New Toll Structure	Via Panama Canal: Percent Increase	Via Least Costly Alternative Route
Refrigerated Ships (continued)											
Non-Diverted Transits (continued)											
S.A.W.C.-Europe	928	4,670	50,906	2.41	4.05	5.78	9.72	115.41	121.08	4.91	121.08
S.A.W.C.-Middle East	5	17	699	2.41	4.28	16.12	28.60	129.48	153.80	18.79	153.80
S.A.W.C.-U.S.E.C.	607	2,226	143,925	2.41	4.02	24.45	40.76	80.58	117.32	45.60	117.32
U.S.E.C.-Asia	32	114	11,043	2.41	4.01	35.93	59.80	134.04	189.83	41.62	189.83
U.S.E.C.-C.A.W.C.	27	66	14,766	2.41	3.93	53.56	87.35	56.28	139.70	148.22	139.70
U.S.E.C.-S.A.W.C.	282	434	67,988	2.41	3.99	24.42	40.47	79.55	116.03	45.85	116.03
U.S.W.C.-Europe	126	672	35,380	2.41	4.17	32.04	55.41	126.00	177.24	40.67	177.24
U.S.W.C.-S.A.E.C.	1	3	28	2.41	4.24	3.98	7.00	121.95	124.71	2.26	124.71
Subtotal	2,847	10,266	583,646	2.41	4.02	21.15	35.28	104.57	129.67	24.00	129.67
Roll-On Roll-Off											
Non-Diverted Transits											
Asia-Canada E.C.	2	8	203	2.41	9.35	7.65	29.67	278.31	298.63	7.30	298.63
Asia-C.A.E.C.	24	473	9,637	2.41	7.92	11.73	38.57	225.40	256.05	13.60	256.05
Asia-U.S.E.C.	40	766	23,844	2.41	7.95	17.95	59.26	237.11	288.42	21.64	288.42
C.A.W.C.-Europe	12	64	5,501	2.41	8.66	23.37	84.00	181.66	257.00	41.47	257.00
C.A.W.C.-S.A.E.C.	0	0	4	2.41	8.67	5.00	18.00	193.67	203.00	4.82	203.00
C.A.W.C.-U.S.E.C.	1	1	694	2.41	8.66	28.94	104.00	155.66	251.00	61.25	251.00
Canada E.C.-Asia	8	41	584	2.41	9.30	4.79	18.50	327.47	336.67	2.81	336.67
Canada E.C.-Oceania	1	31	108	2.41	7.77	1.86	6.00	240.88	239.11	-0.73	239.11
Canada W.C.-C.A.E.C.	0	0	78	2.41	10.19	34.25	144.89	224.84	359.54	59.91	359.54
C.A.E.C.-C.A.W.C.	0	1	193	2.41	9.72	31.72	127.86	154.90	273.04	76.27	273.04
C.A.E.C.-Oceania	2	7	719	2.41	8.66	14.75	53.00	252.66	297.00	17.55	297.00

(Continued)

Table A-10. Laden Transits, Tons Carried, and Toll Revenue, Maximum Non-Diverting Toll Rates, 200,000 DWT Scenario, 2020, by Ship Type, Diversion Status, and Trade Route (1990 US$, except when noted)(continued)

Ship Type, Diversion Status, and Trade Route	Transits	Cargo Tonnage Carried (thousands)	Revenue (thousands) a/	Current Toll Schedule: Toll Per Panama Canal Net Ton	Current Toll Schedule: Toll Per Cargo Ton Carried	New Toll Schedule: Toll Per Panama Canal Net Ton	New Toll Schedule: Toll Per Cargo Ton Carried	Total Transportation Costs per Ton Carried: Via Panama Canal: With Current Toll Structure	Total Transportation Costs per Ton Carried: Via Panama Canal: With New Toll Structure	Total Transportation Costs per Ton Carried: Via Panama Canal: Percent Increase	Total Transportation Costs per Ton Carried: Via Least Costly Alternative Route
Roll-On Roll-Off (continued)											
Non-Diverted Transits (continued)											
C.A.E.C.-S.A.W.C.	46	81	7,412	2.41	10.19	13.84	58.55	217.90	266.26	22.19	266.26
Europe-C.A.W.C.	18	112	13,422	2.41	8.66	38.40	138.00	181.66	311.00	71.20	311.00
Europe-S.A.W.C.	0	0	8	2.41	8.67	11.95	43.00	240.67	275.00	14.26	275.00
Europe-U.S.W.C.	0	2	172	2.41	8.66	21.70	78.00	241.66	311.00	28.69	311.00
Oceania-C.A.E.C.	0	0	3	2.41	8.01	14.06	46.75	223.21	261.95	17.35	261.95
S.A.W.C.-C.A.E.C.	12	23	1,867	2.41	10.19	13.84	58.55	217.90	266.26	22.19	266.26
S.A.W.C.-Europe	1	3	265	2.41	8.66	13.64	49.00	240.66	281.00	16.76	281.00
S.A.W.C.-U.S.E.C.	6	13	1,250	2.41	10.19	17.60	74.43	210.96	275.20	30.45	275.20
U.S.E.C.-Asia	8	56	3,324	2.41	8.64	19.68	70.56	275.58	337.50	22.47	337.50
U.S.E.C.-C.A.W.C.	2	3	1,326	2.41	8.66	35.34	127.00	132.66	251.00	89.20	251.00
U.S.E.C.-S.A.W.C.	26	45	5,247	2.41	10.19	17.59	74.43	210.96	275.20	30.45	275.20
U.S.W.C.-Canada E.C.	1	2	330	2.41	10.20	33.08	139.95	245.70	375.45	52.81	375.45
U.S.W.C.-C.A.E.C.	1	23	934	2.41	7.75	24.33	78.25	153.28	223.78	45.99	223.78
U.S.W.C.-Europe	0	0	14	2.41	7.80	18.77	60.73	203.42	256.35	26.02	256.35
U.S.W.C.-U.S.E.C.	0	5	248	2.41	7.86	31.14	101.54	151.24	244.92	61.94	244.92
Subtotal	213	1,762	77,386	2.41	8.59	17.77	63.33	228.49	279.24	22.21	279.24
Tankers											
Non-Diverted Transits											
Africa-U.S.W.C.	0	0	1	2.41	1.27	11.35	6.00	15.27	20.00	30.94	20.00
Asia-U.S.E.C.	1	30	356	2.41	1.27	20.79	10.94	22.15	31.82	43.67	31.82
C.A.W.C.-Africa	0	0	33	2.41	1.27	83.58	44.00	37.27	80.00	114.66	80.00
C.A.W.C.-Canada E.C.	0	4	60	2.41	1.27	28.30	14.90	10.23	23.86	133.26	23.86

(Continued)

Table A-10. Laden Transits, Tons Carried, and Toll Revenue, Maximum Non-Diverting Toll Rates, 200,000 DWT Scenario, 2020, by Ship Type, Diversion Status, and Trade Route (1990 US$, except when noted)(continued)

Ship Type, Diversion Status, and Trade Route	Transits	Cargo Tonnage Carried (thousands)	Revenue (thousands) a/	Current Toll Schedule: Toll Per Panama Canal Net Ton	Current Toll Schedule: Toll Per Cargo Ton Carried	New Toll Schedule: Toll Per Panama Canal Net Ton	New Toll Schedule: Toll Per Cargo Ton Carried	Total Transportation Costs per Ton Carried: Via Panama Canal: With Current Toll Structure	Via Panama Canal: With New Toll Structure	Via Panama Canal: Percent Increase	Via Least Costly Alternative Route
Tankers (continued)											
Non-Diverted Transits (continued)											
C.A.W.C.-C.A.E.C.	14	85	5,394	2.41	1.27	40.45	21.29	8.68	28.70	230.71	28.70
C.A.W.C.-Europe	3	70	925	2.41	1.27	20.79	10.94	14.19	23.86	68.17	23.86
C.A.W.C.-U.S.E.C.	7	53	2,582	2.41	1.27	41.84	22.02	9.70	30.45	213.97	30.45
Canada E.C.-Asia	10	393	1,176	2.41	1.27	5.40	2.84	20.80	22.37	7.56	22.37
Canada W.C.-U.S.E.C.	5	253	3,369	2.41	1.27	20.94	11.00	11.42	21.15	85.26	21.15
C.A.E.C.-Asia	6	180	1,893	2.41	1.27	15.64	8.21	18.65	25.59	37.24	25.59
C.A.E.C.-C.A.W.C.	93	1,762	37,135	2.41	1.27	24.82	13.05	6.05	17.83	194.86	17.83
C.A.E.C.-S.A.W.C.	41	879	7,009	2.41	1.27	11.51	6.06	10.87	15.66	44.09	15.66
C.A.E.C.-U.S.W.C.	17	712	8,400	2.41	1.27	19.93	10.48	9.67	18.88	95.30	18.88
Europe-C.A.W.C.	12	54	1,690	2.41	1.27	32.60	17.16	20.41	36.30	77.87	36.30
Europe-S.A.W.C.	2	52	124	2.41	1.27	4.05	2.13	19.11	19.97	4.51	19.97
Europe-U.S.W.C.	6	196	2,021	2.41	1.27	17.56	9.24	18.01	25.98	44.27	25.98
Middle East-U.S.W.C.	0	0	1	2.41	1.25	11.60	6.00	23.25	28.00	20.45	28.00
Oceania-U.S.E.C.	9	153	890	2.41	1.27	8.99	4.73	23.22	26.68	14.91	26.68
S.A.E.C.-Asia	81	14,147	43,617	2.41	1.27	5.85	3.08	12.89	14.70	14.06	14.70
S.A.E.C.-C.A.W.C.	85	4,342	11,987	2.41	1.26	3.84	2.01	8.64	9.39	8.66	9.39
S.A.E.C.-U.S.W.C.	49	1,967	2,339	2.41	1.26	1.94	1.02	14.90	14.66	-1.64	14.66
S.A.W.C.-Canada E.C.	2	36	268	2.41	1.27	11.55	6.08	16.94	21.75	28.41	21.75
S.A.W.C.-C.A.E.C.	42	1,636	9,825	2.41	1.27	9.43	4.95	8.64	12.32	42.66	12.32
S.A.W.C.-Europe	12	106	321	2.41	1.27	5.00	2.63	22.77	24.13	5.98	24.13
S.A.W.C.-U.S.E.C.	47	1,758	13,383	2.41	1.27	12.71	6.69	10.31	15.73	52.60	15.73
U.S.E.C.-Asia	80	2,655	27,785	2.41	1.27	17.36	9.12	18.79	26.64	41.81	26.64
U.S.E.C.-C.A.W.C.	33	614	14,513	2.41	1.27	30.93	16.28	8.14	23.15	184.45	23.15

(Continued)

Table A-10. Laden Transits, Tons Carried, and Toll Revenue, Maximum Non-Diverting Toll Rates, 200,000 DWT Scenario, 2020, by Ship Type, Diversion Status, and Trade Route (1990 US$, except when noted)(continued)

Ship Type, Diversion Status, and Trade Route	Transits	Cargo Tonnage Carried (thousands)	Revenue (thousands) a/	Current Toll Schedule: Toll Per Panama Canal Net Ton	Current Toll Schedule: Toll Per Cargo Ton Carried	New Toll Schedule: Toll Per Panama Canal Net Ton	New Toll Schedule: Toll Per Cargo Ton Carried	Total Transportation Costs per Ton Carried: Via Panama Canal: With Current Toll Structure	Total Transportation Costs per Ton Carried: Via Panama Canal: With New Toll Structure	Total Transportation Costs per Ton Carried: Via Panama Canal: Percent Increase	Total Transportation Costs per Ton Carried: Via Least Costly Alternative Route
Tankers (continued)											
Non-Diverted Transits (continued)											
U.S.E.C.-Canada W.C.	1	4	486	2.41	1.27	28.35	14.92	15.19	28.84	89.88	28.84
U.S.E.C.-Oceania	6	192	978	2.41	1.27	8.42	4.43	21.59	24.75	14.64	24.75
U.S.E.C.-S.A.W.C.	8	147	1,451	2.41	1.27	15.24	8.02	12.12	18.87	55.71	18.87
U.S.E.C.-U.S.W.C.	30	877	15,507	2.41	1.27	27.56	14.50	12.30	25.53	107.60	25.53
U.S.W.C.-Africa	7	224	1,586	2.41	1.26	9.66	5.05	13.36	17.15	28.37	17.15
U.S.W.C.-Canada E.C.	1	21	300	2.41	1.27	24.55	12.92	16.19	27.84	71.97	27.84
U.S.W.C.-C.A.E.C.	8	301	3,971	2.41	1.26	19.47	10.22	9.64	18.60	92.85	18.60
U.S.W.C.-S.A.E.C.	2	87	121	2.41	1.27	2.68	1.41	15.34	15.48	0.92	15.48
U.S.W.C.-U.S.E.C.	8	226	4,167	2.41	1.27	26.04	13.68	11.51	23.92	107.89	23.92
Subtotal	728	34,216	225,664	2.41	1.27	10.75	5.65	12.27	16.27	32.60	16.27
Vehicle Carriers											
Non-Diverted Transits											
Asia-C.A.E.C.	13	33	3,381	2.41	29.09	7.98	96.37	392.50	459.78	17.14	459.78
Asia-S.A.E.C.	0	0	4	2.41	29.13	0.95	11.44	453.29	435.60	-3.90	435.60
Asia-U.S.E.C.	419	1,959	122,346	2.41	29.20	7.90	95.71	413.17	479.68	16.10	479.68
C.A.W.C.-C.A.E.C.	1	1	384	2.41	28.71	14.98	178.50	257.39	407.18	58.19	407.18
Canada E.C.-Asia	0	1	10	2.41	29.22	1.40	17.00	437.22	425.00	-2.79	425.00
C.A.E.C.-C.A.W.C.	4	1	1,729	2.41	29.22	12.45	151.00	263.22	385.00	46.27	385.00
C.A.E.C.-Oceania	1	0	200	2.41	29.22	5.61	68.00	409.22	448.00	9.48	448.00
Europe-Canada W.C.	5	11	1,785	2.41	30.90	7.23	92.69	368.26	430.05	16.78	430.05
Europe-U.S.W.C.	149	285	40,456	2.41	29.95	6.26	77.77	381.68	429.50	12.53	429.50
S.A.W.C.-C.A.E.C.	0	0	11	2.41	28.69	6.30	75.00	307.69	354.00	15.05	354.00

(Continued)

Table A-10. Laden Transits, Tons Carried, and Toll Revenue, Maximum Non-Diverting Toll Rates, 200,000 DWT Scenario, 2020, by Ship Type, Diversion Status, and Trade Route (1990 US$, except when noted)(continued)

Ship Type, Diversion Status, and Trade Route	Transits	Cargo Tonnage Carried (thousands)	Revenue (thousands) a/	Current Toll Schedule: Toll Per Panama Canal Net Ton	Current Toll Schedule: Toll Per Cargo Ton Carried	New Toll Schedule: Toll Per Panama Canal Net Ton	New Toll Schedule: Toll Per Cargo Ton Carried	Total Transportation Costs per Ton Carried, Via Panama Canal: With Current Toll Structure	Total Transportation Costs per Ton Carried, Via Panama Canal: With New Toll Structure	Total Transportation Costs per Ton Carried, Via Panama Canal: Percent Increase	Total Transportation Costs per Ton Carried: Via Least Costly Alternative Route
Vehicle Carriers (continued)											
Non-Diverted Transits (continued)											
U.S.E.C.-Asia	25	114	9,355	2.41	29.67	9.11	112.20	392.18	474.71	21.04	474.71
U.S.E.C.-Oceania	7	18	1,026	2.41	29.22	3.63	44.00	408.22	423.00	3.62	423.00
Subtotal	623	2,424	180,686	2.41	29.43	7.48	91.39	407.80	472.52	15.87	472.52
Total Non-Diverting	13,243	329,616	3,979,713	2.41	1.82	14.40	10.86	44.03	52.95	20.27	52.95

Notes: These calculations do not include all transits and tons carried forecast by the WEFA Group. For some ship-type and trade-route combinations (accounting for a total of 18 transits and 179803 tons), vessel costs were not available for every DWT size interval. As a result, these transits and tons were excluded. In addition, for 1981 transits and 37003606 tons, the cost by way of the Panama Canal without a toll was higher than the least costly alternative route. As a result, these transits and tons were excluded. Percentages may not calculate exactly as shown due to rounding. A fee of $0.40 per Panama Canal net ton has also been included to account for charges such as handling and agency fees incurred when transitting the Canal. The extra fee is only used to determine divesion status by adding it to the cost per ton carried and is not included in the revenue calculations.

a/ Revenue lost from diversions is measured as the revenue generated by the maximum, nondiverting toll rate increase.

Source: Nathan Associates Inc., based on forecasts of traffic and transportation costs provided by The WEFA Group.

MAXIMUM NON-DIVERTING TOLL RATES, 250,000-DWT SCENARIO, 2020

Table A-11. Laden Transits, Tons Carried, and Toll Revenue, Maximum Non-Diverting Toll Rates, 250,000 DWT Scenario, 2020, by Ship Type

	Transits				Tons Carried(thousands)				Revenue(1990 US$thousands)			
Ship Type	Canal	Diverted	Total	Diverted as a Percent of Total	Canal	Diverted	Total	Diverted as a Percent of Total	Canal	Lost a/	Total	Lost as a Percent of Total
Container-Breakbulk	1,325	0	1,325	0.00	20,519	0	20,519	0.00	500,472	0	500,472	0.00
Dry Bulk Carriers	4,030	0	4,030	0.00	209,960	0	209,960	0.00	1,359,111	0	1,359,111	0.00
Chemical Tankers	994	0	994	0.00	22,925	0	22,925	0.00	400,811	0	400,811	0.00
Full Container Ships	1,251	0	1,251	0.00	24,619	0	24,619	0.00	429,279	0	429,279	0.00
General Cargo Ships	758	0	758	0.00	7,499	0	7,499	0.00	166,380	0	166,380	0.00
Liquid Gas Carriers	172	0	172	0.00	1,947	0	1,947	0.00	81,603	0	81,603	0.00
Passenger Ships	336	0	336	0.00	0	0	0	0.00	6,145	0	6,145	0.00
Refrigerated Ships	2,847	0	2,847	0.00	10,266	0	10,266	0.00	583,646	0	583,646	0.00
Roll-On Roll-Off	213	0	213	0.00	1,762	0	1,762	0.00	77,386	0	77,386	0.00
Tankers	715	0	715	0.00	34,216	0	34,216	0.00	249,030	0	249,030	0.00
Vehicle Carriers	623	0	623	0.00	2,424	0	2,424	0.00	180,686	0	180,686	0.00
Total	13,263	0	13,263	0.00	336,138	0	336,138	0.00	4,034,549	0	4,034,549	0.00

Notes: These calculations do not include all transits and tons carried forecast by the WEFA Group. For some ship-type and trade-route combinations (accounting for a total of 18 transits and 179803 tons), vessel costs were not available for every DWT size interval. As a result, these transits and tons were excluded. In addition, for 1981 transits and 37003606 tons, the cost by way of the Panama Canal without a toll was higher than the least costly alternative route. As a result, these transits and tons were excluded. A fee of $0.40 per Panama Canal net ton has also been included to account for charges such as handling and agency fees incurred when transitting the Canal. The extra fee is only used to determine diversion status by adding it to cost per ton carried and is not included in the revenue calculations.

a/ Revenue lost from diversions is measured as the revenue generated by the maximum, nondiverting toll rate increase.

Source: Nathan Associates Inc., based on forecasts of traffic and transportation costs provided by The WEFA Group.

Table A-12. Ballast Transits, Tons Carried, and Toll Revenue, Current Toll Structure and Rates, 250,000 DWT Scenario, 2020, by Ship Type

	Transits				Tons Carried(thousands)				Revenue(1990 US$thousands)			
Ship Type	Canal	Diverted	Total	Diverted as a Percent of Total	Canal	Diverted	Total	Diverted as a Percent of Total	Canal	Lost	Total	Lost as a Percent of Total
Container-Breakbulk	41	0	41	0.00	0	0	0	0.00	1,019	0	1,019	0.00
Dry Bulk Carriers	420	0	420	0.00	0	0	0	0.00	16,174	0	16,174	0.00
Chemical Tankers	82	0	82	0.00	0	0	0	0.00	1,758	0	1,758	0.00
Full Container Ships	9	0	9	0.00	0	0	0	0.00	228	0	228	0.00
General Cargo Ships	140	0	140	0.00	0	0	0	0.00	1,531	0	1,531	0.00
Liquid Gas Carriers	128	0	128	0.00	0	0	0	0.00	3,730	0	3,730	0.00
Passenger Ships	11	0	11	0.00	0	0	0	0.00	131	0	131	0.00
Refrigerated Ships	932	0	932	0.00	0	0	0	0.00	13,778	0	13,778	0.00
Roll-On Roll-Off	30	0	30	0.00	0	0	0	0.00	798	0	798	0.00
Tankers	382	0	382	0.00	0	0	0	0.00	20,779	0	20,779	0.00
Vehicle Carriers	383	0	383	0.00	0	0	0	0.00	22,613	0	22,613	0.00
Total	2,558	0	2,558	0.00	0	0	0	0.00	82,540	0	82,540	0.00

Note: Diversions of ballast transits are computed by diverting a proportion of ballast transits equal to lost revenue as a percent of total potential revenue for a particular laden ship type. See last column on previous table.

Source: Nathan Associates Inc., based on forecasts of traffic and transportation costs provided by The WEFA Group.

Table A-13. Laden Transits, Tons Carried, and Toll Revenue, Maximum Non-Diverting Toll Rates, 250,000 DWT Scenario, 2020, by Ship Type, Diversion Status, and Trade Route (1990 US$, except when noted)

Ship Type, Diversion Status, and Trade Route	Transits	Cargo Tonnage Carried (thousands)	Revenue (thousands) a/	Current Toll Schedule: Toll Per Panama Canal Net Ton	Current Toll Schedule: Toll Per Cargo Ton Carried	New Toll Schedule: Toll Per Panama Canal Net Ton	New Toll Schedule: Toll Per Cargo Ton Carried	Total Transportation Costs per Ton Carried: Via Panama Canal: With Current Toll Structure	Via Panama Canal: With New Toll Structure	Via Panama Canal: Percent Increase	Via Least Costly Alternative Route
Container-Breakbulk											
Non-Diverted Transits											
Africa-C.A.W.C.	3	77	2,388	2.41	1.85	60.52	46.55	68.56	113.26	65.19	113.26
Africa-Canada W.C.	0	2	37	2.41	1.87	18.89	14.64	88.16	100.93	14.49	100.93
Africa-U.S.W.C.	1	9	198	2.41	1.87	20.10	15.58	89.16	102.87	15.38	102.87
Asia-Canada E.C.	0	4	67	2.41	1.86	12.16	9.40	88.65	96.19	8.50	96.19
Asia-C.A.E.C.	91	837	25,658	2.41	1.87	21.59	16.71	93.07	107.91	15.95	107.91
Asia-S.A.E.C.	27	175	1,722	2.41	1.87	5.03	3.90	100.20	102.23	2.03	102.23
Asia-U.S.E.C.	82	1,031	35,673	2.41	1.86	31.27	24.14	94.52	116.80	23.57	116.80
C.A.W.C.-Africa	3	70	2,755	2.41	1.87	63.64	49.37	73.06	120.56	65.02	120.56
C.A.W.C.-C.A.E.C.	7	118	5,084	2.41	1.86	51.76	40.02	49.37	87.53	77.28	87.53
C.A.W.C.-Europe	15	110	7,415	2.41	1.87	38.09	29.51	63.64	91.28	43.44	91.28
C.A.W.C.-S.A.E.C.	12	6	1,359	2.41	1.87	8.86	6.87	69.19	74.19	7.23	74.19
C.A.W.C.-U.S.E.C.	3	19	1,975	2.41	1.87	49.40	38.32	55.40	91.85	65.80	91.85
Canada E.C.-Asia	14	367	1,571	2.41	1.85	6.51	5.00	90.68	93.83	3.47	93.83
Canada E.C.-C.A.W.C.	1	9	589	2.41	1.87	51.70	40.07	54.09	92.29	70.63	92.29
Canada E.C.-Oceania	1	13	26	2.41	1.87	2.66	2.06	102.74	102.93	0.19	102.93
Canada E.C.-S.A.W.C.	1	10	143	2.41	1.85	19.40	14.92	62.78	75.85	20.81	75.85
Canada E.C.-U.S.W.C.	0	0	3	2.41	1.85	49.39	38.01	69.71	105.87	51.86	105.87
Canada W.C.-Africa	8	179	2,074	2.41	1.85	18.11	13.93	88.66	100.74	13.62	100.74
Canada W.C.-Europe	63	1,844	41,265	2.41	1.85	36.43	28.00	77.86	104.01	33.58	104.01
Canada W.C.-S.A.E.C.	11	210	6,833	2.41	1.87	50.79	39.40	71.19	108.72	52.72	108.72
Canada W.C.-U.S.E.C.	8	149	5,425	2.41	1.85	50.70	39.00	64.85	102.00	57.28	102.00
C.A.E.C.-Asia	9	196	2,521	2.41	1.87	21.35	16.54	92.37	107.04	15.89	107.04
C.A.E.C.-C.A.W.C.	7	27	4,857	2.41	1.87	54.01	41.86	50.30	90.29	79.51	90.29

(Continued)

Table A-13. Laden Transits, Tons Carried, and Toll Revenue, Maximum Non-Diverting Toll Rates, 250,000 DWT Scenario, 2020, by Ship Type, Diversion Status, and Trade Route (1990 US$, except when noted)(continued)

Ship Type, Diversion Status, and Trade Route	Transits	Cargo Tonnage Carried (thousands)	Revenue (thousands) a/	Current Toll Schedule: Toll Per Panama Canal Net Ton	Current Toll Schedule: Toll Per Cargo Ton Carried	New Toll Schedule: Toll Per Panama Canal Net Ton	New Toll Schedule: Toll Per Cargo Ton Carried	Total Transportation Costs per Ton Carried, Via Panama Canal: With Current Toll Structure	Total Transportation Costs per Ton Carried, Via Panama Canal: With New Toll Structure	Total Transportation Costs per Ton Carried, Via Panama Canal: Percent Increase	Total Transportation Costs per Ton Carried: Via Least Costly Alternative Route
Container-Breakbulk (continued)											
Non-Diverted Transits (continued)											
C.A.E.C.-Canada W.C.	2	31	1,317	2.41	1.87	50.61	39.22	63.73	101.08	58.61	101.08
C.A.E.C.-Oceania	1	20	394	2.41	1.87	25.07	19.43	90.16	107.72	19.48	107.72
C.A.E.C.-S.A.W.C.	18	144	5,011	2.41	1.87	21.20	16.43	61.88	76.44	23.53	76.44
C.A.E.C.-U.S.W.C.	4	73	2,265	2.41	1.86	43.45	33.56	61.48	93.18	51.56	93.18
Europe-C.A.W.C.	22	137	18,207	2.41	1.87	64.26	49.80	64.73	112.66	74.05	112.66
Europe-Canada W.C.	4	123	2,690	2.41	1.85	32.54	25.00	80.14	103.29	28.88	103.29
Europe-S.A.W.C.	91	752	23,487	2.41	1.87	20.10	15.58	85.37	99.08	16.06	99.08
Europe-U.S.W.C.	24	732	15,512	2.41	1.85	33.85	26.01	79.27	103.43	30.48	103.43
Oceania-Canada E.C.	2	46	119	2.41	1.85	2.60	2.00	93.85	94.00	0.16	94.00
Oceania-C.A.E.C.	4	42	1,300	2.41	1.87	25.35	19.66	90.85	108.64	19.58	108.64
Oceania-S.A.E.C.	7	95	48	2.41	1.86	0.49	0.38	84.47	82.99	-1.76	82.99
S.A.E.C.-C.A.W.C.	9	141	1,026	2.41	1.87	8.76	6.79	68.77	73.69	7.16	73.69
S.A.E.C.-Canada W.C.	11	152	1,489	2.41	1.87	10.13	7.85	87.94	93.92	6.80	93.92
S.A.E.C.-U.S.W.C.	38	572	2,956	2.41	1.87	5.90	4.57	74.36	77.06	3.64	77.06
S.A.W.C.-Canada E.C.	1	2	260	2.41	1.87	21.48	16.66	66.27	81.06	22.32	81.06
S.A.W.C.-C.A.E.C.	13	108	3,573	2.41	1.87	21.48	16.66	62.27	77.06	23.75	77.06
S.A.W.C.-Europe	191	3,350	56,800	2.41	1.87	23.42	18.15	85.09	101.37	19.14	101.37
S.A.W.C.-U.S.E.C.	108	1,055	34,710	2.41	1.87	25.95	20.13	59.46	77.72	30.71	77.72
U.S.E.C.-Asia	172	4,347	85,953	2.41	1.86	30.43	23.43	91.67	113.24	23.54	113.24
U.S.E.C.-C.A.W.C.	10	201	7,660	2.41	1.86	57.71	44.63	46.17	88.94	92.62	88.94
U.S.E.C.-S.A.W.C.	160	1,595	53,180	2.41	1.87	25.85	20.04	59.27	77.44	30.66	77.44
U.S.E.C.-U.S.W.C.	0	0	9	2.41	1.86	50.65	39.00	56.86	94.00	65.33	94.00
U.S.W.C.-Africa	9	143	4,166	2.41	1.85	23.62	18.15	82.33	98.63	19.80	98.63

(Continued)

Table A-13. Laden Transits, Tons Carried, and Toll Revenue, Maximum Non-Diverting Toll Rates, 250,000 DWT Scenario, 2020, by Ship Type, Diversion Status, and Trade Route (1990 US$, except when noted)(continued)

Ship Type, Diversion Status, and Trade Route	Transits	Cargo Tonnage Carried (thousands)	Revenue (thousands) a/	Current Toll Schedule: Toll Per Panama Canal Net Ton	Current Toll Schedule: Toll Per Cargo Ton Carried	New Toll Schedule: Toll Per Panama Canal Net Ton	New Toll Schedule: Toll Per Cargo Ton Carried	Total Transportation Costs per Ton Carried, Via Panama Canal: With Current Toll Structure	Total Transportation Costs per Ton Carried, Via Panama Canal: With New Toll Structure	Total Transportation Costs per Ton Carried, Via Panama Canal: Percent Increase	Total Transportation Costs per Ton Carried: Via Least Costly Alternative Route
Container-Breakbulk (continued)											
Non-Diverted Transits (continued)											
U.S.W.C.-Canada E.C.	2	40	1,012	2.41	1.85	45.50	35.00	66.85	100.00	49.58	100.00
U.S.W.C.-C.A.E.C.	9	63	5,022	2.41	1.87	45.26	35.09	63.58	96.80	52.25	96.80
U.S.W.C.-Europe	38	1,010	22,109	2.41	1.85	33.10	25.46	80.25	103.86	29.41	103.86
U.S.W.C.-S.A.E.C.	4	79	346	2.41	1.87	6.28	4.87	76.06	79.06	3.94	79.06
U.S.W.C.-U.S.E.C.	0	3	212	2.41	1.85	52.61	40.48	58.25	96.88	66.31	96.88
Subtotal	1,325	20,519	500,472	2.41	1.86	27.05	20.91	80.94	100.64	24.34	100.64
Dry Bulk Carriers											
Non-Diverted Transits											
Africa-C.A.W.C.	15	483	5,697	2.41	1.35	22.56	12.60	14.85	26.10	75.80	26.10
Africa-Canada W.C.	34	1,354	4,738	2.41	1.31	7.00	3.80	17.28	19.77	14.42	19.77
Africa-S.A.W.C.	5	128	1,222	2.41	1.35	15.49	8.65	17.80	25.10	41.04	25.10
Africa-U.S.W.C.	7	161	1,102	2.41	1.30	8.03	4.34	16.19	19.23	18.75	19.23
Asia-Canada E.C.	8	302	917	2.41	1.28	4.90	2.60	17.00	18.32	7.77	18.32
Asia-C.A.E.C.	21	345	4,108	2.41	1.33	10.77	5.95	18.03	22.65	25.62	22.65
Asia-S.A.E.C.	6	152	179	2.41	1.35	1.79	1.00	21.65	21.30	-1.60	21.30
Asia-U.S.E.C.	242	6,345	68,416	2.41	1.30	13.43	7.25	16.31	22.26	36.47	22.26
Brazil-Asia	144	21,387	49,257	2.41	1.17	4.50	2.18	17.13	18.14	5.91	18.14
C.A.W.C.-Africa	1	34	513	2.41	1.32	22.64	12.44	14.69	25.81	75.65	25.81
C.A.W.C.-C.A.E.C.	34	961	10,440	2.41	1.33	16.83	9.29	7.81	15.77	101.90	15.77
C.A.W.C.-Europe	16	462	4,398	2.41	1.31	13.69	7.47	12.08	18.24	50.93	18.24
C.A.W.C.-S.A.E.C.	10	136	311	2.41	1.35	1.79	1.00	12.00	11.65	-2.89	11.65
C.A.W.C.-U.S.E.C.	38	1,292	15,032	2.41	1.32	20.18	11.04	7.83	17.55	124.19	17.55

(Continued)

Table A-13. Laden Transits, Tons Carried, and Toll Revenue, Maximum Non-Diverting Toll Rates, 250,000 DWT Scenario, 2020, by Ship Type, Diversion Status, and Trade Route (1990 US$, except when noted)(continued)

Ship Type, Diversion Status, and Trade Route	Transits	Cargo Tonnage Carried (thousands)	Revenue (thousands) a/	Current Toll Schedule: Toll Per Panama Canal Net Ton	Current Toll Schedule: Toll Per Cargo Ton Carried	New Toll Schedule: Toll Per Panama Canal Net Ton	New Toll Schedule: Toll Per Cargo Ton Carried	Total Transportation Costs per Ton Carried: Via Panama Canal: With Current Toll Structure	Via Panama Canal: With New Toll Structure	Via Panama Canal: Percent Increase	Via Least Costly Alternative Route
Dry Bulk Carriers (continued)											
Non-Diverted Transits (continued)											
Canada E.C.-Asia	88	4,219	17,317	2.41	1.25	6.92	3.59	18.06	20.40	12.96	20.40
Canada E.C.-Oceania	3	58	318	2.41	1.33	5.07	2.79	19.62	21.08	7.46	21.08
Canada E.C.-S.A.W.C.	6	163	719	2.41	1.33	6.68	3.68	12.63	14.98	18.63	14.98
Canada W.C.-Africa	96	3,500	13,965	2.41	1.31	7.00	3.80	16.93	19.42	14.72	19.42
Canada W.C.-C.A.E.C.	4	105	1,334	2.41	1.35	17.54	9.80	12.85	21.30	65.81	21.30
Canada W.C.-Europe	238	11,174	73,362	2.41	1.26	11.47	5.99	16.52	21.25	28.64	21.25
Canada W.C.-S.A.E.C.	23	1,374	2,665	2.41	1.22	3.22	1.63	10.51	10.92	3.89	10.92
Canada W.C.-U.S.E.C.	64	1,569	22,910	2.41	1.35	20.59	11.50	13.00	23.15	78.13	23.15
C.A.E.C.-Asia	21	639	3,909	2.41	1.35	10.65	5.95	17.70	22.30	26.02	22.30
C.A.E.C.-C.A.W.C.	25	682	7,572	2.41	1.35	17.46	9.75	8.05	16.45	104.45	16.45
C.A.E.C.-Canada W.C.	2	55	592	2.41	1.35	17.63	9.90	13.05	21.60	65.47	21.60
C.A.E.C.-Oceania	1	11	64	2.41	1.35	7.12	4.00	19.95	22.60	13.26	22.60
C.A.E.C.-S.A.W.C.	12	313	1,491	2.41	1.35	6.89	3.85	11.00	13.50	22.77	13.50
C.A.E.C.-U.S.W.C.	9	236	2,709	2.41	1.35	17.55	9.80	11.85	20.30	71.36	20.30
Columbia-Asia	2	295	2,868	2.41	1.17	18.86	9.19	16.65	24.67	48.13	24.67
Europe-C.A.W.C.	30	797	9,273	2.41	1.34	17.49	9.75	12.79	21.20	65.71	21.20
Europe-Canada W.C.	11	286	2,441	2.41	1.31	11.49	6.25	16.30	21.24	30.30	21.24
Europe-S.A.W.C.	12	298	365	2.41	1.35	1.79	1.00	15.85	15.50	-2.18	15.50
Europe-U.S.W.C.	116	3,102	25,781	2.41	1.31	11.06	6.01	15.40	20.10	30.52	20.10
Middle East-S.A.W.C.	1	52	167	2.41	1.27	5.71	3.00	14.27	16.00	12.15	16.00
Oceania-Canada E.C.	22	661	1,987	2.41	1.35	5.19	2.90	19.70	21.25	7.89	21.25
Oceania-C.A.E.C.	6	166	934	2.41	1.35	8.59	4.80	18.80	22.25	18.38	22.25
Oceania-U.S.E.C.	119	6,406	14,791	2.41	1.24	4.11	2.12	15.19	16.07	5.78	16.07

(Continued)

Table A-13. Laden Transits, Tons Carried, and Toll Revenue, Maximum Non-Diverting Toll Rates, 250,000 DWT Scenario, 2020, by Ship Type, Diversion Status, and Trade Route (1990 US$, except when noted)(continued)

Ship Type, Diversion Status, and Trade Route	Transits	Cargo Tonnage Carried (thousands)	Revenue (thousands) a/	Current Toll Schedule: Toll Per Panama Canal Net Ton	Current Toll Schedule: Toll Per Cargo Ton Carried	New Toll Schedule: Toll Per Panama Canal Net Ton	New Toll Schedule: Toll Per Cargo Ton Carried	Total Transportation Costs per Ton Carried: Via Panama Canal: With Current Toll Structure	Via Panama Canal: With New Toll Structure	Via Panama Canal: Percent Increase	Via Least Costly Alternative Route
Dry Bulk Carriers (continued)											
Non-Diverted Transits (continued)											
S.A.E.C.-Asia	68	2,384	8,919	2.41	1.31	6.49	3.53	16.60	18.82	13.37	18.82
S.A.E.C.-C.A.W.C.	8	247	247	2.41	1.35	1.79	1.00	12.00	11.65	-2.89	11.65
S.A.E.C.-Canada W.C.	3	66	160	2.41	1.35	3.40	1.90	16.80	17.35	3.30	17.35
S.A.E.C.-U.S.W.C.	28	1,128	1,383	2.41	1.26	1.91	1.00	12.93	12.67	-2.02	12.67
S.A.W.C.-Africa	3	157	1,198	2.41	1.28	15.41	8.17	13.65	20.54	50.50	20.54
S.A.W.C.-Canada E.C.	0	10	38	2.41	1.35	6.89	3.85	13.00	15.50	19.27	15.50
S.A.W.C.-C.A.E.C.	7	144	892	2.41	1.35	6.89	3.85	11.00	13.50	22.77	13.50
S.A.W.C.-Europe	187	8,078	11,714	2.41	1.27	2.57	1.36	15.87	15.96	0.54	15.96
S.A.W.C.-U.S.E.C.	54	1,732	9,849	2.41	1.34	10.28	5.71	10.81	15.18	40.45	15.18
U.S.E.C.-Asia	1,601	104,329	788,768	2.41	1.22	13.66	6.92	17.29	22.99	32.96	22.99
U.S.E.C.-C.A.W.C.	207	6,232	75,638	2.41	1.34	20.63	11.47	8.12	18.25	124.75	18.25
U.S.E.C.-Canada W.C.	1	30	314	2.41	1.32	19.53	10.67	12.36	21.71	75.69	21.71
U.S.E.C.-Oceania	21	646	2,450	2.41	1.33	6.28	3.46	18.34	20.47	11.62	20.47
U.S.E.C.-S.A.W.C.	50	1,456	9,097	2.41	1.34	10.33	5.75	10.90	15.31	40.44	15.31
U.S.E.C.-U.S.W.C.	1	0	230	2.41	1.35	19.07	10.65	12.00	21.30	77.56	21.30
U.S.W.C.-Africa	121	4,599	22,691	2.41	1.28	8.05	4.28	15.62	18.62	19.20	18.62
U.S.W.C.-Canada E.C.	7	217	2,124	2.41	1.33	16.77	9.24	13.35	21.26	59.28	21.26
U.S.W.C.-C.A.E.C.	2	48	541	2.41	1.35	17.55	9.80	11.85	20.30	71.37	20.30
U.S.W.C.-Europe	140	6,524	37,197	2.41	1.26	10.09	5.28	13.94	17.96	28.83	17.96
U.S.W.C.-S.A.E.C.	11	279	326	2.41	1.35	1.79	1.00	15.80	15.45	-2.19	15.45
U.S.W.C.-U.S.E.C.	7	183	2,882	2.41	1.31	19.73	10.74	12.05	21.48	78.23	21.48
Venezuela-Asia	12	1,768	8,590	2.41	1.17	9.50	4.60	16.47	19.90	20.84	19.90
Subtotal	4,030	209,960	1,359,111	2.41	1.24	11.31	5.83	16.24	20.80	28.13	20.80

(Continued)

Table A-13. Laden Transits, Tons Carried, and Toll Revenue, Maximum Non-Diverting Toll Rates, 250,000 DWT Scenario, 2020, by Ship Type, Diversion Status, and Trade Route (1990 US$, except when noted)(continued)

Ship Type, Diversion Status, and Trade Route	Transits	Cargo Tonnage Carried (thousands)	Revenue (thousands) a/	Current Toll Schedule: Toll Per Panama Canal Net Ton	Current Toll Schedule: Toll Per Cargo Ton Carried	New Toll Schedule: Toll Per Panama Canal Net Ton	New Toll Schedule: Toll Per Cargo Ton Carried	Total Transportation Costs per Ton Carried: Via Panama Canal: With Current Toll Structure	Via Panama Canal: With New Toll Structure	Via Panama Canal: Percent Increase	Via Least Costly Alternative Route
Chemical Tankers (continued)											
Non-Diverted Transits (continued)											
Africa-S.A.W.C.	1	32	528	2.41	1.34	30.60	17.00	42.34	58.00	36.99	58.00
Asia-C.A.E.C.	3	34	743	2.41	1.34	32.85	18.25	52.46	69.37	32.24	69.37
Asia-S.A.E.C.	3	16	240	2.41	1.34	5.40	3.00	49.34	51.00	3.37	51.00
Asia-U.S.E.C.	32	537	11,270	2.41	1.34	30.45	16.93	44.74	60.33	34.85	60.33
C.A.W.C.-C.A.E.C.	23	139	6,596	2.41	1.34	75.60	42.00	36.34	77.00	111.89	77.00
C.A.W.C.-Europe	8	126	2,441	2.41	1.34	35.21	19.56	37.28	55.50	48.88	55.50
C.A.W.C.-U.S.E.C.	38	470	16,078	2.41	1.34	56.50	31.42	28.06	58.14	107.20	58.14
Canada W.C.-Europe	4	87	1,501	2.41	1.34	27.00	15.00	41.34	55.00	33.05	55.00
Canada W.C.-U.S.E.C.	32	744	21,028	2.41	1.34	40.28	22.40	31.74	52.80	66.35	52.80
C.A.E.C.-Asia	9	248	3,474	2.41	1.34	25.42	14.12	41.66	54.44	30.68	54.44
C.A.E.C.-C.A.W.C.	9	207	5,416	2.41	1.34	37.80	21.00	21.34	41.00	92.14	41.00
C.A.E.C.-S.A.W.C.	11	186	2,259	2.41	1.34	19.04	10.58	31.03	40.27	29.78	40.27
C.A.E.C.-U.S.W.C.	1	10	402	2.41	1.34	72.00	40.00	51.34	90.00	75.31	90.00
Europe-C.A.W.C.	6	30	1,312	2.41	1.34	55.80	31.00	56.34	86.00	52.65	86.00
Europe-S.A.W.C.	6	60	294	2.41	1.34	8.62	4.79	55.90	59.35	6.17	59.35
Europe-U.S.W.C.	9	182	2,920	2.41	1.34	27.74	15.41	42.34	56.41	33.23	56.41
Oceania-U.S.E.C.	18	455	3,559	2.41	1.34	11.05	6.16	40.54	45.36	11.88	45.36
S.A.E.C.-C.A.W.C.	8	61	433	2.41	1.34	11.32	6.29	46.87	51.82	10.56	51.82
S.A.E.C.-U.S.W.C.	2	84	90	2.41	1.35	1.78	1.00	30.35	30.00	-1.16	30.00
S.A.W.C.-C.A.E.C.	22	79	3,474	2.41	1.34	27.81	15.45	42.38	56.49	33.30	56.49
S.A.W.C.-Europe	8	92	420	2.41	1.34	7.88	4.38	51.64	54.68	5.89	54.68
S.A.W.C.-U.S.E.C.	7	47	1,413	2.41	1.34	29.26	16.27	38.35	53.28	38.93	53.28
U.S.E.C.-Asia	565	15,828	244,627	2.41	1.34	28.68	15.95	42.38	56.99	34.47	56.99

(Continued)

Table A-13. Laden Transits, Tons Carried, and Toll Revenue, Maximum Non-Diverting Toll Rates, 250,000 DWT Scenario, 2020, by Ship Type, Diversion Status, and Trade Route (1990 US$, except when noted)(continued)

Ship Type, Diversion Status, and Trade Route	Transits	Cargo Tonnage Carried (thousands)	Revenue (thousands) a/	Current Toll Schedule: Toll Per Panama Canal Net Ton	Current Toll Schedule: Toll Per Cargo Ton Carried	New Toll Schedule: Toll Per Panama Canal Net Ton	New Toll Schedule: Toll Per Cargo Ton Carried	Total Transportation Costs per Ton Carried: Via Panama Canal: With Current Toll Structure	Via Panama Canal: With New Toll Structure	Via Panama Canal: Percent Increase	Via Least Costly Alternative Route
Chemical Tankers (continued)											
Non-Diverted Transits (continued)											
U.S.E.C.-C.A.W.C.	18	146	6,442	2.41	1.34	68.60	38.11	33.25	70.02	110.59	70.02
U.S.E.C.-Canada W.C.	5	36	1,555	2.41	1.34	75.43	41.91	55.76	96.33	72.76	96.33
U.S.E.C.-Oceania	17	409	2,888	2.41	1.34	12.45	6.93	44.76	50.35	12.49	50.35
U.S.E.C.-S.A.W.C.	45	434	8,382	2.41	1.34	30.28	16.84	39.65	55.15	39.09	55.15
U.S.E.C.-U.S.W.C.	50	1,635	34,824	2.41	1.35	33.88	18.96	25.70	43.31	68.53	43.31
U.S.W.C.-C.A.E.C.	2	38	1,129	2.41	1.34	36.00	20.00	29.34	48.00	63.61	48.00
U.S.W.C.-Europe	16	215	4,391	2.41	1.34	30.61	17.02	45.63	61.31	34.36	61.31
U.S.W.C.-S.A.E.C.	0	3	8	2.41	1.34	3.60	2.00	37.34	38.00	1.77	38.00
U.S.W.C.-U.S.E.C.	15	256	10,673	2.41	1.35	33.89	18.96	25.80	43.41	68.27	43.41
Subtotal	994	22,925	400,811	2.41	1.34	30.03	16.71	40.06	55.35	38.16	55.35
Full Container Ships											
Non-Diverted Transits											
Africa-U.S.W.C.	0	2	41	2.41	4.48	21.38	39.74	246.46	281.72	14.31	281.72
Asia-Canada E.C.	35	682	9,231	2.41	4.65	8.92	17.21	210.85	223.41	5.96	223.41
Asia-S.A.E.C.	2	7	103	2.41	4.48	4.79	8.90	274.32	278.74	1.61	278.74
Asia-U.S.E.C. (low inv. cost)	206	4,485	84,005	2.41	4.76	9.09	17.96	238.55	251.75	5.53	251.75
C.A.W.C.-C.A.E.C.	1	5	544	2.41	4.38	46.33	84.18	129.97	209.77	61.40	209.77
C.A.W.C.-Europe	2	22	1,175	2.41	4.36	32.02	57.92	153.30	206.86	34.94	206.86
C.A.W.C.-S.A.E.C.	0	4	35	2.41	4.38	6.22	11.29	163.77	170.68	4.22	170.68
C.A.W.C.-U.S.E.C.	0	3	201	2.41	4.48	52.39	97.40	157.98	250.90	58.82	250.90
Canada E.C.-Asia	32	561	3,673	2.41	4.50	5.22	9.74	230.54	235.78	2.27	235.78
Canada E.C.-Oceania	12	145	474	2.41	4.43	2.45	4.50	259.72	259.79	0.03	259.79

(Continued)

Table A-13. Laden Transits, Tons Carried, and Toll Revenue, Maximum Non-Diverting Toll Rates, 250,000 DWT Scenario, 2020, by Ship Type, Diversion Status, and Trade Route (1990 US$, except when noted)(continued)

Ship Type, Diversion Status, and Trade Route	Transits	Cargo Tonnage Carried (thousands)	Revenue (thousands) a/	Current Toll Schedule: Toll Per Panama Canal Net Ton	Current Toll Schedule: Toll Per Cargo Ton Carried	New Toll Schedule: Toll Per Panama Canal Net Ton	New Toll Schedule: Toll Per Cargo Ton Carried	Total Transportation Costs per Ton Carried, Via Panama Canal: With Current Toll Structure	Total Transportation Costs per Ton Carried, Via Panama Canal: With New Toll Structure	Total Transportation Costs per Ton Carried, Via Panama Canal: Percent Increase	Total Transportation Costs per Ton Carried: Via Least Costly Alternative Route
Full Container Ships (continued)											
Non-Diverted Transits (continued)											
Canada E.C.-U.S.W.C.	5	136	6,593	2.41	4.73	35.14	69.00	160.73	225.00	39.98	225.00
Canada W.C.-Europe	32	491	21,126	2.41	4.46	36.62	67.81	212.22	275.57	29.85	275.57
C.A.E.C.-Asia	8	99	3,035	2.41	4.41	17.86	32.68	217.31	245.58	13.01	245.58
C.A.E.C.-C.A.W.C.	1	3	444	2.41	4.51	77.09	144.39	184.21	324.09	75.93	324.09
C.A.E.C.-Oceania	0	3	97	2.41	4.48	26.71	49.68	248.46	293.66	18.19	293.66
C.A.E.C.-S.A.W.C.	6	6	665	2.41	4.64	22.80	43.87	187.15	226.38	20.96	226.38
C.A.E.C.-U.S.W.C.	1	12	689	2.41	4.38	38.56	70.16	154.50	220.28	42.57	220.28
Europe-C.A.W.C.	0	1	88	2.41	4.36	52.98	95.90	153.30	244.84	59.71	244.84
Europe-Canada W.C.	24	311	13,558	2.41	4.43	34.53	63.45	224.73	283.75	26.26	283.75
Europe-S.A.W.C.	51	731	21,935	2.41	4.36	18.77	33.94	194.28	223.86	15.23	223.86
Europe-U.S.W.C.	144	2,855	25,065	2.41	4.62	6.27	12.03	209.75	217.16	3.53	217.16
Middle East-U.S.W.C.	8	116	2,411	2.41	4.42	17.12	31.40	221.09	248.07	12.20	248.07
Oceania-C.A.E.C.	2	24	670	2.41	4.48	26.71	49.68	248.46	293.66	18.19	293.66
S.A.E.C.-C.A.W.C.	0	4	46	2.41	4.48	8.53	15.86	193.78	205.16	5.87	205.16
S.A.E.C.-U.S.W.C.	1	9	229	2.41	4.48	22.44	41.74	179.84	217.10	20.72	217.10
S.A.W.C.-C.A.E.C.	0	1	37	2.41	4.50	24.39	45.56	191.66	232.72	21.42	232.72
S.A.W.C.-Europe	103	1,966	44,815	2.41	4.36	18.76	33.94	194.27	223.85	15.23	223.85
S.A.W.C.-U.S.E.C.	46	483	16,439	2.41	4.48	28.31	52.66	170.90	219.08	28.19	219.08
U.S.E.C.-Asia (low inv. cost)	243	7,139	92,556	2.41	4.74	9.01	17.72	239.88	252.86	5.41	252.86
U.S.E.C.-C.A.W.C.	6	55	5,120	2.41	4.48	64.12	119.28	136.10	250.90	84.35	250.90
U.S.E.C.-S.A.W.C.	57	487	20,359	2.41	4.48	28.31	52.66	170.90	219.08	28.19	219.08
U.S.E.C.-U.S.W.C.	1	26	1,567	2.41	4.71	41.09	80.28	144.82	220.39	52.18	220.39
U.S.W.C.-Africa	0	0	0	2.41	5.04	17.20	36.00	197.04	228.00	15.71	228.00

(Continued)

Table A-13. Laden Transits, Tons Carried, and Toll Revenue, Maximum Non-Diverting Toll Rates, 250,000 DWT Scenario, 2020, by Ship Type, Diversion Status, and Trade Route (1990 US$, except when noted)(continued)

Ship Type, Diversion Status, and Trade Route	Transits	Cargo Tonnage Carried (thousands)	Revenue (thousands) a/	Current Toll Schedule: Toll Per Panama Canal Net Ton	Current Toll Schedule: Toll Per Cargo Ton Carried	New Toll Schedule: Toll Per Panama Canal Net Ton	New Toll Schedule: Toll Per Cargo Ton Carried	Total Transportation Costs per Ton Carried, Via Panama Canal: With Current Toll Structure	Via Panama Canal: With New Toll Structure	Via Panama Canal: Percent Increase	Via Least Costly Alternative Route
Full Container Ships (continued)											
Non-Diverted Transits (continued)											
U.S.W.C.-Canada E.C.	0	5	312	2.41	4.51	38.70	72.39	163.61	231.49	41.49	231.49
U.S.W.C.-C.A.E.C.	7	42	2,930	2.41	4.46	39.63	73.29	159.01	227.84	43.29	227.84
U.S.W.C.-Europe	194	3,428	31,635	2.41	4.64	5.76	11.10	212.59	219.05	3.04	219.05
U.S.W.C.-Middle East	8	103	984	2.41	4.42	6.76	12.40	221.46	229.44	3.60	229.44
U.S.W.C.-U.S.E.C.	13	168	16,390	2.41	4.59	42.88	81.71	145.28	222.40	53.08	222.40
Subtotal	1,251	24,619	429,279	2.41	4.65	11.25	21.69	220.97	238.34	7.86	238.34
General Cargo Ships											
Non-Diverted Transits											
Africa-C.A.W.C.	2	23	784	2.41	1.39	41.22	23.75	28.19	50.55	79.33	50.55
Africa-S.A.W.C.	2	35	568	2.41	1.39	29.16	16.80	34.14	49.55	45.14	49.55
Asia-Canada E.C.	0	2	9	2.41	1.39	8.59	4.95	38.09	41.65	9.35	41.65
Asia-C.A.E.C.	71	844	17,028	2.41	1.39	20.65	11.90	34.09	44.60	30.84	44.60
Asia-S.A.E.C.	2	13	83	2.41	1.39	3.38	1.95	41.09	41.65	1.37	41.65
Asia-U.S.E.C.	26	339	7,814	2.41	1.39	25.34	14.58	34.56	47.75	38.18	47.75
C.A.W.C.-Africa	5	94	2,336	2.41	1.39	41.22	23.75	28.19	50.55	79.33	50.55
C.A.W.C.-C.A.E.C.	25	109	7,004	2.41	1.46	72.89	44.13	10.10	52.77	422.53	52.77
C.A.W.C.-Europe	21	120	5,751	2.41	1.41	36.86	21.52	26.48	46.59	75.96	46.59
C.A.W.C.-S.A.E.C.	8	51	539	2.41	1.41	9.46	5.53	25.50	29.62	16.16	29.62
C.A.W.C.-U.S.E.C.	10	51	3,700	2.41	1.45	92.24	55.61	11.45	65.61	472.86	65.61
Canada E.C.-Asia	5	12	463	2.41	1.39	8.59	4.95	38.09	41.65	9.35	41.65
Canada E.C.-C.A.W.C.	1	15	355	2.41	1.39	34.28	19.75	19.29	37.65	95.19	37.65
Canada E.C.-Oceania	0	4	4	2.41	1.39	1.74	1.00	43.04	42.65	-0.90	42.65

(Continued)

Table A-13. Laden Transits, Tons Carried, and Toll Revenue, Maximum Non-Diverting Toll Rates, 250,000 DWT Scenario, 2020, by Ship Type, Diversion Status, and Trade Route (1990 US$, except when noted)(continued)

Ship Type, Diversion Status, and Trade Route	Transits	Cargo Tonnage Carried (thousands)	Revenue (thousands) a/	Current Toll Schedule: Toll Per Panama Canal Net Ton	Current Toll Schedule: Toll Per Cargo Ton Carried	New Toll Schedule: Toll Per Panama Canal Net Ton	New Toll Schedule: Toll Per Cargo Ton Carried	Total Transportation Costs per Ton Carried: Via Panama Canal: With Current Toll Structure	Via Panama Canal: With New Toll Structure	Via Panama Canal: Percent Increase	Via Least Costly Alternative Route
General Cargo Ships (continued)											
Non-Diverted Transits (continued)											
Canada E.C.-S.A.W.C.	6	53	944	2.41	1.39	13.80	7.95	25.19	31.75	26.05	31.75
Canada W.C.-C.A.E.C.	6	45	2,267	2.41	1.42	59.46	35.01	28.50	62.09	117.87	62.09
Canada W.C.-Europe	1	12	169	2.41	1.39	25.77	14.85	34.09	47.55	39.49	47.55
Canada W.C.-Middle East	1	6	1	2.41	1.39	0.09	0.05	39.04	37.70	-3.43	37.70
Canada W.C.-S.A.E.C.	6	58	2,246	2.41	1.41	51.95	30.45	33.28	62.32	87.25	62.32
C.A.E.C.-Asia	22	415	5,140	2.41	1.39	20.65	11.90	34.09	44.60	30.84	44.60
C.A.E.C.-C.A.W.C.	25	89	7,912	2.41	1.45	80.93	48.84	9.12	56.51	519.34	56.51
C.A.E.C.-Oceania	0	7	83	2.41	1.39	15.45	8.90	37.09	44.60	20.25	44.60
C.A.E.C.-S.A.W.C.	24	218	3,631	2.41	1.41	20.56	12.00	20.63	31.22	51.36	31.22
C.A.E.C.-U.S.W.C.	9	28	2,628	2.41	1.51	116.34	73.00	30.51	102.00	234.29	102.00
Europe-C.A.W.C.	44	300	19,439	2.41	1.40	50.64	29.41	25.47	53.48	109.98	53.48
Europe-Canada W.C.	2	9	536	2.41	1.50	79.95	49.78	71.00	119.28	68.00	119.28
Europe-S.A.W.C.	39	385	2,326	2.41	1.39	5.55	3.20	30.83	32.64	5.87	32.64
Europe-U.S.W.C.	2	11	708	2.41	1.44	65.41	39.19	55.78	93.53	67.66	93.53
Middle East-S.A.W.C.	4	2	483	2.41	1.50	42.19	26.27	64.45	89.22	38.43	89.22
Middle East-U.S.W.C.	2	4	218	2.41	1.39	12.06	6.95	37.09	42.65	15.00	42.65
Oceania-C.A.E.C.	0	3	89	2.41	1.39	17.18	9.90	36.09	44.60	23.58	44.60
Oceania-U.S.E.C.	1	7	145	2.41	1.43	19.56	11.63	51.18	61.38	19.92	61.38
S.A.E.C.-C.A.W.C.	7	148	432	2.41	1.39	5.21	3.00	23.19	24.80	6.95	24.80
S.A.E.C.-Canada W.C.	0	1	9	2.41	1.39	6.86	3.95	32.14	34.70	7.97	34.70
S.A.E.C.-U.S.W.C.	8	36	397	2.41	1.40	5.28	3.06	34.56	36.22	4.82	36.22
S.A.W.C.-Africa	4	81	1,468	2.41	1.39	30.98	17.85	31.14	47.60	52.87	47.60
S.A.W.C.-Canada E.C.	0	6	57	2.41	1.39	13.80	7.95	25.19	31.75	26.05	31.75

(Continued)

Table A-13. Laden Transits, Tons Carried, and Toll Revenue, Maximum Non-Diverting Toll Rates, 250,000 DWT Scenario, 2020, by Ship Type, Diversion Status, and Trade Route (1990 US$, except when noted)(continued)

Ship Type, Diversion Status, and Trade Route	Transits	Cargo Tonnage Carried (thousands)	Revenue (thousands) a/	Current Toll Schedule: Toll Per Panama Canal Net Ton	Current Toll Schedule: Toll Per Cargo Ton Carried	New Toll Schedule: Toll Per Panama Canal Net Ton	New Toll Schedule: Toll Per Cargo Ton Carried	Total Transportation Costs per Ton Carried, Via Panama Canal: With Current Toll Structure	Via Panama Canal: With New Toll Structure	Via Panama Canal: Percent Increase	Via Least Costly Alternative Route
General Cargo Ships (continued)											
Non-Diverted Transits (continued)											
S.A.W.C.-C.A.E.C.	41	177	6,581	2.41	1.45	37.41	22.46	21.94	42.95	95.79	42.95
S.A.W.C.-Europe	98	1,601	5,873	2.41	1.39	5.21	3.00	30.14	31.75	5.35	31.75
S.A.W.C.-Middle East	2	23	215	2.41	1.39	12.06	6.95	32.14	37.70	17.30	37.70
S.A.W.C.-U.S.E.C.	27	205	5,207	2.41	1.40	24.42	14.22	23.26	36.08	55.09	36.08
U.S.E.C.-Asia	48	782	14,247	2.41	1.39	25.47	14.66	34.72	47.99	38.23	47.99
U.S.E.C.-C.A.W.C.	48	352	17,535	2.41	1.43	70.52	41.83	13.42	53.82	301.06	53.82
U.S.E.C.-Oceania	3	46	362	2.41	1.39	10.33	5.95	37.09	41.65	12.30	41.65
U.S.E.C.-S.A.W.C.	86	605	16,487	2.41	1.41	25.23	14.72	23.39	36.70	56.93	36.70
U.S.E.C.-U.S.W.C.	1	0	237	2.41	1.50	122.09	76.05	32.50	107.05	229.37	107.05
U.S.W.C.-Africa	2	25	445	2.41	1.39	17.18	9.90	34.09	42.60	24.97	42.60
U.S.W.C.-C.A.E.C.	1	0	437	2.41	1.50	109.94	68.48	29.71	96.69	225.43	96.69
U.S.W.C.-Europe	3	31	718	2.41	1.42	38.08	22.47	40.73	61.78	51.67	61.78
U.S.W.C.-S.A.E.C.	6	15	269	2.41	1.45	10.21	6.14	47.38	52.07	9.90	52.07
Subtotal	758	7,499	166,380	2.41	1.40	25.33	14.71	28.74	41.84	45.59	41.84
Liquid Gas Carriers											
Non-Diverted Transits											
C.A.W.C.-C.A.E.C.	4	18	954	2.41	7.30	42.24	128.00	49.30	170.00	244.81	170.00
C.A.E.C.-Asia	15	82	3,770	2.41	4.67	25.75	49.93	107.52	152.78	42.09	152.78
C.A.E.C.-C.A.W.C.	96	1,270	60,050	2.41	3.79	32.89	51.76	23.91	71.88	200.60	71.88
C.A.E.C.-S.A.W.C.	8	119	2,357	2.41	3.83	15.12	24.00	40.83	61.00	49.42	61.00
C.A.E.C.-U.S.W.C.	1	12	497	2.41	3.83	33.39	53.00	45.83	95.00	107.31	95.00
Europe-C.A.W.C.	2	5	253	2.41	7.30	31.02	94.00	110.30	197.00	78.60	197.00

(Continued)

Table A-13. Laden Transits, Tons Carried, and Toll Revenue, Maximum Non-Diverting Toll Rates, 250,000 DWT Scenario, 2020, by Ship Type, Diversion Status, and Trade Route (1990 US$, except when noted)(continued)

Ship Type, Diversion Status, and Trade Route	Transits	Cargo Tonnage Carried (thousands)	Revenue (thousands) a/	Current Toll Schedule: Toll Per Panama Canal Net Ton	Current Toll Schedule: Toll Per Cargo Ton Carried	New Toll Schedule: Toll Per Panama Canal Net Ton	New Toll Schedule: Toll Per Cargo Ton Carried	Total Transportation Costs per Ton Carried: Via Panama Canal: With Current Toll Structure	Total Transportation Costs per Ton Carried: Via Panama Canal: With New Toll Structure	Total Transportation Costs per Ton Carried: Via Panama Canal: Percent Increase	Total Transportation Costs per Ton Carried: Via Least Costly Alternative Route
Liquid Gas Carriers (continued)											
Non-Diverted Transits (continued)											
Europe-S.A.W.C.	0	1	4	2.41	3.82	5.04	8.00	67.82	72.00	6.16	72.00
Oceania-U.S.E.C.	6	91	1,229	2.41	3.62	8.64	12.99	66.11	75.48	14.17	75.48
S.A.E.C.-Asia	2	27	415	2.41	3.83	11.97	19.00	78.83	94.00	19.25	94.00
S.A.E.C.-C.A.W.C.	11	31	399	2.41	7.30	6.60	20.00	99.30	112.00	12.79	112.00
U.S.E.C.-Asia	23	273	11,076	2.41	3.86	26.87	43.04	82.65	121.83	47.40	121.83
U.S.E.C.-C.A.W.C.	1	2	190	2.41	7.30	46.53	141.00	57.30	191.00	233.32	191.00
U.S.E.C.-Oceania	1	11	176	2.41	3.83	10.71	17.00	86.83	100.00	15.17	100.00
U.S.E.C.-S.A.W.C.	2	6	234	2.41	7.30	21.78	66.00	94.30	153.00	62.24	153.00
Subtotal	172	1,947	81,603	2.41	3.90	28.58	46.29	41.82	84.66	102.42	84.66
Passenger Ships											
Non-Diverted Transits											
North-Bound	153	0	2,251	2.41	0.00	2.01	0.00	0.00	0.00	0.00	0.00
South-Bound	183	0	3,894	2.41	0.00	2.01	0.00	0.00	0.00	0.00	0.00
Subtotal	336	0	6,145	2.41	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Refrigerated Ships											
Non-Diverted Transits											
Africa-Asia	29	151	398	2.41	4.28	1.69	3.00	162.08	160.80	-0.79	160.80
Africa-C.A.W.C.	0	0	82	2.41	4.27	55.47	98.40	113.87	208.00	82.66	208.00
Africa-S.A.W.C.	9	9	3,213	2.41	4.15	38.75	66.78	133.93	196.56	46.76	196.56
Asia-C.A.E.C.	20	71	6,038	2.41	3.97	29.89	49.17	128.09	173.29	35.29	173.29
Asia-S.A.E.C.	5	3	188	2.41	4.28	4.40	7.80	168.08	171.60	2.10	171.60

(Continued)

Table A-13. Laden Transits, Tons Carried, and Toll Revenue, Maximum Non-Diverting Toll Rates, 250,000 DWT Scenario, 2020, by Ship Type, Diversion Status, and Trade Route (1990 US$, except when noted)(continued)

Ship Type, Diversion Status, and Trade Route	Transits	Cargo Tonnage Carried (thousands)	Revenue (thousands) a/	Current Toll Schedule: Toll Per Panama Canal Net Ton	Current Toll Schedule: Toll Per Cargo Ton Carried	New Toll Schedule: Toll Per Panama Canal Net Ton	New Toll Schedule: Toll Per Cargo Ton Carried	Total Transportation Costs per Ton Carried: Via Panama Canal: With Current Toll Structure	Total Transportation Costs per Ton Carried: Via Panama Canal: With New Toll Structure	Total Transportation Costs per Ton Carried: Via Panama Canal: Percent Increase	Total Transportation Costs per Ton Carried: Via Least Costly Alternative Route
Refrigerated Ships (continued)											
Non-Diverted Transits (continued)											
Asia-U.S.E.C.	0	0	125	2.41	4.28	34.95	62.00	140.48	198.20	41.09	198.20
C.A.W.C.-Africa	1	3	461	2.41	4.28	55.46	98.40	113.88	208.00	82.66	208.00
C.A.W.C.-Canada E.C.	0	2	132	2.41	4.28	44.98	79.80	76.48	152.00	98.76	152.00
C.A.W.C.-C.A.E.C.	20	132	10,401	2.41	3.88	47.91	77.06	50.94	124.12	143.67	124.12
C.A.W.C.-Europe	219	987	79,274	2.41	3.94	35.22	57.59	89.55	143.20	59.91	143.20
C.A.W.C.-S.A.E.C.	1	4	50	2.41	4.28	6.65	11.80	89.28	96.80	8.43	96.80
C.A.W.C.-U.S.E.C.	1	2	398	2.41	4.28	52.08	92.40	61.68	149.80	142.88	149.80
Canada E.C.-Asia	12	63	1,063	2.41	4.28	10.60	18.80	155.08	169.60	9.37	169.60
Canada E.C.-C.A.W.C.	5	10	2,169	2.41	3.95	46.27	75.85	70.22	142.12	102.39	142.12
Canada W.C.-Europe	3	28	1,077	2.41	4.12	34.78	59.42	131.88	187.18	41.94	187.18
C.A.E.C.-Asia	10	32	2,734	2.41	4.12	29.91	51.17	135.20	182.25	34.80	182.25
C.A.E.C.-C.A.W.C.	23	5	11,938	2.41	3.87	47.90	77.00	50.87	124.00	143.74	124.00
C.A.E.C.-S.A.W.C.	54	42	12,027	2.41	3.87	20.53	33.00	71.87	101.00	40.52	101.00
Europe-C.A.W.C.	160	13	98,228	2.41	3.89	57.02	91.97	89.41	177.49	98.52	177.49
Europe-Canada W.C.	1	1	221	2.41	4.28	32.24	57.20	136.48	189.40	38.78	189.40
Europe-S.A.W.C.	169	145	9,626	2.41	4.02	5.90	9.84	116.06	121.88	5.01	121.88
Europe-U.S.W.C.	14	10	3,561	2.41	4.28	31.45	55.80	126.88	178.40	40.61	178.40
Middle East-S.A.W.C.	2	3	223	2.41	4.28	16.12	28.60	129.48	153.80	18.79	153.80
Oceania-C.A.E.C.	3	18	519	2.41	4.28	22.21	39.40	147.28	182.40	23.85	182.40
Oceania-U.S.E.C.	33	116	3,837	2.41	4.24	14.02	24.67	148.70	169.13	13.74	169.13
S.A.E.C.-Asia	11	50	1,382	2.41	4.28	14.99	26.60	137.48	159.80	16.24	159.80
S.A.W.C.-Africa	14	50	5,276	2.41	4.15	42.24	72.78	123.33	191.96	55.64	191.96
S.A.W.C.-C.A.E.C.	21	111	4,271	2.41	3.99	20.30	33.61	75.06	104.68	39.46	104.68

(Continued)

Table A-13. Laden Transits, Tons Carried, and Toll Revenue, Maximum Non-Diverting Toll Rates, 250,000 DWT Scenario, 2020, by Ship Type, Diversion Status, and Trade Route (1990 US$, except when noted)(continued)

Ship Type, Diversion Status, and Trade Route	Transits	Cargo Tonnage Carried (thousands)	Revenue (thousands) a/	Current Toll Schedule: Toll Per Panama Canal Net Ton	Current Toll Schedule: Toll Per Cargo Ton Carried	New Toll Schedule: Toll Per Panama Canal Net Ton	New Toll Schedule: Toll Per Cargo Ton Carried	Total Transportation Costs per Ton Carried, Via Panama Canal: With Current Toll Structure	Total Transportation Costs per Ton Carried, Via Panama Canal: With New Toll Structure	Total Transportation Costs per Ton Carried, Via Panama Canal: Percent Increase	Total Transportation Costs per Ton Carried: Via Least Costly Alternative Route
Refrigerated Ships (continued)											
Non-Diverted Transits (continued)											
S.A.W.C.-Europe	928	4,670	50,906	2.41	4.05	5.78	9.72	115.41	121.08	4.91	121.08
S.A.W.C.-Middle East	5	17	699	2.41	4.28	16.12	28.60	129.48	153.80	18.79	153.80
S.A.W.C.-U.S.E.C.	607	2,226	143,925	2.41	4.02	24.45	40.76	80.58	117.32	45.60	117.32
U.S.E.C.-Asia	32	114	11,043	2.41	4.01	35.93	59.80	134.04	189.83	41.62	189.83
U.S.E.C.-C.A.W.C.	27	66	14,766	2.41	3.93	53.56	87.35	56.28	139.70	148.22	139.70
U.S.E.C.-S.A.W.C.	282	434	67,988	2.41	3.99	24.42	40.47	79.55	116.03	45.85	116.03
U.S.W.C.-Europe	126	672	35,380	2.41	4.17	32.04	55.41	126.00	177.24	40.67	177.24
U.S.W.C.-S.A.E.C.	1	3	28	2.41	4.24	3.98	7.00	121.95	124.71	2.26	124.71
Subtotal	2,847	10,266	583,646	2.41	4.02	21.15	35.28	104.57	129.67	24.00	129.67
Roll-On Roll-Off											
Non-Diverted Transits											
Asia-Canada E.C.	2	8	203	2.41	9.35	7.65	29.67	278.31	298.63	7.30	298.63
Asia-C.A.E.C.	24	473	9,637	2.41	7.92	11.73	38.57	225.40	256.05	13.60	256.05
Asia-U.S.E.C.	40	766	23,844	2.41	7.95	17.95	59.26	237.11	288.42	21.64	288.42
C.A.W.C.-Europe	12	64	5,501	2.41	8.66	23.37	84.00	181.66	257.00	41.47	257.00
C.A.W.C.-S.A.E.C.	0	0	4	2.41	8.67	5.00	18.00	193.67	203.00	4.82	203.00
C.A.W.C.-U.S.E.C.	1	1	694	2.41	8.66	28.94	104.00	155.66	251.00	61.25	251.00
Canada E.C.-Asia	8	41	584	2.41	9.30	4.79	18.50	327.47	336.67	2.81	336.67
Canada E.C.-Oceania	1	31	108	2.41	7.77	1.86	6.00	240.88	239.11	-0.73	239.11
Canada W.C.-C.A.E.C.	0	0	78	2.41	10.19	34.25	144.89	224.84	359.54	59.91	359.54
C.A.E.C.-C.A.W.C.	0	1	193	2.41	9.72	31.72	127.86	154.90	273.04	76.27	273.04
C.A.E.C.-Oceania	2	7	719	2.41	8.66	14.75	53.00	252.66	297.00	17.55	297.00

(Continued)

Table A-13. Laden Transits, Tons Carried, and Toll Revenue, Maximum Non-Diverting Toll Rates, 250,000 DWT Scenario, 2020, by Ship Type, Diversion Status, and Trade Route (1990 US$, except when noted)(continued)

Ship Type, Diversion Status, and Trade Route	Transits	Cargo Tonnage Carried (thousands)	Revenue (thousands) a/	Current Toll Schedule: Toll Per Panama Canal Net Ton	Current Toll Schedule: Toll Per Cargo Ton Carried	New Toll Schedule: Toll Per Panama Canal Net Ton	New Toll Schedule: Toll Per Cargo Ton Carried	Total Transportation Costs per Ton Carried: Via Panama Canal: With Current Toll Structure	Total Transportation Costs per Ton Carried: Via Panama Canal: With New Toll Structure	Total Transportation Costs per Ton Carried: Via Panama Canal: Percent Increase	Total Transportation Costs per Ton Carried: Via Least Costly Alternative Route
Roll-On Roll-Off (continued)											
Non-Diverted Transits (continued)											
C.A.E.C.-S.A.W.C.	46	81	7,412	2.41	10.19	13.84	58.55	217.90	266.26	22.19	266.26
Europe-C.A.W.C.	18	112	13,422	2.41	8.66	38.40	138.00	181.66	311.00	71.20	311.00
Europe-S.A.W.C.	0	0	8	2.41	8.67	11.95	43.00	240.67	275.00	14.26	275.00
Europe-U.S.W.C.	0	2	172	2.41	8.66	21.70	78.00	241.66	311.00	28.69	311.00
Oceania-C.A.E.C.	0	0	3	2.41	8.01	14.06	46.75	223.21	261.95	17.35	261.95
S.A.W.C.-C.A.E.C.	12	23	1,867	2.41	10.19	13.84	58.55	217.90	266.26	22.19	266.26
S.A.W.C.-Europe	1	3	265	2.41	8.66	13.64	49.00	240.66	281.00	16.76	281.00
S.A.W.C.-U.S.E.C.	6	13	1,250	2.41	10.19	17.60	74.43	210.96	275.20	30.45	275.20
U.S.E.C.-Asia	8	56	3,324	2.41	8.64	19.68	70.56	275.58	337.50	22.47	337.50
U.S.E.C.-C.A.W.C.	2	3	1,326	2.41	8.66	35.34	127.00	132.66	251.00	89.20	251.00
U.S.E.C.-S.A.W.C.	26	45	5,247	2.41	10.19	17.59	74.43	210.96	275.20	30.45	275.20
U.S.W.C.-Canada E.C.	1	2	330	2.41	10.20	33.08	139.95	245.70	375.45	52.81	375.45
U.S.W.C.-C.A.E.C.	1	23	934	2.41	7.75	24.33	78.25	153.28	223.78	45.99	223.78
U.S.W.C.-Europe	0	0	14	2.41	7.80	18.77	60.73	203.42	256.35	26.02	256.35
U.S.W.C.-U.S.E.C.	0	5	248	2.41	7.86	31.14	101.54	151.24	244.92	61.94	244.92
Subtotal	213	1,762	77,386	2.41	8.59	17.77	63.33	228.49	279.24	22.21	279.24
Tankers											
Non-Diverted Transits											
Africa-U.S.W.C.	0	0	1	2.41	1.27	11.35	6.00	15.27	20.00	30.94	20.00
Asia-U.S.E.C.	1	30	356	2.41	1.27	20.79	10.94	22.15	31.82	43.67	31.82
C.A.W.C.-Africa	0	0	33	2.41	1.27	83.58	44.00	37.27	80.00	114.66	80.00
C.A.W.C.-Canada E.C.	0	4	60	2.41	1.27	28.30	14.90	10.23	23.86	133.26	23.86

(Continued)

Table A-13. Laden Transits, Tons Carried, and Toll Revenue, Maximum Non-Diverting Toll Rates, 250,000 DWT Scenario, 2020, by Ship Type, Diversion Status, and Trade Route (1990 US$, except when noted)(continued)

Ship Type, Diversion Status, and Trade Route	Transits	Cargo Tonnage Carried (thousands)	Revenue (thousands) a/	Current Toll Schedule: Toll Per Panama Canal Net Ton	Current Toll Schedule: Toll Per Cargo Ton Carried	New Toll Schedule: Toll Per Panama Canal Net Ton	New Toll Schedule: Toll Per Cargo Ton Carried	Total Transportation Costs per Ton Carried, Via Panama Canal: With Current Toll Structure	Total Transportation Costs per Ton Carried, Via Panama Canal: With New Toll Structure	Total Transportation Costs per Ton Carried, Via Panama Canal: Percent Increase	Total Transportation Costs per Ton Carried: Via Least Costly Alternative Route
Tankers (continued)											
Non-Diverted Transits (continued)											
C.A.W.C.-C.A.E.C.	14	85	5,394	2.41	1.27	40.45	21.29	8.68	28.70	230.71	28.70
C.A.W.C.-Europe	3	70	925	2.41	1.27	20.79	10.94	14.19	23.86	68.17	23.86
C.A.W.C.-U.S.E.C.	7	53	2,582	2.41	1.27	41.84	22.02	9.70	30.45	213.97	30.45
Canada E.C.-Asia	10	393	1,176	2.41	1.27	5.40	2.84	20.80	22.37	7.56	22.37
Canada W.C.-U.S.E.C.	5	253	3,369	2.41	1.27	20.94	11.00	11.42	21.15	85.26	21.15
C.A.E.C.-Asia	6	180	1,893	2.41	1.27	15.64	8.21	18.65	25.59	37.24	25.59
C.A.E.C.-C.A.W.C.	93	1,762	37,135	2.41	1.27	24.82	13.05	6.05	17.83	194.86	17.83
C.A.E.C.-S.A.W.C.	41	879	7,009	2.41	1.27	11.51	6.06	10.87	15.66	44.09	15.66
C.A.E.C.-U.S.W.C.	17	712	8,400	2.41	1.27	19.93	10.48	9.67	18.88	95.30	18.88
Europe-C.A.W.C.	12	54	1,690	2.41	1.27	32.60	17.16	20.41	36.30	77.87	36.30
Europe-S.A.W.C.	2	52	124	2.41	1.27	4.05	2.13	19.11	19.97	4.51	19.97
Europe-U.S.W.C.	6	196	2,021	2.41	1.27	17.56	9.24	18.01	25.98	44.27	25.98
Middle East-U.S.W.C.	0	0	1	2.41	1.25	11.60	6.00	23.25	28.00	20.45	28.00
Oceania-U.S.E.C.	9	153	890	2.41	1.27	8.99	4.73	23.22	26.68	14.91	26.68
S.A.E.C.-Asia	67	14,147	66,983	2.41	1.27	8.99	4.73	11.24	14.70	30.80	14.70
S.A.E.C.-C.A.W.C.	85	4,342	11,987	2.41	1.26	3.84	2.01	8.64	9.39	8.66	9.39
S.A.E.C.-U.S.W.C.	49	1,967	2,339	2.41	1.26	1.94	1.02	14.90	14.66	-1.64	14.66
S.A.W.C.-Canada E.C.	2	36	268	2.41	1.27	11.55	6.08	16.94	21.75	28.41	21.75
S.A.W.C.-C.A.E.C.	42	1,636	9,825	2.41	1.27	9.43	4.95	8.64	12.32	42.66	12.32
S.A.W.C.-Europe	12	106	321	2.41	1.27	5.00	2.63	22.77	24.13	5.98	24.13
S.A.W.C.-U.S.E.C.	47	1,758	13,383	2.41	1.27	12.71	6.69	10.31	15.73	52.60	15.73
U.S.E.C.-Asia	80	2,655	27,785	2.41	1.27	17.36	9.12	18.79	26.64	41.81	26.64
U.S.E.C.-C.A.W.C.	33	614	14,513	2.41	1.27	30.93	16.28	8.14	23.15	184.45	23.15

(Continued)

Table A-13. Laden Transits, Tons Carried, and Toll Revenue, Maximum Non-Diverting Toll Rates, 250,000 DWT Scenario, 2020, by Ship Type, Diversion Status, and Trade Route (1990 US$, except when noted)(continued)

Ship Type, Diversion Status, and Trade Route	Transits	Cargo Tonnage Carried (thousands)	Revenue (thousands) a/	Current Toll Schedule: Toll Per Panama Canal Net Ton	Current Toll Schedule: Toll Per Cargo Ton Carried	New Toll Schedule: Toll Per Panama Canal Net Ton	New Toll Schedule: Toll Per Cargo Ton Carried	Total Transportation Costs per Ton Carried: Via Panama Canal: With Current Toll Structure	Via Panama Canal: With New Toll Structure	Via Panama Canal: Percent Increase	Via Least Costly Alternative Route
Tankers (continued)											
Non-Diverted Transits (continued)											
U.S.E.C.-Canada W.C.	1	4	486	2.41	1.27	28.35	14.92	15.19	28.84	89.88	28.84
U.S.E.C.-Oceania	6	192	978	2.41	1.27	8.42	4.43	21.59	24.75	14.64	24.75
U.S.E.C.-S.A.W.C.	8	147	1,451	2.41	1.27	15.24	8.02	12.12	18.87	55.71	18.87
U.S.E.C.-U.S.W.C.	30	877	15,507	2.41	1.27	27.56	14.50	12.30	25.53	107.60	25.53
U.S.W.C.-Africa	7	224	1,586	2.41	1.26	9.66	5.05	13.36	17.15	28.37	17.15
U.S.W.C.-Canada E.C.	1	21	300	2.41	1.27	24.55	12.92	16.19	27.84	71.97	27.84
U.S.W.C.-C.A.E.C.	8	301	3,971	2.41	1.26	19.47	10.22	9.64	18.60	92.85	18.60
U.S.W.C.-S.A.E.C.	2	87	121	2.41	1.27	2.68	1.41	15.34	15.48	0.92	15.48
U.S.W.C.-U.S.E.C.	8	226	4,167	2.41	1.27	26.04	13.68	11.51	23.92	107.89	23.92
Subtotal	715	34,216	249,030	2.41	1.27	11.86	6.24	11.59	16.27	40.40	16.27
Vehicle Carriers											
Non-Diverted Transits											
Asia-C.A.E.C.	13	33	3,381	2.41	29.09	7.98	96.37	392.50	459.78	17.14	459.78
Asia-S.A.E.C.	0	0	4	2.41	29.13	0.95	11.44	453.29	435.60	-3.90	435.60
Asia-U.S.E.C.	419	1,959	122,346	2.41	29.20	7.90	95.71	413.17	479.68	16.10	479.68
C.A.W.C.-C.A.E.C.	1	1	384	2.41	28.71	14.98	178.50	257.39	407.18	58.19	407.18
Canada E.C.-Asia	0	1	10	2.41	29.22	1.40	17.00	437.22	425.00	-2.79	425.00
C.A.E.C.-C.A.W.C.	4	1	1,729	2.41	29.22	12.45	151.00	263.22	385.00	46.27	385.00
C.A.E.C.-Oceania	1	0	200	2.41	29.22	5.61	68.00	409.22	448.00	9.48	448.00
Europe-Canada W.C.	5	11	1,785	2.41	30.90	7.23	92.69	368.26	430.05	16.78	430.05
Europe-U.S.W.C.	149	285	40,456	2.41	29.95	6.26	77.77	381.68	429.50	12.53	429.50
S.A.W.C.-C.A.E.C.	0	0	11	2.41	28.69	6.30	75.00	307.69	354.00	15.05	354.00

(Continued)

Table A-13. Laden Transits, Tons Carried, and Toll Revenue, Maximum Non-Diverting Toll Rates, 250,000 DWT Scenario, 2020, by Ship Type, Diversion Status, and Trade Route (1990 US$, except when noted)(continued)

Ship Type, Diversion Status, and Trade Route	Transits	Cargo Tonnage Carried (thousands)	Revenue (thousands) a/	Current Toll Schedule: Toll Per Panama Canal Net Ton	Current Toll Schedule: Toll Per Cargo Ton Carried	New Toll Schedule: Toll Per Panama Canal Net Ton	New Toll Schedule: Toll Per Cargo Ton Carried	Total Transportation Costs per Ton Carried: Via Panama Canal: With Current Toll Structure	Via Panama Canal: With New Toll Structure	Via Panama Canal: Percent Increase	Via Least Costly Alternative Route
Vehicle Carriers (continued)											
Non-Diverted Transits (continued)											
U.S.E.C.-Asia	25	114	9,355	2.41	29.67	9.11	112.20	392.18	474.71	21.04	474.71
U.S.E.C.-Oceania	7	18	1,026	2.41	29.22	3.63	44.00	408.22	423.00	3.62	423.00
Subtotal	623	2,424	180,686	2.41	29.43	7.48	91.39	407.80	472.52	15.87	472.52
Total Non-Diverting	13,263	336,138	4,034,549	2.41	1.81	14.42	10.80	43.39	52.28	20.48	52.28

Notes: These calculations do not include all transits and tons carried forecast by the WEFA Group. For some ship-type and trade-route combinations (accounting for a total of 18 transits and 179803 tons), vessel costs were not available for every DWT size interval. As a result, these transits and tons were excluded. In addition, for 1981 transits and 37003606 tons, the cost by way of the Panama Canal without a toll was higher than the least costly alternative route. As a result, these transits and tons were excluded. Percentages may not calculate exactly as shown due to rounding. A fee of $0.40 per Panama Canal net ton has also been included to account for charges such as handling and agency fees incurred when transitting the Canal. The extra fee is only used to determine divesion status by adding it to the cost per ton carried and is not included in the revenue calculations.

a/ Revenue lost from diversions is measured as the revenue generated by the maximum, nondiverting toll rate increase.

Source: Nathan Associates Inc., based on forecasts of traffic and transportation costs provided by The WEFA Group.

MAXIMUM NON-DIVERTING TOLL RATES, STATUS QUO SCENARIO, 2060

Table A-14. Laden Transits, Tons Carried, and Toll Revenue, Maximum Non-Diverting Toll Rates, Status Quo Scenario, 2060, by Ship Type

	Transits				Tons Carried(thousands)				Revenue(1990 US$thousands)			
Ship Type	Canal	Diverted	Total	Diverted as a Percent of Total	Canal	Diverted	Total	Diverted as a Percent of Total	Canal	Lost a/	Total	Lost as a Percent of Total
Container-Breakbulk	2,310	0	2,310	0.00	34,316	0	34,316	0.00	959,399	0	959,399	0.00
Dry Bulk Carriers	2,552	0	2,552	0.00	112,337	0	112,337	0.00	1,128,436	0	1,128,436	0.00
Chemical Tankers	1,183	0	1,183	0.00	32,247	0	32,247	0.00	584,507	0	584,507	0.00
Full Container Ships	1,498	0	1,498	0.00	28,061	0	28,061	0.00	448,280	0	448,280	0.00
General Cargo Ships	1,383	0	1,383	0.00	13,357	0	13,357	0.00	360,763	0	360,763	0.00
Liquid Gas Carriers	104	0	104	0.00	1,071	0	1,071	0.00	51,039	0	51,039	0.00
Passenger Ships	435	0	435	0.00	0	0	0	0.00	6,694	0	6,694	0.00
Refrigerated Ships	3,897	0	3,897	0.00	15,828	0	15,828	0.00	1,142,924	0	1,142,924	0.00
Roll-On Roll-Off	397	0	397	0.00	2,929	0	2,929	0.00	154,889	0	154,889	0.00
Tankers	266	0	266	0.00	6,016	0	6,016	0.00	110,515	0	110,515	0.00
Vehicle Carriers	724	0	724	0.00	2,831	0	2,831	0.00	234,314	0	234,314	0.00
Total	14,750	0	14,750	0.00	248,993	0	248,993	0.00	5,181,760	0	5,181,760	0.00

Notes: These calculations do not include all transits and tons carried forecast by the WEFA Group. For some ship-type and trade-route combinations (accounting for a total of 13 transits and 219227 tons), vessel costs were not available for every DWT size interval. As a result, these transits and tons were excluded. In addition, for 934 transits and 22985287 tons, the cost by way of the Panama Canal without a toll was higher than the least costly alternative route. As a result, these transits and tons were excluded. A fee of $0.40 per Panama Canal net ton has also been included to account for charges such as handling and agency fees incurred when transitting the Canal. The extra fee is only used to determine diversion status by adding it to cost per ton carried and is not included in the revenue calculations.

a/ Revenue lost from diversions is measured as the revenue generated by the maximum, nondiverting toll rate increase.

Source: Nathan Associates Inc., based on forecasts of traffic and transportation costs provided by the WEFA Group.

Table A-15. Ballast Transits, Tons Carried, and Toll Revenue, Current Toll Structure and Rates, Status Quo Scenario, 2060, by Ship Type

	Transits				Tons Carried(thousands)				Revenue(1990 US$thousands)			
Ship Type	Canal	Diverted	Total	Diverted as a Percent of Total	Canal	Diverted	Total	Diverted as a Percent of Total	Canal	Lost	Total	Lost as a Percent of Total
Container-Breakbulk	57	0	57	0.00	0	0	0	0.00	1,378	0	1,378	0.00
Dry Bulk Carriers	319	0	319	0.00	0	0	0	0.00	12,498	0	12,498	0.00
Chemical Tankers	95	0	95	0.00	0	0	0	0.00	2,635	0	2,635	0.00
Full Container Ships	5	0	5	0.00	0	0	0	0.00	288	0	288	0.00
General Cargo Ships	222	0	222	0.00	0	0	0	0.00	2,407	0	2,407	0.00
Liquid Gas Carriers	65	0	65	0.00	0	0	0	0.00	1,707	0	1,707	0.00
Passenger Ships	51	0	51	0.00	0	0	0	0.00	664	0	664	0.00
Refrigerated Ships	954	0	954	0.00	0	0	0	0.00	17,067	0	17,067	0.00
Roll-On Roll-Off	56	0	56	0.00	0	0	0	0.00	1,389	0	1,389	0.00
Tankers	125	0	125	0.00	0	0	0	0.00	3,192	0	3,192	0.00
Vehicle Carriers	440	0	440	0.00	0	0	0	0.00	25,965	0	25,965	0.00
Total	2,389	0	2,389	0.00	0	0	0	0.00	69,189	0	69,189	0.00

Note: Diversions of ballast transits are computed by diverting a proportion of ballast transits equal to lost revenue as a percent of total potential revenue for a particular laden ship type. See last column on previous table.

Source: Nathan Associates Inc., based on forecasts of traffic and transportation costs provided by the WEFA Group.

Table A-16. Laden Transits, Tons Carried, and Toll Revenue, Maximum Non-Diverting Toll Rates, Status Quo Scenario, 2060, by Ship Type, Diversion Status, and Trade Route (1990 US$, except when noted)

Ship Type, Diversion Status, and Trade Route	Transits	Cargo Tonnage Carried (thousands)	Revenue (thousands) a/	Current Toll Schedule: Toll Per Panama Canal Net Ton	Current Toll Schedule: Toll Per Cargo Ton Carried	New Toll Schedule: Toll Per Panama Canal Net Ton	New Toll Schedule: Toll Per Cargo Ton Carried	Total Transportation Costs per Ton Carried: Via Panama Canal: With Current Toll Structure	Total Transportation Costs per Ton Carried: Via Panama Canal: With New Toll Structure	Total Transportation Costs per Ton Carried: Via Panama Canal: Percent Increase	Total Transportation Costs per Ton Carried: Via Least Costly Alternative Route
Container-Breakbulk											
Non-Diverted Transits											
Africa-C.A.W.C.	6	185	5,988	2.41	1.85	63.31	48.70	72.26	119.11	64.83	119.11
Africa-Canada W.C.	0	5	126	2.41	1.87	21.20	16.43	92.01	106.57	15.83	106.57
Africa-U.S.W.C.	2	25	614	2.41	1.87	21.47	16.64	93.01	107.78	15.88	107.78
Asia-Canada E.C.	1	8	131	2.41	1.86	12.63	9.77	93.05	100.96	8.50	100.96
Asia-C.A.E.C.	135	1,246	40,468	2.41	1.87	22.88	17.71	97.20	113.04	16.30	113.04
Asia-S.A.E.C.	48	305	3,072	2.41	1.87	5.16	4.00	105.12	107.25	2.03	107.25
Asia-U.S.E.C.	139	1,759	65,504	2.41	1.86	33.64	25.98	99.37	123.49	24.27	123.49
C.A.W.C.-Africa	6	112	4,726	2.41	1.87	68.57	53.19	76.03	127.35	67.50	127.35
C.A.W.C.-C.A.E.C.	16	247	11,229	2.41	1.86	54.75	42.34	51.25	91.73	78.97	91.73
C.A.W.C.-Europe	41	304	22,101	2.41	1.87	41.01	31.78	65.68	95.59	45.54	95.59
C.A.W.C.-S.A.E.C.	23	10	2,492	2.41	1.87	8.86	6.87	72.11	77.11	6.93	77.11
C.A.W.C.-U.S.E.C.	7	40	4,374	2.41	1.87	52.14	40.45	57.32	95.90	67.31	95.90
Canada E.C.-C.A.W.C.	3	25	1,788	2.41	1.87	55.37	42.92	55.94	96.99	73.39	96.99
Canada E.C.-S.A.W.C.	1	17	269	2.41	1.85	20.60	15.85	65.70	79.70	21.30	79.70
Canada E.C.-U.S.W.C.	0	0	5	2.41	1.86	52.65	40.71	72.57	111.42	53.53	111.42
Canada W.C.-Africa	29	662	8,232	2.41	1.85	19.42	14.94	93.53	106.62	13.99	106.62
Canada W.C.-Europe	107	3,116	73,903	2.41	1.85	38.57	29.67	81.19	109.01	34.26	109.01
Canada W.C.-S.A.E.C.	22	421	14,759	2.41	1.87	54.55	42.32	74.11	114.56	54.58	114.56
Canada W.C.-U.S.E.C.	15	303	11,863	2.41	1.85	54.60	42.00	67.85	108.00	59.17	108.00
C.A.E.C.-Asia	13	270	3,685	2.41	1.87	22.64	17.54	96.31	111.98	16.27	111.98
C.A.E.C.-C.A.W.C.	13	49	9,492	2.41	1.87	57.60	44.65	52.15	94.93	82.04	94.93
C.A.E.C.-Canada W.C.	4	59	2,641	2.41	1.87	54.00	41.86	66.58	106.57	60.07	106.57
C.A.E.C.-Oceania	2	38	807	2.41	1.87	26.43	20.49	94.01	112.63	19.81	112.63

(Continued)

Table A-16. Laden Transits, Tons Carried, and Toll Revenue, Maximum Non-Diverting Toll Rates, Status Quo Scenario, 2060, by Ship Type, Diversion Status, and Trade Route (1990 US$, except when noted)(continued)

Ship Type, Diversion Status, and Trade Route	Transits	Cargo Tonnage Carried (thousands)	Revenue (thousands) a/	Current Toll Schedule: Toll Per Panama Canal Net Ton	Current Toll Schedule: Toll Per Cargo Ton Carried	New Toll Schedule: Toll Per Panama Canal Net Ton	New Toll Schedule: Toll Per Cargo Ton Carried	Total Transportation Costs per Ton Carried: Via Panama Canal: With Current Toll Structure	Via Panama Canal: With New Toll Structure	Via Panama Canal: Percent Increase	Via Least Costly Alternative Route
Container-Breakbulk (continued)											
Non-Diverted Transits (continued)											
C.A.E.C.-S.A.W.C.	37	286	10,105	2.41	1.87	21.47	16.64	64.73	79.50	22.82	79.50
C.A.E.C.-U.S.W.C.	6	112	3,641	2.41	1.86	45.78	35.37	64.27	97.78	52.13	97.78
Europe-C.A.W.C.	44	271	38,633	2.41	1.87	69.02	53.50	66.79	118.42	77.31	118.42
Europe-Canada W.C.	7	217	4,980	2.41	1.85	34.05	26.19	83.24	107.58	29.23	107.58
Europe-S.A.W.C.	182	1,504	49,698	2.41	1.87	21.27	16.49	90.01	104.63	16.24	104.63
Europe-U.S.W.C.	36	1,115	24,784	2.41	1.85	35.46	27.28	82.41	107.84	30.85	107.84
Oceania-C.A.E.C.	10	99	3,222	2.41	1.87	26.70	20.71	94.77	113.61	19.88	113.61
S.A.E.C.-C.A.W.C.	16	252	1,838	2.41	1.87	8.76	6.79	71.65	76.57	6.87	76.57
S.A.W.C.-Canada E.C.	1	2	324	2.41	1.87	22.66	17.58	69.19	84.90	22.71	84.90
S.A.W.C.-C.A.E.C.	26	206	6,847	2.41	1.87	21.64	16.79	65.19	80.11	22.89	80.11
S.A.W.C.-Europe	329	5,753	99,974	2.41	1.87	24.00	18.60	89.68	106.41	18.66	106.41
S.A.W.C.-U.S.E.C.	239	2,340	81,376	2.41	1.87	27.43	21.28	62.12	81.53	31.25	81.53
U.S.E.C.-Asia	284	7,177	150,920	2.41	1.86	32.35	24.92	96.15	119.21	23.99	119.21
U.S.E.C.-C.A.W.C.	22	446	18,049	2.41	1.86	61.35	47.45	47.68	93.27	95.60	93.27
U.S.E.C.-S.A.W.C.	347	3,443	121,763	2.41	1.87	27.15	21.04	61.84	81.01	31.00	81.01
U.S.E.C.-U.S.W.C.	0	0	10	2.41	1.86	53.02	41.00	58.86	98.00	66.49	98.00
U.S.W.C.-Africa	22	367	11,345	2.41	1.85	25.05	19.27	85.43	102.85	20.39	102.85
U.S.W.C.-Canada E.C.	1	33	914	2.41	1.85	49.40	38.00	69.85	106.00	51.75	106.00
U.S.W.C.-C.A.E.C.	19	135	11,321	2.41	1.87	47.69	36.98	66.46	101.57	52.83	101.57
U.S.W.C.-Europe	51	1,343	30,940	2.41	1.86	34.81	26.80	83.60	108.54	29.84	108.54
U.S.W.C.-U.S.E.C.	0	6	445	2.41	1.85	56.57	43.54	60.33	102.02	69.09	102.02
Subtotal	2,310	34,316	959,399	2.41	1.86	29.94	23.15	83.50	105.56	26.42	105.56
Dry Bulk Carriers											
Non-Diverted Transits											
Africa-C.A.W.C.	31	1,201	14,496	2.41	1.31	23.67	12.91	15.51	27.11	74.74	27.11

(Continued)

Table A-16. Laden Transits, Tons Carried, and Toll Revenue, Maximum Non-Diverting Toll Rates, Status Quo Scenario, 2060, by Ship Type, Diversion Status, and Trade Route (1990 US$, except when noted)(continued)

Ship Type, Diversion Status, and Trade Route	Transits	Cargo Tonnage Carried (thousands)	Revenue (thousands) a/	Current Toll Schedule: Toll Per Panama Canal Net Ton	Current Toll Schedule: Toll Per Cargo Ton Carried	New Toll Schedule: Toll Per Panama Canal Net Ton	New Toll Schedule: Toll Per Cargo Ton Carried	Total Transportation Costs per Ton Carried: Via Panama Canal: With Current Toll Structure	Via Panama Canal: With New Toll Structure	Via Panama Canal: Percent Increase	Via Least Costly Alternative Route
Dry Bulk Carriers (continued)											
Non-Diverted Transits (continued)											
Africa-S.A.W.C.	10	313	3,148	2.41	1.31	16.70	9.11	18.34	26.14	42.50	26.14
C.A.W.C.-Africa	2	52	881	2.41	1.30	24.41	13.15	15.33	27.18	77.32	27.18
C.A.W.C.-C.A.E.C.	65	2,167	25,048	2.41	1.30	18.54	10.03	7.57	16.30	115.22	16.30
C.A.W.C.-U.S.E.C.	49	1,854	23,315	2.41	1.29	21.80	11.70	7.74	18.15	134.39	18.15
Canada W.C.-C.A.E.C.	9	270	3,548	2.41	1.31	18.74	10.19	12.66	21.54	70.13	21.54
Canada W.C.-Europe	325	14,976	111,886	2.41	1.26	13.07	6.85	15.62	21.21	35.76	21.21
Canada W.C.-U.S.E.C.	110	3,183	45,374	2.41	1.31	20.65	11.23	13.41	23.33	73.97	23.33
C.A.E.C.-Asia	23	808	5,274	2.41	1.31	11.64	6.35	18.34	23.38	27.45	23.38
C.A.E.C.-C.A.W.C.	52	1,650	19,231	2.41	1.31	18.76	10.23	7.91	16.83	112.65	16.83
C.A.E.C.-Canada W.C.	3	105	1,172	2.41	1.31	18.63	10.16	12.74	21.59	69.41	21.59
C.A.E.C.-U.S.W.C.	9	286	3,415	2.41	1.31	18.63	10.16	11.74	20.59	75.32	20.59
Europe-C.A.W.C.	54	1,627	21,274	2.41	1.31	20.08	10.95	12.74	22.38	75.61	22.38
Europe-U.S.W.C.	155	4,679	39,477	2.41	1.29	11.49	6.15	15.94	20.80	30.49	20.80
U.S.E.C.-Asia	1,239	64,706	625,081	2.41	1.25	17.35	8.97	14.89	22.61	51.89	22.61
U.S.E.C.-C.A.W.C.	400	14,003	178,496	2.41	1.31	22.25	12.10	7.94	18.73	135.88	18.73
U.S.E.C.-U.S.W.C.	1	0	258	2.41	1.31	21.92	11.95	11.74	22.38	90.56	22.38
U.S.W.C.-Canada E.C.	6	211	2,175	2.41	1.30	18.15	9.80	14.00	22.50	60.70	22.50
U.S.W.C.-C.A.E.C.	1	30	358	2.41	1.31	18.74	10.19	11.66	20.54	76.15	20.54
U.S.W.C.-U.S.E.C.	9	215	4,527	2.41	1.29	23.34	12.47	11.95	23.13	93.59	23.13
Subtotal	2,552	112,337	1,128,436	2.41	1.27	17.41	9.15	13.75	21.66	57.56	21.66
Chemical Tankers											
Non-Diverted Transits											
Africa-S.A.W.C.	2	59	1,033	2.41	1.34	32.36	18.00	43.34	60.00	38.44	60.00

(Continued)

Table A-16. Laden Transits, Tons Carried, and Toll Revenue, Maximum Non-Diverting Toll Rates, Status Quo Scenario, 2060, by Ship Type, Diversion Status, and Trade Route (1990 US$, except when noted)(continued)

Ship Type, Diversion Status, and Trade Route	Transits	Cargo Tonnage Carried (thousands)	Revenue (thousands) a/	Current Toll Schedule: Toll Per Panama Canal Net Ton	Current Toll Schedule: Toll Per Cargo Ton Carried	New Toll Schedule: Toll Per Panama Canal Net Ton	New Toll Schedule: Toll Per Cargo Ton Carried	Total Transportation Costs per Ton Carried, Via Panama Canal: With Current Toll Structure	Total Transportation Costs per Ton Carried, Via Panama Canal: With New Toll Structure	Total Transportation Costs per Ton Carried, Via Panama Canal: Percent Increase	Total Transportation Costs per Ton Carried: Via Least Costly Alternative Route
Chemical Tankers (continued)											
Non-Diverted Transits (continued)											
Asia-C.A.E.C.	4	50	1,080	2.41	1.34	32.66	18.16	54.00	70.82	31.15	70.82
Asia-U.S.E.C.	39	820	17,181	2.41	1.34	30.93	17.20	43.81	59.67	36.20	59.67
C.A.W.C.-C.A.E.C.	49	306	15,796	2.41	1.34	82.35	45.75	39.39	83.80	112.75	83.80
C.A.W.C.-Europe	9	169	3,286	2.41	1.34	35.23	19.59	38.02	56.27	48.00	56.27
C.A.W.C.-U.S.E.C.	63	885	31,322	2.41	1.34	58.45	32.49	27.74	58.89	112.30	58.89
Canada W.C.-Europe	4	106	1,948	2.41	1.34	28.77	16.00	42.34	57.00	34.62	57.00
Canada W.C.-U.S.E.C.	39	1,042	28,949	2.41	1.34	39.56	22.00	31.94	52.60	64.68	52.60
C.A.E.C.-Asia	9	293	4,057	2.41	1.34	25.17	14.00	42.34	55.00	29.90	55.00
C.A.E.C.-C.A.W.C.	5	115	3,140	2.41	1.34	39.56	22.00	21.34	42.00	96.81	42.00
C.A.E.C.-S.A.W.C.	11	217	2,845	2.41	1.34	20.36	11.32	30.34	40.32	32.89	40.32
C.A.E.C.-U.S.W.C.	2	15	646	2.41	1.34	78.84	43.80	55.94	98.40	75.91	98.40
Europe-C.A.W.C.	10	51	2,414	2.41	1.34	61.29	34.05	60.84	93.55	53.77	93.55
Europe-U.S.W.C.	10	261	4,273	2.41	1.34	28.32	15.75	42.05	56.46	34.27	56.46
S.A.W.C.-C.A.E.C.	36	134	6,798	2.41	1.34	31.30	17.40	44.18	60.24	36.35	60.24
S.A.W.C.-Europe	12	151	738	2.41	1.34	8.35	4.64	53.51	56.81	6.17	56.81
S.A.W.C.-U.S.E.C.	12	100	3,031	2.41	1.34	29.23	16.25	39.07	53.98	38.16	53.98
U.S.E.C.-Asia	683	23,746	372,042	2.41	1.34	29.13	16.20	41.54	56.40	35.77	56.40
U.S.E.C.-C.A.W.C.	27	238	11,452	2.41	1.34	74.80	41.57	34.18	74.41	117.70	74.41
U.S.E.C.-Canada W.C.	8	61	2,929	2.41	1.34	83.24	46.25	60.04	104.95	74.80	104.95
U.S.E.C.-Oceania	17	545	3,584	2.41	1.34	11.67	6.49	43.19	48.34	11.92	48.34
U.S.E.C.-S.A.W.C.	53	560	11,140	2.41	1.34	31.09	17.28	41.25	57.19	38.64	57.19
U.S.E.C.-U.S.W.C.	48	1,814	38,931	2.41	1.34	34.44	19.14	25.49	43.29	69.84	43.29
U.S.W.C.-C.A.E.C.	1	12	379	2.41	1.34	37.76	21.00	29.34	49.00	67.01	49.00

(Continued)

Table A-16. Laden Transits, Tons Carried, and Toll Revenue, Maximum Non-Diverting Toll Rates, Status Quo Scenario, 2060, by Ship Type, Diversion Status, and Trade Route (1990 US$, except when noted)(continued)

Ship Type, Diversion Status, and Trade Route	Transits	Cargo Tonnage Carried (thousands)	Revenue (thousands) a/	Current Toll Schedule: Toll Per Panama Canal Net Ton	Current Toll Schedule: Toll Per Cargo Ton Carried	New Toll Schedule: Toll Per Panama Canal Net Ton	New Toll Schedule: Toll Per Cargo Ton Carried	Total Transportation Costs per Ton Carried: Via Panama Canal: With Current Toll Structure	Via Panama Canal: With New Toll Structure	Via Panama Canal: Percent Increase	Via Least Costly Alternative Route
Chemical Tankers (continued)											
Non-Diverted Transits (continued)											
U.S.W.C.-Europe	16	266	5,521	2.41	1.34	31.21	17.35	45.29	61.30	35.35	61.30
U.S.W.C.-U.S.E.C.	12	233	9,991	2.41	1.34	35.00	19.45	25.79	43.90	70.23	43.90
Subtotal	1,183	32,247	584,507	2.41	1.34	31.67	17.61	39.87	55.95	40.33	55.95
Full Container Ships											
Non-Diverted Transits											
Africa-U.S.W.C.	0	5	123	2.41	4.49	21.90	40.79	247.81	284.11	14.65	284.11
Asia-Canada E.C.	33	739	13,461	2.41	4.70	11.85	23.11	207.29	225.70	8.88	225.70
Asia-S.A.E.C.	4	14	291	2.41	4.49	6.41	11.94	274.66	282.11	2.71	282.11
Asia-U.S.E.C. (low inv. cost)	211	4,208	36,530	2.41	4.74	4.23	8.33	241.67	245.26	1.48	245.26
C.A.W.C.-C.A.E.C.	1	9	995	2.41	4.44	44.74	82.42	130.00	207.98	59.99	207.98
C.A.W.C.-Europe	2	37	2,020	2.41	4.42	31.20	57.25	152.02	204.85	34.75	204.85
C.A.W.C.-S.A.E.C.	0	7	65	2.41	4.44	6.12	11.28	162.41	169.25	4.21	169.25
C.A.W.C.-U.S.E.C.	0	5	304	2.41	4.49	51.76	96.37	161.41	253.29	56.93	253.29
Canada E.C.-Asia	35	658	6,183	2.41	4.55	7.32	13.83	226.90	236.18	4.09	236.18
Canada E.C.-U.S.W.C.	8	247	13,691	2.41	4.77	39.91	79.00	154.77	229.00	47.96	229.00
Canada W.C.-Europe	31	511	22,755	2.41	4.51	37.53	70.16	210.71	276.36	31.16	276.36
C.A.E.C.-Asia	8	116	3,862	2.41	4.47	19.17	35.55	213.60	244.68	14.55	244.68
C.A.E.C.-C.A.W.C.	1	7	710	2.41	4.47	52.44	97.22	143.12	235.87	64.81	235.87
C.A.E.C.-Oceania	1	8	283	2.41	4.49	27.25	50.73	250.78	297.02	18.44	297.02
C.A.E.C.-S.A.W.C.	2	10	428	2.41	4.49	21.27	39.64	178.89	214.04	19.65	214.04
C.A.E.C.-U.S.W.C.	2	26	1,545	2.41	4.45	37.90	69.92	152.93	218.40	42.81	218.40
Europe-C.A.W.C.	0	1	160	2.41	4.42	52.00	95.40	152.02	243.00	59.85	243.00

(Continued)

Table A-16. Laden Transits, Tons Carried, and Toll Revenue, Maximum Non-Diverting Toll Rates, Status Quo Scenario, 2060, by Ship Type, Diversion Status, and Trade Route (1990 US$, except when noted)(continued)

Ship Type, Diversion Status, and Trade Route	Transits	Cargo Tonnage Carried (thousands)	Revenue (thousands) a/	Current Toll Schedule: Toll Per Panama Canal Net Ton	Current Toll Schedule: Toll Per Cargo Ton Carried	New Toll Schedule: Toll Per Panama Canal Net Ton	New Toll Schedule: Toll Per Cargo Ton Carried	Total Transportation Costs per Ton Carried: Via Panama Canal: With Current Toll Structure	Via Panama Canal: With New Toll Structure	Via Panama Canal: Percent Increase	Via Least Costly Alternative Route
Full Container Ships (continued)											
Non-Diverted Transits (continued)											
Europe-Canada W.C.	25	336	15,177	2.41	4.47	35.08	65.07	223.81	284.41	27.08	284.41
Europe-S.A.W.C.	81	1,309	41,189	2.41	4.42	19.16	35.15	191.22	221.95	16.07	221.95
Europe-U.S.W.C.	164	2,963	11,215	2.41	4.60	2.74	5.22	215.04	215.66	0.29	215.66
Middle East-U.S.W.C.	15	247	5,585	2.41	4.47	18.25	33.86	218.19	247.58	13.47	247.58
Oceania-C.A.E.C.	5	64	1,835	2.41	4.49	27.25	50.73	250.78	297.02	18.44	297.02
S.A.E.C.-C.A.W.C.	1	8	74	2.41	4.49	7.49	13.94	197.14	206.59	4.79	206.59
S.A.E.C.-U.S.W.C.	2	20	471	2.41	4.49	21.89	40.76	183.23	219.50	19.80	219.50
S.A.W.C.-C.A.E.C.	0	1	70	2.41	4.49	21.27	39.64	178.89	214.04	19.65	214.04
S.A.W.C.-Europe	144	3,081	73,635	2.41	4.42	19.16	35.16	191.21	221.95	16.07	221.95
S.A.W.C.-U.S.E.C.	99	1,047	35,031	2.41	4.49	27.75	51.67	174.32	221.50	27.07	221.50
U.S.E.C.-Asia (low inv. cost)	277	7,718	51,434	2.41	4.73	4.66	9.13	242.19	246.59	1.82	246.59
U.S.E.C.-C.A.W.C.	13	112	10,279	2.41	4.49	62.97	117.25	140.53	253.29	80.24	253.29
U.S.E.C.-S.A.W.C.	117	1,005	41,320	2.41	4.49	27.75	51.67	174.32	221.50	27.07	221.50
U.S.E.C.-U.S.W.C.	1	26	1,748	2.41	4.76	45.48	89.80	138.99	224.03	61.19	224.03
U.S.W.C.-Africa	0	0	2	2.41	4.64	22.85	44.00	193.64	233.00	20.33	233.00
U.S.W.C.-Canada E.C.	0	8	479	2.41	4.57	40.40	76.54	159.49	231.46	45.13	231.46
U.S.W.C.-C.A.E.C.	6	90	5,078	2.41	4.46	41.01	75.91	161.25	232.70	44.31	232.70
U.S.W.C.-Europe	163	2,735	11,910	2.41	4.62	2.82	5.41	216.86	217.65	0.36	217.65
U.S.W.C.-Middle East	25	356	4,046	2.41	4.47	7.89	14.64	219.26	229.43	4.64	229.43
U.S.W.C.-U.S.E.C.	21	326	34,295	2.41	4.65	45.55	87.80	141.16	224.31	58.91	224.31
Subtotal	1,498	28,061	448,280	2.41	4.62	10.53	20.21	218.08	234.14	7.37	234.14
General Cargo Ships											
Non-Diverted Transits											
Africa-C.A.W.C.	3	46	1,728	2.41	1.39	46.36	26.70	31.04	56.35	81.55	56.35

(Continued)

Table A-16. Laden Transits, Tons Carried, and Toll Revenue, Maximum Non-Diverting Toll Rates, Status Quo Scenario, 2060, by Ship Type, Diversion Status, and Trade Route (1990 US$, except when noted)(continued)

Ship Type, Diversion Status, and Trade Route	Transits	Cargo Tonnage Carried (thousands)	Revenue (thousands) a/	Current Toll Schedule: Toll Per Panama Canal Net Ton	Current Toll Schedule: Toll Per Cargo Ton Carried	New Toll Schedule: Toll Per Panama Canal Net Ton	New Toll Schedule: Toll Per Cargo Ton Carried	Total Transportation Costs per Ton Carried: Via Panama Canal: With Current Toll Structure	Via Panama Canal: With New Toll Structure	Via Panama Canal: Percent Increase	Via Least Costly Alternative Route
General Cargo Ships (continued)											
Non-Diverted Transits (continued)											
Africa-S.A.W.C.	3	68	1,176	2.41	1.39	30.91	17.80	37.94	54.35	43.26	54.35
Asia-C.A.E.C.	127	1,501	35,259	2.41	1.39	24.05	13.85	36.99	49.45	33.69	49.45
Asia-S.A.E.C.	4	25	162	2.41	1.39	3.39	1.95	45.89	46.45	1.23	46.45
Asia-U.S.E.C.	49	632	15,558	2.41	1.39	27.11	15.58	38.14	52.33	37.22	52.33
C.A.W.C.-Africa	7	139	3,889	2.41	1.39	46.36	26.70	31.04	56.35	81.55	56.35
C.A.W.C.-C.A.E.C.	55	243	18,225	2.41	1.46	84.90	51.36	9.72	59.62	513.51	59.62
C.A.W.C.-Europe	51	291	15,495	2.41	1.41	40.77	23.79	29.65	52.03	75.50	52.03
C.A.W.C.-S.A.E.C.	15	99	1,146	2.41	1.41	10.26	5.99	27.71	32.29	16.54	32.29
C.A.W.C.-U.S.E.C.	16	84	6,952	2.41	1.45	106.43	64.11	12.26	74.92	511.01	74.92
Canada E.C.-C.A.W.C.	2	36	915	2.41	1.39	37.68	21.70	21.19	41.50	95.87	41.50
Canada W.C.-C.A.E.C.	16	120	6,888	2.41	1.42	67.90	39.96	31.71	70.25	121.55	70.25
Canada W.C.-Europe	1	21	307	2.41	1.39	27.52	15.85	37.94	52.40	38.12	52.40
Canada W.C.-Middle East	2	13	35	2.41	1.39	1.74	1.00	42.89	42.50	-0.90	42.50
Canada W.C.-S.A.E.C.	14	126	5,840	2.41	1.41	61.66	36.12	36.39	71.10	95.37	71.10
C.A.E.C.-Asia	28	538	7,754	2.41	1.39	24.05	13.85	36.99	49.45	33.69	49.45
C.A.E.C.-C.A.W.C.	56	209	21,564	2.41	1.45	94.41	56.93	8.51	63.99	651.66	63.99
C.A.E.C.-Oceania	1	13	177	2.41	1.39	17.19	9.90	40.94	49.45	20.79	49.45
C.A.E.C.-S.A.W.C.	53	492	9,249	2.41	1.41	23.26	13.57	22.58	34.74	53.88	34.74
C.A.E.C.-U.S.W.C.	12	42	4,258	2.41	1.50	128.03	79.66	32.53	110.69	240.28	110.69
Europe-C.A.W.C.	87	598	42,735	2.41	1.40	55.84	32.41	28.49	59.50	108.85	59.50
Europe-Canada W.C.	3	11	750	2.41	1.50	93.37	58.09	80.37	136.96	70.41	136.96
Europe-S.A.W.C.	68	680	4,114	2.41	1.39	5.55	3.20	33.84	35.65	5.35	35.65
Europe-U.S.W.C.	4	18	1,326	2.41	1.44	77.98	46.68	62.15	107.39	72.78	107.39

(Continued)

Table A-16. Laden Transits, Tons Carried, and Toll Revenue, Maximum Non-Diverting Toll Rates, Status Quo Scenario, 2060, by Ship Type, Diversion Status, and Trade Route (1990 US$, except when noted)(continued)

Ship Type, Diversion Status, and Trade Route	Transits	Cargo Tonnage Carried (thousands)	Revenue (thousands) a/	Current Toll Schedule: Toll Per Panama Canal Net Ton	Current Toll Schedule: Toll Per Cargo Ton Carried	New Toll Schedule: Toll Per Panama Canal Net Ton	New Toll Schedule: Toll Per Cargo Ton Carried	Total Transportation Costs per Ton Carried: Via Panama Canal: With Current Toll Structure	Via Panama Canal: With New Toll Structure	Via Panama Canal: Percent Increase	Via Least Costly Alternative Route
General Cargo Ships (continued)											
Non-Diverted Transits (continued)											
Middle East-S.A.W.C.	6	3	805	2.41	1.50	48.19	29.98	73.82	102.30	38.58	102.30
Oceania-C.A.E.C.	1	7	232	2.41	1.39	18.93	10.90	39.94	49.45	23.82	49.45
Oceania-U.S.E.C.	1	6	151	2.41	1.43	22.69	13.48	57.41	69.46	20.99	69.46
S.A.E.C.-C.A.W.C.	13	261	747	2.41	1.39	5.12	2.95	25.14	26.70	6.21	26.70
S.A.W.C.-C.A.E.C.	82	361	15,571	2.41	1.45	43.54	26.12	23.90	48.57	103.26	48.57
S.A.W.C.-Europe	171	2,817	10,159	2.41	1.39	5.12	2.95	33.04	34.60	4.73	34.60
S.A.W.C.-U.S.E.C.	56	430	12,993	2.41	1.40	29.02	16.89	25.31	40.80	61.18	40.80
U.S.E.C.-Asia	74	1,214	23,648	2.41	1.39	27.24	15.67	38.38	52.66	37.22	52.66
U.S.E.C.-C.A.W.C.	103	776	44,039	2.41	1.43	80.40	47.66	14.67	60.90	315.17	60.90
U.S.E.C.-S.A.W.C.	187	1,336	43,228	2.41	1.41	29.98	17.48	25.45	41.52	63.18	41.52
U.S.E.C.-U.S.W.C.	1	0	309	2.41	1.50	143.07	89.02	35.37	122.89	247.45	122.89
U.S.W.C.-Africa	7	75	1,578	2.41	1.39	20.58	11.85	36.99	47.45	28.29	47.45
U.S.W.C.-C.A.E.C.	3	1	1,119	2.41	1.50	128.03	79.66	32.53	110.69	240.28	110.69
U.S.W.C.-Europe	3	25	682	2.41	1.42	44.84	26.44	44.83	69.85	55.81	69.85
Subtotal	1,383	13,357	360,763	2.41	1.40	30.77	17.88	30.47	46.45	52.48	46.45
Liquid Gas Carriers											
Non-Diverted Transits											
C.A.W.C.-C.A.E.C.	10	43	2,623	2.41	7.30	49.83	151.00	57.30	201.00	250.77	201.00
C.A.E.C.-Asia	10	53	2,839	2.41	4.67	30.20	58.57	124.16	178.06	43.41	178.06
C.A.E.C.-C.A.W.C.	56	742	39,655	2.41	3.79	37.19	58.53	26.91	81.65	203.39	81.65
C.A.E.C.-S.A.W.C.	4	60	1,397	2.41	3.83	17.64	28.00	45.83	70.00	52.75	70.00
C.A.E.C.-U.S.W.C.	0	3	123	2.41	3.83	38.43	61.00	51.83	109.00	110.32	109.00

(Continued)

Table A-16. Laden Transits, Tons Carried, and Toll Revenue, Maximum Non-Diverting Toll Rates, Status Quo Scenario, 2060, by Ship Type, Diversion Status, and Trade Route (1990 US$, except when noted)(continued)

Ship Type, Diversion Status, and Trade Route	Transits	Cargo Tonnage Carried (thousands)	Revenue (thousands) a/	Current Toll Schedule: Toll Per Panama Canal Net Ton	Current Toll Schedule: Toll Per Cargo Ton Carried	New Toll Schedule: Toll Per Panama Canal Net Ton	New Toll Schedule: Toll Per Cargo Ton Carried	Total Transportation Costs per Ton Carried, Via Panama Canal: With Current Toll Structure	Total Transportation Costs per Ton Carried, Via Panama Canal: With New Toll Structure	Total Transportation Costs per Ton Carried, Via Panama Canal: Percent Increase	Total Transportation Costs per Ton Carried: Via Least Costly Alternative Route
Liquid Gas Carriers (continued)											
Non-Diverted Transits (continued)											
Europe-C.A.W.C.	2	7	422	2.41	7.30	36.96	112.00	129.30	234.00	80.97	234.00
Europe-S.A.W.C.	0	1	7	2.41	3.82	5.67	9.00	76.82	82.00	6.74	82.00
Oceania-U.S.E.C.	4	57	862	2.41	3.62	9.65	14.50	75.10	85.98	14.48	85.98
S.A.E.C.-Asia	2	30	519	2.41	3.83	13.23	21.00	89.83	107.00	19.12	107.00
S.A.E.C.-C.A.W.C.	12	32	492	2.41	7.30	7.92	24.00	115.30	132.00	14.48	132.00
U.S.E.C.-Asia	3	41	1,929	2.41	3.86	30.77	49.29	94.04	139.47	48.31	139.47
U.S.E.C.-C.A.W.C.	0	1	76	2.41	7.30	55.10	167.00	66.30	226.00	240.85	226.00
U.S.E.C.-S.A.W.C.	1	2	95	2.41	7.30	26.40	80.00	109.30	182.00	66.51	182.00
Subtotal	104	1,071	51,039	2.41	3.99	32.59	53.99	44.45	96.49	117.06	96.49
Passenger Ships											
Non-Diverted Transits											
North-Bound	197	0	2,354	2.41	0.00	2.01	0.00	0.00	0.00	0.00	0.00
South-Bound	238	0	4,340	2.41	0.00	2.01	0.00	0.00	0.00	0.00	0.00
Subtotal	435	0	6,694	2.41	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Refrigerated Ships											
Non-Diverted Transits											
Africa-C.A.W.C.	0	0	81	2.41	4.00	65.27	108.40	120.20	224.60	86.85	224.60
Africa-S.A.W.C.	49	21	23,947	2.41	3.94	47.57	77.81	154.50	228.37	47.81	228.37
Asia-C.A.E.C.	25	95	9,946	2.41	3.86	32.49	52.00	131.86	180.00	36.51	180.00
Asia-U.S.E.C.	1	0	289	2.41	4.00	40.96	68.00	149.60	213.60	42.78	213.60
C.A.W.C.-Africa	2	7	1,124	2.41	4.00	65.29	108.40	120.20	224.60	86.85	224.60

(Continued)

Table A-16. Laden Transits, Tons Carried, and Toll Revenue, Maximum Non-Diverting Toll Rates, Status Quo Scenario, 2060, by Ship Type, Diversion Status, and Trade Route (1990 US$, except when noted)(continued)

Ship Type, Diversion Status, and Trade Route	Transits	Cargo Tonnage Carried (thousands)	Revenue (thousands) a/	Current Toll Schedule: Toll Per Panama Canal Net Ton	Current Toll Schedule: Toll Per Cargo Ton Carried	New Toll Schedule: Toll Per Panama Canal Net Ton	New Toll Schedule: Toll Per Cargo Ton Carried	Total Transportation Costs per Ton Carried, Via Panama Canal: With Current Toll Structure	Total Transportation Costs per Ton Carried, Via Panama Canal: With New Toll Structure	Total Transportation Costs per Ton Carried, Via Panama Canal: Percent Increase	Total Transportation Costs per Ton Carried: Via Least Costly Alternative Route
Refrigerated Ships (continued)											
Non-Diverted Transits (continued)											
C.A.W.C.-Canada E.C.	1	5	289	2.41	4.00	53.12	88.20	79.20	163.40	106.31	163.40
C.A.W.C.-C.A.E.C.	39	294	24,922	2.41	3.86	51.87	83.00	52.86	132.00	149.73	132.00
C.A.W.C.-Europe	276	1,493	129,159	2.41	3.86	38.12	61.00	92.86	150.00	61.54	150.00
C.A.W.C.-S.A.E.C.	2	9	118	2.41	4.00	7.59	12.60	94.40	103.00	9.11	103.00
C.A.W.C.-U.S.E.C.	1	2	661	2.41	4.00	60.47	100.40	64.00	160.40	150.62	160.40
Canada E.C.-Asia	15	92	1,705	2.41	4.00	12.53	20.80	165.80	182.60	10.13	182.60
Canada E.C.-C.A.W.C.	11	31	6,727	2.41	3.86	50.62	81.00	71.86	149.00	107.36	149.00
Canada W.C.-Europe	4	45	1,739	2.41	3.86	38.12	61.00	132.86	190.00	43.01	190.00
C.A.E.C.-Asia	13	37	4,632	2.41	3.93	34.56	56.34	144.92	197.33	36.17	197.33
C.A.E.C.-C.A.W.C.	43	11	27,486	2.41	3.86	51.87	83.00	52.86	132.00	149.73	132.00
C.A.E.C.-S.A.W.C.	93	82	25,028	2.41	3.86	21.87	35.00	75.86	107.00	41.06	107.00
Europe-C.A.W.C.	308	26	231,015	2.41	3.86	61.24	98.00	92.86	187.00	101.39	187.00
Europe-Canada W.C.	1	1	355	2.41	4.00	37.83	62.80	145.60	204.40	40.38	204.40
Europe-S.A.W.C.	295	278	23,810	2.41	3.88	6.93	11.16	119.82	127.10	6.08	127.10
Europe-U.S.W.C.	18	16	6,112	2.41	4.00	36.62	60.80	135.40	192.20	41.95	192.20
Middle East-S.A.W.C.	3	6	465	2.41	4.00	18.91	31.40	138.00	165.40	19.85	165.40
Oceania-C.A.E.C.	6	50	1,569	2.41	4.00	26.26	43.60	157.20	196.80	25.19	196.80
Oceania-U.S.E.C.	53	207	8,296	2.41	3.98	16.34	27.02	160.43	183.47	14.36	183.47
S.A.E.C.-Asia	12	62	1,914	2.41	4.00	17.71	29.40	146.60	172.00	17.33	172.00
S.A.W.C.-C.A.E.C.	40	241	10,565	2.41	3.86	21.97	35.23	76.48	107.85	41.01	107.85
S.A.W.C.-Europe	1,101	6,815	86,297	2.41	3.89	6.91	11.16	119.88	127.15	6.06	127.15
S.A.W.C.-U.S.E.C.	808	3,821	255,421	2.41	3.88	27.00	43.45	82.93	122.50	47.72	122.50
U.S.E.C.-Asia	46	189	21,080	2.41	3.87	39.22	63.06	139.10	198.29	42.55	198.29

(Continued)

Table A-16. Laden Transits, Tons Carried, and Toll Revenue, Maximum Non-Diverting Toll Rates, Status Quo Scenario, 2060, by Ship Type, Diversion Status, and Trade Route (1990 US$, except when noted)(continued)

Ship Type, Diversion Status, and Trade Route	Transits	Cargo Tonnage Carried (thousands)	Revenue (thousands) a/	Current Toll Schedule: Toll Per Panama Canal Net Ton	Current Toll Schedule: Toll Per Cargo Ton Carried	New Toll Schedule: Toll Per Panama Canal Net Ton	New Toll Schedule: Toll Per Cargo Ton Carried	Total Transportation Costs per Ton Carried: Via Panama Canal: With Current Toll Structure	Total Transportation Costs per Ton Carried: Via Panama Canal: With New Toll Structure	Total Transportation Costs per Ton Carried: Via Panama Canal: Percent Increase	Total Transportation Costs per Ton Carried: Via Least Costly Alternative Route
Refrigerated Ships (continued)											
Non-Diverted Transits (continued)											
U.S.E.C.-C.A.W.C.	70	196	49,049	2.41	3.86	57.49	92.00	57.86	146.00	152.35	146.00
U.S.E.C.-S.A.W.C.	423	892	136,523	2.41	3.87	26.89	43.14	82.19	121.46	47.79	121.46
U.S.W.C.-Europe	140	804	52,599	2.41	3.95	36.87	60.42	134.45	190.92	42.00	190.92
Subtotal	3,897	15,828	1,142,924	2.41	3.88	25.25	40.66	105.39	134.40	27.52	134.40
Roll-On Roll-Off											
Non-Diverted Transits											
Asia-Canada E.C.	3	15	434	2.41	9.35	8.99	34.88	298.90	324.43	8.54	324.43
Asia-C.A.E.C.	32	633	13,191	2.41	7.92	11.98	39.41	236.83	268.32	13.29	268.32
Asia-U.S.E.C.	67	1,286	42,741	2.41	7.95	19.19	63.32	248.85	304.22	22.25	304.22
C.A.W.C.-Europe	33	177	16,323	2.41	8.66	25.04	90.00	198.66	280.00	40.94	280.00
C.A.W.C.-S.A.E.C.	0	0	3	2.41	8.66	2.23	8.00	211.66	211.00	-0.31	211.00
C.A.W.C.-U.S.E.C.	3	1	1,568	2.41	8.66	30.89	111.00	170.66	273.00	59.97	273.00
Canada E.C.-Asia	17	85	1,586	2.41	9.30	6.27	24.20	355.27	370.17	4.19	370.17
Canada W.C.-C.A.E.C.	0	1	222	2.41	10.19	38.94	164.71	239.87	394.39	64.42	394.39
C.A.E.C.-C.A.W.C.	1	2	447	2.41	9.72	34.37	138.58	167.54	296.40	76.92	296.40
C.A.E.C.-Oceania	7	20	2,524	2.41	8.66	18.09	65.00	275.66	332.00	20.44	332.00
C.A.E.C.-S.A.W.C.	85	149	13,343	2.41	10.19	13.58	57.43	232.93	280.17	20.28	280.17
Europe-C.A.W.C.	35	221	30,696	2.41	8.66	44.52	160.00	198.66	350.00	76.18	350.00
Europe-S.A.W.C.	0	0	17	2.41	8.67	13.63	49.00	262.67	303.00	15.36	303.00
Europe-U.S.W.C.	1	3	319	2.41	8.66	26.71	96.00	262.66	350.00	33.25	350.00
Oceania-C.A.E.C.	0	0	6	2.41	7.97	14.16	46.80	234.97	273.80	16.53	273.80
S.A.W.C.-C.A.E.C.	22	44	3,451	2.41	10.19	13.58	57.43	232.93	280.17	20.28	280.17

(Continued)

Table A-16. Laden Transits, Tons Carried, and Toll Revenue, Maximum Non-Diverting Toll Rates, Status Quo Scenario, 2060, by Ship Type, Diversion Status, and Trade Route (1990 US$, except when noted)(continued)

Ship Type, Diversion Status, and Trade Route	Transits	Cargo Tonnage Carried (thousands)	Revenue (thousands) a/	Current Toll Schedule: Toll Per Panama Canal Net Ton	Current Toll Schedule: Toll Per Cargo Ton Carried	New Toll Schedule: Toll Per Panama Canal Net Ton	New Toll Schedule: Toll Per Cargo Ton Carried	Total Transportation Costs per Ton Carried, Via Panama Canal: With Current Toll Structure	Total Transportation Costs per Ton Carried, Via Panama Canal: With New Toll Structure	Total Transportation Costs per Ton Carried, Via Panama Canal: Percent Increase	Total Transportation Costs per Ton Carried: Via Least Costly Alternative Route
Roll-On Roll-Off (continued)											
Non-Diverted Transits (continued)											
S.A.W.C.-Europe	2	5	533	2.41	8.66	15.86	57.00	262.66	311.00	18.40	311.00
S.A.W.C.-U.S.E.C.	12	25	2,533	2.41	10.19	18.27	77.28	224.99	292.08	29.82	292.08
U.S.E.C.-Asia	14	93	6,951	2.41	8.64	24.75	88.72	298.20	378.28	26.85	378.28
U.S.E.C.-C.A.W.C.	4	7	3,067	2.41	8.66	38.12	137.00	144.66	273.00	88.72	273.00
U.S.E.C.-S.A.W.C.	57	101	12,094	2.41	10.19	18.27	77.28	224.99	292.08	29.82	292.08
U.S.W.C.-Canada E.C.	1	2	315	2.41	10.20	38.00	160.77	263.70	414.27	57.10	414.27
U.S.W.C.-C.A.E.C.	2	48	2,021	2.41	7.75	24.74	79.57	160.82	232.64	44.66	232.64
U.S.W.C.-Europe	0	1	20	2.41	7.77	19.42	62.59	212.68	267.50	25.78	267.50
U.S.W.C.-U.S.E.C.	0	9	481	2.41	7.86	31.95	104.20	159.45	255.79	60.42	255.79
Subtotal	397	2,929	154,889	2.41	8.68	20.03	72.15	240.41	299.62	24.63	299.62
Tankers											
Non-Diverted Transits											
C.A.W.C.-Africa	0	0	80	2.41	1.27	104.50	55.00	46.27	100.00	116.13	100.00
C.A.W.C.-Canada E.C.	0	8	153	2.41	1.27	33.96	17.88	12.21	28.82	136.06	28.82
C.A.W.C.-C.A.E.C.	16	95	7,356	2.41	1.27	49.40	26.00	10.26	34.99	241.09	34.99
C.A.W.C.-Europe	4	94	1,475	2.41	1.27	24.59	12.94	17.17	28.84	67.98	28.84
C.A.W.C.-U.S.E.C.	10	80	4,842	2.41	1.27	52.15	27.45	11.18	37.36	234.21	37.36
Canada W.C.-U.S.E.C.	6	255	4,117	2.41	1.28	25.85	13.75	13.76	26.23	90.60	26.23
C.A.E.C.-C.A.W.C.	46	750	20,005	2.41	1.27	31.52	16.59	7.38	22.70	207.65	22.70
C.A.E.C.-U.S.W.C.	5	228	3,269	2.41	1.28	24.13	12.77	11.94	23.43	96.30	23.43
Europe-C.A.W.C.	17	81	3,103	2.41	1.27	40.09	21.10	24.95	44.78	79.49	44.78
Europe-U.S.W.C.	4	109	1,342	2.41	1.27	20.88	10.99	22.50	32.22	43.21	32.22

(Continued)

Table A-16. Laden Transits, Tons Carried, and Toll Revenue, Maximum Non-Diverting Toll Rates, Status Quo Scenario, 2060, by Ship Type, Diversion Status, and Trade Route (1990 US$, except when noted)(continued)

Ship Type, Diversion Status, and Trade Route	Transits	Cargo Tonnage Carried (thousands)	Revenue (thousands) a/	Current Toll Schedule: Toll Per Panama Canal Net Ton	Current Toll Schedule: Toll Per Cargo Ton Carried	New Toll Schedule: Toll Per Panama Canal Net Ton	New Toll Schedule: Toll Per Cargo Ton Carried	Total Transportation Costs per Ton Carried: Via Panama Canal: With Current Toll Structure	Via Panama Canal: With New Toll Structure	Via Panama Canal: Percent Increase	Via Least Costly Alternative Route
Tankers (continued)											
Non-Diverted Transits (continued)											
S.A.W.C.-Europe	19	173	718	2.41	1.27	6.86	3.61	28.01	30.35	8.36	30.35
U.S.E.C.-Asia	92	2,946	37,381	2.41	1.28	20.83	11.10	22.72	32.54	43.19	32.54
U.S.E.C.-C.A.W.C.	14	260	7,635	2.41	1.27	38.36	20.19	9.23	28.15	205.03	28.15
U.S.E.C.-Canada W.C.	2	7	1,034	2.41	1.27	35.87	18.88	18.17	35.78	96.94	35.78
U.S.E.C.-Oceania	4	129	806	2.41	1.27	10.34	5.44	26.02	30.19	16.03	30.19
U.S.E.C.-U.S.W.C.	21	601	13,322	2.41	1.27	34.36	18.16	14.06	30.95	120.07	30.95
U.S.W.C.-C.A.E.C.	3	96	1,551	2.41	1.30	23.22	12.49	11.94	23.13	93.78	23.13
U.S.W.C.-U.S.E.C.	4	102	2,324	2.41	1.29	31.83	17.01	13.38	29.10	117.53	29.10
Subtotal	266	6,016	110,515	2.41	1.28	26.88	14.25	18.03	30.23	67.65	30.23
Vehicle Carriers											
Non-Diverted Transits											
Asia-C.A.E.C.	13	34	3,918	2.41	29.09	8.97	108.30	417.18	496.39	18.99	496.39
Asia-S.A.E.C.	0	0	7	2.41	29.13	1.11	13.44	484.18	468.49	-3.24	468.49
Asia-U.S.E.C.	481	2,251	155,583	2.41	29.20	8.74	105.94	439.57	516.31	17.46	516.31
C.A.W.C.-C.A.E.C.	3	3	995	2.41	28.71	17.07	203.34	266.36	440.99	65.56	440.99
Canada E.C.-Asia	1	3	35	2.41	29.22	1.65	20.00	465.22	456.00	-1.98	456.00
C.A.E.C.-C.A.W.C.	8	3	4,415	2.41	29.22	13.86	168.00	272.22	411.00	50.98	411.00
C.A.E.C.-Oceania	1	0	237	2.41	29.22	6.35	77.00	434.22	482.00	11.00	482.00
Europe-Canada W.C.	7	16	2,879	2.41	30.90	7.95	101.96	386.38	457.44	18.39	457.44
Europe-U.S.W.C.	156	299	46,872	2.41	29.95	6.91	85.91	403.00	458.96	13.89	458.96
S.A.W.C.-C.A.E.C.	0	0	29	2.41	28.70	7.14	85.00	323.70	380.00	17.39	380.00
U.S.E.C.-Asia	42	192	17,406	2.41	29.67	10.07	124.04	415.80	510.17	22.70	510.17

(Continued)

Table A-16. Laden Transits, Tons Carried, and Toll Revenue, Maximum Non-Diverting Toll Rates, Status Quo Scenario, 2060, by Ship Type, Diversion Status, and Trade Route (1990 US$, except when noted)(continued)

Ship Type, Diversion Status, and Trade Route	Transits	Cargo Tonnage Carried (thousands)	Revenue (thousands) a/	Current Toll Schedule: Toll Per Panama Canal Net Ton	Current Toll Schedule: Toll Per Cargo Ton Carried	New Toll Schedule: Toll Per Panama Canal Net Ton	New Toll Schedule: Toll Per Cargo Ton Carried	Total Transportation Costs per Ton Carried, Via Panama Canal: With Current Toll Structure	Total Transportation Costs per Ton Carried, Via Panama Canal: With New Toll Structure	Total Transportation Costs per Ton Carried, Via Panama Canal: Percent Increase	Total Transportation Costs per Ton Carried: Via Least Costly Alternative Route
Vehicle Carriers (continued)											
Non-Diverted Transits (continued)											
U.S.E.C.-Oceania	13	30	1,940	2.41	29.22	4.04	49.00	433.22	453.00	4.57	453.00
Subtotal	724	2,831	234,314	2.41	29.42	8.36	102.08	433.13	508.34	17.37	508.34
Total Non-Diverting	14,750	248,993	5,181,760	2.41	2.22	19.96	18.40	64.16	79.44	23.81	79.44

Notes: These calculations do not include all transits and tons carried forecast by the WEFA Group. For some ship-type and trade-route combinations (accounting for a total of 13 transits and 219227 tons), vessel costs were not available for every DWT size interval. As a result, these transits and tons were excluded. In addition, for 934 transits and 22985287 tons, the cost by way of the Panama Canal without a toll was higher than the least costly alternative route. As a result, these transits and tons were excluded. Percentages may not calculate exactly as shown due to rounding. A fee of $0.40 per Panama Canal net ton has also been included to account for charges such as handling and agency fees incurred when transitting the Canal. The extra fee is only used to determine divesion status by adding it to the cost per ton carried and is not included in the revenue calculations.

a/ Revenue lost from diversions is measured as the revenue generated by the maximum, nondiverting toll rate increase.

Source: Nathan Associates Inc., based on forecasts of traffic and transportation costs provided by the WEFA Group.

MAXIMUM NON-DIVERTING TOLL RATES, 150,000-DWT SCENARIO, 2060

Table A-17. Laden Transits, Tons Carried, and Toll Revenue, Maximum Non-Diverting Toll Rates, 150,000 DWT Scenario, 2060, by Ship Type

	Transits				Tons Carried(thousands)				Revenue(1990 US$thousands)			
Ship Type	Canal	Diverted	Total	Diverted as a Percent of Total	Canal	Diverted	Total	Diverted as a Percent of Total	Canal	Lost a/	Total	Lost as a Percent of Total
Container-Breakbulk	2,465	0	2,465	0.00	36,996	0	36,996	0.00	975,169	0	975,169	0.00
Dry Bulk Carriers	5,044	0	5,044	0.00	274,199	0	274,199	0.00	1,870,260	0	1,870,260	0.00
Chemical Tankers	1,224	0	1,224	0.00	32,988	0	32,988	0.00	589,664	0	589,664	0.00
Full Container Ships	1,470	0	1,470	0.00	31,786	0	31,786	0.00	630,157	0	630,157	0.00
General Cargo Ships	1,464	0	1,464	0.00	13,991	0	13,991	0.00	372,104	0	372,104	0.00
Liquid Gas Carriers	104	0	104	0.00	1,071	0	1,071	0.00	51,039	0	51,039	0.00
Passenger Ships	435	0	435	0.00	0	0	0	0.00	6,694	0	6,694	0.00
Refrigerated Ships	3,983	0	3,983	0.00	16,260	0	16,260	0.00	1,158,732	0	1,158,732	0.00
Roll-On Roll-Off	400	0	400	0.00	2,990	0	2,990	0.00	155,074	0	155,074	0.00
Tankers	589	0	589	0.00	27,821	0	27,821	0.00	181,280	0	181,280	0.00
Vehicle Carriers	724	0	724	0.00	2,831	0	2,831	0.00	234,314	0	234,314	0.00
Total	17,904	0	17,904	0.00	440,934	0	440,934	0.00	6,224,487	0	6,224,487	0.00

Notes: These calculations do not include all transits and tons carried forecast by the WEFA Group. For some ship-type and trade-route combinations (accounting for a total of 27 transits and 291695 tons), vessel costs were not available for every DWT size interval. As a result, these transits and tons were excluded. In addition, for 2536 transits and 56215466 tons, the cost by way of the Panama Canal without a toll was higher than the least costly alternative route. As a result, these transits and tons were excluded. A fee of $0.40 per Panama Canal net ton has also been included to account for charges such as handling and agency fees incurred when transitting the Canal. The extra fee is only used to determine diversion status by adding it to cost per ton carried and is not included in the revenue calculations.

a/ Revenue lost from diversions is measured as the revenue generated by the maximum, nondiverting toll rate increase.

Source: Nathan Associates Inc., based on forecasts of traffic and transportation costs provided by The WEFA Group.

Table A-18. Ballast Transits, Tons Carried, and Toll Revenue, Current Toll Structure and Rates, 150,000 DWT Scenario, 2060, by Ship Type

	Transits				Tons Carried(thousands)				Revenue(1990 US$thousands)			
Ship Type	Canal	Diverted	Total	Diverted as a Percent of Total	Canal	Diverted	Total	Diverted as a Percent of Total	Canal	Lost	Total	Lost as a Percent of Total
Container-Breakbulk	67	0	67	0.00	0	0	0	0.00	1,629	0	1,629	0.00
Dry Bulk Carriers	342	0	342	0.00	0	0	0	0.00	10,895	0	10,895	0.00
Chemical Tankers	127	0	127	0.00	0	0	0	0.00	3,447	0	3,447	0.00
Full Container Ships	6	0	6	0.00	0	0	0	0.00	260	0	260	0.00
General Cargo Ships	274	0	274	0.00	0	0	0	0.00	3,023	0	3,023	0.00
Liquid Gas Carriers	958	0	958	0.00	0	0	0	0.00	48,680	0	48,680	0.00
Passenger Ships	51	0	51	0.00	0	0	0	0.00	664	0	664	0.00
Refrigerated Ships	1,069	0	1,069	0.00	0	0	0	0.00	18,983	0	18,983	0.00
Roll-On Roll-Off	58	0	58	0.00	0	0	0	0.00	1,716	0	1,716	0.00
Tankers	305	0	305	0.00	0	0	0	0.00	15,991	0	15,991	0.00
Vehicle Carriers	441	0	441	0.00	0	0	0	0.00	26,043	0	26,043	0.00
Total	3,698	0	3,698	0.00	0	0	0	0.00	131,331	0	131,331	0.00

Note: Diversions of ballast transits are computed by diverting a proportion of ballast transits equal to lost revenue as a percent of total potential revenue for a particular laden ship type. See last column on previous table.

Source: Nathan Associates Inc., based on forecasts of traffic and transportation costs provided by The WEFA Group.

Table A-19. Laden Transits, Tons Carried, and Toll Revenue, Maximum Non-Diverting Toll Rates, 150,000 DWT Scenario, 2060, by Ship Type, Diversion Status, and Trade Route (1990 US$, except when noted)

Ship Type, Diversion Status, and Trade Route	Transits	Cargo Tonnage Carried (thousands)	Revenue (thousands) a/	Current Toll Schedule: Toll Per Panama Canal Net Ton	Current Toll Schedule: Toll Per Cargo Ton Carried	New Toll Schedule: Toll Per Panama Canal Net Ton	New Toll Schedule: Toll Per Cargo Ton Carried	Total Transportation Costs per Ton Carried: Via Panama Canal: With Current Toll Structure	Total Transportation Costs per Ton Carried: Via Panama Canal: With New Toll Structure	Total Transportation Costs per Ton Carried: Via Panama Canal: Percent Increase	Total Transportation Costs per Ton Carried: Via Least Costly Alternative Route
Container-Breakbulk											
Non-Diverted Transits											
Africa-C.A.W.C.	6	185	5,988	2.41	1.85	63.31	48.70	72.26	119.11	64.83	119.11
Africa-Canada W.C.	0	5	126	2.41	1.87	21.20	16.43	92.01	106.57	15.83	106.57
Africa-U.S.W.C.	2	25	614	2.41	1.87	21.47	16.64	93.01	107.78	15.88	107.78
Asia-Canada E.C.	1	8	131	2.41	1.86	12.63	9.77	93.05	100.96	8.50	100.96
Asia-C.A.E.C.	135	1,246	40,468	2.41	1.87	22.88	17.71	97.20	113.04	16.30	113.04
Asia-S.A.E.C.	48	305	3,072	2.41	1.87	5.16	4.00	105.12	107.25	2.03	107.25
Asia-U.S.E.C.	139	1,759	65,504	2.41	1.86	33.64	25.98	99.37	123.49	24.27	123.49
C.A.W.C.-Africa	6	112	4,726	2.41	1.87	68.57	53.19	76.03	127.35	67.50	127.35
C.A.W.C.-C.A.E.C.	16	247	11,229	2.41	1.86	54.75	42.34	51.25	91.73	78.97	91.73
C.A.W.C.-Europe	41	304	22,101	2.41	1.87	41.01	31.78	65.68	95.59	45.54	95.59
C.A.W.C.-S.A.E.C.	23	10	2,492	2.41	1.87	8.86	6.87	72.11	77.11	6.93	77.11
C.A.W.C.-U.S.E.C.	7	40	4,374	2.41	1.87	52.14	40.45	57.32	95.90	67.31	95.90
Canada E.C.-Asia	31	815	3,487	2.41	1.85	6.50	5.00	95.14	98.29	3.31	98.29
Canada E.C.-C.A.W.C.	3	25	1,788	2.41	1.87	55.37	42.92	55.94	96.99	73.39	96.99
Canada E.C.-Oceania	2	25	71	2.41	1.87	3.68	2.85	107.65	108.63	0.91	108.63
Canada E.C.-S.A.W.C.	1	17	269	2.41	1.85	20.60	15.85	65.70	79.70	21.30	79.70
Canada E.C.-U.S.W.C.	0	0	5	2.41	1.86	52.65	40.71	72.57	111.42	53.53	111.42
Canada W.C.-Africa	29	662	8,232	2.41	1.85	19.42	14.94	93.53	106.62	13.99	106.62
Canada W.C.-Europe	107	3,116	73,903	2.41	1.85	38.57	29.67	81.19	109.01	34.26	109.01
Canada W.C.-S.A.E.C.	22	421	14,759	2.41	1.87	54.55	42.32	74.11	114.56	54.58	114.56
Canada W.C.-U.S.E.C.	15	303	11,863	2.41	1.85	54.60	42.00	67.85	108.00	59.17	108.00
C.A.E.C.-Asia	13	270	3,685	2.41	1.87	22.64	17.54	96.31	111.98	16.27	111.98
C.A.E.C.-C.A.W.C.	13	49	9,492	2.41	1.87	57.60	44.65	52.15	94.93	82.04	94.93

(Continued)

Table A-19. Laden Transits, Tons Carried, and Toll Revenue, Maximum Non-Diverting Toll Rates, 150,000 DWT Scenario, 2060, by Ship Type, Diversion Status, and Trade Route (1990 US$, except when noted)(continued)

Ship Type, Diversion Status, and Trade Route	Transits	Cargo Tonnage Carried (thousands)	Revenue (thousands) a/	Current Toll Schedule: Toll Per Panama Canal Net Ton	Current Toll Schedule: Toll Per Cargo Ton Carried	New Toll Schedule: Toll Per Panama Canal Net Ton	New Toll Schedule: Toll Per Cargo Ton Carried	Total Transportation Costs per Ton Carried, Via Panama Canal: With Current Toll Structure	Total Transportation Costs per Ton Carried, Via Panama Canal: With New Toll Structure	Total Transportation Costs per Ton Carried, Via Panama Canal: Percent Increase	Total Transportation Costs per Ton Carried: Via Least Costly Alternative Route
Container-Breakbulk (continued)											
Non-Diverted Transits (continued)											
C.A.E.C.-Canada W.C.	4	59	2,641	2.41	1.87	54.00	41.86	66.58	106.57	60.07	106.57
C.A.E.C.-Oceania	2	38	807	2.41	1.87	26.43	20.49	94.01	112.63	19.81	112.63
C.A.E.C.-S.A.W.C.	37	286	10,105	2.41	1.87	21.47	16.64	64.73	79.50	22.82	79.50
C.A.E.C.-U.S.W.C.	6	112	3,641	2.41	1.86	45.78	35.37	64.27	97.78	52.13	97.78
Europe-C.A.W.C.	44	271	38,633	2.41	1.87	69.02	53.50	66.79	118.42	77.31	118.42
Europe-Canada W.C.	7	217	4,980	2.41	1.85	34.05	26.19	83.24	107.58	29.23	107.58
Europe-S.A.W.C.	182	1,504	49,698	2.41	1.87	21.27	16.49	90.01	104.63	16.24	104.63
Europe-U.S.W.C.	36	1,115	24,784	2.41	1.85	35.46	27.28	82.41	107.84	30.85	107.84
Oceania-Canada E.C.	4	88	226	2.41	1.85	2.60	2.00	97.85	98.00	0.15	98.00
Oceania-C.A.E.C.	10	99	3,222	2.41	1.87	26.70	20.71	94.77	113.61	19.88	113.61
S.A.E.C.-C.A.W.C.	16	252	1,838	2.41	1.87	8.76	6.79	71.65	76.57	6.87	76.57
S.A.E.C.-Canada W.C.	25	335	3,290	2.41	1.87	10.14	7.86	92.79	98.78	6.46	98.78
S.A.E.C.-U.S.W.C.	84	1,260	6,524	2.41	1.87	5.92	4.58	78.16	80.87	3.47	80.87
S.A.W.C.-Africa	3	52	1,714	2.41	1.87	50.85	39.45	82.90	120.48	45.33	120.48
S.A.W.C.-Canada E.C.	1	2	324	2.41	1.87	22.66	17.58	69.19	84.90	22.71	84.90
S.A.W.C.-C.A.E.C.	26	206	6,847	2.41	1.87	21.64	16.79	65.19	80.11	22.89	80.11
S.A.W.C.-Europe	329	5,753	99,974	2.41	1.87	24.00	18.60	89.68	106.41	18.66	106.41
S.A.W.C.-U.S.E.C.	239	2,340	81,376	2.41	1.87	27.43	21.28	62.12	81.53	31.25	81.53
U.S.E.C.-Asia	284	7,177	150,920	2.41	1.86	32.35	24.92	96.15	119.21	23.99	119.21
U.S.E.C.-C.A.W.C.	22	446	18,049	2.41	1.86	61.35	47.45	47.68	93.27	95.60	93.27
U.S.E.C.-S.A.W.C.	347	3,443	121,763	2.41	1.87	27.15	21.04	61.84	81.01	31.00	81.01
U.S.E.C.-U.S.W.C.	0	0	10	2.41	1.86	53.02	41.00	58.86	98.00	66.49	98.00
U.S.W.C.-Africa	22	367	11,345	2.41	1.85	25.05	19.27	85.43	102.85	20.39	102.85

(Continued)

Table A-19. Laden Transits, Tons Carried, and Toll Revenue, Maximum Non-Diverting Toll Rates, 150,000 DWT Scenario, 2060, by Ship Type, Diversion Status, and Trade Route (1990 US$, except when noted)(continued)

Ship Type, Diversion Status, and Trade Route	Transits	Cargo Tonnage Carried (thousands)	Revenue (thousands) a/	Current Toll Schedule: Toll Per Panama Canal Net Ton	Current Toll Schedule: Toll Per Cargo Ton Carried	New Toll Schedule: Toll Per Panama Canal Net Ton	New Toll Schedule: Toll Per Cargo Ton Carried	Total Transportation Costs per Ton Carried: Via Panama Canal: With Current Toll Structure	Via Panama Canal: With New Toll Structure	Via Panama Canal: Percent Increase	Via Least Costly Alternative Route
Container-Breakbulk (continued)											
Non-Diverted Transits (continued)											
U.S.W.C.-Canada E.C.	1	33	914	2.41	1.85	49.40	38.00	69.85	106.00	51.75	106.00
U.S.W.C.-C.A.E.C.	19	135	11,321	2.41	1.87	47.69	36.98	66.46	101.57	52.83	101.57
U.S.W.C.-Europe	51	1,343	30,940	2.41	1.86	34.81	26.80	83.60	108.54	29.84	108.54
U.S.W.C.-S.A.E.C.	6	104	458	2.41	1.87	6.28	4.87	79.98	82.98	3.75	82.98
U.S.W.C.-U.S.E.C.	0	6	445	2.41	1.85	56.57	43.54	60.33	102.02	69.09	102.02
Subtotal	2,465	36,996	975,169	2.41	1.86	28.50	22.04	83.70	104.44	24.78	104.44
Dry Bulk Carriers											
Non-Diverted Transits											
Africa-C.A.W.C.	29	1,201	14,676	2.41	1.30	24.15	13.07	15.34	27.11	76.68	27.11
Africa-Canada W.C.	156	7,645	24,284	2.41	1.28	6.51	3.45	17.82	19.99	12.20	19.99
Africa-S.A.W.C.	9	313	3,217	2.41	1.30	17.20	9.31	18.13	26.14	44.15	26.14
Africa-U.S.W.C.	10	297	2,325	2.41	1.27	9.56	5.04	16.17	19.94	23.31	19.94
Asia-Canada E.C.	15	695	1,732	2.41	1.25	4.10	2.13	17.55	18.43	5.00	18.43
Asia-C.A.E.C.	29	527	8,004	2.41	1.30	12.73	6.85	18.85	24.40	29.47	24.40
Asia-S.A.E.C.	5	172	202	2.41	1.30	1.85	1.00	21.84	21.54	-1.39	21.54
Asia-U.S.E.C.	386	12,134	141,165	2.41	1.27	14.81	7.81	16.62	23.16	39.34	23.16
C.A.W.C.-Africa	2	52	881	2.41	1.29	24.54	13.15	15.32	27.18	77.40	27.18
C.A.W.C.-C.A.E.C.	63	2,167	25,048	2.41	1.30	18.64	10.03	7.57	16.30	115.42	16.30
C.A.W.C.-Europe	19	626	6,230	2.41	1.28	14.39	7.66	12.19	18.57	52.30	18.57
C.A.W.C.-S.A.E.C.	16	268	1,070	2.41	1.30	3.24	1.75	11.59	12.04	3.85	12.04
C.A.W.C.-U.S.E.C.	47	1,854	23,415	2.41	1.29	22.02	11.75	7.69	18.15	136.14	18.15
Canada E.C.-Asia	120	6,018	16,312	2.41	1.19	4.77	2.36	19.24	20.41	6.07	20.41

(Continued)

Table A-19. Laden Transits, Tons Carried, and Toll Revenue, Maximum Non-Diverting Toll Rates, 150,000 DWT Scenario, 2060, by Ship Type, Diversion Status, and Trade Route (1990 US$, except when noted)(continued)

Ship Type, Diversion Status, and Trade Route	Transits	Cargo Tonnage Carried (thousands)	Revenue (thousands) a/	Current Toll Schedule: Toll Per Panama Canal Net Ton	Current Toll Schedule: Toll Per Cargo Ton Carried	New Toll Schedule: Toll Per Panama Canal Net Ton	New Toll Schedule: Toll Per Cargo Ton Carried	Total Transportation Costs per Ton Carried: Via Panama Canal: With Current Toll Structure	Via Panama Canal: With New Toll Structure	Via Panama Canal: Percent Increase	Via Least Costly Alternative Route
Dry Bulk Carriers (continued)											
Non-Diverted Transits (continued)											
Canada E.C.-Oceania	7	132	553	2.41	1.29	3.74	2.00	21.09	21.80	3.37	21.80
Canada E.C.-S.A.W.C.	12	426	2,065	2.41	1.29	7.48	4.00	12.85	15.56	21.10	15.56
Canada W.C.-Africa	175	7,689	26,985	2.41	1.28	6.31	3.36	17.49	19.57	11.87	19.57
Canada W.C.-C.A.E.C.	9	270	3,569	2.41	1.30	18.95	10.25	12.59	21.54	71.04	21.54
Canada W.C.-Europe	304	15,944	106,916	2.41	1.22	12.07	6.13	16.30	21.21	30.09	21.21
Canada W.C.-S.A.E.C.	31	1,820	3,401	2.41	1.13	3.37	1.58	11.79	12.24	3.81	12.24
Canada W.C.-U.S.E.C.	105	3,183	45,617	2.41	1.30	20.88	11.29	13.34	23.33	74.84	23.33
C.A.E.C.-Asia	22	808	5,440	2.41	1.30	12.10	6.55	18.13	23.38	28.93	23.38
C.A.E.C.-C.A.W.C.	49	1,650	19,382	2.41	1.30	19.05	10.31	7.82	16.83	115.10	16.83
C.A.E.C.-Canada W.C.	3	105	1,186	2.41	1.30	19.00	10.28	12.61	21.59	71.16	21.59
C.A.E.C.-Oceania	1	22	127	2.41	1.30	7.39	4.00	19.89	22.59	13.55	22.59
C.A.E.C.-S.A.W.C.	24	734	4,329	2.41	1.30	8.80	4.76	10.61	14.07	32.56	14.07
C.A.E.C.-U.S.W.C.	9	286	3,456	2.41	1.30	19.00	10.28	11.61	20.59	77.28	20.59
Columbia-Asia	3	352	290	2.41	9.87	1.90	7.80	27.57	25.50	-7.52	25.50
Europe-C.A.W.C.	51	1,627	21,507	2.41	1.30	20.46	11.07	12.61	22.38	77.42	22.38
Europe-Canada W.C.	12	408	3,688	2.41	1.28	12.81	6.79	16.56	22.07	33.29	22.07
Europe-S.A.W.C.	16	514	781	2.41	1.30	2.29	1.24	16.13	16.07	-0.40	16.07
Europe-U.S.W.C.	142	4,679	40,950	2.41	1.28	12.12	6.42	15.66	20.80	32.85	20.80
Middle East-S.A.W.C.	2	104	334	2.41	1.25	5.81	3.00	14.08	15.83	12.47	15.83
Oceania-Canada E.C.	23	859	1,782	2.41	1.30	3.70	2.00	20.84	21.54	3.34	21.54
Oceania-C.A.E.C.	14	469	2,613	2.41	1.30	8.78	4.75	19.09	22.54	18.05	22.54
Oceania-U.S.E.C.	36	2,218	7,243	2.41	1.23	5.90	3.00	15.65	17.42	11.34	17.42
S.A.E.C.-Asia	60	2,563	9,041	2.41	1.28	6.29	3.33	16.77	18.82	12.25	18.82

(Continued)

Table A-19. Laden Transits, Tons Carried, and Toll Revenue, Maximum Non-Diverting Toll Rates, 150,000 DWT Scenario, 2060, by Ship Type, Diversion Status, and Trade Route (1990 US$, except when noted)(continued)

Ship Type, Diversion Status, and Trade Route	Transits	Cargo Tonnage Carried (thousands)	Revenue (thousands) a/	Current Toll Schedule: Toll Per Panama Canal Net Ton	Current Toll Schedule: Toll Per Cargo Ton Carried	New Toll Schedule: Toll Per Panama Canal Net Ton	New Toll Schedule: Toll Per Cargo Ton Carried	Total Transportation Costs per Ton Carried: Via Panama Canal: With Current Toll Structure	Via Panama Canal: With New Toll Structure	Via Panama Canal: Percent Increase	Via Least Costly Alternative Route
Dry Bulk Carriers (continued)											
Non-Diverted Transits (continued)											
S.A.E.C.-C.A.W.C.	12	441	777	2.41	1.30	3.25	1.76	11.61	12.07	3.92	12.07
S.A.E.C.-Canada W.C.	3	97	247	2.41	1.30	3.70	2.00	17.13	17.83	4.06	17.83
S.A.E.C.-U.S.W.C.	34	1,722	2,129	2.41	1.23	1.95	1.00	13.30	13.07	-1.76	13.07
S.A.W.C.-Africa	5	296	2,260	2.41	1.25	15.99	8.31	14.34	21.40	49.20	21.40
S.A.W.C.-Canada E.C.	1	24	93	2.41	1.30	7.40	4.00	13.34	16.04	20.21	16.04
S.A.W.C.-C.A.E.C.	12	277	2,116	2.41	1.30	8.78	4.75	10.59	14.04	32.54	14.04
S.A.W.C.-Europe	238	9,167	17,460	2.41	1.29	3.34	1.79	15.52	16.02	3.21	16.02
S.A.W.C.-U.S.E.C.	91	3,585	19,562	2.41	1.30	10.20	5.50	11.28	15.48	37.24	15.48
U.S.E.C.-Asia	1,753	139,874	919,063	2.41	1.10	13.06	5.95	17.76	22.61	27.32	22.61
U.S.E.C.-C.A.W.C.	375	14,003	181,746	2.41	1.30	22.72	12.23	7.80	18.73	140.21	18.73
U.S.E.C.-Oceania	23	909	2,853	2.41	1.29	5.60	3.00	19.26	20.97	8.88	20.97
U.S.E.C.-S.A.W.C.	82	2,944	17,781	2.41	1.30	10.13	5.45	11.45	15.60	36.28	15.60
U.S.E.C.-U.S.W.C.	1	0	260	2.41	1.30	22.31	12.07	11.61	22.38	92.70	22.38
U.S.W.C.-Africa	198	9,018	51,270	2.41	1.26	9.47	4.93	15.70	19.37	23.42	19.37
U.S.W.C.-Canada E.C.	5	211	2,188	2.41	1.29	18.36	9.86	13.93	22.50	61.48	22.50
U.S.W.C.-C.A.E.C.	1	30	360	2.41	1.30	18.95	10.25	11.59	20.54	77.17	20.54
U.S.W.C.-Europe	168	9,505	61,856	2.41	1.24	11.77	6.04	14.02	18.82	34.27	18.82
U.S.W.C.-S.A.E.C.	13	436	510	2.41	1.30	1.85	1.00	16.09	15.79	-1.88	15.79
U.S.W.C.-U.S.E.C.	8	215	4,534	2.41	1.28	23.51	12.49	11.92	23.13	94.04	23.13
Venezuela-Asia	5	615	3,380	2.41	0.99	12.69	5.20	19.49	23.70	21.62	23.70
Subtotal	5,044	274,199	1,870,260	2.41	1.18	12.38	6.07	16.23	21.08	29.89	21.08
Chemical Tankers											
Non-Diverted Transits											
Africa-S.A.W.C.	2	59	1,033	2.41	1.34	32.36	18.00	43.34	60.00	38.44	60.00

(Continued)

Table A-19. Laden Transits, Tons Carried, and Toll Revenue, Maximum Non-Diverting Toll Rates, 150,000 DWT Scenario, 2060, by Ship Type, Diversion Status, and Trade Route (1990 US$, except when noted)(continued)

Ship Type, Diversion Status, and Trade Route	Transits	Cargo Tonnage Carried (thousands)	Revenue (thousands) a/	Current Toll Schedule: Toll Per Panama Canal Net Ton	Current Toll Schedule: Toll Per Cargo Ton Carried	New Toll Schedule: Toll Per Panama Canal Net Ton	New Toll Schedule: Toll Per Cargo Ton Carried	Total Transportation Costs per Ton Carried: Via Panama Canal: With Current Toll Structure	Total Transportation Costs per Ton Carried: Via Panama Canal: With New Toll Structure	Total Transportation Costs per Ton Carried: Via Panama Canal: Percent Increase	Total Transportation Costs per Ton Carried: Via Least Costly Alternative Route
Chemical Tankers (continued)											
Non-Diverted Transits (continued)											
Asia-C.A.E.C.	4	50	1,080	2.41	1.34	32.66	18.16	54.00	70.82	31.15	70.82
Asia-S.A.E.C.	4	23	347	2.41	1.34	5.39	3.00	50.34	52.00	3.30	52.00
Asia-U.S.E.C.	39	820	17,181	2.41	1.34	30.93	17.20	43.81	59.67	36.20	59.67
C.A.W.C.-C.A.E.C.	49	306	15,796	2.41	1.34	82.35	45.75	39.39	83.80	112.75	83.80
C.A.W.C.-Europe	9	169	3,286	2.41	1.34	35.23	19.59	38.02	56.27	48.00	56.27
C.A.W.C.-U.S.E.C.	63	885	31,322	2.41	1.34	58.45	32.49	27.74	58.89	112.30	58.89
Canada W.C.-Europe	4	106	1,948	2.41	1.34	28.77	16.00	42.34	57.00	34.62	57.00
Canada W.C.-U.S.E.C.	39	1,042	28,949	2.41	1.34	39.56	22.00	31.94	52.60	64.68	52.60
C.A.E.C.-Asia	9	293	4,057	2.41	1.34	25.17	14.00	42.34	55.00	29.90	55.00
C.A.E.C.-C.A.W.C.	5	115	3,140	2.41	1.34	39.56	22.00	21.34	42.00	96.81	42.00
C.A.E.C.-S.A.W.C.	11	217	2,845	2.41	1.34	20.36	11.32	30.34	40.32	32.89	40.32
C.A.E.C.-U.S.W.C.	2	15	646	2.41	1.34	78.84	43.80	55.94	98.40	75.91	98.40
Europe-C.A.W.C.	10	51	2,414	2.41	1.34	61.29	34.05	60.84	93.55	53.77	93.55
Europe-S.A.W.C.	9	98	516	2.41	1.34	9.34	5.19	58.65	62.50	6.56	62.50
Europe-U.S.W.C.	10	261	4,273	2.41	1.34	28.32	15.75	42.05	56.46	34.27	56.46
Oceania-U.S.E.C.	17	494	3,663	2.41	1.34	10.70	5.95	40.63	45.24	11.35	45.24
S.A.E.C.-C.A.W.C.	10	79	528	2.41	1.34	10.54	5.86	50.34	54.86	8.98	54.86
S.A.E.C.-U.S.W.C.	1	43	91	2.41	1.34	3.60	2.00	30.34	31.00	2.18	31.00
S.A.W.C.-C.A.E.C.	36	134	6,798	2.41	1.34	31.30	17.40	44.18	60.24	36.35	60.24
S.A.W.C.-Europe	12	151	738	2.41	1.34	8.35	4.64	53.51	56.81	6.17	56.81
S.A.W.C.-U.S.E.C.	12	100	3,031	2.41	1.34	29.23	16.25	39.07	53.98	38.16	53.98
U.S.E.C.-Asia	683	23,746	372,042	2.41	1.34	29.13	16.20	41.54	56.40	35.77	56.40
U.S.E.C.-C.A.W.C.	27	238	11,452	2.41	1.34	74.80	41.57	34.18	74.41	117.70	74.41

(Continued)

Table A-19. Laden Transits, Tons Carried, and Toll Revenue, Maximum Non-Diverting Toll Rates, 150,000 DWT Scenario, 2060, by Ship Type, Diversion Status, and Trade Route (1990 US$, except when noted)(continued)

Ship Type, Diversion Status, and Trade Route	Transits	Cargo Tonnage Carried (thousands)	Revenue (thousands) a/	Current Toll Schedule: Toll Per Panama Canal Net Ton	Current Toll Schedule: Toll Per Cargo Ton Carried	New Toll Schedule: Toll Per Panama Canal Net Ton	New Toll Schedule: Toll Per Cargo Ton Carried	Total Transportation Costs per Ton Carried, Via Panama Canal: With Current Toll Structure	Total Transportation Costs per Ton Carried, Via Panama Canal: With New Toll Structure	Total Transportation Costs per Ton Carried, Via Panama Canal: Percent Increase	Total Transportation Costs per Ton Carried: Via Least Costly Alternative Route
Chemical Tankers (continued)											
Non-Diverted Transits (continued)											
U.S.E.C.-Canada W.C.	8	61	2,929	2.41	1.34	83.24	46.25	60.04	104.95	74.80	104.95
U.S.E.C.-Oceania	17	545	3,584	2.41	1.34	11.67	6.49	43.19	48.34	11.92	48.34
U.S.E.C.-S.A.W.C.	53	560	11,140	2.41	1.34	31.09	17.28	41.25	57.19	38.64	57.19
U.S.E.C.-U.S.W.C.	48	1,814	38,931	2.41	1.34	34.44	19.14	25.49	43.29	69.84	43.29
U.S.W.C.-C.A.E.C.	1	12	379	2.41	1.34	37.76	21.00	29.34	49.00	67.01	49.00
U.S.W.C.-Europe	16	266	5,521	2.41	1.34	31.21	17.35	45.29	61.30	35.35	61.30
U.S.W.C.-S.A.E.C.	0	6	13	2.41	1.34	3.60	2.00	38.34	39.00	1.72	39.00
U.S.W.C.-U.S.E.C.	12	233	9,991	2.41	1.34	35.00	19.45	25.79	43.90	70.23	43.90
Subtotal	1,224	32,988	589,664	2.41	1.34	31.04	17.26	39.96	55.77	39.57	55.77
Full Container Ships											
Non-Diverted Transits											
Africa-U.S.W.C.	0	5	123	2.41	4.49	21.90	40.79	247.81	284.11	14.65	284.11
Asia-Canada E.C.	33	739	13,461	2.41	4.70	11.85	23.11	207.29	225.70	8.88	225.70
Asia-S.A.E.C.	4	14	291	2.41	4.49	6.41	11.94	274.66	282.11	2.71	282.11
Asia-U.S.E.C. (low inv. cost)	186	5,208	98,397	2.41	4.92	9.06	18.48	231.70	245.26	5.85	245.26
C.A.W.C.-C.A.E.C.	1	9	995	2.41	4.44	44.74	82.42	130.00	207.98	59.99	207.98
C.A.W.C.-Europe	2	37	2,020	2.41	4.42	31.20	57.25	152.02	204.85	34.75	204.85
C.A.W.C.-S.A.E.C.	0	7	65	2.41	4.44	6.12	11.28	162.41	169.25	4.21	169.25
C.A.W.C.-U.S.E.C.	0	5	304	2.41	4.49	51.76	96.37	161.41	253.29	56.93	253.29
Canada E.C.-Asia	35	658	6,183	2.41	4.55	7.32	13.83	226.90	236.18	4.09	236.18
Canada E.C.-Oceania	23	286	1,594	2.41	4.47	4.12	7.64	257.67	260.84	1.23	260.84
Canada E.C.-U.S.W.C.	8	247	13,691	2.41	4.77	39.91	79.00	154.77	229.00	47.96	229.00

(Continued)

Table A-19. Laden Transits, Tons Carried, and Toll Revenue, Maximum Non-Diverting Toll Rates, 150,000 DWT Scenario, 2060, by Ship Type, Diversion Status, and Trade Route (1990 US$, except when noted)(continued)

Ship Type, Diversion Status, and Trade Route	Transits	Cargo Tonnage Carried (thousands)	Revenue (thousands) a/	Current Toll Schedule: Toll Per Panama Canal Net Ton	Current Toll Schedule: Toll Per Cargo Ton Carried	New Toll Schedule: Toll Per Panama Canal Net Ton	New Toll Schedule: Toll Per Cargo Ton Carried	Total Transportation Costs per Ton Carried: Via Panama Canal: With Current Toll Structure	Via Panama Canal: With New Toll Structure	Via Panama Canal: Percent Increase	Via Least Costly Alternative Route
Full Container Ships (continued)											
Non-Diverted Transits (continued)											
Canada W.C.-Europe	31	511	22,755	2.41	4.51	37.53	70.16	210.71	276.36	31.16	276.36
C.A.E.C.-Asia	8	116	3,862	2.41	4.47	19.17	35.55	213.60	244.68	14.55	244.68
C.A.E.C.-C.A.W.C.	1	7	710	2.41	4.47	52.44	97.22	143.12	235.87	64.81	235.87
C.A.E.C.-Oceania	1	8	283	2.41	4.49	27.25	50.73	250.78	297.02	18.44	297.02
C.A.E.C.-S.A.W.C.	2	10	428	2.41	4.49	21.27	39.64	178.89	214.04	19.65	214.04
C.A.E.C.-U.S.W.C.	2	26	1,545	2.41	4.45	37.90	69.92	152.93	218.40	42.81	218.40
Europe-C.A.W.C.	0	1	160	2.41	4.42	52.00	95.40	152.02	243.00	59.85	243.00
Europe-Canada W.C.	25	336	15,177	2.41	4.47	35.08	65.07	223.81	284.41	27.08	284.41
Europe-S.A.W.C.	81	1,309	41,189	2.41	4.42	19.16	35.15	191.22	221.95	16.07	221.95
Europe-U.S.W.C.	140	3,123	33,249	2.41	4.67	7.51	14.53	205.80	215.66	4.79	215.66
Middle East-U.S.W.C.	15	247	5,585	2.41	4.47	18.25	33.86	218.19	247.58	13.47	247.58
Oceania-Canada E.C.	10	177	108	2.41	4.47	0.58	1.08	251.62	248.23	-1.35	248.23
Oceania-C.A.E.C.	5	64	1,835	2.41	4.49	27.25	50.73	250.78	297.02	18.44	297.02
Oceania-S.A.E.C.	0	2	1	2.41	4.49	0.54	1.00	241.87	238.38	-1.44	238.38
S.A.E.C.-C.A.W.C.	1	8	74	2.41	4.49	7.49	13.94	197.14	206.59	4.79	206.59
S.A.E.C.-U.S.W.C.	2	20	471	2.41	4.49	21.89	40.76	183.23	219.50	19.80	219.50
S.A.W.C.-C.A.E.C.	0	1	70	2.41	4.49	21.27	39.64	178.89	214.04	19.65	214.04
S.A.W.C.-Europe	144	3,081	73,635	2.41	4.42	19.16	35.16	191.21	221.95	16.07	221.95
S.A.W.C.-U.S.E.C.	99	1,047	35,031	2.41	4.49	27.75	51.67	174.32	221.50	27.07	221.50
U.S.E.C.-Asia (low inv. cost)	234	8,718	115,271	2.41	4.88	9.05	18.33	233.14	246.59	5.77	246.59
U.S.E.C.-C.A.W.C.	13	112	10,279	2.41	4.49	62.97	117.25	140.53	253.29	80.24	253.29
U.S.E.C.-S.A.W.C.	117	1,005	41,320	2.41	4.49	27.75	51.67	174.32	221.50	27.07	221.50
U.S.E.C.-U.S.W.C.	1	26	1,748	2.41	4.76	45.48	89.80	138.99	224.03	61.19	224.03

(Continued)

Table A-19. Laden Transits, Tons Carried, and Toll Revenue, Maximum Non-Diverting Toll Rates, 150,000 DWT Scenario, 2060, by Ship Type, Diversion Status, and Trade Route (1990 US$, except when noted)(continued)

Ship Type, Diversion Status, and Trade Route	Transits	Cargo Tonnage Carried (thousands)	Revenue (thousands) a/	Current Toll Schedule: Toll Per Panama Canal Net Ton	Current Toll Schedule: Toll Per Cargo Ton Carried	New Toll Schedule: Toll Per Panama Canal Net Ton	New Toll Schedule: Toll Per Cargo Ton Carried	Total Transportation Costs per Ton Carried: Via Panama Canal: With Current Toll Structure	Via Panama Canal: With New Toll Structure	Via Panama Canal: Percent Increase	Via Least Costly Alternative Route
Full Container Ships (continued)											
Non-Diverted Transits (continued)											
U.S.W.C.-Africa	0	0	2	2.41	4.64	22.85	44.00	193.64	233.00	20.33	233.00
U.S.W.C.-Canada E.C.	0	8	479	2.41	4.57	40.40	76.54	159.49	231.46	45.13	231.46
U.S.W.C.-C.A.E.C.	6	90	5,078	2.41	4.46	41.01	75.91	161.25	232.70	44.31	232.70
U.S.W.C.-Europe	196	3,835	44,345	2.41	4.68	6.99	13.58	208.75	217.65	4.26	217.65
U.S.W.C.-Middle East	25	356	4,046	2.41	4.47	7.89	14.64	219.26	229.43	4.64	229.43
U.S.W.C.-U.S.E.C.	21	326	34,295	2.41	4.65	45.55	87.80	141.16	224.31	58.91	224.31
Subtotal	1,470	31,786	630,157	2.41	4.72	12.73	24.92	214.06	234.53	9.56	234.53
General Cargo Ships											
Non-Diverted Transits											
Africa-C.A.W.C.	3	46	1,728	2.41	1.39	46.36	26.70	31.04	56.35	81.55	56.35
Africa-S.A.W.C.	3	68	1,176	2.41	1.39	30.91	17.80	37.94	54.35	43.26	54.35
Asia-Canada E.C.	0	3	20	2.41	1.39	10.24	5.90	41.94	46.45	10.76	46.45
Asia-C.A.E.C.	127	1,501	35,259	2.41	1.39	24.05	13.85	36.99	49.45	33.69	49.45
Asia-S.A.E.C.	4	25	162	2.41	1.39	3.39	1.95	45.89	46.45	1.23	46.45
Asia-U.S.E.C.	49	632	15,558	2.41	1.39	27.11	15.58	38.14	52.33	37.22	52.33
C.A.W.C.-Africa	7	139	3,889	2.41	1.39	46.36	26.70	31.04	56.35	81.55	56.35
C.A.W.C.-C.A.E.C.	55	243	18,225	2.41	1.46	84.90	51.36	9.72	59.62	513.51	59.62
C.A.W.C.-Europe	51	291	15,495	2.41	1.41	40.77	23.79	29.65	52.03	75.50	52.03
C.A.W.C.-S.A.E.C.	15	99	1,146	2.41	1.41	10.26	5.99	27.71	32.29	16.54	32.29
C.A.W.C.-U.S.E.C.	16	84	6,952	2.41	1.45	106.43	64.11	12.26	74.92	511.01	74.92
Canada E.C.-Asia	10	25	1,206	2.41	1.39	10.25	5.90	41.94	46.45	10.76	46.45
Canada E.C.-C.A.W.C.	2	36	915	2.41	1.39	37.68	21.70	21.19	41.50	95.87	41.50

(Continued)

Table A-19. Laden Transits, Tons Carried, and Toll Revenue, Maximum Non-Diverting Toll Rates, 150,000 DWT Scenario, 2060, by Ship Type, Diversion Status, and Trade Route (1990 US$, except when noted)(continued)

Ship Type, Diversion Status, and Trade Route	Transits	Cargo Tonnage Carried (thousands)	Revenue (thousands) a/	Current Toll Schedule: Toll Per Panama Canal Net Ton	Current Toll Schedule: Toll Per Cargo Ton Carried	New Toll Schedule: Toll Per Panama Canal Net Ton	New Toll Schedule: Toll Per Cargo Ton Carried	Total Transportation Costs per Ton Carried: Via Panama Canal: With Current Toll Structure	Via Panama Canal: With New Toll Structure	Via Panama Canal: Percent Increase	Via Least Costly Alternative Route
General Cargo Ships (continued)											
Non-Diverted Transits (continued)											
Canada E.C.-Oceania	0	7	9	2.41	1.39	1.74	1.00	47.84	47.45	-0.81	47.45
Canada E.C.-S.A.W.C.	16	148	2,907	2.41	1.39	15.37	8.85	28.09	35.55	26.57	35.55
Canada W.C.-C.A.E.C.	16	120	6,888	2.41	1.42	67.90	39.96	31.71	70.25	121.55	70.25
Canada W.C.-Europe	1	21	307	2.41	1.39	27.52	15.85	37.94	52.40	38.12	52.40
Canada W.C.-Middle East	2	13	35	2.41	1.39	1.74	1.00	42.89	42.50	-0.90	42.50
Canada W.C.-S.A.E.C.	14	126	5,840	2.41	1.41	61.66	36.12	36.39	71.10	95.37	71.10
C.A.E.C.-Asia	28	538	7,754	2.41	1.39	24.05	13.85	36.99	49.45	33.69	49.45
C.A.E.C.-C.A.W.C.	56	209	21,564	2.41	1.45	94.41	56.93	8.51	63.99	651.66	63.99
C.A.E.C.-Oceania	1	13	177	2.41	1.39	17.19	9.90	40.94	49.45	20.79	49.45
C.A.E.C.-S.A.W.C.	53	492	9,249	2.41	1.41	23.26	13.57	22.58	34.74	53.88	34.74
C.A.E.C.-U.S.W.C.	12	42	4,258	2.41	1.50	128.03	79.66	32.53	110.69	240.28	110.69
Europe-C.A.W.C.	87	598	42,735	2.41	1.40	55.84	32.41	28.49	59.50	108.85	59.50
Europe-Canada W.C.	3	11	750	2.41	1.50	93.37	58.09	80.37	136.96	70.41	136.96
Europe-S.A.W.C.	73	734	4,438	2.41	1.39	5.55	3.20	33.84	35.65	5.35	35.65
Europe-U.S.W.C.	4	18	1,326	2.41	1.44	77.98	46.68	62.15	107.39	72.78	107.39
Middle East-S.A.W.C.	6	3	805	2.41	1.50	48.19	29.98	73.82	102.30	38.58	102.30
Middle East-U.S.W.C.	7	19	1,073	2.41	1.39	13.72	7.90	40.94	47.45	15.91	47.45
Oceania-C.A.E.C.	1	7	232	2.41	1.39	18.93	10.90	39.94	49.45	23.82	49.45
Oceania-U.S.E.C.	2	9	231	2.41	1.43	22.69	13.48	57.41	69.46	20.99	69.46
S.A.E.C.-C.A.W.C.	13	261	747	2.41	1.39	5.12	2.95	25.14	26.70	6.21	26.70
S.A.E.C.-Canada W.C.	0	2	26	2.41	1.39	8.51	4.90	35.04	38.55	10.02	38.55
S.A.E.C.-U.S.W.C.	17	77	934	2.41	1.40	5.80	3.36	38.23	40.19	5.14	40.19
S.A.W.C.-Africa	8	149	3,129	2.41	1.39	35.94	20.70	34.04	53.35	56.74	53.35

(Continued)

Table A-19. Laden Transits, Tons Carried, and Toll Revenue, Maximum Non-Diverting Toll Rates, 150,000 DWT Scenario, 2060, by Ship Type, Diversion Status, and Trade Route (1990 US$, except when noted)(continued)

Ship Type, Diversion Status, and Trade Route	Transits	Cargo Tonnage Carried (thousands)	Revenue (thousands) a/	Current Toll Schedule: Toll Per Panama Canal Net Ton	Current Toll Schedule: Toll Per Cargo Ton Carried	New Toll Schedule: Toll Per Panama Canal Net Ton	New Toll Schedule: Toll Per Cargo Ton Carried	Total Transportation Costs per Ton Carried: Via Panama Canal: With Current Toll Structure	Via Panama Canal: With New Toll Structure	Via Panama Canal: Percent Increase	Via Least Costly Alternative Route
General Cargo Ships (continued)											
Non-Diverted Transits (continued)											
S.A.W.C.-Canada E.C.	1	14	148	2.41	1.39	15.37	8.85	28.09	35.55	26.57	35.55
S.A.W.C.-C.A.E.C.	82	361	15,571	2.41	1.45	43.54	26.12	23.90	48.57	103.26	48.57
S.A.W.C.-Europe	171	2,817	10,159	2.41	1.39	5.12	2.95	33.04	34.60	4.73	34.60
S.A.W.C.-Middle East	2	25	269	2.41	1.39	13.72	7.90	35.99	42.50	18.10	42.50
S.A.W.C.-U.S.E.C.	56	430	12,993	2.41	1.40	29.02	16.89	25.31	40.80	61.18	40.80
U.S.E.C.-Asia	74	1,214	23,648	2.41	1.39	27.24	15.67	38.38	52.66	37.22	52.66
U.S.E.C.-C.A.W.C.	103	776	44,039	2.41	1.43	80.40	47.66	14.67	60.90	315.17	60.90
U.S.E.C.-Oceania	6	89	804	2.41	1.39	11.98	6.90	40.94	46.45	13.46	46.45
U.S.E.C.-S.A.W.C.	187	1,336	43,228	2.41	1.41	29.98	17.48	25.45	41.52	63.18	41.52
U.S.E.C.-U.S.W.C.	1	0	309	2.41	1.50	143.07	89.02	35.37	122.89	247.45	122.89
U.S.W.C.-Africa	7	75	1,578	2.41	1.39	20.58	11.85	36.99	47.45	28.29	47.45
U.S.W.C.-C.A.E.C.	3	1	1,119	2.41	1.50	128.03	79.66	32.53	110.69	240.28	110.69
U.S.W.C.-Europe	3	25	682	2.41	1.42	44.84	26.44	44.83	69.85	55.81	69.85
U.S.W.C.-S.A.E.C.	8	19	412	2.41	1.45	12.17	7.31	53.26	59.12	11.01	59.12
Subtotal	1,464	13,991	372,104	2.41	1.40	29.63	17.20	30.69	46.34	50.98	46.34
Liquid Gas Carriers											
Non-Diverted Transits											
C.A.W.C.-C.A.E.C.	10	43	2,623	2.41	7.30	49.83	151.00	57.30	201.00	250.77	201.00
C.A.E.C.-Asia	10	53	2,839	2.41	4.67	30.20	58.57	124.16	178.06	43.41	178.06
C.A.E.C.-C.A.W.C.	56	742	39,655	2.41	3.79	37.19	58.53	26.91	81.65	203.39	81.65
C.A.E.C.-S.A.W.C.	4	60	1,397	2.41	3.83	17.64	28.00	45.83	70.00	52.75	70.00
C.A.E.C.-U.S.W.C.	0	3	123	2.41	3.83	38.43	61.00	51.83	109.00	110.32	109.00

(Continued)

Table A-19. Laden Transits, Tons Carried, and Toll Revenue, Maximum Non-Diverting Toll Rates, 150,000 DWT Scenario, 2060, by Ship Type, Diversion Status, and Trade Route (1990 US$, except when noted)(continued)

Ship Type, Diversion Status, and Trade Route	Transits	Cargo Tonnage Carried (thousands)	Revenue (thousands) a/	Current Toll Schedule: Toll Per Panama Canal Net Ton	Current Toll Schedule: Toll Per Cargo Ton Carried	New Toll Schedule: Toll Per Panama Canal Net Ton	New Toll Schedule: Toll Per Cargo Ton Carried	Total Transportation Costs per Ton Carried, Via Panama Canal: With Current Toll Structure	Total Transportation Costs per Ton Carried, Via Panama Canal: With New Toll Structure	Total Transportation Costs per Ton Carried, Via Panama Canal: Percent Increase	Total Transportation Costs per Ton Carried: Via Least Costly Alternative Route
Liquid Gas Carriers (continued)											
Non-Diverted Transits (continued)											
Europe-C.A.W.C.	2	7	422	2.41	7.30	36.96	112.00	129.30	234.00	80.97	234.00
Europe-S.A.W.C.	0	1	7	2.41	3.82	5.67	9.00	76.82	82.00	6.74	82.00
Oceania-U.S.E.C.	4	57	862	2.41	3.62	9.65	14.50	75.10	85.98	14.48	85.98
S.A.E.C.-Asia	2	30	519	2.41	3.83	13.23	21.00	89.83	107.00	19.12	107.00
S.A.E.C.-C.A.W.C.	12	32	492	2.41	7.30	7.92	24.00	115.30	132.00	14.48	132.00
U.S.E.C.-Asia	3	41	1,929	2.41	3.86	30.77	49.29	94.04	139.47	48.31	139.47
U.S.E.C.-C.A.W.C.	0	1	76	2.41	7.30	55.10	167.00	66.30	226.00	240.85	226.00
U.S.E.C.-S.A.W.C.	1	2	95	2.41	7.30	26.40	80.00	109.30	182.00	66.51	182.00
Subtotal	104	1,071	51,039	2.41	3.99	32.59	53.99	44.45	96.49	117.06	96.49
Passenger Ships											
Non-Diverted Transits											
North-Bound	197	0	2,354	2.41	0.00	2.01	0.00	0.00	0.00	0.00	0.00
South-Bound	238	0	4,340	2.41	0.00	2.01	0.00	0.00	0.00	0.00	0.00
Subtotal	435	0	6,694	2.41	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Refrigerated Ships											
Non-Diverted Transits											
Africa-Asia	46	292	926	2.41	4.00	2.17	3.60	173.40	173.00	-0.23	173.00
Africa-C.A.W.C.	0	0	81	2.41	4.00	65.27	108.40	120.20	224.60	86.85	224.60
Africa-S.A.W.C.	49	21	23,947	2.41	3.94	47.57	77.81	154.50	228.37	47.81	228.37
Asia-C.A.E.C.	25	95	9,946	2.41	3.86	32.49	52.00	131.86	180.00	36.51	180.00
Asia-S.A.E.C.	7	5	320	2.41	4.00	4.94	8.20	180.00	184.20	2.33	184.20

(Continued)

Table A-19. Laden Transits, Tons Carried, and Toll Revenue, Maximum Non-Diverting Toll Rates, 150,000 DWT Scenario, 2060, by Ship Type, Diversion Status, and Trade Route (1990 US$, except when noted)(continued)

Ship Type, Diversion Status, and Trade Route	Transits	Cargo Tonnage Carried (thousands)	Revenue (thousands) a/	Current Toll Schedule: Toll Per Panama Canal Net Ton	Current Toll Schedule: Toll Per Cargo Ton Carried	New Toll Schedule: Toll Per Panama Canal Net Ton	New Toll Schedule: Toll Per Cargo Ton Carried	Total Transportation Costs per Ton Carried: Via Panama Canal: With Current Toll Structure	Total Transportation Costs per Ton Carried: Via Panama Canal: With New Toll Structure	Total Transportation Costs per Ton Carried: Via Panama Canal: Percent Increase	Total Transportation Costs per Ton Carried: Via Least Costly Alternative Route
Refrigerated Ships (continued)											
Non-Diverted Transits (continued)											
Asia-U.S.E.C.	1	0	289	2.41	4.00	40.96	68.00	149.60	213.60	42.78	213.60
C.A.W.C.-Africa	2	7	1,124	2.41	4.00	65.29	108.40	120.20	224.60	86.85	224.60
C.A.W.C.-Canada E.C.	1	5	289	2.41	4.00	53.12	88.20	79.20	163.40	106.31	163.40
C.A.W.C.-C.A.E.C.	39	294	24,922	2.41	3.86	51.87	83.00	52.86	132.00	149.73	132.00
C.A.W.C.-Europe	276	1,493	129,159	2.41	3.86	38.12	61.00	92.86	150.00	61.54	150.00
C.A.W.C.-S.A.E.C.	2	9	118	2.41	4.00	7.59	12.60	94.40	103.00	9.11	103.00
C.A.W.C.-U.S.E.C.	1	2	661	2.41	4.00	60.47	100.40	64.00	160.40	150.62	160.40
Canada E.C.-Asia	15	92	1,705	2.41	4.00	12.53	20.80	165.80	182.60	10.13	182.60
Canada E.C.-C.A.W.C.	11	31	6,727	2.41	3.86	50.62	81.00	71.86	149.00	107.36	149.00
Canada W.C.-Europe	4	45	1,739	2.41	3.86	38.12	61.00	132.86	190.00	43.01	190.00
C.A.E.C.-Asia	13	37	4,632	2.41	3.93	34.56	56.34	144.92	197.33	36.17	197.33
C.A.E.C.-C.A.W.C.	43	11	27,486	2.41	3.86	51.87	83.00	52.86	132.00	149.73	132.00
C.A.E.C.-S.A.W.C.	93	82	25,028	2.41	3.86	21.87	35.00	75.86	107.00	41.06	107.00
Europe-C.A.W.C.	308	26	231,015	2.41	3.86	61.24	98.00	92.86	187.00	101.39	187.00
Europe-Canada W.C.	1	1	355	2.41	4.00	37.83	62.80	145.60	204.40	40.38	204.40
Europe-S.A.W.C.	295	278	23,810	2.41	3.88	6.93	11.16	119.82	127.10	6.08	127.10
Europe-U.S.W.C.	18	16	6,112	2.41	4.00	36.62	60.80	135.40	192.20	41.95	192.20
Middle East-S.A.W.C.	3	6	465	2.41	4.00	18.91	31.40	138.00	165.40	19.85	165.40
Oceania-C.A.E.C.	6	50	1,569	2.41	4.00	26.26	43.60	157.20	196.80	25.19	196.80
Oceania-U.S.E.C.	53	207	8,296	2.41	3.98	16.34	27.02	160.43	183.47	14.36	183.47
S.A.E.C.-Asia	12	62	1,914	2.41	4.00	17.71	29.40	146.60	172.00	17.33	172.00
S.A.W.C.-Africa	27	111	13,625	2.41	3.94	48.74	79.71	130.08	205.85	58.25	205.85
S.A.W.C.-C.A.E.C.	40	241	10,565	2.41	3.86	21.97	35.23	76.48	107.85	41.01	107.85

(Continued)

Table A-19. Laden Transits, Tons Carried, and Toll Revenue, Maximum Non-Diverting Toll Rates, 150,000 DWT Scenario, 2060, by Ship Type, Diversion Status, and Trade Route (1990 US$, except when noted)(continued)

Ship Type, Diversion Status, and Trade Route	Transits	Cargo Tonnage Carried (thousands)	Revenue (thousands) a/	Current Toll Schedule: Toll Per Panama Canal Net Ton	Current Toll Schedule: Toll Per Cargo Ton Carried	New Toll Schedule: Toll Per Panama Canal Net Ton	New Toll Schedule: Toll Per Cargo Ton Carried	Total Transportation Costs per Ton Carried, Via Panama Canal: With Current Toll Structure	Total Transportation Costs per Ton Carried, Via Panama Canal: With New Toll Structure	Total Transportation Costs per Ton Carried, Via Panama Canal: Percent Increase	Total Transportation Costs per Ton Carried: Via Least Costly Alternative Route
Refrigerated Ships (continued)											
Non-Diverted Transits (continued)											
S.A.W.C.-Europe	1,101	6,815	86,297	2.41	3.89	6.91	11.16	119.88	127.15	6.06	127.15
S.A.W.C.-Middle East	5	18	844	2.41	4.00	18.91	31.40	138.00	165.40	19.85	165.40
S.A.W.C.-U.S.E.C.	808	3,821	255,421	2.41	3.88	27.00	43.45	82.93	122.50	47.72	122.50
U.S.E.C.-Asia	46	189	21,080	2.41	3.87	39.22	63.06	139.10	198.29	42.55	198.29
U.S.E.C.-C.A.W.C.	70	196	49,049	2.41	3.86	57.49	92.00	57.86	146.00	152.35	146.00
U.S.E.C.-S.A.W.C.	423	892	136,523	2.41	3.87	26.89	43.14	82.19	121.46	47.79	121.46
U.S.W.C.-Europe	140	804	52,599	2.41	3.95	36.87	60.42	134.45	190.92	42.00	190.92
U.S.W.C.-S.A.E.C.	2	6	93	2.41	3.98	5.19	8.58	131.22	135.82	3.50	135.82
Subtotal	3,983	16,260	1,158,732	2.41	3.88	25.14	40.50	106.85	135.63	26.93	135.63
Roll-On Roll-Off											
Non-Diverted Transits											
Asia-Canada E.C.	3	15	434	2.41	9.35	8.99	34.88	298.90	324.43	8.54	324.43
Asia-C.A.E.C.	32	633	13,191	2.41	7.92	11.98	39.41	236.83	268.32	13.29	268.32
Asia-U.S.E.C.	67	1,286	42,741	2.41	7.95	19.19	63.32	248.85	304.22	22.25	304.22
C.A.W.C.-Europe	33	177	16,323	2.41	8.66	25.04	90.00	198.66	280.00	40.94	280.00
C.A.W.C.-S.A.E.C.	0	0	3	2.41	8.66	2.23	8.00	211.66	211.00	-0.31	211.00
C.A.W.C.-U.S.E.C.	3	1	1,568	2.41	8.66	30.89	111.00	170.66	273.00	59.97	273.00
Canada E.C.-Asia	17	85	1,586	2.41	9.30	6.27	24.20	355.27	370.17	4.19	370.17
Canada E.C.-Oceania	3	61	184	2.41	7.77	1.64	5.30	251.49	249.02	-0.98	249.02
Canada W.C.-C.A.E.C.	0	1	222	2.41	10.19	38.94	164.71	239.87	394.39	64.42	394.39
C.A.E.C.-C.A.W.C.	1	2	447	2.41	9.72	34.37	138.58	167.54	296.40	76.92	296.40
C.A.E.C.-Oceania	7	20	2,524	2.41	8.66	18.09	65.00	275.66	332.00	20.44	332.00

(Continued)

Table A-19. Laden Transits, Tons Carried, and Toll Revenue, Maximum Non-Diverting Toll Rates, 150,000 DWT Scenario, 2060, by Ship Type, Diversion Status, and Trade Route (1990 US$, except when noted)(continued)

Ship Type, Diversion Status, and Trade Route	Transits	Cargo Tonnage Carried (thousands)	Revenue (thousands) a/	Current Toll Schedule: Toll Per Panama Canal Net Ton	Current Toll Schedule: Toll Per Cargo Ton Carried	New Toll Schedule: Toll Per Panama Canal Net Ton	New Toll Schedule: Toll Per Cargo Ton Carried	Total Transportation Costs per Ton Carried: Via Panama Canal: With Current Toll Structure	Via Panama Canal: With New Toll Structure	Via Panama Canal: Percent Increase	Via Least Costly Alternative Route
Roll-On Roll-Off (continued)											
Non-Diverted Transits (continued)											
C.A.E.C.-S.A.W.C.	85	149	13,343	2.41	10.19	13.58	57.43	232.93	280.17	20.28	280.17
Europe-C.A.W.C.	35	221	30,696	2.41	8.66	44.52	160.00	198.66	350.00	76.18	350.00
Europe-S.A.W.C.	0	0	17	2.41	8.67	13.63	49.00	262.67	303.00	15.36	303.00
Europe-U.S.W.C.	1	3	319	2.41	8.66	26.71	96.00	262.66	350.00	33.25	350.00
Oceania-C.A.E.C.	0	0	6	2.41	7.97	14.16	46.80	234.97	273.80	16.53	273.80
S.A.W.C.-C.A.E.C.	22	44	3,451	2.41	10.19	13.58	57.43	232.93	280.17	20.28	280.17
S.A.W.C.-Europe	2	5	533	2.41	8.66	15.86	57.00	262.66	311.00	18.40	311.00
S.A.W.C.-U.S.E.C.	12	25	2,533	2.41	10.19	18.27	77.28	224.99	292.08	29.82	292.08
U.S.E.C.-Asia	14	93	6,951	2.41	8.64	24.75	88.72	298.20	378.28	26.85	378.28
U.S.E.C.-C.A.W.C.	4	7	3,067	2.41	8.66	38.12	137.00	144.66	273.00	88.72	273.00
U.S.E.C.-S.A.W.C.	57	101	12,094	2.41	10.19	18.27	77.28	224.99	292.08	29.82	292.08
U.S.W.C.-Canada E.C.	1	2	315	2.41	10.20	38.00	160.77	263.70	414.27	57.10	414.27
U.S.W.C.-C.A.E.C.	2	48	2,021	2.41	7.75	24.74	79.57	160.82	232.64	44.66	232.64
U.S.W.C.-Europe	0	1	20	2.41	7.77	19.42	62.59	212.68	267.50	25.78	267.50
U.S.W.C.-U.S.E.C.	0	9	481	2.41	7.86	31.95	104.20	159.45	255.79	60.42	255.79
Subtotal	400	2,990	155,074	2.41	8.67	19.76	71.08	240.63	298.58	24.08	298.58
Tankers											
Non-Diverted Transits											
Africa-U.S.W.C.	0	0	2	2.41	1.27	13.25	7.00	18.27	24.00	31.34	24.00
Asia-U.S.E.C.	3	77	1,088	2.41	1.27	24.55	12.92	27.11	38.76	42.98	38.76
C.A.W.C.-Africa	0	0	80	2.41	1.27	104.50	55.00	46.27	100.00	116.13	100.00
C.A.W.C.-Canada E.C.	0	8	153	2.41	1.27	33.96	17.88	12.21	28.82	136.06	28.82

(Continued)

Table A-19. Laden Transits, Tons Carried, and Toll Revenue, Maximum Non-Diverting Toll Rates, 150,000 DWT Scenario, 2060, by Ship Type, Diversion Status, and Trade Route (1990 US$, except when noted)(continued)

Ship Type, Diversion Status, and Trade Route	Transits	Cargo Tonnage Carried (thousands)	Revenue (thousands) a/	Current Toll Schedule: Toll Per Panama Canal Net Ton	Current Toll Schedule: Toll Per Cargo Ton Carried	New Toll Schedule: Toll Per Panama Canal Net Ton	New Toll Schedule: Toll Per Cargo Ton Carried	Total Transportation Costs per Ton Carried: Via Panama Canal: With Current Toll Structure	Via Panama Canal: With New Toll Structure	Via Panama Canal: Percent Increase	Via Least Costly Alternative Route
Tankers (continued)											
Non-Diverted Transits (continued)											
C.A.W.C.-C.A.E.C.	16	95	7,356	2.41	1.27	49.40	26.00	10.26	34.99	241.09	34.99
C.A.W.C.-Europe	4	94	1,475	2.41	1.27	24.59	12.94	17.17	28.84	67.98	28.84
C.A.W.C.-U.S.E.C.	10	80	4,842	2.41	1.27	52.15	27.45	11.18	37.36	234.21	37.36
Canada E.C.-Asia	18	707	2,551	2.41	1.27	6.50	3.42	25.06	27.21	8.59	27.21
Canada W.C.-U.S.E.C.	6	255	4,117	2.41	1.28	25.85	13.75	13.76	26.23	90.60	26.23
C.A.E.C.-Asia	5	141	1,864	2.41	1.29	19.23	10.31	22.38	31.40	40.29	31.40
C.A.E.C.-C.A.W.C.	45	750	20,005	2.41	1.27	31.54	16.59	7.38	22.70	207.68	22.70
C.A.E.C.-S.A.W.C.	46	887	9,275	2.41	1.27	15.14	7.97	13.34	20.04	50.24	20.04
C.A.E.C.-U.S.W.C.	5	228	3,269	2.41	1.27	24.28	12.77	11.93	23.43	96.44	23.43
Europe-C.A.W.C.	17	81	3,103	2.41	1.27	40.09	21.10	24.95	44.78	79.49	44.78
Europe-S.A.W.C.	4	82	285	2.41	1.27	5.91	3.11	23.34	25.18	7.89	25.18
Europe-U.S.W.C.	4	109	1,342	2.41	1.27	20.88	10.99	22.50	32.22	43.21	32.22
Middle East-U.S.W.C.	0	0	0	2.41	1.25	0.19	0.10	1.63	0.48	-70.49	0.48
Oceania-U.S.E.C.	9	162	1,162	2.41	1.27	11.06	5.82	28.05	32.60	16.23	32.60
S.A.E.C.-Asia	100	14,050	31,763	2.41	1.27	4.29	2.26	15.32	16.31	6.47	16.31
S.A.E.C.-C.A.W.C.	68	3,130	8,802	2.41	1.26	3.91	2.05	10.89	11.68	7.22	11.68
S.A.E.C.-U.S.W.C.	27	978	1,569	2.41	1.27	2.70	1.42	18.67	18.82	0.81	18.82
S.A.W.C.-Canada E.C.	1	14	138	2.41	1.27	15.29	8.05	20.47	27.25	33.13	27.25
S.A.W.C.-C.A.E.C.	15	557	3,707	2.41	1.27	10.83	5.70	10.99	15.42	40.33	15.42
S.A.W.C.-Europe	19	173	718	2.41	1.27	6.86	3.61	28.01	30.35	8.36	30.35
S.A.W.C.-U.S.E.C.	17	607	5,573	2.41	1.27	15.33	8.07	11.71	18.51	58.09	18.51
U.S.E.C.-Asia	90	2,946	37,381	2.41	1.27	21.12	11.10	22.71	32.54	43.31	32.54
U.S.E.C.-C.A.W.C.	14	260	7,635	2.41	1.27	38.36	20.19	9.23	28.15	205.03	28.15

(Continued)

Table A-19. Laden Transits, Tons Carried, and Toll Revenue, Maximum Non-Diverting Toll Rates, 150,000 DWT Scenario, 2060, by Ship Type, Diversion Status, and Trade Route (1990 US$, except when noted)(continued)

Ship Type, Diversion Status, and Trade Route	Transits	Cargo Tonnage Carried (thousands)	Revenue (thousands) a/	Current Toll Schedule: Toll Per Panama Canal Net Ton	Current Toll Schedule: Toll Per Cargo Ton Carried	New Toll Schedule: Toll Per Panama Canal Net Ton	New Toll Schedule: Toll Per Cargo Ton Carried	Total Transportation Costs per Ton Carried: Via Panama Canal: With Current Toll Structure	Via Panama Canal: With New Toll Structure	Via Panama Canal: Percent Increase	Via Least Costly Alternative Route
Tankers (continued)											
Non-Diverted Transits (continued)											
U.S.E.C.-Canada W.C.	2	7	1,034	2.41	1.27	35.87	18.88	18.17	35.78	96.94	35.78
U.S.E.C.-Oceania	4	129	806	2.41	1.27	10.34	5.44	26.02	30.19	16.03	30.19
U.S.E.C.-S.A.W.C.	3	49	578	2.41	1.27	18.20	9.58	13.63	21.94	60.99	21.94
U.S.E.C.-U.S.W.C.	21	601	13,322	2.41	1.27	34.52	18.16	14.06	30.95	120.16	30.95
U.S.W.C.-Africa	10	334	2,368	2.41	1.26	9.68	5.06	16.39	20.19	23.18	20.19
U.S.W.C.-C.A.E.C.	3	96	1,551	2.41	1.26	23.80	12.49	11.90	23.13	94.29	23.13
U.S.W.C.-S.A.E.C.	1	29	40	2.41	1.27	2.68	1.41	18.76	18.90	0.75	18.90
U.S.W.C.-U.S.E.C.	4	102	2,324	2.41	1.27	32.38	17.01	13.36	29.10	117.88	29.10
Subtotal	589	27,821	181,280	2.41	1.27	10.91	5.74	15.72	19.64	24.89	19.64
Vehicle Carriers											
Non-Diverted Transits											
Asia-C.A.E.C.	13	34	3,918	2.41	29.09	8.97	108.30	417.18	496.39	18.99	496.39
Asia-S.A.E.C.	0	0	7	2.41	29.13	1.11	13.44	484.18	468.49	-3.24	468.49
Asia-U.S.E.C.	481	2,251	155,583	2.41	29.20	8.74	105.94	439.57	516.31	17.46	516.31
C.A.W.C.-C.A.E.C.	3	3	995	2.41	28.71	17.07	203.34	266.36	440.99	65.56	440.99
Canada E.C.-Asia	1	3	35	2.41	29.22	1.65	20.00	465.22	456.00	-1.98	456.00
C.A.E.C.-C.A.W.C.	8	3	4,415	2.41	29.22	13.86	168.00	272.22	411.00	50.98	411.00
C.A.E.C.-Oceania	1	0	237	2.41	29.22	6.35	77.00	434.22	482.00	11.00	482.00
Europe-Canada W.C.	7	16	2,879	2.41	30.90	7.95	101.96	386.38	457.44	18.39	457.44
Europe-U.S.W.C.	156	299	46,872	2.41	29.95	6.91	85.91	403.00	458.96	13.89	458.96
S.A.W.C.-C.A.E.C.	0	0	29	2.41	28.70	7.14	85.00	323.70	380.00	17.39	380.00
U.S.E.C.-Asia	42	192	17,406	2.41	29.67	10.07	124.04	415.80	510.17	22.70	510.17

(Continued)

Table A-19. Laden Transits, Tons Carried, and Toll Revenue, Maximum Non-Diverting Toll Rates, 150,000 DWT Scenario, 2060, by Ship Type, Diversion Status, and Trade Route (1990 US$, except when noted)(continued)

Ship Type, Diversion Status, and Trade Route	Transits	Cargo Tonnage Carried (thousands)	Revenue (thousands) a/	Current Toll Schedule: Toll Per Panama Canal Net Ton	Current Toll Schedule: Toll Per Cargo Ton Carried	New Toll Schedule: Toll Per Panama Canal Net Ton	New Toll Schedule: Toll Per Cargo Ton Carried	Total Transportation Costs per Ton Carried: Via Panama Canal: With Current Toll Structure	Total Transportation Costs per Ton Carried: Via Panama Canal: With New Toll Structure	Total Transportation Costs per Ton Carried: Via Panama Canal: Percent Increase	Total Transportation Costs per Ton Carried: Via Least Costly Alternative Route
Vehicle Carriers (continued)											
Non-Diverted Transits (continued)											
U.S.E.C.-Oceania	13	30	1,940	2.41	29.22	4.04	49.00	433.22	453.00	4.57	453.00
Subtotal	724	2,831	234,314	2.41	29.42	8.36	102.08	433.13	508.34	17.37	508.34
Total Non-Diverting	17,904	440,934	6,224,487	2.41	1.79	16.83	12.48	45.96	56.18	22.24	56.18

Notes: These calculations do not include all transits and tons carried forecast by the WEFA Group. For some ship-type and trade-route combinations (accounting for a total of 27 transits and 291695 tons), vessel costs were not available for every DWT size interval. As a result, these transits and tons were excluded. In addition, for 2536 transits and 56215466 tons, the cost by way of the Panama Canal without a toll was higher than the least costly alternative route. As a result, these transits and tons were excluded. Percentages may not calculate exactly as shown due to rounding. A fee of $0.40 per Panama Canal net ton has also been included to account for charges such as handling and agency fees incurred when transitting the Canal. The extra fee is only used to determine divesion status by adding it to the cost per ton carried and is not included in the revenue calculations.

a/ Revenue lost from diversions is measured as the revenue generated by the maximum, nondiverting toll rate increase.

Source: Nathan Associates Inc., based on forecasts of traffic and transportation costs provided by The WEFA Group.

MAXIMUM NON-DIVERTING TOLL RATES, 200,000-DWT SCENARIO, 2060

Table A-20. Laden Transits, Tons Carried, and Toll Revenue, Maximum Non-Diverting Toll Rates, 200,000 DWT Scenario, 2060, by Ship Type

	Transits				Tons Carried(thousands)				Revenue(1990 US$thousands)			
Ship Type	Canal	Diverted	Total	Diverted as a Percent of Total	Canal	Diverted	Total	Diverted as a Percent of Total	Canal	Lost a/	Total	Lost as a Percent of Total
Container-Breakbulk	2,465	0	2,465	0.00	36,996	0	36,996	0.00	975,169	0	975,169	0.00
Dry Bulk Carriers	4,986	0	4,986	0.00	284,965	0	284,965	0.00	2,030,953	0	2,030,953	0.00
Chemical Tankers	1,224	0	1,224	0.00	32,988	0	32,988	0.00	589,664	0	589,664	0.00
Full Container Ships	1,470	0	1,470	0.00	31,786	0	31,786	0.00	630,157	0	630,157	0.00
General Cargo Ships	1,464	0	1,464	0.00	13,991	0	13,991	0.00	372,104	0	372,104	0.00
Liquid Gas Carriers	104	0	104	0.00	1,071	0	1,071	0.00	51,039	0	51,039	0.00
Passenger Ships	435	0	435	0.00	0	0	0	0.00	6,694	0	6,694	0.00
Refrigerated Ships	3,983	0	3,983	0.00	16,260	0	16,260	0.00	1,158,732	0	1,158,732	0.00
Roll-On Roll-Off	400	0	400	0.00	2,990	0	2,990	0.00	155,074	0	155,074	0.00
Tankers	567	0	567	0.00	27,821	0	27,821	0.00	198,005	0	198,005	0.00
Vehicle Carriers	724	0	724	0.00	2,831	0	2,831	0.00	234,314	0	234,314	0.00
Total	17,822	0	17,822	0.00	451,699	0	451,699	0.00	6,401,906	0	6,401,906	0.00

Notes: These calculations do not include all transits and tons carried forecast by the WEFA Group. For some ship-type and trade-route combinations (accounting for a total of 27 transits and 291695 tons), vessel costs were not available for every DWT size interval. As a result, these transits and tons were excluded. In addition, for 2480 transits and 49528628 tons, the cost by way of the Panama Canal without a toll was higher than the least costly alternative route. As a result, these transits and tons were excluded. A fee of $0.40 per Panama Canal net ton has also been included to account for charges such as handling and agency fees incurred when transitting the Canal. The extra fee is only used to determine diversion status by adding it to cost per ton carried and is not included in the revenue calculations.

a/ Revenue lost from diversions is measured as the revenue generated by the maximum, nondiverting toll rate increase.

Source: Nathan Associates Inc., based on forecasts of traffic and transportation costs provided by The WEFA Group.

Table A-21. Ballast Transits, Tons Carried, and Toll Revenue, Current Toll Structure and Rates, 200,000 DWT Scenario, 2060, by Ship Type

	Transits				Tons Carried(thousands)				Revenue(1990 US$thousands)			
Ship Type	Canal	Diverted	Total	Diverted as a Percent of Total	Canal	Diverted	Total	Diverted as a Percent of Total	Canal	Lost	Total	Lost as a Percent of Total
Container-Breakbulk	67	0	67	0.00	0	0	0	0.00	1,629	0	1,629	0.00
Dry Bulk Carriers	410	0	410	0.00	0	0	0	0.00	19,001	0	19,001	0.00
Chemical Tankers	127	0	127	0.00	0	0	0	0.00	3,447	0	3,447	0.00
Full Container Ships	6	0	6	0.00	0	0	0	0.00	260	0	260	0.00
General Cargo Ships	274	0	274	0.00	0	0	0	0.00	3,023	0	3,023	0.00
Liquid Gas Carriers	958	0	958	0.00	0	0	0	0.00	48,680	0	48,680	0.00
Passenger Ships	51	0	51	0.00	0	0	0	0.00	664	0	664	0.00
Refrigerated Ships	1,069	0	1,069	0.00	0	0	0	0.00	18,983	0	18,983	0.00
Roll-On Roll-Off	58	0	58	0.00	0	0	0	0.00	1,716	0	1,716	0.00
Tankers	289	0	289	0.00	0	0	0	0.00	16,051	0	16,051	0.00
Vehicle Carriers	441	0	441	0.00	0	0	0	0.00	26,043	0	26,043	0.00
Total	3,750	0	3,750	0.00	0	0	0	0.00	139,497	0	139,497	0.00

Note: Diversions of ballast transits are computed by diverting a proportion of ballast transits equal to lost revenue as a percent of total potential revenue for a particular laden ship type. See last column on previous table.

Source: Nathan Associates Inc., based on forecasts of traffic and transportation costs provided by The WEFA Group.

Table A-22. Laden Transits, Tons Carried, and Toll Revenue, Maximum Non-Diverting Toll Rates, 200,000 DWT Scenario, 2060, by Ship Type, Diversion Status, and Trade Route (1990 US$, except when noted)

Ship Type, Diversion Status, and Trade Route	Transits	Cargo Tonnage Carried (thousands)	Revenue (thousands) a/	Current Toll Schedule: Toll Per Panama Canal Net Ton	Current Toll Schedule: Toll Per Cargo Ton Carried	New Toll Schedule: Toll Per Panama Canal Net Ton	New Toll Schedule: Toll Per Cargo Ton Carried	Total Transportation Costs per Ton Carried: Via Panama Canal: With Current Toll Structure	Total Transportation Costs per Ton Carried: Via Panama Canal: With New Toll Structure	Total Transportation Costs per Ton Carried: Via Panama Canal: Percent Increase	Total Transportation Costs per Ton Carried: Via Least Costly Alternative Route
Container-Breakbulk											
Non-Diverted Transits											
Africa-C.A.W.C.	6	185	5,988	2.41	1.85	63.31	48.70	72.26	119.11	64.83	119.11
Africa-Canada W.C.	0	5	126	2.41	1.87	21.20	16.43	92.01	106.57	15.83	106.57
Africa-U.S.W.C.	2	25	614	2.41	1.87	21.47	16.64	93.01	107.78	15.88	107.78
Asia-Canada E.C.	1	8	131	2.41	1.86	12.63	9.77	93.05	100.96	8.50	100.96
Asia-C.A.E.C.	135	1,246	40,468	2.41	1.87	22.88	17.71	97.20	113.04	16.30	113.04
Asia-S.A.E.C.	48	305	3,072	2.41	1.87	5.16	4.00	105.12	107.25	2.03	107.25
Asia-U.S.E.C.	139	1,759	65,504	2.41	1.86	33.64	25.98	99.37	123.49	24.27	123.49
C.A.W.C.-Africa	6	112	4,726	2.41	1.87	68.57	53.19	76.03	127.35	67.50	127.35
C.A.W.C.-C.A.E.C.	16	247	11,229	2.41	1.86	54.75	42.34	51.25	91.73	78.97	91.73
C.A.W.C.-Europe	41	304	22,101	2.41	1.87	41.01	31.78	65.68	95.59	45.54	95.59
C.A.W.C.-S.A.E.C.	23	10	2,492	2.41	1.87	8.86	6.87	72.11	77.11	6.93	77.11
C.A.W.C.-U.S.E.C.	7	40	4,374	2.41	1.87	52.14	40.45	57.32	95.90	67.31	95.90
Canada E.C.-Asia	31	815	3,487	2.41	1.85	6.50	5.00	95.14	98.29	3.31	98.29
Canada E.C.-C.A.W.C.	3	25	1,788	2.41	1.87	55.37	42.92	55.94	96.99	73.39	96.99
Canada E.C.-Oceania	2	25	71	2.41	1.87	3.68	2.85	107.65	108.63	0.91	108.63
Canada E.C.-S.A.W.C.	1	17	269	2.41	1.85	20.60	15.85	65.70	79.70	21.30	79.70
Canada E.C.-U.S.W.C.	0	0	5	2.41	1.86	52.65	40.71	72.57	111.42	53.53	111.42
Canada W.C.-Africa	29	662	8,232	2.41	1.85	19.42	14.94	93.53	106.62	13.99	106.62
Canada W.C.-Europe	107	3,116	73,903	2.41	1.85	38.57	29.67	81.19	109.01	34.26	109.01
Canada W.C.-S.A.E.C.	22	421	14,759	2.41	1.87	54.55	42.32	74.11	114.56	54.58	114.56
Canada W.C.-U.S.E.C.	15	303	11,863	2.41	1.85	54.60	42.00	67.85	108.00	59.17	108.00
C.A.E.C.-Asia	13	270	3,685	2.41	1.87	22.64	17.54	96.31	111.98	16.27	111.98
C.A.E.C.-C.A.W.C.	13	49	9,492	2.41	1.87	57.60	44.65	52.15	94.93	82.04	94.93

(Continued)

Table A-22. Laden Transits, Tons Carried, and Toll Revenue, Maximum Non-Diverting Toll Rates, 200,000 DWT Scenario, 2060, by Ship Type, Diversion Status, and Trade Route (1990 US$, except when noted)(continued)

Ship Type, Diversion Status, and Trade Route	Transits	Cargo Tonnage Carried (thousands)	Revenue (thousands) a/	Current Toll Schedule: Toll Per Panama Canal Net Ton	Current Toll Schedule: Toll Per Cargo Ton Carried	New Toll Schedule: Toll Per Panama Canal Net Ton	New Toll Schedule: Toll Per Cargo Ton Carried	Total Transportation Costs per Ton Carried, Via Panama Canal: With Current Toll Structure	Total Transportation Costs per Ton Carried, Via Panama Canal: With New Toll Structure	Total Transportation Costs per Ton Carried, Via Panama Canal: Percent Increase	Total Transportation Costs per Ton Carried: Via Least Costly Alternative Route
Container-Breakbulk (continued)											
Non-Diverted Transits (continued)											
C.A.E.C.-Canada W.C.	4	59	2,641	2.41	1.87	54.00	41.86	66.58	106.57	60.07	106.57
C.A.E.C.-Oceania	2	38	807	2.41	1.87	26.43	20.49	94.01	112.63	19.81	112.63
C.A.E.C.-S.A.W.C.	37	286	10,105	2.41	1.87	21.47	16.64	64.73	79.50	22.82	79.50
C.A.E.C.-U.S.W.C.	6	112	3,641	2.41	1.86	45.78	35.37	64.27	97.78	52.13	97.78
Europe-C.A.W.C.	44	271	38,633	2.41	1.87	69.02	53.50	66.79	118.42	77.31	118.42
Europe-Canada W.C.	7	217	4,980	2.41	1.85	34.05	26.19	83.24	107.58	29.23	107.58
Europe-S.A.W.C.	182	1,504	49,698	2.41	1.87	21.27	16.49	90.01	104.63	16.24	104.63
Europe-U.S.W.C.	36	1,115	24,784	2.41	1.85	35.46	27.28	82.41	107.84	30.85	107.84
Oceania-Canada E.C.	4	88	226	2.41	1.85	2.60	2.00	97.85	98.00	0.15	98.00
Oceania-C.A.E.C.	10	99	3,222	2.41	1.87	26.70	20.71	94.77	113.61	19.88	113.61
S.A.E.C.-C.A.W.C.	16	252	1,838	2.41	1.87	8.76	6.79	71.65	76.57	6.87	76.57
S.A.E.C.-Canada W.C.	25	335	3,290	2.41	1.87	10.14	7.86	92.79	98.78	6.46	98.78
S.A.E.C.-U.S.W.C.	84	1,260	6,524	2.41	1.87	5.92	4.58	78.16	80.87	3.47	80.87
S.A.W.C.-Africa	3	52	1,714	2.41	1.87	50.85	39.45	82.90	120.48	45.33	120.48
S.A.W.C.-Canada E.C.	1	2	324	2.41	1.87	22.66	17.58	69.19	84.90	22.71	84.90
S.A.W.C.-C.A.E.C.	26	206	6,847	2.41	1.87	21.64	16.79	65.19	80.11	22.89	80.11
S.A.W.C.-Europe	329	5,753	99,974	2.41	1.87	24.00	18.60	89.68	106.41	18.66	106.41
S.A.W.C.-U.S.E.C.	239	2,340	81,376	2.41	1.87	27.43	21.28	62.12	81.53	31.25	81.53
U.S.E.C.-Asia	284	7,177	150,920	2.41	1.86	32.35	24.92	96.15	119.21	23.99	119.21
U.S.E.C.-C.A.W.C.	22	446	18,049	2.41	1.86	61.35	47.45	47.68	93.27	95.60	93.27
U.S.E.C.-S.A.W.C.	347	3,443	121,763	2.41	1.87	27.15	21.04	61.84	81.01	31.00	81.01
U.S.E.C.-U.S.W.C.	0	0	10	2.41	1.86	53.02	41.00	58.86	98.00	66.49	98.00
U.S.W.C.-Africa	22	367	11,345	2.41	1.85	25.05	19.27	85.43	102.85	20.39	102.85

(Continued)

Table A-22. Laden Transits, Tons Carried, and Toll Revenue, Maximum Non-Diverting Toll Rates, 200,000 DWT Scenario, 2060, by Ship Type, Diversion Status, and Trade Route (1990 US$, except when noted)(continued)

Ship Type, Diversion Status, and Trade Route	Transits	Cargo Tonnage Carried (thousands)	Revenue (thousands) a/	Current Toll Schedule: Toll Per Panama Canal Net Ton	Current Toll Schedule: Toll Per Cargo Ton Carried	New Toll Schedule: Toll Per Panama Canal Net Ton	New Toll Schedule: Toll Per Cargo Ton Carried	Total Transportation Costs per Ton Carried: Via Panama Canal: With Current Toll Structure	Via Panama Canal: With New Toll Structure	Via Panama Canal: Percent Increase	Via Least Costly Alternative Route
Container-Breakbulk (continued)											
Non-Diverted Transits (continued)											
U.S.W.C.-Canada E.C.	1	33	914	2.41	1.85	49.40	38.00	69.85	106.00	51.75	106.00
U.S.W.C.-C.A.E.C.	19	135	11,321	2.41	1.87	47.69	36.98	66.46	101.57	52.83	101.57
U.S.W.C.-Europe	51	1,343	30,940	2.41	1.86	34.81	26.80	83.60	108.54	29.84	108.54
U.S.W.C.-S.A.E.C.	6	104	458	2.41	1.87	6.28	4.87	79.98	82.98	3.75	82.98
U.S.W.C.-U.S.E.C.	0	6	445	2.41	1.85	56.57	43.54	60.33	102.02	69.09	102.02
Subtotal	2,465	36,996	975,169	2.41	1.86	28.50	22.04	83.70	104.44	24.78	104.44
Dry Bulk Carriers											
Non-Diverted Transits											
Africa-C.A.W.C.	29	1,201	14,676	2.41	1.30	24.15	13.07	15.34	27.11	76.68	27.11
Africa-Canada W.C.	156	7,645	24,284	2.41	1.28	6.51	3.45	17.82	19.99	12.20	19.99
Africa-S.A.W.C.	9	313	3,217	2.41	1.30	17.20	9.31	18.13	26.14	44.15	26.14
Africa-U.S.W.C.	10	297	2,325	2.41	1.27	9.56	5.04	16.17	19.94	23.31	19.94
Asia-Canada E.C.	15	695	1,732	2.41	1.25	4.10	2.13	17.55	18.43	5.00	18.43
Asia-C.A.E.C.	29	527	8,004	2.41	1.30	12.73	6.85	18.85	24.40	29.47	24.40
Asia-S.A.E.C.	5	172	202	2.41	1.30	1.85	1.00	21.84	21.54	-1.39	21.54
Asia-U.S.E.C.	386	12,134	141,165	2.41	1.27	14.81	7.81	16.62	23.16	39.34	23.16
Brazil-Asia	45	6,687	3,885	2.41	1.17	1.14	0.55	18.97	18.35	-3.26	18.35
C.A.W.C.-Africa	2	52	881	2.41	1.29	24.54	13.15	15.32	27.18	77.40	27.18
C.A.W.C.-C.A.E.C.	63	2,167	25,048	2.41	1.30	18.64	10.03	7.57	16.30	115.42	16.30
C.A.W.C.-Europe	19	626	6,230	2.41	1.28	14.39	7.66	12.19	18.57	52.30	18.57
C.A.W.C.-S.A.E.C.	16	268	1,070	2.41	1.30	3.24	1.75	11.59	12.04	3.85	12.04
C.A.W.C.-U.S.E.C.	47	1,854	23,415	2.41	1.29	22.02	11.75	7.69	18.15	136.14	18.15

(Continued)

Table A-22. Laden Transits, Tons Carried, and Toll Revenue, Maximum Non-Diverting Toll Rates, 200,000 DWT Scenario, 2060, by Ship Type, Diversion Status, and Trade Route (1990 US$, except when noted)(continued)

Ship Type, Diversion Status, and Trade Route	Transits	Cargo Tonnage Carried (thousands)	Revenue (thousands) a/	Current Toll Schedule: Toll Per Panama Canal Net Ton	Current Toll Schedule: Toll Per Cargo Ton Carried	New Toll Schedule: Toll Per Panama Canal Net Ton	New Toll Schedule: Toll Per Cargo Ton Carried	Total Transportation Costs per Ton Carried: Via Panama Canal: With Current Toll Structure	Via Panama Canal: With New Toll Structure	Via Panama Canal: Percent Increase	Via Least Costly Alternative Route
Dry Bulk Carriers (continued)											
Non-Diverted Transits (continued)											
Canada E.C.-Asia	129	7,535	24,984	2.41	1.22	5.61	2.85	18.78	20.41	8.65	20.41
Canada E.C.-Oceania	7	132	553	2.41	1.29	3.74	2.00	21.09	21.80	3.37	21.80
Canada E.C.-S.A.W.C.	12	426	2,065	2.41	1.29	7.48	4.00	12.85	15.56	21.10	15.56
Canada W.C.-Africa	175	7,689	26,985	2.41	1.28	6.31	3.36	17.49	19.57	11.87	19.57
Canada W.C.-C.A.E.C.	9	270	3,569	2.41	1.30	18.95	10.25	12.59	21.54	71.04	21.54
Canada W.C.-Europe	301	15,944	110,055	2.41	1.24	12.22	6.31	16.14	21.21	31.37	21.21
Canada W.C.-S.A.E.C.	29	1,820	3,810	2.41	1.22	3.51	1.77	11.69	12.24	4.74	12.24
Canada W.C.-U.S.E.C.	105	3,183	45,617	2.41	1.30	20.88	11.29	13.34	23.33	74.84	23.33
C.A.E.C.-Asia	22	808	5,440	2.41	1.30	12.10	6.55	18.13	23.38	28.93	23.38
C.A.E.C.-C.A.W.C.	49	1,650	19,382	2.41	1.30	19.05	10.31	7.82	16.83	115.10	16.83
C.A.E.C.-Canada W.C.	3	105	1,186	2.41	1.30	19.00	10.28	12.61	21.59	71.16	21.59
C.A.E.C.-Oceania	1	22	127	2.41	1.30	7.39	4.00	19.89	22.59	13.55	22.59
C.A.E.C.-S.A.W.C.	24	734	4,329	2.41	1.30	8.80	4.76	10.61	14.07	32.56	14.07
C.A.E.C.-U.S.W.C.	9	286	3,456	2.41	1.30	19.00	10.28	11.61	20.59	77.28	20.59
Columbia-Asia	2	352	3,573	2.41	1.17	19.82	9.60	17.07	25.50	49.41	25.50
Europe-C.A.W.C.	51	1,627	21,507	2.41	1.30	20.46	11.07	12.61	22.38	77.42	22.38
Europe-Canada W.C.	12	408	3,688	2.41	1.28	12.81	6.79	16.56	22.07	33.29	22.07
Europe-S.A.W.C.	16	514	781	2.41	1.30	2.29	1.24	16.13	16.07	-0.40	16.07
Europe-U.S.W.C.	142	4,679	40,950	2.41	1.28	12.12	6.42	15.66	20.80	32.85	20.80
Middle East-S.A.W.C.	2	104	334	2.41	1.25	5.81	3.00	14.08	15.83	12.47	15.83
Oceania-Canada E.C.	23	859	1,782	2.41	1.30	3.70	2.00	20.84	21.54	3.34	21.54
Oceania-C.A.E.C.	14	469	2,613	2.41	1.30	8.78	4.75	19.09	22.54	18.05	22.54
Oceania-U.S.E.C.	36	2,218	7,243	2.41	1.23	5.90	3.00	15.65	17.42	11.34	17.42

(Continued)

Table A-22. Laden Transits, Tons Carried, and Toll Revenue, Maximum Non-Diverting Toll Rates, 200,000 DWT Scenario, 2060, by Ship Type, Diversion Status, and Trade Route (1990 US$, except when noted)(continued)

Ship Type, Diversion Status, and Trade Route	Transits	Cargo Tonnage Carried (thousands)	Revenue (thousands) a/	Current Toll Schedule: Toll Per Panama Canal Net Ton	Current Toll Schedule: Toll Per Cargo Ton Carried	New Toll Schedule: Toll Per Panama Canal Net Ton	New Toll Schedule: Toll Per Cargo Ton Carried	Total Transportation Costs per Ton Carried: Via Panama Canal: With Current Toll Structure	Via Panama Canal: With New Toll Structure	Via Panama Canal: Percent Increase	Via Least Costly Alternative Route
Dry Bulk Carriers (continued)											
Non-Diverted Transits (continued)											
S.A.E.C.-Asia	60	2,563	9,041	2.41	1.28	6.29	3.33	16.77	18.82	12.25	18.82
S.A.E.C.-C.A.W.C.	12	441	777	2.41	1.30	3.25	1.76	11.61	12.07	3.92	12.07
S.A.E.C.-Canada W.C.	3	97	247	2.41	1.30	3.70	2.00	17.13	17.83	4.06	17.83
S.A.E.C.-U.S.W.C.	34	1,722	2,129	2.41	1.23	1.95	1.00	13.30	13.07	-1.76	13.07
S.A.W.C.-Africa	5	296	2,260	2.41	1.25	15.99	8.31	14.34	21.40	49.20	21.40
S.A.W.C.-Canada E.C.	1	24	93	2.41	1.30	7.40	4.00	13.34	16.04	20.21	16.04
S.A.W.C.-C.A.E.C.	12	277	2,116	2.41	1.30	8.78	4.75	10.59	14.04	32.54	14.04
S.A.W.C.-Europe	251	11,113	17,052	2.41	1.27	2.73	1.44	15.85	16.02	1.07	16.02
S.A.W.C.-U.S.E.C.	90	3,585	19,312	2.41	1.30	10.19	5.50	11.28	15.48	37.23	15.48
U.S.E.C.-Asia	1,629	139,874	1,054,267	2.41	1.20	13.74	6.82	16.99	22.61	33.11	22.61
U.S.E.C.-C.A.W.C.	375	14,003	181,746	2.41	1.30	22.72	12.23	7.80	18.73	140.21	18.73
U.S.E.C.-Oceania	23	909	2,853	2.41	1.29	5.60	3.00	19.26	20.97	8.88	20.97
U.S.E.C.-S.A.W.C.	82	2,944	17,781	2.41	1.30	10.13	5.45	11.45	15.60	36.28	15.60
U.S.E.C.-U.S.W.C.	1	0	260	2.41	1.30	22.31	12.07	11.61	22.38	92.70	22.38
U.S.W.C.-Africa	198	9,018	51,270	2.41	1.26	9.47	4.93	15.70	19.37	23.42	19.37
U.S.W.C.-Canada E.C.	5	211	2,188	2.41	1.29	18.36	9.86	13.93	22.50	61.48	22.50
U.S.W.C.-C.A.E.C.	1	30	360	2.41	1.30	18.95	10.25	11.59	20.54	77.17	20.54
U.S.W.C.-Europe	168	9,505	61,856	2.41	1.24	11.77	6.04	14.02	18.82	34.27	18.82
U.S.W.C.-S.A.E.C.	13	436	510	2.41	1.30	1.85	1.00	16.09	15.79	-1.88	15.79
U.S.W.C.-U.S.E.C.	8	215	4,534	2.41	1.28	23.51	12.49	11.92	23.13	94.04	23.13
Venezuela-Asia	8	1,231	10,140	2.41	1.17	16.10	7.80	17.07	23.70	38.86	23.70
Subtotal	4,986	284,965	2,030,953	2.41	1.23	12.42	6.35	15.90	20.98	31.97	20.98
Chemical Tankers											
Non-Diverted Transits											
Africa-S.A.W.C.	2	59	1,033	2.41	1.34	32.36	18.00	43.34	60.00	38.44	60.00

(Continued)

Table A-22. Laden Transits, Tons Carried, and Toll Revenue, Maximum Non-Diverting Toll Rates, 200,000 DWT Scenario, 2060, by Ship Type, Diversion Status, and Trade Route (1990 US$, except when noted)(continued)

Ship Type, Diversion Status, and Trade Route	Transits	Cargo Tonnage Carried (thousands)	Revenue (thousands) a/	Current Toll Schedule: Toll Per Panama Canal Net Ton	Current Toll Schedule: Toll Per Cargo Ton Carried	New Toll Schedule: Toll Per Panama Canal Net Ton	New Toll Schedule: Toll Per Cargo Ton Carried	Total Transportation Costs per Ton Carried: Via Panama Canal: With Current Toll Structure	Via Panama Canal: With New Toll Structure	Via Panama Canal: Percent Increase	Via Least Costly Alternative Route
Chemical Tankers (continued)											
Non-Diverted Transits (continued)											
Asia-C.A.E.C.	4	50	1,080	2.41	1.34	32.66	18.16	54.00	70.82	31.15	70.82
Asia-S.A.E.C.	4	23	347	2.41	1.34	5.39	3.00	50.34	52.00	3.30	52.00
Asia-U.S.E.C.	39	820	17,181	2.41	1.34	30.93	17.20	43.81	59.67	36.20	59.67
C.A.W.C.-C.A.E.C.	49	306	15,796	2.41	1.34	82.35	45.75	39.39	83.80	112.75	83.80
C.A.W.C.-Europe	9	169	3,286	2.41	1.34	35.23	19.59	38.02	56.27	48.00	56.27
C.A.W.C.-U.S.E.C.	63	885	31,322	2.41	1.34	58.45	32.49	27.74	58.89	112.30	58.89
Canada W.C.-Europe	4	106	1,948	2.41	1.34	28.77	16.00	42.34	57.00	34.62	57.00
Canada W.C.-U.S.E.C.	39	1,042	28,949	2.41	1.34	39.56	22.00	31.94	52.60	64.68	52.60
C.A.E.C.-Asia	9	293	4,057	2.41	1.34	25.17	14.00	42.34	55.00	29.90	55.00
C.A.E.C.-C.A.W.C.	5	115	3,140	2.41	1.34	39.56	22.00	21.34	42.00	96.81	42.00
C.A.E.C.-S.A.W.C.	11	217	2,845	2.41	1.34	20.36	11.32	30.34	40.32	32.89	40.32
C.A.E.C.-U.S.W.C.	2	15	646	2.41	1.34	78.84	43.80	55.94	98.40	75.91	98.40
Europe-C.A.W.C.	10	51	2,414	2.41	1.34	61.29	34.05	60.84	93.55	53.77	93.55
Europe-S.A.W.C.	9	98	516	2.41	1.34	9.34	5.19	58.65	62.50	6.56	62.50
Europe-U.S.W.C.	10	261	4,273	2.41	1.34	28.32	15.75	42.05	56.46	34.27	56.46
Oceania-U.S.E.C.	17	494	3,663	2.41	1.34	10.70	5.95	40.63	45.24	11.35	45.24
S.A.E.C.-C.A.W.C.	10	79	528	2.41	1.34	10.54	5.86	50.34	54.86	8.98	54.86
S.A.E.C.-U.S.W.C.	1	43	91	2.41	1.34	3.60	2.00	30.34	31.00	2.18	31.00
S.A.W.C.-C.A.E.C.	36	134	6,798	2.41	1.34	31.30	17.40	44.18	60.24	36.35	60.24
S.A.W.C.-Europe	12	151	738	2.41	1.34	8.35	4.64	53.51	56.81	6.17	56.81
S.A.W.C.-U.S.E.C.	12	100	3,031	2.41	1.34	29.23	16.25	39.07	53.98	38.16	53.98
U.S.E.C.-Asia	683	23,746	372,042	2.41	1.34	29.13	16.20	41.54	56.40	35.77	56.40
U.S.E.C.-C.A.W.C.	27	238	11,452	2.41	1.34	74.80	41.57	34.18	74.41	117.70	74.41

(Continued)

Table A-22. Laden Transits, Tons Carried, and Toll Revenue, Maximum Non-Diverting Toll Rates, 200,000 DWT Scenario, 2060, by Ship Type, Diversion Status, and Trade Route (1990 US$, except when noted)(continued)

Ship Type, Diversion Status, and Trade Route	Transits	Cargo Tonnage Carried (thousands)	Revenue (thousands) a/	Current Toll Schedule: Toll Per Panama Canal Net Ton	Current Toll Schedule: Toll Per Cargo Ton Carried	New Toll Schedule: Toll Per Panama Canal Net Ton	New Toll Schedule: Toll Per Cargo Ton Carried	Total Transportation Costs per Ton Carried: Via Panama Canal: With Current Toll Structure	Via Panama Canal: With New Toll Structure	Via Panama Canal: Percent Increase	Via Least Costly Alternative Route
Full Container Ships (continued)											
Non-Diverted Transits (continued)											
Canada W.C.-Europe	31	511	22,755	2.41	4.51	37.53	70.16	210.71	276.36	31.16	276.36
C.A.E.C.-Asia	8	116	3,862	2.41	4.47	19.17	35.55	213.60	244.68	14.55	244.68
C.A.E.C.-C.A.W.C.	1	7	710	2.41	4.47	52.44	97.22	143.12	235.87	64.81	235.87
C.A.E.C.-Oceania	1	8	283	2.41	4.49	27.25	50.73	250.78	297.02	18.44	297.02
C.A.E.C.-S.A.W.C.	2	10	428	2.41	4.49	21.27	39.64	178.89	214.04	19.65	214.04
C.A.E.C.-U.S.W.C.	2	26	1,545	2.41	4.45	37.90	69.92	152.93	218.40	42.81	218.40
Europe-C.A.W.C.	0	1	160	2.41	4.42	52.00	95.40	152.02	243.00	59.85	243.00
Europe-Canada W.C.	25	336	15,177	2.41	4.47	35.08	65.07	223.81	284.41	27.08	284.41
Europe-S.A.W.C.	81	1,309	41,189	2.41	4.42	19.16	35.15	191.22	221.95	16.07	221.95
Europe-U.S.W.C.	140	3,123	33,249	2.41	4.67	7.51	14.53	205.80	215.66	4.79	215.66
Middle East-U.S.W.C.	15	247	5,585	2.41	4.47	18.25	33.86	218.19	247.58	13.47	247.58
Oceania-Canada E.C.	10	177	108	2.41	4.47	0.58	1.08	251.62	248.23	-1.35	248.23
Oceania-C.A.E.C.	5	64	1,835	2.41	4.49	27.25	50.73	250.78	297.02	18.44	297.02
Oceania-S.A.E.C.	0	2	1	2.41	4.49	0.54	1.00	241.87	238.38	-1.44	238.38
S.A.E.C.-C.A.W.C.	1	8	74	2.41	4.49	7.49	13.94	197.14	206.59	4.79	206.59
S.A.E.C.-U.S.W.C.	2	20	471	2.41	4.49	21.89	40.76	183.23	219.50	19.80	219.50
S.A.W.C.-C.A.E.C.	0	1	70	2.41	4.49	21.27	39.64	178.89	214.04	19.65	214.04
S.A.W.C.-Europe	144	3,081	73,635	2.41	4.42	19.16	35.16	191.21	221.95	16.07	221.95
S.A.W.C.-U.S.E.C.	99	1,047	35,031	2.41	4.49	27.75	51.67	174.32	221.50	27.07	221.50
U.S.E.C.-Asia (low inv. cost)	234	8,718	115,271	2.41	4.88	9.05	18.33	233.14	246.59	5.77	246.59
U.S.E.C.-C.A.W.C.	13	112	10,279	2.41	4.49	62.97	117.25	140.53	253.29	80.24	253.29
U.S.E.C.-S.A.W.C.	117	1,005	41,320	2.41	4.49	27.75	51.67	174.32	221.50	27.07	221.50
U.S.E.C.-U.S.W.C.	1	26	1,748	2.41	4.76	45.48	89.80	138.99	224.03	61.19	224.03

(Continued)

Table A-22. Laden Transits, Tons Carried, and Toll Revenue, Maximum Non-Diverting Toll Rates, 200,000 DWT Scenario, 2060, by Ship Type, Diversion Status, and Trade Route (1990 US$, except when noted)(continued)

Ship Type, Diversion Status, and Trade Route	Transits	Cargo Tonnage Carried (thousands)	Revenue (thousands) a/	Current Toll Schedule: Toll Per Panama Canal Net Ton	Current Toll Schedule: Toll Per Cargo Ton Carried	New Toll Schedule: Toll Per Panama Canal Net Ton	New Toll Schedule: Toll Per Cargo Ton Carried	Total Transportation Costs per Ton Carried: Via Panama Canal: With Current Toll Structure	Via Panama Canal: With New Toll Structure	Via Panama Canal: Percent Increase	Via Least Costly Alternative Route
Chemical Tankers (continued)											
Non-Diverted Transits (continued)											
U.S.E.C.-Canada W.C.	8	61	2,929	2.41	1.34	83.24	46.25	60.04	104.95	74.80	104.95
U.S.E.C.-Oceania	17	545	3,584	2.41	1.34	11.67	6.49	43.19	48.34	11.92	48.34
U.S.E.C.-S.A.W.C.	53	560	11,140	2.41	1.34	31.09	17.28	41.25	57.19	38.64	57.19
U.S.E.C.-U.S.W.C.	48	1,814	38,931	2.41	1.34	34.44	19.14	25.49	43.29	69.84	43.29
U.S.W.C.-C.A.E.C.	1	12	379	2.41	1.34	37.76	21.00	29.34	49.00	67.01	49.00
U.S.W.C.-Europe	16	266	5,521	2.41	1.34	31.21	17.35	45.29	61.30	35.35	61.30
U.S.W.C.-S.A.E.C.	0	6	13	2.41	1.34	3.60	2.00	38.34	39.00	1.72	39.00
U.S.W.C.-U.S.E.C.	12	233	9,991	2.41	1.34	35.00	19.45	25.79	43.90	70.23	43.90
Subtotal	1,224	32,988	589,664	2.41	1.34	31.04	17.26	39.96	55.77	39.57	55.77
Full Container Ships											
Non-Diverted Transits											
Africa-U.S.W.C.	0	5	123	2.41	4.49	21.90	40.79	247.81	284.11	14.65	284.11
Asia-Canada E.C.	33	739	13,461	2.41	4.70	11.85	23.11	207.29	225.70	8.88	225.70
Asia-S.A.E.C.	4	14	291	2.41	4.49	6.41	11.94	274.66	282.11	2.71	282.11
Asia-U.S.E.C. (low inv. cost)	186	5,208	98,397	2.41	4.92	9.06	18.48	231.70	245.26	5.85	245.26
C.A.W.C.-C.A.E.C.	1	9	995	2.41	4.44	44.74	82.42	130.00	207.98	59.99	207.98
C.A.W.C.-Europe	2	37	2,020	2.41	4.42	31.20	57.25	152.02	204.85	34.75	204.85
C.A.W.C.-S.A.E.C.	0	7	65	2.41	4.44	6.12	11.28	162.41	169.25	4.21	169.25
C.A.W.C.-U.S.E.C.	0	5	304	2.41	4.49	51.76	96.37	161.41	253.29	56.93	253.29
Canada E.C.-Asia	35	658	6,183	2.41	4.55	7.32	13.83	226.90	236.18	4.09	236.18
Canada E.C.-Oceania	23	286	1,594	2.41	4.47	4.12	7.64	257.67	260.84	1.23	260.84
Canada E.C.-U.S.W.C.	8	247	13,691	2.41	4.77	39.91	79.00	154.77	229.00	47.96	229.00

(Continued)

Table A-22. Laden Transits, Tons Carried, and Toll Revenue, Maximum Non-Diverting Toll Rates, 200,000 DWT Scenario, 2060, by Ship Type, Diversion Status, and Trade Route (1990 US$, except when noted)(continued)

Ship Type, Diversion Status, and Trade Route	Transits	Cargo Tonnage Carried (thousands)	Revenue (thousands) a/	Current Toll Schedule: Toll Per Panama Canal Net Ton	Current Toll Schedule: Toll Per Cargo Ton Carried	New Toll Schedule: Toll Per Panama Canal Net Ton	New Toll Schedule: Toll Per Cargo Ton Carried	Total Transportation Costs per Ton Carried: Via Panama Canal: With Current Toll Structure	Via Panama Canal: With New Toll Structure	Via Panama Canal: Percent Increase	Via Least Costly Alternative Route
Full Container Ships (continued)											
Non-Diverted Transits (continued)											
U.S.W.C.-Africa	0	0	2	2.41	4.64	22.85	44.00	193.64	233.00	20.33	233.00
U.S.W.C.-Canada E.C.	0	8	479	2.41	4.57	40.40	76.54	159.49	231.46	45.13	231.46
U.S.W.C.-C.A.E.C.	6	90	5,078	2.41	4.46	41.01	75.91	161.25	232.70	44.31	232.70
U.S.W.C.-Europe	196	3,835	44,345	2.41	4.68	6.99	13.58	208.75	217.65	4.26	217.65
U.S.W.C.-Middle East	25	356	4,046	2.41	4.47	7.89	14.64	219.26	229.43	4.64	229.43
U.S.W.C.-U.S.E.C.	21	326	34,295	2.41	4.65	45.55	87.80	141.16	224.31	58.91	224.31
Subtotal	1,470	31,786	630,157	2.41	4.72	12.73	24.92	214.06	234.53	9.56	234.53
General Cargo Ships											
Non-Diverted Transits											
Africa-C.A.W.C.	3	46	1,728	2.41	1.39	46.36	26.70	31.04	56.35	81.55	56.35
Africa-S.A.W.C.	3	68	1,176	2.41	1.39	30.91	17.80	37.94	54.35	43.26	54.35
Asia-Canada E.C.	0	3	20	2.41	1.39	10.24	5.90	41.94	46.45	10.76	46.45
Asia-C.A.E.C.	127	1,501	35,259	2.41	1.39	24.05	13.85	36.99	49.45	33.69	49.45
Asia-S.A.E.C.	4	25	162	2.41	1.39	3.39	1.95	45.89	46.45	1.23	46.45
Asia-U.S.E.C.	49	632	15,558	2.41	1.39	27.11	15.58	38.14	52.33	37.22	52.33
C.A.W.C.-Africa	7	139	3,889	2.41	1.39	46.36	26.70	31.04	56.35	81.55	56.35
C.A.W.C.-C.A.E.C.	55	243	18,225	2.41	1.46	84.90	51.36	9.72	59.62	513.51	59.62
C.A.W.C.-Europe	51	291	15,495	2.41	1.41	40.77	23.79	29.65	52.03	75.50	52.03
C.A.W.C.-S.A.E.C.	15	99	1,146	2.41	1.41	10.26	5.99	27.71	32.29	16.54	32.29
C.A.W.C.-U.S.E.C.	16	84	6,952	2.41	1.45	106.43	64.11	12.26	74.92	511.01	74.92
Canada E.C.-Asia	10	25	1,206	2.41	1.39	10.25	5.90	41.94	46.45	10.76	46.45
Canada E.C.-C.A.W.C.	2	36	915	2.41	1.39	37.68	21.70	21.19	41.50	95.87	41.50

(Continued)

Table A-22. Laden Transits, Tons Carried, and Toll Revenue, Maximum Non-Diverting Toll Rates, 200,000 DWT Scenario, 2060, by Ship Type, Diversion Status, and Trade Route (1990 US$, except when noted)(continued)

Ship Type, Diversion Status, and Trade Route	Transits	Cargo Tonnage Carried (thousands)	Revenue (thousands) a/	Current Toll Schedule: Toll Per Panama Canal Net Ton	Current Toll Schedule: Toll Per Cargo Ton Carried	New Toll Schedule: Toll Per Panama Canal Net Ton	New Toll Schedule: Toll Per Cargo Ton Carried	Total Transportation Costs per Ton Carried: Via Panama Canal: With Current Toll Structure	Total Transportation Costs per Ton Carried: Via Panama Canal: With New Toll Structure	Total Transportation Costs per Ton Carried: Via Panama Canal: Percent Increase	Total Transportation Costs per Ton Carried: Via Least Costly Alternative Route
General Cargo Ships (continued)											
Non-Diverted Transits (continued)											
Canada E.C.-Oceania	0	7	9	2.41	1.39	1.74	1.00	47.84	47.45	-0.81	47.45
Canada E.C.-S.A.W.C.	16	148	2,907	2.41	1.39	15.37	8.85	28.09	35.55	26.57	35.55
Canada W.C.-C.A.E.C.	16	120	6,888	2.41	1.42	67.90	39.96	31.71	70.25	121.55	70.25
Canada W.C.-Europe	1	21	307	2.41	1.39	27.52	15.85	37.94	52.40	38.12	52.40
Canada W.C.-Middle East	2	13	35	2.41	1.39	1.74	1.00	42.89	42.50	-0.90	42.50
Canada W.C.-S.A.E.C.	14	126	5,840	2.41	1.41	61.66	36.12	36.39	71.10	95.37	71.10
C.A.E.C.-Asia	28	538	7,754	2.41	1.39	24.05	13.85	36.99	49.45	33.69	49.45
C.A.E.C.-C.A.W.C.	56	209	21,564	2.41	1.45	94.41	56.93	8.51	63.99	651.66	63.99
C.A.E.C.-Oceania	1	13	177	2.41	1.39	17.19	9.90	40.94	49.45	20.79	49.45
C.A.E.C.-S.A.W.C.	53	492	9,249	2.41	1.41	23.26	13.57	22.58	34.74	53.88	34.74
C.A.E.C.-U.S.W.C.	12	42	4,258	2.41	1.50	128.03	79.66	32.53	110.69	240.28	110.69
Europe-C.A.W.C.	87	598	42,735	2.41	1.40	55.84	32.41	28.49	59.50	108.85	59.50
Europe-Canada W.C.	3	11	750	2.41	1.50	93.37	58.09	80.37	136.96	70.41	136.96
Europe-S.A.W.C.	73	734	4,438	2.41	1.39	5.55	3.20	33.84	35.65	5.35	35.65
Europe-U.S.W.C.	4	18	1,326	2.41	1.44	77.98	46.68	62.15	107.39	72.78	107.39
Middle East-S.A.W.C.	6	3	805	2.41	1.50	48.19	29.98	73.82	102.30	38.58	102.30
Middle East-U.S.W.C.	7	19	1,073	2.41	1.39	13.72	7.90	40.94	47.45	15.91	47.45
Oceania-C.A.E.C.	1	7	232	2.41	1.39	18.93	10.90	39.94	49.45	23.82	49.45
Oceania-U.S.E.C.	2	9	231	2.41	1.43	22.69	13.48	57.41	69.46	20.99	69.46
S.A.E.C.-C.A.W.C.	13	261	747	2.41	1.39	5.12	2.95	25.14	26.70	6.21	26.70
S.A.E.C.-Canada W.C.	0	2	26	2.41	1.39	8.51	4.90	35.04	38.55	10.02	38.55
S.A.E.C.-U.S.W.C.	17	77	934	2.41	1.40	5.80	3.36	38.23	40.19	5.14	40.19
S.A.W.C.-Africa	8	149	3,129	2.41	1.39	35.94	20.70	34.04	53.35	56.74	53.35

(Continued)

Table A-22. Laden Transits, Tons Carried, and Toll Revenue, Maximum Non-Diverting Toll Rates, 200,000 DWT Scenario, 2060, by Ship Type, Diversion Status, and Trade Route (1990 US$, except when noted)(continued)

Ship Type, Diversion Status, and Trade Route	Transits	Cargo Tonnage Carried (thousands)	Revenue (thousands) a/	Current Toll Schedule: Toll Per Panama Canal Net Ton	Current Toll Schedule: Toll Per Cargo Ton Carried	New Toll Schedule: Toll Per Panama Canal Net Ton	New Toll Schedule: Toll Per Cargo Ton Carried	Total Transportation Costs per Ton Carried: Via Panama Canal: With Current Toll Structure	Via Panama Canal: With New Toll Structure	Via Panama Canal: Percent Increase	Via Least Costly Alternative Route
General Cargo Ships (continued)											
Non-Diverted Transits (continued)											
S.A.W.C.-Canada E.C.	1	14	148	2.41	1.39	15.37	8.85	28.09	35.55	26.57	35.55
S.A.W.C.-C.A.E.C.	82	361	15,571	2.41	1.45	43.54	26.12	23.90	48.57	103.26	48.57
S.A.W.C.-Europe	171	2,817	10,159	2.41	1.39	5.12	2.95	33.04	34.60	4.73	34.60
S.A.W.C.-Middle East	2	25	269	2.41	1.39	13.72	7.90	35.99	42.50	18.10	42.50
S.A.W.C.-U.S.E.C.	56	430	12,993	2.41	1.40	29.02	16.89	25.31	40.80	61.18	40.80
U.S.E.C.-Asia	74	1,214	23,648	2.41	1.39	27.24	15.67	38.38	52.66	37.22	52.66
U.S.E.C.-C.A.W.C.	103	776	44,039	2.41	1.43	80.40	47.66	14.67	60.90	315.17	60.90
U.S.E.C.-Oceania	6	89	804	2.41	1.39	11.98	6.90	40.94	46.45	13.46	46.45
U.S.E.C.-S.A.W.C.	187	1,336	43,228	2.41	1.41	29.98	17.48	25.45	41.52	63.18	41.52
U.S.E.C.-U.S.W.C.	1	0	309	2.41	1.50	143.07	89.02	35.37	122.89	247.45	122.89
U.S.W.C.-Africa	7	75	1,578	2.41	1.39	20.58	11.85	36.99	47.45	28.29	47.45
U.S.W.C.-C.A.E.C.	3	1	1,119	2.41	1.50	128.03	79.66	32.53	110.69	240.28	110.69
U.S.W.C.-Europe	3	25	682	2.41	1.42	44.84	26.44	44.83	69.85	55.81	69.85
U.S.W.C.-S.A.E.C.	8	19	412	2.41	1.45	12.17	7.31	53.26	59.12	11.01	59.12
Subtotal	1,464	13,991	372,104	2.41	1.40	29.63	17.20	30.69	46.34	50.98	46.34
Liquid Gas Carriers											
Non-Diverted Transits											
C.A.W.C.-C.A.E.C.	10	43	2,623	2.41	7.30	49.83	151.00	57.30	201.00	250.77	201.00
C.A.E.C.-Asia	10	53	2,839	2.41	4.67	30.20	58.57	124.16	178.06	43.41	178.06
C.A.E.C.-C.A.W.C.	56	742	39,655	2.41	3.79	37.19	58.53	26.91	81.65	203.39	81.65
C.A.E.C.-S.A.W.C.	4	60	1,397	2.41	3.83	17.64	28.00	45.83	70.00	52.75	70.00
C.A.E.C.-U.S.W.C.	0	3	123	2.41	3.83	38.43	61.00	51.83	109.00	110.32	109.00

(Continued)

Table A-22. Laden Transits, Tons Carried, and Toll Revenue, Maximum Non-Diverting Toll Rates, 200,000 DWT Scenario, 2060, by Ship Type, Diversion Status, and Trade Route (1990 US$, except when noted)(continued)

Ship Type, Diversion Status, and Trade Route	Transits	Cargo Tonnage Carried (thousands)	Revenue (thousands) a/	Current Toll Schedule: Toll Per Panama Canal Net Ton	Current Toll Schedule: Toll Per Cargo Ton Carried	New Toll Schedule: Toll Per Panama Canal Net Ton	New Toll Schedule: Toll Per Cargo Ton Carried	Total Transportation Costs per Ton Carried: Via Panama Canal: With Current Toll Structure	Via Panama Canal: With New Toll Structure	Via Panama Canal: Percent Increase	Via Least Costly Alternative Route
Liquid Gas Carriers (continued)											
Non-Diverted Transits (continued)											
Europe-C.A.W.C.	2	7	422	2.41	7.30	36.96	112.00	129.30	234.00	80.97	234.00
Europe-S.A.W.C.	0	1	7	2.41	3.82	5.67	9.00	76.82	82.00	6.74	82.00
Oceania-U.S.E.C.	4	57	862	2.41	3.62	9.65	14.50	75.10	85.98	14.48	85.98
S.A.E.C.-Asia	2	30	519	2.41	3.83	13.23	21.00	89.83	107.00	19.12	107.00
S.A.E.C.-C.A.W.C.	12	32	492	2.41	7.30	7.92	24.00	115.30	132.00	14.48	132.00
U.S.E.C.-Asia	3	41	1,929	2.41	3.86	30.77	49.29	94.04	139.47	48.31	139.47
U.S.E.C.-C.A.W.C.	0	1	76	2.41	7.30	55.10	167.00	66.30	226.00	240.85	226.00
U.S.E.C.-S.A.W.C.	1	2	95	2.41	7.30	26.40	80.00	109.30	182.00	66.51	182.00
Subtotal	104	1,071	51,039	2.41	3.99	32.59	53.99	44.45	96.49	117.06	96.49
Passenger Ships											
Non-Diverted Transits											
North-Bound	197	0	2,354	2.41	0.00	2.01	0.00	0.00	0.00	0.00	0.00
South-Bound	238	0	4,340	2.41	0.00	2.01	0.00	0.00	0.00	0.00	0.00
Subtotal	435	0	6,694	2.41	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Refrigerated Ships											
Non-Diverted Transits											
Africa-Asia	46	292	926	2.41	4.00	2.17	3.60	173.40	173.00	-0.23	173.00
Africa-C.A.W.C.	0	0	81	2.41	4.00	65.27	108.40	120.20	224.60	86.85	224.60
Africa-S.A.W.C.	49	21	23,947	2.41	3.94	47.57	77.81	154.50	228.37	47.81	228.37
Asia-C.A.E.C.	25	95	9,946	2.41	3.86	32.49	52.00	131.86	180.00	36.51	180.00
Asia-S.A.E.C.	7	5	320	2.41	4.00	4.94	8.20	180.00	184.20	2.33	184.20

(Continued)

Table A-22. Laden Transits, Tons Carried, and Toll Revenue, Maximum Non-Diverting Toll Rates, 200,000 DWT Scenario, 2060, by Ship Type, Diversion Status, and Trade Route (1990 US$, except when noted)(continued)

Ship Type, Diversion Status, and Trade Route	Transits	Cargo Tonnage Carried (thousands)	Revenue (thousands) a/	Current Toll Schedule: Toll Per Panama Canal Net Ton	Current Toll Schedule: Toll Per Cargo Ton Carried	New Toll Schedule: Toll Per Panama Canal Net Ton	New Toll Schedule: Toll Per Cargo Ton Carried	Total Transportation Costs per Ton Carried: Via Panama Canal: With Current Toll Structure	Via Panama Canal: With New Toll Structure	Via Panama Canal: Percent Increase	Via Least Costly Alternative Route
Refrigerated Ships (continued)											
Non-Diverted Transits (continued)											
Asia-U.S.E.C.	1	0	289	2.41	4.00	40.96	68.00	149.60	213.60	42.78	213.60
C.A.W.C.-Africa	2	7	1,124	2.41	4.00	65.29	108.40	120.20	224.60	86.85	224.60
C.A.W.C.-Canada E.C.	1	5	289	2.41	4.00	53.12	88.20	79.20	163.40	106.31	163.40
C.A.W.C.-C.A.E.C.	39	294	24,922	2.41	3.86	51.87	83.00	52.86	132.00	149.73	132.00
C.A.W.C.-Europe	276	1,493	129,159	2.41	3.86	38.12	61.00	92.86	150.00	61.54	150.00
C.A.W.C.-S.A.E.C.	2	9	118	2.41	4.00	7.59	12.60	94.40	103.00	9.11	103.00
C.A.W.C.-U.S.E.C.	1	2	661	2.41	4.00	60.47	100.40	64.00	160.40	150.62	160.40
Canada E.C.-Asia	15	92	1,705	2.41	4.00	12.53	20.80	165.80	182.60	10.13	182.60
Canada E.C.-C.A.W.C.	11	31	6,727	2.41	3.86	50.62	81.00	71.86	149.00	107.36	149.00
Canada W.C.-Europe	4	45	1,739	2.41	3.86	38.12	61.00	132.86	190.00	43.01	190.00
C.A.E.C.-Asia	13	37	4,632	2.41	3.93	34.56	56.34	144.92	197.33	36.17	197.33
C.A.E.C.-C.A.W.C.	43	11	27,486	2.41	3.86	51.87	83.00	52.86	132.00	149.73	132.00
C.A.E.C.-S.A.W.C.	93	82	25,028	2.41	3.86	21.87	35.00	75.86	107.00	41.06	107.00
Europe-C.A.W.C.	308	26	231,015	2.41	3.86	61.24	98.00	92.86	187.00	101.39	187.00
Europe-Canada W.C.	1	1	355	2.41	4.00	37.83	62.80	145.60	204.40	40.38	204.40
Europe-S.A.W.C.	295	278	23,810	2.41	3.88	6.93	11.16	119.82	127.10	6.08	127.10
Europe-U.S.W.C.	18	16	6,112	2.41	4.00	36.62	60.80	135.40	192.20	41.95	192.20
Middle East-S.A.W.C.	3	6	465	2.41	4.00	18.91	31.40	138.00	165.40	19.85	165.40
Oceania-C.A.E.C.	6	50	1,569	2.41	4.00	26.26	43.60	157.20	196.80	25.19	196.80
Oceania-U.S.E.C.	53	207	8,296	2.41	3.98	16.34	27.02	160.43	183.47	14.36	183.47
S.A.E.C.-Asia	12	62	1,914	2.41	4.00	17.71	29.40	146.60	172.00	17.33	172.00
S.A.W.C.-Africa	27	111	13,625	2.41	3.94	48.74	79.71	130.08	205.85	58.25	205.85
S.A.W.C.-C.A.E.C.	40	241	10,565	2.41	3.86	21.97	35.23	76.48	107.85	41.01	107.85

(Continued)

Table A-22. Laden Transits, Tons Carried, and Toll Revenue, Maximum Non-Diverting Toll Rates, 200,000 DWT Scenario, 2060, by Ship Type, Diversion Status, and Trade Route (1990 US$, except when noted)(continued)

Ship Type, Diversion Status, and Trade Route	Transits	Cargo Tonnage Carried (thousands)	Revenue (thousands) a/	Current Toll Schedule: Toll Per Panama Canal Net Ton	Current Toll Schedule: Toll Per Cargo Ton Carried	New Toll Schedule: Toll Per Panama Canal Net Ton	New Toll Schedule: Toll Per Cargo Ton Carried	Total Transportation Costs per Ton Carried: Via Panama Canal: With Current Toll Structure	Via Panama Canal: With New Toll Structure	Via Panama Canal: Percent Increase	Via Least Costly Alternative Route
Refrigerated Ships (continued)											
Non-Diverted Transits (continued)											
S.A.W.C.-Europe	1,101	6,815	86,297	2.41	3.89	6.91	11.16	119.88	127.15	6.06	127.15
S.A.W.C.-Middle East	5	18	844	2.41	4.00	18.91	31.40	138.00	165.40	19.85	165.40
S.A.W.C.-U.S.E.C.	808	3,821	255,421	2.41	3.88	27.00	43.45	82.93	122.50	47.72	122.50
U.S.E.C.-Asia	46	189	21,080	2.41	3.87	39.22	63.06	139.10	198.29	42.55	198.29
U.S.E.C.-C.A.W.C.	70	196	49,049	2.41	3.86	57.49	92.00	57.86	146.00	152.35	146.00
U.S.E.C.-S.A.W.C.	423	892	136,523	2.41	3.87	26.89	43.14	82.19	121.46	47.79	121.46
U.S.W.C.-Europe	140	804	52,599	2.41	3.95	36.87	60.42	134.45	190.92	42.00	190.92
U.S.W.C.-S.A.E.C.	2	6	93	2.41	3.98	5.19	8.58	131.22	135.82	3.50	135.82
Subtotal	3,983	16,260	1,158,732	2.41	3.88	25.14	40.50	106.85	135.63	26.93	135.63
Roll-On Roll-Off											
Non-Diverted Transits											
Asia-Canada E.C.	3	15	434	2.41	9.35	8.99	34.88	298.90	324.43	8.54	324.43
Asia-C.A.E.C.	32	633	13,191	2.41	7.92	11.98	39.41	236.83	268.32	13.29	268.32
Asia-U.S.E.C.	67	1,286	42,741	2.41	7.95	19.19	63.32	248.85	304.22	22.25	304.22
C.A.W.C.-Europe	33	177	16,323	2.41	8.66	25.04	90.00	198.66	280.00	40.94	280.00
C.A.W.C.-S.A.E.C.	0	0	3	2.41	8.66	2.23	8.00	211.66	211.00	-0.31	211.00
C.A.W.C.-U.S.E.C.	3	1	1,568	2.41	8.66	30.89	111.00	170.66	273.00	59.97	273.00
Canada E.C.-Asia	17	85	1,586	2.41	9.30	6.27	24.20	355.27	370.17	4.19	370.17
Canada E.C.-Oceania	3	61	184	2.41	7.77	1.64	5.30	251.49	249.02	-0.98	249.02
Canada W.C.-C.A.E.C.	0	1	222	2.41	10.19	38.94	164.71	239.87	394.39	64.42	394.39
C.A.E.C.-C.A.W.C.	1	2	447	2.41	9.72	34.37	138.58	167.54	296.40	76.92	296.40
C.A.E.C.-Oceania	7	20	2,524	2.41	8.66	18.09	65.00	275.66	332.00	20.44	332.00

(Continued)

Table A-22. Laden Transits, Tons Carried, and Toll Revenue, Maximum Non-Diverting Toll Rates, 200,000 DWT Scenario, 2060, by Ship Type, Diversion Status, and Trade Route (1990 US$, except when noted)(continued)

Ship Type, Diversion Status, and Trade Route	Transits	Cargo Tonnage Carried (thousands)	Revenue (thousands) a/	Current Toll Schedule: Toll Per Panama Canal Net Ton	Current Toll Schedule: Toll Per Cargo Ton Carried	New Toll Schedule: Toll Per Panama Canal Net Ton	New Toll Schedule: Toll Per Cargo Ton Carried	Total Transportation Costs per Ton Carried: Via Panama Canal: With Current Toll Structure	Via Panama Canal: With New Toll Structure	Via Panama Canal: Percent Increase	Via Least Costly Alternative Route
Roll-On Roll-Off (continued)											
Non-Diverted Transits (continued)											
C.A.E.C.-S.A.W.C.	85	149	13,343	2.41	10.19	13.58	57.43	232.93	280.17	20.28	280.17
Europe-C.A.W.C.	35	221	30,696	2.41	8.66	44.52	160.00	198.66	350.00	76.18	350.00
Europe-S.A.W.C.	0	0	17	2.41	8.67	13.63	49.00	262.67	303.00	15.36	303.00
Europe-U.S.W.C.	1	3	319	2.41	8.66	26.71	96.00	262.66	350.00	33.25	350.00
Oceania-C.A.E.C.	0	0	6	2.41	7.97	14.16	46.80	234.97	273.80	16.53	273.80
S.A.W.C.-C.A.E.C.	22	44	3,451	2.41	10.19	13.58	57.43	232.93	280.17	20.28	280.17
S.A.W.C.-Europe	2	5	533	2.41	8.66	15.86	57.00	262.66	311.00	18.40	311.00
S.A.W.C.-U.S.E.C.	12	25	2,533	2.41	10.19	18.27	77.28	224.99	292.08	29.82	292.08
U.S.E.C.-Asia	14	93	6,951	2.41	8.64	24.75	88.72	298.20	378.28	26.85	378.28
U.S.E.C.-C.A.W.C.	4	7	3,067	2.41	8.66	38.12	137.00	144.66	273.00	88.72	273.00
U.S.E.C.-S.A.W.C.	57	101	12,094	2.41	10.19	18.27	77.28	224.99	292.08	29.82	292.08
U.S.W.C.-Canada E.C.	1	2	315	2.41	10.20	38.00	160.77	263.70	414.27	57.10	414.27
U.S.W.C.-C.A.E.C.	2	48	2,021	2.41	7.75	24.74	79.57	160.82	232.64	44.66	232.64
U.S.W.C.-Europe	0	1	20	2.41	7.77	19.42	62.59	212.68	267.50	25.78	267.50
U.S.W.C.-U.S.E.C.	0	9	481	2.41	7.86	31.95	104.20	159.45	255.79	60.42	255.79
Subtotal	400	2,990	155,074	2.41	8.67	19.76	71.08	240.63	298.58	24.08	298.58
Tankers											
Non-Diverted Transits											
Africa-U.S.W.C.	0	0	2	2.41	1.27	13.25	7.00	18.27	24.00	31.34	24.00
Asia-U.S.E.C.	3	77	1,088	2.41	1.27	24.55	12.92	27.11	38.76	42.98	38.76
C.A.W.C.-Africa	0	0	80	2.41	1.27	104.50	55.00	46.27	100.00	116.13	100.00
C.A.W.C.-Canada E.C.	0	8	153	2.41	1.27	33.96	17.88	12.21	28.82	136.06	28.82

(Continued)

Table A-22. Laden Transits, Tons Carried, and Toll Revenue, Maximum Non-Diverting Toll Rates, 200,000 DWT Scenario, 2060, by Ship Type, Diversion Status, and Trade Route (1990 US$, except when noted)(continued)

Ship Type, Diversion Status, and Trade Route	Transits	Cargo Tonnage Carried (thousands)	Revenue (thousands) a/	Current Toll Schedule: Toll Per Panama Canal Net Ton	Current Toll Schedule: Toll Per Cargo Ton Carried	New Toll Schedule: Toll Per Panama Canal Net Ton	New Toll Schedule: Toll Per Cargo Ton Carried	Total Transportation Costs per Ton Carried, Via Panama Canal: With Current Toll Structure	Total Transportation Costs per Ton Carried, Via Panama Canal: With New Toll Structure	Total Transportation Costs per Ton Carried, Via Panama Canal: Percent Increase	Total Transportation Costs per Ton Carried: Via Least Costly Alternative Route
Tankers (continued)											
Non-Diverted Transits (continued)											
C.A.W.C.-C.A.E.C.	16	95	7,356	2.41	1.27	49.40	26.00	10.26	34.99	241.09	34.99
C.A.W.C.-Europe	4	94	1,475	2.41	1.27	24.59	12.94	17.17	28.84	67.98	28.84
C.A.W.C.-U.S.E.C.	10	80	4,842	2.41	1.27	52.15	27.45	11.18	37.36	234.21	37.36
Canada E.C.-Asia	18	707	2,551	2.41	1.27	6.50	3.42	25.06	27.21	8.59	27.21
Canada W.C.-U.S.E.C.	6	255	4,117	2.41	1.28	25.85	13.75	13.76	26.23	90.60	26.23
C.A.E.C.-Asia	5	141	1,864	2.41	1.27	19.63	10.31	22.36	31.40	40.46	31.40
C.A.E.C.-C.A.W.C.	45	750	20,005	2.41	1.27	31.54	16.59	7.38	22.70	207.68	22.70
C.A.E.C.-S.A.W.C.	46	887	9,275	2.41	1.27	15.14	7.97	13.34	20.04	50.24	20.04
C.A.E.C.-U.S.W.C.	5	228	3,269	2.41	1.27	24.28	12.77	11.93	23.43	96.44	23.43
Europe-C.A.W.C.	17	81	3,103	2.41	1.27	40.09	21.10	24.95	44.78	79.49	44.78
Europe-S.A.W.C.	4	82	285	2.41	1.27	5.91	3.11	23.34	25.18	7.89	25.18
Europe-U.S.W.C.	4	109	1,342	2.41	1.27	20.88	10.99	22.50	32.22	43.21	32.22
Middle East-U.S.W.C.	0	0	0	2.41	1.25	0.19	0.10	1.63	0.48	-70.49	0.48
Oceania-U.S.E.C.	9	162	1,162	2.41	1.27	11.06	5.82	28.05	32.60	16.23	32.60
S.A.E.C.-Asia	77	14,050	48,488	2.41	1.27	6.56	3.45	14.13	16.31	15.44	16.31
S.A.E.C.-C.A.W.C.	68	3,130	8,802	2.41	1.26	3.91	2.05	10.89	11.68	7.22	11.68
S.A.E.C.-U.S.W.C.	27	978	1,569	2.41	1.27	2.70	1.42	18.67	18.82	0.81	18.82
S.A.W.C.-Canada E.C.	1	14	138	2.41	1.27	15.29	8.05	20.47	27.25	33.13	27.25
S.A.W.C.-C.A.E.C.	15	557	3,707	2.41	1.27	10.83	5.70	10.99	15.42	40.33	15.42
S.A.W.C.-Europe	19	173	718	2.41	1.27	6.86	3.61	28.01	30.35	8.36	30.35
S.A.W.C.-U.S.E.C.	17	607	5,573	2.41	1.27	15.33	8.07	11.71	18.51	58.09	18.51
U.S.E.C.-Asia	90	2,946	37,381	2.41	1.27	21.12	11.10	22.71	32.54	43.31	32.54
U.S.E.C.-C.A.W.C.	14	260	7,635	2.41	1.27	38.36	20.19	9.23	28.15	205.03	28.15

(Continued)

Table A-22. Laden Transits, Tons Carried, and Toll Revenue, Maximum Non-Diverting Toll Rates, 200,000 DWT Scenario, 2060, by Ship Type, Diversion Status, and Trade Route (1990 US$, except when noted)(continued)

Ship Type, Diversion Status, and Trade Route	Transits	Cargo Tonnage Carried (thousands)	Revenue (thousands) a/	Current Toll Schedule: Toll Per Panama Canal Net Ton	Current Toll Schedule: Toll Per Cargo Ton Carried	New Toll Schedule: Toll Per Panama Canal Net Ton	New Toll Schedule: Toll Per Cargo Ton Carried	Total Transportation Costs per Ton Carried: Via Panama Canal: With Current Toll Structure	Via Panama Canal: With New Toll Structure	Via Panama Canal: Percent Increase	Via Least Costly Alternative Route
Tankers (continued)											
Non-Diverted Transits (continued)											
U.S.E.C.-Canada W.C.	2	7	1,034	2.41	1.27	35.87	18.88	18.17	35.78	96.94	35.78
U.S.E.C.-Oceania	4	129	806	2.41	1.27	10.34	5.44	26.02	30.19	16.03	30.19
U.S.E.C.-S.A.W.C.	3	49	578	2.41	1.27	18.20	9.58	13.63	21.94	60.99	21.94
U.S.E.C.-U.S.W.C.	21	601	13,322	2.41	1.27	34.52	18.16	14.06	30.95	120.16	30.95
U.S.W.C.-Africa	10	334	2,368	2.41	1.26	9.68	5.06	16.39	20.19	23.18	20.19
U.S.W.C.-C.A.E.C.	3	96	1,551	2.41	1.26	23.80	12.49	11.90	23.13	94.29	23.13
U.S.W.C.-S.A.E.C.	1	29	40	2.41	1.27	2.68	1.41	18.76	18.90	0.75	18.90
U.S.W.C.-U.S.E.C.	4	102	2,324	2.41	1.27	32.38	17.01	13.36	29.10	117.88	29.10
Subtotal	567	27,821	198,005	2.41	1.27	11.92	6.27	15.12	19.64	29.86	19.64
Vehicle Carriers											
Non-Diverted Transits											
Asia-C.A.E.C.	13	34	3,918	2.41	29.09	8.97	108.30	417.18	496.39	18.99	496.39
Asia-S.A.E.C.	0	0	7	2.41	29.13	1.11	13.44	484.18	468.49	-3.24	468.49
Asia-U.S.E.C.	481	2,251	155,583	2.41	29.20	8.74	105.94	439.57	516.31	17.46	516.31
C.A.W.C.-C.A.E.C.	3	3	995	2.41	28.71	17.07	203.34	266.36	440.99	65.56	440.99
Canada E.C.-Asia	1	3	35	2.41	29.22	1.65	20.00	465.22	456.00	-1.98	456.00
C.A.E.C.-C.A.W.C.	8	3	4,415	2.41	29.22	13.86	168.00	272.22	411.00	50.98	411.00
C.A.E.C.-Oceania	1	0	237	2.41	29.22	6.35	77.00	434.22	482.00	11.00	482.00
Europe-Canada W.C.	7	16	2,879	2.41	30.90	7.95	101.96	386.38	457.44	18.39	457.44
Europe-U.S.W.C.	156	299	46,872	2.41	29.95	6.91	85.91	403.00	458.96	13.89	458.96
S.A.W.C.-C.A.E.C.	0	0	29	2.41	28.70	7.14	85.00	323.70	380.00	17.39	380.00
U.S.E.C.-Asia	42	192	17,406	2.41	29.67	10.07	124.04	415.80	510.17	22.70	510.17

(Continued)

Table A-22. Laden Transits, Tons Carried, and Toll Revenue, Maximum Non-Diverting Toll Rates, 200,000 DWT Scenario, 2060, by Ship Type, Diversion Status, and Trade Route (1990 US$, except when noted)(continued)

Ship Type, Diversion Status, and Trade Route	Transits	Cargo Tonnage Carried (thousands)	Revenue (thousands) a/	Current Toll Schedule: Toll Per Panama Canal Net Ton	Current Toll Schedule: Toll Per Cargo Ton Carried	New Toll Schedule: Toll Per Panama Canal Net Ton	New Toll Schedule: Toll Per Cargo Ton Carried	Total Transportation Costs per Ton Carried: Via Panama Canal: With Current Toll Structure	Total Transportation Costs per Ton Carried: Via Panama Canal: With New Toll Structure	Total Transportation Costs per Ton Carried: Via Panama Canal: Percent Increase	Total Transportation Costs per Ton Carried: Via Least Costly Alternative Route
Vehicle Carriers (continued)											
Non-Diverted Transits (continued)											
U.S.E.C.-Oceania	13	30	1,940	2.41	29.22	4.04	49.00	433.22	453.00	4.57	453.00
Subtotal	724	2,831	234,314	2.41	29.42	8.36	102.08	433.13	508.34	17.37	508.34
Total Non-Diverting	17,822	451,699	6,401,906	2.41	1.80	16.75	12.53	45.01	55.29	22.84	55.29

Notes: These calculations do not include all transits and tons carried forecast by the WEFA Group. For some ship-type and trade-route combinations (accounting for a total of 27 transits and 291695 tons), vessel costs were not available for every DWT size interval. As a result, these transits and tons were excluded. In addition, for 2480 transits and 49528628 tons, the cost by way of the Panama Canal without a toll was higher than the least costly alternative route. As a result, these transits and tons were excluded. Percentages may not calculate exactly as shown due to rounding. A fee of $0.40 per Panama Canal net ton has also been included to account for charges such as handling and agency fees incurred when transitting the Canal. The extra fee is only used to determine divesion status by adding it to the cost per ton carried and is not included in the revenue calculations.

a/ Revenue lost from diversions is measured as the revenue generated by the maximum, nondiverting toll rate increase.

Source: Nathan Associates Inc., based on forecasts of traffic and transportation costs provided by The WEFA Group.

MAXIMUM NON-DIVERTING TOLL RATES, 250,000-DWT SCENARIO, 2060

Table A-23. Laden Transits, Tons Carried, and Toll Revenue, Maximum Non-Diverting Toll Rates, 250,000 DWT Scenario, 2060, by Ship Type

	Transits				Tons Carried(thousands)				Revenue(1990 US$thousands)			
Ship Type	Canal	Diverted	Total	Diverted as a Percent of Total	Canal	Diverted	Total	Diverted as a Percent of Total	Canal	Lost a/	Total	Lost as a Percent of Total
Container-Breakbulk	2,465	0	2,465	0.00	36,996	0	36,996	0.00	975,169	0	975,169	0.00
Dry Bulk Carriers	5,057	0	5,057	0.00	298,765	0	298,765	0.00	2,081,616	0	2,081,616	0.00
Chemical Tankers	1,224	0	1,224	0.00	32,988	0	32,988	0.00	589,664	0	589,664	0.00
Full Container Ships	1,470	0	1,470	0.00	31,786	0	31,786	0.00	630,157	0	630,157	0.00
General Cargo Ships	1,464	0	1,464	0.00	13,991	0	13,991	0.00	372,104	0	372,104	0.00
Liquid Gas Carriers	104	0	104	0.00	1,071	0	1,071	0.00	51,039	0	51,039	0.00
Passenger Ships	435	0	435	0.00	0	0	0	0.00	6,694	0	6,694	0.00
Refrigerated Ships	3,983	0	3,983	0.00	16,260	0	16,260	0.00	1,158,732	0	1,158,732	0.00
Roll-On Roll-Off	400	0	400	0.00	2,990	0	2,990	0.00	155,074	0	155,074	0.00
Tankers	553	0	553	0.00	27,821	0	27,821	0.00	223,865	0	223,865	0.00
Vehicle Carriers	724	0	724	0.00	2,831	0	2,831	0.00	234,314	0	234,314	0.00
Total	17,879	0	17,879	0.00	465,499	0	465,499	0.00	6,478,429	0	6,478,429	0.00

Notes: These calculations do not include all transits and tons carried forecast by the WEFA Group. For some ship-type and trade-route combinations (accounting for a total of 27 transits and 291695 tons), vessel costs were not available for every DWT size interval. As a result, these transits and tons were excluded. In addition, for 2480 transits and 49528628 tons, the cost by way of the Panama Canal without a toll was higher than the least costly alternative route. As a result, these transits and tons were excluded. A fee of $0.40 per Panama Canal net ton has also been included to account for charges such as handling and agency fees incurred when transitting the Canal. The extra fee is only used to determine diversion status by adding it to cost per ton carried and is not included in the revenue calculations.

a/ Revenue lost from diversions is measured as the revenue generated by the maximum, nondiverting toll rate increase.

Source: Nathan Associates Inc., based on forecasts of traffic and transportation costs provided by The WEFA Group.

Table A-24. Ballast Transits, Tons Carried, and Toll Revenue, Current Toll Structure and Rates, 250,000 DWT Scenario, 2060, by Ship Type

	Transits				Tons Carried(thousands)				Revenue(1990 US$thousands)			
Ship Type	Canal	Diverted	Total	Diverted as a Percent of Total	Canal	Diverted	Total	Diverted as a Percent of Total	Canal	Lost	Total	Lost as a Percent of Total
Container-Breakbulk	67	0	67	0.00	0	0	0	0.00	1,629	0	1,629	0.00
Dry Bulk Carriers	342	0	342	0.00	0	0	0	0.00	10,895	0	10,895	0.00
Chemical Tankers	127	0	127	0.00	0	0	0	0.00	3,447	0	3,447	0.00
Full Container Ships	6	0	6	0.00	0	0	0	0.00	260	0	260	0.00
General Cargo Ships	274	0	274	0.00	0	0	0	0.00	3,023	0	3,023	0.00
Liquid Gas Carriers	958	0	958	0.00	0	0	0	0.00	48,680	0	48,680	0.00
Passenger Ships	51	0	51	0.00	0	0	0	0.00	664	0	664	0.00
Refrigerated Ships	1,069	0	1,069	0.00	0	0	0	0.00	18,983	0	18,983	0.00
Roll-On Roll-Off	58	0	58	0.00	0	0	0	0.00	1,716	0	1,716	0.00
Tankers	279	0	279	0.00	0	0	0	0.00	16,039	0	16,039	0.00
Vehicle Carriers	441	0	441	0.00	0	0	0	0.00	26,043	0	26,043	0.00
Total	3,672	0	3,672	0.00	0	0	0	0.00	131,379	0	131,379	0.00

Note: Diversions of ballast transits are computed by diverting a proportion of ballast transits equal to lost revenue as a percent of total potential revenue for a particular laden ship type. See last column on previous table.

Source: Nathan Associates Inc., based on forecasts of traffic and transportation costs provided by The WEFA Group.

Table A-25. Laden Transits, Tons Carried, and Toll Revenue, Maximum Non-Diverting Toll Rates, 250,000 DWT Scenario, 2060, by Ship Type, Diversion Status, and Trade Route (1990 US$, except when noted)

Ship Type, Diversion Status, and Trade Route	Transits	Cargo Tonnage Carried (thousands)	Revenue (thousands) a/	Current Toll Schedule: Toll Per Panama Canal Net Ton	Current Toll Schedule: Toll Per Cargo Ton Carried	New Toll Schedule: Toll Per Panama Canal Net Ton	New Toll Schedule: Toll Per Cargo Ton Carried	Total Transportation Costs per Ton Carried: Via Panama Canal: With Current Toll Structure	Via Panama Canal: With New Toll Structure	Via Panama Canal: Percent Increase	Via Least Costly Alternative Route
Container-Breakbulk											
Non-Diverted Transits											
Africa-C.A.W.C.	6	185	5,988	2.41	1.85	63.31	48.70	72.26	119.11	64.83	119.11
Africa-Canada W.C.	0	5	126	2.41	1.87	21.20	16.43	92.01	106.57	15.83	106.57
Africa-U.S.W.C.	2	25	614	2.41	1.87	21.47	16.64	93.01	107.78	15.88	107.78
Asia-Canada E.C.	1	8	131	2.41	1.86	12.63	9.77	93.05	100.96	8.50	100.96
Asia-C.A.E.C.	135	1,246	40,468	2.41	1.87	22.88	17.71	97.20	113.04	16.30	113.04
Asia-S.A.E.C.	48	305	3,072	2.41	1.87	5.16	4.00	105.12	107.25	2.03	107.25
Asia-U.S.E.C.	139	1,759	65,504	2.41	1.86	33.64	25.98	99.37	123.49	24.27	123.49
C.A.W.C.-Africa	6	112	4,726	2.41	1.87	68.57	53.19	76.03	127.35	67.50	127.35
C.A.W.C.-C.A.E.C.	16	247	11,229	2.41	1.86	54.75	42.34	51.25	91.73	78.97	91.73
C.A.W.C.-Europe	41	304	22,101	2.41	1.87	41.01	31.78	65.68	95.59	45.54	95.59
C.A.W.C.-S.A.E.C.	23	10	2,492	2.41	1.87	8.86	6.87	72.11	77.11	6.93	77.11
C.A.W.C.-U.S.E.C.	7	40	4,374	2.41	1.87	52.14	40.45	57.32	95.90	67.31	95.90
Canada E.C.-Asia	31	815	3,487	2.41	1.85	6.50	5.00	95.14	98.29	3.31	98.29
Canada E.C.-C.A.W.C.	3	25	1,788	2.41	1.87	55.37	42.92	55.94	96.99	73.39	96.99
Canada E.C.-Oceania	2	25	71	2.41	1.87	3.68	2.85	107.65	108.63	0.91	108.63
Canada E.C.-S.A.W.C.	1	17	269	2.41	1.85	20.60	15.85	65.70	79.70	21.30	79.70
Canada E.C.-U.S.W.C.	0	0	5	2.41	1.86	52.65	40.71	72.57	111.42	53.53	111.42
Canada W.C.-Africa	29	662	8,232	2.41	1.85	19.42	14.94	93.53	106.62	13.99	106.62
Canada W.C.-Europe	107	3,116	73,903	2.41	1.85	38.57	29.67	81.19	109.01	34.26	109.01
Canada W.C.-S.A.E.C.	22	421	14,759	2.41	1.87	54.55	42.32	74.11	114.56	54.58	114.56
Canada W.C.-U.S.E.C.	15	303	11,863	2.41	1.85	54.60	42.00	67.85	108.00	59.17	108.00
C.A.E.C.-Asia	13	270	3,685	2.41	1.87	22.64	17.54	96.31	111.98	16.27	111.98
C.A.E.C.-C.A.W.C.	13	49	9,492	2.41	1.87	57.60	44.65	52.15	94.93	82.04	94.93

(Continued)

Table A-25. Laden Transits, Tons Carried, and Toll Revenue, Maximum Non-Diverting Toll Rates, 250,000 DWT Scenario, 2060, by Ship Type, Diversion Status, and Trade Route (1990 US$, except when noted)(continued)

Ship Type, Diversion Status, and Trade Route	Transits	Cargo Tonnage Carried (thousands)	Revenue (thousands) a/	Current Toll Schedule: Toll Per Panama Canal Net Ton	Current Toll Schedule: Toll Per Cargo Ton Carried	New Toll Schedule: Toll Per Panama Canal Net Ton	New Toll Schedule: Toll Per Cargo Ton Carried	Total Transportation Costs per Ton Carried: Via Panama Canal: With Current Toll Structure	Via Panama Canal: With New Toll Structure	Via Panama Canal: Percent Increase	Via Least Costly Alternative Route
Container-Breakbulk (continued)											
Non-Diverted Transits (continued)											
C.A.E.C.-Canada W.C.	4	59	2,641	2.41	1.87	54.00	41.86	66.58	106.57	60.07	106.57
C.A.E.C.-Oceania	2	38	807	2.41	1.87	26.43	20.49	94.01	112.63	19.81	112.63
C.A.E.C.-S.A.W.C.	37	286	10,105	2.41	1.87	21.47	16.64	64.73	79.50	22.82	79.50
C.A.E.C.-U.S.W.C.	6	112	3,641	2.41	1.86	45.78	35.37	64.27	97.78	52.13	97.78
Europe-C.A.W.C.	44	271	38,633	2.41	1.87	69.02	53.50	66.79	118.42	77.31	118.42
Europe-Canada W.C.	7	217	4,980	2.41	1.85	34.05	26.19	83.24	107.58	29.23	107.58
Europe-S.A.W.C.	182	1,504	49,698	2.41	1.87	21.27	16.49	90.01	104.63	16.24	104.63
Europe-U.S.W.C.	36	1,115	24,784	2.41	1.85	35.46	27.28	82.41	107.84	30.85	107.84
Oceania-Canada E.C.	4	88	226	2.41	1.85	2.60	2.00	97.85	98.00	0.15	98.00
Oceania-C.A.E.C.	10	99	3,222	2.41	1.87	26.70	20.71	94.77	113.61	19.88	113.61
S.A.E.C.-C.A.W.C.	16	252	1,838	2.41	1.87	8.76	6.79	71.65	76.57	6.87	76.57
S.A.E.C.-Canada W.C.	25	335	3,290	2.41	1.87	10.14	7.86	92.79	98.78	6.46	98.78
S.A.E.C.-U.S.W.C.	84	1,260	6,524	2.41	1.87	5.92	4.58	78.16	80.87	3.47	80.87
S.A.W.C.-Africa	3	52	1,714	2.41	1.87	50.85	39.45	82.90	120.48	45.33	120.48
S.A.W.C.-Canada E.C.	1	2	324	2.41	1.87	22.66	17.58	69.19	84.90	22.71	84.90
S.A.W.C.-C.A.E.C.	26	206	6,847	2.41	1.87	21.64	16.79	65.19	80.11	22.89	80.11
S.A.W.C.-Europe	329	5,753	99,974	2.41	1.87	24.00	18.60	89.68	106.41	18.66	106.41
S.A.W.C.-U.S.E.C.	239	2,340	81,376	2.41	1.87	27.43	21.28	62.12	81.53	31.25	81.53
U.S.E.C.-Asia	284	7,177	150,920	2.41	1.86	32.35	24.92	96.15	119.21	23.99	119.21
U.S.E.C.-C.A.W.C.	22	446	18,049	2.41	1.86	61.35	47.45	47.68	93.27	95.60	93.27
U.S.E.C.-S.A.W.C.	347	3,443	121,763	2.41	1.87	27.15	21.04	61.84	81.01	31.00	81.01
U.S.E.C.-U.S.W.C.	0	0	10	2.41	1.86	53.02	41.00	58.86	98.00	66.49	98.00
U.S.W.C.-Africa	22	367	11,345	2.41	1.85	25.05	19.27	85.43	102.85	20.39	102.85

(Continued)

Table A-25. Laden Transits, Tons Carried, and Toll Revenue, Maximum Non-Diverting Toll Rates, 250,000 DWT Scenario, 2060, by Ship Type, Diversion Status, and Trade Route (1990 US$, except when noted)(continued)

Ship Type, Diversion Status, and Trade Route	Transits	Cargo Tonnage Carried (thousands)	Revenue (thousands) a/	Current Toll Schedule: Toll Per Panama Canal Net Ton	Current Toll Schedule: Toll Per Cargo Ton Carried	New Toll Schedule: Toll Per Panama Canal Net Ton	New Toll Schedule: Toll Per Cargo Ton Carried	Total Transportation Costs per Ton Carried: Via Panama Canal: With Current Toll Structure	Total Transportation Costs per Ton Carried: Via Panama Canal: With New Toll Structure	Total Transportation Costs per Ton Carried: Via Panama Canal: Percent Increase	Total Transportation Costs per Ton Carried: Via Least Costly Alternative Route
Container-Breakbulk (continued)											
Non-Diverted Transits (continued)											
U.S.W.C.-Canada E.C.	1	33	914	2.41	1.85	49.40	38.00	69.85	106.00	51.75	106.00
U.S.W.C.-C.A.E.C.	19	135	11,321	2.41	1.87	47.69	36.98	66.46	101.57	52.83	101.57
U.S.W.C.-Europe	51	1,343	30,940	2.41	1.86	34.81	26.80	83.60	108.54	29.84	108.54
U.S.W.C.-S.A.E.C.	6	104	458	2.41	1.87	6.28	4.87	79.98	82.98	3.75	82.98
U.S.W.C.-U.S.E.C.	0	6	445	2.41	1.85	56.57	43.54	60.33	102.02	69.09	102.02
Subtotal	2,465	36,996	975,169	2.41	1.86	28.50	22.04	83.70	104.44	24.78	104.44
Dry Bulk Carriers											
Non-Diverted Transits											
Africa-C.A.W.C.	29	1,201	14,676	2.41	1.30	24.15	13.07	15.34	27.11	76.68	27.11
Africa-Canada W.C.	156	7,645	24,284	2.41	1.28	6.51	3.45	17.82	19.99	12.20	19.99
Africa-S.A.W.C.	9	313	3,217	2.41	1.30	17.20	9.31	18.13	26.14	44.15	26.14
Africa-U.S.W.C.	10	297	2,325	2.41	1.27	9.56	5.04	16.17	19.94	23.31	19.94
Asia-Canada E.C.	15	695	1,732	2.41	1.25	4.10	2.13	17.55	18.43	5.00	18.43
Asia-C.A.E.C.	29	527	8,004	2.41	1.30	12.73	6.85	18.85	24.40	29.47	24.40
Asia-S.A.E.C.	5	172	202	2.41	1.30	1.85	1.00	21.84	21.54	-1.39	21.54
Asia-U.S.E.C.	386	12,134	141,165	2.41	1.27	14.81	7.81	16.62	23.16	39.34	23.16
Brazil-Asia	108	18,541	43,289	2.41	1.16	4.58	2.21	17.30	18.35	6.05	18.35
C.A.W.C.-Africa	2	52	881	2.41	1.29	24.54	13.15	15.32	27.18	77.40	27.18
C.A.W.C.-C.A.E.C.	63	2,167	25,048	2.41	1.30	18.64	10.03	7.57	16.30	115.42	16.30
C.A.W.C.-Europe	19	626	6,230	2.41	1.28	14.39	7.66	12.19	18.57	52.30	18.57
C.A.W.C.-S.A.E.C.	16	268	1,070	2.41	1.30	3.24	1.75	11.59	12.04	3.85	12.04
C.A.W.C.-U.S.E.C.	47	1,854	23,415	2.41	1.29	22.02	11.75	7.69	18.15	136.14	18.15

(Continued)

Table A-25. Laden Transits, Tons Carried, and Toll Revenue, Maximum Non-Diverting Toll Rates, 250,000 DWT Scenario, 2060, by Ship Type, Diversion Status, and Trade Route (1990 US$, except when noted)(continued)

Ship Type, Diversion Status, and Trade Route	Transits	Cargo Tonnage Carried (thousands)	Revenue (thousands) a/	Current Toll Schedule: Toll Per Panama Canal Net Ton	Current Toll Schedule: Toll Per Cargo Ton Carried	New Toll Schedule: Toll Per Panama Canal Net Ton	New Toll Schedule: Toll Per Cargo Ton Carried	Total Transportation Costs per Ton Carried: Via Panama Canal: With Current Toll Structure	Via Panama Canal: With New Toll Structure	Via Panama Canal: Percent Increase	Via Least Costly Alternative Route
Dry Bulk Carriers (continued)											
Non-Diverted Transits (continued)											
Canada E.C.-Asia	126	7,535	29,455	2.41	1.22	6.62	3.36	18.27	20.41	11.69	20.41
Canada E.C.-Oceania	7	132	553	2.41	1.29	3.74	2.00	21.09	21.80	3.37	21.80
Canada E.C.-S.A.W.C.	12	426	2,065	2.41	1.29	7.48	4.00	12.85	15.56	21.10	15.56
Canada W.C.-Africa	175	7,689	26,985	2.41	1.28	6.31	3.36	17.49	19.57	11.87	19.57
Canada W.C.-C.A.E.C.	9	270	3,569	2.41	1.30	18.95	10.25	12.59	21.54	71.04	21.54
Canada W.C.-Europe	301	15,944	110,055	2.41	1.24	12.22	6.31	16.14	21.21	31.37	21.21
Canada W.C.-S.A.E.C.	29	1,820	3,810	2.41	1.22	3.51	1.77	11.69	12.24	4.74	12.24
Canada W.C.-U.S.E.C.	105	3,183	45,617	2.41	1.30	20.88	11.29	13.34	23.33	74.84	23.33
C.A.E.C.-Asia	22	808	5,440	2.41	1.30	12.10	6.55	18.13	23.38	28.93	23.38
C.A.E.C.-C.A.W.C.	49	1,650	19,382	2.41	1.30	19.05	10.31	7.82	16.83	115.10	16.83
C.A.E.C.-Canada W.C.	3	105	1,186	2.41	1.30	19.00	10.28	12.61	21.59	71.16	21.59
C.A.E.C.-Oceania	1	22	127	2.41	1.30	7.39	4.00	19.89	22.59	13.55	22.59
C.A.E.C.-S.A.W.C.	24	734	4,329	2.41	1.30	8.80	4.76	10.61	14.07	32.56	14.07
C.A.E.C.-U.S.W.C.	9	286	3,456	2.41	1.30	19.00	10.28	11.61	20.59	77.28	20.59
Columbia-Asia	2	352	3,569	2.41	1.17	19.82	9.60	17.07	25.50	49.41	25.50
Europe-C.A.W.C.	51	1,627	21,507	2.41	1.30	20.46	11.07	12.61	22.38	77.42	22.38
Europe-Canada W.C.	12	408	3,688	2.41	1.28	12.81	6.79	16.56	22.07	33.29	22.07
Europe-S.A.W.C.	16	514	781	2.41	1.30	2.29	1.24	16.13	16.07	-0.40	16.07
Europe-U.S.W.C.	142	4,679	40,950	2.41	1.28	12.12	6.42	15.66	20.80	32.85	20.80
Middle East-S.A.W.C.	2	104	334	2.41	1.25	5.81	3.00	14.08	15.83	12.47	15.83
Oceania-Canada E.C.	23	859	1,782	2.41	1.30	3.70	2.00	20.84	21.54	3.34	21.54
Oceania-C.A.E.C.	14	469	2,613	2.41	1.30	8.78	4.75	19.09	22.54	18.05	22.54
Oceania-U.S.E.C.	36	2,218	7,243	2.41	1.23	5.90	3.00	15.65	17.42	11.34	17.42

(Continued)

Table A-25. Laden Transits, Tons Carried, and Toll Revenue, Maximum Non-Diverting Toll Rates, 250,000 DWT Scenario, 2060, by Ship Type, Diversion Status, and Trade Route (1990 US$, except when noted)(continued)

Ship Type, Diversion Status, and Trade Route	Transits	Cargo Tonnage Carried (thousands)	Revenue (thousands) a/	Current Toll Schedule: Toll Per Panama Canal Net Ton	Current Toll Schedule: Toll Per Cargo Ton Carried	New Toll Schedule: Toll Per Panama Canal Net Ton	New Toll Schedule: Toll Per Cargo Ton Carried	Total Transportation Costs per Ton Carried: Via Panama Canal: With Current Toll Structure	Via Panama Canal: With New Toll Structure	Via Panama Canal: Percent Increase	Via Least Costly Alternative Route
Dry Bulk Carriers (continued)											
Non-Diverted Transits (continued)											
S.A.E.C.-Asia	60	2,563	9,339	2.41	1.28	6.50	3.44	16.77	18.93	12.91	18.93
S.A.E.C.-C.A.W.C.	12	441	777	2.41	1.30	3.25	1.76	11.61	12.07	3.92	12.07
S.A.E.C.-Canada W.C.	3	97	247	2.41	1.30	3.70	2.00	17.13	17.83	4.06	17.83
S.A.E.C.-U.S.W.C.	34	1,722	2,129	2.41	1.23	1.95	1.00	13.30	13.07	-1.76	13.07
S.A.W.C.-Africa	5	296	2,260	2.41	1.25	15.99	8.31	14.34	21.40	49.20	21.40
S.A.W.C.-Canada E.C.	1	24	93	2.41	1.30	7.40	4.00	13.34	16.04	20.21	16.04
S.A.W.C.-C.A.E.C.	12	277	2,116	2.41	1.30	8.78	4.75	10.59	14.04	32.54	14.04
S.A.W.C.-Europe	262	13,060	21,869	2.41	1.25	3.02	1.57	15.70	16.02	2.02	16.02
S.A.W.C.-U.S.E.C.	91	3,585	19,562	2.41	1.30	10.20	5.50	11.28	15.48	37.24	15.48
U.S.E.C.-Asia	1,629	139,874	1,054,267	2.41	1.20	13.74	6.82	16.99	22.61	33.11	22.61
U.S.E.C.-C.A.W.C.	375	14,003	181,746	2.41	1.30	22.72	12.23	7.80	18.73	140.21	18.73
U.S.E.C.-Oceania	23	909	2,853	2.41	1.29	5.60	3.00	19.26	20.97	8.88	20.97
U.S.E.C.-S.A.W.C.	82	2,944	17,781	2.41	1.30	10.13	5.45	11.45	15.60	36.28	15.60
U.S.E.C.-U.S.W.C.	1	0	260	2.41	1.30	22.31	12.07	11.61	22.38	92.70	22.38
U.S.W.C.-Africa	198	9,018	51,270	2.41	1.26	9.47	4.93	15.70	19.37	23.42	19.37
U.S.W.C.-Canada E.C.	5	211	2,188	2.41	1.29	18.36	9.86	13.93	22.50	61.48	22.50
U.S.W.C.-C.A.E.C.	1	30	360	2.41	1.30	18.95	10.25	11.59	20.54	77.17	20.54
U.S.W.C.-Europe	168	9,505	61,856	2.41	1.24	11.77	6.04	14.02	18.82	34.27	18.82
U.S.W.C.-S.A.E.C.	13	436	510	2.41	1.30	1.85	1.00	16.09	15.79	-1.88	15.79
U.S.W.C.-U.S.E.C.	8	215	4,534	2.41	1.28	23.51	12.49	11.92	23.13	94.04	23.13
Venezuela-Asia	7	1,230	11,566	2.41	1.16	18.44	8.90	15.96	23.70	48.46	23.70
Subtotal	5,057	298,765	2,081,616	2.41	1.23	12.21	6.22	15.89	20.84	31.16	20.84
Chemical Tankers											
Non-Diverted Transits											
Africa-S.A.W.C.	2	59	1,033	2.41	1.34	32.36	18.00	43.34	60.00	38.44	60.00

(Continued)

Table A-25. Laden Transits, Tons Carried, and Toll Revenue, Maximum Non-Diverting Toll Rates, 250,000 DWT Scenario, 2060, by Ship Type, Diversion Status, and Trade Route (1990 US$, except when noted)(continued)

Ship Type, Diversion Status, and Trade Route	Transits	Cargo Tonnage Carried (thousands)	Revenue (thousands) a/	Current Toll Schedule: Toll Per Panama Canal Net Ton	Current Toll Schedule: Toll Per Cargo Ton Carried	New Toll Schedule: Toll Per Panama Canal Net Ton	New Toll Schedule: Toll Per Cargo Ton Carried	Total Transportation Costs per Ton Carried, Via Panama Canal: With Current Toll Structure	Total Transportation Costs per Ton Carried, Via Panama Canal: With New Toll Structure	Total Transportation Costs per Ton Carried, Via Panama Canal: Percent Increase	Total Transportation Costs per Ton Carried: Via Least Costly Alternative Route
Chemical Tankers (continued)											
Non-Diverted Transits (continued)											
Asia-C.A.E.C.	4	50	1,080	2.41	1.34	32.66	18.16	54.00	70.82	31.15	70.82
Asia-S.A.E.C.	4	23	347	2.41	1.34	5.39	3.00	50.34	52.00	3.30	52.00
Asia-U.S.E.C.	39	820	17,181	2.41	1.34	30.93	17.20	43.81	59.67	36.20	59.67
C.A.W.C.-C.A.E.C.	49	306	15,796	2.41	1.34	82.35	45.75	39.39	83.80	112.75	83.80
C.A.W.C.-Europe	9	169	3,286	2.41	1.34	35.23	19.59	38.02	56.27	48.00	56.27
C.A.W.C.-U.S.E.C.	63	885	31,322	2.41	1.34	58.45	32.49	27.74	58.89	112.30	58.89
Canada W.C.-Europe	4	106	1,948	2.41	1.34	28.77	16.00	42.34	57.00	34.62	57.00
Canada W.C.-U.S.E.C.	39	1,042	28,949	2.41	1.34	39.56	22.00	31.94	52.60	64.68	52.60
C.A.E.C.-Asia	9	293	4,057	2.41	1.34	25.17	14.00	42.34	55.00	29.90	55.00
C.A.E.C.-C.A.W.C.	5	115	3,140	2.41	1.34	39.56	22.00	21.34	42.00	96.81	42.00
C.A.E.C.-S.A.W.C.	11	217	2,845	2.41	1.34	20.36	11.32	30.34	40.32	32.89	40.32
C.A.E.C.-U.S.W.C.	2	15	646	2.41	1.34	78.84	43.80	55.94	98.40	75.91	98.40
Europe-C.A.W.C.	10	51	2,414	2.41	1.34	61.29	34.05	60.84	93.55	53.77	93.55
Europe-S.A.W.C.	9	98	516	2.41	1.34	9.34	5.19	58.65	62.50	6.56	62.50
Europe-U.S.W.C.	10	261	4,273	2.41	1.34	28.32	15.75	42.05	56.46	34.27	56.46
Oceania-U.S.E.C.	17	494	3,663	2.41	1.34	10.70	5.95	40.63	45.24	11.35	45.24
S.A.E.C.-C.A.W.C.	10	79	528	2.41	1.34	10.54	5.86	50.34	54.86	8.98	54.86
S.A.E.C.-U.S.W.C.	1	43	91	2.41	1.34	3.60	2.00	30.34	31.00	2.18	31.00
S.A.W.C.-C.A.E.C.	36	134	6,798	2.41	1.34	31.30	17.40	44.18	60.24	36.35	60.24
S.A.W.C.-Europe	12	151	738	2.41	1.34	8.35	4.64	53.51	56.81	6.17	56.81
S.A.W.C.-U.S.E.C.	12	100	3,031	2.41	1.34	29.23	16.25	39.07	53.98	38.16	53.98
U.S.E.C.-Asia	683	23,746	372,042	2.41	1.34	29.13	16.20	41.54	56.40	35.77	56.40
U.S.E.C.-C.A.W.C.	27	238	11,452	2.41	1.34	74.80	41.57	34.18	74.41	117.70	74.41

(Continued)

Table A-25. Laden Transits, Tons Carried, and Toll Revenue, Maximum Non-Diverting Toll Rates, 250,000 DWT Scenario, 2060, by Ship Type, Diversion Status, and Trade Route (1990 US$, except when noted)(continued)

Ship Type, Diversion Status, and Trade Route	Transits	Cargo Tonnage Carried (thousands)	Revenue (thousands) a/	Current Toll Schedule: Toll Per Panama Canal Net Ton	Current Toll Schedule: Toll Per Cargo Ton Carried	New Toll Schedule: Toll Per Panama Canal Net Ton	New Toll Schedule: Toll Per Cargo Ton Carried	Total Transportation Costs per Ton Carried, Via Panama Canal: With Current Toll Structure	Via Panama Canal: With New Toll Structure	Via Panama Canal: Percent Increase	Via Least Costly Alternative Route
Chemical Tankers (continued)											
Non-Diverted Transits (continued)											
U.S.E.C.-Canada W.C.	8	61	2,929	2.41	1.34	83.24	46.25	60.04	104.95	74.80	104.95
U.S.E.C.-Oceania	17	545	3,584	2.41	1.34	11.67	6.49	43.19	48.34	11.92	48.34
U.S.E.C.-S.A.W.C.	53	560	11,140	2.41	1.34	31.09	17.28	41.25	57.19	38.64	57.19
U.S.E.C.-U.S.W.C.	48	1,814	38,931	2.41	1.34	34.44	19.14	25.49	43.29	69.84	43.29
U.S.W.C.-C.A.E.C.	1	12	379	2.41	1.34	37.76	21.00	29.34	49.00	67.01	49.00
U.S.W.C.-Europe	16	266	5,521	2.41	1.34	31.21	17.35	45.29	61.30	35.35	61.30
U.S.W.C.-S.A.E.C.	0	6	13	2.41	1.34	3.60	2.00	38.34	39.00	1.72	39.00
U.S.W.C.-U.S.E.C.	12	233	9,991	2.41	1.34	35.00	19.45	25.79	43.90	70.23	43.90
Subtotal	1,224	32,988	589,664	2.41	1.34	31.04	17.26	39.96	55.77	39.57	55.77
Full Container Ships											
Non-Diverted Transits											
Africa-U.S.W.C.	0	5	123	2.41	4.49	21.90	40.79	247.81	284.11	14.65	284.11
Asia-Canada E.C.	33	739	13,461	2.41	4.70	11.85	23.11	207.29	225.70	8.88	225.70
Asia-S.A.E.C.	4	14	291	2.41	4.49	6.41	11.94	274.66	282.11	2.71	282.11
Asia-U.S.E.C. (low inv. cost)	186	5,208	98,397	2.41	4.92	9.06	18.48	231.70	245.26	5.85	245.26
C.A.W.C.-C.A.E.C.	1	9	995	2.41	4.44	44.74	82.42	130.00	207.98	59.99	207.98
C.A.W.C.-Europe	2	37	2,020	2.41	4.42	31.20	57.25	152.02	204.85	34.75	204.85
C.A.W.C.-S.A.E.C.	0	7	65	2.41	4.44	6.12	11.28	162.41	169.25	4.21	169.25
C.A.W.C.-U.S.E.C.	0	5	304	2.41	4.49	51.76	96.37	161.41	253.29	56.93	253.29
Canada E.C.-Asia	35	658	6,183	2.41	4.55	7.32	13.83	226.90	236.18	4.09	236.18
Canada E.C.-Oceania	23	286	1,594	2.41	4.47	4.12	7.64	257.67	260.84	1.23	260.84
Canada E.C.-U.S.W.C.	8	247	13,691	2.41	4.77	39.91	79.00	154.77	229.00	47.96	229.00

(Continued)

Table A-25. Laden Transits, Tons Carried, and Toll Revenue, Maximum Non-Diverting Toll Rates, 250,000 DWT Scenario, 2060, by Ship Type, Diversion Status, and Trade Route (1990 US$, except when noted)(continued)

Ship Type, Diversion Status, and Trade Route	Transits	Cargo Tonnage Carried (thousands)	Revenue (thousands) a/	Current Toll Schedule: Toll Per Panama Canal Net Ton	Current Toll Schedule: Toll Per Cargo Ton Carried	New Toll Schedule: Toll Per Panama Canal Net Ton	New Toll Schedule: Toll Per Cargo Ton Carried	Total Transportation Costs per Ton Carried: Via Panama Canal: With Current Toll Structure	Via Panama Canal: With New Toll Structure	Via Panama Canal: Percent Increase	Via Least Costly Alternative Route
Full Container Ships (continued)											
Non-Diverted Transits (continued)											
Canada W.C.-Europe	31	511	22,755	2.41	4.51	37.53	70.16	210.71	276.36	31.16	276.36
C.A.E.C.-Asia	8	116	3,862	2.41	4.47	19.17	35.55	213.60	244.68	14.55	244.68
C.A.E.C.-C.A.W.C.	1	7	710	2.41	4.47	52.44	97.22	143.12	235.87	64.81	235.87
C.A.E.C.-Oceania	1	8	283	2.41	4.49	27.25	50.73	250.78	297.02	18.44	297.02
C.A.E.C.-S.A.W.C.	2	10	428	2.41	4.49	21.27	39.64	178.89	214.04	19.65	214.04
C.A.E.C.-U.S.W.C.	2	26	1,545	2.41	4.45	37.90	69.92	152.93	218.40	42.81	218.40
Europe-C.A.W.C.	0	1	160	2.41	4.42	52.00	95.40	152.02	243.00	59.85	243.00
Europe-Canada W.C.	25	336	15,177	2.41	4.47	35.08	65.07	223.81	284.41	27.08	284.41
Europe-S.A.W.C.	81	1,309	41,189	2.41	4.42	19.16	35.15	191.22	221.95	16.07	221.95
Europe-U.S.W.C.	140	3,123	33,249	2.41	4.67	7.51	14.53	205.80	215.66	4.79	215.66
Middle East-U.S.W.C.	15	247	5,585	2.41	4.47	18.25	33.86	218.19	247.58	13.47	247.58
Oceania-Canada E.C.	10	177	108	2.41	4.47	0.58	1.08	251.62	248.23	-1.35	248.23
Oceania-C.A.E.C.	5	64	1,835	2.41	4.49	27.25	50.73	250.78	297.02	18.44	297.02
Oceania-S.A.E.C.	0	2	1	2.41	4.49	0.54	1.00	241.87	238.38	-1.44	238.38
S.A.E.C.-C.A.W.C.	1	8	74	2.41	4.49	7.49	13.94	197.14	206.59	4.79	206.59
S.A.E.C.-U.S.W.C.	2	20	471	2.41	4.49	21.89	40.76	183.23	219.50	19.80	219.50
S.A.W.C.-C.A.E.C.	0	1	70	2.41	4.49	21.27	39.64	178.89	214.04	19.65	214.04
S.A.W.C.-Europe	144	3,081	73,635	2.41	4.42	19.16	35.16	191.21	221.95	16.07	221.95
S.A.W.C.-U.S.E.C.	99	1,047	35,031	2.41	4.49	27.75	51.67	174.32	221.50	27.07	221.50
U.S.E.C.-Asia (low inv. cost)	234	8,718	115,271	2.41	4.88	9.05	18.33	233.14	246.59	5.77	246.59
U.S.E.C.-C.A.W.C.	13	112	10,279	2.41	4.49	62.97	117.25	140.53	253.29	80.24	253.29
U.S.E.C.-S.A.W.C.	117	1,005	41,320	2.41	4.49	27.75	51.67	174.32	221.50	27.07	221.50
U.S.E.C.-U.S.W.C.	1	26	1,748	2.41	4.76	45.48	89.80	138.99	224.03	61.19	224.03

(Continued)

Table A-25. Laden Transits, Tons Carried, and Toll Revenue, Maximum Non-Diverting Toll Rates, 250,000 DWT Scenario, 2060, by Ship Type, Diversion Status, and Trade Route (1990 US$, except when noted)(continued)

Ship Type, Diversion Status, and Trade Route	Transits	Cargo Tonnage Carried (thousands)	Revenue (thousands) a/	Current Toll Schedule: Toll Per Panama Canal Net Ton	Current Toll Schedule: Toll Per Cargo Ton Carried	New Toll Schedule: Toll Per Panama Canal Net Ton	New Toll Schedule: Toll Per Cargo Ton Carried	Total Transportation Costs per Ton Carried: Via Panama Canal: With Current Toll Structure	Via Panama Canal: With New Toll Structure	Via Panama Canal: Percent Increase	Via Least Costly Alternative Route
Full Container Ships (continued)											
Non-Diverted Transits (continued)											
U.S.W.C.-Africa	0	0	2	2.41	4.64	22.85	44.00	193.64	233.00	20.33	233.00
U.S.W.C.-Canada E.C.	0	8	479	2.41	4.57	40.40	76.54	159.49	231.46	45.13	231.46
U.S.W.C.-C.A.E.C.	6	90	5,078	2.41	4.46	41.01	75.91	161.25	232.70	44.31	232.70
U.S.W.C.-Europe	196	3,835	44,345	2.41	4.68	6.99	13.58	208.75	217.65	4.26	217.65
U.S.W.C.-Middle East	25	356	4,046	2.41	4.47	7.89	14.64	219.26	229.43	4.64	229.43
U.S.W.C.-U.S.E.C.	21	326	34,295	2.41	4.65	45.55	87.80	141.16	224.31	58.91	224.31
Subtotal	1,470	31,786	630,157	2.41	4.72	12.73	24.92	214.06	234.53	9.56	234.53
General Cargo Ships											
Non-Diverted Transits											
Africa-C.A.W.C.	3	46	1,728	2.41	1.39	46.36	26.70	31.04	56.35	81.55	56.35
Africa-S.A.W.C.	3	68	1,176	2.41	1.39	30.91	17.80	37.94	54.35	43.26	54.35
Asia-Canada E.C.	0	3	20	2.41	1.39	10.24	5.90	41.94	46.45	10.76	46.45
Asia-C.A.E.C.	127	1,501	35,259	2.41	1.39	24.05	13.85	36.99	49.45	33.69	49.45
Asia-S.A.E.C.	4	25	162	2.41	1.39	3.39	1.95	45.89	46.45	1.23	46.45
Asia-U.S.E.C.	49	632	15,558	2.41	1.39	27.11	15.58	38.14	52.33	37.22	52.33
C.A.W.C.-Africa	7	139	3,889	2.41	1.39	46.36	26.70	31.04	56.35	81.55	56.35
C.A.W.C.-C.A.E.C.	55	243	18,225	2.41	1.46	84.90	51.36	9.72	59.62	513.51	59.62
C.A.W.C.-Europe	51	291	15,495	2.41	1.41	40.77	23.79	29.65	52.03	75.50	52.03
C.A.W.C.-S.A.E.C.	15	99	1,146	2.41	1.41	10.26	5.99	27.71	32.29	16.54	32.29
C.A.W.C.-U.S.E.C.	16	84	6,952	2.41	1.45	106.43	64.11	12.26	74.92	511.01	74.92
Canada E.C.-Asia	10	25	1,206	2.41	1.39	10.25	5.90	41.94	46.45	10.76	46.45
Canada E.C.-C.A.W.C.	2	36	915	2.41	1.39	37.68	21.70	21.19	41.50	95.87	41.50

(Continued)

Table A-25. Laden Transits, Tons Carried, and Toll Revenue, Maximum Non-Diverting Toll Rates, 250,000 DWT Scenario, 2060, by Ship Type, Diversion Status, and Trade Route (1990 US$, except when noted)(continued)

Ship Type, Diversion Status, and Trade Route	Transits	Cargo Tonnage Carried (thousands)	Revenue (thousands) a/	Current Toll Schedule: Toll Per Panama Canal Net Ton	Current Toll Schedule: Toll Per Cargo Ton Carried	New Toll Schedule: Toll Per Panama Canal Net Ton	New Toll Schedule: Toll Per Cargo Ton Carried	Total Transportation Costs per Ton Carried, Via Panama Canal: With Current Toll Structure	Total Transportation Costs per Ton Carried, Via Panama Canal: With New Toll Structure	Total Transportation Costs per Ton Carried, Via Panama Canal: Percent Increase	Total Transportation Costs per Ton Carried: Via Least Costly Alternative Route
General Cargo Ships (continued)											
Non-Diverted Transits (continued)											
Canada E.C.-Oceania	0	7	9	2.41	1.39	1.74	1.00	47.84	47.45	-0.81	47.45
Canada E.C.-S.A.W.C.	16	148	2,907	2.41	1.39	15.37	8.85	28.09	35.55	26.57	35.55
Canada W.C.-C.A.E.C.	16	120	6,888	2.41	1.42	67.90	39.96	31.71	70.25	121.55	70.25
Canada W.C.-Europe	1	21	307	2.41	1.39	27.52	15.85	37.94	52.40	38.12	52.40
Canada W.C.-Middle East	2	13	35	2.41	1.39	1.74	1.00	42.89	42.50	-0.90	42.50
Canada W.C.-S.A.E.C.	14	126	5,840	2.41	1.41	61.66	36.12	36.39	71.10	95.37	71.10
C.A.E.C.-Asia	28	538	7,754	2.41	1.39	24.05	13.85	36.99	49.45	33.69	49.45
C.A.E.C.-C.A.W.C.	56	209	21,564	2.41	1.45	94.41	56.93	8.51	63.99	651.66	63.99
C.A.E.C.-Oceania	1	13	177	2.41	1.39	17.19	9.90	40.94	49.45	20.79	49.45
C.A.E.C.-S.A.W.C.	53	492	9,249	2.41	1.41	23.26	13.57	22.58	34.74	53.88	34.74
C.A.E.C.-U.S.W.C.	12	42	4,258	2.41	1.50	128.03	79.66	32.53	110.69	240.28	110.69
Europe-C.A.W.C.	87	598	42,735	2.41	1.40	55.84	32.41	28.49	59.50	108.85	59.50
Europe-Canada W.C.	3	11	750	2.41	1.50	93.37	58.09	80.37	136.96	70.41	136.96
Europe-S.A.W.C.	73	734	4,438	2.41	1.39	5.55	3.20	33.84	35.65	5.35	35.65
Europe-U.S.W.C.	4	18	1,326	2.41	1.44	77.98	46.68	62.15	107.39	72.78	107.39
Middle East-S.A.W.C.	6	3	805	2.41	1.50	48.19	29.98	73.82	102.30	38.58	102.30
Middle East-U.S.W.C.	7	19	1,073	2.41	1.39	13.72	7.90	40.94	47.45	15.91	47.45
Oceania-C.A.E.C.	1	7	232	2.41	1.39	18.93	10.90	39.94	49.45	23.82	49.45
Oceania-U.S.E.C.	2	9	231	2.41	1.43	22.69	13.48	57.41	69.46	20.99	69.46
S.A.E.C.-C.A.W.C.	13	261	747	2.41	1.39	5.12	2.95	25.14	26.70	6.21	26.70
S.A.E.C.-Canada W.C.	0	2	26	2.41	1.39	8.51	4.90	35.04	38.55	10.02	38.55
S.A.E.C.-U.S.W.C.	17	77	934	2.41	1.40	5.80	3.36	38.23	40.19	5.14	40.19
S.A.W.C.-Africa	8	149	3,129	2.41	1.39	35.94	20.70	34.04	53.35	56.74	53.35

(Continued)

Table A-25. Laden Transits, Tons Carried, and Toll Revenue, Maximum Non-Diverting Toll Rates, 250,000 DWT Scenario, 2060, by Ship Type, Diversion Status, and Trade Route (1990 US$, except when noted)(continued)

Ship Type, Diversion Status, and Trade Route	Transits	Cargo Tonnage Carried (thousands)	Revenue (thousands) a/	Current Toll Schedule: Toll Per Panama Canal Net Ton	Current Toll Schedule: Toll Per Cargo Ton Carried	New Toll Schedule: Toll Per Panama Canal Net Ton	New Toll Schedule: Toll Per Cargo Ton Carried	Total Transportation Costs per Ton Carried: Via Panama Canal: With Current Toll Structure	Via Panama Canal: With New Toll Structure	Via Panama Canal: Percent Increase	Via Least Costly Alternative Route
General Cargo Ships (continued)											
Non-Diverted Transits (continued)											
S.A.W.C.-Canada E.C.	1	14	148	2.41	1.39	15.37	8.85	28.09	35.55	26.57	35.55
S.A.W.C.-C.A.E.C.	82	361	15,571	2.41	1.45	43.54	26.12	23.90	48.57	103.26	48.57
S.A.W.C.-Europe	171	2,817	10,159	2.41	1.39	5.12	2.95	33.04	34.60	4.73	34.60
S.A.W.C.-Middle East	2	25	269	2.41	1.39	13.72	7.90	35.99	42.50	18.10	42.50
S.A.W.C.-U.S.E.C.	56	430	12,993	2.41	1.40	29.02	16.89	25.31	40.80	61.18	40.80
U.S.E.C.-Asia	74	1,214	23,648	2.41	1.39	27.24	15.67	38.38	52.66	37.22	52.66
U.S.E.C.-C.A.W.C.	103	776	44,039	2.41	1.43	80.40	47.66	14.67	60.90	315.17	60.90
U.S.E.C.-Oceania	6	89	804	2.41	1.39	11.98	6.90	40.94	46.45	13.46	46.45
U.S.E.C.-S.A.W.C.	187	1,336	43,228	2.41	1.41	29.98	17.48	25.45	41.52	63.18	41.52
U.S.E.C.-U.S.W.C.	1	0	309	2.41	1.50	143.07	89.02	35.37	122.89	247.45	122.89
U.S.W.C.-Africa	7	75	1,578	2.41	1.39	20.58	11.85	36.99	47.45	28.29	47.45
U.S.W.C.-C.A.E.C.	3	1	1,119	2.41	1.50	128.03	79.66	32.53	110.69	240.28	110.69
U.S.W.C.-Europe	3	25	682	2.41	1.42	44.84	26.44	44.83	69.85	55.81	69.85
U.S.W.C.-S.A.E.C.	8	19	412	2.41	1.45	12.17	7.31	53.26	59.12	11.01	59.12
Subtotal	1,464	13,991	372,104	2.41	1.40	29.63	17.20	30.69	46.34	50.98	46.34
Liquid Gas Carriers											
Non-Diverted Transits											
C.A.W.C.-C.A.E.C.	10	43	2,623	2.41	7.30	49.83	151.00	57.30	201.00	250.77	201.00
C.A.E.C.-Asia	10	53	2,839	2.41	4.67	30.20	58.57	124.16	178.06	43.41	178.06
C.A.E.C.-C.A.W.C.	56	742	39,655	2.41	3.79	37.19	58.53	26.91	81.65	203.39	81.65
C.A.E.C.-S.A.W.C.	4	60	1,397	2.41	3.83	17.64	28.00	45.83	70.00	52.75	70.00
C.A.E.C.-U.S.W.C.	0	3	123	2.41	3.83	38.43	61.00	51.83	109.00	110.32	109.00

(Continued)

Table A-25. Laden Transits, Tons Carried, and Toll Revenue, Maximum Non-Diverting Toll Rates, 250,000 DWT Scenario, 2060, by Ship Type, Diversion Status, and Trade Route (1990 US$, except when noted)(continued)

Ship Type, Diversion Status, and Trade Route	Transits	Cargo Tonnage Carried (thousands)	Revenue (thousands) a/	Current Toll Schedule: Toll Per Panama Canal Net Ton	Current Toll Schedule: Toll Per Cargo Ton Carried	New Toll Schedule: Toll Per Panama Canal Net Ton	New Toll Schedule: Toll Per Cargo Ton Carried	Total Transportation Costs per Ton Carried: Via Panama Canal: With Current Toll Structure	Via Panama Canal: With New Toll Structure	Via Panama Canal: Percent Increase	Via Least Costly Alternative Route
Liquid Gas Carriers (continued)											
Non-Diverted Transits (continued)											
Europe-C.A.W.C.	2	7	422	2.41	7.30	36.96	112.00	129.30	234.00	80.97	234.00
Europe-S.A.W.C.	0	1	7	2.41	3.82	5.67	9.00	76.82	82.00	6.74	82.00
Oceania-U.S.E.C.	4	57	862	2.41	3.62	9.65	14.50	75.10	85.98	14.48	85.98
S.A.E.C.-Asia	2	30	519	2.41	3.83	13.23	21.00	89.83	107.00	19.12	107.00
S.A.E.C.-C.A.W.C.	12	32	492	2.41	7.30	7.92	24.00	115.30	132.00	14.48	132.00
U.S.E.C.-Asia	3	41	1,929	2.41	3.86	30.77	49.29	94.04	139.47	48.31	139.47
U.S.E.C.-C.A.W.C.	0	1	76	2.41	7.30	55.10	167.00	66.30	226.00	240.85	226.00
U.S.E.C.-S.A.W.C.	1	2	95	2.41	7.30	26.40	80.00	109.30	182.00	66.51	182.00
Subtotal	104	1,071	51,039	2.41	3.99	32.59	53.99	44.45	96.49	117.06	96.49
Passenger Ships											
Non-Diverted Transits											
North-Bound	197	0	2,354	2.41	0.00	2.01	0.00	0.00	0.00	0.00	0.00
South-Bound	238	0	4,340	2.41	0.00	2.01	0.00	0.00	0.00	0.00	0.00
Subtotal	435	0	6,694	2.41	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Refrigerated Ships											
Non-Diverted Transits											
Africa-Asia	46	292	926	2.41	4.00	2.17	3.60	173.40	173.00	-0.23	173.00
Africa-C.A.W.C.	0	0	81	2.41	4.00	65.27	108.40	120.20	224.60	86.85	224.60
Africa-S.A.W.C.	49	21	23,947	2.41	3.94	47.57	77.81	154.50	228.37	47.81	228.37
Asia-C.A.E.C.	25	95	9,946	2.41	3.86	32.49	52.00	131.86	180.00	36.51	180.00
Asia-S.A.E.C.	7	5	320	2.41	4.00	4.94	8.20	180.00	184.20	2.33	184.20

(Continued)

Table A-25. Laden Transits, Tons Carried, and Toll Revenue, Maximum Non-Diverting Toll Rates, 250,000 DWT Scenario, 2060, by Ship Type, Diversion Status, and Trade Route (1990 US$, except when noted)(continued)

Ship Type, Diversion Status, and Trade Route	Transits	Cargo Tonnage Carried (thousands)	Revenue (thousands) a/	Current Toll Schedule: Toll Per Panama Canal Net Ton	Current Toll Schedule: Toll Per Cargo Ton Carried	New Toll Schedule: Toll Per Panama Canal Net Ton	New Toll Schedule: Toll Per Cargo Ton Carried	Total Transportation Costs per Ton Carried: Via Panama Canal: With Current Toll Structure	Total Transportation Costs per Ton Carried: Via Panama Canal: With New Toll Structure	Total Transportation Costs per Ton Carried: Via Panama Canal: Percent Increase	Total Transportation Costs per Ton Carried: Via Least Costly Alternative Route
Refrigerated Ships (continued)											
Non-Diverted Transits (continued)											
Asia-U.S.E.C.	1	0	289	2.41	4.00	40.96	68.00	149.60	213.60	42.78	213.60
C.A.W.C.-Africa	2	7	1,124	2.41	4.00	65.29	108.40	120.20	224.60	86.85	224.60
C.A.W.C.-Canada E.C.	1	5	289	2.41	4.00	53.12	88.20	79.20	163.40	106.31	163.40
C.A.W.C.-C.A.E.C.	39	294	24,922	2.41	3.86	51.87	83.00	52.86	132.00	149.73	132.00
C.A.W.C.-Europe	276	1,493	129,159	2.41	3.86	38.12	61.00	92.86	150.00	61.54	150.00
C.A.W.C.-S.A.E.C.	2	9	118	2.41	4.00	7.59	12.60	94.40	103.00	9.11	103.00
C.A.W.C.-U.S.E.C.	1	2	661	2.41	4.00	60.47	100.40	64.00	160.40	150.62	160.40
Canada E.C.-Asia	15	92	1,705	2.41	4.00	12.53	20.80	165.80	182.60	10.13	182.60
Canada E.C.-C.A.W.C.	11	31	6,727	2.41	3.86	50.62	81.00	71.86	149.00	107.36	149.00
Canada W.C.-Europe	4	45	1,739	2.41	3.86	38.12	61.00	132.86	190.00	43.01	190.00
C.A.E.C.-Asia	13	37	4,632	2.41	3.93	34.56	56.34	144.92	197.33	36.17	197.33
C.A.E.C.-C.A.W.C.	43	11	27,486	2.41	3.86	51.87	83.00	52.86	132.00	149.73	132.00
C.A.E.C.-S.A.W.C.	93	82	25,028	2.41	3.86	21.87	35.00	75.86	107.00	41.06	107.00
Europe-C.A.W.C.	308	26	231,015	2.41	3.86	61.24	98.00	92.86	187.00	101.39	187.00
Europe-Canada W.C.	1	1	355	2.41	4.00	37.83	62.80	145.60	204.40	40.38	204.40
Europe-S.A.W.C.	295	278	23,810	2.41	3.88	6.93	11.16	119.82	127.10	6.08	127.10
Europe-U.S.W.C.	18	16	6,112	2.41	4.00	36.62	60.80	135.40	192.20	41.95	192.20
Middle East-S.A.W.C.	3	6	465	2.41	4.00	18.91	31.40	138.00	165.40	19.85	165.40
Oceania-C.A.E.C.	6	50	1,569	2.41	4.00	26.26	43.60	157.20	196.80	25.19	196.80
Oceania-U.S.E.C.	53	207	8,296	2.41	3.98	16.34	27.02	160.43	183.47	14.36	183.47
S.A.E.C.-Asia	12	62	1,914	2.41	4.00	17.71	29.40	146.60	172.00	17.33	172.00
S.A.W.C.-Africa	27	111	13,625	2.41	3.94	48.74	79.71	130.08	205.85	58.25	205.85
S.A.W.C.-C.A.E.C.	40	241	10,565	2.41	3.86	21.97	35.23	76.48	107.85	41.01	107.85

(Continued)

Table A-25. Laden Transits, Tons Carried, and Toll Revenue, Maximum Non-Diverting Toll Rates, 250,000 DWT Scenario, 2060, by Ship Type, Diversion Status, and Trade Route (1990 US$, except when noted)(continued)

Ship Type, Diversion Status, and Trade Route	Transits	Cargo Tonnage Carried (thousands)	Revenue (thousands) a/	Current Toll Schedule: Toll Per Panama Canal Net Ton	Current Toll Schedule: Toll Per Cargo Ton Carried	New Toll Schedule: Toll Per Panama Canal Net Ton	New Toll Schedule: Toll Per Cargo Ton Carried	Total Transportation Costs per Ton Carried, Via Panama Canal: With Current Toll Structure	Total Transportation Costs per Ton Carried, Via Panama Canal: With New Toll Structure	Total Transportation Costs per Ton Carried, Via Panama Canal: Percent Increase	Total Transportation Costs per Ton Carried: Via Least Costly Alternative Route
Refrigerated Ships (continued)											
Non-Diverted Transits (continued)											
S.A.W.C.-Europe	1,101	6,815	86,297	2.41	3.89	6.91	11.16	119.88	127.15	6.06	127.15
S.A.W.C.-Middle East	5	18	844	2.41	4.00	18.91	31.40	138.00	165.40	19.85	165.40
S.A.W.C.-U.S.E.C.	808	3,821	255,421	2.41	3.88	27.00	43.45	82.93	122.50	47.72	122.50
U.S.E.C.-Asia	46	189	21,080	2.41	3.87	39.22	63.06	139.10	198.29	42.55	198.29
U.S.E.C.-C.A.W.C.	70	196	49,049	2.41	3.86	57.49	92.00	57.86	146.00	152.35	146.00
U.S.E.C.-S.A.W.C.	423	892	136,523	2.41	3.87	26.89	43.14	82.19	121.46	47.79	121.46
U.S.W.C.-Europe	140	804	52,599	2.41	3.95	36.87	60.42	134.45	190.92	42.00	190.92
U.S.W.C.-S.A.E.C.	2	6	93	2.41	3.98	5.19	8.58	131.22	135.82	3.50	135.82
Subtotal	3,983	16,260	1,158,732	2.41	3.88	25.14	40.50	106.85	135.63	26.93	135.63
Roll-On Roll-Off											
Non-Diverted Transits											
Asia-Canada E.C.	3	15	434	2.41	9.35	8.99	34.88	298.90	324.43	8.54	324.43
Asia-C.A.E.C.	32	633	13,191	2.41	7.92	11.98	39.41	236.83	268.32	13.29	268.32
Asia-U.S.E.C.	67	1,286	42,741	2.41	7.95	19.19	63.32	248.85	304.22	22.25	304.22
C.A.W.C.-Europe	33	177	16,323	2.41	8.66	25.04	90.00	198.66	280.00	40.94	280.00
C.A.W.C.-S.A.E.C.	0	0	3	2.41	8.66	2.23	8.00	211.66	211.00	-0.31	211.00
C.A.W.C.-U.S.E.C.	3	1	1,568	2.41	8.66	30.89	111.00	170.66	273.00	59.97	273.00
Canada E.C.-Asia	17	85	1,586	2.41	9.30	6.27	24.20	355.27	370.17	4.19	370.17
Canada E.C.-Oceania	3	61	184	2.41	7.77	1.64	5.30	251.49	249.02	-0.98	249.02
Canada W.C.-C.A.E.C.	0	1	222	2.41	10.19	38.94	164.71	239.87	394.39	64.42	394.39
C.A.E.C.-C.A.W.C.	1	2	447	2.41	9.72	34.37	138.58	167.54	296.40	76.92	296.40
C.A.E.C.-Oceania	7	20	2,524	2.41	8.66	18.09	65.00	275.66	332.00	20.44	332.00

(Continued)

Table A-25. Laden Transits, Tons Carried, and Toll Revenue, Maximum Non-Diverting Toll Rates, 250,000 DWT Scenario, 2060, by Ship Type, Diversion Status, and Trade Route (1990 US$, except when noted)(continued)

Ship Type, Diversion Status, and Trade Route	Transits	Cargo Tonnage Carried (thousands)	Revenue (thousands) a/	Current Toll Schedule: Toll Per Panama Canal Net Ton	Current Toll Schedule: Toll Per Cargo Ton Carried	New Toll Schedule: Toll Per Panama Canal Net Ton	New Toll Schedule: Toll Per Cargo Ton Carried	Total Transportation Costs per Ton Carried, Via Panama Canal: With Current Toll Structure	Total Transportation Costs per Ton Carried, Via Panama Canal: With New Toll Structure	Total Transportation Costs per Ton Carried, Via Panama Canal: Percent Increase	Total Transportation Costs per Ton Carried: Via Least Costly Alternative Route
Roll-On Roll-Off (continued)											
Non-Diverted Transits (continued)											
C.A.E.C.-S.A.W.C.	85	149	13,343	2.41	10.19	13.58	57.43	232.93	280.17	20.28	280.17
Europe-C.A.W.C.	35	221	30,696	2.41	8.66	44.52	160.00	198.66	350.00	76.18	350.00
Europe-S.A.W.C.	0	0	17	2.41	8.67	13.63	49.00	262.67	303.00	15.36	303.00
Europe-U.S.W.C.	1	3	319	2.41	8.66	26.71	96.00	262.66	350.00	33.25	350.00
Oceania-C.A.E.C.	0	0	6	2.41	7.97	14.16	46.80	234.97	273.80	16.53	273.80
S.A.W.C.-C.A.E.C.	22	44	3,451	2.41	10.19	13.58	57.43	232.93	280.17	20.28	280.17
S.A.W.C.-Europe	2	5	533	2.41	8.66	15.86	57.00	262.66	311.00	18.40	311.00
S.A.W.C.-U.S.E.C.	12	25	2,533	2.41	10.19	18.27	77.28	224.99	292.08	29.82	292.08
U.S.E.C.-Asia	14	93	6,951	2.41	8.64	24.75	88.72	298.20	378.28	26.85	378.28
U.S.E.C.-C.A.W.C.	4	7	3,067	2.41	8.66	38.12	137.00	144.66	273.00	88.72	273.00
U.S.E.C.-S.A.W.C.	57	101	12,094	2.41	10.19	18.27	77.28	224.99	292.08	29.82	292.08
U.S.W.C.-Canada E.C.	1	2	315	2.41	10.20	38.00	160.77	263.70	414.27	57.10	414.27
U.S.W.C.-C.A.E.C.	2	48	2,021	2.41	7.75	24.74	79.57	160.82	232.64	44.66	232.64
U.S.W.C.-Europe	0	1	20	2.41	7.77	19.42	62.59	212.68	267.50	25.78	267.50
U.S.W.C.-U.S.E.C.	0	9	481	2.41	7.86	31.95	104.20	159.45	255.79	60.42	255.79
Subtotal	400	2,990	155,074	2.41	8.67	19.76	71.08	240.63	298.58	24.08	298.58
Tankers											
Non-Diverted Transits											
Africa-U.S.W.C.	0	0	2	2.41	1.27	13.25	7.00	18.27	24.00	31.34	24.00
Asia-U.S.E.C.	3	77	1,088	2.41	1.27	24.55	12.92	27.11	38.76	42.98	38.76
C.A.W.C.-Africa	0	0	80	2.41	1.27	104.50	55.00	46.27	100.00	116.13	100.00
C.A.W.C.-Canada E.C.	0	8	153	2.41	1.27	33.96	17.88	12.21	28.82	136.06	28.82

(Continued)

Table A-25. Laden Transits, Tons Carried, and Toll Revenue, Maximum Non-Diverting Toll Rates, 250,000 DWT Scenario, 2060, by Ship Type, Diversion Status, and Trade Route (1990 US$, except when noted)(continued)

Ship Type, Diversion Status, and Trade Route	Transits	Cargo Tonnage Carried (thousands)	Revenue (thousands) a/	Current Toll Schedule: Toll Per Panama Canal Net Ton	Current Toll Schedule: Toll Per Cargo Ton Carried	New Toll Schedule: Toll Per Panama Canal Net Ton	New Toll Schedule: Toll Per Cargo Ton Carried	Total Transportation Costs per Ton Carried: Via Panama Canal: With Current Toll Structure	Via Panama Canal: With New Toll Structure	Via Panama Canal: Percent Increase	Via Least Costly Alternative Route
Tankers (continued)											
Non-Diverted Transits (continued)											
C.A.W.C.-C.A.E.C.	16	95	7,356	2.41	1.27	49.40	26.00	10.26	34.99	241.09	34.99
C.A.W.C.-Europe	4	94	1,475	2.41	1.27	24.59	12.94	17.17	28.84	67.98	28.84
C.A.W.C.-U.S.E.C.	10	80	4,842	2.41	1.27	52.15	27.45	11.18	37.36	234.21	37.36
Canada E.C.-Asia	18	707	2,551	2.41	1.27	6.50	3.42	25.06	27.21	8.59	27.21
Canada W.C.-U.S.E.C.	6	255	4,117	2.41	1.28	25.85	13.75	13.76	26.23	90.60	26.23
C.A.E.C.-Asia	5	141	1,864	2.41	1.27	19.63	10.31	22.36	31.40	40.46	31.40
C.A.E.C.-C.A.W.C.	45	750	20,005	2.41	1.27	31.54	16.59	7.38	22.70	207.68	22.70
C.A.E.C.-S.A.W.C.	46	887	9,275	2.41	1.27	15.14	7.97	13.34	20.04	50.24	20.04
C.A.E.C.-U.S.W.C.	5	228	3,269	2.41	1.27	24.28	12.77	11.93	23.43	96.44	23.43
Europe-C.A.W.C.	17	81	3,103	2.41	1.27	40.09	21.10	24.95	44.78	79.49	44.78
Europe-S.A.W.C.	4	82	285	2.41	1.27	5.91	3.11	23.34	25.18	7.89	25.18
Europe-U.S.W.C.	4	109	1,342	2.41	1.27	20.88	10.99	22.50	32.22	43.21	32.22
Middle East-U.S.W.C.	0	0	0	2.41	1.25	0.19	0.10	1.63	0.48	-70.49	0.48
Oceania-U.S.E.C.	9	162	1,162	2.41	1.27	11.06	5.82	28.05	32.60	16.23	32.60
S.A.E.C.-Asia	64	14,050	74,348	2.41	1.27	10.05	5.29	12.29	16.31	32.73	16.31
S.A.E.C.-C.A.W.C.	68	3,130	8,802	2.41	1.26	3.91	2.05	10.89	11.68	7.22	11.68
S.A.E.C.-U.S.W.C.	27	978	1,569	2.41	1.27	2.70	1.42	18.67	18.82	0.81	18.82
S.A.W.C.-Canada E.C.	1	14	138	2.41	1.27	15.29	8.05	20.47	27.25	33.13	27.25
S.A.W.C.-C.A.E.C.	15	557	3,707	2.41	1.27	10.83	5.70	10.99	15.42	40.33	15.42
S.A.W.C.-Europe	19	173	718	2.41	1.27	6.86	3.61	28.01	30.35	8.36	30.35
S.A.W.C.-U.S.E.C.	17	607	5,573	2.41	1.27	15.33	8.07	11.71	18.51	58.09	18.51
U.S.E.C.-Asia	90	2,946	37,381	2.41	1.27	21.12	11.10	22.71	32.54	43.31	32.54
U.S.E.C.-C.A.W.C.	14	260	7,635	2.41	1.27	38.36	20.19	9.23	28.15	205.03	28.15

(Continued)

Table A-25. Laden Transits, Tons Carried, and Toll Revenue, Maximum Non-Diverting Toll Rates, 250,000 DWT Scenario, 2060, by Ship Type, Diversion Status, and Trade Route (1990 US$, except when noted)(continued)

Ship Type, Diversion Status, and Trade Route	Transits	Cargo Tonnage Carried (thousands)	Revenue (thousands) a/	Current Toll Schedule: Toll Per Panama Canal Net Ton	Current Toll Schedule: Toll Per Cargo Ton Carried	New Toll Schedule: Toll Per Panama Canal Net Ton	New Toll Schedule: Toll Per Cargo Ton Carried	Total Transportation Costs per Ton Carried: Via Panama Canal: With Current Toll Structure	Via Panama Canal: With New Toll Structure	Via Panama Canal: Percent Increase	Via Least Costly Alternative Route
Tankers (continued)											
Non-Diverted Transits (continued)											
U.S.E.C.-Canada W.C.	2	7	1,034	2.41	1.27	35.87	18.88	18.17	35.78	96.94	35.78
U.S.E.C.-Oceania	4	129	806	2.41	1.27	10.34	5.44	26.02	30.19	16.03	30.19
U.S.E.C.-S.A.W.C.	3	49	578	2.41	1.27	18.20	9.58	13.63	21.94	60.99	21.94
U.S.E.C.-U.S.W.C.	21	601	13,322	2.41	1.27	34.52	18.16	14.06	30.95	120.16	30.95
U.S.W.C.-Africa	10	334	2,368	2.41	1.26	9.68	5.06	16.39	20.19	23.18	20.19
U.S.W.C.-C.A.E.C.	3	96	1,551	2.41	1.26	23.80	12.49	11.90	23.13	94.29	23.13
U.S.W.C.-S.A.E.C.	1	29	40	2.41	1.27	2.68	1.41	18.76	18.90	0.75	18.90
U.S.W.C.-U.S.E.C.	4	102	2,324	2.41	1.27	32.38	17.01	13.36	29.10	117.88	29.10
Subtotal	553	27,821	223,865	2.41	1.27	13.48	7.09	14.19	19.64	38.36	19.64
Vehicle Carriers											
Non-Diverted Transits											
Asia-C.A.E.C.	13	34	3,918	2.41	29.09	8.97	108.30	417.18	496.39	18.99	496.39
Asia-S.A.E.C.	0	0	7	2.41	29.13	1.11	13.44	484.18	468.49	-3.24	468.49
Asia-U.S.E.C.	481	2,251	155,583	2.41	29.20	8.74	105.94	439.57	516.31	17.46	516.31
C.A.W.C.-C.A.E.C.	3	3	995	2.41	28.71	17.07	203.34	266.36	440.99	65.56	440.99
Canada E.C.-Asia	1	3	35	2.41	29.22	1.65	20.00	465.22	456.00	-1.98	456.00
C.A.E.C.-C.A.W.C.	8	3	4,415	2.41	29.22	13.86	168.00	272.22	411.00	50.98	411.00
C.A.E.C.-Oceania	1	0	237	2.41	29.22	6.35	77.00	434.22	482.00	11.00	482.00
Europe-Canada W.C.	7	16	2,879	2.41	30.90	7.95	101.96	386.38	457.44	18.39	457.44
Europe-U.S.W.C.	156	299	46,872	2.41	29.95	6.91	85.91	403.00	458.96	13.89	458.96
S.A.W.C.-C.A.E.C.	0	0	29	2.41	28.70	7.14	85.00	323.70	380.00	17.39	380.00
U.S.E.C.-Asia	42	192	17,406	2.41	29.67	10.07	124.04	415.80	510.17	22.70	510.17

(Continued)

Table A-25. Laden Transits, Tons Carried, and Toll Revenue, Maximum Non-Diverting Toll Rates, 250,000 DWT Scenario, 2060, by Ship Type, Diversion Status, and Trade Route (1990 US$, except when noted)(continued)

Ship Type, Diversion Status, and Trade Route	Transits	Cargo Tonnage Carried (thousands)	Revenue (thousands) a/	Current Toll Schedule: Toll Per Panama Canal Net Ton	Current Toll Schedule: Toll Per Cargo Ton Carried	New Toll Schedule: Toll Per Panama Canal Net Ton	New Toll Schedule: Toll Per Cargo Ton Carried	Total Transportation Costs per Ton Carried, Via Panama Canal: With Current Toll Structure	Total Transportation Costs per Ton Carried, Via Panama Canal: With New Toll Structure	Total Transportation Costs per Ton Carried, Via Panama Canal: Percent Increase	Total Transportation Costs per Ton Carried: Via Least Costly Alternative Route
Vehicle Carriers (continued)											
Non-Diverted Transits (continued)											
U.S.E.C.-Oceania	13	30	1,940	2.41	29.22	4.04	49.00	433.22	453.00	4.57	453.00
Subtotal	724	2,831	234,314	2.41	29.42	8.36	102.08	433.13	508.34	17.37	508.34
Total Non-Diverting	17,879	465,499	6,478,429	2.41	1.78	16.64	12.32	44.09	54.18	22.90	54.18

Notes: These calculations do not include all transits and tons carried forecast by the WEFA Group. For some ship-type and trade-route combinations (accounting for a total of 27 transits and 291695 tons), vessel costs were not available for every DWT size interval. As a result, these transits and tons were excluded. In addition, for 2480 transits and 49528628 tons, the cost by way of the Panama Canal without a toll was higher than the least costly alternative route. As a result, these transits and tons were excluded. Percentages may not calculate exactly as shown due to rounding. A fee of $0.40 per Panama Canal net ton has also been included to account for charges such as handling and agency fees incurred when transitting the Canal. The extra fee is only used to determine divesion status by adding it to the cost per ton carried and is not included in the revenue calculations.

a/ Revenue lost from diversions is measured as the revenue generated by the maximum, nondiverting toll rate increase.

Source: Nathan Associates Inc., based on forecasts of traffic and transportation costs provided by The WEFA Group.

Appendix B

CURRENT TOLL STRUCTURE AND RATES

Table B-1. Summary of Estimated Revenues by Project Scenario and Year from Current Toll Structure and Rates (1990 US$millions)

Year and Project Scenario	Laden	Ballast	Total
2020			
Status Quo a/	417	65	482
150,000 DWT	531	81	612
200,000 DWT	549	81	630
250,000 DWT	556	81	637
2060			
Status Quo a/	522	69	591
150,000 DWT	738	131	869
200,000 DWT	756	139	895
250,000 DWT	777	131	908

Note: Toll rates are $2.01 per Panama Canal net ton for laden vessesls and $1.60 per Panama Canal net ton for vessels in ballast.

a/ Status Quo is a 65,000 DWT Scenario.

Source: Nathan Associates Inc., based on "no toll" forecasts of traffic and transportation costs provided by The WEFA Group.

CURRENT TOLL STRUCTURE AND RATES, STATUS QUO SCENARIO, 2020

Table B-2. Laden Transits, Tons Carried, and Toll Revenue, Current Toll Stucture and Rates, Status Quo Scenario, 2020, by Ship Type

	Transits				Tons Carried(thousands)				Revenue(1990 US$thousands)			
Ship Type	Canal	Diverted	Total	Diverted as a Percent of Total	Canal	Diverted	Total	Diverted as a Percent of Total	Canal	Lost a/	Total	Lost as a Percent of Total
Container-Breakbulk	1,317	7	1,325	0.56	20,424	95	20,519	0.46	36,989	48	37,037	0.13
Dry Bulk Carriers	3,399	79	3,477	2.26	121,159	2,240	123,399	1.82	145,078	1,767	146,845	1.20
Chemical Tankers	992	2	994	0.22	22,841	84	22,925	0.37	26,730	90	26,819	0.33
Full Container Ships	969	338	1,307	25.88	17,176	5,363	22,539	23.79	52,808	15,375	68,183	22.55
General Cargo Ships	757	1	758	0.14	7,489	10	7,499	0.13	13,179	5	13,184	0.04
Liquid Gas Carriers	172	0	172	0.00	1,947	0	1,947	0.00	5,739	0	5,739	0.00
Passenger Ships	336	0	336	0.00	0	0	0	0.00	6,145	0	6,145	0.00
Refrigerated Ships	2,819	29	2,847	1.00	10,116	151	10,266	1.47	54,985	398	55,382	0.72
Roll-On Roll-Off	211	1	213	0.67	1,731	31	1,762	1.78	8,635	108	8,743	1.23
Tankers	523	170	693	24.52	13,759	6,310	20,068	31.44	18,551	9,044	27,595	32.77
Vehicle Carriers	623	0	623	0.05	2,423	1	2,424	0.04	48,505	14	48,519	0.03
Total	12,116	628	12,744	4.93	219,065	14,285	233,349	6.12	417,343	26,848	444,191	6.04

Notes: These calculations do not include all transits and tons carried forecast by the WEFA Group. For some ship-type and trade-route combinations (accounting for a total of 18 transits and 179803 tons), vessel costs were not available for every DWT size interval. As a result, these transits and tons were excluded. In addition, for 2098 transits and 35979616 tons, the cost by way of the Panama Canal without a toll was higher than the least costly alternative route. As a result, these transits and tons were excluded. A fee of $0.40 per Panama Canal net ton has also been included to account for charges such as handling and agency fees incurred when transitting the Canal. The extra fee is only used to determine diversion status by adding it to cost per ton carried and is not included in the revenue calculations.

a/ Revenue lost from diversions is measured as the revenue generated by the maximum, nondiverting toll rate increase.

Source: Nathan Associates Inc., based on forecasts of traffic and transportation costs provided by the WEFA Group.

Table B-3. Ballast Transits, Tons Carried, and Toll Revenue, Current Toll Stucture and Rates, Status Quo Scenario, 2020, by Ship Type

	Transits				Tons Carried(thousands)				Revenue(1990 US$thousands)			
Ship Type	Canal	Diverted	Total	Diverted as a Percent of Total	Canal	Diverted	Total	Diverted as a Percent of Total	Canal	Lost	Total	Lost as a Percent of Total
Container-Breakbulk	41	0	41	0.13	0	0	0	0.00	1,018	1	1,019	0.13
Dry Bulk Carriers	371	5	375	1.20	0	0	0	0.00	12,499	152	12,650	1.20
Chemical Tankers	82	0	82	0.33	0	0	0	0.00	1,753	6	1,758	0.33
Full Container Ships	8	2	10	22.55	0	0	0	0.00	237	69	307	22.55
General Cargo Ships	140	0	140	0.04	0	0	0	0.00	1,530	1	1,531	0.04
Liquid Gas Carriers	128	0	128	0.00	0	0	0	0.00	3,730	0	3,730	0.00
Passenger Ships	11	0	11	0.00	0	0	0	0.00	131	0	131	0.00
Refrigerated Ships	925	7	932	0.72	0	0	0	0.00	13,679	99	13,778	0.72
Roll-On Roll-Off	30	0	30	1.23	0	0	0	0.00	788	10	798	1.23
Tankers	224	109	333	32.77	0	0	0	0.00	6,732	3,281	10,013	32.77
Vehicle Carriers	383	0	383	0.03	0	0	0	0.00	22,606	7	22,613	0.03
Total	2,342	123	2,465	5.01	0	0	0	0.00	64,704	3,626	68,330	5.31

Note: Diversions of ballast transits are computed by diverting a proportion of ballast transits equal to lost revenue as a percent of total potential revenue for a particular laden ship type. See last column on previous table.

Source: Nathan Associates Inc., based on forecasts of traffic and transportation costs provided by the WEFA Group.

Table B-4. Laden Transits, Tons Carried, Toll Revenue and Toll Rates, Current Toll Structure and Rates, Status Quo Scenario, 2020, by Ship Type, Diversion Status, and Trade Route (1990 US$, except when noted)

Ship Type, Diversion Status, and Trade Route	Transits	Cargo Tonnage Carried (thousands)	Revenue (thousands) a/	Current Toll Schedule: Toll Per Panama Canal Net Ton	Current Toll Schedule: Toll Per Cargo Ton Carried	New Toll Schedule: Toll Per Panama Canal Net Ton	New Toll Schedule: Toll Per Cargo Ton Carried	Total Transportation Costs per Ton Carried: Via Panama Canal: With Current Toll Structure	Via Panama Canal: With New Toll Structure	Via Panama Canal: Percent Increase	Via Least Costly Alternative Route
Container-Breakbulk											
Non-Diverted Transits											
Africa-C.A.W.C.	3	77	79	2.41	1.85	2.41	1.85	68.56	68.56	0.00	113.26
Africa-Canada W.C.	0	2	4	2.41	1.87	2.41	1.87	88.16	88.16	0.00	100.93
Africa-U.S.W.C.	1	9	20	2.41	1.87	2.41	1.87	89.16	89.16	0.00	102.87
Asia-Canada E.C.	0	4	11	2.41	1.86	2.41	1.86	88.65	88.65	0.00	96.19
Asia-C.A.E.C.	91	837	2,389	2.41	1.87	2.41	1.87	93.07	93.07	0.00	107.91
Asia-S.A.E.C.	27	175	688	2.41	1.87	2.41	1.87	100.20	100.20	0.00	102.23
Asia-U.S.E.C.	82	1,031	2,293	2.41	1.86	2.41	1.86	94.52	94.52	0.00	116.80
C.A.W.C.-Africa	3	70	87	2.41	1.87	2.41	1.87	73.06	73.06	0.00	120.56
C.A.W.C.-C.A.E.C.	7	118	197	2.41	1.86	2.41	1.86	49.37	49.37	0.00	87.53
C.A.W.C.-Europe	15	110	391	2.41	1.87	2.41	1.87	63.64	63.64	0.00	91.28
C.A.W.C.-S.A.E.C.	12	6	308	2.41	1.87	2.41	1.87	69.19	69.19	0.00	74.19
C.A.W.C.-U.S.E.C.	3	19	80	2.41	1.87	2.41	1.87	55.40	55.40	0.00	91.85
Canada E.C.-Asia	14	367	485	2.41	1.85	2.41	1.85	90.68	90.68	0.00	93.83
Canada E.C.-C.A.W.C.	1	9	23	2.41	1.87	2.41	1.87	54.09	54.09	0.00	92.29
Canada E.C.-Oceania	1	13	20	2.41	1.87	2.41	1.87	102.74	102.74	0.00	102.93
Canada E.C.-S.A.W.C.	1	10	15	2.41	1.85	2.41	1.85	62.78	62.78	0.00	75.85
Canada E.C.-U.S.W.C.	0	0	0	2.41	1.85	2.41	1.85	69.71	69.71	0.00	105.87
Canada W.C.-Africa	8	179	230	2.41	1.85	2.41	1.85	88.66	88.66	0.00	100.74
Canada W.C.-Europe	63	1,844	2,277	2.41	1.85	2.41	1.85	77.86	77.86	0.00	104.01
Canada W.C.-S.A.E.C.	11	210	270	2.41	1.87	2.41	1.87	71.19	71.19	0.00	108.72
Canada W.C.-U.S.E.C.	8	149	215	2.41	1.85	2.41	1.85	64.85	64.85	0.00	102.00
C.A.E.C.-Asia	9	196	237	2.41	1.87	2.41	1.87	92.37	92.37	0.00	107.04
C.A.E.C.-C.A.W.C.	7	27	181	2.41	1.87	2.41	1.87	50.30	50.30	0.00	90.29

(Continued)

Table B-4. Laden Transits, Tons Carried, Toll Revenue and Toll Rates, Current Toll Structure and Rates, Status Quo Scenario, 2020, by Ship Type, Diversion Status, and Trade Route (1990 US$, except when noted)(continued)

Ship Type, Diversion Status, and Trade Route	Transits	Cargo Tonnage Carried (thousands)	Revenue (thousands) a/	Current Toll Schedule: Toll Per Panama Canal Net Ton	Current Toll Schedule: Toll Per Cargo Ton Carried	New Toll Schedule: Toll Per Panama Canal Net Ton	New Toll Schedule: Toll Per Cargo Ton Carried	Total Transportation Costs per Ton Carried: Via Panama Canal: With Current Toll Structure	Via Panama Canal: With New Toll Structure	Via Panama Canal: Percent Increase	Via Least Costly Alternative Route
Container-Breakbulk (continued)											
Non-Diverted Transits (continued)											
C.A.E.C.-Canada W.C.	2	31	52	2.41	1.87	2.41	1.87	63.73	63.73	0.00	101.08
C.A.E.C.-Oceania	1	20	32	2.41	1.87	2.41	1.87	90.16	90.16	0.00	107.72
C.A.E.C.-S.A.W.C.	18	144	475	2.41	1.87	2.41	1.87	61.88	61.88	0.00	76.44
C.A.E.C.-U.S.W.C.	4	73	105	2.41	1.86	2.41	1.86	61.48	61.48	0.00	93.18
Europe-C.A.W.C.	22	137	570	2.41	1.87	2.41	1.87	64.73	64.73	0.00	112.66
Europe-Canada W.C.	4	123	166	2.41	1.85	2.41	1.85	80.14	80.14	0.00	103.29
Europe-S.A.W.C.	91	752	2,348	2.41	1.87	2.41	1.87	85.37	85.37	0.00	99.08
Europe-U.S.W.C.	24	732	921	2.41	1.85	2.41	1.85	79.27	79.27	0.00	103.43
Oceania-Canada E.C.	2	46	92	2.41	1.85	2.41	1.85	93.85	93.85	0.00	94.00
Oceania-C.A.E.C.	4	42	103	2.41	1.87	2.41	1.87	90.85	90.85	0.00	108.64
S.A.E.C.-C.A.W.C.	9	141	235	2.41	1.87	2.41	1.87	68.77	68.77	0.00	73.69
S.A.E.C.-Canada W.C.	11	152	295	2.41	1.87	2.41	1.87	87.94	87.94	0.00	93.92
S.A.E.C.-U.S.W.C.	38	572	1,007	2.41	1.87	2.41	1.87	74.36	74.36	0.00	77.06
S.A.W.C.-Canada E.C.	1	2	24	2.41	1.87	2.41	1.87	66.27	66.27	0.00	81.06
S.A.W.C.-C.A.E.C.	13	108	334	2.41	1.87	2.41	1.87	62.27	62.27	0.00	77.06
S.A.W.C.-Europe	191	3,350	4,875	2.41	1.87	2.41	1.87	85.09	85.09	0.00	101.37
S.A.W.C.-U.S.E.C.	108	1,055	2,688	2.41	1.87	2.41	1.87	59.46	59.46	0.00	77.72
U.S.E.C.-Asia	172	4,347	5,678	2.41	1.86	2.41	1.86	91.67	91.67	0.00	113.24
U.S.E.C.-C.A.W.C.	10	201	267	2.41	1.86	2.41	1.86	46.17	46.17	0.00	88.94
U.S.E.C.-S.A.W.C.	160	1,595	4,135	2.41	1.87	2.41	1.87	59.27	59.27	0.00	77.44
U.S.E.C.-U.S.W.C.	0	0	0	2.41	1.86	2.41	1.86	56.86	56.86	0.00	94.00
U.S.W.C.-Africa	9	143	354	2.41	1.85	2.41	1.85	82.33	82.33	0.00	98.63
U.S.W.C.-Canada E.C.	2	40	45	2.41	1.85	2.41	1.85	66.85	66.85	0.00	100.00

(Continued)

Table B-4. Laden Transits, Tons Carried, Toll Revenue and Toll Rates, Current Toll Structure and Rates, Status Quo Scenario, 2020, by Ship Type, Diversion Status, and Trade Route (1990 US$, except when noted)(continued)

Ship Type, Diversion Status, and Trade Route	Transits	Cargo Tonnage Carried (thousands)	Revenue (thousands) a/	Current Toll Schedule: Toll Per Panama Canal Net Ton	Current Toll Schedule: Toll Per Cargo Ton Carried	New Toll Schedule: Toll Per Panama Canal Net Ton	New Toll Schedule: Toll Per Cargo Ton Carried	Total Transportation Costs per Ton Carried: Via Panama Canal: With Current Toll Structure	Via Panama Canal: With New Toll Structure	Via Panama Canal: Percent Increase	Via Least Costly Alternative Route
Container-Breakbulk (continued)											
Non-Diverted Transits (continued)											
U.S.W.C.-C.A.E.C.	9	63	223	2.41	1.87	2.41	1.87	63.58	63.58	0.00	96.80
U.S.W.C.-Europe	38	1,010	1,342	2.41	1.85	2.41	1.85	80.25	80.25	0.00	103.86
U.S.W.C.-S.A.E.C.	4	79	111	2.41	1.87	2.41	1.87	76.06	76.06	0.00	79.06
U.S.W.C.-U.S.E.C.	0	3	8	2.41	1.85	2.41	1.85	58.25	58.25	0.00	96.88
Subtotal	1,317	20,424	36,989	2.41	1.86	2.41	1.86	80.92	80.92	0.00	100.72
Container-Breakbulk											
Diverted Transits											
Oceania-S.A.E.C.	7	95	48	2.41	1.86	2.41	1.86	84.47	84.47	0.00	82.99
Subtotal	7	95	48	2.41	1.86	2.41	1.86	84.47	84.47	0.00	82.99
Subtotal	1,325	20,519	37,037	2.41	1.86	2.41	1.86	80.94	80.94	0.00	100.64
Dry Bulk Carriers											
Non-Diverted Transits											
Africa-C.A.W.C.	15	483	510	2.41	1.35	2.41	1.35	15.05	15.05	0.00	26.10
Africa-Canada W.C.	36	1,354	1,376	2.41	1.32	2.41	1.32	17.69	17.69	0.00	19.77
Africa-S.A.W.C.	5	128	159	2.41	1.35	2.41	1.35	18.05	18.05	0.00	25.10
Africa-U.S.W.C.	7	161	282	2.41	1.31	2.41	1.31	16.45	16.45	0.00	19.23
Asia-Canada E.C.	9	302	380	2.41	1.29	2.41	1.29	17.41	17.41	0.00	18.32
Asia-C.A.E.C.	21	345	739	2.41	1.35	2.41	1.35	18.17	18.17	0.00	22.65
Asia-U.S.E.C.	259	6,345	10,170	2.41	1.32	2.41	1.32	16.82	16.82	0.00	22.26
C.A.W.C.-Africa	1	34	45	2.41	1.34	2.41	1.34	14.93	14.93	0.00	25.81
C.A.W.C.-C.A.E.C.	36	961	1,270	2.41	1.35	2.41	1.35	7.94	7.94	0.00	15.77

(Continued)

Table B-4. Laden Transits, Tons Carried, Toll Revenue and Toll Rates, Current Toll Structure and Rates, Status Quo Scenario, 2020, by Ship Type, Diversion Status, and Trade Route (1990 US$, except when noted)(continued)

Ship Type, Diversion Status, and Trade Route	Transits	Cargo Tonnage Carried (thousands)	Revenue (thousands) a/	Current Toll Schedule: Toll Per Panama Canal Net Ton	Current Toll Schedule: Toll Per Cargo Ton Carried	New Toll Schedule: Toll Per Panama Canal Net Ton	New Toll Schedule: Toll Per Cargo Ton Carried	Total Transportation Costs per Ton Carried: Via Panama Canal: With Current Toll Structure	Via Panama Canal: With New Toll Structure	Via Panama Canal: Percent Increase	Via Least Costly Alternative Route
Dry Bulk Carriers (continued)											
Non-Diverted Transits (continued)											
C.A.W.C.-Europe	17	462	646	2.41	1.33	2.41	1.33	12.42	12.42	0.00	18.24
C.A.W.C.-U.S.E.C.	41	1,292	1,499	2.41	1.33	2.41	1.33	8.06	8.06	0.00	17.55
Canada E.C.-Asia	75	2,498	2,979	2.41	1.31	2.41	1.31	18.36	18.36	0.00	20.40
Canada E.C.-Oceania	3	58	123	2.41	1.34	2.41	1.34	19.86	19.86	0.00	21.08
Canada E.C.-S.A.W.C.	6	163	217	2.41	1.33	2.41	1.33	12.78	12.78	0.00	14.98
Canada W.C.-Africa	104	3,500	4,064	2.41	1.32	2.41	1.32	17.34	17.34	0.00	19.42
Canada W.C.-C.A.E.C.	5	105	154	2.41	1.35	2.41	1.35	13.05	13.05	0.00	21.30
Canada W.C.-Europe	261	9,815	11,516	2.41	1.29	2.41	1.29	15.96	15.96	0.00	21.25
Canada W.C.-U.S.E.C.	66	1,569	2,249	2.41	1.35	2.41	1.35	13.15	13.15	0.00	23.15
C.A.E.C.-Asia	22	639	741	2.41	1.35	2.41	1.35	17.95	17.95	0.00	22.30
C.A.E.C.-C.A.W.C.	26	682	877	2.41	1.35	2.41	1.35	8.15	8.15	0.00	16.45
C.A.E.C.-Canada W.C.	2	55	68	2.41	1.35	2.41	1.35	13.05	13.05	0.00	21.60
C.A.E.C.-Oceania	1	11	18	2.41	1.35	2.41	1.35	19.95	19.95	0.00	22.60
C.A.E.C.-S.A.W.C.	13	313	437	2.41	1.35	2.41	1.35	11.15	11.15	0.00	13.50
C.A.E.C.-U.S.W.C.	9	236	312	2.41	1.35	2.41	1.35	12.05	12.05	0.00	20.30
Europe-C.A.W.C.	32	797	1,074	2.41	1.35	2.41	1.35	13.05	13.05	0.00	21.20
Europe-Canada W.C.	12	286	438	2.41	1.33	2.41	1.33	16.94	16.94	0.00	21.24
Europe-U.S.W.C.	126	3,102	4,776	2.41	1.32	2.41	1.32	16.00	16.00	0.00	20.10
Middle East-S.A.W.C.	1	52	59	2.41	1.27	2.41	1.27	14.27	14.27	0.00	16.00
Oceania-Canada E.C.	23	661	773	2.41	1.35	2.41	1.35	19.95	19.95	0.00	21.25
Oceania-C.A.E.C.	6	166	220	2.41	1.35	2.41	1.35	19.05	19.05	0.00	22.25
Oceania-U.S.E.C.	141	6,406	7,321	2.41	1.26	2.41	1.26	15.77	15.77	0.00	16.07
S.A.E.C.-Asia	73	2,384	2,788	2.41	1.32	2.41	1.32	17.06	17.06	0.00	18.40

(Continued)

Table B-4. Laden Transits, Tons Carried, Toll Revenue and Toll Rates, Current Toll Structure and Rates, Status Quo Scenario, 2020, by Ship Type, Diversion Status, and Trade Route (1990 US$, except when noted)(continued)

Ship Type, Diversion Status, and Trade Route	Transits	Cargo Tonnage Carried (thousands)	Revenue (thousands) a/	Current Toll Schedule: Toll Per Panama Canal Net Ton	Current Toll Schedule: Toll Per Cargo Ton Carried	New Toll Schedule: Toll Per Panama Canal Net Ton	New Toll Schedule: Toll Per Cargo Ton Carried	Total Transportation Costs per Ton Carried: Via Panama Canal: With Current Toll Structure	Via Panama Canal: With New Toll Structure	Via Panama Canal: Percent Increase	Via Least Costly Alternative Route
Dry Bulk Carriers (continued)											
Non-Diverted Transits (continued)											
S.A.E.C.-Canada W.C.	3	66	95	2.41	1.35	2.41	1.35	17.05	17.05	0.00	17.35
S.A.W.C.-Africa	4	157	159	2.41	1.29	2.41	1.29	14.00	14.00	0.00	20.54
S.A.W.C.-Canada E.C.	0	10	11	2.41	1.35	2.41	1.35	13.15	13.15	0.00	15.50
S.A.W.C.-C.A.E.C.	8	144	261	2.41	1.35	2.41	1.35	11.15	11.15	0.00	13.50
S.A.W.C.-Europe	172	5,176	6,142	2.41	1.34	2.41	1.34	15.62	15.62	0.00	15.96
S.A.W.C.-U.S.E.C.	56	1,732	1,939	2.41	1.35	2.41	1.35	10.97	10.97	0.00	15.18
U.S.E.C.-Asia	1,108	48,574	54,494	2.41	1.27	2.41	1.27	15.30	15.30	0.00	22.99
U.S.E.C.-C.A.W.C.	212	6,232	7,322	2.41	1.35	2.41	1.35	8.22	8.22	0.00	18.25
U.S.E.C.-Canada W.C.	1	30	33	2.41	1.33	2.41	1.33	12.67	12.67	0.00	21.71
U.S.E.C.-Oceania	21	646	742	2.41	1.34	2.41	1.34	18.67	18.67	0.00	20.47
U.S.E.C.-S.A.W.C.	54	1,456	1,859	2.41	1.35	2.41	1.35	11.05	11.05	0.00	15.31
U.S.E.C.-U.S.W.C.	1	0	24	2.41	1.35	2.41	1.35	12.15	12.15	0.00	21.30
U.S.W.C.-Africa	133	4,599	5,723	2.41	1.30	2.41	1.30	16.19	16.19	0.00	18.62
U.S.W.C.-Canada E.C.	7	217	258	2.41	1.34	2.41	1.34	13.89	13.89	0.00	21.26
U.S.W.C.-C.A.E.C.	2	48	62	2.41	1.35	2.41	1.35	12.05	12.05	0.00	20.30
U.S.W.C.-Europe	156	6,524	7,395	2.41	1.28	2.41	1.28	14.48	14.48	0.00	17.96
U.S.W.C.-U.S.E.C.	7	183	278	2.41	1.33	2.41	1.33	12.16	12.16	0.00	21.48
Subtotal	3,399	121,159	145,078	2.41	1.30	2.41	1.30	15.00	15.00	0.00	20.62
Dry Bulk Carriers											
Diverted Transits											
Asia-S.A.E.C.	6	152	125	2.41	1.35	2.41	1.35	21.95	21.95	0.00	21.30
C.A.W.C.-S.A.E.C.	10	136	264	2.41	1.35	2.41	1.35	12.15	12.15	0.00	11.65

(Continued)

Table B-4. Laden Transits, Tons Carried, Toll Revenue and Toll Rates, Current Toll Structure and Rates, Status Quo Scenario, 2020, by Ship Type, Diversion Status, and Trade Route (1990 US$, except when noted)(continued)

Ship Type, Diversion Status, and Trade Route	Transits	Cargo Tonnage Carried (thousands)	Revenue (thousands) a/	Current Toll Schedule: Toll Per Panama Canal Net Ton	Current Toll Schedule: Toll Per Cargo Ton Carried	New Toll Schedule: Toll Per Panama Canal Net Ton	New Toll Schedule: Toll Per Cargo Ton Carried	Total Transportation Costs per Ton Carried, Via Panama Canal: With Current Toll Structure	Via Panama Canal: With New Toll Structure	Via Panama Canal: Percent Increase	Via Least Costly Alternative Route
Dry Bulk Carriers (continued)											
Diverted Transits (continued)											
Europe-S.A.W.C.	12	298	292	2.41	1.35	2.41	1.35	16.05	16.05	0.00	15.50
S.A.E.C.-C.A.W.C.	8	247	210	2.41	1.35	2.41	1.35	12.15	12.15	0.00	11.65
S.A.E.C.-U.S.W.C.	31	1,128	631	2.41	1.28	2.41	1.28	13.48	13.48	0.00	12.67
U.S.W.C.-S.A.E.C.	11	279	244	2.41	1.35	2.41	1.35	16.05	16.05	0.00	15.45
Subtotal	79	2,240	1,767	2.41	1.32	2.41	1.32	14.49	14.49	0.00	13.80
Subtotal	3,477	123,399	146,845	2.41	1.30	2.41	1.30	14.99	14.99	0.00	20.49
Chemical Tankers											
Non-Diverted Transits											
Africa-S.A.W.C.	1	32	35	2.41	1.34	2.41	1.34	42.34	42.34	0.00	58.00
Asia-C.A.E.C.	3	34	45	2.41	1.34	2.41	1.34	52.46	52.46	0.00	69.37
Asia-S.A.E.C.	3	16	89	2.41	1.34	2.41	1.34	49.34	49.34	0.00	51.00
Asia-U.S.E.C.	32	537	744	2.41	1.34	2.41	1.34	44.74	44.74	0.00	60.33
C.A.W.C.-C.A.E.C.	23	139	175	2.41	1.34	2.41	1.34	36.34	36.34	0.00	77.00
C.A.W.C.-Europe	8	126	139	2.41	1.34	2.41	1.34	37.28	37.28	0.00	55.50
C.A.W.C.-U.S.E.C.	38	470	572	2.41	1.34	2.41	1.34	28.06	28.06	0.00	58.14
Canada W.C.-Europe	4	87	112	2.41	1.34	2.41	1.34	41.34	41.34	0.00	55.00
Canada W.C.-U.S.E.C.	32	744	1,049	2.41	1.34	2.41	1.34	31.74	31.74	0.00	52.80
C.A.E.C.-Asia	9	248	275	2.41	1.34	2.41	1.34	41.66	41.66	0.00	54.44
C.A.E.C.-C.A.W.C.	9	207	288	2.41	1.34	2.41	1.34	21.34	21.34	0.00	41.00
C.A.E.C.-S.A.W.C.	11	186	238	2.41	1.34	2.41	1.34	31.03	31.03	0.00	40.27
C.A.E.C.-U.S.W.C.	1	10	11	2.41	1.34	2.41	1.34	51.34	51.34	0.00	90.00
Europe-C.A.W.C.	6	30	47	2.41	1.34	2.41	1.34	56.34	56.34	0.00	86.00

(Continued)

Table B-4. Laden Transits, Tons Carried, Toll Revenue and Toll Rates, Current Toll Structure and Rates, Status Quo Scenario, 2020, by Ship Type, Diversion Status, and Trade Route (1990 US$, except when noted)(continued)

Ship Type, Diversion Status, and Trade Route	Transits	Cargo Tonnage Carried (thousands)	Revenue (thousands) a/	Current Toll Schedule: Toll Per Panama Canal Net Ton	Current Toll Schedule: Toll Per Cargo Ton Carried	New Toll Schedule: Toll Per Panama Canal Net Ton	New Toll Schedule: Toll Per Cargo Ton Carried	Total Transportation Costs per Ton Carried: Via Panama Canal: With Current Toll Structure	Via Panama Canal: With New Toll Structure	Via Panama Canal: Percent Increase	Via Least Costly Alternative Route
Chemical Tankers (continued)											
Non-Diverted Transits (continued)											
Europe-S.A.W.C.	6	60	68	2.41	1.34	2.41	1.34	55.90	55.90	0.00	59.35
Europe-U.S.W.C.	9	182	212	2.41	1.34	2.41	1.34	42.34	42.34	0.00	56.41
Oceania-U.S.E.C.	18	455	647	2.41	1.34	2.41	1.34	40.54	40.54	0.00	45.36
S.A.E.C.-C.A.W.C.	8	61	77	2.41	1.34	2.41	1.34	46.87	46.87	0.00	51.82
S.A.W.C.-C.A.E.C.	22	79	251	2.41	1.34	2.41	1.34	42.38	42.38	0.00	56.49
S.A.W.C.-Europe	8	92	107	2.41	1.34	2.41	1.34	51.64	51.64	0.00	54.68
S.A.W.C.-U.S.E.C.	7	47	97	2.41	1.34	2.41	1.34	38.35	38.35	0.00	53.28
U.S.E.C.-Asia	565	15,828	17,142	2.41	1.34	2.41	1.34	42.38	42.38	0.00	56.99
U.S.E.C.-C.A.W.C.	18	146	189	2.41	1.34	2.41	1.34	33.25	33.25	0.00	70.02
U.S.E.C.-Canada W.C.	5	36	41	2.41	1.34	2.41	1.34	55.76	55.76	0.00	96.33
U.S.E.C.-Oceania	17	409	466	2.41	1.34	2.41	1.34	44.76	44.76	0.00	50.35
U.S.E.C.-S.A.W.C.	45	434	556	2.41	1.34	2.41	1.34	39.65	39.65	0.00	55.15
U.S.E.C.-U.S.W.C.	50	1,635	2,066	2.41	1.35	2.41	1.35	25.70	25.70	0.00	43.31
U.S.W.C.-C.A.E.C.	2	38	63	2.41	1.34	2.41	1.34	29.34	29.34	0.00	48.00
U.S.W.C.-Europe	16	215	288	2.41	1.34	2.41	1.34	45.63	45.63	0.00	61.31
U.S.W.C.-S.A.E.C.	0	3	4	2.41	1.34	2.41	1.34	37.34	37.34	0.00	38.00
U.S.W.C.-U.S.E.C.	15	256	633	2.41	1.35	2.41	1.35	25.80	25.80	0.00	43.41
Subtotal	992	22,841	26,730	2.41	1.34	2.41	1.34	40.10	40.10	0.00	55.44
Chemical Tankers											
Diverted Transits											
S.A.E.C.-U.S.W.C.	2	84	90	2.41	1.35	2.41	1.35	30.35	30.35	0.00	30.00
Subtotal	2	84	90	2.41	1.35	2.41	1.35	30.35	30.35	0.00	30.00
Subtotal	994	22,925	26,819	2.41	1.34	2.41	1.34	40.06	40.06	0.00	55.35

(Continued)

Table B-4. Laden Transits, Tons Carried, Toll Revenue and Toll Rates, Current Toll Structure and Rates, Status Quo Scenario, 2020, by Ship Type, Diversion Status, and Trade Route (1990 US$, except when noted)(continued)

Ship Type, Diversion Status, and Trade Route	Transits	Cargo Tonnage Carried (thousands)	Revenue (thousands) a/	Current Toll Schedule: Toll Per Panama Canal Net Ton	Current Toll Schedule: Toll Per Cargo Ton Carried	New Toll Schedule: Toll Per Panama Canal Net Ton	New Toll Schedule: Toll Per Cargo Ton Carried	Total Transportation Costs per Ton Carried: Via Panama Canal: With Current Toll Structure	Via Panama Canal: With New Toll Structure	Via Panama Canal: Percent Increase	Via Least Costly Alternative Route
Full Container Ships (continued)											
Non-Diverted Transits (continued)											
Africa-U.S.W.C.	0	2	4	2.41	4.48	2.41	4.48	246.46	246.46	0.00	281.72
Asia-Canada E.C.	35	682	2,080	2.41	4.65	2.41	4.65	210.85	210.85	0.00	223.41
Asia-S.A.E.C.	2	7	43	2.41	4.48	2.41	4.48	274.32	274.32	0.00	278.74
Asia-U.S.E.C. (low inv. cost)	228	3,885	15,795	2.41	4.69	2.41	4.69	247.19	247.19	0.00	251.75
C.A.W.C.-C.A.E.C.	1	5	24	2.41	4.38	2.41	4.38	129.97	129.97	0.00	209.77
C.A.W.C.-Europe	2	22	74	2.41	4.36	2.41	4.36	153.30	153.30	0.00	206.86
C.A.W.C.-S.A.E.C.	0	4	11	2.41	4.38	2.41	4.38	163.77	163.77	0.00	170.68
C.A.W.C.-U.S.E.C.	0	3	8	2.41	4.48	2.41	4.48	157.98	157.98	0.00	250.90
Canada E.C.-Asia	32	561	1,415	2.41	4.50	2.41	4.50	230.54	230.54	0.00	235.78
Canada E.C.-Oceania	12	145	390	2.41	4.43	2.41	4.43	259.72	259.72	0.00	259.79
Canada E.C.-U.S.W.C.	5	136	377	2.41	4.73	2.41	4.73	160.73	160.73	0.00	225.00
Canada W.C.-Europe	32	491	1,160	2.41	4.46	2.41	4.46	212.22	212.22	0.00	275.57
C.A.E.C.-Asia	8	99	342	2.41	4.41	2.41	4.41	217.31	217.31	0.00	245.58
C.A.E.C.-C.A.W.C.	1	3	12	2.41	4.51	2.41	4.51	184.21	184.21	0.00	324.09
C.A.E.C.-Oceania	0	3	7	2.41	4.48	2.41	4.48	248.46	248.46	0.00	293.66
C.A.E.C.-S.A.W.C.	6	6	59	2.41	4.64	2.41	4.64	187.15	187.15	0.00	226.38
C.A.E.C.-U.S.W.C.	1	12	36	2.41	4.38	2.41	4.38	154.50	154.50	0.00	220.28
Europe-C.A.W.C.	0	1	3	2.41	4.36	2.41	4.36	153.30	153.30	0.00	244.84
Europe-Canada W.C.	24	311	789	2.41	4.43	2.41	4.43	224.73	224.73	0.00	283.75
Europe-S.A.W.C.	51	731	2,349	2.41	4.36	2.41	4.36	194.28	194.28	0.00	223.86
Middle East-U.S.W.C.	8	116	283	2.41	4.42	2.41	4.42	221.09	221.09	0.00	248.07
Oceania-C.A.E.C.	2	24	50	2.41	4.48	2.41	4.48	248.46	248.46	0.00	293.66
S.A.E.C.-C.A.W.C.	0	4	11	2.41	4.48	2.41	4.48	193.78	193.78	0.00	205.16

(Continued)

Table B-4. Laden Transits, Tons Carried, Toll Revenue and Toll Rates, Current Toll Structure and Rates, Status Quo Scenario, 2020, by Ship Type, Diversion Status, and Trade Route (1990 US$, except when noted)(continued)

Ship Type, Diversion Status, and Trade Route	Transits	Cargo Tonnage Carried (thousands)	Revenue (thousands) a/	Current Toll Schedule: Toll Per Panama Canal Net Ton	Current Toll Schedule: Toll Per Cargo Ton Carried	New Toll Schedule: Toll Per Panama Canal Net Ton	New Toll Schedule: Toll Per Cargo Ton Carried	Total Transportation Costs per Ton Carried: Via Panama Canal: With Current Toll Structure	Via Panama Canal: With New Toll Structure	Via Panama Canal: Percent Increase	Via Least Costly Alternative Route
Full Container Ships (continued)											
Non-Diverted Transits (continued)											
S.A.E.C.-U.S.W.C.	1	9	21	2.41	4.48	2.41	4.48	179.84	179.84	0.00	217.10
S.A.W.C.-C.A.E.C.	0	1	3	2.41	4.50	2.41	4.50	191.66	191.66	0.00	232.72
S.A.W.C.-Europe	103	1,966	4,801	2.41	4.36	2.41	4.36	194.27	194.27	0.00	223.85
S.A.W.C.-U.S.E.C.	46	483	1,167	2.41	4.48	2.41	4.48	170.90	170.90	0.00	219.08
U.S.E.C.-Asia (low inv. cost)	275	6,579	18,586	2.41	4.67	2.41	4.67	247.48	247.48	0.00	252.86
U.S.E.C.-C.A.W.C.	6	55	160	2.41	4.48	2.41	4.48	136.10	136.10	0.00	250.90
U.S.E.C.-S.A.W.C.	57	487	1,445	2.41	4.48	2.41	4.48	170.90	170.90	0.00	219.08
U.S.E.C.-U.S.W.C.	1	26	77	2.41	4.71	2.41	4.71	144.82	144.82	0.00	220.39
U.S.W.C.-Africa	0	0	0	2.41	5.04	2.41	5.04	197.04	197.04	0.00	228.00
U.S.W.C.-Canada E.C.	0	5	16	2.41	4.51	2.41	4.51	163.61	163.61	0.00	231.49
U.S.W.C.-C.A.E.C.	7	42	149	2.41	4.46	2.41	4.46	159.01	159.01	0.00	227.84
U.S.W.C.-Middle East	8	103	293	2.41	4.42	2.41	4.42	221.46	221.46	0.00	229.44
U.S.W.C.-U.S.E.C.	13	168	768	2.41	4.59	2.41	4.59	145.28	145.28	0.00	222.40
Subtotal	969	17,176	52,808	2.41	4.60	2.41	4.60	228.14	228.14	0.00	244.77
Full Container Ships											
Diverted Transits											
Europe-U.S.W.C.	167	2,735	6,941	2.41	4.55	2.41	4.55	218.21	218.21	0.00	217.16
U.S.W.C.-Europe	171	2,628	8,434	2.41	4.57	2.41	4.57	219.57	219.57	0.00	219.05
Subtotal	338	5,363	15,375	2.41	4.56	2.41	4.56	218.88	218.88	0.00	218.09
Subtotal	1,307	22,539	68,183	2.41	4.59	2.41	4.59	225.94	225.94	0.00	238.42
General Cargo Ships											
Non-Diverted Transits											
Africa-C.A.W.C.	2	23	38	2.41	1.39	2.41	1.39	28.19	28.19	0.00	50.55

(Continued)

Table B-4. Laden Transits, Tons Carried, Toll Revenue and Toll Rates, Current Toll Structure and Rates, Status Quo Scenario, 2020, by Ship Type, Diversion Status, and Trade Route (1990 US$, except when noted)(continued)

Ship Type, Diversion Status, and Trade Route	Transits	Cargo Tonnage Carried (thousands)	Revenue (thousands) a/	Current Toll Schedule: Toll Per Panama Canal Net Ton	Current Toll Schedule: Toll Per Cargo Ton Carried	New Toll Schedule: Toll Per Panama Canal Net Ton	New Toll Schedule: Toll Per Cargo Ton Carried	Total Transportation Costs per Ton Carried, Via Panama Canal: With Current Toll Structure	Total Transportation Costs per Ton Carried, Via Panama Canal: With New Toll Structure	Total Transportation Costs per Ton Carried, Via Panama Canal: Percent Increase	Total Transportation Costs per Ton Carried: Via Least Costly Alternative Route
General Cargo Ships (continued)											
Non-Diverted Transits (continued)											
Africa-S.A.W.C.	2	35	39	2.41	1.39	2.41	1.39	34.14	34.14	0.00	49.55
Asia-Canada E.C.	0	2	2	2.41	1.39	2.41	1.39	38.09	38.09	0.00	41.65
Asia-C.A.E.C.	71	844	1,657	2.41	1.39	2.41	1.39	34.09	34.09	0.00	44.60
Asia-S.A.E.C.	2	13	49	2.41	1.39	2.41	1.39	41.09	41.09	0.00	41.65
Asia-U.S.E.C.	26	339	620	2.41	1.39	2.41	1.39	34.56	34.56	0.00	47.75
C.A.W.C.-Africa	5	94	114	2.41	1.39	2.41	1.39	28.19	28.19	0.00	50.55
C.A.W.C.-C.A.E.C.	25	109	193	2.41	1.46	2.41	1.46	10.10	10.10	0.00	52.77
C.A.W.C.-Europe	21	120	314	2.41	1.41	2.41	1.41	26.48	26.48	0.00	46.59
C.A.W.C.-S.A.E.C.	8	51	114	2.41	1.41	2.41	1.41	25.50	25.50	0.00	29.62
C.A.W.C.-U.S.E.C.	10	51	81	2.41	1.45	2.41	1.45	11.45	11.45	0.00	65.61
Canada E.C.-Asia	5	12	108	2.41	1.39	2.41	1.39	38.09	38.09	0.00	41.65
Canada E.C.-C.A.W.C.	1	15	21	2.41	1.39	2.41	1.39	19.29	19.29	0.00	37.65
Canada E.C.-S.A.W.C.	6	53	137	2.41	1.39	2.41	1.39	25.19	25.19	0.00	31.75
Canada W.C.-C.A.E.C.	6	45	77	2.41	1.42	2.41	1.42	28.50	28.50	0.00	62.09
Canada W.C.-Europe	1	12	13	2.41	1.39	2.41	1.39	34.09	34.09	0.00	47.55
Canada W.C.-S.A.E.C.	6	58	87	2.41	1.41	2.41	1.41	33.28	33.28	0.00	62.32
C.A.E.C.-Asia	22	415	500	2.41	1.39	2.41	1.39	34.09	34.09	0.00	44.60
C.A.E.C.-C.A.W.C.	25	89	197	2.41	1.45	2.41	1.45	9.12	9.12	0.00	56.51
C.A.E.C.-Oceania	0	7	11	2.41	1.39	2.41	1.39	37.09	37.09	0.00	44.60
C.A.E.C.-S.A.W.C.	24	218	355	2.41	1.41	2.41	1.41	20.63	20.63	0.00	31.22
C.A.E.C.-U.S.W.C.	9	28	45	2.41	1.51	2.41	1.51	30.51	30.51	0.00	102.00
Europe-C.A.W.C.	44	300	772	2.41	1.40	2.41	1.40	25.47	25.47	0.00	53.48
Europe-Canada W.C.	2	9	13	2.41	1.50	2.41	1.50	71.00	71.00	0.00	119.28

(Continued)

Table B-4. Laden Transits, Tons Carried, Toll Revenue and Toll Rates, Current Toll Structure and Rates, Status Quo Scenario, 2020, by Ship Type, Diversion Status, and Trade Route (1990 US$, except when noted)(continued)

Ship Type, Diversion Status, and Trade Route	Transits	Cargo Tonnage Carried (thousands)	Revenue (thousands) a/	Current Toll Schedule: Toll Per Panama Canal Net Ton	Current Toll Schedule: Toll Per Cargo Ton Carried	New Toll Schedule: Toll Per Panama Canal Net Ton	New Toll Schedule: Toll Per Cargo Ton Carried	Total Transportation Costs per Ton Carried: Via Panama Canal: With Current Toll Structure	Via Panama Canal: With New Toll Structure	Via Panama Canal: Percent Increase	Via Least Costly Alternative Route
General Cargo Ships (continued)											
Non-Diverted Transits (continued)											
Europe-S.A.W.C.	39	385	843	2.41	1.39	2.41	1.39	30.83	30.83	0.00	32.64
Europe-U.S.W.C.	2	11	22	2.41	1.44	2.41	1.44	55.78	55.78	0.00	93.53
Middle East-S.A.W.C.	4	2	23	2.41	1.50	2.41	1.50	64.45	64.45	0.00	89.22
Middle East-U.S.W.C.	2	4	36	2.41	1.39	2.41	1.39	37.09	37.09	0.00	42.65
Oceania-C.A.E.C.	0	3	10	2.41	1.39	2.41	1.39	36.09	36.09	0.00	44.60
Oceania-U.S.E.C.	1	7	15	2.41	1.43	2.41	1.43	51.18	51.18	0.00	61.38
S.A.E.C.-C.A.W.C.	7	148	167	2.41	1.39	2.41	1.39	23.19	23.19	0.00	24.80
S.A.E.C.-Canada W.C.	0	1	3	2.41	1.39	2.41	1.39	32.14	32.14	0.00	34.70
S.A.E.C.-U.S.W.C.	8	36	151	2.41	1.40	2.41	1.40	34.56	34.56	0.00	36.22
S.A.W.C.-Africa	4	81	95	2.41	1.39	2.41	1.39	31.14	31.14	0.00	47.60
S.A.W.C.-Canada E.C.	0	6	8	2.41	1.39	2.41	1.39	25.19	25.19	0.00	31.75
S.A.W.C.-C.A.E.C.	41	177	354	2.41	1.45	2.41	1.45	21.94	21.94	0.00	42.95
S.A.W.C.-Europe	98	1,601	2,267	2.41	1.39	2.41	1.39	30.14	30.14	0.00	31.75
S.A.W.C.-Middle East	2	23	36	2.41	1.39	2.41	1.39	32.14	32.14	0.00	37.70
S.A.W.C.-U.S.E.C.	27	205	429	2.41	1.40	2.41	1.40	23.26	23.26	0.00	36.08
U.S.E.C.-Asia	48	782	1,125	2.41	1.39	2.41	1.39	34.72	34.72	0.00	47.99
U.S.E.C.-C.A.W.C.	48	352	500	2.41	1.43	2.41	1.43	13.42	13.42	0.00	53.82
U.S.E.C.-Oceania	3	46	70	2.41	1.39	2.41	1.39	37.09	37.09	0.00	41.65
U.S.E.C.-S.A.W.C.	86	605	1,313	2.41	1.41	2.41	1.41	23.39	23.39	0.00	36.70
U.S.E.C.-U.S.W.C.	1	0	4	2.41	1.50	2.41	1.50	32.50	32.50	0.00	107.05
U.S.W.C.-Africa	2	25	52	2.41	1.39	2.41	1.39	34.09	34.09	0.00	42.60
U.S.W.C.-C.A.E.C.	1	0	8	2.41	1.50	2.41	1.50	29.71	29.71	0.00	96.69
U.S.W.C.-Europe	3	31	38	2.41	1.42	2.41	1.42	40.73	40.73	0.00	61.78

(Continued)

Table B-4. Laden Transits, Tons Carried, Toll Revenue and Toll Rates, Current Toll Structure and Rates, Status Quo Scenario, 2020, by Ship Type, Diversion Status, and Trade Route (1990 US$, except when noted)(continued)

Ship Type, Diversion Status, and Trade Route	Transits	Cargo Tonnage Carried (thousands)	Revenue (thousands) a/	Current Toll Schedule: Toll Per Panama Canal Net Ton	Current Toll Schedule: Toll Per Cargo Ton Carried	New Toll Schedule: Toll Per Panama Canal Net Ton	New Toll Schedule: Toll Per Cargo Ton Carried	Total Transportation Costs per Ton Carried: Via Panama Canal: With Current Toll Structure	Via Panama Canal: With New Toll Structure	Via Panama Canal: Percent Increase	Via Least Costly Alternative Route
General Cargo Ships (continued)											
Non-Diverted Transits (continued)											
U.S.W.C.-S.A.E.C.	6	15	53	2.41	1.45	2.41	1.45	47.38	47.38	0.00	52.07
Subtotal	757	7,489	13,179	2.41	1.40	2.41	1.40	28.72	28.72	0.00	41.84
General Cargo Ships											
Diverted Transits											
Canada E.C.-Oceania	0	4	4	2.41	1.39	2.41	1.39	43.04	43.04	0.00	42.65
Canada W.C.-Middle East	1	6	1	2.41	1.39	2.41	1.39	39.04	39.04	0.00	37.70
Subtotal	1	10	5	2.41	1.39	2.41	1.39	40.55	40.55	0.00	39.57
Subtotal	758	7,499	13,184	2.41	1.40	2.41	1.40	28.74	28.74	0.00	41.84
Liquid Gas Carriers											
Non-Diverted Transits											
C.A.W.C.-C.A.E.C.	4	18	45	2.41	7.30	2.41	7.30	49.30	49.30	0.00	170.00
C.A.E.C.-Asia	15	82	294	2.41	4.67	2.41	4.67	107.52	107.52	0.00	152.78
C.A.E.C.-C.A.W.C.	96	1,270	3,670	2.41	3.79	2.41	3.79	23.91	23.91	0.00	71.88
C.A.E.C.-S.A.W.C.	8	119	313	2.41	3.83	2.41	3.83	40.83	40.83	0.00	61.00
C.A.E.C.-U.S.W.C.	1	12	30	2.41	3.83	2.41	3.83	45.83	45.83	0.00	95.00
Europe-C.A.W.C.	2	5	16	2.41	7.30	2.41	7.30	110.30	110.30	0.00	197.00
Europe-S.A.W.C.	0	1	2	2.41	3.82	2.41	3.82	67.82	67.82	0.00	72.00
Oceania-U.S.E.C.	6	91	286	2.41	3.62	2.41	3.62	66.11	66.11	0.00	75.48
S.A.E.C.-Asia	2	27	70	2.41	3.83	2.41	3.83	78.83	78.83	0.00	94.00
S.A.E.C.-C.A.W.C.	11	31	121	2.41	7.30	2.41	7.30	99.30	99.30	0.00	112.00
U.S.E.C.-Asia	23	273	828	2.41	3.86	2.41	3.86	82.65	82.65	0.00	121.83

(Continued)

Table B-4. Laden Transits, Tons Carried, Toll Revenue and Toll Rates, Current Toll Structure and Rates, Status Quo Scenario, 2020, by Ship Type, Diversion Status, and Trade Route (1990 US$, except when noted)(continued)

Ship Type, Diversion Status, and Trade Route	Transits	Cargo Tonnage Carried (thousands)	Revenue (thousands) a/	Current Toll Schedule: Toll Per Panama Canal Net Ton	Current Toll Schedule: Toll Per Cargo Ton Carried	New Toll Schedule: Toll Per Panama Canal Net Ton	New Toll Schedule: Toll Per Cargo Ton Carried	Total Transportation Costs per Ton Carried: Via Panama Canal: With Current Toll Structure	Via Panama Canal: With New Toll Structure	Via Panama Canal: Percent Increase	Via Least Costly Alternative Route
Liquid Gas Carriers (continued)											
Non-Diverted Transits (continued)											
U.S.E.C.-C.A.W.C.	1	2	8	2.41	7.30	2.41	7.30	57.30	57.30	0.00	191.00
U.S.E.C.-Oceania	1	11	33	2.41	3.83	2.41	3.83	86.83	86.83	0.00	100.00
U.S.E.C.-S.A.W.C.	2	6	22	2.41	7.30	2.41	7.30	94.30	94.30	0.00	153.00
Subtotal	172	1,947	5,739	2.41	3.90	2.41	3.90	41.82	41.82	0.00	84.66
Passenger Ships											
Non-Diverted Transits											
North-Bound	153	0	2,251	2.41	0.00	2.41	0.00	0.00	0.00	0.00	0.00
South-Bound	183	0	3,894	2.41	0.00	2.41	0.00	0.00	0.00	0.00	0.00
Subtotal	336	0	6,145	2.41	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Refrigerated Ships											
Non-Diverted Transits											
Africa-C.A.W.C.	0	0	3	2.41	4.27	2.41	4.27	113.87	113.87	0.00	208.00
Africa-S.A.W.C.	9	9	167	2.41	4.15	2.41	4.15	133.93	133.93	0.00	196.56
Asia-C.A.E.C.	20	71	406	2.41	3.97	2.41	3.97	128.09	128.09	0.00	173.29
Asia-S.A.E.C.	5	3	86	2.41	4.28	2.41	4.28	168.08	168.08	0.00	171.60
Asia-U.S.E.C.	0	0	7	2.41	4.28	2.41	4.28	140.48	140.48	0.00	198.20
C.A.W.C.-Africa	1	3	17	2.41	4.28	2.41	4.28	113.88	113.88	0.00	208.00
C.A.W.C.-Canada E.C.	0	2	6	2.41	4.28	2.41	4.28	76.48	76.48	0.00	152.00
C.A.W.C.-C.A.E.C.	20	132	436	2.41	3.88	2.41	3.88	50.94	50.94	0.00	124.12
C.A.W.C.-Europe	219	987	4,524	2.41	3.94	2.41	3.94	89.55	89.55	0.00	143.20
C.A.W.C.-S.A.E.C.	1	4	15	2.41	4.28	2.41	4.28	89.28	89.28	0.00	96.80

(Continued)

Table B-4. Laden Transits, Tons Carried, Toll Revenue and Toll Rates, Current Toll Structure and Rates, Status Quo Scenario, 2020, by Ship Type, Diversion Status, and Trade Route (1990 US$, except when noted)(continued)

Ship Type, Diversion Status, and Trade Route	Transits	Cargo Tonnage Carried (thousands)	Revenue (thousands) a/	Current Toll Schedule: Toll Per Panama Canal Net Ton	Current Toll Schedule: Toll Per Cargo Ton Carried	New Toll Schedule: Toll Per Panama Canal Net Ton	New Toll Schedule: Toll Per Cargo Ton Carried	Total Transportation Costs per Ton Carried: Via Panama Canal: With Current Toll Structure	Via Panama Canal: With New Toll Structure	Via Panama Canal: Percent Increase	Via Least Costly Alternative Route
Refrigerated Ships (continued)											
Non-Diverted Transits (continued)											
C.A.W.C.-U.S.E.C.	1	2	15	2.41	4.28	2.41	4.28	61.68	61.68	0.00	149.80
Canada E.C.-Asia	12	63	202	2.41	4.28	2.41	4.28	155.08	155.08	0.00	169.60
Canada E.C.-C.A.W.C.	5	10	94	2.41	3.95	2.41	3.95	70.22	70.22	0.00	142.12
Canada W.C.-Europe	3	28	62	2.41	4.12	2.41	4.12	131.88	131.88	0.00	187.18
C.A.E.C.-Asia	10	32	184	2.41	4.12	2.41	4.12	135.20	135.20	0.00	182.25
C.A.E.C.-C.A.W.C.	23	5	501	2.41	3.87	2.41	3.87	50.87	50.87	0.00	124.00
C.A.E.C.-S.A.W.C.	54	42	1,177	2.41	3.87	2.41	3.87	71.87	71.87	0.00	101.00
Europe-C.A.W.C.	160	13	3,463	2.41	3.89	2.41	3.89	89.41	89.41	0.00	177.49
Europe-Canada W.C.	1	1	14	2.41	4.28	2.41	4.28	136.48	136.48	0.00	189.40
Europe-S.A.W.C.	169	145	3,282	2.41	4.02	2.41	4.02	116.06	116.06	0.00	121.88
Europe-U.S.W.C.	14	10	228	2.41	4.28	2.41	4.28	126.88	126.88	0.00	178.40
Middle East-S.A.W.C.	2	3	28	2.41	4.28	2.41	4.28	129.48	129.48	0.00	153.80
Oceania-C.A.E.C.	3	18	47	2.41	4.28	2.41	4.28	147.28	147.28	0.00	182.40
Oceania-U.S.E.C.	33	116	550	2.41	4.24	2.41	4.24	148.70	148.70	0.00	169.13
S.A.E.C.-Asia	11	50	185	2.41	4.28	2.41	4.28	137.48	137.48	0.00	159.80
S.A.W.C.-Africa	14	50	251	2.41	4.15	2.41	4.15	123.33	123.33	0.00	191.96
S.A.W.C.-C.A.E.C.	21	111	423	2.41	3.99	2.41	3.99	75.06	75.06	0.00	104.68
S.A.W.C.-Europe	928	4,670	17,690	2.41	4.05	2.41	4.05	115.41	115.41	0.00	121.08
S.A.W.C.-Middle East	5	17	87	2.41	4.28	2.41	4.28	129.48	129.48	0.00	153.80
S.A.W.C.-U.S.E.C.	607	2,226	11,833	2.41	4.02	2.41	4.02	80.58	80.58	0.00	117.32
U.S.E.C.-Asia	32	114	618	2.41	4.01	2.41	4.01	134.04	134.04	0.00	189.83
U.S.E.C.-C.A.W.C.	27	66	554	2.41	3.93	2.41	3.93	56.28	56.28	0.00	139.70
U.S.E.C.-S.A.W.C.	282	434	5,596	2.41	3.99	2.41	3.99	79.55	79.55	0.00	116.03

(Continued)

Table B-4. Laden Transits, Tons Carried, Toll Revenue and Toll Rates, Current Toll Structure and Rates, Status Quo Scenario, 2020, by Ship Type, Diversion Status, and Trade Route (1990 US$, except when noted)(continued)

Ship Type, Diversion Status, and Trade Route	Transits	Cargo Tonnage Carried (thousands)	Revenue (thousands) a/	Current Toll Schedule: Toll Per Panama Canal Net Ton	Current Toll Schedule: Toll Per Cargo Ton Carried	New Toll Schedule: Toll Per Panama Canal Net Ton	New Toll Schedule: Toll Per Cargo Ton Carried	Total Transportation Costs per Ton Carried: Via Panama Canal: With Current Toll Structure	Via Panama Canal: With New Toll Structure	Via Panama Canal: Percent Increase	Via Least Costly Alternative Route
Refrigerated Ships (continued)											
Non-Diverted Transits (continued)											
U.S.W.C.-Europe	126	672	2,220	2.41	4.17	2.41	4.17	126.00	126.00	0.00	177.24
U.S.W.C.-S.A.E.C.	1	3	14	2.41	4.24	2.41	4.24	121.95	121.95	0.00	124.71
Subtotal	2,819	10,116	54,985	2.41	4.02	2.41	4.02	103.72	103.72	0.00	129.20
Refrigerated Ships											
Diverted Transits											
Africa-Asia	29	151	398	2.41	4.28	2.41	4.28	162.08	162.08	0.00	160.80
Subtotal	29	151	398	2.41	4.28	2.41	4.28	162.08	162.08	0.00	160.80
Subtotal	2,847	10,266	55,382	2.41	4.02	2.41	4.02	104.57	104.57	0.00	129.67
Roll-On Roll-Off											
Non-Diverted Transits											
Asia-Canada E.C.	2	8	53	2.41	9.35	2.41	9.35	278.31	278.31	0.00	298.63
Asia-C.A.E.C.	24	473	1,651	2.41	7.92	2.41	7.92	225.40	225.40	0.00	256.05
Asia-U.S.E.C.	40	766	2,669	2.41	7.95	2.41	7.95	237.11	237.11	0.00	288.42
C.A.W.C.-Europe	12	64	473	2.41	8.66	2.41	8.66	181.66	181.66	0.00	257.00
C.A.W.C.-S.A.E.C.	0	0	2	2.41	8.67	2.41	8.67	193.67	193.67	0.00	203.00
C.A.W.C.-U.S.E.C.	1	1	48	2.41	8.66	2.41	8.66	155.66	155.66	0.00	251.00
Canada E.C.-Asia	8	41	245	2.41	9.30	2.41	9.30	327.47	327.47	0.00	336.67
Canada W.C.-C.A.E.C.	0	0	5	2.41	10.19	2.41	10.19	224.84	224.84	0.00	359.54
C.A.E.C.-C.A.W.C.	0	1	12	2.41	9.72	2.41	9.72	154.90	154.90	0.00	273.04
C.A.E.C.-Oceania	2	7	98	2.41	8.66	2.41	8.66	252.66	252.66	0.00	297.00
C.A.E.C.-S.A.W.C.	46	81	1,076	2.41	10.19	2.41	10.19	217.90	217.90	0.00	266.26

(Continued)

Table B-4. Laden Transits, Tons Carried, Toll Revenue and Toll Rates, Current Toll Structure and Rates, Status Quo Scenario, 2020, by Ship Type, Diversion Status, and Trade Route (1990 US$, except when noted)(continued)

Ship Type, Diversion Status, and Trade Route	Transits	Cargo Tonnage Carried (thousands)	Revenue (thousands) a/	Current Toll Schedule: Toll Per Panama Canal Net Ton	Current Toll Schedule: Toll Per Cargo Ton Carried	New Toll Schedule: Toll Per Panama Canal Net Ton	New Toll Schedule: Toll Per Cargo Ton Carried	Total Transportation Costs per Ton Carried: Via Panama Canal: With Current Toll Structure	Via Panama Canal: With New Toll Structure	Via Panama Canal: Percent Increase	Via Least Costly Alternative Route
Roll-On Roll-Off (continued)											
Non-Diverted Transits (continued)											
Europe-C.A.W.C.	18	112	703	2.41	8.66	2.41	8.66	181.66	181.66	0.00	311.00
Europe-S.A.W.C.	0	0	1	2.41	8.67	2.41	8.67	240.67	240.67	0.00	275.00
Europe-U.S.W.C.	0	2	16	2.41	8.66	2.41	8.66	241.66	241.66	0.00	311.00
Oceania-C.A.E.C.	0	0	0	2.41	8.01	2.41	8.01	223.21	223.21	0.00	261.95
S.A.W.C.-C.A.E.C.	12	23	271	2.41	10.19	2.41	10.19	217.90	217.90	0.00	266.26
S.A.W.C.-Europe	1	3	39	2.41	8.66	2.41	8.66	240.66	240.66	0.00	281.00
S.A.W.C.-U.S.E.C.	6	13	143	2.41	10.19	2.41	10.19	210.96	210.96	0.00	275.20
U.S.E.C.-Asia	8	56	339	2.41	8.64	2.41	8.64	275.58	275.58	0.00	337.50
U.S.E.C.-C.A.W.C.	2	3	75	2.41	8.66	2.41	8.66	132.66	132.66	0.00	251.00
U.S.E.C.-S.A.W.C.	26	45	599	2.41	10.19	2.41	10.19	210.96	210.96	0.00	275.20
U.S.W.C.-Canada E.C.	1	2	20	2.41	10.20	2.41	10.20	245.70	245.70	0.00	375.45
U.S.W.C.-C.A.E.C.	1	23	77	2.41	7.75	2.41	7.75	153.28	153.28	0.00	223.78
U.S.W.C.-Europe	0	0	2	2.41	7.80	2.41	7.80	203.42	203.42	0.00	256.35
U.S.W.C.-U.S.E.C.	0	5	16	2.41	7.86	2.41	7.86	151.24	151.24	0.00	244.92
Subtotal	211	1,731	8,635	2.41	8.60	2.41	8.60	228.26	228.26	0.00	279.97
Roll-On Roll-Off											
Diverted Transits											
Canada E.C.-Oceania	1	31	108	2.41	7.77	2.41	7.77	240.88	240.88	0.00	239.11
Subtotal	1	31	108	2.41	7.77	2.41	7.77	240.88	240.88	0.00	239.11
Subtotal	213	1,762	8,743	2.41	8.59	2.41	8.59	228.49	228.49	0.00	279.24
Tankers											
Non-Diverted Transits											
Africa-U.S.W.C.	0	0	0	2.41	1.27	2.41	1.27	15.27	15.27	0.00	20.00

(Continued)

Table B-4. Laden Transits, Tons Carried, Toll Revenue and Toll Rates, Current Toll Structure and Rates, Status Quo Scenario, 2020, by Ship Type, Diversion Status, and Trade Route (1990 US$, except when noted)(continued)

Ship Type, Diversion Status, and Trade Route	Transits	Cargo Tonnage Carried (thousands)	Revenue (thousands) a/	Current Toll Schedule: Toll Per Panama Canal Net Ton	Current Toll Schedule: Toll Per Cargo Ton Carried	New Toll Schedule: Toll Per Panama Canal Net Ton	New Toll Schedule: Toll Per Cargo Ton Carried	Total Transportation Costs per Ton Carried: Via Panama Canal: With Current Toll Structure	Via Panama Canal: With New Toll Structure	Via Panama Canal: Percent Increase	Via Least Costly Alternative Route
Tankers (continued)											
Non-Diverted Transits (continued)											
Asia-U.S.E.C.	1	30	34	2.41	1.27	2.41	1.27	22.15	22.15	0.00	31.82
C.A.W.C.-Africa	0	0	1	2.41	1.27	2.41	1.27	37.27	37.27	0.00	80.00
C.A.W.C.-Canada E.C.	0	4	4	2.41	1.27	2.41	1.27	10.23	10.23	0.00	23.86
C.A.W.C.-C.A.E.C.	14	85	268	2.41	1.27	2.41	1.27	8.68	8.68	0.00	28.70
C.A.W.C.-Europe	3	70	89	2.41	1.27	2.41	1.27	14.19	14.19	0.00	23.86
C.A.W.C.-U.S.E.C.	7	53	124	2.41	1.27	2.41	1.27	9.70	9.70	0.00	30.45
Canada E.C.-Asia	10	393	438	2.41	1.27	2.41	1.27	20.80	20.80	0.00	22.37
Canada W.C.-U.S.E.C.	6	253	329	2.41	1.29	2.41	1.29	11.44	11.44	0.00	21.15
C.A.E.C.-Asia	7	180	249	2.41	1.29	2.41	1.29	18.67	18.67	0.00	25.59
C.A.E.C.-C.A.W.C.	96	1,762	3,010	2.41	1.27	2.41	1.27	6.05	6.05	0.00	17.83
C.A.E.C.-S.A.W.C.	41	879	1,223	2.41	1.27	2.41	1.27	10.87	10.87	0.00	15.66
C.A.E.C.-U.S.W.C.	17	712	853	2.41	1.28	2.41	1.28	9.68	9.68	0.00	18.88
Europe-C.A.W.C.	12	54	104	2.41	1.27	2.41	1.27	20.41	20.41	0.00	36.30
Europe-S.A.W.C.	2	52	62	2.41	1.27	2.41	1.27	19.11	19.11	0.00	19.97
Europe-U.S.W.C.	6	196	231	2.41	1.27	2.41	1.27	18.01	18.01	0.00	25.98
Middle East-U.S.W.C.	0	0	0	2.41	1.25	2.41	1.25	23.25	23.25	0.00	28.00
Oceania-U.S.E.C.	9	153	199	2.41	1.27	2.41	1.27	23.22	23.22	0.00	26.68
S.A.W.C.-Canada E.C.	2	36	47	2.41	1.27	2.41	1.27	16.94	16.94	0.00	21.75
S.A.W.C.-C.A.E.C.	45	1,636	2,021	2.41	1.27	2.41	1.27	8.90	8.90	0.00	12.32
S.A.W.C.-Europe	12	106	129	2.41	1.27	2.41	1.27	22.77	22.77	0.00	24.13
S.A.W.C.-U.S.E.C.	47	1,758	2,117	2.41	1.27	2.41	1.27	10.31	10.31	0.00	15.73
U.S.E.C.-Asia	82	2,655	3,265	2.41	1.29	2.41	1.29	18.81	18.81	0.00	26.64
U.S.E.C.-C.A.W.C.	33	614	943	2.41	1.27	2.41	1.27	8.14	8.14	0.00	23.15

(Continued)

Table B-4. Laden Transits, Tons Carried, Toll Revenue and Toll Rates, Current Toll Structure and Rates, Status Quo Scenario, 2020, by Ship Type, Diversion Status, and Trade Route (1990 US$, except when noted)(continued)

Ship Type, Diversion Status, and Trade Route	Transits	Cargo Tonnage Carried (thousands)	Revenue (thousands) a/	Current Toll Schedule: Toll Per Panama Canal Net Ton	Current Toll Schedule: Toll Per Cargo Ton Carried	New Toll Schedule: Toll Per Panama Canal Net Ton	New Toll Schedule: Toll Per Cargo Ton Carried	Total Transportation Costs per Ton Carried: Via Panama Canal: With Current Toll Structure	Via Panama Canal: With New Toll Structure	Via Panama Canal: Percent Increase	Via Least Costly Alternative Route
Tankers (continued)											
Non-Diverted Transits (continued)											
U.S.E.C.-Canada W.C.	1	4	34	2.41	1.27	2.41	1.27	15.19	15.19	0.00	28.84
U.S.E.C.-Oceania	6	192	234	2.41	1.27	2.41	1.27	21.59	21.59	0.00	24.75
U.S.E.C.-S.A.W.C.	8	147	191	2.41	1.27	2.41	1.27	12.12	12.12	0.00	18.87
U.S.E.C.-U.S.W.C.	30	877	1,136	2.41	1.27	2.41	1.27	12.30	12.30	0.00	25.53
U.S.W.C.-Africa	8	224	350	2.41	1.33	2.41	1.33	13.43	13.43	0.00	17.15
U.S.W.C.-Canada E.C.	1	21	25	2.41	1.27	2.41	1.27	16.19	16.19	0.00	27.84
U.S.W.C.-C.A.E.C.	8	301	420	2.41	1.30	2.41	1.30	9.68	9.68	0.00	18.60
U.S.W.C.-S.A.E.C.	2	87	91	2.41	1.27	2.41	1.27	15.34	15.34	0.00	15.48
U.S.W.C.-U.S.E.C.	8	226	327	2.41	1.29	2.41	1.29	11.53	11.53	0.00	23.92
Subtotal	523	13,759	18,551	2.41	1.28	2.41	1.28	12.45	12.45	0.00	20.29
Tankers											
Diverted Transits											
S.A.E.C.-C.A.W.C.	117	4,342	7,395	2.41	1.27	2.41	1.27	9.42	9.42	0.00	9.39
S.A.E.C.-U.S.W.C.	53	1,967	1,649	2.41	1.27	2.41	1.27	15.19	15.19	0.00	14.66
Subtotal	170	6,310	9,044	2.41	1.27	2.41	1.27	11.22	11.22	0.00	11.03
Subtotal	693	20,068	27,595	2.41	1.27	2.41	1.27	12.06	12.06	0.00	17.38
Vehicle Carriers											
Non-Diverted Transits											
Asia-C.A.E.C.	13	33	851	2.41	29.09	2.41	29.09	392.50	392.50	0.00	459.78
Asia-U.S.E.C.	419	1,959	31,128	2.41	29.20	2.41	29.20	413.17	413.17	0.00	479.68
C.A.W.C.-C.A.E.C.	1	1	52	2.41	28.71	2.41	28.71	257.39	257.39	0.00	407.18

(Continued)

Table B-4. Laden Transits, Tons Carried, Toll Revenue and Toll Rates, Current Toll Structure and Rates, Status Quo Scenario, 2020, by Ship Type, Diversion Status, and Trade Route (1990 US$, except when noted)(continued)

Ship Type, Diversion Status, and Trade Route	Transits	Cargo Tonnage Carried (thousands)	Revenue (thousands) a/	Current Toll Schedule: Toll Per Panama Canal Net Ton	Current Toll Schedule: Toll Per Cargo Ton Carried	New Toll Schedule: Toll Per Panama Canal Net Ton	New Toll Schedule: Toll Per Cargo Ton Carried	Total Transportation Costs per Ton Carried: Via Panama Canal: With Current Toll Structure	Via Panama Canal: With New Toll Structure	Via Panama Canal: Percent Increase	Via Least Costly Alternative Route
Vehicle Carriers (continued)											
Non-Diverted Transits (continued)											
C.A.E.C.-C.A.W.C.	4	1	279	2.41	29.22	2.41	29.22	263.22	263.22	0.00	385.00
C.A.E.C.-Oceania	1	0	72	2.41	29.22	2.41	29.22	409.22	409.22	0.00	448.00
Europe-Canada W.C.	5	11	496	2.41	30.90	2.41	30.90	368.26	368.26	0.00	430.05
Europe-U.S.W.C.	149	285	12,992	2.41	29.95	2.41	29.95	381.68	381.68	0.00	429.50
S.A.W.C.-C.A.E.C.	0	0	3	2.41	28.69	2.41	28.69	307.69	307.69	0.00	354.00
U.S.E.C.-Asia	25	114	2,063	2.41	29.67	2.41	29.67	392.18	392.18	0.00	474.71
U.S.E.C.-Oceania	7	18	568	2.41	29.22	2.41	29.22	408.22	408.22	0.00	423.00
Subtotal	623	2,423	48,505	2.41	29.43	2.41	29.43	407.79	407.79	0.00	472.54
Vehicle Carriers											
Diverted Transits											
Asia-S.A.E.C.	0	0	4	2.41	29.13	2.41	29.13	453.29	453.29	0.00	435.60
Canada E.C.-Asia	0	1	10	2.41	29.22	2.41	29.22	437.22	437.22	0.00	425.00
Subtotal	0	1	14	2.41	29.18	2.41	29.18	440.32	440.32	0.00	427.05
Subtotal	623	2,424	48,519	2.41	29.43	2.41	29.43	407.80	407.80	0.00	472.52
Total Non-Diverting	12,116	219,065	417,343	2.41	2.04	2.41	2.04	51.15	51.15	0.00	62.63
Total Diverting	628	14,285	26,848	2.41	2.19	2.41	2.19	92.44	92.44	0.00	91.92

Notes: These calculations do not include all transits and tons carried forecast by the WEFA Group. For some ship-type and trade-route combinations (accounting for a total of 18 transits and 179803 tons), vessel costs were not available for every DWT size interval. As a result, these transits and tons were excluded. In addition, for 2098 transits and 35979616 tons, the cost by way of the Panama Canal without a toll was higher than the least costly alternative route. As a result, these transits and tons were excluded. Percentages may not calculate exactly as shown due to rounding. A fee of $0.40 per Panama Canal net ton has also been included to account for charges such as handling and agency fees incurred when transitting the Canal. The extra fee is only used to determine divesion status by adding it to the cost per ton carried and is not included in the revenue calculations.

a/ Revenue lost from diversions is measured as the revenue generated by the maximum, nondiverting toll rate increase.

Source: Nathan Associates Inc., based on forecasts of traffic and transportation costs provided by the WEFA Group.

CURRENT TOLL STRUCTURE AND RATES, 150,000-DWT SCENARIO, 2020

Table B-5. Laden Transits, Tons Carried, and Toll Revenue, Current Toll Stucture and Rates, 150,000 DWT Scenario, 2020, by Ship Type

	Transits				Tons Carried(thousands)				Revenue(1990 US$thousands)			
Ship Type	Canal	Diverted	Total	Diverted as a Percent of Total	Canal	Diverted	Total	Diverted as a Percent of Total	Canal	Lost a/	Total	Lost as a Percent of Total
Container-Breakbulk	1,317	7	1,325	0.56	20,424	95	20,519	0.46	36,989	48	37,037	0.13
Dry Bulk Carriers	3,807	74	3,881	1.90	184,013	2,240	186,253	1.20	214,087	2,811	216,898	1.30
Chemical Tankers	992	2	994	0.22	22,841	84	22,925	0.37	26,730	90	26,819	0.33
Full Container Ships	1,251	0	1,251	0.00	24,619	0	24,619	0.00	76,708	0	76,708	0.00
General Cargo Ships	757	1	758	0.14	7,489	10	7,499	0.13	13,179	5	13,184	0.04
Liquid Gas Carriers	172	0	172	0.00	1,947	0	1,947	0.00	5,739	0	5,739	0.00
Passenger Ships	336	0	336	0.00	0	0	0	0.00	6,145	0	6,145	0.00
Refrigerated Ships	2,819	29	2,847	1.00	10,116	151	10,266	1.47	54,985	398	55,382	0.72
Roll-On Roll-Off	211	1	213	0.67	1,731	31	1,762	1.78	8,635	108	8,743	1.23
Tankers	702	49	751	6.48	32,248	1,967	34,216	5.75	39,772	2,339	42,111	5.55
Vehicle Carriers	623	0	623	0.05	2,423	1	2,424	0.04	48,505	14	48,519	0.03
Total	12,987	163	13,150	1.24	307,852	4,579	312,431	1.47	531,473	5,812	537,284	1.08

Notes: These calculations do not include all transits and tons carried forecast by the WEFA Group. For some ship-type and trade-route combinations (accounting for a total of 18 transits and 179803 tons), vessel costs were not available for every DWT size interval. As a result, these transits and tons were excluded. In addition, for 2111 transits and 51867350 tons, the cost by way of the Panama Canal without a toll was higher than the least costly alternative route. As a result, these transits and tons were excluded. A fee of $0.40 per Panama Canal net ton has also been included to account for charges such as handling and agency fees incurred when transitting the Canal. The extra fee is only used to determine diversion status by adding it to cost per ton carried and is not included in the revenue calculations.

a/ Revenue lost from diversions is measured as the revenue generated by the maximum, nondiverting toll rate increase.

Source: Nathan Associates Inc., based on forecasts of traffic and transportation costs provided by The WEFA Group.

Table B-6. Ballast Transits, Tons Carried, and Toll Revenue, Current Toll Stucture and Rates, 150,000 DWT Scenario, 2020, by Ship Type

	Transits				Tons Carried(thousands)				Revenue(1990 US$thousands)			
Ship Type	Canal	Diverted	Total	Diverted as a Percent of Total	Canal	Diverted	Total	Diverted as a Percent of Total	Canal	Lost	Total	Lost as a Percent of Total
Container-Breakbulk	41	0	41	0.13	0	0	0	0.00	1,018	1	1,019	0.13
Dry Bulk Carriers	395	5	400	1.30	0	0	0	0.00	15,236	201	15,436	1.30
Chemical Tankers	82	0	82	0.33	0	0	0	0.00	1,753	6	1,758	0.33
Full Container Ships	9	0	9	0.00	0	0	0	0.00	226	0	226	0.00
General Cargo Ships	140	0	140	0.04	0	0	0	0.00	1,530	1	1,531	0.04
Liquid Gas Carriers	128	0	128	0.00	0	0	0	0.00	3,730	0	3,730	0.00
Passenger Ships	11	0	11	0.00	0	0	0	0.00	131	0	131	0.00
Refrigerated Ships	925	7	932	0.72	0	0	0	0.00	13,679	99	13,778	0.72
Roll-On Roll-Off	30	0	30	1.23	0	0	0	0.00	788	10	798	1.23
Tankers	402	24	426	5.55	0	0	0	0.00	20,012	1,176	21,188	5.55
Vehicle Carriers	383	0	383	0.03	0	0	0	0.00	22,606	7	22,613	0.03
Total	2,546	36	2,582	1.41	0	0	0	0.00	80,709	1,500	82,209	1.82

Note: Diversions of ballast transits are computed by diverting a proportion of ballast transits equal to lost revenue as a percent of total potential revenue for a particular laden ship type. See last column on previous table.

Source: Nathan Associates Inc., based on forecasts of traffic and transportation costs provided by The WEFA Group.

Table B-7. Laden Transits, Tons Carried, Toll Revenue and Toll Rates, Current Toll Structure and Rates, 150,000 DWT Scenario, 2020, by Ship Type, Diversion Status, and Trade Route (1990 US$, except when noted)

Ship Type, Diversion Status, and Trade Route	Transits	Cargo Tonnage Carried (thousands)	Revenue (thousands) a/	Current Toll Schedule: Toll Per Panama Canal Net Ton	Current Toll Schedule: Toll Per Cargo Ton Carried	New Toll Schedule: Toll Per Panama Canal Net Ton	New Toll Schedule: Toll Per Cargo Ton Carried	Total Transportation Costs per Ton Carried: Via Panama Canal: With Current Toll Structure	Via Panama Canal: With New Toll Structure	Via Panama Canal: Percent Increase	Via Least Costly Alternative Route
Container-Breakbulk											
Non-Diverted Transits											
Africa-C.A.W.C.	3	77	79	2.41	1.85	2.41	1.85	68.56	68.56	0.00	113.26
Africa-Canada W.C.	0	2	4	2.41	1.87	2.41	1.87	88.16	88.16	0.00	100.93
Africa-U.S.W.C.	1	9	20	2.41	1.87	2.41	1.87	89.16	89.16	0.00	102.87
Asia-Canada E.C.	0	4	11	2.41	1.86	2.41	1.86	88.65	88.65	0.00	96.19
Asia-C.A.E.C.	91	837	2,389	2.41	1.87	2.41	1.87	93.07	93.07	0.00	107.91
Asia-S.A.E.C.	27	175	688	2.41	1.87	2.41	1.87	100.20	100.20	0.00	102.23
Asia-U.S.E.C.	82	1,031	2,293	2.41	1.86	2.41	1.86	94.52	94.52	0.00	116.80
C.A.W.C.-Africa	3	70	87	2.41	1.87	2.41	1.87	73.06	73.06	0.00	120.56
C.A.W.C.-C.A.E.C.	7	118	197	2.41	1.86	2.41	1.86	49.37	49.37	0.00	87.53
C.A.W.C.-Europe	15	110	391	2.41	1.87	2.41	1.87	63.64	63.64	0.00	91.28
C.A.W.C.-S.A.E.C.	12	6	308	2.41	1.87	2.41	1.87	69.19	69.19	0.00	74.19
C.A.W.C.-U.S.E.C.	3	19	80	2.41	1.87	2.41	1.87	55.40	55.40	0.00	91.85
Canada E.C.-Asia	14	367	485	2.41	1.85	2.41	1.85	90.68	90.68	0.00	93.83
Canada E.C.-C.A.W.C.	1	9	23	2.41	1.87	2.41	1.87	54.09	54.09	0.00	92.29
Canada E.C.-Oceania	1	13	20	2.41	1.87	2.41	1.87	102.74	102.74	0.00	102.93
Canada E.C.-S.A.W.C.	1	10	15	2.41	1.85	2.41	1.85	62.78	62.78	0.00	75.85
Canada E.C.-U.S.W.C.	0	0	0	2.41	1.85	2.41	1.85	69.71	69.71	0.00	105.87
Canada W.C.-Africa	8	179	230	2.41	1.85	2.41	1.85	88.66	88.66	0.00	100.74
Canada W.C.-Europe	63	1,844	2,277	2.41	1.85	2.41	1.85	77.86	77.86	0.00	104.01
Canada W.C.-S.A.E.C.	11	210	270	2.41	1.87	2.41	1.87	71.19	71.19	0.00	108.72
Canada W.C.-U.S.E.C.	8	149	215	2.41	1.85	2.41	1.85	64.85	64.85	0.00	102.00
C.A.E.C.-Asia	9	196	237	2.41	1.87	2.41	1.87	92.37	92.37	0.00	107.04
C.A.E.C.-C.A.W.C.	7	27	181	2.41	1.87	2.41	1.87	50.30	50.30	0.00	90.29

(Continued)

Table B-7. Laden Transits, Tons Carried, Toll Revenue and Toll Rates, Current Toll Structure and Rates, 150,000 DWT Scenario, 2020, by Ship Type, Diversion Status, and Trade Route (1990 US$, except when noted)(continued)

Ship Type, Diversion Status, and Trade Route	Transits	Cargo Tonnage Carried (thousands)	Revenue (thousands) a/	Current Toll Schedule: Toll Per Panama Canal Net Ton	Current Toll Schedule: Toll Per Cargo Ton Carried	New Toll Schedule: Toll Per Panama Canal Net Ton	New Toll Schedule: Toll Per Cargo Ton Carried	Total Transportation Costs per Ton Carried, Via Panama Canal: With Current Toll Structure	Total Transportation Costs per Ton Carried, Via Panama Canal: With New Toll Structure	Total Transportation Costs per Ton Carried, Via Panama Canal: Percent Increase	Total Transportation Costs per Ton Carried: Via Least Costly Alternative Route
Container-Breakbulk (continued)											
Non-Diverted Transits (continued)											
C.A.E.C.-Canada W.C.	2	31	52	2.41	1.87	2.41	1.87	63.73	63.73	0.00	101.08
C.A.E.C.-Oceania	1	20	32	2.41	1.87	2.41	1.87	90.16	90.16	0.00	107.72
C.A.E.C.-S.A.W.C.	18	144	475	2.41	1.87	2.41	1.87	61.88	61.88	0.00	76.44
C.A.E.C.-U.S.W.C.	4	73	105	2.41	1.86	2.41	1.86	61.48	61.48	0.00	93.18
Europe-C.A.W.C.	22	137	570	2.41	1.87	2.41	1.87	64.73	64.73	0.00	112.66
Europe-Canada W.C.	4	123	166	2.41	1.85	2.41	1.85	80.14	80.14	0.00	103.29
Europe-S.A.W.C.	91	752	2,348	2.41	1.87	2.41	1.87	85.37	85.37	0.00	99.08
Europe-U.S.W.C.	24	732	921	2.41	1.85	2.41	1.85	79.27	79.27	0.00	103.43
Oceania-Canada E.C.	2	46	92	2.41	1.85	2.41	1.85	93.85	93.85	0.00	94.00
Oceania-C.A.E.C.	4	42	103	2.41	1.87	2.41	1.87	90.85	90.85	0.00	108.64
S.A.E.C.-C.A.W.C.	9	141	235	2.41	1.87	2.41	1.87	68.77	68.77	0.00	73.69
S.A.E.C.-Canada W.C.	11	152	295	2.41	1.87	2.41	1.87	87.94	87.94	0.00	93.92
S.A.E.C.-U.S.W.C.	38	572	1,007	2.41	1.87	2.41	1.87	74.36	74.36	0.00	77.06
S.A.W.C.-Canada E.C.	1	2	24	2.41	1.87	2.41	1.87	66.27	66.27	0.00	81.06
S.A.W.C.-C.A.E.C.	13	108	334	2.41	1.87	2.41	1.87	62.27	62.27	0.00	77.06
S.A.W.C.-Europe	191	3,350	4,875	2.41	1.87	2.41	1.87	85.09	85.09	0.00	101.37
S.A.W.C.-U.S.E.C.	108	1,055	2,688	2.41	1.87	2.41	1.87	59.46	59.46	0.00	77.72
U.S.E.C.-Asia	172	4,347	5,678	2.41	1.85	2.41	1.85	91.66	91.66	0.00	113.24
U.S.E.C.-C.A.W.C.	10	201	267	2.41	1.86	2.41	1.86	46.17	46.17	0.00	88.94
U.S.E.C.-S.A.W.C.	160	1,595	4,135	2.41	1.87	2.41	1.87	59.27	59.27	0.00	77.44
U.S.E.C.-U.S.W.C.	0	0	0	2.41	1.86	2.41	1.86	56.86	56.86	0.00	94.00
U.S.W.C.-Africa	9	143	354	2.41	1.85	2.41	1.85	82.33	82.33	0.00	98.63
U.S.W.C.-Canada E.C.	2	40	45	2.41	1.85	2.41	1.85	66.85	66.85	0.00	100.00

(Continued)

Table B-7. Laden Transits, Tons Carried, Toll Revenue and Toll Rates, Current Toll Structure and Rates, 150,000 DWT Scenario, 2020, by Ship Type, Diversion Status, and Trade Route (1990 US$, except when noted)(continued)

Ship Type, Diversion Status, and Trade Route	Transits	Cargo Tonnage Carried (thousands)	Revenue (thousands) a/	Current Toll Schedule: Toll Per Panama Canal Net Ton	Current Toll Schedule: Toll Per Cargo Ton Carried	New Toll Schedule: Toll Per Panama Canal Net Ton	New Toll Schedule: Toll Per Cargo Ton Carried	Total Transportation Costs per Ton Carried: Via Panama Canal: With Current Toll Structure	Via Panama Canal: With New Toll Structure	Via Panama Canal: Percent Increase	Via Least Costly Alternative Route
Container-Breakbulk (continued)											
Non-Diverted Transits (continued)											
U.S.W.C.-C.A.E.C.	9	63	223	2.41	1.87	2.41	1.87	63.58	63.58	0.00	96.80
U.S.W.C.-Europe	38	1,010	1,342	2.41	1.85	2.41	1.85	80.25	80.25	0.00	103.86
U.S.W.C.-S.A.E.C.	4	79	111	2.41	1.87	2.41	1.87	76.06	76.06	0.00	79.06
U.S.W.C.-U.S.E.C.	0	3	8	2.41	1.85	2.41	1.85	58.25	58.25	0.00	96.88
Subtotal	1,317	20,424	36,989	2.41	1.86	2.41	1.86	80.92	80.92	0.00	100.72
Container-Breakbulk											
Diverted Transits											
Oceania-S.A.E.C.	7	95	48	2.41	1.86	2.41	1.86	84.47	84.47	0.00	82.99
Subtotal	7	95	48	2.41	1.86	2.41	1.86	84.47	84.47	0.00	82.99
Subtotal	1,325	20,519	37,037	2.41	1.86	2.41	1.86	80.94	80.94	0.00	100.64
Dry Bulk Carriers											
Non-Diverted Transits											
Africa-C.A.W.C.	15	483	508	2.41	1.35	2.41	1.35	14.85	14.85	0.00	26.10
Africa-Canada W.C.	34	1,354	1,361	2.41	1.31	2.41	1.31	17.28	17.28	0.00	19.77
Africa-S.A.W.C.	5	128	159	2.41	1.35	2.41	1.35	17.80	17.80	0.00	25.10
Africa-U.S.W.C.	7	161	276	2.41	1.30	2.41	1.30	16.19	16.19	0.00	19.23
Asia-Canada E.C.	8	302	376	2.41	1.28	2.41	1.28	17.00	17.00	0.00	18.32
Asia-C.A.E.C.	21	345	766	2.41	1.33	2.41	1.33	18.03	18.03	0.00	22.65
Asia-U.S.E.C.	242	6,345	10,237	2.41	1.30	2.41	1.30	16.31	16.31	0.00	22.26
C.A.W.C.-Africa	1	34	46	2.41	1.32	2.41	1.32	14.69	14.69	0.00	25.81
C.A.W.C.-C.A.E.C.	34	961	1,247	2.41	1.33	2.41	1.33	7.81	7.81	0.00	15.77

(Continued)

Table B-7. Laden Transits, Tons Carried, Toll Revenue and Toll Rates, Current Toll Structure and Rates, 150,000 DWT Scenario, 2020, by Ship Type, Diversion Status, and Trade Route (1990 US$, except when noted)(continued)

Ship Type, Diversion Status, and Trade Route	Transits	Cargo Tonnage Carried (thousands)	Revenue (thousands) a/	Current Toll Schedule: Toll Per Panama Canal Net Ton	Current Toll Schedule: Toll Per Cargo Ton Carried	New Toll Schedule: Toll Per Panama Canal Net Ton	New Toll Schedule: Toll Per Cargo Ton Carried	Total Transportation Costs per Ton Carried: Via Panama Canal: With Current Toll Structure	Via Panama Canal: With New Toll Structure	Via Panama Canal: Percent Increase	Via Least Costly Alternative Route
Dry Bulk Carriers (continued)											
Non-Diverted Transits (continued)											
C.A.W.C.-Europe	16	462	646	2.41	1.31	2.41	1.31	12.08	12.08	0.00	18.24
C.A.W.C.-U.S.E.C.	38	1,292	1,497	2.41	1.32	2.41	1.32	7.83	7.83	0.00	17.55
Canada E.C.-Asia	87	3,754	4,490	2.41	1.26	2.41	1.26	18.86	18.86	0.00	20.40
Canada E.C.-Oceania	3	58	126	2.41	1.33	2.41	1.33	19.62	19.62	0.00	21.08
Canada E.C.-S.A.W.C.	6	163	216	2.41	1.33	2.41	1.33	12.63	12.63	0.00	14.98
Canada W.C.-Africa	96	3,500	4,008	2.41	1.31	2.41	1.31	16.93	16.93	0.00	19.42
Canada W.C.-C.A.E.C.	4	105	153	2.41	1.35	2.41	1.35	12.85	12.85	0.00	21.30
Canada W.C.-Europe	242	11,174	12,882	2.41	1.26	2.41	1.26	16.88	16.88	0.00	21.25
Canada W.C.-S.A.E.C.	24	1,374	1,670	2.41	1.22	2.41	1.22	10.63	10.63	0.00	10.92
Canada W.C.-U.S.E.C.	64	1,569	2,237	2.41	1.35	2.41	1.35	13.00	13.00	0.00	23.15
C.A.E.C.-Asia	21	639	737	2.41	1.35	2.41	1.35	17.70	17.70	0.00	22.30
C.A.E.C.-C.A.W.C.	25	682	872	2.41	1.35	2.41	1.35	8.05	8.05	0.00	16.45
C.A.E.C.-Canada W.C.	2	55	68	2.41	1.35	2.41	1.35	13.05	13.05	0.00	21.60
C.A.E.C.-Oceania	1	11	18	2.41	1.35	2.41	1.35	19.95	19.95	0.00	22.60
C.A.E.C.-S.A.W.C.	12	313	435	2.41	1.35	2.41	1.35	11.00	11.00	0.00	13.50
C.A.E.C.-U.S.W.C.	9	236	310	2.41	1.35	2.41	1.35	11.85	11.85	0.00	20.30
Columbia-Asia	3	288	299	2.41	1.18	2.41	1.18	17.58	17.58	0.00	24.67
Europe-C.A.W.C.	30	797	1,066	2.41	1.34	2.41	1.34	12.79	12.79	0.00	21.20
Europe-Canada W.C.	11	286	427	2.41	1.31	2.41	1.31	16.30	16.30	0.00	21.24
Europe-U.S.W.C.	116	3,102	4,686	2.41	1.31	2.41	1.31	15.40	15.40	0.00	20.10
Middle East-S.A.W.C.	1	52	59	2.41	1.27	2.41	1.27	14.27	14.27	0.00	16.00
Oceania-Canada E.C.	22	661	769	2.41	1.35	2.41	1.35	19.70	19.70	0.00	21.25
Oceania-C.A.E.C.	6	166	218	2.41	1.35	2.41	1.35	18.80	18.80	0.00	22.25

(Continued)

Table B-7. Laden Transits, Tons Carried, Toll Revenue and Toll Rates, Current Toll Structure and Rates, 150,000 DWT Scenario, 2020, by Ship Type, Diversion Status, and Trade Route (1990 US$, except when noted)(continued)

Ship Type, Diversion Status, and Trade Route	Transits	Cargo Tonnage Carried (thousands)	Revenue (thousands) a/	Current Toll Schedule: Toll Per Panama Canal Net Ton	Current Toll Schedule: Toll Per Cargo Ton Carried	New Toll Schedule: Toll Per Panama Canal Net Ton	New Toll Schedule: Toll Per Cargo Ton Carried	Total Transportation Costs per Ton Carried, Via Panama Canal: With Current Toll Structure	Total Transportation Costs per Ton Carried, Via Panama Canal: With New Toll Structure	Total Transportation Costs per Ton Carried, Via Panama Canal: Percent Increase	Total Transportation Costs per Ton Carried: Via Least Costly Alternative Route
Dry Bulk Carriers (continued)											
Non-Diverted Transits (continued)											
Oceania-U.S.E.C.	119	6,406	7,230	2.41	1.24	2.41	1.24	15.19	15.19	0.00	16.07
S.A.E.C.-Asia	68	2,384	2,762	2.41	1.31	2.41	1.31	16.60	16.60	0.00	18.40
S.A.E.C.-Canada W.C.	3	66	95	2.41	1.35	2.41	1.35	16.80	16.80	0.00	17.35
S.A.W.C.-Africa	4	157	159	2.41	1.29	2.41	1.29	14.00	14.00	0.00	20.54
S.A.W.C.-Canada E.C.	0	10	11	2.41	1.35	2.41	1.35	13.15	13.15	0.00	15.50
S.A.W.C.-C.A.E.C.	7	144	260	2.41	1.35	2.41	1.35	11.00	11.00	0.00	13.50
S.A.W.C.-Europe	175	6,221	7,210	2.41	1.31	2.41	1.31	15.85	15.85	0.00	15.96
S.A.W.C.-U.S.E.C.	54	1,732	1,925	2.41	1.34	2.41	1.34	10.81	10.81	0.00	15.18
U.S.E.C.-Asia	1,601	104,329	116,054	2.41	1.22	2.41	1.22	17.29	17.29	0.00	22.99
U.S.E.C.-C.A.W.C.	207	6,232	7,370	2.41	1.34	2.41	1.34	8.12	8.12	0.00	18.25
U.S.E.C.-Canada W.C.	1	30	32	2.41	1.32	2.41	1.32	12.36	12.36	0.00	21.71
U.S.E.C.-Oceania	21	646	784	2.41	1.33	2.41	1.33	18.34	18.34	0.00	20.47
U.S.E.C.-S.A.W.C.	50	1,456	1,770	2.41	1.34	2.41	1.34	10.90	10.90	0.00	15.31
U.S.E.C.-U.S.W.C.	1	0	24	2.41	1.35	2.41	1.35	12.00	12.00	0.00	21.30
U.S.W.C.-Africa	121	4,599	5,666	2.41	1.28	2.41	1.28	15.62	15.62	0.00	18.62
U.S.W.C.-Canada E.C.	7	217	255	2.41	1.33	2.41	1.33	13.35	13.35	0.00	21.26
U.S.W.C.-C.A.E.C.	2	48	62	2.41	1.35	2.41	1.35	11.85	11.85	0.00	20.30
U.S.W.C.-Europe	140	6,524	7,410	2.41	1.26	2.41	1.26	13.94	13.94	0.00	17.96
U.S.W.C.-U.S.E.C.	7	183	294	2.41	1.31	2.41	1.31	12.05	12.05	0.00	21.48
Venezuela-Asia	15	1,778	1,850	2.41	1.18	2.41	1.18	0.00	0.00	***.**	0.00
Subtotal	3,807	184,013	214,087	2.41	1.26	2.39	1.25	16.04	16.04	0.00	21.05
Dry Bulk Carriers											
Diverted Transits											
Asia-S.A.E.C.	6	152	179	2.41	1.35	2.41	1.35	21.65	21.65	0.00	21.30

(Continued)

Table B-7. Laden Transits, Tons Carried, Toll Revenue and Toll Rates, Current Toll Structure and Rates, 150,000 DWT Scenario, 2020, by Ship Type, Diversion Status, and Trade Route (1990 US$, except when noted)(continued)

Ship Type, Diversion Status, and Trade Route	Transits	Cargo Tonnage Carried (thousands)	Revenue (thousands) a/	Current Toll Schedule: Toll Per Panama Canal Net Ton	Current Toll Schedule: Toll Per Cargo Ton Carried	New Toll Schedule: Toll Per Panama Canal Net Ton	New Toll Schedule: Toll Per Cargo Ton Carried	Total Transportation Costs per Ton Carried: Via Panama Canal: With Current Toll Structure	Via Panama Canal: With New Toll Structure	Via Panama Canal: Percent Increase	Via Least Costly Alternative Route
Dry Bulk Carriers (continued)											
Diverted Transits (continued)											
C.A.W.C.-S.A.E.C.	10	136	311	2.41	1.35	2.41	1.35	12.00	12.00	0.00	11.65
Europe-S.A.W.C.	12	298	365	2.41	1.35	2.41	1.35	15.85	15.85	0.00	15.50
S.A.E.C.-C.A.W.C.	8	247	247	2.41	1.35	2.41	1.35	12.00	12.00	0.00	11.65
S.A.E.C.-U.S.W.C.	28	1,128	1,383	2.41	1.26	2.41	1.26	12.93	12.93	0.00	12.67
U.S.W.C.-S.A.E.C.	11	279	326	2.41	1.35	2.41	1.35	15.80	15.80	0.00	15.45
Subtotal	74	2,240	2,811	2.41	1.30	2.41	1.30	14.11	14.11	0.00	13.80
Subtotal	3,881	186,253	216,898	2.41	1.26	2.39	1.25	16.01	16.01	0.00	20.96
Chemical Tankers											
Non-Diverted Transits											
Africa-S.A.W.C.	1	32	35	2.41	1.34	2.41	1.34	42.34	42.34	0.00	58.00
Asia-C.A.E.C.	3	34	45	2.41	1.34	2.41	1.34	52.46	52.46	0.00	69.37
Asia-S.A.E.C.	3	16	89	2.41	1.34	2.41	1.34	49.34	49.34	0.00	51.00
Asia-U.S.E.C.	32	537	744	2.41	1.34	2.41	1.34	44.74	44.74	0.00	60.33
C.A.W.C.-C.A.E.C.	23	139	175	2.41	1.34	2.41	1.34	36.34	36.34	0.00	77.00
C.A.W.C.-Europe	8	126	139	2.41	1.34	2.41	1.34	37.28	37.28	0.00	55.50
C.A.W.C.-U.S.E.C.	38	470	572	2.41	1.34	2.41	1.34	28.06	28.06	0.00	58.14
Canada W.C.-Europe	4	87	112	2.41	1.34	2.41	1.34	41.34	41.34	0.00	55.00
Canada W.C.-U.S.E.C.	32	744	1,049	2.41	1.34	2.41	1.34	31.74	31.74	0.00	52.80
C.A.E.C.-Asia	9	248	275	2.41	1.34	2.41	1.34	41.66	41.66	0.00	54.44
C.A.E.C.-C.A.W.C.	9	207	288	2.41	1.34	2.41	1.34	21.34	21.34	0.00	41.00
C.A.E.C.-S.A.W.C.	11	186	238	2.41	1.34	2.41	1.34	31.03	31.03	0.00	40.27
C.A.E.C.-U.S.W.C.	1	10	11	2.41	1.34	2.41	1.34	51.34	51.34	0.00	90.00

(Continued)

Table B-7. Laden Transits, Tons Carried, Toll Revenue and Toll Rates, Current Toll Structure and Rates, 150,000 DWT Scenario, 2020, by Ship Type, Diversion Status, and Trade Route (1990 US$, except when noted)(continued)

Ship Type, Diversion Status, and Trade Route	Transits	Cargo Tonnage Carried (thousands)	Revenue (thousands) a/	Current Toll Schedule: Toll Per Panama Canal Net Ton	Current Toll Schedule: Toll Per Cargo Ton Carried	New Toll Schedule: Toll Per Panama Canal Net Ton	New Toll Schedule: Toll Per Cargo Ton Carried	Total Transportation Costs per Ton Carried, Via Panama Canal: With Current Toll Structure	Total Transportation Costs per Ton Carried, Via Panama Canal: With New Toll Structure	Total Transportation Costs per Ton Carried, Via Panama Canal: Percent Increase	Total Transportation Costs per Ton Carried: Via Least Costly Alternative Route
Chemical Tankers (continued)											
Non-Diverted Transits (continued)											
Europe-C.A.W.C.	6	30	47	2.41	1.34	2.41	1.34	56.34	56.34	0.00	86.00
Europe-S.A.W.C.	6	60	68	2.41	1.34	2.41	1.34	55.90	55.90	0.00	59.35
Europe-U.S.W.C.	9	182	212	2.41	1.34	2.41	1.34	42.34	42.34	0.00	56.41
Oceania-U.S.E.C.	18	455	647	2.41	1.34	2.41	1.34	40.54	40.54	0.00	45.36
S.A.E.C.-C.A.W.C.	8	61	77	2.41	1.34	2.41	1.34	46.87	46.87	0.00	51.82
S.A.W.C.-C.A.E.C.	22	79	251	2.41	1.34	2.41	1.34	42.38	42.38	0.00	56.49
S.A.W.C.-Europe	8	92	107	2.41	1.34	2.41	1.34	51.64	51.64	0.00	54.68
S.A.W.C.-U.S.E.C.	7	47	97	2.41	1.34	2.41	1.34	38.35	38.35	0.00	53.28
U.S.E.C.-Asia	565	15,828	17,142	2.41	1.34	2.41	1.34	42.38	42.38	0.00	56.99
U.S.E.C.-C.A.W.C.	18	146	189	2.41	1.34	2.41	1.34	33.25	33.25	0.00	70.02
U.S.E.C.-Canada W.C.	5	36	41	2.41	1.34	2.41	1.34	55.76	55.76	0.00	96.33
U.S.E.C.-Oceania	17	409	466	2.41	1.34	2.41	1.34	44.76	44.76	0.00	50.35
U.S.E.C.-S.A.W.C.	45	434	556	2.41	1.34	2.41	1.34	39.65	39.65	0.00	55.15
U.S.E.C.-U.S.W.C.	50	1,635	2,066	2.41	1.35	2.41	1.35	25.70	25.70	0.00	43.31
U.S.W.C.-C.A.E.C.	2	38	63	2.41	1.34	2.41	1.34	29.34	29.34	0.00	48.00
U.S.W.C.-Europe	16	215	288	2.41	1.34	2.41	1.34	45.63	45.63	0.00	61.31
U.S.W.C.-S.A.E.C.	0	3	4	2.41	1.34	2.41	1.34	37.34	37.34	0.00	38.00
U.S.W.C.-U.S.E.C.	15	256	633	2.41	1.35	2.41	1.35	25.80	25.80	0.00	43.41
Subtotal	992	22,841	26,730	2.41	1.34	2.41	1.34	40.10	40.10	0.00	55.44
Chemical Tankers											
Diverted Transits											
S.A.E.C.-U.S.W.C.	2	84	90	2.41	1.35	2.41	1.35	30.35	30.35	0.00	30.00
Subtotal	2	84	90	2.41	1.35	2.41	1.35	30.35	30.35	0.00	30.00
Subtotal	994	22,925	26,819	2.41	1.34	2.41	1.34	40.06	40.06	0.00	55.35

(Continued)

Table B-7. Laden Transits, Tons Carried, Toll Revenue and Toll Rates, Current Toll Structure and Rates, 150,000 DWT Scenario, 2020, by Ship Type, Diversion Status, and Trade Route (1990 US$, except when noted)(continued)

Ship Type, Diversion Status, and Trade Route	Transits	Cargo Tonnage Carried (thousands)	Revenue (thousands) a/	Current Toll Schedule: Toll Per Panama Canal Net Ton	Current Toll Schedule: Toll Per Cargo Ton Carried	New Toll Schedule: Toll Per Panama Canal Net Ton	New Toll Schedule: Toll Per Cargo Ton Carried	Total Transportation Costs per Ton Carried, Via Panama Canal: With Current Toll Structure	Via Panama Canal: With New Toll Structure	Via Panama Canal: Percent Increase	Via Least Costly Alternative Route
Full Container Ships (continued)											
Non-Diverted Transits (continued)											
Africa-U.S.W.C.	0	2	4	2.41	4.48	2.41	4.48	246.46	246.46	0.00	281.72
Asia-Canada E.C.	35	682	2,080	2.41	4.65	2.41	4.65	210.85	210.85	0.00	223.41
Asia-S.A.E.C.	2	7	43	2.41	4.48	2.41	4.48	274.32	274.32	0.00	278.74
Asia-U.S.E.C. (low inv. cost)	206	4,485	18,576	2.41	4.76	2.41	4.76	238.55	238.55	0.00	251.75
C.A.W.C.-C.A.E.C.	1	5	24	2.41	4.38	2.41	4.38	129.97	129.97	0.00	209.77
C.A.W.C.-Europe	2	22	74	2.41	4.36	2.41	4.36	153.30	153.30	0.00	206.86
C.A.W.C.-S.A.E.C.	0	4	11	2.41	4.38	2.41	4.38	163.77	163.77	0.00	170.68
C.A.W.C.-U.S.E.C.	0	3	8	2.41	4.48	2.41	4.48	157.98	157.98	0.00	250.90
Canada E.C.-Asia	32	561	1,415	2.41	4.50	2.41	4.50	230.54	230.54	0.00	235.78
Canada E.C.-Oceania	12	145	390	2.41	4.43	2.41	4.43	259.72	259.72	0.00	259.79
Canada E.C.-U.S.W.C.	5	136	377	2.41	4.73	2.41	4.73	160.73	160.73	0.00	225.00
Canada W.C.-Europe	32	491	1,160	2.41	4.46	2.41	4.46	212.22	212.22	0.00	275.57
C.A.E.C.-Asia	8	99	342	2.41	4.41	2.41	4.41	217.31	217.31	0.00	245.58
C.A.E.C.-C.A.W.C.	1	3	12	2.41	4.51	2.41	4.51	184.21	184.21	0.00	324.09
C.A.E.C.-Oceania	0	3	7	2.41	4.48	2.41	4.48	248.46	248.46	0.00	293.66
C.A.E.C.-S.A.W.C.	6	6	59	2.41	4.64	2.41	4.64	187.15	187.15	0.00	226.38
C.A.E.C.-U.S.W.C.	1	12	36	2.41	4.38	2.41	4.38	154.50	154.50	0.00	220.28
Europe-C.A.W.C.	0	1	3	2.41	4.36	2.41	4.36	153.30	153.30	0.00	244.84
Europe-Canada W.C.	24	311	789	2.41	4.43	2.41	4.43	224.73	224.73	0.00	283.75
Europe-S.A.W.C.	51	731	2,349	2.41	4.36	2.41	4.36	194.28	194.28	0.00	223.86
Europe-U.S.W.C.	144	2,855	8,033	2.41	4.62	2.41	4.62	209.75	209.75	0.00	217.16
Middle East-U.S.W.C.	8	116	283	2.41	4.42	2.41	4.42	221.09	221.09	0.00	248.07
Oceania-C.A.E.C.	2	24	50	2.41	4.48	2.41	4.48	248.46	248.46	0.00	293.66

(Continued)

Table B-7. Laden Transits, Tons Carried, Toll Revenue and Toll Rates, Current Toll Structure and Rates, 150,000 DWT Scenario, 2020, by Ship Type, Diversion Status, and Trade Route (1990 US$, except when noted)(continued)

Ship Type, Diversion Status, and Trade Route	Transits	Cargo Tonnage Carried (thousands)	Revenue (thousands) a/	Current Toll Schedule: Toll Per Panama Canal Net Ton	Current Toll Schedule: Toll Per Cargo Ton Carried	New Toll Schedule: Toll Per Panama Canal Net Ton	New Toll Schedule: Toll Per Cargo Ton Carried	Total Transportation Costs per Ton Carried, Via Panama Canal: With Current Toll Structure	Via Panama Canal: With New Toll Structure	Via Panama Canal: Percent Increase	Via Least Costly Alternative Route
Full Container Ships (continued)											
Non-Diverted Transits (continued)											
S.A.E.C.-C.A.W.C.	0	4	11	2.41	4.48	2.41	4.48	193.78	193.78	0.00	205.16
S.A.E.C.-U.S.W.C.	1	9	21	2.41	4.48	2.41	4.48	179.84	179.84	0.00	217.10
S.A.W.C.-C.A.E.C.	0	1	3	2.41	4.50	2.41	4.50	191.66	191.66	0.00	232.72
S.A.W.C.-Europe	103	1,966	4,801	2.41	4.36	2.41	4.36	194.27	194.27	0.00	223.85
S.A.W.C.-U.S.E.C.	46	483	1,167	2.41	4.48	2.41	4.48	170.90	170.90	0.00	219.08
U.S.E.C.-Asia (low inv. cost)	243	7,139	20,637	2.41	4.74	2.41	4.74	239.88	239.88	0.00	252.86
U.S.E.C.-C.A.W.C.	6	55	160	2.41	4.48	2.41	4.48	136.10	136.10	0.00	250.90
U.S.E.C.-S.A.W.C.	57	487	1,445	2.41	4.48	2.41	4.48	170.90	170.90	0.00	219.08
U.S.E.C.-U.S.W.C.	1	26	77	2.41	4.71	2.41	4.71	144.82	144.82	0.00	220.39
U.S.W.C.-Africa	0	0	0	2.41	5.04	2.41	5.04	197.04	197.04	0.00	228.00
U.S.W.C.-Canada E.C.	0	5	16	2.41	4.51	2.41	4.51	163.61	163.61	0.00	231.49
U.S.W.C.-C.A.E.C.	7	42	149	2.41	4.46	2.41	4.46	159.01	159.01	0.00	227.84
U.S.W.C.-Europe	194	3,428	11,035	2.41	4.64	2.41	4.64	212.59	212.59	0.00	219.05
U.S.W.C.-Middle East	8	103	293	2.41	4.42	2.41	4.42	221.46	221.46	0.00	229.44
U.S.W.C.-U.S.E.C.	13	168	768	2.41	4.59	2.41	4.59	145.28	145.28	0.00	222.40
Subtotal	1,251	24,619	76,708	2.41	4.65	2.41	4.65	220.97	220.97	0.00	238.34
General Cargo Ships											
Non-Diverted Transits											
Africa-C.A.W.C.	2	23	38	2.41	1.39	2.41	1.39	28.19	28.19	0.00	50.55
Africa-S.A.W.C.	2	35	39	2.41	1.39	2.41	1.39	34.14	34.14	0.00	49.55
Asia-Canada E.C.	0	2	2	2.41	1.39	2.41	1.39	38.09	38.09	0.00	41.65
Asia-C.A.E.C.	71	844	1,657	2.41	1.39	2.41	1.39	34.09	34.09	0.00	44.60

(Continued)

Table B-7. Laden Transits, Tons Carried, Toll Revenue and Toll Rates, Current Toll Structure and Rates, 150,000 DWT Scenario, 2020, by Ship Type, Diversion Status, and Trade Route (1990 US$, except when noted)(continued)

Ship Type, Diversion Status, and Trade Route	Transits	Cargo Tonnage Carried (thousands)	Revenue (thousands) a/	Current Toll Schedule: Toll Per Panama Canal Net Ton	Current Toll Schedule: Toll Per Cargo Ton Carried	New Toll Schedule: Toll Per Panama Canal Net Ton	New Toll Schedule: Toll Per Cargo Ton Carried	Total Transportation Costs per Ton Carried, Via Panama Canal: With Current Toll Structure	Total Transportation Costs per Ton Carried, Via Panama Canal: With New Toll Structure	Total Transportation Costs per Ton Carried, Via Panama Canal: Percent Increase	Total Transportation Costs per Ton Carried: Via Least Costly Alternative Route
General Cargo Ships (continued)											
Non-Diverted Transits (continued)											
Asia-S.A.E.C.	2	13	49	2.41	1.39	2.41	1.39	41.09	41.09	0.00	41.65
Asia-U.S.E.C.	26	339	620	2.41	1.39	2.41	1.39	34.56	34.56	0.00	47.75
C.A.W.C.-Africa	5	94	114	2.41	1.39	2.41	1.39	28.19	28.19	0.00	50.55
C.A.W.C.-C.A.E.C.	25	109	193	2.41	1.46	2.41	1.46	10.10	10.10	0.00	52.77
C.A.W.C.-Europe	21	120	314	2.41	1.41	2.41	1.41	26.48	26.48	0.00	46.59
C.A.W.C.-S.A.E.C.	8	51	114	2.41	1.41	2.41	1.41	25.50	25.50	0.00	29.62
C.A.W.C.-U.S.E.C.	10	51	81	2.41	1.45	2.41	1.45	11.45	11.45	0.00	65.61
Canada E.C.-Asia	5	12	108	2.41	1.39	2.41	1.39	38.09	38.09	0.00	41.65
Canada E.C.-C.A.W.C.	1	15	21	2.41	1.39	2.41	1.39	19.29	19.29	0.00	37.65
Canada E.C.-S.A.W.C.	6	53	137	2.41	1.39	2.41	1.39	25.19	25.19	0.00	31.75
Canada W.C.-C.A.E.C.	6	45	77	2.41	1.42	2.41	1.42	28.50	28.50	0.00	62.09
Canada W.C.-Europe	1	12	13	2.41	1.39	2.41	1.39	34.09	34.09	0.00	47.55
Canada W.C.-S.A.E.C.	6	58	87	2.41	1.41	2.41	1.41	33.28	33.28	0.00	62.32
C.A.E.C.-Asia	22	415	500	2.41	1.39	2.41	1.39	34.09	34.09	0.00	44.60
C.A.E.C.-C.A.W.C.	25	89	197	2.41	1.45	2.41	1.45	9.12	9.12	0.00	56.51
C.A.E.C.-Oceania	0	7	11	2.41	1.39	2.41	1.39	37.09	37.09	0.00	44.60
C.A.E.C.-S.A.W.C.	24	218	355	2.41	1.41	2.41	1.41	20.63	20.63	0.00	31.22
C.A.E.C.-U.S.W.C.	9	28	45	2.41	1.51	2.41	1.51	30.51	30.51	0.00	102.00
Europe-C.A.W.C.	44	300	772	2.41	1.40	2.41	1.40	25.47	25.47	0.00	53.48
Europe-Canada W.C.	2	9	13	2.41	1.50	2.41	1.50	71.00	71.00	0.00	119.28
Europe-S.A.W.C.	39	385	843	2.41	1.39	2.41	1.39	30.83	30.83	0.00	32.64
Europe-U.S.W.C.	2	11	22	2.41	1.44	2.41	1.44	55.78	55.78	0.00	93.53
Middle East-S.A.W.C.	4	2	23	2.41	1.50	2.41	1.50	64.45	64.45	0.00	89.22

(Continued)

Table B-7. Laden Transits, Tons Carried, Toll Revenue and Toll Rates, Current Toll Structure and Rates, 150,000 DWT Scenario, 2020, by Ship Type, Diversion Status, and Trade Route (1990 US$, except when noted)(continued)

Ship Type, Diversion Status, and Trade Route	Transits	Cargo Tonnage Carried (thousands)	Revenue (thousands) a/	Current Toll Schedule: Toll Per Panama Canal Net Ton	Current Toll Schedule: Toll Per Cargo Ton Carried	New Toll Schedule: Toll Per Panama Canal Net Ton	New Toll Schedule: Toll Per Cargo Ton Carried	Total Transportation Costs per Ton Carried, Via Panama Canal: With Current Toll Structure	Via Panama Canal: With New Toll Structure	Via Panama Canal: Percent Increase	Via Least Costly Alternative Route
General Cargo Ships (continued)											
Non-Diverted Transits (continued)											
Middle East-U.S.W.C.	2	4	36	2.41	1.39	2.41	1.39	37.09	37.09	0.00	42.65
Oceania-C.A.E.C.	0	3	10	2.41	1.39	2.41	1.39	36.09	36.09	0.00	44.60
Oceania-U.S.E.C.	1	7	15	2.41	1.43	2.41	1.43	51.18	51.18	0.00	61.38
S.A.E.C.-C.A.W.C.	7	148	167	2.41	1.39	2.41	1.39	23.19	23.19	0.00	24.80
S.A.E.C.-Canada W.C.	0	1	3	2.41	1.39	2.41	1.39	32.14	32.14	0.00	34.70
S.A.E.C.-U.S.W.C.	8	36	151	2.41	1.40	2.41	1.40	34.56	34.56	0.00	36.22
S.A.W.C.-Africa	4	81	95	2.41	1.39	2.41	1.39	31.14	31.14	0.00	47.60
S.A.W.C.-Canada E.C.	0	6	8	2.41	1.39	2.41	1.39	25.19	25.19	0.00	31.75
S.A.W.C.-C.A.E.C.	41	177	354	2.41	1.45	2.41	1.45	21.94	21.94	0.00	42.95
S.A.W.C.-Europe	98	1,601	2,267	2.41	1.39	2.41	1.39	30.14	30.14	0.00	31.75
S.A.W.C.-Middle East	2	23	36	2.41	1.39	2.41	1.39	32.14	32.14	0.00	37.70
S.A.W.C.-U.S.E.C.	27	205	429	2.41	1.40	2.41	1.40	23.26	23.26	0.00	36.08
U.S.E.C.-Asia	48	782	1,125	2.41	1.39	2.41	1.39	34.72	34.72	0.00	47.99
U.S.E.C.-C.A.W.C.	48	352	500	2.41	1.43	2.41	1.43	13.42	13.42	0.00	53.82
U.S.E.C.-Oceania	3	46	70	2.41	1.39	2.41	1.39	37.09	37.09	0.00	41.65
U.S.E.C.-S.A.W.C.	86	605	1,313	2.41	1.41	2.41	1.41	23.39	23.39	0.00	36.70
U.S.E.C.-U.S.W.C.	1	0	4	2.41	1.50	2.41	1.50	32.50	32.50	0.00	107.05
U.S.W.C.-Africa	2	25	52	2.41	1.39	2.41	1.39	34.09	34.09	0.00	42.60
U.S.W.C.-C.A.E.C.	1	0	8	2.41	1.50	2.41	1.50	29.71	29.71	0.00	96.69
U.S.W.C.-Europe	3	31	38	2.41	1.42	2.41	1.42	40.73	40.73	0.00	61.78
U.S.W.C.-S.A.E.C.	6	15	53	2.41	1.45	2.41	1.45	47.38	47.38	0.00	52.07
Subtotal	757	7,489	13,179	2.41	1.40	2.41	1.40	28.72	28.72	0.00	41.84
General Cargo Ships											
Diverted Transits											
Canada E.C.-Oceania	0	4	4	2.41	1.39	2.41	1.39	43.04	43.04	0.00	42.65

(Continued)

Table B-7. Laden Transits, Tons Carried, Toll Revenue and Toll Rates, Current Toll Structure and Rates, 150,000 DWT Scenario, 2020, by Ship Type, Diversion Status, and Trade Route (1990 US$, except when noted)(continued)

Ship Type, Diversion Status, and Trade Route	Transits	Cargo Tonnage Carried (thousands)	Revenue (thousands) a/	Current Toll Schedule: Toll Per Panama Canal Net Ton	Current Toll Schedule: Toll Per Cargo Ton Carried	New Toll Schedule: Toll Per Panama Canal Net Ton	New Toll Schedule: Toll Per Cargo Ton Carried	Total Transportation Costs per Ton Carried, Via Panama Canal: With Current Toll Structure	Total Transportation Costs per Ton Carried, Via Panama Canal: With New Toll Structure	Total Transportation Costs per Ton Carried, Via Panama Canal: Percent Increase	Total Transportation Costs per Ton Carried: Via Least Costly Alternative Route
General Cargo Ships (continued)											
Diverted Transits (continued)											
Canada W.C.-Middle East	1	6	1	2.41	1.39	2.41	1.39	39.04	39.04	0.00	37.70
Subtotal	1	10	5	2.41	1.39	2.41	1.39	40.55	40.55	0.00	39.57
Subtotal	758	7,499	13,184	2.41	1.40	2.41	1.40	28.74	28.74	0.00	41.84
Liquid Gas Carriers											
Non-Diverted Transits											
C.A.W.C.-C.A.E.C.	4	18	45	2.41	7.30	2.41	7.30	49.30	49.30	0.00	170.00
C.A.E.C.-Asia	15	82	294	2.41	4.67	2.41	4.67	107.52	107.52	0.00	152.78
C.A.E.C.-C.A.W.C.	96	1,270	3,670	2.41	3.79	2.41	3.79	23.91	23.91	0.00	71.88
C.A.E.C.-S.A.W.C.	8	119	313	2.41	3.83	2.41	3.83	40.83	40.83	0.00	61.00
C.A.E.C.-U.S.W.C.	1	12	30	2.41	3.83	2.41	3.83	45.83	45.83	0.00	95.00
Europe-C.A.W.C.	2	5	16	2.41	7.30	2.41	7.30	110.30	110.30	0.00	197.00
Europe-S.A.W.C.	0	1	2	2.41	3.82	2.41	3.82	67.82	67.82	0.00	72.00
Oceania-U.S.E.C.	6	91	286	2.41	3.62	2.41	3.62	66.11	66.11	0.00	75.48
S.A.E.C.-Asia	2	27	70	2.41	3.83	2.41	3.83	78.83	78.83	0.00	94.00
S.A.E.C.-C.A.W.C.	11	31	121	2.41	7.30	2.41	7.30	99.30	99.30	0.00	112.00
U.S.E.C.-Asia	23	273	828	2.41	3.86	2.41	3.86	82.65	82.65	0.00	121.83
U.S.E.C.-C.A.W.C.	1	2	8	2.41	7.30	2.41	7.30	57.30	57.30	0.00	191.00
U.S.E.C.-Oceania	1	11	33	2.41	3.83	2.41	3.83	86.83	86.83	0.00	100.00
U.S.E.C.-S.A.W.C.	2	6	22	2.41	7.30	2.41	7.30	94.30	94.30	0.00	153.00
Subtotal	172	1,947	5,739	2.41	3.90	2.41	3.90	41.82	41.82	0.00	84.66
Passenger Ships											
Non-Diverted Transits											
North-Bound	153	0	2,251	2.41	0.00	2.41	0.00	0.00	0.00	0.00	0.00

(Continued)

Table B-7. Laden Transits, Tons Carried, Toll Revenue and Toll Rates, Current Toll Structure and Rates, 150,000 DWT Scenario, 2020, by Ship Type, Diversion Status, and Trade Route (1990 US$, except when noted)(continued)

Ship Type, Diversion Status, and Trade Route	Transits	Cargo Tonnage Carried (thousands)	Revenue (thousands) a/	Current Toll Schedule: Toll Per Panama Canal Net Ton	Current Toll Schedule: Toll Per Cargo Ton Carried	New Toll Schedule: Toll Per Panama Canal Net Ton	New Toll Schedule: Toll Per Cargo Ton Carried	Total Transportation Costs per Ton Carried: Via Panama Canal: With Current Toll Structure	Via Panama Canal: With New Toll Structure	Via Panama Canal: Percent Increase	Via Least Costly Alternative Route
Passenger Ships (continued)											
Non-Diverted Transits (continued)											
South-Bound	183	0	3,894	2.41	0.00	2.41	0.00	0.00	0.00	0.00	0.00
Subtotal	336	0	6,145	2.41	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Refrigerated Ships											
Non-Diverted Transits											
Africa-C.A.W.C.	0	0	3	2.41	4.27	2.41	4.27	113.87	113.87	0.00	208.00
Africa-S.A.W.C.	9	9	167	2.41	4.15	2.41	4.15	133.93	133.93	0.00	196.56
Asia-C.A.E.C.	20	71	406	2.41	3.97	2.41	3.97	128.09	128.09	0.00	173.29
Asia-S.A.E.C.	5	3	86	2.41	4.28	2.41	4.28	168.08	168.08	0.00	171.60
Asia-U.S.E.C.	0	0	7	2.41	4.28	2.41	4.28	140.48	140.48	0.00	198.20
C.A.W.C.-Africa	1	3	17	2.41	4.28	2.41	4.28	113.88	113.88	0.00	208.00
C.A.W.C.-Canada E.C.	0	2	6	2.41	4.28	2.41	4.28	76.48	76.48	0.00	152.00
C.A.W.C.-C.A.E.C.	20	132	436	2.41	3.88	2.41	3.88	50.94	50.94	0.00	124.12
C.A.W.C.-Europe	219	987	4,524	2.41	3.94	2.41	3.94	89.55	89.55	0.00	143.20
C.A.W.C.-S.A.E.C.	1	4	15	2.41	4.28	2.41	4.28	89.28	89.28	0.00	96.80
C.A.W.C.-U.S.E.C.	1	2	15	2.41	4.28	2.41	4.28	61.68	61.68	0.00	149.80
Canada E.C.-Asia	12	63	202	2.41	4.28	2.41	4.28	155.08	155.08	0.00	169.60
Canada E.C.-C.A.W.C.	5	10	94	2.41	3.95	2.41	3.95	70.22	70.22	0.00	142.12
Canada W.C.-Europe	3	28	62	2.41	4.12	2.41	4.12	131.88	131.88	0.00	187.18
C.A.E.C.-Asia	10	32	184	2.41	4.12	2.41	4.12	135.20	135.20	0.00	182.25
C.A.E.C.-C.A.W.C.	23	5	501	2.41	3.87	2.41	3.87	50.87	50.87	0.00	124.00
C.A.E.C.-S.A.W.C.	54	42	1,177	2.41	3.87	2.41	3.87	71.87	71.87	0.00	101.00
Europe-C.A.W.C.	160	13	3,463	2.41	3.89	2.41	3.89	89.41	89.41	0.00	177.49

(Continued)

Table B-7. Laden Transits, Tons Carried, Toll Revenue and Toll Rates, Current Toll Structure and Rates, 150,000 DWT Scenario, 2020, by Ship Type, Diversion Status, and Trade Route (1990 US$, except when noted)(continued)

Ship Type, Diversion Status, and Trade Route	Transits	Cargo Tonnage Carried (thousands)	Revenue (thousands) a/	Current Toll Schedule: Toll Per Panama Canal Net Ton	Current Toll Schedule: Toll Per Cargo Ton Carried	New Toll Schedule: Toll Per Panama Canal Net Ton	New Toll Schedule: Toll Per Cargo Ton Carried	Total Transportation Costs per Ton Carried, Via Panama Canal: With Current Toll Structure	Total Transportation Costs per Ton Carried, Via Panama Canal: With New Toll Structure	Total Transportation Costs per Ton Carried, Via Panama Canal: Percent Increase	Total Transportation Costs per Ton Carried: Via Least Costly Alternative Route
Refrigerated Ships (continued)											
Non-Diverted Transits (continued)											
Europe-Canada W.C.	1	1	14	2.41	4.28	2.41	4.28	136.48	136.48	0.00	189.40
Europe-S.A.W.C.	169	145	3,282	2.41	4.02	2.41	4.02	116.06	116.06	0.00	121.88
Europe-U.S.W.C.	14	10	228	2.41	4.28	2.41	4.28	126.88	126.88	0.00	178.40
Middle East-S.A.W.C.	2	3	28	2.41	4.28	2.41	4.28	129.48	129.48	0.00	153.80
Oceania-C.A.E.C.	3	18	47	2.41	4.28	2.41	4.28	147.28	147.28	0.00	182.40
Oceania-U.S.E.C.	33	116	550	2.41	4.24	2.41	4.24	148.70	148.70	0.00	169.13
S.A.E.C.-Asia	11	50	185	2.41	4.28	2.41	4.28	137.48	137.48	0.00	159.80
S.A.W.C.-Africa	14	50	251	2.41	4.15	2.41	4.15	123.33	123.33	0.00	191.96
S.A.W.C.-C.A.E.C.	21	111	423	2.41	3.99	2.41	3.99	75.06	75.06	0.00	104.68
S.A.W.C.-Europe	928	4,670	17,690	2.41	4.05	2.41	4.05	115.41	115.41	0.00	121.08
S.A.W.C.-Middle East	5	17	87	2.41	4.28	2.41	4.28	129.48	129.48	0.00	153.80
S.A.W.C.-U.S.E.C.	607	2,226	11,833	2.41	4.02	2.41	4.02	80.58	80.58	0.00	117.32
U.S.E.C.-Asia	32	114	618	2.41	4.01	2.41	4.01	134.04	134.04	0.00	189.83
U.S.E.C.-C.A.W.C.	27	66	554	2.41	3.93	2.41	3.93	56.28	56.28	0.00	139.70
U.S.E.C.-S.A.W.C.	282	434	5,596	2.41	3.99	2.41	3.99	79.55	79.55	0.00	116.03
U.S.W.C.-Europe	126	672	2,220	2.41	4.17	2.41	4.17	126.00	126.00	0.00	177.24
U.S.W.C.-S.A.E.C.	1	3	14	2.41	4.24	2.41	4.24	121.95	121.95	0.00	124.71
Subtotal	2,819	10,116	54,985	2.41	4.02	2.41	4.02	103.72	103.72	0.00	129.20
Refrigerated Ships											
Diverted Transits											
Africa-Asia	29	151	398	2.41	4.28	2.41	4.28	162.08	162.08	0.00	160.80
Subtotal	29	151	398	2.41	4.28	2.41	4.28	162.08	162.08	0.00	160.80
Subtotal	2,847	10,266	55,382	2.41	4.02	2.41	4.02	104.57	104.57	0.00	129.67

(Continued)

Table B-7. Laden Transits, Tons Carried, Toll Revenue and Toll Rates, Current Toll Structure and Rates, 150,000 DWT Scenario, 2020, by Ship Type, Diversion Status, and Trade Route (1990 US$, except when noted)(continued)

Ship Type, Diversion Status, and Trade Route	Transits	Cargo Tonnage Carried (thousands)	Revenue (thousands) a/	Current Toll Schedule: Toll Per Panama Canal Net Ton	Current Toll Schedule: Toll Per Cargo Ton Carried	New Toll Schedule: Toll Per Panama Canal Net Ton	New Toll Schedule: Toll Per Cargo Ton Carried	Total Transportation Costs per Ton Carried: Via Panama Canal: With Current Toll Structure	Via Panama Canal: With New Toll Structure	Via Panama Canal: Percent Increase	Via Least Costly Alternative Route
Roll-On Roll-Off (continued)											
Non-Diverted Transits (continued)											
Asia-Canada E.C.	2	8	53	2.41	9.35	2.41	9.35	278.31	278.31	0.00	298.63
Asia-C.A.E.C.	24	473	1,651	2.41	7.92	2.41	7.92	225.40	225.40	0.00	256.05
Asia-U.S.E.C.	40	766	2,669	2.41	7.95	2.41	7.95	237.11	237.11	0.00	288.42
C.A.W.C.-Europe	12	64	473	2.41	8.66	2.41	8.66	181.66	181.66	0.00	257.00
C.A.W.C.-S.A.E.C.	0	0	2	2.41	8.67	2.41	8.67	193.67	193.67	0.00	203.00
C.A.W.C.-U.S.E.C.	1	1	48	2.41	8.66	2.41	8.66	155.66	155.66	0.00	251.00
Canada E.C.-Asia	8	41	245	2.41	9.30	2.41	9.30	327.47	327.47	0.00	336.67
Canada W.C.-C.A.E.C.	0	0	5	2.41	10.19	2.41	10.19	224.84	224.84	0.00	359.54
C.A.E.C.-C.A.W.C.	0	1	12	2.41	9.72	2.41	9.72	154.90	154.90	0.00	273.04
C.A.E.C.-Oceania	2	7	98	2.41	8.66	2.41	8.66	252.66	252.66	0.00	297.00
C.A.E.C.-S.A.W.C.	46	81	1,076	2.41	10.19	2.41	10.19	217.90	217.90	0.00	266.26
Europe-C.A.W.C.	18	112	703	2.41	8.66	2.41	8.66	181.66	181.66	0.00	311.00
Europe-S.A.W.C.	0	0	1	2.41	8.67	2.41	8.67	240.67	240.67	0.00	275.00
Europe-U.S.W.C.	0	2	16	2.41	8.66	2.41	8.66	241.66	241.66	0.00	311.00
Oceania-C.A.E.C.	0	0	0	2.41	8.01	2.41	8.01	223.21	223.21	0.00	261.95
S.A.W.C.-C.A.E.C.	12	23	271	2.41	10.19	2.41	10.19	217.90	217.90	0.00	266.26
S.A.W.C.-Europe	1	3	39	2.41	8.66	2.41	8.66	240.66	240.66	0.00	281.00
S.A.W.C.-U.S.E.C.	6	13	143	2.41	10.19	2.41	10.19	210.96	210.96	0.00	275.20
U.S.E.C.-Asia	8	56	339	2.41	8.64	2.41	8.64	275.58	275.58	0.00	337.50
U.S.E.C.-C.A.W.C.	2	3	75	2.41	8.66	2.41	8.66	132.66	132.66	0.00	251.00
U.S.E.C.-S.A.W.C.	26	45	599	2.41	10.19	2.41	10.19	210.96	210.96	0.00	275.20
U.S.W.C.-Canada E.C.	1	2	20	2.41	10.20	2.41	10.20	245.70	245.70	0.00	375.45
U.S.W.C.-C.A.E.C.	1	23	77	2.41	7.75	2.41	7.75	153.28	153.28	0.00	223.78

(Continued)

Table B-7. Laden Transits, Tons Carried, Toll Revenue and Toll Rates, Current Toll Structure and Rates, 150,000 DWT Scenario, 2020, by Ship Type, Diversion Status, and Trade Route (1990 US$, except when noted)(continued)

Ship Type, Diversion Status, and Trade Route	Transits	Cargo Tonnage Carried (thousands)	Revenue (thousands) a/	Current Toll Schedule: Toll Per Panama Canal Net Ton	Current Toll Schedule: Toll Per Cargo Ton Carried	New Toll Schedule: Toll Per Panama Canal Net Ton	New Toll Schedule: Toll Per Cargo Ton Carried	Total Transportation Costs per Ton Carried: Via Panama Canal: With Current Toll Structure	Via Panama Canal: With New Toll Structure	Via Panama Canal: Percent Increase	Via Least Costly Alternative Route
Roll-On Roll-Off (continued)											
Non-Diverted Transits (continued)											
U.S.W.C.-Europe	0	0	2	2.41	7.80	2.41	7.80	203.42	203.42	0.00	256.35
U.S.W.C.-U.S.E.C.	0	5	16	2.41	7.86	2.41	7.86	151.24	151.24	0.00	244.92
Subtotal	211	1,731	8,635	2.41	8.60	2.41	8.60	228.26	228.26	0.00	279.97
Roll-On Roll-Off											
Diverted Transits											
Canada E.C.-Oceania	1	31	108	2.41	7.77	2.41	7.77	240.88	240.88	0.00	239.11
Subtotal	1	31	108	2.41	7.77	2.41	7.77	240.88	240.88	0.00	239.11
Subtotal	213	1,762	8,743	2.41	8.59	2.41	8.59	228.49	228.49	0.00	279.24
Tankers											
Non-Diverted Transits											
Africa-U.S.W.C.	0	0	0	2.41	1.27	2.41	1.27	15.27	15.27	0.00	20.00
Asia-U.S.E.C.	1	30	34	2.41	1.27	2.41	1.27	22.15	22.15	0.00	31.82
C.A.W.C.-Africa	0	0	1	2.41	1.27	2.41	1.27	37.27	37.27	0.00	80.00
C.A.W.C.-Canada E.C.	0	4	4	2.41	1.27	2.41	1.27	10.23	10.23	0.00	23.86
C.A.W.C.-C.A.E.C.	14	85	268	2.41	1.27	2.41	1.27	8.68	8.68	0.00	28.70
C.A.W.C.-Europe	3	70	89	2.41	1.27	2.41	1.27	14.19	14.19	0.00	23.86
C.A.W.C.-U.S.E.C.	7	53	124	2.41	1.27	2.41	1.27	9.70	9.70	0.00	30.45
Canada E.C.-Asia	10	393	438	2.41	1.27	2.41	1.27	20.80	20.80	0.00	22.37
Canada W.C.-U.S.E.C.	5	253	323	2.41	1.27	2.41	1.27	11.42	11.42	0.00	21.15
C.A.E.C.-Asia	6	180	243	2.41	1.27	2.41	1.27	18.65	18.65	0.00	25.59
C.A.E.C.-C.A.W.C.	93	1,762	3,007	2.41	1.27	2.41	1.27	6.05	6.05	0.00	17.83

(Continued)

Table B-7. Laden Transits, Tons Carried, Toll Revenue and Toll Rates, Current Toll Structure and Rates, 150,000 DWT Scenario, 2020, by Ship Type, Diversion Status, and Trade Route (1990 US$, except when noted)(continued)

Ship Type, Diversion Status, and Trade Route	Transits	Cargo Tonnage Carried (thousands)	Revenue (thousands) a/	Current Toll Schedule: Toll Per Panama Canal Net Ton	Current Toll Schedule: Toll Per Cargo Ton Carried	New Toll Schedule: Toll Per Panama Canal Net Ton	New Toll Schedule: Toll Per Cargo Ton Carried	Total Transportation Costs per Ton Carried, Via Panama Canal: With Current Toll Structure	Total Transportation Costs per Ton Carried, Via Panama Canal: With New Toll Structure	Total Transportation Costs per Ton Carried, Via Panama Canal: Percent Increase	Total Transportation Costs per Ton Carried: Via Least Costly Alternative Route
Tankers (continued)											
Non-Diverted Transits (continued)											
C.A.E.C.-S.A.W.C.	41	879	1,223	2.41	1.27	2.41	1.27	10.87	10.87	0.00	15.66
C.A.E.C.-U.S.W.C.	17	712	847	2.41	1.27	2.41	1.27	9.67	9.67	0.00	18.88
Europe-C.A.W.C.	12	54	104	2.41	1.27	2.41	1.27	20.41	20.41	0.00	36.30
Europe-S.A.W.C.	2	52	62	2.41	1.27	2.41	1.27	19.11	19.11	0.00	19.97
Europe-U.S.W.C.	6	196	231	2.41	1.27	2.41	1.27	18.01	18.01	0.00	25.98
Middle East-U.S.W.C.	0	0	0	2.41	1.25	2.41	1.25	23.25	23.25	0.00	28.00
Oceania-U.S.E.C.	9	153	199	2.41	1.27	2.41	1.27	23.22	23.22	0.00	26.68
S.A.E.C.-Asia	104	14,147	14,981	2.41	1.27	2.41	1.27	13.83	13.83	0.00	14.70
S.A.E.C.-C.A.W.C.	85	4,342	6,275	2.41	1.26	2.41	1.26	8.64	8.64	0.00	9.39
S.A.W.C.-Canada E.C.	2	36	47	2.41	1.27	2.41	1.27	16.94	16.94	0.00	21.75
S.A.W.C.-C.A.E.C.	42	1,636	2,095	2.41	1.27	2.41	1.27	8.64	8.64	0.00	12.32
S.A.W.C.-Europe	12	106	129	2.41	1.27	2.41	1.27	22.77	22.77	0.00	24.13
S.A.W.C.-U.S.E.C.	47	1,758	2,116	2.41	1.27	2.41	1.27	10.31	10.31	0.00	15.73
U.S.E.C.-Asia	80	2,655	3,218	2.41	1.27	2.41	1.27	18.79	18.79	0.00	26.64
U.S.E.C.-C.A.W.C.	33	614	943	2.41	1.27	2.41	1.27	8.14	8.14	0.00	23.15
U.S.E.C.-Canada W.C.	1	4	34	2.41	1.27	2.41	1.27	15.19	15.19	0.00	28.84
U.S.E.C.-Oceania	6	192	234	2.41	1.27	2.41	1.27	21.59	21.59	0.00	24.75
U.S.E.C.-S.A.W.C.	8	147	191	2.41	1.27	2.41	1.27	12.12	12.12	0.00	18.87
U.S.E.C.-U.S.W.C.	30	877	1,131	2.41	1.27	2.41	1.27	12.30	12.30	0.00	25.53
U.S.W.C.-Africa	7	224	330	2.41	1.26	2.41	1.26	13.36	13.36	0.00	17.15
U.S.W.C.-Canada E.C.	1	21	25	2.41	1.27	2.41	1.27	16.19	16.19	0.00	27.84
U.S.W.C.-C.A.E.C.	8	301	410	2.41	1.26	2.41	1.26	9.64	9.64	0.00	18.60
U.S.W.C.-S.A.E.C.	2	87	91	2.41	1.27	2.41	1.27	15.34	15.34	0.00	15.48

(Continued)

Table B-7. Laden Transits, Tons Carried, Toll Revenue and Toll Rates, Current Toll Structure and Rates, 150,000 DWT Scenario, 2020, by Ship Type, Diversion Status, and Trade Route (1990 US$, except when noted)(continued)

Ship Type, Diversion Status, and Trade Route	Transits	Cargo Tonnage Carried (thousands)	Revenue (thousands) a/	Current Toll Schedule: Toll Per Panama Canal Net Ton	Current Toll Schedule: Toll Per Cargo Ton Carried	New Toll Schedule: Toll Per Panama Canal Net Ton	New Toll Schedule: Toll Per Cargo Ton Carried	Total Transportation Costs per Ton Carried: Via Panama Canal: With Current Toll Structure	Via Panama Canal: With New Toll Structure	Via Panama Canal: Percent Increase	Via Least Costly Alternative Route
Tankers (continued)											
Non-Diverted Transits (continued)											
U.S.W.C.-U.S.E.C.	8	226	322	2.41	1.27	2.41	1.27	11.51	11.51	0.00	23.92
Subtotal	702	32,248	39,772	2.41	1.27	2.41	1.27	12.52	12.52	0.00	16.37
Tankers											
Diverted Transits											
S.A.E.C.-U.S.W.C.	49	1,967	2,339	2.41	1.26	2.41	1.26	14.90	14.90	0.00	14.66
Subtotal	49	1,967	2,339	2.41	1.26	2.41	1.26	14.90	14.90	0.00	14.66
Subtotal	751	34,216	42,111	2.41	1.27	2.41	1.27	12.66	12.66	0.00	16.27
Vehicle Carriers											
Non-Diverted Transits											
Asia-C.A.E.C.	13	33	851	2.41	29.09	2.41	29.09	392.50	392.50	0.00	459.78
Asia-U.S.E.C.	419	1,959	31,128	2.41	29.20	2.41	29.20	413.17	413.17	0.00	479.68
C.A.W.C.-C.A.E.C.	1	1	52	2.41	28.71	2.41	28.71	257.39	257.39	0.00	407.18
C.A.E.C.-C.A.W.C.	4	1	279	2.41	29.22	2.41	29.22	263.22	263.22	0.00	385.00
C.A.E.C.-Oceania	1	0	72	2.41	29.22	2.41	29.22	409.22	409.22	0.00	448.00
Europe-Canada W.C.	5	11	496	2.41	30.90	2.41	30.90	368.26	368.26	0.00	430.05
Europe-U.S.W.C.	149	285	12,992	2.41	29.95	2.41	29.95	381.68	381.68	0.00	429.50
S.A.W.C.-C.A.E.C.	0	0	3	2.41	28.69	2.41	28.69	307.69	307.69	0.00	354.00
U.S.E.C.-Asia	25	114	2,063	2.41	29.67	2.41	29.67	392.18	392.18	0.00	474.71
U.S.E.C.-Oceania	7	18	568	2.41	29.22	2.41	29.22	408.22	408.22	0.00	423.00
Subtotal	623	2,423	48,505	2.41	29.43	2.41	29.43	407.79	407.79	0.00	472.54
Vehicle Carriers											
Diverted Transits											
Asia-S.A.E.C.	0	0	4	2.41	29.13	2.41	29.13	453.29	453.29	0.00	435.60

(Continued)

Table B-7. Laden Transits, Tons Carried, Toll Revenue and Toll Rates, Current Toll Structure and Rates, 150,000 DWT Scenario, 2020, by Ship Type, Diversion Status, and Trade Route (1990 US$, except when noted)(continued)

Ship Type, Diversion Status, and Trade Route	Transits	Cargo Tonnage Carried (thousands)	Revenue (thousands) a/	Current Toll Schedule: Toll Per Panama Canal Net Ton	Current Toll Schedule: Toll Per Cargo Ton Carried	New Toll Schedule: Toll Per Panama Canal Net Ton	New Toll Schedule: Toll Per Cargo Ton Carried	Total Transportation Costs per Ton Carried: Via Panama Canal: With Current Toll Structure	Via Panama Canal: With New Toll Structure	Via Panama Canal: Percent Increase	Via Least Costly Alternative Route
Vehicle Carriers (continued)											
Diverted Transits (continued)											
Canada E.C.-Asia	0	1	10	2.41	29.22	2.41	29.22	437.22	437.22	0.00	425.00
Subtotal	0	1	14	2.41	29.18	2.41	29.18	440.32	440.32	0.00	427.05
Subtotal	623	2,424	48,519	2.41	29.43	2.41	29.43	407.80	407.80	0.00	472.52
Total Non-Diverting	12,987	307,852	531,473	2.41	1.87	2.40	1.86	45.78	45.78	0.00	55.24
Total Diverting	163	4,579	5,812	2.41	1.40	2.41	1.40	22.78	22.78	0.00	22.43

Notes: These calculations do not include all transits and tons carried forecast by the WEFA Group. For some ship-type and trade-route combinations (accounting for a total of 18 transits and 179803 tons), vessel costs were not available for every DWT size interval. As a result, these transits and tons were excluded. In addition, for 2111 transits and 51867350 tons, the cost by way of the Panama Canal without a toll was higher than the least costly alternative route. As a result, these transits and tons were excluded. Percentages may not calculate exactly as shown due to rounding. A fee of $0.40 per Panama Canal net ton has also been included to account for charges such as handling and agency fees incurred when transitting the Canal. The extra fee is only used to determine diversion status by adding it to the cost per ton carried and is not included in the revenue calculations.

a/ Revenue lost from diversions is measured as the revenue generated by the maximum, nondiverting toll rate increase.

Source: Nathan Associates Inc., based on forecasts of traffic and transportation costs provided by The WEFA Group.

CURRENT TOLL STRUCTURE AND RATES, 200,000-DWT SCENARIO, 2020

Table B-8. Laden Transits, Tons Carried, and Toll Revenue, Current Toll Stucture and Rates, 200,000 DWT Scenario, 2020, by Ship Type

	Transits				Tons Carried(thousands)				Revenue(1990 US$thousands)			
Ship Type	Canal	Diverted	Total	Diverted as a Percent of Total	Canal	Diverted	Total	Diverted as a Percent of Total	Canal	Lost a/	Total	Lost as a Percent of Total
Container-Breakbulk	1,317	7	1,325	0.56	20,424	95	20,519	0.46	36,989	48	37,037	0.13
Dry Bulk Carriers	3,923	74	3,997	1.84	201,198	2,240	203,439	1.10	231,856	2,811	234,666	1.20
Chemical Tankers	992	2	994	0.22	22,841	84	22,925	0.37	26,730	90	26,819	0.33
Full Container Ships	1,251	0	1,251	0.00	24,619	0	24,619	0.00	76,708	0	76,708	0.00
General Cargo Ships	757	1	758	0.14	7,489	10	7,499	0.13	13,179	5	13,184	0.04
Liquid Gas Carriers	172	0	172	0.00	1,947	0	1,947	0.00	5,739	0	5,739	0.00
Passenger Ships	336	0	336	0.00	0	0	0	0.00	6,145	0	6,145	0.00
Refrigerated Ships	2,819	29	2,847	1.00	10,116	151	10,266	1.47	54,985	398	55,382	0.72
Roll-On Roll-Off	211	1	213	0.67	1,731	31	1,762	1.78	8,635	108	8,743	1.23
Tankers	680	49	728	6.68	32,248	1,967	34,216	5.75	39,772	2,339	42,111	5.55
Vehicle Carriers	623	0	623	0.05	2,423	1	2,424	0.04	48,505	14	48,519	0.03
Total	13,080	163	13,243	1.23	325,037	4,579	329,616	1.39	549,241	5,812	555,053	1.05

Notes: These calculations do not include all transits and tons carried forecast by the WEFA Group. For some ship-type and trade-route combinations (accounting for a total of 18 transits and 179803 tons), vessel costs were not available for every DWT size interval. As a result, these transits and tons were excluded. In addition, for 1981 transits and 37003606 tons, the cost by way of the Panama Canal without a toll was higher than the least costly alternative route. As a result, these transits and tons were excluded. A fee of $0.40 per Panama Canal net ton has also been included to account for charges such as handling and agency fees incurred when transitting the Canal. The extra fee is only used to determine diversion status by adding it to cost per ton carried and is not included in the revenue calculations.

a/ Revenue lost from diversions is measured as the revenue generated by the maximum, nondiverting toll rate increase.

Source: Nathan Associates Inc., based on forecasts of traffic and transportation costs provided by The WEFA Group.

Table B-9. Ballast Transits, Tons Carried, and Toll Revenue, Current Toll Stucture and Rates, 200,000 DWT Scenario, 2020, by Ship Type

	Transits				Tons Carried(thousands)				Revenue(1990 US$thousands)			
Ship Type	Canal	Diverted	Total	Diverted as a Percent of Total	Canal	Diverted	Total	Diverted as a Percent of Total	Canal	Lost	Total	Lost as a Percent of Total
Container-Breakbulk	41	0	41	0.13	0	0	0	0.00	1,018	1	1,019	0.13
Dry Bulk Carriers	413	5	418	1.20	0	0	0	0.00	15,677	190	15,868	1.20
Chemical Tankers	82	0	82	0.33	0	0	0	0.00	1,753	6	1,758	0.33
Full Container Ships	9	0	9	0.00	0	0	0	0.00	228	0	228	0.00
General Cargo Ships	140	0	140	0.04	0	0	0	0.00	1,530	1	1,531	0.04
Liquid Gas Carriers	128	0	128	0.00	0	0	0	0.00	3,730	0	3,730	0.00
Passenger Ships	11	0	11	0.00	0	0	0	0.00	131	0	131	0.00
Refrigerated Ships	925	7	932	0.72	0	0	0	0.00	13,679	99	13,778	0.72
Roll-On Roll-Off	30	0	30	1.23	0	0	0	0.00	788	10	798	1.23
Tankers	370	22	392	5.55	0	0	0	0.00	19,637	1,154	20,791	5.55
Vehicle Carriers	383	0	383	0.03	0	0	0	0.00	22,606	7	22,613	0.03
Total	2,532	34	2,566	1.34	0	0	0	0.00	80,777	1,468	82,245	1.78

Note: Diversions of ballast transits are computed by diverting a proportion of ballast transits equal to lost revenue as a percent of total potential revenue for a particular laden ship type. See last column on previous table.

Source: Nathan Associates Inc., based on forecasts of traffic and transportation costs provided by The WEFA Group.

Table B-10. Laden Transits, Tons Carried, Toll Revenue and Toll Rates, Current Toll Structure and Rates, 200,000 DWT Scenario, 2020, by Ship Type, Diversion Status, and Trade Route (1990 US$, except when noted)

Ship Type, Diversion Status, and Trade Route	Transits	Cargo Tonnage Carried (thousands)	Revenue (thousands) a/	Current Toll Schedule: Toll Per Panama Canal Net Ton	Current Toll Schedule: Toll Per Cargo Ton Carried	New Toll Schedule: Toll Per Panama Canal Net Ton	New Toll Schedule: Toll Per Cargo Ton Carried	Total Transportation Costs per Ton Carried: Via Panama Canal: With Current Toll Structure	Via Panama Canal: With New Toll Structure	Via Panama Canal: Percent Increase	Via Least Costly Alternative Route
Container-Breakbulk											
Non-Diverted Transits											
Africa-C.A.W.C.	3	77	79	2.41	1.85	2.41	1.85	68.56	68.56	0.00	113.26
Africa-Canada W.C.	0	2	4	2.41	1.87	2.41	1.87	88.16	88.16	0.00	100.93
Africa-U.S.W.C.	1	9	20	2.41	1.87	2.41	1.87	89.16	89.16	0.00	102.87
Asia-Canada E.C.	0	4	11	2.41	1.86	2.41	1.86	88.65	88.65	0.00	96.19
Asia-C.A.E.C.	91	837	2,389	2.41	1.87	2.41	1.87	93.07	93.07	0.00	107.91
Asia-S.A.E.C.	27	175	688	2.41	1.87	2.41	1.87	100.20	100.20	0.00	102.23
Asia-U.S.E.C.	82	1,031	2,293	2.41	1.86	2.41	1.86	94.52	94.52	0.00	116.80
C.A.W.C.-Africa	3	70	87	2.41	1.87	2.41	1.87	73.06	73.06	0.00	120.56
C.A.W.C.-C.A.E.C.	7	118	197	2.41	1.86	2.41	1.86	49.37	49.37	0.00	87.53
C.A.W.C.-Europe	15	110	391	2.41	1.87	2.41	1.87	63.64	63.64	0.00	91.28
C.A.W.C.-S.A.E.C.	12	6	308	2.41	1.87	2.41	1.87	69.19	69.19	0.00	74.19
C.A.W.C.-U.S.E.C.	3	19	80	2.41	1.87	2.41	1.87	55.40	55.40	0.00	91.85
Canada E.C.-Asia	14	367	485	2.41	1.85	2.41	1.85	90.68	90.68	0.00	93.83
Canada E.C.-C.A.W.C.	1	9	23	2.41	1.87	2.41	1.87	54.09	54.09	0.00	92.29
Canada E.C.-Oceania	1	13	20	2.41	1.87	2.41	1.87	102.74	102.74	0.00	102.93
Canada E.C.-S.A.W.C.	1	10	15	2.41	1.85	2.41	1.85	62.78	62.78	0.00	75.85
Canada E.C.-U.S.W.C.	0	0	0	2.41	1.85	2.41	1.85	69.71	69.71	0.00	105.87
Canada W.C.-Africa	8	179	230	2.41	1.85	2.41	1.85	88.66	88.66	0.00	100.74
Canada W.C.-Europe	63	1,844	2,277	2.41	1.85	2.41	1.85	77.86	77.86	0.00	104.01
Canada W.C.-S.A.E.C.	11	210	270	2.41	1.87	2.41	1.87	71.19	71.19	0.00	108.72
Canada W.C.-U.S.E.C.	8	149	215	2.41	1.85	2.41	1.85	64.85	64.85	0.00	102.00
C.A.E.C.-Asia	9	196	237	2.41	1.87	2.41	1.87	92.37	92.37	0.00	107.04
C.A.E.C.-C.A.W.C.	7	27	181	2.41	1.87	2.41	1.87	50.30	50.30	0.00	90.29

(Continued)

Table B-10. Laden Transits, Tons Carried, Toll Revenue and Toll Rates, Current Toll Structure and Rates, 200,000 DWT Scenario, 2020, by Ship Type, Diversion Status, and Trade Route (1990 US$, except when noted)(continued)

Ship Type, Diversion Status, and Trade Route	Transits	Cargo Tonnage Carried (thousands)	Revenue (thousands) a/	Current Toll Schedule: Toll Per Panama Canal Net Ton	Current Toll Schedule: Toll Per Cargo Ton Carried	New Toll Schedule: Toll Per Panama Canal Net Ton	New Toll Schedule: Toll Per Cargo Ton Carried	Total Transportation Costs per Ton Carried: Via Panama Canal: With Current Toll Structure	Via Panama Canal: With New Toll Structure	Via Panama Canal: Percent Increase	Via Least Costly Alternative Route
Container-Breakbulk (continued)											
Non-Diverted Transits (continued)											
C.A.E.C.-Canada W.C.	2	31	52	2.41	1.87	2.41	1.87	63.73	63.73	0.00	101.08
C.A.E.C.-Oceania	1	20	32	2.41	1.87	2.41	1.87	90.16	90.16	0.00	107.72
C.A.E.C.-S.A.W.C.	18	144	475	2.41	1.87	2.41	1.87	61.88	61.88	0.00	76.44
C.A.E.C.-U.S.W.C.	4	73	105	2.41	1.86	2.41	1.86	61.48	61.48	0.00	93.18
Europe-C.A.W.C.	22	137	570	2.41	1.87	2.41	1.87	64.73	64.73	0.00	112.66
Europe-Canada W.C.	4	123	166	2.41	1.85	2.41	1.85	80.14	80.14	0.00	103.29
Europe-S.A.W.C.	91	752	2,348	2.41	1.87	2.41	1.87	85.37	85.37	0.00	99.08
Europe-U.S.W.C.	24	732	921	2.41	1.85	2.41	1.85	79.27	79.27	0.00	103.43
Oceania-Canada E.C.	2	46	92	2.41	1.85	2.41	1.85	93.85	93.85	0.00	94.00
Oceania-C.A.E.C.	4	42	103	2.41	1.87	2.41	1.87	90.85	90.85	0.00	108.64
S.A.E.C.-C.A.W.C.	9	141	235	2.41	1.87	2.41	1.87	68.77	68.77	0.00	73.69
S.A.E.C.-Canada W.C.	11	152	295	2.41	1.87	2.41	1.87	87.94	87.94	0.00	93.92
S.A.E.C.-U.S.W.C.	38	572	1,007	2.41	1.87	2.41	1.87	74.36	74.36	0.00	77.06
S.A.W.C.-Canada E.C.	1	2	24	2.41	1.87	2.41	1.87	66.27	66.27	0.00	81.06
S.A.W.C.-C.A.E.C.	13	108	334	2.41	1.87	2.41	1.87	62.27	62.27	0.00	77.06
S.A.W.C.-Europe	191	3,350	4,875	2.41	1.87	2.41	1.87	85.09	85.09	0.00	101.37
S.A.W.C.-U.S.E.C.	108	1,055	2,688	2.41	1.87	2.41	1.87	59.46	59.46	0.00	77.72
U.S.E.C.-Asia	172	4,347	5,678	2.41	1.86	2.41	1.86	91.67	91.67	0.00	113.24
U.S.E.C.-C.A.W.C.	10	201	267	2.41	1.86	2.41	1.86	46.17	46.17	0.00	88.94
U.S.E.C.-S.A.W.C.	160	1,595	4,135	2.41	1.87	2.41	1.87	59.27	59.27	0.00	77.44
U.S.E.C.-U.S.W.C.	0	0	0	2.41	1.86	2.41	1.86	56.86	56.86	0.00	94.00
U.S.W.C.-Africa	9	143	354	2.41	1.85	2.41	1.85	82.33	82.33	0.00	98.63
U.S.W.C.-Canada E.C.	2	40	45	2.41	1.85	2.41	1.85	66.85	66.85	0.00	100.00

(Continued)

Table B-10. Laden Transits, Tons Carried, Toll Revenue and Toll Rates, Current Toll Structure and Rates, 200,000 DWT Scenario, 2020, by Ship Type, Diversion Status, and Trade Route (1990 US$, except when noted)(continued)

Ship Type, Diversion Status, and Trade Route	Transits	Cargo Tonnage Carried (thousands)	Revenue (thousands) a/	Current Toll Schedule: Toll Per Panama Canal Net Ton	Current Toll Schedule: Toll Per Cargo Ton Carried	New Toll Schedule: Toll Per Panama Canal Net Ton	New Toll Schedule: Toll Per Cargo Ton Carried	Total Transportation Costs per Ton Carried, Via Panama Canal: With Current Toll Structure	Total Transportation Costs per Ton Carried, Via Panama Canal: With New Toll Structure	Total Transportation Costs per Ton Carried, Via Panama Canal: Percent Increase	Total Transportation Costs per Ton Carried: Via Least Costly Alternative Route
Container-Breakbulk (continued)											
Non-Diverted Transits (continued)											
U.S.W.C.-C.A.E.C.	9	63	223	2.41	1.87	2.41	1.87	63.58	63.58	0.00	96.80
U.S.W.C.-Europe	38	1,010	1,342	2.41	1.85	2.41	1.85	80.25	80.25	0.00	103.86
U.S.W.C.-S.A.E.C.	4	79	111	2.41	1.87	2.41	1.87	76.06	76.06	0.00	79.06
U.S.W.C.-U.S.E.C.	0	3	8	2.41	1.85	2.41	1.85	58.25	58.25	0.00	96.88
Subtotal	1,317	20,424	36,989	2.41	1.86	2.41	1.86	80.92	80.92	0.00	100.72
Container-Breakbulk											
Diverted Transits											
Oceania-S.A.E.C.	7	95	48	2.41	1.86	2.41	1.86	84.47	84.47	0.00	82.99
Subtotal	7	95	48	2.41	1.86	2.41	1.86	84.47	84.47	0.00	82.99
Subtotal	1,325	20,519	37,037	2.41	1.86	2.41	1.86	80.94	80.94	0.00	100.64
Dry Bulk Carriers											
Non-Diverted Transits											
Africa-C.A.W.C.	15	483	508	2.41	1.35	2.41	1.35	14.85	14.85	0.00	26.10
Africa-Canada W.C.	34	1,354	1,361	2.41	1.31	2.41	1.31	17.28	17.28	0.00	19.77
Africa-S.A.W.C.	5	128	159	2.41	1.35	2.41	1.35	17.80	17.80	0.00	25.10
Africa-U.S.W.C.	7	161	276	2.41	1.30	2.41	1.30	16.19	16.19	0.00	19.23
Asia-Canada E.C.	8	302	376	2.41	1.28	2.41	1.28	17.00	17.00	0.00	18.32
Asia-C.A.E.C.	21	345	766	2.41	1.33	2.41	1.33	18.03	18.03	0.00	22.65
Asia-U.S.E.C.	242	6,345	10,237	2.41	1.30	2.41	1.30	16.31	16.31	0.00	22.26
Brazil-Asia	109	14,866	15,343	2.41	1.17	2.41	1.17	18.03	18.03	0.00	18.14
C.A.W.C.-Africa	1	34	46	2.41	1.32	2.41	1.32	14.69	14.69	0.00	25.81

(Continued)

Table B-10. Laden Transits, Tons Carried, Toll Revenue and Toll Rates, Current Toll Structure and Rates, 200,000 DWT Scenario, 2020, by Ship Type, Diversion Status, and Trade Route (1990 US$, except when noted)(continued)

Ship Type, Diversion Status, and Trade Route	Transits	Cargo Tonnage Carried (thousands)	Revenue (thousands) a/	Current Toll Schedule: Toll Per Panama Canal Net Ton	Current Toll Schedule: Toll Per Cargo Ton Carried	New Toll Schedule: Toll Per Panama Canal Net Ton	New Toll Schedule: Toll Per Cargo Ton Carried	Total Transportation Costs per Ton Carried, Via Panama Canal: With Current Toll Structure	Total Transportation Costs per Ton Carried, Via Panama Canal: With New Toll Structure	Total Transportation Costs per Ton Carried, Via Panama Canal: Percent Increase	Total Transportation Costs per Ton Carried: Via Least Costly Alternative Route
Dry Bulk Carriers (continued)											
Non-Diverted Transits (continued)											
C.A.W.C.-C.A.E.C.	34	961	1,247	2.41	1.33	2.41	1.33	7.81	7.81	0.00	15.77
C.A.W.C.-Europe	16	462	646	2.41	1.31	2.41	1.31	12.08	12.08	0.00	18.24
C.A.W.C.-U.S.E.C.	38	1,292	1,497	2.41	1.32	2.41	1.32	7.83	7.83	0.00	17.55
Canada E.C.-Asia	89	4,219	5,032	2.41	1.25	2.41	1.25	18.32	18.32	0.00	20.40
Canada E.C.-Oceania	3	58	126	2.41	1.33	2.41	1.33	19.62	19.62	0.00	21.08
Canada E.C.-S.A.W.C.	6	163	216	2.41	1.33	2.41	1.33	12.63	12.63	0.00	14.98
Canada W.C.-Africa	96	3,500	4,008	2.41	1.31	2.41	1.31	16.93	16.93	0.00	19.42
Canada W.C.-C.A.E.C.	4	105	153	2.41	1.35	2.41	1.35	12.85	12.85	0.00	21.30
Canada W.C.-Europe	238	11,174	12,859	2.41	1.26	2.41	1.26	16.52	16.52	0.00	21.25
Canada W.C.-S.A.E.C.	23	1,374	1,665	2.41	1.22	2.41	1.22	10.51	10.51	0.00	10.92
Canada W.C.-U.S.E.C.	64	1,569	2,237	2.41	1.35	2.41	1.35	13.00	13.00	0.00	23.15
C.A.E.C.-Asia	21	639	737	2.41	1.35	2.41	1.35	17.70	17.70	0.00	22.30
C.A.E.C.-C.A.W.C.	25	682	872	2.41	1.35	2.41	1.35	8.05	8.05	0.00	16.45
C.A.E.C.-Canada W.C.	2	55	68	2.41	1.35	2.41	1.35	13.05	13.05	0.00	21.60
C.A.E.C.-Oceania	1	11	18	2.41	1.35	2.41	1.35	19.95	19.95	0.00	22.60
C.A.E.C.-S.A.W.C.	12	313	435	2.41	1.35	2.41	1.35	11.00	11.00	0.00	13.50
C.A.E.C.-U.S.W.C.	9	236	310	2.41	1.35	2.41	1.35	11.85	11.85	0.00	20.30
Columbia-Asia	2	295	306	2.41	1.17	2.41	1.17	16.65	16.65	0.00	24.67
Europe-C.A.W.C.	30	797	1,066	2.41	1.34	2.41	1.34	12.79	12.79	0.00	21.20
Europe-Canada W.C.	11	286	427	2.41	1.31	2.41	1.31	16.30	16.30	0.00	21.24
Europe-U.S.W.C.	116	3,102	4,686	2.41	1.31	2.41	1.31	15.40	15.40	0.00	20.10
Middle East-S.A.W.C.	1	52	59	2.41	1.27	2.41	1.27	14.27	14.27	0.00	16.00
Oceania-Canada E.C.	22	661	769	2.41	1.35	2.41	1.35	19.70	19.70	0.00	21.25

(Continued)

Table B-10. Laden Transits, Tons Carried, Toll Revenue and Toll Rates, Current Toll Structure and Rates, 200,000 DWT Scenario, 2020, by Ship Type, Diversion Status, and Trade Route (1990 US$, except when noted)(continued)

Ship Type, Diversion Status, and Trade Route	Transits	Cargo Tonnage Carried (thousands)	Revenue (thousands) a/	Current Toll Schedule: Toll Per Panama Canal Net Ton	Current Toll Schedule: Toll Per Cargo Ton Carried	New Toll Schedule: Toll Per Panama Canal Net Ton	New Toll Schedule: Toll Per Cargo Ton Carried	Total Transportation Costs per Ton Carried: Via Panama Canal: With Current Toll Structure	Via Panama Canal: With New Toll Structure	Via Panama Canal: Percent Increase	Via Least Costly Alternative Route
Dry Bulk Carriers (continued)											
Non-Diverted Transits (continued)											
Oceania-C.A.E.C.	6	166	218	2.41	1.35	2.41	1.35	18.80	18.80	0.00	22.25
Oceania-U.S.E.C.	119	6,406	7,230	2.41	1.24	2.41	1.24	15.19	15.19	0.00	16.07
S.A.E.C.-Asia	68	2,384	2,762	2.41	1.31	2.41	1.31	16.60	16.60	0.00	18.40
S.A.E.C.-Canada W.C.	3	66	95	2.41	1.35	2.41	1.35	16.80	16.80	0.00	17.35
S.A.W.C.-Africa	3	157	156	2.41	1.28	2.41	1.28	13.65	13.65	0.00	20.54
S.A.W.C.-Canada E.C.	0	10	11	2.41	1.35	2.41	1.35	13.00	13.00	0.00	15.50
S.A.W.C.-C.A.E.C.	7	144	260	2.41	1.35	2.41	1.35	11.00	11.00	0.00	13.50
S.A.W.C.-Europe	187	8,078	9,149	2.41	1.27	2.41	1.27	15.87	15.87	0.00	15.96
S.A.W.C.-U.S.E.C.	54	1,732	1,925	2.41	1.34	2.41	1.34	10.81	10.81	0.00	15.18
U.S.E.C.-Asia	1,601	104,329	116,054	2.41	1.22	2.41	1.22	17.29	17.29	0.00	22.99
U.S.E.C.-C.A.W.C.	207	6,232	7,370	2.41	1.34	2.41	1.34	8.12	8.12	0.00	18.25
U.S.E.C.-Canada W.C.	1	30	32	2.41	1.32	2.41	1.32	12.36	12.36	0.00	21.71
U.S.E.C.-Oceania	21	646	784	2.41	1.33	2.41	1.33	18.34	18.34	0.00	20.47
U.S.E.C.-S.A.W.C.	50	1,456	1,770	2.41	1.34	2.41	1.34	10.90	10.90	0.00	15.31
U.S.E.C.-U.S.W.C.	1	0	24	2.41	1.35	2.41	1.35	12.00	12.00	0.00	21.30
U.S.W.C.-Africa	121	4,599	5,666	2.41	1.28	2.41	1.28	15.62	15.62	0.00	18.62
U.S.W.C.-Canada E.C.	7	217	255	2.41	1.33	2.41	1.33	13.35	13.35	0.00	21.26
U.S.W.C.-C.A.E.C.	2	48	62	2.41	1.35	2.41	1.35	11.85	11.85	0.00	20.30
U.S.W.C.-Europe	140	6,524	7,410	2.41	1.26	2.41	1.26	13.94	13.94	0.00	17.96
U.S.W.C.-U.S.E.C.	7	183	294	2.41	1.31	2.41	1.31	12.05	12.05	0.00	21.48
Venezuela-Asia	12	1,768	1,818	2.41	1.17	2.41	1.17	16.47	16.47	0.00	19.90
Subtotal	3,923	201,198	231,856	2.41	1.25	2.41	1.25	16.30	16.30	0.00	20.96
Dry Bulk Carriers											
Diverted Transits											
Asia-S.A.E.C.	6	152	179	2.41	1.35	2.41	1.35	21.65	21.65	0.00	21.30

(Continued)

Table B-10. Laden Transits, Tons Carried, Toll Revenue and Toll Rates, Current Toll Structure and Rates, 200,000 DWT Scenario, 2020, by Ship Type, Diversion Status, and Trade Route (1990 US$, except when noted)(continued)

Ship Type, Diversion Status, and Trade Route	Transits	Cargo Tonnage Carried (thousands)	Revenue (thousands) a/	Current Toll Schedule: Toll Per Panama Canal Net Ton	Current Toll Schedule: Toll Per Cargo Ton Carried	New Toll Schedule: Toll Per Panama Canal Net Ton	New Toll Schedule: Toll Per Cargo Ton Carried	Total Transportation Costs per Ton Carried, Via Panama Canal: With Current Toll Structure	Total Transportation Costs per Ton Carried, Via Panama Canal: With New Toll Structure	Total Transportation Costs per Ton Carried, Via Panama Canal: Percent Increase	Total Transportation Costs per Ton Carried: Via Least Costly Alternative Route
Dry Bulk Carriers (continued)											
Diverted Transits (continued)											
C.A.W.C.-S.A.E.C.	10	136	311	2.41	1.35	2.41	1.35	12.00	12.00	0.00	11.65
Europe-S.A.W.C.	12	298	365	2.41	1.35	2.41	1.35	15.85	15.85	0.00	15.50
S.A.E.C.-C.A.W.C.	8	247	247	2.41	1.35	2.41	1.35	12.00	12.00	0.00	11.65
S.A.E.C.-U.S.W.C.	28	1,128	1,383	2.41	1.26	2.41	1.26	12.93	12.93	0.00	12.67
U.S.W.C.-S.A.E.C.	11	279	326	2.41	1.35	2.41	1.35	15.80	15.80	0.00	15.45
Subtotal	74	2,240	2,811	2.41	1.30	2.41	1.30	14.11	14.11	0.00	13.80
Subtotal	3,997	203,439	234,666	2.41	1.25	2.41	1.25	16.28	16.28	0.00	20.88
Chemical Tankers											
Non-Diverted Transits											
Africa-S.A.W.C.	1	32	35	2.41	1.34	2.41	1.34	42.34	42.34	0.00	58.00
Asia-C.A.E.C.	3	34	45	2.41	1.34	2.41	1.34	52.46	52.46	0.00	69.37
Asia-S.A.E.C.	3	16	89	2.41	1.34	2.41	1.34	49.34	49.34	0.00	51.00
Asia-U.S.E.C.	32	537	744	2.41	1.34	2.41	1.34	44.74	44.74	0.00	60.33
C.A.W.C.-C.A.E.C.	23	139	175	2.41	1.34	2.41	1.34	36.34	36.34	0.00	77.00
C.A.W.C.-Europe	8	126	139	2.41	1.34	2.41	1.34	37.28	37.28	0.00	55.50
C.A.W.C.-U.S.E.C.	38	470	572	2.41	1.34	2.41	1.34	28.06	28.06	0.00	58.14
Canada W.C.-Europe	4	87	112	2.41	1.34	2.41	1.34	41.34	41.34	0.00	55.00
Canada W.C.-U.S.E.C.	32	744	1,049	2.41	1.34	2.41	1.34	31.74	31.74	0.00	52.80
C.A.E.C.-Asia	9	248	275	2.41	1.34	2.41	1.34	41.66	41.66	0.00	54.44
C.A.E.C.-C.A.W.C.	9	207	288	2.41	1.34	2.41	1.34	21.34	21.34	0.00	41.00
C.A.E.C.-S.A.W.C.	11	186	238	2.41	1.34	2.41	1.34	31.03	31.03	0.00	40.27
C.A.E.C.-U.S.W.C.	1	10	11	2.41	1.34	2.41	1.34	51.34	51.34	0.00	90.00

(Continued)

Table B-10. Laden Transits, Tons Carried, Toll Revenue and Toll Rates, Current Toll Structure and Rates, 200,000 DWT Scenario, 2020, by Ship Type, Diversion Status, and Trade Route (1990 US$, except when noted)(continued)

Ship Type, Diversion Status, and Trade Route	Transits	Cargo Tonnage Carried (thousands)	Revenue (thousands) a/	Current Toll Schedule: Toll Per Panama Canal Net Ton	Current Toll Schedule: Toll Per Cargo Ton Carried	New Toll Schedule: Toll Per Panama Canal Net Ton	New Toll Schedule: Toll Per Cargo Ton Carried	Total Transportation Costs per Ton Carried, Via Panama Canal: With Current Toll Structure	Total Transportation Costs per Ton Carried, Via Panama Canal: With New Toll Structure	Total Transportation Costs per Ton Carried, Via Panama Canal: Percent Increase	Total Transportation Costs per Ton Carried: Via Least Costly Alternative Route
Chemical Tankers (continued)											
Non-Diverted Transits (continued)											
Europe-C.A.W.C.	6	30	47	2.41	1.34	2.41	1.34	56.34	56.34	0.00	86.00
Europe-S.A.W.C.	6	60	68	2.41	1.34	2.41	1.34	55.90	55.90	0.00	59.35
Europe-U.S.W.C.	9	182	212	2.41	1.34	2.41	1.34	42.34	42.34	0.00	56.41
Oceania-U.S.E.C.	18	455	647	2.41	1.34	2.41	1.34	40.54	40.54	0.00	45.36
S.A.E.C.-C.A.W.C.	8	61	77	2.41	1.34	2.41	1.34	46.87	46.87	0.00	51.82
S.A.W.C.-C.A.E.C.	22	79	251	2.41	1.34	2.41	1.34	42.38	42.38	0.00	56.49
S.A.W.C.-Europe	8	92	107	2.41	1.34	2.41	1.34	51.64	51.64	0.00	54.68
S.A.W.C.-U.S.E.C.	7	47	97	2.41	1.34	2.41	1.34	38.35	38.35	0.00	53.28
U.S.E.C.-Asia	565	15,828	17,142	2.41	1.34	2.41	1.34	42.38	42.38	0.00	56.99
U.S.E.C.-C.A.W.C.	18	146	189	2.41	1.34	2.41	1.34	33.25	33.25	0.00	70.02
U.S.E.C.-Canada W.C.	5	36	41	2.41	1.34	2.41	1.34	55.76	55.76	0.00	96.33
U.S.E.C.-Oceania	17	409	466	2.41	1.34	2.41	1.34	44.76	44.76	0.00	50.35
U.S.E.C.-S.A.W.C.	45	434	556	2.41	1.34	2.41	1.34	39.65	39.65	0.00	55.15
U.S.E.C.-U.S.W.C.	50	1,635	2,066	2.41	1.35	2.41	1.35	25.70	25.70	0.00	43.31
U.S.W.C.-C.A.E.C.	2	38	63	2.41	1.34	2.41	1.34	29.34	29.34	0.00	48.00
U.S.W.C.-Europe	16	215	288	2.41	1.34	2.41	1.34	45.63	45.63	0.00	61.31
U.S.W.C.-S.A.E.C.	0	3	4	2.41	1.34	2.41	1.34	37.34	37.34	0.00	38.00
U.S.W.C.-U.S.E.C.	15	256	633	2.41	1.35	2.41	1.35	25.80	25.80	0.00	43.41
Subtotal	992	22,841	26,730	2.41	1.34	2.41	1.34	40.10	40.10	0.00	55.44
Chemical Tankers											
Diverted Transits											
S.A.E.C.-U.S.W.C.	2	84	90	2.41	1.35	2.41	1.35	30.35	30.35	0.00	30.00
Subtotal	2	84	90	2.41	1.35	2.41	1.35	30.35	30.35	0.00	30.00
Subtotal	994	22,925	26,819	2.41	1.34	2.41	1.34	40.06	40.06	0.00	55.35

(Continued)

Table B-10. Laden Transits, Tons Carried, Toll Revenue and Toll Rates, Current Toll Structure and Rates, 200,000 DWT Scenario, 2020, by Ship Type, Diversion Status, and Trade Route (1990 US$, except when noted)(continued)

Ship Type, Diversion Status, and Trade Route	Transits	Cargo Tonnage Carried (thousands)	Revenue (thousands) a/	Current Toll Schedule: Toll Per Panama Canal Net Ton	Current Toll Schedule: Toll Per Cargo Ton Carried	New Toll Schedule: Toll Per Panama Canal Net Ton	New Toll Schedule: Toll Per Cargo Ton Carried	Total Transportation Costs per Ton Carried, Via Panama Canal: With Current Toll Structure	Total Transportation Costs per Ton Carried, Via Panama Canal: With New Toll Structure	Total Transportation Costs per Ton Carried, Via Panama Canal: Percent Increase	Total Transportation Costs per Ton Carried: Via Least Costly Alternative Route
Full Container Ships (continued)											
Non-Diverted Transits (continued)											
Africa-U.S.W.C.	0	2	4	2.41	4.48	2.41	4.48	246.46	246.46	0.00	281.72
Asia-Canada E.C.	35	682	2,080	2.41	4.65	2.41	4.65	210.85	210.85	0.00	223.41
Asia-S.A.E.C.	2	7	43	2.41	4.48	2.41	4.48	274.32	274.32	0.00	278.74
Asia-U.S.E.C. (low inv. cost)	206	4,485	18,576	2.41	4.76	2.41	4.76	238.55	238.55	0.00	251.75
C.A.W.C.-C.A.E.C.	1	5	24	2.41	4.38	2.41	4.38	129.97	129.97	0.00	209.77
C.A.W.C.-Europe	2	22	74	2.41	4.36	2.41	4.36	153.30	153.30	0.00	206.86
C.A.W.C.-S.A.E.C.	0	4	11	2.41	4.38	2.41	4.38	163.77	163.77	0.00	170.68
C.A.W.C.-U.S.E.C.	0	3	8	2.41	4.48	2.41	4.48	157.98	157.98	0.00	250.90
Canada E.C.-Asia	32	561	1,415	2.41	4.50	2.41	4.50	230.54	230.54	0.00	235.78
Canada E.C.-Oceania	12	145	390	2.41	4.43	2.41	4.43	259.72	259.72	0.00	259.79
Canada E.C.-U.S.W.C.	5	136	377	2.41	4.73	2.41	4.73	160.73	160.73	0.00	225.00
Canada W.C.-Europe	32	491	1,160	2.41	4.46	2.41	4.46	212.22	212.22	0.00	275.57
C.A.E.C.-Asia	8	99	342	2.41	4.41	2.41	4.41	217.31	217.31	0.00	245.58
C.A.E.C.-C.A.W.C.	1	3	12	2.41	4.51	2.41	4.51	184.21	184.21	0.00	324.09
C.A.E.C.-Oceania	0	3	7	2.41	4.48	2.41	4.48	248.46	248.46	0.00	293.66
C.A.E.C.-S.A.W.C.	6	6	59	2.41	4.64	2.41	4.64	187.15	187.15	0.00	226.38
C.A.E.C.-U.S.W.C.	1	12	36	2.41	4.38	2.41	4.38	154.50	154.50	0.00	220.28
Europe-C.A.W.C.	0	1	3	2.41	4.36	2.41	4.36	153.30	153.30	0.00	244.84
Europe-Canada W.C.	24	311	789	2.41	4.43	2.41	4.43	224.73	224.73	0.00	283.75
Europe-S.A.W.C.	51	731	2,349	2.41	4.36	2.41	4.36	194.28	194.28	0.00	223.86
Europe-U.S.W.C.	144	2,855	8,033	2.41	4.62	2.41	4.62	209.75	209.75	0.00	217.16
Middle East-U.S.W.C.	8	116	283	2.41	4.42	2.41	4.42	221.09	221.09	0.00	248.07
Oceania-C.A.E.C.	2	24	50	2.41	4.48	2.41	4.48	248.46	248.46	0.00	293.66

(Continued)

Table B-10. Laden Transits, Tons Carried, Toll Revenue and Toll Rates, Current Toll Structure and Rates, 200,000 DWT Scenario, 2020, by Ship Type, Diversion Status, and Trade Route (1990 US$, except when noted)(continued)

Ship Type, Diversion Status, and Trade Route	Transits	Cargo Tonnage Carried (thousands)	Revenue (thousands) a/	Current Toll Schedule: Toll Per Panama Canal Net Ton	Current Toll Schedule: Toll Per Cargo Ton Carried	New Toll Schedule: Toll Per Panama Canal Net Ton	New Toll Schedule: Toll Per Cargo Ton Carried	Total Transportation Costs per Ton Carried: Via Panama Canal: With Current Toll Structure	Via Panama Canal: With New Toll Structure	Via Panama Canal: Percent Increase	Via Least Costly Alternative Route
Full Container Ships (continued)											
Non-Diverted Transits (continued)											
S.A.E.C.-C.A.W.C.	0	4	11	2.41	4.48	2.41	4.48	193.78	193.78	0.00	205.16
S.A.E.C.-U.S.W.C.	1	9	21	2.41	4.48	2.41	4.48	179.84	179.84	0.00	217.10
S.A.W.C.-C.A.E.C.	0	1	3	2.41	4.50	2.41	4.50	191.66	191.66	0.00	232.72
S.A.W.C.-Europe	103	1,966	4,801	2.41	4.36	2.41	4.36	194.27	194.27	0.00	223.85
S.A.W.C.-U.S.E.C.	46	483	1,167	2.41	4.48	2.41	4.48	170.90	170.90	0.00	219.08
U.S.E.C.-Asia (low inv. cost)	243	7,139	20,637	2.41	4.74	2.41	4.74	239.88	239.88	0.00	252.86
U.S.E.C.-C.A.W.C.	6	55	160	2.41	4.48	2.41	4.48	136.10	136.10	0.00	250.90
U.S.E.C.-S.A.W.C.	57	487	1,445	2.41	4.48	2.41	4.48	170.90	170.90	0.00	219.08
U.S.E.C.-U.S.W.C.	1	26	77	2.41	4.71	2.41	4.71	144.82	144.82	0.00	220.39
U.S.W.C.-Africa	0	0	0	2.41	5.04	2.41	5.04	197.04	197.04	0.00	228.00
U.S.W.C.-Canada E.C.	0	5	16	2.41	4.51	2.41	4.51	163.61	163.61	0.00	231.49
U.S.W.C.-C.A.E.C.	7	42	149	2.41	4.46	2.41	4.46	159.01	159.01	0.00	227.84
U.S.W.C.-Europe	194	3,428	11,035	2.41	4.64	2.41	4.64	212.59	212.59	0.00	219.05
U.S.W.C.-Middle East	8	103	293	2.41	4.42	2.41	4.42	221.46	221.46	0.00	229.44
U.S.W.C.-U.S.E.C.	13	168	768	2.41	4.59	2.41	4.59	145.28	145.28	0.00	222.40
Subtotal	1,251	24,619	76,708	2.41	4.65	2.41	4.65	220.97	220.97	0.00	238.34
General Cargo Ships											
Non-Diverted Transits											
Africa-C.A.W.C.	2	23	38	2.41	1.39	2.41	1.39	28.19	28.19	0.00	50.55
Africa-S.A.W.C.	2	35	39	2.41	1.39	2.41	1.39	34.14	34.14	0.00	49.55
Asia-Canada E.C.	0	2	2	2.41	1.39	2.41	1.39	38.09	38.09	0.00	41.65
Asia-C.A.E.C.	71	844	1,657	2.41	1.39	2.41	1.39	34.09	34.09	0.00	44.60

(Continued)

Table B-10. Laden Transits, Tons Carried, Toll Revenue and Toll Rates, Current Toll Structure and Rates, 200,000 DWT Scenario, 2020, by Ship Type, Diversion Status, and Trade Route (1990 US$, except when noted)(continued)

Ship Type, Diversion Status, and Trade Route	Transits	Cargo Tonnage Carried (thousands)	Revenue (thousands) a/	Current Toll Schedule: Toll Per Panama Canal Net Ton	Current Toll Schedule: Toll Per Cargo Ton Carried	New Toll Schedule: Toll Per Panama Canal Net Ton	New Toll Schedule: Toll Per Cargo Ton Carried	Total Transportation Costs per Ton Carried: Via Panama Canal: With Current Toll Structure	Via Panama Canal: With New Toll Structure	Via Panama Canal: Percent Increase	Via Least Costly Alternative Route
General Cargo Ships (continued)											
Non-Diverted Transits (continued)											
Asia-S.A.E.C.	2	13	49	2.41	1.39	2.41	1.39	41.09	41.09	0.00	41.65
Asia-U.S.E.C.	26	339	620	2.41	1.39	2.41	1.39	34.56	34.56	0.00	47.75
C.A.W.C.-Africa	5	94	114	2.41	1.39	2.41	1.39	28.19	28.19	0.00	50.55
C.A.W.C.-C.A.E.C.	25	109	193	2.41	1.46	2.41	1.46	10.10	10.10	0.00	52.77
C.A.W.C.-Europe	21	120	314	2.41	1.41	2.41	1.41	26.48	26.48	0.00	46.59
C.A.W.C.-S.A.E.C.	8	51	114	2.41	1.41	2.41	1.41	25.50	25.50	0.00	29.62
C.A.W.C.-U.S.E.C.	10	51	81	2.41	1.45	2.41	1.45	11.45	11.45	0.00	65.61
Canada E.C.-Asia	5	12	108	2.41	1.39	2.41	1.39	38.09	38.09	0.00	41.65
Canada E.C.-C.A.W.C.	1	15	21	2.41	1.39	2.41	1.39	19.29	19.29	0.00	37.65
Canada E.C.-S.A.W.C.	6	53	137	2.41	1.39	2.41	1.39	25.19	25.19	0.00	31.75
Canada W.C.-C.A.E.C.	6	45	77	2.41	1.42	2.41	1.42	28.50	28.50	0.00	62.09
Canada W.C.-Europe	1	12	13	2.41	1.39	2.41	1.39	34.09	34.09	0.00	47.55
Canada W.C.-S.A.E.C.	6	58	87	2.41	1.41	2.41	1.41	33.28	33.28	0.00	62.32
C.A.E.C.-Asia	22	415	500	2.41	1.39	2.41	1.39	34.09	34.09	0.00	44.60
C.A.E.C.-C.A.W.C.	25	89	197	2.41	1.45	2.41	1.45	9.12	9.12	0.00	56.51
C.A.E.C.-Oceania	0	7	11	2.41	1.39	2.41	1.39	37.09	37.09	0.00	44.60
C.A.E.C.-S.A.W.C.	24	218	355	2.41	1.41	2.41	1.41	20.63	20.63	0.00	31.22
C.A.E.C.-U.S.W.C.	9	28	45	2.41	1.51	2.41	1.51	30.51	30.51	0.00	102.00
Europe-C.A.W.C.	44	300	772	2.41	1.40	2.41	1.40	25.47	25.47	0.00	53.48
Europe-Canada W.C.	2	9	13	2.41	1.50	2.41	1.50	71.00	71.00	0.00	119.28
Europe-S.A.W.C.	39	385	843	2.41	1.39	2.41	1.39	30.83	30.83	0.00	32.64
Europe-U.S.W.C.	2	11	22	2.41	1.44	2.41	1.44	55.78	55.78	0.00	93.53
Middle East-S.A.W.C.	4	2	23	2.41	1.50	2.41	1.50	64.45	64.45	0.00	89.22

(Continued)

Table B-10. Laden Transits, Tons Carried, Toll Revenue and Toll Rates, Current Toll Structure and Rates, 200,000 DWT Scenario, 2020, by Ship Type, Diversion Status, and Trade Route (1990 US$, except when noted)(continued)

Ship Type, Diversion Status, and Trade Route	Transits	Cargo Tonnage Carried (thousands)	Revenue (thousands) a/	Current Toll Schedule: Toll Per Panama Canal Net Ton	Current Toll Schedule: Toll Per Cargo Ton Carried	New Toll Schedule: Toll Per Panama Canal Net Ton	New Toll Schedule: Toll Per Cargo Ton Carried	Total Transportation Costs per Ton Carried: Via Panama Canal: With Current Toll Structure	Via Panama Canal: With New Toll Structure	Via Panama Canal: Percent Increase	Via Least Costly Alternative Route
General Cargo Ships (continued)											
Non-Diverted Transits (continued)											
Middle East-U.S.W.C.	2	4	36	2.41	1.39	2.41	1.39	37.09	37.09	0.00	42.65
Oceania-C.A.E.C.	0	3	10	2.41	1.39	2.41	1.39	36.09	36.09	0.00	44.60
Oceania-U.S.E.C.	1	7	15	2.41	1.43	2.41	1.43	51.18	51.18	0.00	61.38
S.A.E.C.-C.A.W.C.	7	148	167	2.41	1.39	2.41	1.39	23.19	23.19	0.00	24.80
S.A.E.C.-Canada W.C.	0	1	3	2.41	1.39	2.41	1.39	32.14	32.14	0.00	34.70
S.A.E.C.-U.S.W.C.	8	36	151	2.41	1.40	2.41	1.40	34.56	34.56	0.00	36.22
S.A.W.C.-Africa	4	81	95	2.41	1.39	2.41	1.39	31.14	31.14	0.00	47.60
S.A.W.C.-Canada E.C.	0	6	8	2.41	1.39	2.41	1.39	25.19	25.19	0.00	31.75
S.A.W.C.-C.A.E.C.	41	177	354	2.41	1.45	2.41	1.45	21.94	21.94	0.00	42.95
S.A.W.C.-Europe	98	1,601	2,267	2.41	1.39	2.41	1.39	30.14	30.14	0.00	31.75
S.A.W.C.-Middle East	2	23	36	2.41	1.39	2.41	1.39	32.14	32.14	0.00	37.70
S.A.W.C.-U.S.E.C.	27	205	429	2.41	1.40	2.41	1.40	23.26	23.26	0.00	36.08
U.S.E.C.-Asia	48	782	1,125	2.41	1.39	2.41	1.39	34.72	34.72	0.00	47.99
U.S.E.C.-C.A.W.C.	48	352	500	2.41	1.43	2.41	1.43	13.42	13.42	0.00	53.82
U.S.E.C.-Oceania	3	46	70	2.41	1.39	2.41	1.39	37.09	37.09	0.00	41.65
U.S.E.C.-S.A.W.C.	86	605	1,313	2.41	1.41	2.41	1.41	23.39	23.39	0.00	36.70
U.S.E.C.-U.S.W.C.	1	0	4	2.41	1.50	2.41	1.50	32.50	32.50	0.00	107.05
U.S.W.C.-Africa	2	25	52	2.41	1.39	2.41	1.39	34.09	34.09	0.00	42.60
U.S.W.C.-C.A.E.C.	1	0	8	2.41	1.50	2.41	1.50	29.71	29.71	0.00	96.69
U.S.W.C.-Europe	3	31	38	2.41	1.42	2.41	1.42	40.73	40.73	0.00	61.78
U.S.W.C.-S.A.E.C.	6	15	53	2.41	1.45	2.41	1.45	47.38	47.38	0.00	52.07
Subtotal	757	7,489	13,179	2.41	1.40	2.41	1.40	28.72	28.72	0.00	41.84
General Cargo Ships											
Diverted Transits											
Canada E.C.-Oceania	0	4	4	2.41	1.39	2.41	1.39	43.04	43.04	0.00	42.65

(Continued)

Table B-10. Laden Transits, Tons Carried, Toll Revenue and Toll Rates, Current Toll Structure and Rates, 200,000 DWT Scenario, 2020, by Ship Type, Diversion Status, and Trade Route (1990 US$, except when noted)(continued)

Ship Type, Diversion Status, and Trade Route	Transits	Cargo Tonnage Carried (thousands)	Revenue (thousands) a/	Current Toll Schedule: Toll Per Panama Canal Net Ton	Current Toll Schedule: Toll Per Cargo Ton Carried	New Toll Schedule: Toll Per Panama Canal Net Ton	New Toll Schedule: Toll Per Cargo Ton Carried	Total Transportation Costs per Ton Carried: Via Panama Canal: With Current Toll Structure	Via Panama Canal: With New Toll Structure	Via Panama Canal: Percent Increase	Via Least Costly Alternative Route
General Cargo Ships (continued)											
Diverted Transits (continued)											
Canada W.C.-Middle East	1	6	1	2.41	1.39	2.41	1.39	39.04	39.04	0.00	37.70
Subtotal	1	10	5	2.41	1.39	2.41	1.39	40.55	40.55	0.00	39.57
Subtotal	758	7,499	13,184	2.41	1.40	2.41	1.40	28.74	28.74	0.00	41.84
Liquid Gas Carriers											
Non-Diverted Transits											
C.A.W.C.-C.A.E.C.	4	18	45	2.41	7.30	2.41	7.30	49.30	49.30	0.00	170.00
C.A.E.C.-Asia	15	82	294	2.41	4.67	2.41	4.67	107.52	107.52	0.00	152.78
C.A.E.C.-C.A.W.C.	96	1,270	3,670	2.41	3.79	2.41	3.79	23.91	23.91	0.00	71.88
C.A.E.C.-S.A.W.C.	8	119	313	2.41	3.83	2.41	3.83	40.83	40.83	0.00	61.00
C.A.E.C.-U.S.W.C.	1	12	30	2.41	3.83	2.41	3.83	45.83	45.83	0.00	95.00
Europe-C.A.W.C.	2	5	16	2.41	7.30	2.41	7.30	110.30	110.30	0.00	197.00
Europe-S.A.W.C.	0	1	2	2.41	3.82	2.41	3.82	67.82	67.82	0.00	72.00
Oceania-U.S.E.C.	6	91	286	2.41	3.62	2.41	3.62	66.11	66.11	0.00	75.48
S.A.E.C.-Asia	2	27	70	2.41	3.83	2.41	3.83	78.83	78.83	0.00	94.00
S.A.E.C.-C.A.W.C.	11	31	121	2.41	7.30	2.41	7.30	99.30	99.30	0.00	112.00
U.S.E.C.-Asia	23	273	828	2.41	3.86	2.41	3.86	82.65	82.65	0.00	121.83
U.S.E.C.-C.A.W.C.	1	2	8	2.41	7.30	2.41	7.30	57.30	57.30	0.00	191.00
U.S.E.C.-Oceania	1	11	33	2.41	3.83	2.41	3.83	86.83	86.83	0.00	100.00
U.S.E.C.-S.A.W.C.	2	6	22	2.41	7.30	2.41	7.30	94.30	94.30	0.00	153.00
Subtotal	172	1,947	5,739	2.41	3.90	2.41	3.90	41.82	41.82	0.00	84.66
Passenger Ships											
Non-Diverted Transits											
North-Bound	153	0	2,251	2.41	0.00	2.41	0.00	0.00	0.00	0.00	0.00

(Continued)

Table B-10. Laden Transits, Tons Carried, Toll Revenue and Toll Rates, Current Toll Structure and Rates, 200,000 DWT Scenario, 2020, by Ship Type, Diversion Status, and Trade Route (1990 US$, except when noted)(continued)

Ship Type, Diversion Status, and Trade Route	Transits	Cargo Tonnage Carried (thousands)	Revenue (thousands) a/	Current Toll Schedule: Toll Per Panama Canal Net Ton	Current Toll Schedule: Toll Per Cargo Ton Carried	New Toll Schedule: Toll Per Panama Canal Net Ton	New Toll Schedule: Toll Per Cargo Ton Carried	Total Transportation Costs per Ton Carried, Via Panama Canal: With Current Toll Structure	Total Transportation Costs per Ton Carried, Via Panama Canal: With New Toll Structure	Total Transportation Costs per Ton Carried, Via Panama Canal: Percent Increase	Total Transportation Costs per Ton Carried: Via Least Costly Alternative Route
Passenger Ships (continued)											
Non-Diverted Transits (continued)											
South-Bound	183	0	3,894	2.41	0.00	2.41	0.00	0.00	0.00	0.00	0.00
Subtotal	336	0	6,145	2.41	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Refrigerated Ships											
Non-Diverted Transits											
Africa-C.A.W.C.	0	0	3	2.41	4.27	2.41	4.27	113.87	113.87	0.00	208.00
Africa-S.A.W.C.	9	9	167	2.41	4.15	2.41	4.15	133.93	133.93	0.00	196.56
Asia-C.A.E.C.	20	71	406	2.41	3.97	2.41	3.97	128.09	128.09	0.00	173.29
Asia-S.A.E.C.	5	3	86	2.41	4.28	2.41	4.28	168.08	168.08	0.00	171.60
Asia-U.S.E.C.	0	0	7	2.41	4.28	2.41	4.28	140.48	140.48	0.00	198.20
C.A.W.C.-Africa	1	3	17	2.41	4.28	2.41	4.28	113.88	113.88	0.00	208.00
C.A.W.C.-Canada E.C.	0	2	6	2.41	4.28	2.41	4.28	76.48	76.48	0.00	152.00
C.A.W.C.-C.A.E.C.	20	132	436	2.41	3.88	2.41	3.88	50.94	50.94	0.00	124.12
C.A.W.C.-Europe	219	987	4,524	2.41	3.94	2.41	3.94	89.55	89.55	0.00	143.20
C.A.W.C.-S.A.E.C.	1	4	15	2.41	4.28	2.41	4.28	89.28	89.28	0.00	96.80
C.A.W.C.-U.S.E.C.	1	2	15	2.41	4.28	2.41	4.28	61.68	61.68	0.00	149.80
Canada E.C.-Asia	12	63	202	2.41	4.28	2.41	4.28	155.08	155.08	0.00	169.60
Canada E.C.-C.A.W.C.	5	10	94	2.41	3.95	2.41	3.95	70.22	70.22	0.00	142.12
Canada W.C.-Europe	3	28	62	2.41	4.12	2.41	4.12	131.88	131.88	0.00	187.18
C.A.E.C.-Asia	10	32	184	2.41	4.12	2.41	4.12	135.20	135.20	0.00	182.25
C.A.E.C.-C.A.W.C.	23	5	501	2.41	3.87	2.41	3.87	50.87	50.87	0.00	124.00
C.A.E.C.-S.A.W.C.	54	42	1,177	2.41	3.87	2.41	3.87	71.87	71.87	0.00	101.00
Europe-C.A.W.C.	160	13	3,463	2.41	3.89	2.41	3.89	89.41	89.41	0.00	177.49

(Continued)

Table B-10. Laden Transits, Tons Carried, Toll Revenue and Toll Rates, Current Toll Structure and Rates, 200,000 DWT Scenario, 2020, by Ship Type, Diversion Status, and Trade Route (1990 US$, except when noted)(continued)

Ship Type, Diversion Status, and Trade Route	Transits	Cargo Tonnage Carried (thousands)	Revenue (thousands) a/	Current Toll Schedule: Toll Per Panama Canal Net Ton	Current Toll Schedule: Toll Per Cargo Ton Carried	New Toll Schedule: Toll Per Panama Canal Net Ton	New Toll Schedule: Toll Per Cargo Ton Carried	Total Transportation Costs per Ton Carried, Via Panama Canal: With Current Toll Structure	Total Transportation Costs per Ton Carried, Via Panama Canal: With New Toll Structure	Total Transportation Costs per Ton Carried, Via Panama Canal: Percent Increase	Total Transportation Costs per Ton Carried: Via Least Costly Alternative Route
Refrigerated Ships (continued)											
Non-Diverted Transits (continued)											
Europe-Canada W.C.	1	1	14	2.41	4.28	2.41	4.28	136.48	136.48	0.00	189.40
Europe-S.A.W.C.	169	145	3,282	2.41	4.02	2.41	4.02	116.06	116.06	0.00	121.88
Europe-U.S.W.C.	14	10	228	2.41	4.28	2.41	4.28	126.88	126.88	0.00	178.40
Middle East-S.A.W.C.	2	3	28	2.41	4.28	2.41	4.28	129.48	129.48	0.00	153.80
Oceania-C.A.E.C.	3	18	47	2.41	4.28	2.41	4.28	147.28	147.28	0.00	182.40
Oceania-U.S.E.C.	33	116	550	2.41	4.24	2.41	4.24	148.70	148.70	0.00	169.13
S.A.E.C.-Asia	11	50	185	2.41	4.28	2.41	4.28	137.48	137.48	0.00	159.80
S.A.W.C.-Africa	14	50	251	2.41	4.15	2.41	4.15	123.33	123.33	0.00	191.96
S.A.W.C.-C.A.E.C.	21	111	423	2.41	3.99	2.41	3.99	75.06	75.06	0.00	104.68
S.A.W.C.-Europe	928	4,670	17,690	2.41	4.05	2.41	4.05	115.41	115.41	0.00	121.08
S.A.W.C.-Middle East	5	17	87	2.41	4.28	2.41	4.28	129.48	129.48	0.00	153.80
S.A.W.C.-U.S.E.C.	607	2,226	11,833	2.41	4.02	2.41	4.02	80.58	80.58	0.00	117.32
U.S.E.C.-Asia	32	114	618	2.41	4.01	2.41	4.01	134.04	134.04	0.00	189.83
U.S.E.C.-C.A.W.C.	27	66	554	2.41	3.93	2.41	3.93	56.28	56.28	0.00	139.70
U.S.E.C.-S.A.W.C.	282	434	5,596	2.41	3.99	2.41	3.99	79.55	79.55	0.00	116.03
U.S.W.C.-Europe	126	672	2,220	2.41	4.17	2.41	4.17	126.00	126.00	0.00	177.24
U.S.W.C.-S.A.E.C.	1	3	14	2.41	4.24	2.41	4.24	121.95	121.95	0.00	124.71
Subtotal	2,819	10,116	54,985	2.41	4.02	2.41	4.02	103.72	103.72	0.00	129.20
Refrigerated Ships											
Diverted Transits											
Africa-Asia	29	151	398	2.41	4.28	2.41	4.28	162.08	162.08	0.00	160.80
Subtotal	29	151	398	2.41	4.28	2.41	4.28	162.08	162.08	0.00	160.80
Subtotal	2,847	10,266	55,382	2.41	4.02	2.41	4.02	104.57	104.57	0.00	129.67

(Continued)

Table B-10. Laden Transits, Tons Carried, Toll Revenue and Toll Rates, Current Toll Structure and Rates, 200,000 DWT Scenario, 2020, by Ship Type, Diversion Status, and Trade Route (1990 US$, except when noted)(continued)

Ship Type, Diversion Status, and Trade Route	Transits	Cargo Tonnage Carried (thousands)	Revenue (thousands) a/	Current Toll Schedule: Toll Per Panama Canal Net Ton	Current Toll Schedule: Toll Per Cargo Ton Carried	New Toll Schedule: Toll Per Panama Canal Net Ton	New Toll Schedule: Toll Per Cargo Ton Carried	Total Transportation Costs per Ton Carried: Via Panama Canal: With Current Toll Structure	Via Panama Canal: With New Toll Structure	Via Panama Canal: Percent Increase	Via Least Costly Alternative Route
Roll-On Roll-Off (continued)											
Non-Diverted Transits (continued)											
Asia-Canada E.C.	2	8	53	2.41	9.35	2.41	9.35	278.31	278.31	0.00	298.63
Asia-C.A.E.C.	24	473	1,651	2.41	7.92	2.41	7.92	225.40	225.40	0.00	256.05
Asia-U.S.E.C.	40	766	2,669	2.41	7.95	2.41	7.95	237.11	237.11	0.00	288.42
C.A.W.C.-Europe	12	64	473	2.41	8.66	2.41	8.66	181.66	181.66	0.00	257.00
C.A.W.C.-S.A.E.C.	0	0	2	2.41	8.67	2.41	8.67	193.67	193.67	0.00	203.00
C.A.W.C.-U.S.E.C.	1	1	48	2.41	8.66	2.41	8.66	155.66	155.66	0.00	251.00
Canada E.C.-Asia	8	41	245	2.41	9.30	2.41	9.30	327.47	327.47	0.00	336.67
Canada W.C.-C.A.E.C.	0	0	5	2.41	10.19	2.41	10.19	224.84	224.84	0.00	359.54
C.A.E.C.-C.A.W.C.	0	1	12	2.41	9.72	2.41	9.72	154.90	154.90	0.00	273.04
C.A.E.C.-Oceania	2	7	98	2.41	8.66	2.41	8.66	252.66	252.66	0.00	297.00
C.A.E.C.-S.A.W.C.	46	81	1,076	2.41	10.19	2.41	10.19	217.90	217.90	0.00	266.26
Europe-C.A.W.C.	18	112	703	2.41	8.66	2.41	8.66	181.66	181.66	0.00	311.00
Europe-S.A.W.C.	0	0	1	2.41	8.67	2.41	8.67	240.67	240.67	0.00	275.00
Europe-U.S.W.C.	0	2	16	2.41	8.66	2.41	8.66	241.66	241.66	0.00	311.00
Oceania-C.A.E.C.	0	0	0	2.41	8.01	2.41	8.01	223.21	223.21	0.00	261.95
S.A.W.C.-C.A.E.C.	12	23	271	2.41	10.19	2.41	10.19	217.90	217.90	0.00	266.26
S.A.W.C.-Europe	1	3	39	2.41	8.66	2.41	8.66	240.66	240.66	0.00	281.00
S.A.W.C.-U.S.E.C.	6	13	143	2.41	10.19	2.41	10.19	210.96	210.96	0.00	275.20
U.S.E.C.-Asia	8	56	339	2.41	8.64	2.41	8.64	275.58	275.58	0.00	337.50
U.S.E.C.-C.A.W.C.	2	3	75	2.41	8.66	2.41	8.66	132.66	132.66	0.00	251.00
U.S.E.C.-S.A.W.C.	26	45	599	2.41	10.19	2.41	10.19	210.96	210.96	0.00	275.20
U.S.W.C.-Canada E.C.	1	2	20	2.41	10.20	2.41	10.20	245.70	245.70	0.00	375.45
U.S.W.C.-C.A.E.C.	1	23	77	2.41	7.75	2.41	7.75	153.28	153.28	0.00	223.78

(Continued)

Table B-10. Laden Transits, Tons Carried, Toll Revenue and Toll Rates, Current Toll Structure and Rates, 200,000 DWT Scenario, 2020, by Ship Type, Diversion Status, and Trade Route (1990 US$, except when noted)(continued)

Ship Type, Diversion Status, and Trade Route	Transits	Cargo Tonnage Carried (thousands)	Revenue (thousands) a/	Current Toll Schedule: Toll Per Panama Canal Net Ton	Current Toll Schedule: Toll Per Cargo Ton Carried	New Toll Schedule: Toll Per Panama Canal Net Ton	New Toll Schedule: Toll Per Cargo Ton Carried	Total Transportation Costs per Ton Carried: Via Panama Canal: With Current Toll Structure	Via Panama Canal: With New Toll Structure	Via Panama Canal: Percent Increase	Via Least Costly Alternative Route
Roll-On Roll-Off (continued)											
Non-Diverted Transits (continued)											
U.S.W.C.-Europe	0	0	2	2.41	7.80	2.41	7.80	203.42	203.42	0.00	256.35
U.S.W.C.-U.S.E.C.	0	5	16	2.41	7.86	2.41	7.86	151.24	151.24	0.00	244.92
Subtotal	211	1,731	8,635	2.41	8.60	2.41	8.60	228.26	228.26	0.00	279.97
Roll-On Roll-Off											
Diverted Transits											
Canada E.C.-Oceania	1	31	108	2.41	7.77	2.41	7.77	240.88	240.88	0.00	239.11
Subtotal	1	31	108	2.41	7.77	2.41	7.77	240.88	240.88	0.00	239.11
Subtotal	213	1,762	8,743	2.41	8.59	2.41	8.59	228.49	228.49	0.00	279.24
Tankers											
Non-Diverted Transits											
Africa-U.S.W.C.	0	0	0	2.41	1.27	2.41	1.27	15.27	15.27	0.00	20.00
Asia-U.S.E.C.	1	30	34	2.41	1.27	2.41	1.27	22.15	22.15	0.00	31.82
C.A.W.C.-Africa	0	0	1	2.41	1.27	2.41	1.27	37.27	37.27	0.00	80.00
C.A.W.C.-Canada E.C.	0	4	4	2.41	1.27	2.41	1.27	10.23	10.23	0.00	23.86
C.A.W.C.-C.A.E.C.	14	85	268	2.41	1.27	2.41	1.27	8.68	8.68	0.00	28.70
C.A.W.C.-Europe	3	70	89	2.41	1.27	2.41	1.27	14.19	14.19	0.00	23.86
C.A.W.C.-U.S.E.C.	7	53	124	2.41	1.27	2.41	1.27	9.70	9.70	0.00	30.45
Canada E.C.-Asia	10	393	438	2.41	1.27	2.41	1.27	20.80	20.80	0.00	22.37
Canada W.C.-U.S.E.C.	5	253	323	2.41	1.27	2.41	1.27	11.42	11.42	0.00	21.15
C.A.E.C.-Asia	6	180	243	2.41	1.27	2.41	1.27	18.65	18.65	0.00	25.59
C.A.E.C.-C.A.W.C.	93	1,762	3,007	2.41	1.27	2.41	1.27	6.05	6.05	0.00	17.83

(Continued)

Table B-10. Laden Transits, Tons Carried, Toll Revenue and Toll Rates, Current Toll Structure and Rates, 200,000 DWT Scenario, 2020, by Ship Type, Diversion Status, and Trade Route (1990 US$, except when noted)(continued)

Ship Type, Diversion Status, and Trade Route	Transits	Cargo Tonnage Carried (thousands)	Revenue (thousands) a/	Current Toll Schedule: Toll Per Panama Canal Net Ton	Current Toll Schedule: Toll Per Cargo Ton Carried	New Toll Schedule: Toll Per Panama Canal Net Ton	New Toll Schedule: Toll Per Cargo Ton Carried	Total Transportation Costs per Ton Carried, Via Panama Canal: With Current Toll Structure	Via Panama Canal: With New Toll Structure	Via Panama Canal: Percent Increase	Via Least Costly Alternative Route
Tankers (continued)											
Non-Diverted Transits (continued)											
C.A.E.C.-S.A.W.C.	41	879	1,223	2.41	1.27	2.41	1.27	10.87	10.87	0.00	15.66
C.A.E.C.-U.S.W.C.	17	712	847	2.41	1.27	2.41	1.27	9.67	9.67	0.00	18.88
Europe-C.A.W.C.	12	54	104	2.41	1.27	2.41	1.27	20.41	20.41	0.00	36.30
Europe-S.A.W.C.	2	52	62	2.41	1.27	2.41	1.27	19.11	19.11	0.00	19.97
Europe-U.S.W.C.	6	196	231	2.41	1.27	2.41	1.27	18.01	18.01	0.00	25.98
Middle East-U.S.W.C.	0	0	0	2.41	1.25	2.41	1.25	23.25	23.25	0.00	28.00
Oceania-U.S.E.C.	9	153	199	2.41	1.27	2.41	1.27	23.22	23.22	0.00	26.68
S.A.E.C.-Asia	81	14,147	14,981	2.41	1.27	2.41	1.27	12.89	12.89	0.00	14.70
S.A.E.C.-C.A.W.C.	85	4,342	6,275	2.41	1.26	2.41	1.26	8.64	8.64	0.00	9.39
S.A.W.C.-Canada E.C.	2	36	47	2.41	1.27	2.41	1.27	16.94	16.94	0.00	21.75
S.A.W.C.-C.A.E.C.	42	1,636	2,095	2.41	1.27	2.41	1.27	8.64	8.64	0.00	12.32
S.A.W.C.-Europe	12	106	129	2.41	1.27	2.41	1.27	22.77	22.77	0.00	24.13
S.A.W.C.-U.S.E.C.	47	1,758	2,116	2.41	1.27	2.41	1.27	10.31	10.31	0.00	15.73
U.S.E.C.-Asia	80	2,655	3,218	2.41	1.27	2.41	1.27	18.79	18.79	0.00	26.64
U.S.E.C.-C.A.W.C.	33	614	943	2.41	1.27	2.41	1.27	8.14	8.14	0.00	23.15
U.S.E.C.-Canada W.C.	1	4	34	2.41	1.27	2.41	1.27	15.19	15.19	0.00	28.84
U.S.E.C.-Oceania	6	192	234	2.41	1.27	2.41	1.27	21.59	21.59	0.00	24.75
U.S.E.C.-S.A.W.C.	8	147	191	2.41	1.27	2.41	1.27	12.12	12.12	0.00	18.87
U.S.E.C.-U.S.W.C.	30	877	1,131	2.41	1.27	2.41	1.27	12.30	12.30	0.00	25.53
U.S.W.C.-Africa	7	224	330	2.41	1.26	2.41	1.26	13.36	13.36	0.00	17.15
U.S.W.C.-Canada E.C.	1	21	25	2.41	1.27	2.41	1.27	16.19	16.19	0.00	27.84
U.S.W.C.-C.A.E.C.	8	301	410	2.41	1.26	2.41	1.26	9.64	9.64	0.00	18.60
U.S.W.C.-S.A.E.C.	2	87	91	2.41	1.27	2.41	1.27	15.34	15.34	0.00	15.48

(Continued)

Table B-10. Laden Transits, Tons Carried, Toll Revenue and Toll Rates, Current Toll Structure and Rates, 200,000 DWT Scenario, 2020, by Ship Type, Diversion Status, and Trade Route (1990 US$, except when noted)(continued)

Ship Type, Diversion Status, and Trade Route	Transits	Cargo Tonnage Carried (thousands)	Revenue (thousands) a/	Current Toll Schedule: Toll Per Panama Canal Net Ton	Current Toll Schedule: Toll Per Cargo Ton Carried	New Toll Schedule: Toll Per Panama Canal Net Ton	New Toll Schedule: Toll Per Cargo Ton Carried	Total Transportation Costs per Ton Carried: Via Panama Canal: With Current Toll Structure	Via Panama Canal: With New Toll Structure	Via Panama Canal: Percent Increase	Via Least Costly Alternative Route
Tankers (continued)											
Non-Diverted Transits (continued)											
U.S.W.C.-U.S.E.C.	8	226	322	2.41	1.27	2.41	1.27	11.51	11.51	0.00	23.92
Subtotal	680	32,248	39,772	2.41	1.27	2.41	1.27	12.11	12.11	0.00	16.37
Tankers											
Diverted Transits											
S.A.E.C.-U.S.W.C.	49	1,967	2,339	2.41	1.26	2.41	1.26	14.90	14.90	0.00	14.66
Subtotal	49	1,967	2,339	2.41	1.26	2.41	1.26	14.90	14.90	0.00	14.66
Subtotal	728	34,216	42,111	2.41	1.27	2.41	1.27	12.27	12.27	0.00	16.27
Vehicle Carriers											
Non-Diverted Transits											
Asia-C.A.E.C.	13	33	851	2.41	29.09	2.41	29.09	392.50	392.50	0.00	459.78
Asia-U.S.E.C.	419	1,959	31,128	2.41	29.20	2.41	29.20	413.17	413.17	0.00	479.68
C.A.W.C.-C.A.E.C.	1	1	52	2.41	28.71	2.41	28.71	257.39	257.39	0.00	407.18
C.A.E.C.-C.A.W.C.	4	1	279	2.41	29.22	2.41	29.22	263.22	263.22	0.00	385.00
C.A.E.C.-Oceania	1	0	72	2.41	29.22	2.41	29.22	409.22	409.22	0.00	448.00
Europe-Canada W.C.	5	11	496	2.41	30.90	2.41	30.90	368.26	368.26	0.00	430.05
Europe-U.S.W.C.	149	285	12,992	2.41	29.95	2.41	29.95	381.68	381.68	0.00	429.50
S.A.W.C.-C.A.E.C.	0	0	3	2.41	28.69	2.41	28.69	307.69	307.69	0.00	354.00
U.S.E.C.-Asia	25	114	2,063	2.41	29.67	2.41	29.67	392.18	392.18	0.00	474.71
U.S.E.C.-Oceania	7	18	568	2.41	29.22	2.41	29.22	408.22	408.22	0.00	423.00
Subtotal	623	2,423	48,505	2.41	29.43	2.41	29.43	407.79	407.79	0.00	472.54
Vehicle Carriers											
Diverted Transits											
Asia-S.A.E.C.	0	0	4	2.41	29.13	2.41	29.13	453.29	453.29	0.00	435.60

(Continued)

Table B-10. Laden Transits, Tons Carried, Toll Revenue and Toll Rates, Current Toll Structure and Rates, 200,000 DWT Scenario, 2020, by Ship Type, Diversion Status, and Trade Route (1990 US$, except when noted)(continued)

Ship Type, Diversion Status, and Trade Route	Transits	Cargo Tonnage Carried (thousands)	Revenue (thousands) a/	Current Toll Schedule: Toll Per Panama Canal Net Ton	Current Toll Schedule: Toll Per Cargo Ton Carried	New Toll Schedule: Toll Per Panama Canal Net Ton	New Toll Schedule: Toll Per Cargo Ton Carried	Total Transportation Costs per Ton Carried: Via Panama Canal: With Current Toll Structure	Via Panama Canal: With New Toll Structure	Via Panama Canal: Percent Increase	Via Least Costly Alternative Route
Vehicle Carriers (continued)											
Diverted Transits (continued)											
Canada E.C.-Asia	0	1	10	2.41	29.22	2.41	29.22	437.22	437.22	0.00	425.00
Subtotal	0	1	14	2.41	29.18	2.41	29.18	440.32	440.32	0.00	427.05
Subtotal	623	2,424	48,519	2.41	29.43	2.41	29.43	407.80	407.80	0.00	472.52
Total Non-Diverting	13,080	325,037	549,241	2.41	1.82	2.41	1.82	44.33	44.33	0.00	53.38
Total Diverting	163	4,579	5,812	2.41	1.40	2.41	1.40	22.78	22.78	0.00	22.43

Notes: These calculations do not include all transits and tons carried forecast by the WEFA Group. For some ship-type and trade-route combinations (accounting for a total of 18 transits and 179803 tons), vessel costs were not available for every DWT size interval. As a result, these transits and tons were excluded. In addition, for 1981 transits and 37003606 tons, the cost by way of the Panama Canal without a toll was higher than the least costly alternative route. As a result, these transits and tons were excluded. Percentages may not calculate exactly as shown due to rounding. A fee of $0.40 per Panama Canal net ton has also been included to account for charges such as handling and agency fees incurred when transitting the Canal. The extra fee is only used to determine divesion status by adding it to the cost per ton carried and is not included in the revenue calculations.

a/ Revenue lost from diversions is measured as the revenue generated by the maximum, nondiverting toll rate increase.

Source: Nathan Associates Inc., based on forecasts of traffic and transportation costs provided by The WEFA Group.

CURRENT TOLL STRUCTURE AND RATES, 250,000-DWT SCENARIO, 2020

Table B-11. Laden Transits, Tons Carried, and Toll Revenue, Current Toll Stucture and Rates, 250,000 DWT Scenario, 2020, by Ship Type

	Transits				Tons Carried(thousands)				Revenue(1990 US$thousands)			
Ship Type	Canal	Diverted	Total	Diverted as a Percent of Total	Canal	Diverted	Total	Diverted as a Percent of Total	Canal	Lost a/	Total	Lost as a Percent of Total
Container-Breakbulk	1,317	7	1,325	0.56	20,424	95	20,519	0.46	36,989	48	37,037	0.13
Dry Bulk Carriers	3,957	74	4,030	1.83	207,720	2,240	209,960	1.07	238,514	2,811	241,325	1.16
Chemical Tankers	992	2	994	0.22	22,841	84	22,925	0.37	26,730	90	26,819	0.33
Full Container Ships	1,251	0	1,251	0.00	24,619	0	24,619	0.00	76,708	0	76,708	0.00
General Cargo Ships	757	1	758	0.14	7,489	10	7,499	0.13	13,179	5	13,184	0.04
Liquid Gas Carriers	172	0	172	0.00	1,947	0	1,947	0.00	5,739	0	5,739	0.00
Passenger Ships	336	0	336	0.00	0	0	0	0.00	6,145	0	6,145	0.00
Refrigerated Ships	2,819	29	2,847	1.00	10,116	151	10,266	1.47	54,985	398	55,382	0.72
Roll-On Roll-Off	211	1	213	0.67	1,731	31	1,762	1.78	8,635	108	8,743	1.23
Tankers	666	49	715	6.81	32,248	1,967	34,216	5.75	39,772	2,339	42,111	5.55
Vehicle Carriers	623	0	623	0.05	2,423	1	2,424	0.04	48,505	14	48,519	0.03
Total	13,100	163	13,263	1.23	331,558	4,579	336,138	1.36	555,899	5,812	561,711	1.03

Notes: These calculations do not include all transits and tons carried forecast by the WEFA Group. For some ship-type and trade-route combinations (accounting for a total of 18 transits and 179803 tons), vessel costs were not available for every DWT size interval. As a result, these transits and tons were excluded. In addition, for 1981 transits and 37003606 tons, the cost by way of the Panama Canal without a toll was higher than the least costly alternative route. As a result, these transits and tons were excluded. A fee of $0.40 per Panama Canal net ton has also been included to account for charges such as handling and agency fees incurred when transitting the Canal. The extra fee is only used to determine diversion status by adding it to cost per ton carried and is not included in the revenue calculations.

a/ Revenue lost from diversions is measured as the revenue generated by the maximum, nondiverting toll rate increase.

Source: Nathan Associates Inc., based on forecasts of traffic and transportation costs provided by The WEFA Group.

Table B-12. Ballast Transits, Tons Carried, and Toll Revenue, Current Toll Stucture and Rates, 250,000 DWT Scenario, 2020, by Ship Type

	Transits				Tons Carried(thousands)				Revenue(1990 US$thousands)			
Ship Type	Canal	Diverted	Total	Diverted as a Percent of Total	Canal	Diverted	Total	Diverted as a Percent of Total	Canal	Lost	Total	Lost as a Percent of Total
Container-Breakbulk	41	0	41	0.13	0	0	0	0.00	1,018	1	1,019	0.13
Dry Bulk Carriers	415	5	420	1.16	0	0	0	0.00	15,986	188	16,174	1.16
Chemical Tankers	82	0	82	0.33	0	0	0	0.00	1,753	6	1,758	0.33
Full Container Ships	9	0	9	0.00	0	0	0	0.00	228	0	228	0.00
General Cargo Ships	140	0	140	0.04	0	0	0	0.00	1,530	1	1,531	0.04
Liquid Gas Carriers	128	0	128	0.00	0	0	0	0.00	3,730	0	3,730	0.00
Passenger Ships	11	0	11	0.00	0	0	0	0.00	131	0	131	0.00
Refrigerated Ships	925	7	932	0.72	0	0	0	0.00	13,679	99	13,778	0.72
Roll-On Roll-Off	30	0	30	1.23	0	0	0	0.00	788	10	798	1.23
Tankers	361	21	382	5.55	0	0	0	0.00	19,626	1,153	20,779	5.55
Vehicle Carriers	383	0	383	0.03	0	0	0	0.00	22,606	7	22,613	0.03
Total	2,524	34	2,558	1.32	0	0	0	0.00	81,075	1,464	82,540	1.77

Note: Diversions of ballast transits are computed by diverting a proportion of ballast transits equal to lost revenue as a percent of total potential revenue for a particular laden ship type. See last column on previous table.

Source: Nathan Associates Inc., based on forecasts of traffic and transportation costs provided by The WEFA Group.

Table B-13. Laden Transits, Tons Carried, Toll Revenue and Toll Rates, Current Toll Structure and Rates, 250,000 DWT Scenario, 2020, by Ship Type, Diversion Status, and Trade Route (1990 US$, except when noted)

Ship Type, Diversion Status, and Trade Route	Transits	Cargo Tonnage Carried (thousands)	Revenue (thousands) a/	Current Toll Schedule: Toll Per Panama Canal Net Ton	Current Toll Schedule: Toll Per Cargo Ton Carried	New Toll Schedule: Toll Per Panama Canal Net Ton	New Toll Schedule: Toll Per Cargo Ton Carried	Total Transportation Costs per Ton Carried: Via Panama Canal: With Current Toll Structure	Via Panama Canal: With New Toll Structure	Via Panama Canal: Percent Increase	Via Least Costly Alternative Route
Container-Breakbulk											
Non-Diverted Transits											
Africa-C.A.W.C.	3	77	79	2.41	1.85	2.41	1.85	68.56	68.56	0.00	113.26
Africa-Canada W.C.	0	2	4	2.41	1.87	2.41	1.87	88.16	88.16	0.00	100.93
Africa-U.S.W.C.	1	9	20	2.41	1.87	2.41	1.87	89.16	89.16	0.00	102.87
Asia-Canada E.C.	0	4	11	2.41	1.86	2.41	1.86	88.65	88.65	0.00	96.19
Asia-C.A.E.C.	91	837	2,389	2.41	1.87	2.41	1.87	93.07	93.07	0.00	107.91
Asia-S.A.E.C.	27	175	688	2.41	1.87	2.41	1.87	100.20	100.20	0.00	102.23
Asia-U.S.E.C.	82	1,031	2,293	2.41	1.86	2.41	1.86	94.52	94.52	0.00	116.80
C.A.W.C.-Africa	3	70	87	2.41	1.87	2.41	1.87	73.06	73.06	0.00	120.56
C.A.W.C.-C.A.E.C.	7	118	197	2.41	1.86	2.41	1.86	49.37	49.37	0.00	87.53
C.A.W.C.-Europe	15	110	391	2.41	1.87	2.41	1.87	63.64	63.64	0.00	91.28
C.A.W.C.-S.A.E.C.	12	6	308	2.41	1.87	2.41	1.87	69.19	69.19	0.00	74.19
C.A.W.C.-U.S.E.C.	3	19	80	2.41	1.87	2.41	1.87	55.40	55.40	0.00	91.85
Canada E.C.-Asia	14	367	485	2.41	1.85	2.41	1.85	90.68	90.68	0.00	93.83
Canada E.C.-C.A.W.C.	1	9	23	2.41	1.87	2.41	1.87	54.09	54.09	0.00	92.29
Canada E.C.-Oceania	1	13	20	2.41	1.87	2.41	1.87	102.74	102.74	0.00	102.93
Canada E.C.-S.A.W.C.	1	10	15	2.41	1.85	2.41	1.85	62.78	62.78	0.00	75.85
Canada E.C.-U.S.W.C.	0	0	0	2.41	1.85	2.41	1.85	69.71	69.71	0.00	105.87
Canada W.C.-Africa	8	179	230	2.41	1.85	2.41	1.85	88.66	88.66	0.00	100.74
Canada W.C.-Europe	63	1,844	2,277	2.41	1.85	2.41	1.85	77.86	77.86	0.00	104.01
Canada W.C.-S.A.E.C.	11	210	270	2.41	1.87	2.41	1.87	71.19	71.19	0.00	108.72
Canada W.C.-U.S.E.C.	8	149	215	2.41	1.85	2.41	1.85	64.85	64.85	0.00	102.00
C.A.E.C.-Asia	9	196	237	2.41	1.87	2.41	1.87	92.37	92.37	0.00	107.04
C.A.E.C.-C.A.W.C.	7	27	181	2.41	1.87	2.41	1.87	50.30	50.30	0.00	90.29

(Continued)

Table B-13. Laden Transits, Tons Carried, Toll Revenue and Toll Rates, Current Toll Structure and Rates, 250,000 DWT Scenario, 2020, by Ship Type, Diversion Status, and Trade Route (1990 US$, except when noted)(continued)

Ship Type, Diversion Status, and Trade Route	Transits	Cargo Tonnage Carried (thousands)	Revenue (thousands) a/	Current Toll Schedule: Toll Per Panama Canal Net Ton	Current Toll Schedule: Toll Per Cargo Ton Carried	New Toll Schedule: Toll Per Panama Canal Net Ton	New Toll Schedule: Toll Per Cargo Ton Carried	Total Transportation Costs per Ton Carried, Via Panama Canal: With Current Toll Structure	Via Panama Canal: With New Toll Structure	Via Panama Canal: Percent Increase	Via Least Costly Alternative Route
Container-Breakbulk (continued)											
Non-Diverted Transits (continued)											
C.A.E.C.-Canada W.C.	2	31	52	2.41	1.87	2.41	1.87	63.73	63.73	0.00	101.08
C.A.E.C.-Oceania	1	20	32	2.41	1.87	2.41	1.87	90.16	90.16	0.00	107.72
C.A.E.C.-S.A.W.C.	18	144	475	2.41	1.87	2.41	1.87	61.88	61.88	0.00	76.44
C.A.E.C.-U.S.W.C.	4	73	105	2.41	1.86	2.41	1.86	61.48	61.48	0.00	93.18
Europe-C.A.W.C.	22	137	570	2.41	1.87	2.41	1.87	64.73	64.73	0.00	112.66
Europe-Canada W.C.	4	123	166	2.41	1.85	2.41	1.85	80.14	80.14	0.00	103.29
Europe-S.A.W.C.	91	752	2,348	2.41	1.87	2.41	1.87	85.37	85.37	0.00	99.08
Europe-U.S.W.C.	24	732	921	2.41	1.85	2.41	1.85	79.27	79.27	0.00	103.43
Oceania-Canada E.C.	2	46	92	2.41	1.85	2.41	1.85	93.85	93.85	0.00	94.00
Oceania-C.A.E.C.	4	42	103	2.41	1.87	2.41	1.87	90.85	90.85	0.00	108.64
S.A.E.C.-C.A.W.C.	9	141	235	2.41	1.87	2.41	1.87	68.77	68.77	0.00	73.69
S.A.E.C.-Canada W.C.	11	152	295	2.41	1.87	2.41	1.87	87.94	87.94	0.00	93.92
S.A.E.C.-U.S.W.C.	38	572	1,007	2.41	1.87	2.41	1.87	74.36	74.36	0.00	77.06
S.A.W.C.-Canada E.C.	1	2	24	2.41	1.87	2.41	1.87	66.27	66.27	0.00	81.06
S.A.W.C.-C.A.E.C.	13	108	334	2.41	1.87	2.41	1.87	62.27	62.27	0.00	77.06
S.A.W.C.-Europe	191	3,350	4,875	2.41	1.87	2.41	1.87	85.09	85.09	0.00	101.37
S.A.W.C.-U.S.E.C.	108	1,055	2,688	2.41	1.87	2.41	1.87	59.46	59.46	0.00	77.72
U.S.E.C.-Asia	172	4,347	5,678	2.41	1.86	2.41	1.86	91.67	91.67	0.00	113.24
U.S.E.C.-C.A.W.C.	10	201	267	2.41	1.86	2.41	1.86	46.17	46.17	0.00	88.94
U.S.E.C.-S.A.W.C.	160	1,595	4,135	2.41	1.87	2.41	1.87	59.27	59.27	0.00	77.44
U.S.E.C.-U.S.W.C.	0	0	0	2.41	1.86	2.41	1.86	56.86	56.86	0.00	94.00
U.S.W.C.-Africa	9	143	354	2.41	1.85	2.41	1.85	82.33	82.33	0.00	98.63
U.S.W.C.-Canada E.C.	2	40	45	2.41	1.85	2.41	1.85	66.85	66.85	0.00	100.00

(Continued)

Table B-13. Laden Transits, Tons Carried, Toll Revenue and Toll Rates, Current Toll Structure and Rates, 250,000 DWT Scenario, 2020, by Ship Type, Diversion Status, and Trade Route (1990 US$, except when noted)(continued)

Ship Type, Diversion Status, and Trade Route	Transits	Cargo Tonnage Carried (thousands)	Revenue (thousands) a/	Current Toll Schedule: Toll Per Panama Canal Net Ton	Current Toll Schedule: Toll Per Cargo Ton Carried	New Toll Schedule: Toll Per Panama Canal Net Ton	New Toll Schedule: Toll Per Cargo Ton Carried	Total Transportation Costs per Ton Carried, Via Panama Canal: With Current Toll Structure	Total Transportation Costs per Ton Carried, Via Panama Canal: With New Toll Structure	Total Transportation Costs per Ton Carried, Via Panama Canal: Percent Increase	Total Transportation Costs per Ton Carried: Via Least Costly Alternative Route
Container-Breakbulk (continued)											
Non-Diverted Transits (continued)											
U.S.W.C.-C.A.E.C.	9	63	223	2.41	1.87	2.41	1.87	63.58	63.58	0.00	96.80
U.S.W.C.-Europe	38	1,010	1,342	2.41	1.85	2.41	1.85	80.25	80.25	0.00	103.86
U.S.W.C.-S.A.E.C.	4	79	111	2.41	1.87	2.41	1.87	76.06	76.06	0.00	79.06
U.S.W.C.-U.S.E.C.	0	3	8	2.41	1.85	2.41	1.85	58.25	58.25	0.00	96.88
Subtotal	1,317	20,424	36,989	2.41	1.86	2.41	1.86	80.92	80.92	0.00	100.72
Container-Breakbulk											
Diverted Transits											
Oceania-S.A.E.C.	7	95	48	2.41	1.86	2.41	1.86	84.47	84.47	0.00	82.99
Subtotal	7	95	48	2.41	1.86	2.41	1.86	84.47	84.47	0.00	82.99
Subtotal	1,325	20,519	37,037	2.41	1.86	2.41	1.86	80.94	80.94	0.00	100.64
Dry Bulk Carriers											
Non-Diverted Transits											
Africa-C.A.W.C.	15	483	508	2.41	1.35	2.41	1.35	14.85	14.85	0.00	26.10
Africa-Canada W.C.	34	1,354	1,361	2.41	1.31	2.41	1.31	17.28	17.28	0.00	19.77
Africa-S.A.W.C.	5	128	159	2.41	1.35	2.41	1.35	17.80	17.80	0.00	25.10
Africa-U.S.W.C.	7	161	276	2.41	1.30	2.41	1.30	16.19	16.19	0.00	19.23
Asia-Canada E.C.	8	302	376	2.41	1.28	2.41	1.28	17.00	17.00	0.00	18.32
Asia-C.A.E.C.	21	345	766	2.41	1.33	2.41	1.33	18.03	18.03	0.00	22.65
Asia-U.S.E.C.	242	6,345	10,237	2.41	1.30	2.41	1.30	16.31	16.31	0.00	22.26
Brazil-Asia	144	21,387	22,005	2.41	1.17	2.41	1.17	17.13	17.13	0.00	18.14
C.A.W.C.-Africa	1	34	46	2.41	1.32	2.41	1.32	14.69	14.69	0.00	25.81

(Continued)

Table B-13. Laden Transits, Tons Carried, Toll Revenue and Toll Rates, Current Toll Structure and Rates, 250,000 DWT Scenario, 2020, by Ship Type, Diversion Status, and Trade Route (1990 US$, except when noted)(continued)

Ship Type, Diversion Status, and Trade Route	Transits	Cargo Tonnage Carried (thousands)	Revenue (thousands) a/	Current Toll Schedule: Toll Per Panama Canal Net Ton	Current Toll Schedule: Toll Per Cargo Ton Carried	New Toll Schedule: Toll Per Panama Canal Net Ton	New Toll Schedule: Toll Per Cargo Ton Carried	Total Transportation Costs per Ton Carried, Via Panama Canal: With Current Toll Structure	Via Panama Canal: With New Toll Structure	Via Panama Canal: Percent Increase	Via Least Costly Alternative Route
Dry Bulk Carriers (continued)											
Non-Diverted Transits (continued)											
C.A.W.C.-C.A.E.C.	34	961	1,247	2.41	1.33	2.41	1.33	7.81	7.81	0.00	15.77
C.A.W.C.-Europe	16	462	646	2.41	1.31	2.41	1.31	12.08	12.08	0.00	18.24
C.A.W.C.-U.S.E.C.	38	1,292	1,497	2.41	1.32	2.41	1.32	7.83	7.83	0.00	17.55
Canada E.C.-Asia	88	4,219	5,028	2.41	1.25	2.41	1.25	18.06	18.06	0.00	20.40
Canada E.C.-Oceania	3	58	126	2.41	1.33	2.41	1.33	19.62	19.62	0.00	21.08
Canada E.C.-S.A.W.C.	6	163	216	2.41	1.33	2.41	1.33	12.63	12.63	0.00	14.98
Canada W.C.-Africa	96	3,500	4,008	2.41	1.31	2.41	1.31	16.93	16.93	0.00	19.42
Canada W.C.-C.A.E.C.	4	105	153	2.41	1.35	2.41	1.35	12.85	12.85	0.00	21.30
Canada W.C.-Europe	238	11,174	12,859	2.41	1.26	2.41	1.26	16.52	16.52	0.00	21.25
Canada W.C.-S.A.E.C.	23	1,374	1,665	2.41	1.22	2.41	1.22	10.51	10.51	0.00	10.92
Canada W.C.-U.S.E.C.	64	1,569	2,237	2.41	1.35	2.41	1.35	13.00	13.00	0.00	23.15
C.A.E.C.-Asia	21	639	737	2.41	1.35	2.41	1.35	17.70	17.70	0.00	22.30
C.A.E.C.-C.A.W.C.	25	682	872	2.41	1.35	2.41	1.35	8.05	8.05	0.00	16.45
C.A.E.C.-Canada W.C.	2	55	68	2.41	1.35	2.41	1.35	13.05	13.05	0.00	21.60
C.A.E.C.-Oceania	1	11	18	2.41	1.35	2.41	1.35	19.95	19.95	0.00	22.60
C.A.E.C.-S.A.W.C.	12	313	435	2.41	1.35	2.41	1.35	11.00	11.00	0.00	13.50
C.A.E.C.-U.S.W.C.	9	236	310	2.41	1.35	2.41	1.35	11.85	11.85	0.00	20.30
Columbia-Asia	2	295	306	2.41	1.17	2.41	1.17	16.65	16.65	0.00	24.67
Europe-C.A.W.C.	30	797	1,066	2.41	1.34	2.41	1.34	12.79	12.79	0.00	21.20
Europe-Canada W.C.	11	286	427	2.41	1.31	2.41	1.31	16.30	16.30	0.00	21.24
Europe-U.S.W.C.	116	3,102	4,686	2.41	1.31	2.41	1.31	15.40	15.40	0.00	20.10
Middle East-S.A.W.C.	1	52	59	2.41	1.27	2.41	1.27	14.27	14.27	0.00	16.00
Oceania-Canada E.C.	22	661	769	2.41	1.35	2.41	1.35	19.70	19.70	0.00	21.25

(Continued)

Table B-13. Laden Transits, Tons Carried, Toll Revenue and Toll Rates, Current Toll Structure and Rates, 250,000 DWT Scenario, 2020, by Ship Type, Diversion Status, and Trade Route (1990 US$, except when noted)(continued)

Ship Type, Diversion Status, and Trade Route	Transits	Cargo Tonnage Carried (thousands)	Revenue (thousands) a/	Current Toll Schedule: Toll Per Panama Canal Net Ton	Current Toll Schedule: Toll Per Cargo Ton Carried	New Toll Schedule: Toll Per Panama Canal Net Ton	New Toll Schedule: Toll Per Cargo Ton Carried	Total Transportation Costs per Ton Carried, Via Panama Canal: With Current Toll Structure	Total Transportation Costs per Ton Carried, Via Panama Canal: With New Toll Structure	Total Transportation Costs per Ton Carried, Via Panama Canal: Percent Increase	Total Transportation Costs per Ton Carried: Via Least Costly Alternative Route
Dry Bulk Carriers (continued)											
Non-Diverted Transits (continued)											
Oceania-C.A.E.C.	6	166	218	2.41	1.35	2.41	1.35	18.80	18.80	0.00	22.25
Oceania-U.S.E.C.	119	6,406	7,230	2.41	1.24	2.41	1.24	15.19	15.19	0.00	16.07
S.A.E.C.-Asia	68	2,384	2,762	2.41	1.31	2.41	1.31	16.60	16.60	0.00	18.82
S.A.E.C.-Canada W.C.	3	66	95	2.41	1.35	2.41	1.35	16.80	16.80	0.00	17.35
S.A.W.C.-Africa	3	157	156	2.41	1.28	2.41	1.28	13.65	13.65	0.00	20.54
S.A.W.C.-Canada E.C.	0	10	11	2.41	1.35	2.41	1.35	13.00	13.00	0.00	15.50
S.A.W.C.-C.A.E.C.	7	144	260	2.41	1.35	2.41	1.35	11.00	11.00	0.00	13.50
S.A.W.C.-Europe	187	8,078	9,149	2.41	1.27	2.41	1.27	15.87	15.87	0.00	15.96
S.A.W.C.-U.S.E.C.	54	1,732	1,925	2.41	1.34	2.41	1.34	10.81	10.81	0.00	15.18
U.S.E.C.-Asia	1,601	104,329	116,054	2.41	1.22	2.41	1.22	17.29	17.29	0.00	22.99
U.S.E.C.-C.A.W.C.	207	6,232	7,370	2.41	1.34	2.41	1.34	8.12	8.12	0.00	18.25
U.S.E.C.-Canada W.C.	1	30	32	2.41	1.32	2.41	1.32	12.36	12.36	0.00	21.71
U.S.E.C.-Oceania	21	646	784	2.41	1.33	2.41	1.33	18.34	18.34	0.00	20.47
U.S.E.C.-S.A.W.C.	50	1,456	1,770	2.41	1.34	2.41	1.34	10.90	10.90	0.00	15.31
U.S.E.C.-U.S.W.C.	1	0	24	2.41	1.35	2.41	1.35	12.00	12.00	0.00	21.30
U.S.W.C.-Africa	121	4,599	5,666	2.41	1.28	2.41	1.28	15.62	15.62	0.00	18.62
U.S.W.C.-Canada E.C.	7	217	255	2.41	1.33	2.41	1.33	13.35	13.35	0.00	21.26
U.S.W.C.-C.A.E.C.	2	48	62	2.41	1.35	2.41	1.35	11.85	11.85	0.00	20.30
U.S.W.C.-Europe	140	6,524	7,410	2.41	1.26	2.41	1.26	13.94	13.94	0.00	17.96
U.S.W.C.-U.S.E.C.	7	183	294	2.41	1.31	2.41	1.31	12.05	12.05	0.00	21.48
Venezuela-Asia	12	1,768	1,818	2.41	1.17	2.41	1.17	16.47	16.47	0.00	19.90
Subtotal	3,957	207,720	238,514	2.41	1.24	2.41	1.24	16.26	16.26	0.00	20.88
Dry Bulk Carriers											
Diverted Transits											
Asia-S.A.E.C.	6	152	179	2.41	1.35	2.41	1.35	21.65	21.65	0.00	21.30

(Continued)

Table B-13. Laden Transits, Tons Carried, Toll Revenue and Toll Rates, Current Toll Structure and Rates, 250,000 DWT Scenario, 2020, by Ship Type, Diversion Status, and Trade Route (1990 US$, except when noted)(continued)

Ship Type, Diversion Status, and Trade Route	Transits	Cargo Tonnage Carried (thousands)	Revenue (thousands) a/	Current Toll Schedule: Toll Per Panama Canal Net Ton	Current Toll Schedule: Toll Per Cargo Ton Carried	New Toll Schedule: Toll Per Panama Canal Net Ton	New Toll Schedule: Toll Per Cargo Ton Carried	Total Transportation Costs per Ton Carried: Via Panama Canal: With Current Toll Structure	Via Panama Canal: With New Toll Structure	Via Panama Canal: Percent Increase	Via Least Costly Alternative Route
Dry Bulk Carriers (continued)											
Diverted Transits (continued)											
C.A.W.C.-S.A.E.C.	10	136	311	2.41	1.35	2.41	1.35	12.00	12.00	0.00	11.65
Europe-S.A.W.C.	12	298	365	2.41	1.35	2.41	1.35	15.85	15.85	0.00	15.50
S.A.E.C.-C.A.W.C.	8	247	247	2.41	1.35	2.41	1.35	12.00	12.00	0.00	11.65
S.A.E.C.-U.S.W.C.	28	1,128	1,383	2.41	1.26	2.41	1.26	12.93	12.93	0.00	12.67
U.S.W.C.-S.A.E.C.	11	279	326	2.41	1.35	2.41	1.35	15.80	15.80	0.00	15.45
Subtotal	74	2,240	2,811	2.41	1.30	2.41	1.30	14.11	14.11	0.00	13.80
Subtotal	4,030	209,960	241,325	2.41	1.24	2.41	1.24	16.24	16.24	0.00	20.80
Chemical Tankers											
Non-Diverted Transits											
Africa-S.A.W.C.	1	32	35	2.41	1.34	2.41	1.34	42.34	42.34	0.00	58.00
Asia-C.A.E.C.	3	34	45	2.41	1.34	2.41	1.34	52.46	52.46	0.00	69.37
Asia-S.A.E.C.	3	16	89	2.41	1.34	2.41	1.34	49.34	49.34	0.00	51.00
Asia-U.S.E.C.	32	537	744	2.41	1.34	2.41	1.34	44.74	44.74	0.00	60.33
C.A.W.C.-C.A.E.C.	23	139	175	2.41	1.34	2.41	1.34	36.34	36.34	0.00	77.00
C.A.W.C.-Europe	8	126	139	2.41	1.34	2.41	1.34	37.28	37.28	0.00	55.50
C.A.W.C.-U.S.E.C.	38	470	572	2.41	1.34	2.41	1.34	28.06	28.06	0.00	58.14
Canada W.C.-Europe	4	87	112	2.41	1.34	2.41	1.34	41.34	41.34	0.00	55.00
Canada W.C.-U.S.E.C.	32	744	1,049	2.41	1.34	2.41	1.34	31.74	31.74	0.00	52.80
C.A.E.C.-Asia	9	248	275	2.41	1.34	2.41	1.34	41.66	41.66	0.00	54.44
C.A.E.C.-C.A.W.C.	9	207	288	2.41	1.34	2.41	1.34	21.34	21.34	0.00	41.00
C.A.E.C.-S.A.W.C.	11	186	238	2.41	1.34	2.41	1.34	31.03	31.03	0.00	40.27
C.A.E.C.-U.S.W.C.	1	10	11	2.41	1.34	2.41	1.34	51.34	51.34	0.00	90.00

(Continued)

Table B-13. Laden Transits, Tons Carried, Toll Revenue and Toll Rates, Current Toll Structure and Rates, 250,000 DWT Scenario, 2020, by Ship Type, Diversion Status, and Trade Route (1990 US$, except when noted)(continued)

Ship Type, Diversion Status, and Trade Route	Transits	Cargo Tonnage Carried (thousands)	Revenue (thousands) a/	Current Toll Schedule: Toll Per Panama Canal Net Ton	Current Toll Schedule: Toll Per Cargo Ton Carried	New Toll Schedule: Toll Per Panama Canal Net Ton	New Toll Schedule: Toll Per Cargo Ton Carried	Total Transportation Costs per Ton Carried, Via Panama Canal: With Current Toll Structure	Total Transportation Costs per Ton Carried, Via Panama Canal: With New Toll Structure	Total Transportation Costs per Ton Carried, Via Panama Canal: Percent Increase	Total Transportation Costs per Ton Carried: Via Least Costly Alternative Route
Chemical Tankers (continued)											
Non-Diverted Transits (continued)											
Europe-C.A.W.C.	6	30	47	2.41	1.34	2.41	1.34	56.34	56.34	0.00	86.00
Europe-S.A.W.C.	6	60	68	2.41	1.34	2.41	1.34	55.90	55.90	0.00	59.35
Europe-U.S.W.C.	9	182	212	2.41	1.34	2.41	1.34	42.34	42.34	0.00	56.41
Oceania-U.S.E.C.	18	455	647	2.41	1.34	2.41	1.34	40.54	40.54	0.00	45.36
S.A.E.C.-C.A.W.C.	8	61	77	2.41	1.34	2.41	1.34	46.87	46.87	0.00	51.82
S.A.W.C.-C.A.E.C.	22	79	251	2.41	1.34	2.41	1.34	42.38	42.38	0.00	56.49
S.A.W.C.-Europe	8	92	107	2.41	1.34	2.41	1.34	51.64	51.64	0.00	54.68
S.A.W.C.-U.S.E.C.	7	47	97	2.41	1.34	2.41	1.34	38.35	38.35	0.00	53.28
U.S.E.C.-Asia	565	15,828	17,142	2.41	1.34	2.41	1.34	42.38	42.38	0.00	56.99
U.S.E.C.-C.A.W.C.	18	146	189	2.41	1.34	2.41	1.34	33.25	33.25	0.00	70.02
U.S.E.C.-Canada W.C.	5	36	41	2.41	1.34	2.41	1.34	55.76	55.76	0.00	96.33
U.S.E.C.-Oceania	17	409	466	2.41	1.34	2.41	1.34	44.76	44.76	0.00	50.35
U.S.E.C.-S.A.W.C.	45	434	556	2.41	1.34	2.41	1.34	39.65	39.65	0.00	55.15
U.S.E.C.-U.S.W.C.	50	1,635	2,066	2.41	1.35	2.41	1.35	25.70	25.70	0.00	43.31
U.S.W.C.-C.A.E.C.	2	38	63	2.41	1.34	2.41	1.34	29.34	29.34	0.00	48.00
U.S.W.C.-Europe	16	215	288	2.41	1.34	2.41	1.34	45.63	45.63	0.00	61.31
U.S.W.C.-S.A.E.C.	0	3	4	2.41	1.34	2.41	1.34	37.34	37.34	0.00	38.00
U.S.W.C.-U.S.E.C.	15	256	633	2.41	1.35	2.41	1.35	25.80	25.80	0.00	43.41
Subtotal	992	22,841	26,730	2.41	1.34	2.41	1.34	40.10	40.10	0.00	55.44
Chemical Tankers											
Diverted Transits											
S.A.E.C.-U.S.W.C.	2	84	90	2.41	1.35	2.41	1.35	30.35	30.35	0.00	30.00
Subtotal	2	84	90	2.41	1.35	2.41	1.35	30.35	30.35	0.00	30.00
Subtotal	994	22,925	26,819	2.41	1.34	2.41	1.34	40.06	40.06	0.00	55.35

(Continued)

Table B-13. Laden Transits, Tons Carried, Toll Revenue and Toll Rates, Current Toll Structure and Rates, 250,000 DWT Scenario, 2020, by Ship Type, Diversion Status, and Trade Route (1990 US$, except when noted)(continued)

Ship Type, Diversion Status, and Trade Route	Transits	Cargo Tonnage Carried (thousands)	Revenue (thousands) a/	Current Toll Schedule: Toll Per Panama Canal Net Ton	Current Toll Schedule: Toll Per Cargo Ton Carried	New Toll Schedule: Toll Per Panama Canal Net Ton	New Toll Schedule: Toll Per Cargo Ton Carried	Total Transportation Costs per Ton Carried: Via Panama Canal: With Current Toll Structure	Via Panama Canal: With New Toll Structure	Via Panama Canal: Percent Increase	Via Least Costly Alternative Route
Full Container Ships (continued)											
Non-Diverted Transits (continued)											
Africa-U.S.W.C.	0	2	4	2.41	4.48	2.41	4.48	246.46	246.46	0.00	281.72
Asia-Canada E.C.	35	682	2,080	2.41	4.65	2.41	4.65	210.85	210.85	0.00	223.41
Asia-S.A.E.C.	2	7	43	2.41	4.48	2.41	4.48	274.32	274.32	0.00	278.74
Asia-U.S.E.C. (low inv. cost)	206	4,485	18,576	2.41	4.76	2.41	4.76	238.55	238.55	0.00	251.75
C.A.W.C.-C.A.E.C.	1	5	24	2.41	4.38	2.41	4.38	129.97	129.97	0.00	209.77
C.A.W.C.-Europe	2	22	74	2.41	4.36	2.41	4.36	153.30	153.30	0.00	206.86
C.A.W.C.-S.A.E.C.	0	4	11	2.41	4.38	2.41	4.38	163.77	163.77	0.00	170.68
C.A.W.C.-U.S.E.C.	0	3	8	2.41	4.48	2.41	4.48	157.98	157.98	0.00	250.90
Canada E.C.-Asia	32	561	1,415	2.41	4.50	2.41	4.50	230.54	230.54	0.00	235.78
Canada E.C.-Oceania	12	145	390	2.41	4.43	2.41	4.43	259.72	259.72	0.00	259.79
Canada E.C.-U.S.W.C.	5	136	377	2.41	4.73	2.41	4.73	160.73	160.73	0.00	225.00
Canada W.C.-Europe	32	491	1,160	2.41	4.46	2.41	4.46	212.22	212.22	0.00	275.57
C.A.E.C.-Asia	8	99	342	2.41	4.41	2.41	4.41	217.31	217.31	0.00	245.58
C.A.E.C.-C.A.W.C.	1	3	12	2.41	4.51	2.41	4.51	184.21	184.21	0.00	324.09
C.A.E.C.-Oceania	0	3	7	2.41	4.48	2.41	4.48	248.46	248.46	0.00	293.66
C.A.E.C.-S.A.W.C.	6	6	59	2.41	4.64	2.41	4.64	187.15	187.15	0.00	226.38
C.A.E.C.-U.S.W.C.	1	12	36	2.41	4.38	2.41	4.38	154.50	154.50	0.00	220.28
Europe-C.A.W.C.	0	1	3	2.41	4.36	2.41	4.36	153.30	153.30	0.00	244.84
Europe-Canada W.C.	24	311	789	2.41	4.43	2.41	4.43	224.73	224.73	0.00	283.75
Europe-S.A.W.C.	51	731	2,349	2.41	4.36	2.41	4.36	194.28	194.28	0.00	223.86
Europe-U.S.W.C.	144	2,855	8,033	2.41	4.62	2.41	4.62	209.75	209.75	0.00	217.16
Middle East-U.S.W.C.	8	116	283	2.41	4.42	2.41	4.42	221.09	221.09	0.00	248.07
Oceania-C.A.E.C.	2	24	50	2.41	4.48	2.41	4.48	248.46	248.46	0.00	293.66

(Continued)

Table B-13. Laden Transits, Tons Carried, Toll Revenue and Toll Rates, Current Toll Structure and Rates, 250,000 DWT Scenario, 2020, by Ship Type, Diversion Status, and Trade Route (1990 US$, except when noted)(continued)

Ship Type, Diversion Status, and Trade Route	Transits	Cargo Tonnage Carried (thousands)	Revenue (thousands) a/	Current Toll Schedule: Toll Per Panama Canal Net Ton	Current Toll Schedule: Toll Per Cargo Ton Carried	New Toll Schedule: Toll Per Panama Canal Net Ton	New Toll Schedule: Toll Per Cargo Ton Carried	Total Transportation Costs per Ton Carried, Via Panama Canal: With Current Toll Structure	Via Panama Canal: With New Toll Structure	Via Panama Canal: Percent Increase	Via Least Costly Alternative Route
Full Container Ships (continued)											
Non-Diverted Transits (continued)											
S.A.E.C.-C.A.W.C.	0	4	11	2.41	4.48	2.41	4.48	193.78	193.78	0.00	205.16
S.A.E.C.-U.S.W.C.	1	9	21	2.41	4.48	2.41	4.48	179.84	179.84	0.00	217.10
S.A.W.C.-C.A.E.C.	0	1	3	2.41	4.50	2.41	4.50	191.66	191.66	0.00	232.72
S.A.W.C.-Europe	103	1,966	4,801	2.41	4.36	2.41	4.36	194.27	194.27	0.00	223.85
S.A.W.C.-U.S.E.C.	46	483	1,167	2.41	4.48	2.41	4.48	170.90	170.90	0.00	219.08
U.S.E.C.-Asia (low inv. cost)	243	7,139	20,637	2.41	4.74	2.41	4.74	239.88	239.88	0.00	252.86
U.S.E.C.-C.A.W.C.	6	55	160	2.41	4.48	2.41	4.48	136.10	136.10	0.00	250.90
U.S.E.C.-S.A.W.C.	57	487	1,445	2.41	4.48	2.41	4.48	170.90	170.90	0.00	219.08
U.S.E.C.-U.S.W.C.	1	26	77	2.41	4.71	2.41	4.71	144.82	144.82	0.00	220.39
U.S.W.C.-Africa	0	0	0	2.41	5.04	2.41	5.04	197.04	197.04	0.00	228.00
U.S.W.C.-Canada E.C.	0	5	16	2.41	4.51	2.41	4.51	163.61	163.61	0.00	231.49
U.S.W.C.-C.A.E.C.	7	42	149	2.41	4.46	2.41	4.46	159.01	159.01	0.00	227.84
U.S.W.C.-Europe	194	3,428	11,035	2.41	4.64	2.41	4.64	212.59	212.59	0.00	219.05
U.S.W.C.-Middle East	8	103	293	2.41	4.42	2.41	4.42	221.46	221.46	0.00	229.44
U.S.W.C.-U.S.E.C.	13	168	768	2.41	4.59	2.41	4.59	145.28	145.28	0.00	222.40
Subtotal	1,251	24,619	76,708	2.41	4.65	2.41	4.65	220.97	220.97	0.00	238.34
General Cargo Ships											
Non-Diverted Transits											
Africa-C.A.W.C.	2	23	38	2.41	1.39	2.41	1.39	28.19	28.19	0.00	50.55
Africa-S.A.W.C.	2	35	39	2.41	1.39	2.41	1.39	34.14	34.14	0.00	49.55
Asia-Canada E.C.	0	2	2	2.41	1.39	2.41	1.39	38.09	38.09	0.00	41.65
Asia-C.A.E.C.	71	844	1,657	2.41	1.39	2.41	1.39	34.09	34.09	0.00	44.60

(Continued)

Table B-13. Laden Transits, Tons Carried, Toll Revenue and Toll Rates, Current Toll Structure and Rates, 250,000 DWT Scenario, 2020, by Ship Type, Diversion Status, and Trade Route (1990 US$, except when noted)(continued)

Ship Type, Diversion Status, and Trade Route	Transits	Cargo Tonnage Carried (thousands)	Revenue (thousands) a/	Current Toll Schedule: Toll Per Panama Canal Net Ton	Current Toll Schedule: Toll Per Cargo Ton Carried	New Toll Schedule: Toll Per Panama Canal Net Ton	New Toll Schedule: Toll Per Cargo Ton Carried	Total Transportation Costs per Ton Carried, Via Panama Canal: With Current Toll Structure	Total Transportation Costs per Ton Carried, Via Panama Canal: With New Toll Structure	Total Transportation Costs per Ton Carried, Via Panama Canal: Percent Increase	Total Transportation Costs per Ton Carried: Via Least Costly Alternative Route
General Cargo Ships (continued)											
Non-Diverted Transits (continued)											
Asia-S.A.E.C.	2	13	49	2.41	1.39	2.41	1.39	41.09	41.09	0.00	41.65
Asia-U.S.E.C.	26	339	620	2.41	1.39	2.41	1.39	34.56	34.56	0.00	47.75
C.A.W.C.-Africa	5	94	114	2.41	1.39	2.41	1.39	28.19	28.19	0.00	50.55
C.A.W.C.-C.A.E.C.	25	109	193	2.41	1.46	2.41	1.46	10.10	10.10	0.00	52.77
C.A.W.C.-Europe	21	120	314	2.41	1.41	2.41	1.41	26.48	26.48	0.00	46.59
C.A.W.C.-S.A.E.C.	8	51	114	2.41	1.41	2.41	1.41	25.50	25.50	0.00	29.62
C.A.W.C.-U.S.E.C.	10	51	81	2.41	1.45	2.41	1.45	11.45	11.45	0.00	65.61
Canada E.C.-Asia	5	12	108	2.41	1.39	2.41	1.39	38.09	38.09	0.00	41.65
Canada E.C.-C.A.W.C.	1	15	21	2.41	1.39	2.41	1.39	19.29	19.29	0.00	37.65
Canada E.C.-S.A.W.C.	6	53	137	2.41	1.39	2.41	1.39	25.19	25.19	0.00	31.75
Canada W.C.-C.A.E.C.	6	45	77	2.41	1.42	2.41	1.42	28.50	28.50	0.00	62.09
Canada W.C.-Europe	1	12	13	2.41	1.39	2.41	1.39	34.09	34.09	0.00	47.55
Canada W.C.-S.A.E.C.	6	58	87	2.41	1.41	2.41	1.41	33.28	33.28	0.00	62.32
C.A.E.C.-Asia	22	415	500	2.41	1.39	2.41	1.39	34.09	34.09	0.00	44.60
C.A.E.C.-C.A.W.C.	25	89	197	2.41	1.45	2.41	1.45	9.12	9.12	0.00	56.51
C.A.E.C.-Oceania	0	7	11	2.41	1.39	2.41	1.39	37.09	37.09	0.00	44.60
C.A.E.C.-S.A.W.C.	24	218	355	2.41	1.41	2.41	1.41	20.63	20.63	0.00	31.22
C.A.E.C.-U.S.W.C.	9	28	45	2.41	1.51	2.41	1.51	30.51	30.51	0.00	102.00
Europe-C.A.W.C.	44	300	772	2.41	1.40	2.41	1.40	25.47	25.47	0.00	53.48
Europe-Canada W.C.	2	9	13	2.41	1.50	2.41	1.50	71.00	71.00	0.00	119.28
Europe-S.A.W.C.	39	385	843	2.41	1.39	2.41	1.39	30.83	30.83	0.00	32.64
Europe-U.S.W.C.	2	11	22	2.41	1.44	2.41	1.44	55.78	55.78	0.00	93.53
Middle East-S.A.W.C.	4	2	23	2.41	1.50	2.41	1.50	64.45	64.45	0.00	89.22

(Continued)

Table B-13. Laden Transits, Tons Carried, Toll Revenue and Toll Rates, Current Toll Structure and Rates, 250,000 DWT Scenario, 2020, by Ship Type, Diversion Status, and Trade Route (1990 US$, except when noted)(continued)

Ship Type, Diversion Status, and Trade Route	Transits	Cargo Tonnage Carried (thousands)	Revenue (thousands) a/	Current Toll Schedule: Toll Per Panama Canal Net Ton	Current Toll Schedule: Toll Per Cargo Ton Carried	New Toll Schedule: Toll Per Panama Canal Net Ton	New Toll Schedule: Toll Per Cargo Ton Carried	Total Transportation Costs per Ton Carried: Via Panama Canal: With Current Toll Structure	Via Panama Canal: With New Toll Structure	Via Panama Canal: Percent Increase	Via Least Costly Alternative Route
General Cargo Ships (continued)											
Non-Diverted Transits (continued)											
Middle East-U.S.W.C.	2	4	36	2.41	1.39	2.41	1.39	37.09	37.09	0.00	42.65
Oceania-C.A.E.C.	0	3	10	2.41	1.39	2.41	1.39	36.09	36.09	0.00	44.60
Oceania-U.S.E.C.	1	7	15	2.41	1.43	2.41	1.43	51.18	51.18	0.00	61.38
S.A.E.C.-C.A.W.C.	7	148	167	2.41	1.39	2.41	1.39	23.19	23.19	0.00	24.80
S.A.E.C.-Canada W.C.	0	1	3	2.41	1.39	2.41	1.39	32.14	32.14	0.00	34.70
S.A.E.C.-U.S.W.C.	8	36	151	2.41	1.40	2.41	1.40	34.56	34.56	0.00	36.22
S.A.W.C.-Africa	4	81	95	2.41	1.39	2.41	1.39	31.14	31.14	0.00	47.60
S.A.W.C.-Canada E.C.	0	6	8	2.41	1.39	2.41	1.39	25.19	25.19	0.00	31.75
S.A.W.C.-C.A.E.C.	41	177	354	2.41	1.45	2.41	1.45	21.94	21.94	0.00	42.95
S.A.W.C.-Europe	98	1,601	2,267	2.41	1.39	2.41	1.39	30.14	30.14	0.00	31.75
S.A.W.C.-Middle East	2	23	36	2.41	1.39	2.41	1.39	32.14	32.14	0.00	37.70
S.A.W.C.-U.S.E.C.	27	205	429	2.41	1.40	2.41	1.40	23.26	23.26	0.00	36.08
U.S.E.C.-Asia	48	782	1,125	2.41	1.39	2.41	1.39	34.72	34.72	0.00	47.99
U.S.E.C.-C.A.W.C.	48	352	500	2.41	1.43	2.41	1.43	13.42	13.42	0.00	53.82
U.S.E.C.-Oceania	3	46	70	2.41	1.39	2.41	1.39	37.09	37.09	0.00	41.65
U.S.E.C.-S.A.W.C.	86	605	1,313	2.41	1.41	2.41	1.41	23.39	23.39	0.00	36.70
U.S.E.C.-U.S.W.C.	1	0	4	2.41	1.50	2.41	1.50	32.50	32.50	0.00	107.05
U.S.W.C.-Africa	2	25	52	2.41	1.39	2.41	1.39	34.09	34.09	0.00	42.60
U.S.W.C.-C.A.E.C.	1	0	8	2.41	1.50	2.41	1.50	29.71	29.71	0.00	96.69
U.S.W.C.-Europe	3	31	38	2.41	1.42	2.41	1.42	40.73	40.73	0.00	61.78
U.S.W.C.-S.A.E.C.	6	15	53	2.41	1.45	2.41	1.45	47.38	47.38	0.00	52.07
Subtotal	757	7,489	13,179	2.41	1.40	2.41	1.40	28.72	28.72	0.00	41.84
General Cargo Ships											
Diverted Transits											
Canada E.C.-Oceania	0	4	4	2.41	1.39	2.41	1.39	43.04	43.04	0.00	42.65

(Continued)

Table B-13. Laden Transits, Tons Carried, Toll Revenue and Toll Rates, Current Toll Structure and Rates, 250,000 DWT Scenario, 2020, by Ship Type, Diversion Status, and Trade Route (1990 US$, except when noted)(continued)

Ship Type, Diversion Status, and Trade Route	Transits	Cargo Tonnage Carried (thousands)	Revenue (thousands) a/	Current Toll Schedule: Toll Per Panama Canal Net Ton	Current Toll Schedule: Toll Per Cargo Ton Carried	New Toll Schedule: Toll Per Panama Canal Net Ton	New Toll Schedule: Toll Per Cargo Ton Carried	Total Transportation Costs per Ton Carried, Via Panama Canal: With Current Toll Structure	Total Transportation Costs per Ton Carried, Via Panama Canal: With New Toll Structure	Total Transportation Costs per Ton Carried, Via Panama Canal: Percent Increase	Total Transportation Costs per Ton Carried: Via Least Costly Alternative Route
General Cargo Ships (continued)											
Diverted Transits (continued)											
Canada W.C.-Middle East	1	6	1	2.41	1.39	2.41	1.39	39.04	39.04	0.00	37.70
Subtotal	1	10	5	2.41	1.39	2.41	1.39	40.55	40.55	0.00	39.57
Subtotal	758	7,499	13,184	2.41	1.40	2.41	1.40	28.74	28.74	0.00	41.84
Liquid Gas Carriers											
Non-Diverted Transits											
C.A.W.C.-C.A.E.C.	4	18	45	2.41	7.30	2.41	7.30	49.30	49.30	0.00	170.00
C.A.E.C.-Asia	15	82	294	2.41	4.67	2.41	4.67	107.52	107.52	0.00	152.78
C.A.E.C.-C.A.W.C.	96	1,270	3,670	2.41	3.79	2.41	3.79	23.91	23.91	0.00	71.88
C.A.E.C.-S.A.W.C.	8	119	313	2.41	3.83	2.41	3.83	40.83	40.83	0.00	61.00
C.A.E.C.-U.S.W.C.	1	12	30	2.41	3.83	2.41	3.83	45.83	45.83	0.00	95.00
Europe-C.A.W.C.	2	5	16	2.41	7.30	2.41	7.30	110.30	110.30	0.00	197.00
Europe-S.A.W.C.	0	1	2	2.41	3.82	2.41	3.82	67.82	67.82	0.00	72.00
Oceania-U.S.E.C.	6	91	286	2.41	3.62	2.41	3.62	66.11	66.11	0.00	75.48
S.A.E.C.-Asia	2	27	70	2.41	3.83	2.41	3.83	78.83	78.83	0.00	94.00
S.A.E.C.-C.A.W.C.	11	31	121	2.41	7.30	2.41	7.30	99.30	99.30	0.00	112.00
U.S.E.C.-Asia	23	273	828	2.41	3.86	2.41	3.86	82.65	82.65	0.00	121.83
U.S.E.C.-C.A.W.C.	1	2	8	2.41	7.30	2.41	7.30	57.30	57.30	0.00	191.00
U.S.E.C.-Oceania	1	11	33	2.41	3.83	2.41	3.83	86.83	86.83	0.00	100.00
U.S.E.C.-S.A.W.C.	2	6	22	2.41	7.30	2.41	7.30	94.30	94.30	0.00	153.00
Subtotal	172	1,947	5,739	2.41	3.90	2.41	3.90	41.82	41.82	0.00	84.66
Passenger Ships											
Non-Diverted Transits											
North-Bound	153	0	2,251	2.41	0.00	2.41	0.00	0.00	0.00	0.00	0.00

(Continued)

Table B-13. Laden Transits, Tons Carried, Toll Revenue and Toll Rates, Current Toll Structure and Rates, 250,000 DWT Scenario, 2020, by Ship Type, Diversion Status, and Trade Route (1990 US$, except when noted)(continued)

Ship Type, Diversion Status, and Trade Route	Transits	Cargo Tonnage Carried (thousands)	Revenue (thousands) a/	Current Toll Schedule: Toll Per Panama Canal Net Ton	Current Toll Schedule: Toll Per Cargo Ton Carried	New Toll Schedule: Toll Per Panama Canal Net Ton	New Toll Schedule: Toll Per Cargo Ton Carried	Total Transportation Costs per Ton Carried, Via Panama Canal: With Current Toll Structure	Total Transportation Costs per Ton Carried, Via Panama Canal: With New Toll Structure	Total Transportation Costs per Ton Carried, Via Panama Canal: Percent Increase	Total Transportation Costs per Ton Carried: Via Least Costly Alternative Route
Passenger Ships (continued)											
Non-Diverted Transits (continued)											
South-Bound	183	0	3,894	2.41	0.00	2.41	0.00	0.00	0.00	0.00	0.00
Subtotal	336	0	6,145	2.41	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Refrigerated Ships											
Non-Diverted Transits											
Africa-C.A.W.C.	0	0	3	2.41	4.27	2.41	4.27	113.87	113.87	0.00	208.00
Africa-S.A.W.C.	9	9	167	2.41	4.15	2.41	4.15	133.93	133.93	0.00	196.56
Asia-C.A.E.C.	20	71	406	2.41	3.97	2.41	3.97	128.09	128.09	0.00	173.29
Asia-S.A.E.C.	5	3	86	2.41	4.28	2.41	4.28	168.08	168.08	0.00	171.60
Asia-U.S.E.C.	0	0	7	2.41	4.28	2.41	4.28	140.48	140.48	0.00	198.20
C.A.W.C.-Africa	1	3	17	2.41	4.28	2.41	4.28	113.88	113.88	0.00	208.00
C.A.W.C.-Canada E.C.	0	2	6	2.41	4.28	2.41	4.28	76.48	76.48	0.00	152.00
C.A.W.C.-C.A.E.C.	20	132	436	2.41	3.88	2.41	3.88	50.94	50.94	0.00	124.12
C.A.W.C.-Europe	219	987	4,524	2.41	3.94	2.41	3.94	89.55	89.55	0.00	143.20
C.A.W.C.-S.A.E.C.	1	4	15	2.41	4.28	2.41	4.28	89.28	89.28	0.00	96.80
C.A.W.C.-U.S.E.C.	1	2	15	2.41	4.28	2.41	4.28	61.68	61.68	0.00	149.80
Canada E.C.-Asia	12	63	202	2.41	4.28	2.41	4.28	155.08	155.08	0.00	169.60
Canada E.C.-C.A.W.C.	5	10	94	2.41	3.95	2.41	3.95	70.22	70.22	0.00	142.12
Canada W.C.-Europe	3	28	62	2.41	4.12	2.41	4.12	131.88	131.88	0.00	187.18
C.A.E.C.-Asia	10	32	184	2.41	4.12	2.41	4.12	135.20	135.20	0.00	182.25
C.A.E.C.-C.A.W.C.	23	5	501	2.41	3.87	2.41	3.87	50.87	50.87	0.00	124.00
C.A.E.C.-S.A.W.C.	54	42	1,177	2.41	3.87	2.41	3.87	71.87	71.87	0.00	101.00
Europe-C.A.W.C.	160	13	3,463	2.41	3.89	2.41	3.89	89.41	89.41	0.00	177.49

(Continued)

Table B-13. Laden Transits, Tons Carried, Toll Revenue and Toll Rates, Current Toll Structure and Rates, 250,000 DWT Scenario, 2020, by Ship Type, Diversion Status, and Trade Route (1990 US$, except when noted)(continued)

Ship Type, Diversion Status, and Trade Route	Transits	Cargo Tonnage Carried (thousands)	Revenue (thousands) a/	Current Toll Schedule: Toll Per Panama Canal Net Ton	Current Toll Schedule: Toll Per Cargo Ton Carried	New Toll Schedule: Toll Per Panama Canal Net Ton	New Toll Schedule: Toll Per Cargo Ton Carried	Total Transportation Costs per Ton Carried: Via Panama Canal: With Current Toll Structure	Via Panama Canal: With New Toll Structure	Via Panama Canal: Percent Increase	Via Least Costly Alternative Route
Refrigerated Ships (continued)											
Non-Diverted Transits (continued)											
Europe-Canada W.C.	1	1	14	2.41	4.28	2.41	4.28	136.48	136.48	0.00	189.40
Europe-S.A.W.C.	169	145	3,282	2.41	4.02	2.41	4.02	116.06	116.06	0.00	121.88
Europe-U.S.W.C.	14	10	228	2.41	4.28	2.41	4.28	126.88	126.88	0.00	178.40
Middle East-S.A.W.C.	2	3	28	2.41	4.28	2.41	4.28	129.48	129.48	0.00	153.80
Oceania-C.A.E.C.	3	18	47	2.41	4.28	2.41	4.28	147.28	147.28	0.00	182.40
Oceania-U.S.E.C.	33	116	550	2.41	4.24	2.41	4.24	148.70	148.70	0.00	169.13
S.A.E.C.-Asia	11	50	185	2.41	4.28	2.41	4.28	137.48	137.48	0.00	159.80
S.A.W.C.-Africa	14	50	251	2.41	4.15	2.41	4.15	123.33	123.33	0.00	191.96
S.A.W.C.-C.A.E.C.	21	111	423	2.41	3.99	2.41	3.99	75.06	75.06	0.00	104.68
S.A.W.C.-Europe	928	4,670	17,690	2.41	4.05	2.41	4.05	115.41	115.41	0.00	121.08
S.A.W.C.-Middle East	5	17	87	2.41	4.28	2.41	4.28	129.48	129.48	0.00	153.80
S.A.W.C.-U.S.E.C.	607	2,226	11,833	2.41	4.02	2.41	4.02	80.58	80.58	0.00	117.32
U.S.E.C.-Asia	32	114	618	2.41	4.01	2.41	4.01	134.04	134.04	0.00	189.83
U.S.E.C.-C.A.W.C.	27	66	554	2.41	3.93	2.41	3.93	56.28	56.28	0.00	139.70
U.S.E.C.-S.A.W.C.	282	434	5,596	2.41	3.99	2.41	3.99	79.55	79.55	0.00	116.03
U.S.W.C.-Europe	126	672	2,220	2.41	4.17	2.41	4.17	126.00	126.00	0.00	177.24
U.S.W.C.-S.A.E.C.	1	3	14	2.41	4.24	2.41	4.24	121.95	121.95	0.00	124.71
Subtotal	2,819	10,116	54,985	2.41	4.02	2.41	4.02	103.72	103.72	0.00	129.20
Refrigerated Ships											
Diverted Transits											
Africa-Asia	29	151	398	2.41	4.28	2.41	4.28	162.08	162.08	0.00	160.80
Subtotal	29	151	398	2.41	4.28	2.41	4.28	162.08	162.08	0.00	160.80
Subtotal	2,847	10,266	55,382	2.41	4.02	2.41	4.02	104.57	104.57	0.00	129.67

(Continued)

Table B-13. Laden Transits, Tons Carried, Toll Revenue and Toll Rates, Current Toll Structure and Rates, 250,000 DWT Scenario, 2020, by Ship Type, Diversion Status, and Trade Route (1990 US$, except when noted)(continued)

Ship Type, Diversion Status, and Trade Route	Transits	Cargo Tonnage Carried (thousands)	Revenue (thousands) a/	Current Toll Schedule: Toll Per Panama Canal Net Ton	Current Toll Schedule: Toll Per Cargo Ton Carried	New Toll Schedule: Toll Per Panama Canal Net Ton	New Toll Schedule: Toll Per Cargo Ton Carried	Total Transportation Costs per Ton Carried, Via Panama Canal: With Current Toll Structure	Via Panama Canal: With New Toll Structure	Via Panama Canal: Percent Increase	Via Least Costly Alternative Route
Roll-On Roll-Off (continued)											
Non-Diverted Transits (continued)											
Asia-Canada E.C.	2	8	53	2.41	9.35	2.41	9.35	278.31	278.31	0.00	298.63
Asia-C.A.E.C.	24	473	1,651	2.41	7.92	2.41	7.92	225.40	225.40	0.00	256.05
Asia-U.S.E.C.	40	766	2,669	2.41	7.95	2.41	7.95	237.11	237.11	0.00	288.42
C.A.W.C.-Europe	12	64	473	2.41	8.66	2.41	8.66	181.66	181.66	0.00	257.00
C.A.W.C.-S.A.E.C.	0	0	2	2.41	8.67	2.41	8.67	193.67	193.67	0.00	203.00
C.A.W.C.-U.S.E.C.	1	1	48	2.41	8.66	2.41	8.66	155.66	155.66	0.00	251.00
Canada E.C.-Asia	8	41	245	2.41	9.30	2.41	9.30	327.47	327.47	0.00	336.67
Canada W.C.-C.A.E.C.	0	0	5	2.41	10.19	2.41	10.19	224.84	224.84	0.00	359.54
C.A.E.C.-C.A.W.C.	0	1	12	2.41	9.72	2.41	9.72	154.90	154.90	0.00	273.04
C.A.E.C.-Oceania	2	7	98	2.41	8.66	2.41	8.66	252.66	252.66	0.00	297.00
C.A.E.C.-S.A.W.C.	46	81	1,076	2.41	10.19	2.41	10.19	217.90	217.90	0.00	266.26
Europe-C.A.W.C.	18	112	703	2.41	8.66	2.41	8.66	181.66	181.66	0.00	311.00
Europe-S.A.W.C.	0	0	1	2.41	8.67	2.41	8.67	240.67	240.67	0.00	275.00
Europe-U.S.W.C.	0	2	16	2.41	8.66	2.41	8.66	241.66	241.66	0.00	311.00
Oceania-C.A.E.C.	0	0	0	2.41	8.01	2.41	8.01	223.21	223.21	0.00	261.95
S.A.W.C.-C.A.E.C.	12	23	271	2.41	10.19	2.41	10.19	217.90	217.90	0.00	266.26
S.A.W.C.-Europe	1	3	39	2.41	8.66	2.41	8.66	240.66	240.66	0.00	281.00
S.A.W.C.-U.S.E.C.	6	13	143	2.41	10.19	2.41	10.19	210.96	210.96	0.00	275.20
U.S.E.C.-Asia	8	56	339	2.41	8.64	2.41	8.64	275.58	275.58	0.00	337.50
U.S.E.C.-C.A.W.C.	2	3	75	2.41	8.66	2.41	8.66	132.66	132.66	0.00	251.00
U.S.E.C.-S.A.W.C.	26	45	599	2.41	10.19	2.41	10.19	210.96	210.96	0.00	275.20
U.S.W.C.-Canada E.C.	1	2	20	2.41	10.20	2.41	10.20	245.70	245.70	0.00	375.45
U.S.W.C.-C.A.E.C.	1	23	77	2.41	7.75	2.41	7.75	153.28	153.28	0.00	223.78

(Continued)

Table B-13. Laden Transits, Tons Carried, Toll Revenue and Toll Rates, Current Toll Structure and Rates, 250,000 DWT Scenario, 2020, by Ship Type, Diversion Status, and Trade Route (1990 US$, except when noted)(continued)

Ship Type, Diversion Status, and Trade Route	Transits	Cargo Tonnage Carried (thousands)	Revenue (thousands) a/	Current Toll Schedule: Toll Per Panama Canal Net Ton	Current Toll Schedule: Toll Per Cargo Ton Carried	New Toll Schedule: Toll Per Panama Canal Net Ton	New Toll Schedule: Toll Per Cargo Ton Carried	Total Transportation Costs per Ton Carried, Via Panama Canal: With Current Toll Structure	Via Panama Canal: With New Toll Structure	Via Panama Canal: Percent Increase	Via Least Costly Alternative Route
Roll-On Roll-Off (continued)											
Non-Diverted Transits (continued)											
U.S.W.C.-Europe	0	0	2	2.41	7.80	2.41	7.80	203.42	203.42	0.00	256.35
U.S.W.C.-U.S.E.C.	0	5	16	2.41	7.86	2.41	7.86	151.24	151.24	0.00	244.92
Subtotal	211	1,731	8,635	2.41	8.60	2.41	8.60	228.26	228.26	0.00	279.97
Roll-On Roll-Off											
Diverted Transits											
Canada E.C.-Oceania	1	31	108	2.41	7.77	2.41	7.77	240.88	240.88	0.00	239.11
Subtotal	1	31	108	2.41	7.77	2.41	7.77	240.88	240.88	0.00	239.11
Subtotal	213	1,762	8,743	2.41	8.59	2.41	8.59	228.49	228.49	0.00	279.24
Tankers											
Non-Diverted Transits											
Africa-U.S.W.C.	0	0	0	2.41	1.27	2.41	1.27	15.27	15.27	0.00	20.00
Asia-U.S.E.C.	1	30	34	2.41	1.27	2.41	1.27	22.15	22.15	0.00	31.82
C.A.W.C.-Africa	0	0	1	2.41	1.27	2.41	1.27	37.27	37.27	0.00	80.00
C.A.W.C.-Canada E.C.	0	4	4	2.41	1.27	2.41	1.27	10.23	10.23	0.00	23.86
C.A.W.C.-C.A.E.C.	14	85	268	2.41	1.27	2.41	1.27	8.68	8.68	0.00	28.70
C.A.W.C.-Europe	3	70	89	2.41	1.27	2.41	1.27	14.19	14.19	0.00	23.86
C.A.W.C.-U.S.E.C.	7	53	124	2.41	1.27	2.41	1.27	9.70	9.70	0.00	30.45
Canada E.C.-Asia	10	393	438	2.41	1.27	2.41	1.27	20.80	20.80	0.00	22.37
Canada W.C.-U.S.E.C.	5	253	323	2.41	1.27	2.41	1.27	11.42	11.42	0.00	21.15
C.A.E.C.-Asia	6	180	243	2.41	1.27	2.41	1.27	18.65	18.65	0.00	25.59
C.A.E.C.-C.A.W.C.	93	1,762	3,007	2.41	1.27	2.41	1.27	6.05	6.05	0.00	17.83

(Continued)

Table B-13. Laden Transits, Tons Carried, Toll Revenue and Toll Rates, Current Toll Structure and Rates, 250,000 DWT Scenario, 2020, by Ship Type, Diversion Status, and Trade Route (1990 US$, except when noted)(continued)

Ship Type, Diversion Status, and Trade Route	Transits	Cargo Tonnage Carried (thousands)	Revenue (thousands) a/	Current Toll Schedule: Toll Per Panama Canal Net Ton	Current Toll Schedule: Toll Per Cargo Ton Carried	New Toll Schedule: Toll Per Panama Canal Net Ton	New Toll Schedule: Toll Per Cargo Ton Carried	Total Transportation Costs per Ton Carried, Via Panama Canal: With Current Toll Structure	Via Panama Canal: With New Toll Structure	Via Panama Canal: Percent Increase	Via Least Costly Alternative Route
Tankers (continued)											
Non-Diverted Transits (continued)											
C.A.E.C.-S.A.W.C.	41	879	1,223	2.41	1.27	2.41	1.27	10.87	10.87	0.00	15.66
C.A.E.C.-U.S.W.C.	17	712	847	2.41	1.27	2.41	1.27	9.67	9.67	0.00	18.88
Europe-C.A.W.C.	12	54	104	2.41	1.27	2.41	1.27	20.41	20.41	0.00	36.30
Europe-S.A.W.C.	2	52	62	2.41	1.27	2.41	1.27	19.11	19.11	0.00	19.97
Europe-U.S.W.C.	6	196	231	2.41	1.27	2.41	1.27	18.01	18.01	0.00	25.98
Middle East-U.S.W.C.	0	0	0	2.41	1.25	2.41	1.25	23.25	23.25	0.00	28.00
Oceania-U.S.E.C.	9	153	199	2.41	1.27	2.41	1.27	23.22	23.22	0.00	26.68
S.A.E.C.-Asia	67	14,147	14,981	2.41	1.27	2.41	1.27	11.24	11.24	0.00	14.70
S.A.E.C.-C.A.W.C.	85	4,342	6,275	2.41	1.26	2.41	1.26	8.64	8.64	0.00	9.39
S.A.W.C.-Canada E.C.	2	36	47	2.41	1.27	2.41	1.27	16.94	16.94	0.00	21.75
S.A.W.C.-C.A.E.C.	42	1,636	2,095	2.41	1.27	2.41	1.27	8.64	8.64	0.00	12.32
S.A.W.C.-Europe	12	106	129	2.41	1.27	2.41	1.27	22.77	22.77	0.00	24.13
S.A.W.C.-U.S.E.C.	47	1,758	2,116	2.41	1.27	2.41	1.27	10.31	10.31	0.00	15.73
U.S.E.C.-Asia	80	2,655	3,218	2.41	1.27	2.41	1.27	18.79	18.79	0.00	26.64
U.S.E.C.-C.A.W.C.	33	614	943	2.41	1.27	2.41	1.27	8.14	8.14	0.00	23.15
U.S.E.C.-Canada W.C.	1	4	34	2.41	1.27	2.41	1.27	15.19	15.19	0.00	28.84
U.S.E.C.-Oceania	6	192	234	2.41	1.27	2.41	1.27	21.59	21.59	0.00	24.75
U.S.E.C.-S.A.W.C.	8	147	191	2.41	1.27	2.41	1.27	12.12	12.12	0.00	18.87
U.S.E.C.-U.S.W.C.	30	877	1,131	2.41	1.27	2.41	1.27	12.30	12.30	0.00	25.53
U.S.W.C.-Africa	7	224	330	2.41	1.26	2.41	1.26	13.36	13.36	0.00	17.15
U.S.W.C.-Canada E.C.	1	21	25	2.41	1.27	2.41	1.27	16.19	16.19	0.00	27.84
U.S.W.C.-C.A.E.C.	8	301	410	2.41	1.26	2.41	1.26	9.64	9.64	0.00	18.60
U.S.W.C.-S.A.E.C.	2	87	91	2.41	1.27	2.41	1.27	15.34	15.34	0.00	15.48

(Continued)

Table B-13. Laden Transits, Tons Carried, Toll Revenue and Toll Rates, Current Toll Structure and Rates, 250,000 DWT Scenario, 2020, by Ship Type, Diversion Status, and Trade Route (1990 US$, except when noted)(continued)

Ship Type, Diversion Status, and Trade Route	Transits	Cargo Tonnage Carried (thousands)	Revenue (thousands) a/	Current Toll Schedule: Toll Per Panama Canal Net Ton	Current Toll Schedule: Toll Per Cargo Ton Carried	New Toll Schedule: Toll Per Panama Canal Net Ton	New Toll Schedule: Toll Per Cargo Ton Carried	Total Transportation Costs per Ton Carried, Via Panama Canal: With Current Toll Structure	Via Panama Canal: With New Toll Structure	Via Panama Canal: Percent Increase	Via Least Costly Alternative Route
Tankers (continued)											
Non-Diverted Transits (continued)											
U.S.W.C.-U.S.E.C.	8	226	322	2.41	1.27	2.41	1.27	11.51	11.51	0.00	23.92
Subtotal	666	32,248	39,772	2.41	1.27	2.41	1.27	11.39	11.39	0.00	16.37
Tankers											
Diverted Transits											
S.A.E.C.-U.S.W.C.	49	1,967	2,339	2.41	1.26	2.41	1.26	14.90	14.90	0.00	14.66
Subtotal	49	1,967	2,339	2.41	1.26	2.41	1.26	14.90	14.90	0.00	14.66
Subtotal	715	34,216	42,111	2.41	1.27	2.41	1.27	11.59	11.59	0.00	16.27
Vehicle Carriers											
Non-Diverted Transits											
Asia-C.A.E.C.	13	33	851	2.41	29.09	2.41	29.09	392.50	392.50	0.00	459.78
Asia-U.S.E.C.	419	1,959	31,128	2.41	29.20	2.41	29.20	413.17	413.17	0.00	479.68
C.A.W.C.-C.A.E.C.	1	1	52	2.41	28.71	2.41	28.71	257.39	257.39	0.00	407.18
C.A.E.C.-C.A.W.C.	4	1	279	2.41	29.22	2.41	29.22	263.22	263.22	0.00	385.00
C.A.E.C.-Oceania	1	0	72	2.41	29.22	2.41	29.22	409.22	409.22	0.00	448.00
Europe-Canada W.C.	5	11	496	2.41	30.90	2.41	30.90	368.26	368.26	0.00	430.05
Europe-U.S.W.C.	149	285	12,992	2.41	29.95	2.41	29.95	381.68	381.68	0.00	429.50
S.A.W.C.-C.A.E.C.	0	0	3	2.41	28.69	2.41	28.69	307.69	307.69	0.00	354.00
U.S.E.C.-Asia	25	114	2,063	2.41	29.67	2.41	29.67	392.18	392.18	0.00	474.71
U.S.E.C.-Oceania	7	18	568	2.41	29.22	2.41	29.22	408.22	408.22	0.00	423.00
Subtotal	623	2,423	48,505	2.41	29.43	2.41	29.43	407.79	407.79	0.00	472.54
Vehicle Carriers											
Diverted Transits											
Asia-S.A.E.C.	0	0	4	2.41	29.13	2.41	29.13	453.29	453.29	0.00	435.60

(Continued)

Table B-13. Laden Transits, Tons Carried, Toll Revenue and Toll Rates, Current Toll Structure and Rates, 250,000 DWT Scenario, 2020, by Ship Type, Diversion Status, and Trade Route (1990 US$, except when noted)(continued)

Ship Type, Diversion Status, and Trade Route	Transits	Cargo Tonnage Carried (thousands)	Revenue (thousands) a/	Current Toll Schedule: Toll Per Panama Canal Net Ton	Current Toll Schedule: Toll Per Cargo Ton Carried	New Toll Schedule: Toll Per Panama Canal Net Ton	New Toll Schedule: Toll Per Cargo Ton Carried	Total Transportation Costs per Ton Carried: Via Panama Canal: With Current Toll Structure	Via Panama Canal: With New Toll Structure	Via Panama Canal: Percent Increase	Via Least Costly Alternative Route
Vehicle Carriers (continued)											
Diverted Transits (continued)											
Canada E.C.-Asia	0	1	10	2.41	29.22	2.41	29.22	437.22	437.22	0.00	425.00
Subtotal	0	1	14	2.41	29.18	2.41	29.18	440.32	440.32	0.00	427.05
Subtotal	623	2,424	48,519	2.41	29.43	2.41	29.43	407.80	407.80	0.00	472.52
Total Non-Diverting	13,100	331,558	555,899	2.41	1.81	2.41	1.81	43.68	43.68	0.00	52.69
Total Diverting	163	4,579	5,812	2.41	1.40	2.41	1.40	22.78	22.78	0.00	22.43

Notes: These calculations do not include all transits and tons carried forecast by the WEFA Group. For some ship-type and trade-route combinations (accounting for a total of 18 transits and 179803 tons), vessel costs were not available for every DWT size interval. As a result, these transits and tons were excluded. In addition, for 1981 transits and 37003606 tons, the cost by way of the Panama Canal without a toll was higher than the least costly alternative route. As a result, these transits and tons were excluded. Percentages may not calculate exactly as shown due to rounding. A fee of $0.40 per Panama Canal net ton has also been included to account for charges such as handling and agency fees incurred when transitting the Canal. The extra fee is only used to determine diversion status by adding it to the cost per ton carried and is not included in the revenue calculations.

a/ Revenue lost from diversions is measured as the revenue generated by the maximum, nondiverting toll rate increase.

Source: Nathan Associates Inc., based on forecasts of traffic and transportation costs provided by The WEFA Group.

CURRENT TOLL STRUCTURE AND RATES, STATUS QUO SCENARIO, 2060

Table B-14. Laden Transits, Tons Carried, and Toll Revenue, Current Toll Stucture and Rates, Status Quo Scenario, 2060, by Ship Type

	Transits				Tons Carried(thousands)				Revenue(1990 US$thousands)			
Ship Type	Canal	Diverted	Total	Diverted as a Percent of Total	Canal	Diverted	Total	Diverted as a Percent of Total	Canal	Lost a/	Total	Lost as a Percent of Total
Container-Breakbulk	2,310	0	2,310	0.00	34,316	0	34,316	0.00	64,410	0	64,410	0.00
Dry Bulk Carriers	2,552	0	2,552	0.00	112,337	0	112,337	0.00	130,296	0	130,296	0.00
Chemical Tankers	1,183	0	1,183	0.00	32,247	0	32,247	0.00	37,096	0	37,096	0.00
Full Container Ships	1,498	0	1,498	0.00	28,061	0	28,061	0.00	85,542	0	85,542	0.00
General Cargo Ships	1,381	2	1,383	0.13	13,345	13	13,357	0.10	23,527	35	23,561	0.15
Liquid Gas Carriers	104	0	104	0.00	1,071	0	1,071	0.00	3,148	0	3,148	0.00
Passenger Ships	435	0	435	0.00	0	0	0	0.00	6,694	0	6,694	0.00
Refrigerated Ships	3,897	0	3,897	0.00	15,828	0	15,828	0.00	90,982	0	90,982	0.00
Roll-On Roll-Off	397	0	397	0.02	2,929	0	2,929	0.01	15,542	3	15,545	0.02
Tankers	266	0	266	0.00	6,016	0	6,016	0.00	8,263	0	8,263	0.00
Vehicle Carriers	723	1	724	0.10	2,828	3	2,831	0.10	56,272	42	56,314	0.07
Total	14,747	3	14,750	0.02	248,977	16	248,993	0.01	521,772	80	521,852	0.02

Notes: These calculations do not include all transits and tons carried forecast by the WEFA Group. For some ship-type and trade-route combinations (accounting for a total of 13 transits and 219227 tons), vessel costs were not available for every DWT size interval. As a result, these transits and tons were excluded. In addition, for 934 transits and 22985287 tons, the cost by way of the Panama Canal without a toll was higher than the least costly alternative route. As a result, these transits and tons were excluded. A fee of $0.40 per Panama Canal net ton has also been included to account for charges such as handling and agency fees incurred when transitting the Canal. The extra fee is only used to determine diversion status by adding it to cost per ton carried and is not included in the revenue calculations.

a/ Revenue lost from diversions is measured as the revenue generated by the maximum, nondiverting toll rate increase.

Source: Nathan Associates Inc., based on forecasts of traffic and transportation costs provided by The WEFA Group.

Table B-15. Ballast Transits, Tons Carried, and Toll Revenue, Current Toll Stucture and Rates, Status Quo Scenario, 2060, by Ship Type

	Transits				Tons Carried(thousands)				Revenue(1990 US$thousands)			
Ship Type	Canal	Diverted	Total	Diverted as a Percent of Total	Canal	Diverted	Total	Diverted as a Percent of Total	Canal	Lost	Total	Lost as a Percent of Total
Container-Breakbulk	57	0	57	0.00	0	0	0	0.00	1,378	0	1,378	0.00
Dry Bulk Carriers	319	0	319	0.00	0	0	0	0.00	12,498	0	12,498	0.00
Chemical Tankers	95	0	95	0.00	0	0	0	0.00	2,635	0	2,635	0.00
Full Container Ships	5	0	5	0.00	0	0	0	0.00	288	0	288	0.00
General Cargo Ships	222	0	222	0.15	0	0	0	0.00	2,403	4	2,407	0.15
Liquid Gas Carriers	65	0	65	0.00	0	0	0	0.00	1,707	0	1,707	0.00
Passenger Ships	51	0	51	0.00	0	0	0	0.00	664	0	664	0.00
Refrigerated Ships	954	0	954	0.00	0	0	0	0.00	17,067	0	17,067	0.00
Roll-On Roll-Off	56	0	56	0.02	0	0	0	0.00	1,388	0	1,389	0.02
Tankers	125	0	125	0.00	0	0	0	0.00	3,192	0	3,192	0.00
Vehicle Carriers	440	0	440	0.07	0	0	0	0.00	25,947	18	25,965	0.07
Total	2,388	1	2,389	0.03	0	0	0	0.00	69,167	22	69,189	0.03

Note: Diversions of ballast transits are computed by diverting a proportion of ballast transits equal to lost revenue as a percent of total potential revenue for a particular laden ship type. See last column on previous table.

Source: Nathan Associates Inc., based on forecasts of traffic and transportation costs provided by The WEFA Group.

Table B-16. Laden Transits, Tons Carried, Toll Revenue and Toll Rates, Current Toll Structure and Rates, Status Quo Scenario, 2060, by Ship Type, Diversion Status, and Trade Route (1990 US$, except when noted)

Ship Type, Diversion Status, and Trade Route	Transits	Cargo Tonnage Carried (thousands)	Revenue (thousands) a/	Current Toll Schedule: Toll Per Panama Canal Net Ton	Current Toll Schedule: Toll Per Cargo Ton Carried	New Toll Schedule: Toll Per Panama Canal Net Ton	New Toll Schedule: Toll Per Cargo Ton Carried	Total Transportation Costs per Ton Carried: Via Panama Canal: With Current Toll Structure	Via Panama Canal: With New Toll Structure	Via Panama Canal: Percent Increase	Via Least Costly Alternative Route
Container-Breakbulk											
Non-Diverted Transits											
Africa-C.A.W.C.	6	185	190	2.41	1.85	2.41	1.85	72.26	72.26	0.00	119.11
Africa-Canada W.C.	0	5	12	2.41	1.87	2.41	1.87	92.01	92.01	0.00	106.57
Africa-U.S.W.C.	2	25	57	2.41	1.87	2.41	1.87	93.01	93.01	0.00	107.78
Asia-Canada E.C.	1	8	21	2.41	1.86	2.41	1.86	93.05	93.05	0.00	100.96
Asia-C.A.E.C.	135	1,246	3,556	2.41	1.87	2.41	1.87	97.20	97.20	0.00	113.04
Asia-S.A.E.C.	48	305	1,197	2.41	1.87	2.41	1.87	105.12	105.12	0.00	107.25
Asia-U.S.E.C.	139	1,759	3,914	2.41	1.86	2.41	1.86	99.37	99.37	0.00	123.49
C.A.W.C.-Africa	6	112	139	2.41	1.87	2.41	1.87	76.03	76.03	0.00	127.35
C.A.W.C.-C.A.E.C.	16	247	412	2.41	1.86	2.41	1.86	51.25	51.25	0.00	91.73
C.A.W.C.-Europe	41	304	1,083	2.41	1.87	2.41	1.87	65.68	65.68	0.00	95.59
C.A.W.C.-S.A.E.C.	23	10	566	2.41	1.87	2.41	1.87	72.11	72.11	0.00	77.11
C.A.W.C.-U.S.E.C.	7	40	169	2.41	1.87	2.41	1.87	57.32	57.32	0.00	95.90
Canada E.C.-C.A.W.C.	3	25	65	2.41	1.87	2.41	1.87	55.94	55.94	0.00	96.99
Canada E.C.-S.A.W.C.	1	17	26	2.41	1.85	2.41	1.85	65.70	65.70	0.00	79.70
Canada E.C.-U.S.W.C.	0	0	0	2.41	1.86	2.41	1.86	72.57	72.57	0.00	111.42
Canada W.C.-Africa	29	662	852	2.41	1.85	2.41	1.85	93.53	93.53	0.00	106.62
Canada W.C.-Europe	107	3,116	3,851	2.41	1.85	2.41	1.85	81.19	81.19	0.00	109.01
Canada W.C.-S.A.E.C.	22	421	544	2.41	1.87	2.41	1.87	74.11	74.11	0.00	114.56
Canada W.C.-U.S.E.C.	15	303	437	2.41	1.85	2.41	1.85	67.85	67.85	0.00	108.00
C.A.E.C.-Asia	13	270	327	2.41	1.87	2.41	1.87	96.31	96.31	0.00	111.98
C.A.E.C.-C.A.W.C.	13	49	331	2.41	1.87	2.41	1.87	52.15	52.15	0.00	94.93
C.A.E.C.-Canada W.C.	4	59	98	2.41	1.87	2.41	1.87	66.58	66.58	0.00	106.57
C.A.E.C.-Oceania	2	38	61	2.41	1.87	2.41	1.87	94.01	94.01	0.00	112.63

(Continued)

Table B-16. Laden Transits, Tons Carried, Toll Revenue and Toll Rates, Current Toll Structure and Rates, Status Quo Scenario, 2060, by Ship Type, Diversion Status, and Trade Route (1990 US$, except when noted)(continued)

Ship Type, Diversion Status, and Trade Route	Transits	Cargo Tonnage Carried (thousands)	Revenue (thousands) a/	Current Toll Schedule: Toll Per Panama Canal Net Ton	Current Toll Schedule: Toll Per Cargo Ton Carried	New Toll Schedule: Toll Per Panama Canal Net Ton	New Toll Schedule: Toll Per Cargo Ton Carried	Total Transportation Costs per Ton Carried: Via Panama Canal: With Current Toll Structure	Via Panama Canal: With New Toll Structure	Via Panama Canal: Percent Increase	Via Least Costly Alternative Route
Container-Breakbulk (continued)											
Non-Diverted Transits (continued)											
C.A.E.C.-S.A.W.C.	37	286	946	2.41	1.87	2.41	1.87	64.73	64.73	0.00	79.50
C.A.E.C.-U.S.W.C.	6	112	160	2.41	1.86	2.41	1.86	64.27	64.27	0.00	97.78
Europe-C.A.W.C.	44	271	1,125	2.41	1.87	2.41	1.87	66.79	66.79	0.00	118.42
Europe-Canada W.C.	7	217	294	2.41	1.85	2.41	1.85	83.24	83.24	0.00	107.58
Europe-S.A.W.C.	182	1,504	4,696	2.41	1.87	2.41	1.87	90.01	90.01	0.00	104.63
Europe-U.S.W.C.	36	1,115	1,405	2.41	1.85	2.41	1.85	82.41	82.41	0.00	107.84
Oceania-C.A.E.C.	10	99	243	2.41	1.87	2.41	1.87	94.77	94.77	0.00	113.61
S.A.E.C.-C.A.W.C.	16	252	421	2.41	1.87	2.41	1.87	71.65	71.65	0.00	76.57
S.A.W.C.-Canada E.C.	1	2	29	2.41	1.87	2.41	1.87	69.19	69.19	0.00	84.90
S.A.W.C.-C.A.E.C.	26	206	636	2.41	1.87	2.41	1.87	65.19	65.19	0.00	80.11
S.A.W.C.-Europe	329	5,753	8,373	2.41	1.87	2.41	1.87	89.68	89.68	0.00	106.41
S.A.W.C.-U.S.E.C.	239	2,340	5,962	2.41	1.87	2.41	1.87	62.12	62.12	0.00	81.53
U.S.E.C.-Asia	284	7,177	9,378	2.41	1.86	2.41	1.86	96.15	96.15	0.00	119.21
U.S.E.C.-C.A.W.C.	22	446	591	2.41	1.86	2.41	1.86	47.68	47.68	0.00	93.27
U.S.E.C.-S.A.W.C.	347	3,443	9,015	2.41	1.87	2.41	1.87	61.84	61.84	0.00	81.01
U.S.E.C.-U.S.W.C.	0	0	0	2.41	1.86	2.41	1.86	58.86	58.86	0.00	98.00
U.S.W.C.-Africa	22	367	910	2.41	1.85	2.41	1.85	85.43	85.43	0.00	102.85
U.S.W.C.-Canada E.C.	1	33	37	2.41	1.85	2.41	1.85	69.85	69.85	0.00	106.00
U.S.W.C.-C.A.E.C.	19	135	477	2.41	1.87	2.41	1.87	66.46	66.46	0.00	101.57
U.S.W.C.-Europe	51	1,343	1,786	2.41	1.86	2.41	1.86	83.60	83.60	0.00	108.54
U.S.W.C.-U.S.E.C.	0	6	16	2.41	1.85	2.41	1.85	60.33	60.33	0.00	102.02
Subtotal	2,310	34,316	64,410	2.41	1.86	2.41	1.86	83.50	83.50	0.00	105.56
Dry Bulk Carriers											
Non-Diverted Transits											
Africa-C.A.W.C.	31	1,201	1,231	2.41	1.31	2.41	1.31	15.51	15.51	0.00	27.11

(Continued)

Table B-16. Laden Transits, Tons Carried, Toll Revenue and Toll Rates, Current Toll Structure and Rates, Status Quo Scenario, 2060, by Ship Type, Diversion Status, and Trade Route (1990 US$, except when noted)(continued)

Ship Type, Diversion Status, and Trade Route	Transits	Cargo Tonnage Carried (thousands)	Revenue (thousands) a/	Current Toll Schedule: Toll Per Panama Canal Net Ton	Current Toll Schedule: Toll Per Cargo Ton Carried	New Toll Schedule: Toll Per Panama Canal Net Ton	New Toll Schedule: Toll Per Cargo Ton Carried	Total Transportation Costs per Ton Carried: Via Panama Canal: With Current Toll Structure	Via Panama Canal: With New Toll Structure	Via Panama Canal: Percent Increase	Via Least Costly Alternative Route
Dry Bulk Carriers (continued)											
Non-Diverted Transits (continued)											
Africa-S.A.W.C.	10	313	379	2.41	1.31	2.41	1.31	18.34	18.34	0.00	26.14
C.A.W.C.-Africa	2	52	73	2.41	1.30	2.41	1.30	15.33	15.33	0.00	27.18
C.A.W.C.-C.A.E.C.	65	2,167	2,716	2.41	1.30	2.41	1.30	7.57	7.57	0.00	16.30
C.A.W.C.-U.S.E.C.	49	1,854	2,150	2.41	1.29	2.41	1.29	7.74	7.74	0.00	18.15
Canada W.C.-C.A.E.C.	9	270	381	2.41	1.31	2.41	1.31	12.66	12.66	0.00	21.54
Canada W.C.-Europe	325	14,976	17,206	2.41	1.26	2.41	1.26	15.62	15.62	0.00	21.21
Canada W.C.-U.S.E.C.	110	3,183	4,417	2.41	1.31	2.41	1.31	13.41	13.41	0.00	23.33
C.A.E.C.-Asia	23	808	910	2.41	1.31	2.41	1.31	18.34	18.34	0.00	23.38
C.A.E.C.-C.A.W.C.	52	1,650	2,061	2.41	1.31	2.41	1.31	7.91	7.91	0.00	16.83
C.A.E.C.-Canada W.C.	3	105	126	2.41	1.31	2.41	1.31	12.74	12.74	0.00	21.59
C.A.E.C.-U.S.W.C.	9	286	368	2.41	1.31	2.41	1.31	11.74	11.74	0.00	20.59
Europe-C.A.W.C.	54	1,627	2,130	2.41	1.31	2.41	1.31	12.74	12.74	0.00	22.38
Europe-U.S.W.C.	155	4,679	6,906	2.41	1.29	2.41	1.29	15.94	15.94	0.00	20.80
U.S.E.C.-Asia	1,239	64,706	72,428	2.41	1.25	2.41	1.25	14.89	14.89	0.00	22.61
U.S.E.C.-C.A.W.C.	400	14,003	16,123	2.41	1.31	2.41	1.31	7.94	7.94	0.00	18.73
U.S.E.C.-U.S.W.C.	1	0	24	2.41	1.31	2.41	1.31	11.74	11.74	0.00	22.38
U.S.W.C.-Canada E.C.	6	211	241	2.41	1.30	2.41	1.30	14.00	14.00	0.00	22.50
U.S.W.C.-C.A.E.C.	1	30	38	2.41	1.31	2.41	1.31	11.66	11.66	0.00	20.54
U.S.W.C.-U.S.E.C.	9	215	390	2.41	1.29	2.41	1.29	11.95	11.95	0.00	23.13
Subtotal	2,552	112,337	130,296	2.41	1.27	2.41	1.27	13.75	13.75	0.00	21.66
Chemical Tankers											
Non-Diverted Transits											
Africa-S.A.W.C.	2	59	64	2.41	1.34	2.41	1.34	43.34	43.34	0.00	60.00

(Continued)

Table B-16. Laden Transits, Tons Carried, Toll Revenue and Toll Rates, Current Toll Structure and Rates, Status Quo Scenario, 2060, by Ship Type, Diversion Status, and Trade Route (1990 US$, except when noted)(continued)

Ship Type, Diversion Status, and Trade Route	Transits	Cargo Tonnage Carried (thousands)	Revenue (thousands) a/	Current Toll Schedule: Toll Per Panama Canal Net Ton	Current Toll Schedule: Toll Per Cargo Ton Carried	New Toll Schedule: Toll Per Panama Canal Net Ton	New Toll Schedule: Toll Per Cargo Ton Carried	Total Transportation Costs per Ton Carried, Via Panama Canal: With Current Toll Structure	Total Transportation Costs per Ton Carried, Via Panama Canal: With New Toll Structure	Total Transportation Costs per Ton Carried, Via Panama Canal: Percent Increase	Total Transportation Costs per Ton Carried: Via Least Costly Alternative Route
Chemical Tankers (continued)											
Non-Diverted Transits (continued)											
Asia-C.A.E.C.	4	50	66	2.41	1.34	2.41	1.34	54.00	54.00	0.00	70.82
Asia-U.S.E.C.	39	820	1,116	2.41	1.34	2.41	1.34	43.81	43.81	0.00	59.67
C.A.W.C.-C.A.E.C.	49	306	386	2.41	1.34	2.41	1.34	39.39	39.39	0.00	83.80
C.A.W.C.-Europe	9	169	187	2.41	1.34	2.41	1.34	38.02	38.02	0.00	56.27
C.A.W.C.-U.S.E.C.	63	885	1,077	2.41	1.34	2.41	1.34	27.74	27.74	0.00	58.89
Canada W.C.-Europe	4	106	136	2.41	1.34	2.41	1.34	42.34	42.34	0.00	57.00
Canada W.C.-U.S.E.C.	39	1,042	1,471	2.41	1.34	2.41	1.34	31.94	31.94	0.00	52.60
C.A.E.C.-Asia	9	293	324	2.41	1.34	2.41	1.34	42.34	42.34	0.00	55.00
C.A.E.C.-C.A.W.C.	5	115	160	2.41	1.34	2.41	1.34	21.34	21.34	0.00	42.00
C.A.E.C.-S.A.W.C.	11	217	281	2.41	1.34	2.41	1.34	30.34	30.34	0.00	40.32
C.A.E.C.-U.S.W.C.	2	15	16	2.41	1.34	2.41	1.34	55.94	55.94	0.00	98.40
Europe-C.A.W.C.	10	51	79	2.41	1.34	2.41	1.34	60.84	60.84	0.00	93.55
Europe-U.S.W.C.	10	261	303	2.41	1.34	2.41	1.34	42.05	42.05	0.00	56.46
S.A.W.C.-C.A.E.C.	36	134	436	2.41	1.34	2.41	1.34	44.18	44.18	0.00	60.24
S.A.W.C.-Europe	12	151	178	2.41	1.34	2.41	1.34	53.51	53.51	0.00	56.81
S.A.W.C.-U.S.E.C.	12	100	208	2.41	1.34	2.41	1.34	39.07	39.07	0.00	53.98
U.S.E.C.-Asia	683	23,746	25,668	2.41	1.34	2.41	1.34	41.54	41.54	0.00	56.40
U.S.E.C.-C.A.W.C.	27	238	308	2.41	1.34	2.41	1.34	34.18	34.18	0.00	74.41
U.S.E.C.-Canada W.C.	8	61	71	2.41	1.34	2.41	1.34	60.04	60.04	0.00	104.95
U.S.E.C.-Oceania	17	545	617	2.41	1.34	2.41	1.34	43.19	43.19	0.00	48.34
U.S.E.C.-S.A.W.C.	53	560	720	2.41	1.34	2.41	1.34	41.25	41.25	0.00	57.19
U.S.E.C.-U.S.W.C.	48	1,814	2,272	2.41	1.34	2.41	1.34	25.49	25.49	0.00	43.29
U.S.W.C.-C.A.E.C.	1	12	20	2.41	1.34	2.41	1.34	29.34	29.34	0.00	49.00

(Continued)

Table B-16. Laden Transits, Tons Carried, Toll Revenue and Toll Rates, Current Toll Structure and Rates, Status Quo Scenario, 2060, by Ship Type, Diversion Status, and Trade Route (1990 US$, except when noted)(continued)

Ship Type, Diversion Status, and Trade Route	Transits	Cargo Tonnage Carried (thousands)	Revenue (thousands) a/	Current Toll Schedule: Toll Per Panama Canal Net Ton	Current Toll Schedule: Toll Per Cargo Ton Carried	New Toll Schedule: Toll Per Panama Canal Net Ton	New Toll Schedule: Toll Per Cargo Ton Carried	Total Transportation Costs per Ton Carried, Via Panama Canal: With Current Toll Structure	Via Panama Canal: With New Toll Structure	Via Panama Canal: Percent Increase	Via Least Costly Alternative Route
Chemical Tankers (continued)											
Non-Diverted Transits (continued)											
U.S.W.C.-Europe	16	266	356	2.41	1.34	2.41	1.34	45.29	45.29	0.00	61.30
U.S.W.C.-U.S.E.C.	12	233	574	2.41	1.34	2.41	1.34	25.79	25.79	0.00	43.90
Subtotal	1,183	32,247	37,096	2.41	1.34	2.41	1.34	39.87	39.87	0.00	55.95
Full Container Ships											
Non-Diverted Transits											
Africa-U.S.W.C.	0	5	11	2.41	4.49	2.41	4.49	247.81	247.81	0.00	284.11
Asia-Canada E.C.	33	739	2,283	2.41	4.70	2.41	4.70	207.29	207.29	0.00	225.70
Asia-S.A.E.C.	4	14	91	2.41	4.49	2.41	4.49	274.66	274.66	0.00	282.11
Asia-U.S.E.C. (low inv. cost)	211	4,208	17,350	2.41	4.74	2.41	4.74	241.67	241.67	0.00	245.26
C.A.W.C.-C.A.E.C.	1	9	45	2.41	4.44	2.41	4.44	130.00	130.00	0.00	207.98
C.A.W.C.-Europe	2	37	130	2.41	4.42	2.41	4.42	152.02	152.02	0.00	204.85
C.A.W.C.-S.A.E.C.	0	7	21	2.41	4.44	2.41	4.44	162.41	162.41	0.00	169.25
C.A.W.C.-U.S.E.C.	0	5	12	2.41	4.49	2.41	4.49	161.41	161.41	0.00	253.29
Canada E.C.-Asia	35	658	1,697	2.41	4.55	2.41	4.55	226.90	226.90	0.00	236.18
Canada E.C.-U.S.W.C.	8	247	689	2.41	4.77	2.41	4.77	154.77	154.77	0.00	229.00
Canada W.C.-Europe	31	511	1,219	2.41	4.51	2.41	4.51	210.71	210.71	0.00	276.36
C.A.E.C.-Asia	8	116	405	2.41	4.47	2.41	4.47	213.60	213.60	0.00	244.68
C.A.E.C.-C.A.W.C.	1	7	27	2.41	4.47	2.41	4.47	143.12	143.12	0.00	235.87
C.A.E.C.-Oceania	1	8	21	2.41	4.49	2.41	4.49	250.78	250.78	0.00	297.02
C.A.E.C.-S.A.W.C.	2	10	40	2.41	4.49	2.41	4.49	178.89	178.89	0.00	214.04
C.A.E.C.-U.S.W.C.	2	26	82	2.41	4.45	2.41	4.45	152.93	152.93	0.00	218.40
Europe-C.A.W.C.	0	1	6	2.41	4.42	2.41	4.42	152.02	152.02	0.00	243.00

(Continued)

Table B-16. Laden Transits, Tons Carried, Toll Revenue and Toll Rates, Current Toll Structure and Rates, Status Quo Scenario, 2060, by Ship Type, Diversion Status, and Trade Route (1990 US$, except when noted)(continued)

Ship Type, Diversion Status, and Trade Route	Transits	Cargo Tonnage Carried (thousands)	Revenue (thousands) a/	Current Toll Schedule: Toll Per Panama Canal Net Ton	Current Toll Schedule: Toll Per Cargo Ton Carried	New Toll Schedule: Toll Per Panama Canal Net Ton	New Toll Schedule: Toll Per Cargo Ton Carried	Total Transportation Costs per Ton Carried: Via Panama Canal: With Current Toll Structure	Via Panama Canal: With New Toll Structure	Via Panama Canal: Percent Increase	Via Least Costly Alternative Route
Full Container Ships (continued)											
Non-Diverted Transits (continued)											
Europe-Canada W.C.	25	336	870	2.41	4.47	2.41	4.47	223.81	223.81	0.00	284.41
Europe-S.A.W.C.	81	1,309	4,322	2.41	4.42	2.41	4.42	191.22	191.22	0.00	221.95
Europe-U.S.W.C.	164	2,963	8,241	2.41	4.60	2.41	4.60	215.04	215.04	0.00	215.66
Middle East-U.S.W.C.	15	247	615	2.41	4.47	2.41	4.47	218.19	218.19	0.00	247.58
Oceania-C.A.E.C.	5	64	135	2.41	4.49	2.41	4.49	250.78	250.78	0.00	297.02
S.A.E.C.-C.A.W.C.	1	8	20	2.41	4.49	2.41	4.49	197.14	197.14	0.00	206.59
S.A.E.C.-U.S.W.C.	2	20	43	2.41	4.49	2.41	4.49	183.23	183.23	0.00	219.50
S.A.W.C.-C.A.E.C.	0	1	7	2.41	4.49	2.41	4.49	178.89	178.89	0.00	214.04
S.A.W.C.-Europe	144	3,081	7,725	2.41	4.42	2.41	4.42	191.21	191.21	0.00	221.95
S.A.W.C.-U.S.E.C.	99	1,047	2,537	2.41	4.49	2.41	4.49	174.32	174.32	0.00	221.50
U.S.E.C.-Asia (low inv. cost)	277	7,718	22,201	2.41	4.73	2.41	4.73	242.19	242.19	0.00	246.59
U.S.E.C.-C.A.W.C.	13	112	328	2.41	4.49	2.41	4.49	140.53	140.53	0.00	253.29
U.S.E.C.-S.A.W.C.	117	1,005	2,993	2.41	4.49	2.41	4.49	174.32	174.32	0.00	221.50
U.S.E.C.-U.S.W.C.	1	26	77	2.41	4.76	2.41	4.76	138.99	138.99	0.00	224.03
U.S.W.C.-Africa	0	0	0	2.41	4.64	2.41	4.64	193.64	193.64	0.00	233.00
U.S.W.C.-Canada E.C.	0	8	24	2.41	4.57	2.41	4.57	159.49	159.49	0.00	231.46
U.S.W.C.-C.A.E.C.	6	90	249	2.41	4.46	2.41	4.46	161.25	161.25	0.00	232.70
U.S.W.C.-Europe	163	2,735	8,481	2.41	4.62	2.41	4.62	216.86	216.86	0.00	217.65
U.S.W.C.-Middle East	25	356	1,031	2.41	4.47	2.41	4.47	219.26	219.26	0.00	229.43
U.S.W.C.-U.S.E.C.	21	326	1,513	2.41	4.65	2.41	4.65	141.16	141.16	0.00	224.31
Subtotal	1,498	28,061	85,542	2.41	4.62	2.41	4.62	218.08	218.08	0.00	234.14
General Cargo Ships											
Non-Diverted Transits											
Africa-C.A.W.C.	3	46	75	2.41	1.39	2.41	1.39	31.04	31.04	0.00	56.35

(Continued)

Table B-16. Laden Transits, Tons Carried, Toll Revenue and Toll Rates, Current Toll Structure and Rates, Status Quo Scenario, 2060, by Ship Type, Diversion Status, and Trade Route (1990 US$, except when noted)(continued)

Ship Type, Diversion Status, and Trade Route	Transits	Cargo Tonnage Carried (thousands)	Revenue (thousands) a/	Current Toll Schedule: Toll Per Panama Canal Net Ton	Current Toll Schedule: Toll Per Cargo Ton Carried	New Toll Schedule: Toll Per Panama Canal Net Ton	New Toll Schedule: Toll Per Cargo Ton Carried	Total Transportation Costs per Ton Carried: Via Panama Canal: With Current Toll Structure	Via Panama Canal: With New Toll Structure	Via Panama Canal: Percent Increase	Via Least Costly Alternative Route
General Cargo Ships (continued)											
Non-Diverted Transits (continued)											
Africa-S.A.W.C.	3	68	76	2.41	1.39	2.41	1.39	37.94	37.94	0.00	54.35
Asia-C.A.E.C.	127	1,501	2,947	2.41	1.39	2.41	1.39	36.99	36.99	0.00	49.45
Asia-S.A.E.C.	4	25	96	2.41	1.39	2.41	1.39	45.89	45.89	0.00	46.45
Asia-U.S.E.C.	49	632	1,154	2.41	1.39	2.41	1.39	38.14	38.14	0.00	52.33
C.A.W.C.-Africa	7	139	169	2.41	1.39	2.41	1.39	31.04	31.04	0.00	56.35
C.A.W.C.-C.A.E.C.	55	243	431	2.41	1.46	2.41	1.46	9.72	9.72	0.00	59.62
C.A.W.C.-Europe	51	291	764	2.41	1.41	2.41	1.41	29.65	29.65	0.00	52.03
C.A.W.C.-S.A.E.C.	15	99	225	2.41	1.41	2.41	1.41	27.71	27.71	0.00	32.29
C.A.W.C.-U.S.E.C.	16	84	131	2.41	1.45	2.41	1.45	12.26	12.26	0.00	74.92
Canada E.C.-C.A.W.C.	2	36	49	2.41	1.39	2.41	1.39	21.19	21.19	0.00	41.50
Canada W.C.-C.A.E.C.	16	120	204	2.41	1.42	2.41	1.42	31.71	31.71	0.00	70.25
Canada W.C.-Europe	1	21	22	2.41	1.39	2.41	1.39	37.94	37.94	0.00	52.40
Canada W.C.-S.A.E.C.	14	126	190	2.41	1.41	2.41	1.41	36.39	36.39	0.00	71.10
C.A.E.C.-Asia	28	538	648	2.41	1.39	2.41	1.39	36.99	36.99	0.00	49.45
C.A.E.C.-C.A.W.C.	56	209	459	2.41	1.45	2.41	1.45	8.51	8.51	0.00	63.99
C.A.E.C.-Oceania	1	13	21	2.41	1.39	2.41	1.39	40.94	40.94	0.00	49.45
C.A.E.C.-S.A.W.C.	53	492	799	2.41	1.41	2.41	1.41	22.58	22.58	0.00	34.74
C.A.E.C.-U.S.W.C.	12	42	67	2.41	1.50	2.41	1.50	32.53	32.53	0.00	110.69
Europe-C.A.W.C.	87	598	1,538	2.41	1.40	2.41	1.40	28.49	28.49	0.00	59.50
Europe-Canada W.C.	3	11	16	2.41	1.50	2.41	1.50	80.37	80.37	0.00	136.96
Europe-S.A.W.C.	68	680	1,490	2.41	1.39	2.41	1.39	33.84	33.84	0.00	35.65
Europe-U.S.W.C.	4	18	34	2.41	1.44	2.41	1.44	62.15	62.15	0.00	107.39
Middle East-S.A.W.C.	6	3	34	2.41	1.50	2.41	1.50	73.82	73.82	0.00	102.30

(Continued)

Table B-16. Laden Transits, Tons Carried, Toll Revenue and Toll Rates, Current Toll Structure and Rates, Status Quo Scenario, 2060, by Ship Type, Diversion Status, and Trade Route (1990 US$, except when noted)(continued)

Ship Type, Diversion Status, and Trade Route	Transits	Cargo Tonnage Carried (thousands)	Revenue (thousands) a/	Current Toll Schedule: Toll Per Panama Canal Net Ton	Current Toll Schedule: Toll Per Cargo Ton Carried	New Toll Schedule: Toll Per Panama Canal Net Ton	New Toll Schedule: Toll Per Cargo Ton Carried	Total Transportation Costs per Ton Carried: Via Panama Canal: With Current Toll Structure	Via Panama Canal: With New Toll Structure	Via Panama Canal: Percent Increase	Via Least Costly Alternative Route
General Cargo Ships (continued)											
Non-Diverted Transits (continued)											
Oceania-C.A.E.C.	1	7	25	2.41	1.39	2.41	1.39	39.94	39.94	0.00	49.45
Oceania-U.S.E.C.	1	6	13	2.41	1.43	2.41	1.43	57.41	57.41	0.00	69.46
S.A.E.C.-C.A.W.C.	13	261	293	2.41	1.39	2.41	1.39	25.14	25.14	0.00	26.70
S.A.W.C.-C.A.E.C.	82	361	719	2.41	1.45	2.41	1.45	23.90	23.90	0.00	48.57
S.A.W.C.-Europe	171	2,817	3,986	2.41	1.39	2.41	1.39	33.04	33.04	0.00	34.60
S.A.W.C.-U.S.E.C.	56	430	900	2.41	1.40	2.41	1.40	25.31	25.31	0.00	40.80
U.S.E.C.-Asia	74	1,214	1,745	2.41	1.39	2.41	1.39	38.38	38.38	0.00	52.66
U.S.E.C.-C.A.W.C.	103	776	1,101	2.41	1.43	2.41	1.43	14.67	14.67	0.00	60.90
U.S.E.C.-S.A.W.C.	187	1,336	2,898	2.41	1.41	2.41	1.41	25.45	25.45	0.00	41.52
U.S.E.C.-U.S.W.C.	1	0	4	2.41	1.50	2.41	1.50	35.37	35.37	0.00	122.89
U.S.W.C.-Africa	7	75	154	2.41	1.39	2.41	1.39	36.99	36.99	0.00	47.45
U.S.W.C.-C.A.E.C.	3	1	18	2.41	1.50	2.41	1.50	32.53	32.53	0.00	110.69
U.S.W.C.-Europe	3	25	31	2.41	1.42	2.41	1.42	44.83	44.83	0.00	69.85
Subtotal	1,381	13,345	23,527	2.41	1.40	2.41	1.40	30.45	30.45	0.00	46.46
General Cargo Ships											
Diverted Transits											
Canada W.C.-Middle East	2	13	35	2.41	1.39	2.41	1.39	42.89	42.89	0.00	42.50
Subtotal	2	13	35	2.41	1.39	2.41	1.39	42.89	42.89	0.00	42.50
Subtotal	1,383	13,357	23,561	2.41	1.40	2.41	1.40	30.47	30.47	0.00	46.45
Liquid Gas Carriers											
Non-Diverted Transits											
C.A.W.C.-C.A.E.C.	10	43	106	2.41	7.30	2.41	7.30	57.30	57.30	0.00	201.00

(Continued)

Table B-16. Laden Transits, Tons Carried, Toll Revenue and Toll Rates, Current Toll Structure and Rates, Status Quo Scenario, 2060, by Ship Type, Diversion Status, and Trade Route (1990 US$, except when noted)(continued)

Ship Type, Diversion Status, and Trade Route	Transits	Cargo Tonnage Carried (thousands)	Revenue (thousands) a/	Current Toll Schedule: Toll Per Panama Canal Net Ton	Current Toll Schedule: Toll Per Cargo Ton Carried	New Toll Schedule: Toll Per Panama Canal Net Ton	New Toll Schedule: Toll Per Cargo Ton Carried	Total Transportation Costs per Ton Carried: Via Panama Canal: With Current Toll Structure	Via Panama Canal: With New Toll Structure	Via Panama Canal: Percent Increase	Via Least Costly Alternative Route
Liquid Gas Carriers (continued)											
Non-Diverted Transits (continued)											
C.A.E.C.-Asia	10	53	189	2.41	4.67	2.41	4.67	124.16	124.16	0.00	178.06
C.A.E.C.-C.A.W.C.	56	742	2,143	2.41	3.79	2.41	3.79	26.91	26.91	0.00	81.65
C.A.E.C.-S.A.W.C.	4	60	159	2.41	3.83	2.41	3.83	45.83	45.83	0.00	70.00
C.A.E.C.-U.S.W.C.	0	3	6	2.41	3.83	2.41	3.83	51.83	51.83	0.00	109.00
Europe-C.A.W.C.	2	7	23	2.41	7.30	2.41	7.30	129.30	129.30	0.00	234.00
Europe-S.A.W.C.	0	1	3	2.41	3.82	2.41	3.82	76.82	76.82	0.00	82.00
Oceania-U.S.E.C.	4	57	180	2.41	3.62	2.41	3.62	75.10	75.10	0.00	85.98
S.A.E.C.-Asia	2	30	79	2.41	3.83	2.41	3.83	89.83	89.83	0.00	107.00
S.A.E.C.-C.A.W.C.	12	32	125	2.41	7.30	2.41	7.30	115.30	115.30	0.00	132.00
U.S.E.C.-Asia	3	41	126	2.41	3.86	2.41	3.86	94.04	94.04	0.00	139.47
U.S.E.C.-C.A.W.C.	0	1	3	2.41	7.30	2.41	7.30	66.30	66.30	0.00	226.00
U.S.E.C.-S.A.W.C.	1	2	7	2.41	7.30	2.41	7.30	109.30	109.30	0.00	182.00
Subtotal	104	1,071	3,148	2.41	3.99	2.41	3.99	44.45	44.45	0.00	96.49
Passenger Ships											
Non-Diverted Transits											
North-Bound	197	0	2,354	2.41	0.00	2.41	0.00	0.00	0.00	0.00	0.00
South-Bound	238	0	4,340	2.41	0.00	2.41	0.00	0.00	0.00	0.00	0.00
Subtotal	435	0	6,694	2.41	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Refrigerated Ships											
Non-Diverted Transits											
Africa-C.A.W.C.	0	0	2	2.41	4.00	2.41	4.00	120.20	120.20	0.00	224.60

(Continued)

Table B-16. Laden Transits, Tons Carried, Toll Revenue and Toll Rates, Current Toll Structure and Rates, Status Quo Scenario, 2060, by Ship Type, Diversion Status, and Trade Route (1990 US$, except when noted)(continued)

Ship Type, Diversion Status, and Trade Route	Transits	Cargo Tonnage Carried (thousands)	Revenue (thousands) a/	Current Toll Schedule: Toll Per Panama Canal Net Ton	Current Toll Schedule: Toll Per Cargo Ton Carried	New Toll Schedule: Toll Per Panama Canal Net Ton	New Toll Schedule: Toll Per Cargo Ton Carried	Total Transportation Costs per Ton Carried, Via Panama Canal: With Current Toll Structure	Via Panama Canal: With New Toll Structure	Via Panama Canal: Percent Increase	Via Least Costly Alternative Route
Refrigerated Ships (continued)											
Non-Diverted Transits (continued)											
Africa-S.A.W.C.	49	21	1,012	2.41	3.94	2.41	3.94	154.50	154.50	0.00	228.37
Asia-C.A.E.C.	25	95	615	2.41	3.86	2.41	3.86	131.86	131.86	0.00	180.00
Asia-U.S.E.C.	1	0	14	2.41	4.00	2.41	4.00	149.60	149.60	0.00	213.60
C.A.W.C.-Africa	2	7	35	2.41	4.00	2.41	4.00	120.20	120.20	0.00	224.60
C.A.W.C.-Canada E.C.	1	5	11	2.41	4.00	2.41	4.00	79.20	79.20	0.00	163.40
C.A.W.C.-C.A.E.C.	39	294	966	2.41	3.86	2.41	3.86	52.86	52.86	0.00	132.00
C.A.W.C.-Europe	276	1,493	6,811	2.41	3.86	2.41	3.86	92.86	92.86	0.00	150.00
C.A.W.C.-S.A.E.C.	2	9	31	2.41	4.00	2.41	4.00	94.40	94.40	0.00	103.00
C.A.W.C.-U.S.E.C.	1	2	22	2.41	4.00	2.41	4.00	64.00	64.00	0.00	160.40
Canada E.C.-Asia	15	92	274	2.41	4.00	2.41	4.00	165.80	165.80	0.00	182.60
Canada E.C.-C.A.W.C.	11	31	267	2.41	3.86	2.41	3.86	71.86	71.86	0.00	149.00
Canada W.C.-Europe	4	45	92	2.41	3.86	2.41	3.86	132.86	132.86	0.00	190.00
C.A.E.C.-Asia	13	37	269	2.41	3.93	2.41	3.93	144.92	144.92	0.00	197.33
C.A.E.C.-C.A.W.C.	43	11	1,065	2.41	3.86	2.41	3.86	52.86	52.86	0.00	132.00
C.A.E.C.-S.A.W.C.	93	82	2,300	2.41	3.86	2.41	3.86	75.86	75.86	0.00	107.00
Europe-C.A.W.C.	308	26	7,582	2.41	3.86	2.41	3.86	92.86	92.86	0.00	187.00
Europe-Canada W.C.	1	1	19	2.41	4.00	2.41	4.00	145.60	145.60	0.00	204.40
Europe-S.A.W.C.	295	278	6,904	2.41	3.88	2.41	3.88	119.82	119.82	0.00	127.10
Europe-U.S.W.C.	18	16	335	2.41	4.00	2.41	4.00	135.40	135.40	0.00	192.20
Middle East-S.A.W.C.	3	6	49	2.41	4.00	2.41	4.00	138.00	138.00	0.00	165.40
Oceania-C.A.E.C.	6	50	120	2.41	4.00	2.41	4.00	157.20	157.20	0.00	196.80
Oceania-U.S.E.C.	53	207	1,020	2.41	3.98	2.41	3.98	160.43	160.43	0.00	183.47
S.A.E.C.-Asia	12	62	217	2.41	4.00	2.41	4.00	146.60	146.60	0.00	172.00

(Continued)

Table B-16. Laden Transits, Tons Carried, Toll Revenue and Toll Rates, Current Toll Structure and Rates, Status Quo Scenario, 2060, by Ship Type, Diversion Status, and Trade Route (1990 US$, except when noted)(continued)

Ship Type, Diversion Status, and Trade Route	Transits	Cargo Tonnage Carried (thousands)	Revenue (thousands) a/	Current Toll Schedule: Toll Per Panama Canal Net Ton	Current Toll Schedule: Toll Per Cargo Ton Carried	New Toll Schedule: Toll Per Panama Canal Net Ton	New Toll Schedule: Toll Per Cargo Ton Carried	Total Transportation Costs per Ton Carried: Via Panama Canal: With Current Toll Structure	Via Panama Canal: With New Toll Structure	Via Panama Canal: Percent Increase	Via Least Costly Alternative Route
Refrigerated Ships (continued)											
Non-Diverted Transits (continued)											
S.A.W.C.-C.A.E.C.	40	241	967	2.41	3.86	2.41	3.86	76.48	76.48	0.00	107.85
S.A.W.C.-Europe	1,101	6,815	25,105	2.41	3.89	2.41	3.89	119.88	119.88	0.00	127.15
S.A.W.C.-U.S.E.C.	808	3,821	19,011	2.41	3.88	2.41	3.88	82.93	82.93	0.00	122.50
U.S.E.C.-Asia	46	189	1,080	2.41	3.87	2.41	3.87	139.10	139.10	0.00	198.29
U.S.E.C.-C.A.W.C.	70	196	1,715	2.41	3.86	2.41	3.86	57.86	57.86	0.00	146.00
U.S.E.C.-S.A.W.C.	423	892	10,203	2.41	3.87	2.41	3.87	82.19	82.19	0.00	121.46
U.S.W.C.-Europe	140	804	2,868	2.41	3.95	2.41	3.95	134.45	134.45	0.00	190.92
Subtotal	3,897	15,828	90,982	2.41	3.88	2.41	3.88	105.39	105.39	0.00	134.40
Roll-On Roll-Off											
Non-Diverted Transits											
Asia-Canada E.C.	3	15	97	2.41	9.35	2.41	9.35	298.90	298.90	0.00	324.43
Asia-C.A.E.C.	32	633	2,212	2.41	7.92	2.41	7.92	236.83	236.83	0.00	268.32
Asia-U.S.E.C.	67	1,286	4,478	2.41	7.95	2.41	7.95	248.85	248.85	0.00	304.22
C.A.W.C.-Europe	33	177	1,310	2.41	8.66	2.41	8.66	198.66	198.66	0.00	280.00
C.A.W.C.-U.S.E.C.	3	1	102	2.41	8.66	2.41	8.66	170.66	170.66	0.00	273.00
Canada E.C.-Asia	17	85	508	2.41	9.30	2.41	9.30	355.27	355.27	0.00	370.17
Canada W.C.-C.A.E.C.	0	1	11	2.41	10.19	2.41	10.19	239.87	239.87	0.00	394.39
C.A.E.C.-C.A.W.C.	1	2	26	2.41	9.72	2.41	9.72	167.54	167.54	0.00	296.40
C.A.E.C.-Oceania	7	20	281	2.41	8.66	2.41	8.66	275.66	275.66	0.00	332.00
C.A.E.C.-S.A.W.C.	85	149	1,976	2.41	10.19	2.41	10.19	232.93	232.93	0.00	280.17
Europe-C.A.W.C.	35	221	1,386	2.41	8.66	2.41	8.66	198.66	198.66	0.00	350.00
Europe-S.A.W.C.	0	0	3	2.41	8.67	2.41	8.67	262.67	262.67	0.00	303.00

(Continued)

Table B-16. Laden Transits, Tons Carried, Toll Revenue and Toll Rates, Current Toll Structure and Rates, Status Quo Scenario, 2060, by Ship Type, Diversion Status, and Trade Route (1990 US$, except when noted)(continued)

Ship Type, Diversion Status, and Trade Route	Transits	Cargo Tonnage Carried (thousands)	Revenue (thousands) a/	Current Toll Schedule: Toll Per Panama Canal Net Ton	Current Toll Schedule: Toll Per Cargo Ton Carried	New Toll Schedule: Toll Per Panama Canal Net Ton	New Toll Schedule: Toll Per Cargo Ton Carried	Total Transportation Costs per Ton Carried: Via Panama Canal: With Current Toll Structure	Via Panama Canal: With New Toll Structure	Via Panama Canal: Percent Increase	Via Least Costly Alternative Route
Roll-On Roll-Off (continued)											
Non-Diverted Transits (continued)											
Europe-U.S.W.C.	1	3	24	2.41	8.66	2.41	8.66	262.66	262.66	0.00	350.00
Oceania-C.A.E.C.	0	0	1	2.41	7.97	2.41	7.97	234.97	234.97	0.00	273.80
S.A.W.C.-C.A.E.C.	22	44	511	2.41	10.19	2.41	10.19	232.93	232.93	0.00	280.17
S.A.W.C.-Europe	2	5	68	2.41	8.66	2.41	8.66	262.66	262.66	0.00	311.00
S.A.W.C.-U.S.E.C.	12	25	279	2.41	10.19	2.41	10.19	224.99	224.99	0.00	292.08
U.S.E.C.-Asia	14	93	565	2.41	8.64	2.41	8.64	298.20	298.20	0.00	378.28
U.S.E.C.-C.A.W.C.	4	7	162	2.41	8.66	2.41	8.66	144.66	144.66	0.00	273.00
U.S.E.C.-S.A.W.C.	57	101	1,331	2.41	10.19	2.41	10.19	224.99	224.99	0.00	292.08
U.S.W.C.-Canada E.C.	1	2	17	2.41	10.20	2.41	10.20	263.70	263.70	0.00	414.27
U.S.W.C.-C.A.E.C.	2	48	164	2.41	7.75	2.41	7.75	160.82	160.82	0.00	232.64
U.S.W.C.-Europe	0	1	2	2.41	7.77	2.41	7.77	212.68	212.68	0.00	267.50
U.S.W.C.-U.S.E.C.	0	9	30	2.41	7.86	2.41	7.86	159.45	159.45	0.00	255.79
Subtotal	397	2,929	15,542	2.41	8.68	2.41	8.68	240.41	240.41	0.00	299.63
Roll-On Roll-Off											
Diverted Transits											
C.A.W.C.-S.A.E.C.	0	0	3	2.41	8.66	2.41	8.66	211.66	211.66	0.00	211.00
Subtotal	0	0	3	2.41	8.66	2.41	8.66	211.66	211.66	0.00	211.00
Subtotal	397	2,929	15,545	2.41	8.68	2.41	8.68	240.41	240.41	0.00	299.62
Tankers											
Non-Diverted Transits											
C.A.W.C.-Africa	0	0	2	2.41	1.27	2.41	1.27	46.27	46.27	0.00	100.00

(Continued)

Table B-16. Laden Transits, Tons Carried, Toll Revenue and Toll Rates, Current Toll Structure and Rates, Status Quo Scenario, 2060, by Ship Type, Diversion Status, and Trade Route (1990 US$, except when noted)(continued)

Ship Type, Diversion Status, and Trade Route	Transits	Cargo Tonnage Carried (thousands)	Revenue (thousands) a/	Current Toll Schedule: Toll Per Panama Canal Net Ton	Current Toll Schedule: Toll Per Cargo Ton Carried	New Toll Schedule: Toll Per Panama Canal Net Ton	New Toll Schedule: Toll Per Cargo Ton Carried	Total Transportation Costs per Ton Carried: Via Panama Canal: With Current Toll Structure	Via Panama Canal: With New Toll Structure	Via Panama Canal: Percent Increase	Via Least Costly Alternative Route
Tankers (continued)											
Non-Diverted Transits (continued)											
C.A.W.C.-Canada E.C.	0	8	9	2.41	1.27	2.41	1.27	12.21	12.21	0.00	28.82
C.A.W.C.-C.A.E.C.	16	95	299	2.41	1.27	2.41	1.27	10.26	10.26	0.00	34.99
C.A.W.C.-Europe	4	94	121	2.41	1.27	2.41	1.27	17.17	17.17	0.00	28.84
C.A.W.C.-U.S.E.C.	10	80	187	2.41	1.27	2.41	1.27	11.18	11.18	0.00	37.36
Canada W.C.-U.S.E.C.	6	255	320	2.41	1.28	2.41	1.28	13.76	13.76	0.00	26.23
C.A.E.C.-C.A.W.C.	46	750	1,276	2.41	1.27	2.41	1.27	7.38	7.38	0.00	22.70
C.A.E.C.-U.S.W.C.	5	228	272	2.41	1.28	2.41	1.28	11.94	11.94	0.00	23.43
Europe-C.A.W.C.	17	81	156	2.41	1.27	2.41	1.27	24.95	24.95	0.00	44.78
Europe-U.S.W.C.	4	109	129	2.41	1.27	2.41	1.27	22.50	22.50	0.00	32.22
S.A.W.C.-Europe	19	173	210	2.41	1.27	2.41	1.27	28.01	28.01	0.00	30.35
U.S.E.C.-Asia	92	2,946	3,607	2.41	1.28	2.41	1.28	22.72	22.72	0.00	32.54
U.S.E.C.-C.A.W.C.	14	260	400	2.41	1.27	2.41	1.27	9.23	9.23	0.00	28.15
U.S.E.C.-Canada W.C.	2	7	58	2.41	1.27	2.41	1.27	18.17	18.17	0.00	35.78
U.S.E.C.-Oceania	4	129	157	2.41	1.27	2.41	1.27	26.02	26.02	0.00	30.19
U.S.E.C.-U.S.W.C.	21	601	779	2.41	1.27	2.41	1.27	14.06	14.06	0.00	30.95
U.S.W.C.-C.A.E.C.	3	96	134	2.41	1.30	2.41	1.30	11.94	11.94	0.00	23.13
U.S.W.C.-U.S.E.C.	4	102	147	2.41	1.29	2.41	1.29	13.38	13.38	0.00	29.10
Subtotal	266	6,016	8,263	2.41	1.28	2.41	1.28	18.03	18.03	0.00	30.23
Vehicle Carriers											
Non-Diverted Transits											
Asia-C.A.E.C.	13	34	878	2.41	29.09	2.41	29.09	417.18	417.18	0.00	496.39
Asia-U.S.E.C.	481	2,251	35,762	2.41	29.20	2.41	29.20	439.57	439.57	0.00	516.31

(Continued)

Table B-16. Laden Transits, Tons Carried, Toll Revenue and Toll Rates, Current Toll Structure and Rates, Status Quo Scenario, 2060, by Ship Type, Diversion Status, and Trade Route (1990 US$, except when noted)(continued)

Ship Type, Diversion Status, and Trade Route	Transits	Cargo Tonnage Carried (thousands)	Revenue (thousands) a/	Current Toll Schedule: Toll Per Panama Canal Net Ton	Current Toll Schedule: Toll Per Cargo Ton Carried	New Toll Schedule: Toll Per Panama Canal Net Ton	New Toll Schedule: Toll Per Cargo Ton Carried	Total Transportation Costs per Ton Carried: Via Panama Canal: With Current Toll Structure	Via Panama Canal: With New Toll Structure	Via Panama Canal: Percent Increase	Via Least Costly Alternative Route
Vehicle Carriers (continued)											
Non-Diverted Transits (continued)											
C.A.W.C.-C.A.E.C.	3	3	117	2.41	28.71	2.41	28.71	266.36	266.36	0.00	440.99
C.A.E.C.-C.A.W.C.	8	3	640	2.41	29.22	2.41	29.22	272.22	272.22	0.00	411.00
C.A.E.C.-Oceania	1	0	75	2.41	29.22	2.41	29.22	434.22	434.22	0.00	482.00
Europe-Canada W.C.	7	16	728	2.41	30.90	2.41	30.90	386.38	386.38	0.00	457.44
Europe-U.S.W.C.	156	299	13,627	2.41	29.95	2.41	29.95	403.00	403.00	0.00	458.96
S.A.W.C.-C.A.E.C.	0	0	8	2.41	28.70	2.41	28.70	323.70	323.70	0.00	380.00
U.S.E.C.-Asia	42	192	3,473	2.41	29.67	2.41	29.67	415.80	415.80	0.00	510.17
U.S.E.C.-Oceania	13	30	965	2.41	29.22	2.41	29.22	433.22	433.22	0.00	453.00
Subtotal	723	2,828	56,272	2.41	29.42	2.41	29.42	433.09	433.09	0.00	508.39
Vehicle Carriers											
Diverted Transits											
Asia-S.A.E.C.	0	0	7	2.41	29.13	2.41	29.13	484.18	484.18	0.00	468.49
Canada E.C.-Asia	1	3	35	2.41	29.22	2.41	29.22	465.22	465.22	0.00	456.00
Subtotal	1	3	42	2.41	29.20	2.41	29.20	466.92	466.92	0.00	457.12
Subtotal	724	2,831	56,314	2.41	29.42	2.41	29.42	433.13	433.13	0.00	508.34
Total Non-Diverting	14,747	248,977	521,772	2.41	2.22	2.41	2.22	64.16	64.16	0.00	79.44
Total Diverting	3	16	80	2.41	3.14	2.41	3.14	123.12	123.12	0.00	121.03

Notes: These calculations do not include all transits and tons carried forecast by the WEFA Group. For some ship-type and trade-route combinations (accounting for a total of 13 transits and 219227 tons), vessel costs were not available for every DWT size interval. As a result, these transits and tons were excluded. In addition, for 934 transits and 22985287 tons, the cost by way of the Panama Canal without a toll was higher than the least costly alternative route. As a result, these transits and tons were excluded. Percentages may not calculate exactly as shown due to rounding. A fee of $0.40 per Panama Canal net ton has also been included to account for charges such as handling and agency fees incurred when transitting the Canal. The extra fee is only used to determine divesion status by adding it to the cost per ton carried and is not included in the revenue calculations.

a/ Revenue lost from diversions is measured as the revenue generated by the maximum, nondiverting toll rate increase.

Source: Nathan Associates Inc., based on forecasts of traffic and transportation costs provided by The WEFA Group.

CURRENT TOLL STRUCTURE AND RATES, 150,000-DWT SCENARIO, 2060

Table B-17. Laden Transits, Tons Carried, and Toll Revenue, Current Toll Stucture and Rates, 150,000 DWT Scenario, 2060, by Ship Type

	Transits				Tons Carried(thousands)				Revenue(1990 US$thousands)			
Ship Type	Canal	Diverted	Total	Diverted as a Percent of Total	Canal	Diverted	Total	Diverted as a Percent of Total	Canal	Lost a/	Total	Lost as a Percent of Total
Container-Breakbulk	2,465	0	2,465	0.00	36,996	0	36,996	0.00	68,785	0	68,785	0.00
Dry Bulk Carriers	4,972	72	5,044	1.43	271,004	3,196	274,199	1.17	299,723	3,912	303,635	1.29
Chemical Tankers	1,224	0	1,224	0.00	32,988	0	32,988	0.00	38,182	0	38,182	0.00
Full Container Ships	1,460	10	1,470	0.70	31,607	179	31,786	0.56	99,139	109	99,249	0.11
General Cargo Ships	1,462	2	1,464	0.15	13,971	20	13,991	0.14	25,195	43	25,239	0.17
Liquid Gas Carriers	104	0	104	0.00	1,071	0	1,071	0.00	3,148	0	3,148	0.00
Passenger Ships	435	0	435	0.00	0	0	0	0.00	6,694	0	6,694	0.00
Refrigerated Ships	3,937	46	3,983	1.15	15,968	292	16,260	1.80	91,800	926	92,726	1.00
Roll-On Roll-Off	397	3	400	0.70	2,929	61	2,990	2.05	15,542	188	15,730	1.19
Tankers	589	0	589	0.00	27,821	0	27,821	0.00	33,397	0	33,397	0.00
Vehicle Carriers	723	1	724	0.10	2,828	3	2,831	0.10	56,272	42	56,314	0.07
Total	17,770	134	17,904	0.75	437,183	3,751	440,934	0.85	737,878	5,220	743,099	0.70

Notes: These calculations do not include all transits and tons carried forecast by the WEFA Group. For some ship-type and trade-route combinations (accounting for a total of 27 transits and 291695 tons), vessel costs were not available for every DWT size interval. As a result, these transits and tons were excluded. In addition, for 2536 transits and 56215466 tons, the cost by way of the Panama Canal without a toll was higher than the least costly alternative route. As a result, these transits and tons were excluded. A fee of $0.40 per Panama Canal net ton has also been included to account for charges such as handling and agency fees incurred when transitting the Canal. The extra fee is only used to determine diversion status by adding it to cost per ton carried and is not included in the revenue calculations.

a/ Revenue lost from diversions is measured as the revenue generated by the maximum, nondiverting toll rate increase.

Source: Nathan Associates Inc., based on forecasts of traffic and transportation costs provided by The WEFA Group.

Table B-18. Ballast Transits, Tons Carried, and Toll Revenue, Current Toll Stucture and Rates, 150,000 DWT Scenario, 2060, by Ship Type

	Transits				Tons Carried(thousands)				Revenue(1990 US$thousands)			
Ship Type	Canal	Diverted	Total	Diverted as a Percent of Total	Canal	Diverted	Total	Diverted as a Percent of Total	Canal	Lost	Total	Lost as a Percent of Total
Container-Breakbulk	67	0	67	0.00	0	0	0	0.00	1,629	0	1,629	0.00
Dry Bulk Carriers	338	4	342	1.29	0	0	0	0.00	10,755	141	10,895	1.29
Chemical Tankers	127	0	127	0.00	0	0	0	0.00	3,447	0	3,447	0.00
Full Container Ships	6	0	6	0.11	0	0	0	0.00	260	0	260	0.11
General Cargo Ships	274	0	274	0.17	0	0	0	0.00	3,018	5	3,023	0.17
Liquid Gas Carriers	958	0	958	0.00	0	0	0	0.00	48,680	0	48,680	0.00
Passenger Ships	51	0	51	0.00	0	0	0	0.00	664	0	664	0.00
Refrigerated Ships	1,058	11	1,069	1.00	0	0	0	0.00	18,794	190	18,983	1.00
Roll-On Roll-Off	57	1	58	1.19	0	0	0	0.00	1,696	20	1,716	1.19
Tankers	305	0	305	0.00	0	0	0	0.00	15,991	0	15,991	0.00
Vehicle Carriers	441	0	441	0.07	0	0	0	0.00	26,024	18	26,043	0.07
Total	3,681	17	3,698	0.45	0	0	0	0.00	130,957	374	131,331	0.29

Note: Diversions of ballast transits are computed by diverting a proportion of ballast transits equal to lost revenue as a percent of total potential revenue for a particular laden ship type. See last column on previous table.

Source: Nathan Associates Inc., based on forecasts of traffic and transportation costs provided by The WEFA Group.

Table B-19. Laden Transits, Tons Carried, Toll Revenue and Toll Rates, Current Toll Structure and Rates, 150,000 DWT Scenario, 2060, by Ship Type, Diversion Status, and Trade Route (1990 US$, except when noted)

Ship Type, Diversion Status, and Trade Route	Transits	Cargo Tonnage Carried (thousands)	Revenue (thousands) a/	Current Toll Schedule: Toll Per Panama Canal Net Ton	Current Toll Schedule: Toll Per Cargo Ton Carried	New Toll Schedule: Toll Per Panama Canal Net Ton	New Toll Schedule: Toll Per Cargo Ton Carried	Total Transportation Costs per Ton Carried: Via Panama Canal: With Current Toll Structure	Via Panama Canal: With New Toll Structure	Via Panama Canal: Percent Increase	Via Least Costly Alternative Route
Container-Breakbulk											
Non-Diverted Transits											
Africa-C.A.W.C.	6	185	190	2.41	1.85	2.41	1.85	72.26	72.26	0.00	119.11
Africa-Canada W.C.	0	5	12	2.41	1.87	2.41	1.87	92.01	92.01	0.00	106.57
Africa-U.S.W.C.	2	25	57	2.41	1.87	2.41	1.87	93.01	93.01	0.00	107.78
Asia-Canada E.C.	1	8	21	2.41	1.86	2.41	1.86	93.05	93.05	0.00	100.96
Asia-C.A.E.C.	135	1,246	3,556	2.41	1.87	2.41	1.87	97.20	97.20	0.00	113.04
Asia-S.A.E.C.	48	305	1,197	2.41	1.87	2.41	1.87	105.12	105.12	0.00	107.25
Asia-U.S.E.C.	139	1,759	3,914	2.41	1.86	2.41	1.86	99.37	99.37	0.00	123.49
C.A.W.C.-Africa	6	112	139	2.41	1.87	2.41	1.87	76.03	76.03	0.00	127.35
C.A.W.C.-C.A.E.C.	16	247	412	2.41	1.86	2.41	1.86	51.25	51.25	0.00	91.73
C.A.W.C.-Europe	41	304	1,083	2.41	1.87	2.41	1.87	65.68	65.68	0.00	95.59
C.A.W.C.-S.A.E.C.	23	10	566	2.41	1.87	2.41	1.87	72.11	72.11	0.00	77.11
C.A.W.C.-U.S.E.C.	7	40	169	2.41	1.87	2.41	1.87	57.32	57.32	0.00	95.90
Canada E.C.-Asia	31	815	1,078	2.41	1.85	2.41	1.85	95.14	95.14	0.00	98.29
Canada E.C.-C.A.W.C.	3	25	65	2.41	1.87	2.41	1.87	55.94	55.94	0.00	96.99
Canada E.C.-Oceania	2	25	39	2.41	1.87	2.41	1.87	107.65	107.65	0.00	108.63
Canada E.C.-S.A.W.C.	1	17	26	2.41	1.85	2.41	1.85	65.70	65.70	0.00	79.70
Canada E.C.-U.S.W.C.	0	0	0	2.41	1.86	2.41	1.86	72.57	72.57	0.00	111.42
Canada W.C.-Africa	29	662	852	2.41	1.85	2.41	1.85	93.53	93.53	0.00	106.62
Canada W.C.-Europe	107	3,116	3,851	2.41	1.85	2.41	1.85	81.19	81.19	0.00	109.01
Canada W.C.-S.A.E.C.	22	421	544	2.41	1.87	2.41	1.87	74.11	74.11	0.00	114.56
Canada W.C.-U.S.E.C.	15	303	437	2.41	1.85	2.41	1.85	67.85	67.85	0.00	108.00
C.A.E.C.-Asia	13	270	327	2.41	1.87	2.41	1.87	96.31	96.31	0.00	111.98
C.A.E.C.-C.A.W.C.	13	49	331	2.41	1.87	2.41	1.87	52.15	52.15	0.00	94.93

(Continued)

Table B-19. Laden Transits, Tons Carried, Toll Revenue and Toll Rates, Current Toll Structure and Rates, 150,000 DWT Scenario, 2060, by Ship Type, Diversion Status, and Trade Route (1990 US$, except when noted)(continued)

Ship Type, Diversion Status, and Trade Route	Transits	Cargo Tonnage Carried (thousands)	Revenue (thousands) a/	Current Toll Schedule: Toll Per Panama Canal Net Ton	Current Toll Schedule: Toll Per Cargo Ton Carried	New Toll Schedule: Toll Per Panama Canal Net Ton	New Toll Schedule: Toll Per Cargo Ton Carried	Total Transportation Costs per Ton Carried, Via Panama Canal: With Current Toll Structure	Total Transportation Costs per Ton Carried, Via Panama Canal: With New Toll Structure	Total Transportation Costs per Ton Carried, Via Panama Canal: Percent Increase	Total Transportation Costs per Ton Carried: Via Least Costly Alternative Route
Container-Breakbulk (continued)											
Non-Diverted Transits (continued)											
C.A.E.C.-Canada W.C.	4	59	98	2.41	1.87	2.41	1.87	66.58	66.58	0.00	106.57
C.A.E.C.-Oceania	2	38	61	2.41	1.87	2.41	1.87	94.01	94.01	0.00	112.63
C.A.E.C.-S.A.W.C.	37	286	946	2.41	1.87	2.41	1.87	64.73	64.73	0.00	79.50
C.A.E.C.-U.S.W.C.	6	112	160	2.41	1.86	2.41	1.86	64.27	64.27	0.00	97.78
Europe-C.A.W.C.	44	271	1,125	2.41	1.87	2.41	1.87	66.79	66.79	0.00	118.42
Europe-Canada W.C.	7	217	294	2.41	1.85	2.41	1.85	83.24	83.24	0.00	107.58
Europe-S.A.W.C.	182	1,504	4,696	2.41	1.87	2.41	1.87	90.01	90.01	0.00	104.63
Europe-U.S.W.C.	36	1,115	1,405	2.41	1.85	2.41	1.85	82.41	82.41	0.00	107.84
Oceania-Canada E.C.	4	88	175	2.41	1.85	2.41	1.85	97.85	97.85	0.00	98.00
Oceania-C.A.E.C.	10	99	243	2.41	1.87	2.41	1.87	94.77	94.77	0.00	113.61
S.A.E.C.-C.A.W.C.	16	252	421	2.41	1.87	2.41	1.87	71.65	71.65	0.00	76.57
S.A.E.C.-Canada W.C.	25	335	652	2.41	1.87	2.41	1.87	92.79	92.79	0.00	98.78
S.A.E.C.-U.S.W.C.	84	1,260	2,217	2.41	1.87	2.41	1.87	78.16	78.16	0.00	80.87
S.A.W.C.-Africa	3	52	68	2.41	1.87	2.41	1.87	82.90	82.90	0.00	120.48
S.A.W.C.-Canada E.C.	1	2	29	2.41	1.87	2.41	1.87	69.19	69.19	0.00	84.90
S.A.W.C.-C.A.E.C.	26	206	636	2.41	1.87	2.41	1.87	65.19	65.19	0.00	80.11
S.A.W.C.-Europe	329	5,753	8,373	2.41	1.87	2.41	1.87	89.68	89.68	0.00	106.41
S.A.W.C.-U.S.E.C.	239	2,340	5,962	2.41	1.87	2.41	1.87	62.12	62.12	0.00	81.53
U.S.E.C.-Asia	284	7,177	9,378	2.41	1.86	2.41	1.86	96.15	96.15	0.00	119.21
U.S.E.C.-C.A.W.C.	22	446	591	2.41	1.86	2.41	1.86	47.68	47.68	0.00	93.27
U.S.E.C.-S.A.W.C.	347	3,443	9,015	2.41	1.87	2.41	1.87	61.84	61.84	0.00	81.01
U.S.E.C.-U.S.W.C.	0	0	0	2.41	1.86	2.41	1.86	58.86	58.86	0.00	98.00
U.S.W.C.-Africa	22	367	910	2.41	1.85	2.41	1.85	85.43	85.43	0.00	102.85

(Continued)

Table B-19. Laden Transits, Tons Carried, Toll Revenue and Toll Rates, Current Toll Structure and Rates, 150,000 DWT Scenario, 2060, by Ship Type, Diversion Status, and Trade Route (1990 US$, except when noted)(continued)

Ship Type, Diversion Status, and Trade Route	Transits	Cargo Tonnage Carried (thousands)	Revenue (thousands) a/	Current Toll Schedule: Toll Per Panama Canal Net Ton	Current Toll Schedule: Toll Per Cargo Ton Carried	New Toll Schedule: Toll Per Panama Canal Net Ton	New Toll Schedule: Toll Per Cargo Ton Carried	Total Transportation Costs per Ton Carried, Via Panama Canal: With Current Toll Structure	Via Panama Canal: With New Toll Structure	Via Panama Canal: Percent Increase	Via Least Costly Alternative Route
Container-Breakbulk (continued)											
Non-Diverted Transits (continued)											
U.S.W.C.-Canada E.C.	1	33	37	2.41	1.85	2.41	1.85	69.85	69.85	0.00	106.00
U.S.W.C.-C.A.E.C.	19	135	477	2.41	1.87	2.41	1.87	66.46	66.46	0.00	101.57
U.S.W.C.-Europe	51	1,343	1,786	2.41	1.86	2.41	1.86	83.60	83.60	0.00	108.54
U.S.W.C.-S.A.E.C.	6	104	147	2.41	1.87	2.41	1.87	79.98	79.98	0.00	82.98
U.S.W.C.-U.S.E.C.	0	6	16	2.41	1.85	2.41	1.85	60.33	60.33	0.00	102.02
Subtotal	2,465	36,996	68,785	2.41	1.86	2.41	1.86	83.70	83.70	0.00	104.44
Dry Bulk Carriers											
Non-Diverted Transits											
Africa-C.A.W.C.	29	1,201	1,221	2.41	1.30	2.41	1.30	15.34	15.34	0.00	27.11
Africa-Canada W.C.	156	7,645	7,494	2.41	1.28	2.41	1.28	17.82	17.82	0.00	19.99
Africa-S.A.W.C.	9	313	376	2.41	1.30	2.41	1.30	18.13	18.13	0.00	26.14
Africa-U.S.W.C.	10	297	489	2.41	1.27	2.41	1.27	16.17	16.17	0.00	19.94
Asia-Canada E.C.	15	695	850	2.41	1.25	2.41	1.25	17.55	17.55	0.00	18.43
Asia-C.A.E.C.	29	527	1,264	2.41	1.30	2.41	1.30	18.85	18.85	0.00	24.40
Asia-U.S.E.C.	386	12,134	19,160	2.41	1.27	2.41	1.27	16.62	16.62	0.00	23.16
C.A.W.C.-Africa	2	52	72	2.41	1.29	2.41	1.29	15.32	15.32	0.00	27.18
C.A.W.C.-C.A.E.C.	63	2,167	2,700	2.41	1.30	2.41	1.30	7.57	7.57	0.00	16.30
C.A.W.C.-Europe	19	626	870	2.41	1.28	2.41	1.28	12.19	12.19	0.00	18.57
C.A.W.C.-S.A.E.C.	16	268	664	2.41	1.30	2.41	1.30	11.59	11.59	0.00	12.04
C.A.W.C.-U.S.E.C.	47	1,854	2,138	2.41	1.29	2.41	1.29	7.69	7.69	0.00	18.15
Canada E.C.-Asia	120	6,018	6,870	2.41	1.19	2.41	1.19	19.24	19.24	0.00	20.41
Canada E.C.-Oceania	7	132	298	2.41	1.29	2.41	1.29	21.09	21.09	0.00	21.80

(Continued)

Table B-19. Laden Transits, Tons Carried, Toll Revenue and Toll Rates, Current Toll Structure and Rates, 150,000 DWT Scenario, 2060, by Ship Type, Diversion Status, and Trade Route (1990 US$, except when noted)(continued)

Ship Type, Diversion Status, and Trade Route	Transits	Cargo Tonnage Carried (thousands)	Revenue (thousands) a/	Current Toll Schedule: Toll Per Panama Canal Net Ton	Current Toll Schedule: Toll Per Cargo Ton Carried	New Toll Schedule: Toll Per Panama Canal Net Ton	New Toll Schedule: Toll Per Cargo Ton Carried	Total Transportation Costs per Ton Carried: Via Panama Canal: With Current Toll Structure	Via Panama Canal: With New Toll Structure	Via Panama Canal: Percent Increase	Via Least Costly Alternative Route
Dry Bulk Carriers (continued)											
Non-Diverted Transits (continued)											
Canada E.C.-S.A.W.C.	12	426	555	2.41	1.29	2.41	1.29	12.85	12.85	0.00	15.56
Canada W.C.-Africa	175	7,689	8,602	2.41	1.28	2.41	1.28	17.49	17.49	0.00	19.57
Canada W.C.-C.A.E.C.	9	270	378	2.41	1.30	2.41	1.30	12.59	12.59	0.00	21.54
Canada W.C.-Europe	304	15,944	17,800	2.41	1.22	2.41	1.22	16.30	16.30	0.00	21.21
Canada W.C.-S.A.E.C.	31	1,820	2,030	2.41	1.13	2.41	1.13	11.79	11.79	0.00	12.24
Canada W.C.-U.S.E.C.	105	3,183	4,392	2.41	1.30	2.41	1.30	13.34	13.34	0.00	23.33
C.A.E.C.-Asia	22	808	903	2.41	1.30	2.41	1.30	18.13	18.13	0.00	23.38
C.A.E.C.-C.A.W.C.	49	1,650	2,045	2.41	1.30	2.41	1.30	7.82	7.82	0.00	16.83
C.A.E.C.-Canada W.C.	3	105	126	2.41	1.30	2.41	1.30	12.61	12.61	0.00	21.59
C.A.E.C.-Oceania	1	22	35	2.41	1.30	2.41	1.30	19.89	19.89	0.00	22.59
C.A.E.C.-S.A.W.C.	24	734	989	2.41	1.30	2.41	1.30	10.61	10.61	0.00	14.07
C.A.E.C.-U.S.W.C.	9	286	366	2.41	1.30	2.41	1.30	11.61	11.61	0.00	20.59
Europe-C.A.W.C.	51	1,627	2,113	2.41	1.30	2.41	1.30	12.61	12.61	0.00	22.38
Europe-Canada W.C.	12	408	579	2.41	1.28	2.41	1.28	16.56	16.56	0.00	22.07
Europe-U.S.W.C.	142	4,679	6,793	2.41	1.28	2.41	1.28	15.66	15.66	0.00	20.80
Middle East-S.A.W.C.	2	104	116	2.41	1.25	2.41	1.25	14.08	14.08	0.00	15.83
Oceania-Canada E.C.	23	859	969	2.41	1.30	2.41	1.30	20.84	20.84	0.00	21.54
Oceania-C.A.E.C.	14	469	598	2.41	1.30	2.41	1.30	19.09	19.09	0.00	22.54
Oceania-U.S.E.C.	36	2,218	2,467	2.41	1.23	2.41	1.23	15.65	15.65	0.00	17.42
S.A.E.C.-Asia	60	2,563	2,889	2.41	1.28	2.41	1.28	16.77	16.77	0.00	18.82
S.A.E.C.-C.A.W.C.	12	441	480	2.41	1.30	2.41	1.30	11.61	11.61	0.00	12.07
S.A.E.C.-Canada W.C.	3	97	134	2.41	1.30	2.41	1.30	17.13	17.13	0.00	17.83
S.A.W.C.-Africa	5	296	284	2.41	1.25	2.41	1.25	14.34	14.34	0.00	21.40

(Continued)

Table B-19. Laden Transits, Tons Carried, Toll Revenue and Toll Rates, Current Toll Structure and Rates, 150,000 DWT Scenario, 2060, by Ship Type, Diversion Status, and Trade Route (1990 US$, except when noted)(continued)

Ship Type, Diversion Status, and Trade Route	Transits	Cargo Tonnage Carried (thousands)	Revenue (thousands) a/	Current Toll Schedule: Toll Per Panama Canal Net Ton	Current Toll Schedule: Toll Per Cargo Ton Carried	New Toll Schedule: Toll Per Panama Canal Net Ton	New Toll Schedule: Toll Per Cargo Ton Carried	Total Transportation Costs per Ton Carried, Via Panama Canal: With Current Toll Structure	Total Transportation Costs per Ton Carried, Via Panama Canal: With New Toll Structure	Total Transportation Costs per Ton Carried, Via Panama Canal: Percent Increase	Total Transportation Costs per Ton Carried: Via Least Costly Alternative Route
Dry Bulk Carriers (continued)											
Non-Diverted Transits (continued)											
S.A.W.C.-Canada E.C.	1	24	25	2.41	1.30	2.41	1.30	13.34	13.34	0.00	16.04
S.A.W.C.-C.A.E.C.	12	277	484	2.41	1.30	2.41	1.30	10.59	10.59	0.00	14.04
S.A.W.C.-Europe	238	9,167	10,510	2.41	1.29	2.41	1.29	15.52	15.52	0.00	16.02
S.A.W.C.-U.S.E.C.	91	3,585	3,855	2.41	1.30	2.41	1.30	11.28	11.28	0.00	15.48
U.S.E.C.-Asia	1,753	139,874	141,431	2.41	1.10	2.41	1.10	17.76	17.76	0.00	22.61
U.S.E.C.-C.A.W.C.	375	14,003	16,082	2.41	1.30	2.41	1.30	7.80	7.80	0.00	18.73
U.S.E.C.-Oceania	23	909	1,023	2.41	1.29	2.41	1.29	19.26	19.26	0.00	20.97
U.S.E.C.-S.A.W.C.	82	2,944	3,529	2.41	1.30	2.41	1.30	11.45	11.45	0.00	15.60
U.S.E.C.-U.S.W.C.	1	0	23	2.41	1.30	2.41	1.30	11.61	11.61	0.00	22.38
U.S.W.C.-Africa	198	9,018	10,885	2.41	1.26	2.41	1.26	15.70	15.70	0.00	19.37
U.S.W.C.-Canada E.C.	5	211	240	2.41	1.29	2.41	1.29	13.93	13.93	0.00	22.50
U.S.W.C.-C.A.E.C.	1	30	38	2.41	1.30	2.41	1.30	11.59	11.59	0.00	20.54
U.S.W.C.-Europe	168	9,505	10,565	2.41	1.24	2.41	1.24	14.02	14.02	0.00	18.82
U.S.W.C.-U.S.E.C.	8	215	388	2.41	1.28	2.41	1.28	11.92	11.92	0.00	23.13
Venezuela-Asia	5	615	535	2.41	0.99	2.41	0.99	19.49	19.49	0.00	23.70
Subtotal	4,972	271,004	299,723	2.41	1.18	2.41	1.18	16.23	16.23	0.00	21.14
Dry Bulk Carriers											
Diverted Transits											
Asia-S.A.E.C.	5	172	202	2.41	1.30	2.41	1.30	21.84	21.84	0.00	21.54
Columbia-Asia	3	352	290	2.41	9.87	2.41	9.87	27.57	27.57	0.00	25.50
Europe-S.A.W.C.	16	514	781	2.41	1.30	2.41	1.30	16.13	16.13	0.00	16.07
S.A.E.C.-U.S.W.C.	34	1,722	2,129	2.41	1.23	2.41	1.23	13.30	13.30	0.00	13.07

(Continued)

Table B-19. Laden Transits, Tons Carried, Toll Revenue and Toll Rates, Current Toll Structure and Rates, 150,000 DWT Scenario, 2060, by Ship Type, Diversion Status, and Trade Route (1990 US$, except when noted)(continued)

Ship Type, Diversion Status, and Trade Route	Transits	Cargo Tonnage Carried (thousands)	Revenue (thousands) a/	Current Toll Schedule: Toll Per Panama Canal Net Ton	Current Toll Schedule: Toll Per Cargo Ton Carried	New Toll Schedule: Toll Per Panama Canal Net Ton	New Toll Schedule: Toll Per Cargo Ton Carried	Total Transportation Costs per Ton Carried: Via Panama Canal: With Current Toll Structure	Via Panama Canal: With New Toll Structure	Via Panama Canal: Percent Increase	Via Least Costly Alternative Route
Dry Bulk Carriers (continued)											
Diverted Transits (continued)											
U.S.W.C.-S.A.E.C.	13	436	510	2.41	1.30	2.41	1.30	16.09	16.09	0.00	15.79
Subtotal	72	3,196	3,912	2.41	1.35	2.41	1.35	16.17	16.17	0.00	15.75
Subtotal	5,044	274,199	303,635	2.41	1.18	2.41	1.18	16.23	16.23	0.00	21.08
Chemical Tankers											
Non-Diverted Transits											
Africa-S.A.W.C.	2	59	64	2.41	1.34	2.41	1.34	43.34	43.34	0.00	60.00
Asia-C.A.E.C.	4	50	66	2.41	1.34	2.41	1.34	54.00	54.00	0.00	70.82
Asia-S.A.E.C.	4	23	129	2.41	1.34	2.41	1.34	50.34	50.34	0.00	52.00
Asia-U.S.E.C.	39	820	1,116	2.41	1.34	2.41	1.34	43.81	43.81	0.00	59.67
C.A.W.C.-C.A.E.C.	49	306	386	2.41	1.34	2.41	1.34	39.39	39.39	0.00	83.80
C.A.W.C.-Europe	9	169	187	2.41	1.34	2.41	1.34	38.02	38.02	0.00	56.27
C.A.W.C.-U.S.E.C.	63	885	1,077	2.41	1.34	2.41	1.34	27.74	27.74	0.00	58.89
Canada W.C.-Europe	4	106	136	2.41	1.34	2.41	1.34	42.34	42.34	0.00	57.00
Canada W.C.-U.S.E.C.	39	1,042	1,471	2.41	1.34	2.41	1.34	31.94	31.94	0.00	52.60
C.A.E.C.-Asia	9	293	324	2.41	1.34	2.41	1.34	42.34	42.34	0.00	55.00
C.A.E.C.-C.A.W.C.	5	115	160	2.41	1.34	2.41	1.34	21.34	21.34	0.00	42.00
C.A.E.C.-S.A.W.C.	11	217	281	2.41	1.34	2.41	1.34	30.34	30.34	0.00	40.32
C.A.E.C.-U.S.W.C.	2	15	16	2.41	1.34	2.41	1.34	55.94	55.94	0.00	98.40
Europe-C.A.W.C.	10	51	79	2.41	1.34	2.41	1.34	60.84	60.84	0.00	93.55
Europe-S.A.W.C.	9	98	111	2.41	1.34	2.41	1.34	58.65	58.65	0.00	62.50
Europe-U.S.W.C.	10	261	303	2.41	1.34	2.41	1.34	42.05	42.05	0.00	56.46
Oceania-U.S.E.C.	17	494	688	2.41	1.34	2.41	1.34	40.63	40.63	0.00	45.24

(Continued)

Table B-19. Laden Transits, Tons Carried, Toll Revenue and Toll Rates, Current Toll Structure and Rates, 150,000 DWT Scenario, 2060, by Ship Type, Diversion Status, and Trade Route (1990 US$, except when noted)(continued)

Ship Type, Diversion Status, and Trade Route	Transits	Cargo Tonnage Carried (thousands)	Revenue (thousands) a/	Current Toll Schedule: Toll Per Panama Canal Net Ton	Current Toll Schedule: Toll Per Cargo Ton Carried	New Toll Schedule: Toll Per Panama Canal Net Ton	New Toll Schedule: Toll Per Cargo Ton Carried	Total Transportation Costs per Ton Carried, Via Panama Canal: With Current Toll Structure	Total Transportation Costs per Ton Carried, Via Panama Canal: With New Toll Structure	Total Transportation Costs per Ton Carried, Via Panama Canal: Percent Increase	Total Transportation Costs per Ton Carried: Via Least Costly Alternative Route
Chemical Tankers (continued)											
Non-Diverted Transits (continued)											
S.A.E.C.-C.A.W.C.	10	79	101	2.41	1.34	2.41	1.34	50.34	50.34	0.00	54.86
S.A.E.C.-U.S.W.C.	1	43	51	2.41	1.34	2.41	1.34	30.34	30.34	0.00	31.00
S.A.W.C.-C.A.E.C.	36	134	436	2.41	1.34	2.41	1.34	44.18	44.18	0.00	60.24
S.A.W.C.-Europe	12	151	178	2.41	1.34	2.41	1.34	53.51	53.51	0.00	56.81
S.A.W.C.-U.S.E.C.	12	100	208	2.41	1.34	2.41	1.34	39.07	39.07	0.00	53.98
U.S.E.C.-Asia	683	23,746	25,668	2.41	1.34	2.41	1.34	41.54	41.54	0.00	56.40
U.S.E.C.-C.A.W.C.	27	238	308	2.41	1.34	2.41	1.34	34.18	34.18	0.00	74.41
U.S.E.C.-Canada W.C.	8	61	71	2.41	1.34	2.41	1.34	60.04	60.04	0.00	104.95
U.S.E.C.-Oceania	17	545	617	2.41	1.34	2.41	1.34	43.19	43.19	0.00	48.34
U.S.E.C.-S.A.W.C.	53	560	720	2.41	1.34	2.41	1.34	41.25	41.25	0.00	57.19
U.S.E.C.-U.S.W.C.	48	1,814	2,272	2.41	1.34	2.41	1.34	25.49	25.49	0.00	43.29
U.S.W.C.-C.A.E.C.	1	12	20	2.41	1.34	2.41	1.34	29.34	29.34	0.00	49.00
U.S.W.C.-Europe	16	266	356	2.41	1.34	2.41	1.34	45.29	45.29	0.00	61.30
U.S.W.C.-S.A.E.C.	0	6	7	2.41	1.34	2.41	1.34	38.34	38.34	0.00	39.00
U.S.W.C.-U.S.E.C.	12	233	574	2.41	1.34	2.41	1.34	25.79	25.79	0.00	43.90
Subtotal	1,224	32,988	38,182	2.41	1.34	2.41	1.34	39.96	39.96	0.00	55.77
Full Container Ships											
Non-Diverted Transits											
Africa-U.S.W.C.	0	5	11	2.41	4.49	2.41	4.49	247.81	247.81	0.00	284.11
Asia-Canada E.C.	33	739	2,283	2.41	4.70	2.41	4.70	207.29	207.29	0.00	225.70
Asia-S.A.E.C.	4	14	91	2.41	4.49	2.41	4.49	274.66	274.66	0.00	282.11
Asia-U.S.E.C. (low inv. cost)	186	5,208	21,829	2.41	4.92	2.41	4.92	231.70	231.70	0.00	245.26

(Continued)

Table B-19. Laden Transits, Tons Carried, Toll Revenue and Toll Rates, Current Toll Structure and Rates, 150,000 DWT Scenario, 2060, by Ship Type, Diversion Status, and Trade Route (1990 US$, except when noted)(continued)

Ship Type, Diversion Status, and Trade Route	Transits	Cargo Tonnage Carried (thousands)	Revenue (thousands) a/	Current Toll Schedule: Toll Per Panama Canal Net Ton	Current Toll Schedule: Toll Per Cargo Ton Carried	New Toll Schedule: Toll Per Panama Canal Net Ton	New Toll Schedule: Toll Per Cargo Ton Carried	Total Transportation Costs per Ton Carried: Via Panama Canal: With Current Toll Structure	Via Panama Canal: With New Toll Structure	Via Panama Canal: Percent Increase	Via Least Costly Alternative Route
Full Container Ships (continued)											
Non-Diverted Transits (continued)											
C.A.W.C.-C.A.E.C.	1	9	45	2.41	4.44	2.41	4.44	130.00	130.00	0.00	207.98
C.A.W.C.-Europe	2	37	130	2.41	4.42	2.41	4.42	152.02	152.02	0.00	204.85
C.A.W.C.-S.A.E.C.	0	7	21	2.41	4.44	2.41	4.44	162.41	162.41	0.00	169.25
C.A.W.C.-U.S.E.C.	0	5	12	2.41	4.49	2.41	4.49	161.41	161.41	0.00	253.29
Canada E.C.-Asia	35	658	1,697	2.41	4.55	2.41	4.55	226.90	226.90	0.00	236.18
Canada E.C.-Oceania	23	286	779	2.41	4.47	2.41	4.47	257.67	257.67	0.00	260.84
Canada E.C.-U.S.W.C.	8	247	689	2.41	4.77	2.41	4.77	154.77	154.77	0.00	229.00
Canada W.C.-Europe	31	511	1,219	2.41	4.51	2.41	4.51	210.71	210.71	0.00	276.36
C.A.E.C.-Asia	8	116	405	2.41	4.47	2.41	4.47	213.60	213.60	0.00	244.68
C.A.E.C.-C.A.W.C.	1	7	27	2.41	4.47	2.41	4.47	143.12	143.12	0.00	235.87
C.A.E.C.-Oceania	1	8	21	2.41	4.49	2.41	4.49	250.78	250.78	0.00	297.02
C.A.E.C.-S.A.W.C.	2	10	40	2.41	4.49	2.41	4.49	178.89	178.89	0.00	214.04
C.A.E.C.-U.S.W.C.	2	26	82	2.41	4.45	2.41	4.45	152.93	152.93	0.00	218.40
Europe-C.A.W.C.	0	1	6	2.41	4.42	2.41	4.42	152.02	152.02	0.00	243.00
Europe-Canada W.C.	25	336	870	2.41	4.47	2.41	4.47	223.81	223.81	0.00	284.41
Europe-S.A.W.C.	81	1,309	4,322	2.41	4.42	2.41	4.42	191.22	191.22	0.00	221.95
Europe-U.S.W.C.	140	3,123	8,904	2.41	4.67	2.41	4.67	205.80	205.80	0.00	215.66
Middle East-U.S.W.C.	15	247	615	2.41	4.47	2.41	4.47	218.19	218.19	0.00	247.58
Oceania-C.A.E.C.	5	64	135	2.41	4.49	2.41	4.49	250.78	250.78	0.00	297.02
S.A.E.C.-C.A.W.C.	1	8	20	2.41	4.49	2.41	4.49	197.14	197.14	0.00	206.59
S.A.E.C.-U.S.W.C.	2	20	43	2.41	4.49	2.41	4.49	183.23	183.23	0.00	219.50
S.A.W.C.-C.A.E.C.	0	1	7	2.41	4.49	2.41	4.49	178.89	178.89	0.00	214.04
S.A.W.C.-Europe	144	3,081	7,725	2.41	4.42	2.41	4.42	191.21	191.21	0.00	221.95

(Continued)

Table B-19. Laden Transits, Tons Carried, Toll Revenue and Toll Rates, Current Toll Structure and Rates, 150,000 DWT Scenario, 2060, by Ship Type, Diversion Status, and Trade Route (1990 US$, except when noted)(continued)

Ship Type, Diversion Status, and Trade Route	Transits	Cargo Tonnage Carried (thousands)	Revenue (thousands) a/	Current Toll Schedule: Toll Per Panama Canal Net Ton	Current Toll Schedule: Toll Per Cargo Ton Carried	New Toll Schedule: Toll Per Panama Canal Net Ton	New Toll Schedule: Toll Per Cargo Ton Carried	Total Transportation Costs per Ton Carried: Via Panama Canal: With Current Toll Structure	Via Panama Canal: With New Toll Structure	Via Panama Canal: Percent Increase	Via Least Costly Alternative Route
Full Container Ships (continued)											
Non-Diverted Transits (continued)											
S.A.W.C.-U.S.E.C.	99	1,047	2,537	2.41	4.49	2.41	4.49	174.32	174.32	0.00	221.50
U.S.E.C.-Asia (low inv. cost)	234	8,718	25,601	2.41	4.88	2.41	4.88	233.14	233.14	0.00	246.59
U.S.E.C.-C.A.W.C.	13	112	328	2.41	4.49	2.41	4.49	140.53	140.53	0.00	253.29
U.S.E.C.-S.A.W.C.	117	1,005	2,993	2.41	4.49	2.41	4.49	174.32	174.32	0.00	221.50
U.S.E.C.-U.S.W.C.	1	26	77	2.41	4.76	2.41	4.76	138.99	138.99	0.00	224.03
U.S.W.C.-Africa	0	0	0	2.41	4.64	2.41	4.64	193.64	193.64	0.00	233.00
U.S.W.C.-Canada E.C.	0	8	24	2.41	4.57	2.41	4.57	159.49	159.49	0.00	231.46
U.S.W.C.-C.A.E.C.	6	90	249	2.41	4.46	2.41	4.46	161.25	161.25	0.00	232.70
U.S.W.C.-Europe	196	3,835	12,758	2.41	4.68	2.41	4.68	208.75	208.75	0.00	217.65
U.S.W.C.-Middle East	25	356	1,031	2.41	4.47	2.41	4.47	219.26	219.26	0.00	229.43
U.S.W.C.-U.S.E.C.	21	326	1,513	2.41	4.65	2.41	4.65	141.16	141.16	0.00	224.31
Subtotal	1,460	31,607	99,139	2.41	4.72	2.41	4.72	213.85	213.85	0.00	234.46
Full Container Ships											
Diverted Transits											
Oceania-Canada E.C.	10	177	108	2.41	4.47	2.41	4.47	251.62	251.62	0.00	248.23
Oceania-S.A.E.C.	0	2	1	2.41	4.49	2.41	4.49	241.87	241.87	0.00	238.38
Subtotal	10	179	109	2.41	4.47	2.41	4.47	251.49	251.49	0.00	248.10
Subtotal	1,470	31,786	99,249	2.41	4.72	2.41	4.72	214.06	214.06	0.00	234.53
General Cargo Ships											
Non-Diverted Transits											
Africa-C.A.W.C.	3	46	75	2.41	1.39	2.41	1.39	31.04	31.04	0.00	56.35

(Continued)

Table B-19. Laden Transits, Tons Carried, Toll Revenue and Toll Rates, Current Toll Structure and Rates, 150,000 DWT Scenario, 2060, by Ship Type, Diversion Status, and Trade Route (1990 US$, except when noted)(continued)

Ship Type, Diversion Status, and Trade Route	Transits	Cargo Tonnage Carried (thousands)	Revenue (thousands) a/	Current Toll Schedule: Toll Per Panama Canal Net Ton	Current Toll Schedule: Toll Per Cargo Ton Carried	New Toll Schedule: Toll Per Panama Canal Net Ton	New Toll Schedule: Toll Per Cargo Ton Carried	Total Transportation Costs per Ton Carried: Via Panama Canal: With Current Toll Structure	Via Panama Canal: With New Toll Structure	Via Panama Canal: Percent Increase	Via Least Costly Alternative Route
General Cargo Ships (continued)											
Non-Diverted Transits (continued)											
Africa-S.A.W.C.	3	68	76	2.41	1.39	2.41	1.39	37.94	37.94	0.00	54.35
Asia-Canada E.C.	0	3	4	2.41	1.39	2.41	1.39	41.94	41.94	0.00	46.45
Asia-C.A.E.C.	127	1,501	2,947	2.41	1.39	2.41	1.39	36.99	36.99	0.00	49.45
Asia-S.A.E.C.	4	25	96	2.41	1.39	2.41	1.39	45.89	45.89	0.00	46.45
Asia-U.S.E.C.	49	632	1,154	2.41	1.39	2.41	1.39	38.14	38.14	0.00	52.33
C.A.W.C.-Africa	7	139	169	2.41	1.39	2.41	1.39	31.04	31.04	0.00	56.35
C.A.W.C.-C.A.E.C.	55	243	431	2.41	1.46	2.41	1.46	9.72	9.72	0.00	59.62
C.A.W.C.-Europe	51	291	764	2.41	1.41	2.41	1.41	29.65	29.65	0.00	52.03
C.A.W.C.-S.A.E.C.	15	99	225	2.41	1.41	2.41	1.41	27.71	27.71	0.00	32.29
C.A.W.C.-U.S.E.C.	16	84	131	2.41	1.45	2.41	1.45	12.26	12.26	0.00	74.92
Canada E.C.-Asia	10	25	237	2.41	1.39	2.41	1.39	41.94	41.94	0.00	46.45
Canada E.C.-C.A.W.C.	2	36	49	2.41	1.39	2.41	1.39	21.19	21.19	0.00	41.50
Canada E.C.-S.A.W.C.	16	148	380	2.41	1.39	2.41	1.39	28.09	28.09	0.00	35.55
Canada W.C.-C.A.E.C.	16	120	204	2.41	1.42	2.41	1.42	31.71	31.71	0.00	70.25
Canada W.C.-Europe	1	21	22	2.41	1.39	2.41	1.39	37.94	37.94	0.00	52.40
Canada W.C.-S.A.E.C.	14	126	190	2.41	1.41	2.41	1.41	36.39	36.39	0.00	71.10
C.A.E.C.-Asia	28	538	648	2.41	1.39	2.41	1.39	36.99	36.99	0.00	49.45
C.A.E.C.-C.A.W.C.	56	209	459	2.41	1.45	2.41	1.45	8.51	8.51	0.00	63.99
C.A.E.C.-Oceania	1	13	21	2.41	1.39	2.41	1.39	40.94	40.94	0.00	49.45
C.A.E.C.-S.A.W.C.	53	492	799	2.41	1.41	2.41	1.41	22.58	22.58	0.00	34.74
C.A.E.C.-U.S.W.C.	12	42	67	2.41	1.50	2.41	1.50	32.53	32.53	0.00	110.69
Europe-C.A.W.C.	87	598	1,538	2.41	1.40	2.41	1.40	28.49	28.49	0.00	59.50
Europe-Canada W.C.	3	11	16	2.41	1.50	2.41	1.50	80.37	80.37	0.00	136.96

(Continued)

Table B-19. Laden Transits, Tons Carried, Toll Revenue and Toll Rates, Current Toll Structure and Rates, 150,000 DWT Scenario, 2060, by Ship Type, Diversion Status, and Trade Route (1990 US$, except when noted)(continued)

Ship Type, Diversion Status, and Trade Route	Transits	Cargo Tonnage Carried (thousands)	Revenue (thousands) a/	Current Toll Schedule: Toll Per Panama Canal Net Ton	Current Toll Schedule: Toll Per Cargo Ton Carried	New Toll Schedule: Toll Per Panama Canal Net Ton	New Toll Schedule: Toll Per Cargo Ton Carried	Total Transportation Costs per Ton Carried: Via Panama Canal: With Current Toll Structure	Via Panama Canal: With New Toll Structure	Via Panama Canal: Percent Increase	Via Least Costly Alternative Route
General Cargo Ships (continued)											
Non-Diverted Transits (continued)											
Europe-S.A.W.C.	73	734	1,608	2.41	1.39	2.41	1.39	33.84	33.84	0.00	35.65
Europe-U.S.W.C.	4	18	34	2.41	1.44	2.41	1.44	62.15	62.15	0.00	107.39
Middle East-S.A.W.C.	6	3	34	2.41	1.50	2.41	1.50	73.82	73.82	0.00	102.30
Middle East-U.S.W.C.	7	19	157	2.41	1.39	2.41	1.39	40.94	40.94	0.00	47.45
Oceania-C.A.E.C.	1	7	25	2.41	1.39	2.41	1.39	39.94	39.94	0.00	49.45
Oceania-U.S.E.C.	2	9	20	2.41	1.43	2.41	1.43	57.41	57.41	0.00	69.46
S.A.E.C.-C.A.W.C.	13	261	293	2.41	1.39	2.41	1.39	25.14	25.14	0.00	26.70
S.A.E.C.-Canada W.C.	0	2	6	2.41	1.39	2.41	1.39	35.04	35.04	0.00	38.55
S.A.E.C.-U.S.W.C.	17	77	324	2.41	1.40	2.41	1.40	38.23	38.23	0.00	40.19
S.A.W.C.-Africa	8	149	175	2.41	1.39	2.41	1.39	34.04	34.04	0.00	53.35
S.A.W.C.-Canada E.C.	1	14	19	2.41	1.39	2.41	1.39	28.09	28.09	0.00	35.55
S.A.W.C.-C.A.E.C.	82	361	719	2.41	1.45	2.41	1.45	23.90	23.90	0.00	48.57
S.A.W.C.-Europe	171	2,817	3,986	2.41	1.39	2.41	1.39	33.04	33.04	0.00	34.60
S.A.W.C.-Middle East	2	25	39	2.41	1.39	2.41	1.39	35.99	35.99	0.00	42.50
S.A.W.C.-U.S.E.C.	56	430	900	2.41	1.40	2.41	1.40	25.31	25.31	0.00	40.80
U.S.E.C.-Asia	74	1,214	1,745	2.41	1.39	2.41	1.39	38.38	38.38	0.00	52.66
U.S.E.C.-C.A.W.C.	103	776	1,101	2.41	1.43	2.41	1.43	14.67	14.67	0.00	60.90
U.S.E.C.-Oceania	6	89	135	2.41	1.39	2.41	1.39	40.94	40.94	0.00	46.45
U.S.E.C.-S.A.W.C.	187	1,336	2,898	2.41	1.41	2.41	1.41	25.45	25.45	0.00	41.52
U.S.E.C.-U.S.W.C.	1	0	4	2.41	1.50	2.41	1.50	35.37	35.37	0.00	122.89
U.S.W.C.-Africa	7	75	154	2.41	1.39	2.41	1.39	36.99	36.99	0.00	47.45
U.S.W.C.-C.A.E.C.	3	1	18	2.41	1.50	2.41	1.50	32.53	32.53	0.00	110.69
U.S.W.C.-Europe	3	25	31	2.41	1.42	2.41	1.42	44.83	44.83	0.00	69.85

(Continued)

Table B-19. Laden Transits, Tons Carried, Toll Revenue and Toll Rates, Current Toll Structure and Rates, 150,000 DWT Scenario, 2060, by Ship Type, Diversion Status, and Trade Route (1990 US$, except when noted)(continued)

Ship Type, Diversion Status, and Trade Route	Transits	Cargo Tonnage Carried (thousands)	Revenue (thousands) a/	Current Toll Schedule: Toll Per Panama Canal Net Ton	Current Toll Schedule: Toll Per Cargo Ton Carried	New Toll Schedule: Toll Per Panama Canal Net Ton	New Toll Schedule: Toll Per Cargo Ton Carried	Total Transportation Costs per Ton Carried: Via Panama Canal: With Current Toll Structure	Via Panama Canal: With New Toll Structure	Via Panama Canal: Percent Increase	Via Least Costly Alternative Route
General Cargo Ships (continued)											
Non-Diverted Transits (continued)											
U.S.W.C.-S.A.E.C.	8	19	68	2.41	1.45	2.41	1.45	53.26	53.26	0.00	59.12
Subtotal	1,462	13,971	25,195	2.41	1.40	2.41	1.40	30.67	30.67	0.00	46.35
General Cargo Ships											
Diverted Transits											
Canada E.C.-Oceania	0	7	9	2.41	1.39	2.41	1.39	47.84	47.84	0.00	47.45
Canada W.C.-Middle East	2	13	35	2.41	1.39	2.41	1.39	42.89	42.89	0.00	42.50
Subtotal	2	20	43	2.41	1.39	2.41	1.39	44.65	44.65	0.00	44.26
Subtotal	1,464	13,991	25,239	2.41	1.40	2.41	1.40	30.69	30.69	0.00	46.34
Liquid Gas Carriers											
Non-Diverted Transits											
C.A.W.C.-C.A.E.C.	10	43	106	2.41	7.30	2.41	7.30	57.30	57.30	0.00	201.00
C.A.E.C.-Asia	10	53	189	2.41	4.67	2.41	4.67	124.16	124.16	0.00	178.06
C.A.E.C.-C.A.W.C.	56	742	2,143	2.41	3.79	2.41	3.79	26.91	26.91	0.00	81.65
C.A.E.C.-S.A.W.C.	4	60	159	2.41	3.83	2.41	3.83	45.83	45.83	0.00	70.00
C.A.E.C.-U.S.W.C.	0	3	6	2.41	3.83	2.41	3.83	51.83	51.83	0.00	109.00
Europe-C.A.W.C.	2	7	23	2.41	7.30	2.41	7.30	129.30	129.30	0.00	234.00
Europe-S.A.W.C.	0	1	3	2.41	3.82	2.41	3.82	76.82	76.82	0.00	82.00
Oceania-U.S.E.C.	4	57	180	2.41	3.62	2.41	3.62	75.10	75.10	0.00	85.98
S.A.E.C.-Asia	2	30	79	2.41	3.83	2.41	3.83	89.83	89.83	0.00	107.00
S.A.E.C.-C.A.W.C.	12	32	125	2.41	7.30	2.41	7.30	115.30	115.30	0.00	132.00
U.S.E.C.-Asia	3	41	126	2.41	3.86	2.41	3.86	94.04	94.04	0.00	139.47

(Continued)

Table B-19. Laden Transits, Tons Carried, Toll Revenue and Toll Rates, Current Toll Structure and Rates, 150,000 DWT Scenario, 2060, by Ship Type, Diversion Status, and Trade Route (1990 US$, except when noted)(continued)

Ship Type, Diversion Status, and Trade Route	Transits	Cargo Tonnage Carried (thousands)	Revenue (thousands) a/	Current Toll Schedule: Toll Per Panama Canal Net Ton	Current Toll Schedule: Toll Per Cargo Ton Carried	New Toll Schedule: Toll Per Panama Canal Net Ton	New Toll Schedule: Toll Per Cargo Ton Carried	Total Transportation Costs per Ton Carried: Via Panama Canal: With Current Toll Structure	Via Panama Canal: With New Toll Structure	Via Panama Canal: Percent Increase	Via Least Costly Alternative Route
Liquid Gas Carriers (continued)											
Non-Diverted Transits (continued)											
U.S.E.C.-C.A.W.C.	0	1	3	2.41	7.30	2.41	7.30	66.30	66.30	0.00	226.00
U.S.E.C.-S.A.W.C.	1	2	7	2.41	7.30	2.41	7.30	109.30	109.30	0.00	182.00
Subtotal	104	1,071	3,148	2.41	3.99	2.41	3.99	44.45	44.45	0.00	96.49
Passenger Ships											
Non-Diverted Transits											
North-Bound	197	0	2,354	2.41	0.00	2.41	0.00	0.00	0.00	0.00	0.00
South-Bound	238	0	4,340	2.41	0.00	2.41	0.00	0.00	0.00	0.00	0.00
Subtotal	435	0	6,694	2.41	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Refrigerated Ships											
Non-Diverted Transits											
Africa-C.A.W.C.	0	0	2	2.41	4.00	2.41	4.00	120.20	120.20	0.00	224.60
Africa-S.A.W.C.	49	21	1,012	2.41	3.94	2.41	3.94	154.50	154.50	0.00	228.37
Asia-C.A.E.C.	25	95	615	2.41	3.86	2.41	3.86	131.86	131.86	0.00	180.00
Asia-S.A.E.C.	7	5	130	2.41	4.00	2.41	4.00	180.00	180.00	0.00	184.20
Asia-U.S.E.C.	1	0	14	2.41	4.00	2.41	4.00	149.60	149.60	0.00	213.60
C.A.W.C.-Africa	2	7	35	2.41	4.00	2.41	4.00	120.20	120.20	0.00	224.60
C.A.W.C.-Canada E.C.	1	5	11	2.41	4.00	2.41	4.00	79.20	79.20	0.00	163.40
C.A.W.C.-C.A.E.C.	39	294	966	2.41	3.86	2.41	3.86	52.86	52.86	0.00	132.00
C.A.W.C.-Europe	276	1,493	6,811	2.41	3.86	2.41	3.86	92.86	92.86	0.00	150.00
C.A.W.C.-S.A.E.C.	2	9	31	2.41	4.00	2.41	4.00	94.40	94.40	0.00	103.00
C.A.W.C.-U.S.E.C.	1	2	22	2.41	4.00	2.41	4.00	64.00	64.00	0.00	160.40

(Continued)

Table B-19. Laden Transits, Tons Carried, Toll Revenue and Toll Rates, Current Toll Structure and Rates, 150,000 DWT Scenario, 2060, by Ship Type, Diversion Status, and Trade Route (1990 US$, except when noted)(continued)

Ship Type, Diversion Status, and Trade Route	Transits	Cargo Tonnage Carried (thousands)	Revenue (thousands) a/	Current Toll Schedule: Toll Per Panama Canal Net Ton	Current Toll Schedule: Toll Per Cargo Ton Carried	New Toll Schedule: Toll Per Panama Canal Net Ton	New Toll Schedule: Toll Per Cargo Ton Carried	Total Transportation Costs per Ton Carried: Via Panama Canal: With Current Toll Structure	Via Panama Canal: With New Toll Structure	Via Panama Canal: Percent Increase	Via Least Costly Alternative Route
Refrigerated Ships (continued)											
Non-Diverted Transits (continued)											
Canada E.C.-Asia	15	92	274	2.41	4.00	2.41	4.00	165.80	165.80	0.00	182.60
Canada E.C.-C.A.W.C.	11	31	267	2.41	3.86	2.41	3.86	71.86	71.86	0.00	149.00
Canada W.C.-Europe	4	45	92	2.41	3.86	2.41	3.86	132.86	132.86	0.00	190.00
C.A.E.C.-Asia	13	37	269	2.41	3.93	2.41	3.93	144.92	144.92	0.00	197.33
C.A.E.C.-C.A.W.C.	43	11	1,065	2.41	3.86	2.41	3.86	52.86	52.86	0.00	132.00
C.A.E.C.-S.A.W.C.	93	82	2,300	2.41	3.86	2.41	3.86	75.86	75.86	0.00	107.00
Europe-C.A.W.C.	308	26	7,582	2.41	3.86	2.41	3.86	92.86	92.86	0.00	187.00
Europe-Canada W.C.	1	1	19	2.41	4.00	2.41	4.00	145.60	145.60	0.00	204.40
Europe-S.A.W.C.	295	278	6,904	2.41	3.88	2.41	3.88	119.82	119.82	0.00	127.10
Europe-U.S.W.C.	18	16	335	2.41	4.00	2.41	4.00	135.40	135.40	0.00	192.20
Middle East-S.A.W.C.	3	6	49	2.41	4.00	2.41	4.00	138.00	138.00	0.00	165.40
Oceania-C.A.E.C.	6	50	120	2.41	4.00	2.41	4.00	157.20	157.20	0.00	196.80
Oceania-U.S.E.C.	53	207	1,020	2.41	3.98	2.41	3.98	160.43	160.43	0.00	183.47
S.A.E.C.-Asia	12	62	217	2.41	4.00	2.41	4.00	146.60	146.60	0.00	172.00
S.A.W.C.-Africa	27	111	562	2.41	3.94	2.41	3.94	130.08	130.08	0.00	205.85
S.A.W.C.-C.A.E.C.	40	241	967	2.41	3.86	2.41	3.86	76.48	76.48	0.00	107.85
S.A.W.C.-Europe	1,101	6,815	25,105	2.41	3.89	2.41	3.89	119.88	119.88	0.00	127.15
S.A.W.C.-Middle East	5	18	90	2.41	4.00	2.41	4.00	138.00	138.00	0.00	165.40
S.A.W.C.-U.S.E.C.	808	3,821	19,011	2.41	3.88	2.41	3.88	82.93	82.93	0.00	122.50
U.S.E.C.-Asia	46	189	1,080	2.41	3.87	2.41	3.87	139.10	139.10	0.00	198.29
U.S.E.C.-C.A.W.C.	70	196	1,715	2.41	3.86	2.41	3.86	57.86	57.86	0.00	146.00
U.S.E.C.-S.A.W.C.	423	892	10,203	2.41	3.87	2.41	3.87	82.19	82.19	0.00	121.46
U.S.W.C.-Europe	140	804	2,868	2.41	3.95	2.41	3.95	134.45	134.45	0.00	190.92

(Continued)

Table B-19. Laden Transits, Tons Carried, Toll Revenue and Toll Rates, Current Toll Structure and Rates, 150,000 DWT Scenario, 2060, by Ship Type, Diversion Status, and Trade Route (1990 US$, except when noted)(continued)

Ship Type, Diversion Status, and Trade Route	Transits	Cargo Tonnage Carried (thousands)	Revenue (thousands) a/	Current Toll Schedule: Toll Per Panama Canal Net Ton	Current Toll Schedule: Toll Per Cargo Ton Carried	New Toll Schedule: Toll Per Panama Canal Net Ton	New Toll Schedule: Toll Per Cargo Ton Carried	Total Transportation Costs per Ton Carried: Via Panama Canal: With Current Toll Structure	Via Panama Canal: With New Toll Structure	Via Panama Canal: Percent Increase	Via Least Costly Alternative Route
Refrigerated Ships (continued)											
Non-Diverted Transits (continued)											
U.S.W.C.-S.A.E.C.	2	6	36	2.41	3.98	2.41	3.98	131.22	131.22	0.00	135.82
Subtotal	3,937	15,968	91,800	2.41	3.88	2.41	3.88	105.63	105.63	0.00	134.95
Refrigerated Ships											
Diverted Transits											
Africa-Asia	46	292	926	2.41	4.00	2.41	4.00	173.40	173.40	0.00	173.00
Subtotal	46	292	926	2.41	4.00	2.41	4.00	173.40	173.40	0.00	173.00
Subtotal	3,983	16,260	92,726	2.41	3.88	2.41	3.88	106.85	106.85	0.00	135.63
Roll-On Roll-Off											
Non-Diverted Transits											
Asia-Canada E.C.	3	15	97	2.41	9.35	2.41	9.35	298.90	298.90	0.00	324.43
Asia-C.A.E.C.	32	633	2,212	2.41	7.92	2.41	7.92	236.83	236.83	0.00	268.32
Asia-U.S.E.C.	67	1,286	4,478	2.41	7.95	2.41	7.95	248.85	248.85	0.00	304.22
C.A.W.C.-Europe	33	177	1,310	2.41	8.66	2.41	8.66	198.66	198.66	0.00	280.00
C.A.W.C.-U.S.E.C.	3	1	102	2.41	8.66	2.41	8.66	170.66	170.66	0.00	273.00
Canada E.C.-Asia	17	85	508	2.41	9.30	2.41	9.30	355.27	355.27	0.00	370.17
Canada W.C.-C.A.E.C.	0	1	11	2.41	10.19	2.41	10.19	239.87	239.87	0.00	394.39
C.A.E.C.-C.A.W.C.	1	2	26	2.41	9.72	2.41	9.72	167.54	167.54	0.00	296.40
C.A.E.C.-Oceania	7	20	281	2.41	8.66	2.41	8.66	275.66	275.66	0.00	332.00
C.A.E.C.-S.A.W.C.	85	149	1,976	2.41	10.19	2.41	10.19	232.93	232.93	0.00	280.17
Europe-C.A.W.C.	35	221	1,386	2.41	8.66	2.41	8.66	198.66	198.66	0.00	350.00
Europe-S.A.W.C.	0	0	3	2.41	8.67	2.41	8.67	262.67	262.67	0.00	303.00

(Continued)

Table B-19. Laden Transits, Tons Carried, Toll Revenue and Toll Rates, Current Toll Structure and Rates, 150,000 DWT Scenario, 2060, by Ship Type, Diversion Status, and Trade Route (1990 US$, except when noted)(continued)

Ship Type, Diversion Status, and Trade Route	Transits	Cargo Tonnage Carried (thousands)	Revenue (thousands) a/	Current Toll Schedule: Toll Per Panama Canal Net Ton	Current Toll Schedule: Toll Per Cargo Ton Carried	New Toll Schedule: Toll Per Panama Canal Net Ton	New Toll Schedule: Toll Per Cargo Ton Carried	Total Transportation Costs per Ton Carried: Via Panama Canal: With Current Toll Structure	Via Panama Canal: With New Toll Structure	Via Panama Canal: Percent Increase	Via Least Costly Alternative Route
Roll-On Roll-Off (continued)											
Non-Diverted Transits (continued)											
Europe-U.S.W.C.	1	3	24	2.41	8.66	2.41	8.66	262.66	262.66	0.00	350.00
Oceania-C.A.E.C.	0	0	1	2.41	7.97	2.41	7.97	234.97	234.97	0.00	273.80
S.A.W.C.-C.A.E.C.	22	44	511	2.41	10.19	2.41	10.19	232.93	232.93	0.00	280.17
S.A.W.C.-Europe	2	5	68	2.41	8.66	2.41	8.66	262.66	262.66	0.00	311.00
S.A.W.C.-U.S.E.C.	12	25	279	2.41	10.19	2.41	10.19	224.99	224.99	0.00	292.08
U.S.E.C.-Asia	14	93	565	2.41	8.64	2.41	8.64	298.20	298.20	0.00	378.28
U.S.E.C.-C.A.W.C.	4	7	162	2.41	8.66	2.41	8.66	144.66	144.66	0.00	273.00
U.S.E.C.-S.A.W.C.	57	101	1,331	2.41	10.19	2.41	10.19	224.99	224.99	0.00	292.08
U.S.W.C.-Canada E.C.	1	2	17	2.41	10.20	2.41	10.20	263.70	263.70	0.00	414.27
U.S.W.C.-C.A.E.C.	2	48	164	2.41	7.75	2.41	7.75	160.82	160.82	0.00	232.64
U.S.W.C.-Europe	0	1	2	2.41	7.77	2.41	7.77	212.68	212.68	0.00	267.50
U.S.W.C.-U.S.E.C.	0	9	30	2.41	7.86	2.41	7.86	159.45	159.45	0.00	255.79
Subtotal	397	2,929	15,542	2.41	8.68	2.41	8.68	240.41	240.41	0.00	299.63
Roll-On Roll-Off											
Diverted Transits											
C.A.W.C.-S.A.E.C.	0	0	3	2.41	8.66	2.41	8.66	211.66	211.66	0.00	211.00
Canada E.C.-Oceania	3	61	184	2.41	7.77	2.41	7.77	251.49	251.49	0.00	249.02
Subtotal	3	61	188	2.41	7.78	2.41	7.78	251.24	251.24	0.00	248.78
Subtotal	400	2,990	15,730	2.41	8.67	2.41	8.67	240.63	240.63	0.00	298.58
Tankers											
Non-Diverted Transits											
Africa-U.S.W.C.	0	0	0	2.41	1.27	2.41	1.27	18.27	18.27	0.00	24.00

(Continued)

Table B-19. Laden Transits, Tons Carried, Toll Revenue and Toll Rates, Current Toll Structure and Rates, 150,000 DWT Scenario, 2060, by Ship Type, Diversion Status, and Trade Route (1990 US$, except when noted)(continued)

Ship Type, Diversion Status, and Trade Route	Transits	Cargo Tonnage Carried (thousands)	Revenue (thousands) a/	Current Toll Schedule: Toll Per Panama Canal Net Ton	Current Toll Schedule: Toll Per Cargo Ton Carried	New Toll Schedule: Toll Per Panama Canal Net Ton	New Toll Schedule: Toll Per Cargo Ton Carried	Total Transportation Costs per Ton Carried: Via Panama Canal: With Current Toll Structure	Via Panama Canal: With New Toll Structure	Via Panama Canal: Percent Increase	Via Least Costly Alternative Route
Tankers (continued)											
Non-Diverted Transits (continued)											
Asia-U.S.E.C.	3	77	89	2.41	1.27	2.41	1.27	27.11	27.11	0.00	38.76
C.A.W.C.-Africa	0	0	2	2.41	1.27	2.41	1.27	46.27	46.27	0.00	100.00
C.A.W.C.-Canada E.C.	0	8	9	2.41	1.27	2.41	1.27	12.21	12.21	0.00	28.82
C.A.W.C.-C.A.E.C.	16	95	299	2.41	1.27	2.41	1.27	10.26	10.26	0.00	34.99
C.A.W.C.-Europe	4	94	121	2.41	1.27	2.41	1.27	17.17	17.17	0.00	28.84
C.A.W.C.-U.S.E.C.	10	80	187	2.41	1.27	2.41	1.27	11.18	11.18	0.00	37.36
Canada E.C.-Asia	18	707	789	2.41	1.27	2.41	1.27	25.06	25.06	0.00	27.21
Canada W.C.-U.S.E.C.	6	255	320	2.41	1.28	2.41	1.28	13.76	13.76	0.00	26.23
C.A.E.C.-Asia	5	141	195	2.41	1.29	2.41	1.29	22.38	22.38	0.00	31.40
C.A.E.C.-C.A.W.C.	45	750	1,275	2.41	1.27	2.41	1.27	7.38	7.38	0.00	22.70
C.A.E.C.-S.A.W.C.	46	887	1,231	2.41	1.27	2.41	1.27	13.34	13.34	0.00	20.04
C.A.E.C.-U.S.W.C.	5	228	271	2.41	1.27	2.41	1.27	11.93	11.93	0.00	23.43
Europe-C.A.W.C.	17	81	156	2.41	1.27	2.41	1.27	24.95	24.95	0.00	44.78
Europe-S.A.W.C.	4	82	97	2.41	1.27	2.41	1.27	23.34	23.34	0.00	25.18
Europe-U.S.W.C.	4	109	129	2.41	1.27	2.41	1.27	22.50	22.50	0.00	32.22
Oceania-U.S.E.C.	9	162	211	2.41	1.27	2.41	1.27	28.05	28.05	0.00	32.60
S.A.E.C.-Asia	100	14,050	14,868	2.41	1.27	2.41	1.27	15.32	15.32	0.00	16.31
S.A.E.C.-C.A.W.C.	68	3,130	4,524	2.41	1.26	2.41	1.26	10.89	10.89	0.00	11.68
S.A.E.C.-U.S.W.C.	27	978	1,169	2.41	1.27	2.41	1.27	18.67	18.67	0.00	18.82
S.A.W.C.-Canada E.C.	1	14	18	2.41	1.27	2.41	1.27	20.47	20.47	0.00	27.25
S.A.W.C.-C.A.E.C.	15	557	688	2.41	1.27	2.41	1.27	10.99	10.99	0.00	15.42
S.A.W.C.-Europe	19	173	210	2.41	1.27	2.41	1.27	28.01	28.01	0.00	30.35
S.A.W.C.-U.S.E.C.	17	607	731	2.41	1.27	2.41	1.27	11.71	11.71	0.00	18.51

(Continued)

Table B-19. Laden Transits, Tons Carried, Toll Revenue and Toll Rates, Current Toll Structure and Rates, 150,000 DWT Scenario, 2060, by Ship Type, Diversion Status, and Trade Route (1990 US$, except when noted)(continued)

Ship Type, Diversion Status, and Trade Route	Transits	Cargo Tonnage Carried (thousands)	Revenue (thousands) a/	Current Toll Schedule: Toll Per Panama Canal Net Ton	Current Toll Schedule: Toll Per Cargo Ton Carried	New Toll Schedule: Toll Per Panama Canal Net Ton	New Toll Schedule: Toll Per Cargo Ton Carried	Total Transportation Costs per Ton Carried: Via Panama Canal: With Current Toll Structure	Via Panama Canal: With New Toll Structure	Via Panama Canal: Percent Increase	Via Least Costly Alternative Route
Tankers (continued)											
Non-Diverted Transits (continued)											
U.S.E.C.-Asia	90	2,946	3,557	2.41	1.27	2.41	1.27	22.71	22.71	0.00	32.54
U.S.E.C.-C.A.W.C.	14	260	400	2.41	1.27	2.41	1.27	9.23	9.23	0.00	28.15
U.S.E.C.-Canada W.C.	2	7	58	2.41	1.27	2.41	1.27	18.17	18.17	0.00	35.78
U.S.E.C.-Oceania	4	129	157	2.41	1.27	2.41	1.27	26.02	26.02	0.00	30.19
U.S.E.C.-S.A.W.C.	3	49	64	2.41	1.27	2.41	1.27	13.63	13.63	0.00	21.94
U.S.E.C.-U.S.W.C.	21	601	776	2.41	1.27	2.41	1.27	14.06	14.06	0.00	30.95
U.S.W.C.-Africa	10	334	492	2.41	1.26	2.41	1.26	16.39	16.39	0.00	20.19
U.S.W.C.-C.A.E.C.	3	96	131	2.41	1.26	2.41	1.26	11.90	11.90	0.00	23.13
U.S.W.C.-S.A.E.C.	1	29	30	2.41	1.27	2.41	1.27	18.76	18.76	0.00	18.90
U.S.W.C.-U.S.E.C.	4	102	144	2.41	1.27	2.41	1.27	13.36	13.36	0.00	29.10
Subtotal	589	27,821	33,397	2.41	1.27	2.41	1.27	15.72	15.72	0.00	19.64
Tankers											
Diverted Transits											
Middle East-U.S.W.C.	0	0	0	2.41	1.25	2.41	1.25	1.63	1.63	0.00	0.48
Subtotal	0	0	0	2.41	1.25	2.41	1.25	1.63	1.63	0.00	0.48
Subtotal	589	27,821	33,397	2.41	1.27	2.41	1.27	15.72	15.72	0.00	19.64
Vehicle Carriers											
Non-Diverted Transits											
Asia-C.A.E.C.	13	34	878	2.41	29.09	2.41	29.09	417.18	417.18	0.00	496.39
Asia-U.S.E.C.	481	2,251	35,762	2.41	29.20	2.41	29.20	439.57	439.57	0.00	516.31
C.A.W.C.-C.A.E.C.	3	3	117	2.41	28.71	2.41	28.71	266.36	266.36	0.00	440.99

(Continued)

Table B-19. Laden Transits, Tons Carried, Toll Revenue and Toll Rates, Current Toll Structure and Rates, 150,000 DWT Scenario, 2060, by Ship Type, Diversion Status, and Trade Route (1990 US$, except when noted)(continued)

Ship Type, Diversion Status, and Trade Route	Transits	Cargo Tonnage Carried (thousands)	Revenue (thousands) a/	Current Toll Schedule: Toll Per Panama Canal Net Ton	Current Toll Schedule: Toll Per Cargo Ton Carried	New Toll Schedule: Toll Per Panama Canal Net Ton	New Toll Schedule: Toll Per Cargo Ton Carried	Total Transportation Costs per Ton Carried: Via Panama Canal: With Current Toll Structure	Via Panama Canal: With New Toll Structure	Via Panama Canal: Percent Increase	Via Least Costly Alternative Route
Vehicle Carriers (continued)											
Non-Diverted Transits (continued)											
C.A.E.C.-C.A.W.C.	8	3	640	2.41	29.22	2.41	29.22	272.22	272.22	0.00	411.00
C.A.E.C.-Oceania	1	0	75	2.41	29.22	2.41	29.22	434.22	434.22	0.00	482.00
Europe-Canada W.C.	7	16	728	2.41	30.90	2.41	30.90	386.38	386.38	0.00	457.44
Europe-U.S.W.C.	156	299	13,627	2.41	29.95	2.41	29.95	403.00	403.00	0.00	458.96
S.A.W.C.-C.A.E.C.	0	0	8	2.41	28.70	2.41	28.70	323.70	323.70	0.00	380.00
U.S.E.C.-Asia	42	192	3,473	2.41	29.67	2.41	29.67	415.80	415.80	0.00	510.17
U.S.E.C.-Oceania	13	30	965	2.41	29.22	2.41	29.22	433.22	433.22	0.00	453.00
Subtotal	723	2,828	56,272	2.41	29.42	2.41	29.42	433.09	433.09	0.00	508.39
Vehicle Carriers											
Diverted Transits											
Asia-S.A.E.C.	0	0	7	2.41	29.13	2.41	29.13	484.18	484.18	0.00	468.49
Canada E.C.-Asia	1	3	35	2.41	29.22	2.41	29.22	465.22	465.22	0.00	456.00
Subtotal	1	3	42	2.41	29.20	2.41	29.20	466.92	466.92	0.00	457.12
Subtotal	724	2,831	56,314	2.41	29.42	2.41	29.42	433.13	433.13	0.00	508.34
Total Non-Diverting	17,770	437,183	737,878	2.41	1.79	2.41	1.79	45.98	45.98	0.00	56.29
Total Diverting	134	3,751	5,220	2.41	1.68	2.41	1.68	44.00	44.00	0.00	43.39

Notes: These calculations do not include all transits and tons carried forecast by the WEFA Group. For some ship-type and trade-route combinations (accounting for a total of 27 transits and 291695 tons), vessel costs were not available for every DWT size interval. As a result, these transits and tons were excluded. In addition, for 2536 transits and 56215466 tons, the cost by way of the Panama Canal without a toll was higher than the least costly alternative route. As a result, these transits and tons were excluded. Percentages may not calculate exactly as shown due to rounding. A fee of $0.40 per Panama Canal net ton has also been included to account for charges such as handling and agency fees incurred when transitting the Canal. The extra fee is only used to determine diversion status by adding it to the cost per ton carried and is not included in the revenue calculations.

a/ Revenue lost from diversions is measured as the revenue generated by the maximum, nondiverting toll rate increase.

Source: Nathan Associates Inc., based on forecasts of traffic and transportation costs provided by The WEFA Group.

CURRENT TOLL STRUCTURE AND RATES

WT SCENARIO, 2060

Table B-20. Laden Transits, Tons Carried, and Toll Revenue, Current Toll Stucture and Rates, 200,000 DWT Scenario, 2060, by Ship Type

	Transits				Tons Carried(thousands)				Revenue(1990 US$thousands)			
Ship Type	Canal	Diverted	Total	Diverted as a Percent of Total	Canal	Diverted	Total	Diverted as a Percent of Total	Canal	Lost a/	Total	Lost as a Percent of Total
Container-Breakbulk	2,465	0	2,465	0.00	36,996	0	36,996	0.00	68,785	0	68,785	0.00
Dry Bulk Carriers	4,871	115	4,986	2.30	275,435	9,530	284,965	3.34	318,118	7,507	325,625	2.31
Chemical Tankers	1,224	0	1,224	0.00	32,988	0	32,988	0.00	38,182	0	38,182	0.00
Full Container Ships	1,460	10	1,470	0.70	31,607	179	31,786	0.56	99,139	109	99,249	0.11
General Cargo Ships	1,462	2	1,464	0.15	13,971	20	13,991	0.14	25,195	43	25,239	0.17
Liquid Gas Carriers	104	0	104	0.00	1,071	0	1,071	0.00	3,148	0	3,148	0.00
Passenger Ships	435	0	435	0.00	0	0	0	0.00	6,694	0	6,694	0.00
Refrigerated Ships	3,937	46	3,983	1.15	15,968	292	16,260	1.80	91,800	926	92,726	1.00
Roll-On Roll-Off	397	3	400	0.70	2,929	61	2,990	2.05	15,542	188	15,730	1.19
Tankers	567	0	567	0.00	27,821	0	27,821	0.00	33,393	0	33,393	0.00
Vehicle Carriers	723	1	724	0.10	2,828	3	2,831	0.10	56,272	42	56,314	0.07
Total	17,646	176	17,822	0.99	441,614	10,086	451,699	2.23	756,269	8,816	765,085	1.15

Notes: These calculations do not include all transits and tons carried forecast by the WEFA Group. For some ship-type and trade-route combinations (accounting for a total of 27 transits and 291695 tons), vessel costs were not available for every DWT size interval. As a result, these transits and tons were excluded. In addition, for 2480 transits and 49528628 tons, the cost by way of the Panama Canal without a toll was higher than the least costly alternative route. As a result, these transits and tons were excluded. A fee of $0.40 per Panama Canal net ton has also been included to account for charges such as handling and agency fees incurred when transitting the Canal. The extra fee is only used to determine diversion status by adding it to cost per ton carried and is not included in the revenue calculations.

a/ Revenue lost from diversions is measured as the revenue generated by the maximum, nondiverting toll rate increase.

Source: Nathan Associates Inc., based on forecasts of traffic and transportation costs provided by The WEFA Group.

Table B-21. Ballast Transits, Tons Carried, and Toll Revenue, Current Toll Stucture and Rates, 200,000 DWT Scenario, 2060, by Ship Type

	Transits				Tons Carried(thousands)				Revenue(1990 US$thousands)			
Ship Type	Canal	Diverted	Total	Diverted as a Percent of Total	Canal	Diverted	Total	Diverted as a Percent of Total	Canal	Lost	Total	Lost as a Percent of Total
Container-Breakbulk	67	0	67	0.00	0	0	0	0.00	1,629	0	1,629	0.00
Dry Bulk Carriers	401	9	410	2.31	0	0	0	0.00	18,562	439	19,001	2.31
Chemical Tankers	127	0	127	0.00	0	0	0	0.00	3,447	0	3,447	0.00
Full Container Ships	6	0	6	0.11	0	0	0	0.00	260	0	260	0.11
General Cargo Ships	274	0	274	0.17	0	0	0	0.00	3,018	5	3,023	0.17
Liquid Gas Carriers	958	0	958	0.00	0	0	0	0.00	48,680	0	48,680	0.00
Passenger Ships	51	0	51	0.00	0	0	0	0.00	664	0	664	0.00
Refrigerated Ships	1,058	11	1,069	1.00	0	0	0	0.00	18,794	190	18,983	1.00
Roll-On Roll-Off	57	1	58	1.19	0	0	0	0.00	1,696	20	1,716	1.19
Tankers	289	0	289	0.00	0	0	0	0.00	16,051	0	16,051	0.00
Vehicle Carriers	441	0	441	0.07	0	0	0	0.00	26,024	18	26,043	0.07
Total	3,728	22	3,750	0.58	0	0	0	0.00	138,825	673	139,497	0.48

Note: Diversions of ballast transits are computed by diverting a proportion of ballast transits equal to lost revenue as a percent of total potential revenue for a particular laden ship type. See last column on previous table.

Source: Nathan Associates Inc., based on forecasts of traffic and transportation costs provided by The WEFA Group.

Table B-22. Laden Transits, Tons Carried, Toll Revenue and Toll Rates, Current Toll Structure and Rates, 200,000 DWT Scenario, 2060, by Ship Type, Diversion Status, and Trade Route (1990 US$, except when noted)

Ship Type, Diversion Status, and Trade Route	Transits	Cargo Tonnage Carried (thousands)	Revenue (thousands) a/	Current Toll Schedule: Toll Per Panama Canal Net Ton	Current Toll Schedule: Toll Per Cargo Ton Carried	New Toll Schedule: Toll Per Panama Canal Net Ton	New Toll Schedule: Toll Per Cargo Ton Carried	Total Transportation Costs per Ton Carried, Via Panama Canal: With Current Toll Structure	Total Transportation Costs per Ton Carried, Via Panama Canal: With New Toll Structure	Total Transportation Costs per Ton Carried, Via Panama Canal: Percent Increase	Total Transportation Costs per Ton Carried: Via Least Costly Alternative Route
Container-Breakbulk											
Non-Diverted Transits											
Africa-C.A.W.C.	6	185	190	2.41	1.85	2.41	1.85	72.26	72.26	0.00	119.11
Africa-Canada W.C.	0	5	12	2.41	1.87	2.41	1.87	92.01	92.01	0.00	106.57
Africa-U.S.W.C.	2	25	57	2.41	1.87	2.41	1.87	93.01	93.01	0.00	107.78
Asia-Canada E.C.	1	8	21	2.41	1.86	2.41	1.86	93.05	93.05	0.00	100.96
Asia-C.A.E.C.	135	1,246	3,556	2.41	1.87	2.41	1.87	97.20	97.20	0.00	113.04
Asia-S.A.E.C.	48	305	1,197	2.41	1.87	2.41	1.87	105.12	105.12	0.00	107.25
Asia-U.S.E.C.	139	1,759	3,914	2.41	1.86	2.41	1.86	99.37	99.37	0.00	123.49
C.A.W.C.-Africa	6	112	139	2.41	1.87	2.41	1.87	76.03	76.03	0.00	127.35
C.A.W.C.-C.A.E.C.	16	247	412	2.41	1.86	2.41	1.86	51.25	51.25	0.00	91.73
C.A.W.C.-Europe	41	304	1,083	2.41	1.87	2.41	1.87	65.68	65.68	0.00	95.59
C.A.W.C.-S.A.E.C.	23	10	566	2.41	1.87	2.41	1.87	72.11	72.11	0.00	77.11
C.A.W.C.-U.S.E.C.	7	40	169	2.41	1.87	2.41	1.87	57.32	57.32	0.00	95.90
Canada E.C.-Asia	31	815	1,078	2.41	1.85	2.41	1.85	95.14	95.14	0.00	98.29
Canada E.C.-C.A.W.C.	3	25	65	2.41	1.87	2.41	1.87	55.94	55.94	0.00	96.99
Canada E.C.-Oceania	2	25	39	2.41	1.87	2.41	1.87	107.65	107.65	0.00	108.63
Canada E.C.-S.A.W.C.	1	17	26	2.41	1.85	2.41	1.85	65.70	65.70	0.00	79.70
Canada E.C.-U.S.W.C.	0	0	0	2.41	1.86	2.41	1.86	72.57	72.57	0.00	111.42
Canada W.C.-Africa	29	662	852	2.41	1.85	2.41	1.85	93.53	93.53	0.00	106.62
Canada W.C.-Europe	107	3,116	3,851	2.41	1.85	2.41	1.85	81.19	81.19	0.00	109.01
Canada W.C.-S.A.E.C.	22	421	544	2.41	1.87	2.41	1.87	74.11	74.11	0.00	114.56
Canada W.C.-U.S.E.C.	15	303	437	2.41	1.85	2.41	1.85	67.85	67.85	0.00	108.00
C.A.E.C.-Asia	13	270	327	2.41	1.87	2.41	1.87	96.31	96.31	0.00	111.98
C.A.E.C.-C.A.W.C.	13	49	331	2.41	1.87	2.41	1.87	52.15	52.15	0.00	94.93

(Continued)

Table B-22. Laden Transits, Tons Carried, Toll Revenue and Toll Rates, Current Toll Structure and Rates, 200,000 DWT Scenario, 2060, by Ship Type, Diversion Status, and Trade Route (1990 US$, except when noted)(continued)

Ship Type, Diversion Status, and Trade Route	Transits	Cargo Tonnage Carried (thousands)	Revenue (thousands) a/	Current Toll Schedule: Toll Per Panama Canal Net Ton	Current Toll Schedule: Toll Per Cargo Ton Carried	New Toll Schedule: Toll Per Panama Canal Net Ton	New Toll Schedule: Toll Per Cargo Ton Carried	Total Transportation Costs per Ton Carried, Via Panama Canal: With Current Toll Structure	Total Transportation Costs per Ton Carried, Via Panama Canal: With New Toll Structure	Total Transportation Costs per Ton Carried, Via Panama Canal: Percent Increase	Total Transportation Costs per Ton Carried: Via Least Costly Alternative Route
Container-Breakbulk (continued)											
Non-Diverted Transits (continued)											
C.A.E.C.-Canada W.C.	4	59	98	2.41	1.87	2.41	1.87	66.58	66.58	0.00	106.57
C.A.E.C.-Oceania	2	38	61	2.41	1.87	2.41	1.87	94.01	94.01	0.00	112.63
C.A.E.C.-S.A.W.C.	37	286	946	2.41	1.87	2.41	1.87	64.73	64.73	0.00	79.50
C.A.E.C.-U.S.W.C.	6	112	160	2.41	1.86	2.41	1.86	64.27	64.27	0.00	97.78
Europe-C.A.W.C.	44	271	1,125	2.41	1.87	2.41	1.87	66.79	66.79	0.00	118.42
Europe-Canada W.C.	7	217	294	2.41	1.85	2.41	1.85	83.24	83.24	0.00	107.58
Europe-S.A.W.C.	182	1,504	4,696	2.41	1.87	2.41	1.87	90.01	90.01	0.00	104.63
Europe-U.S.W.C.	36	1,115	1,405	2.41	1.85	2.41	1.85	82.41	82.41	0.00	107.84
Oceania-Canada E.C.	4	88	175	2.41	1.85	2.41	1.85	97.85	97.85	0.00	98.00
Oceania-C.A.E.C.	10	99	243	2.41	1.87	2.41	1.87	94.77	94.77	0.00	113.61
S.A.E.C.-C.A.W.C.	16	252	421	2.41	1.87	2.41	1.87	71.65	71.65	0.00	76.57
S.A.E.C.-Canada W.C.	25	335	652	2.41	1.87	2.41	1.87	92.79	92.79	0.00	98.78
S.A.E.C.-U.S.W.C.	84	1,260	2,217	2.41	1.87	2.41	1.87	78.16	78.16	0.00	80.87
S.A.W.C.-Africa	3	52	68	2.41	1.87	2.41	1.87	82.90	82.90	0.00	120.48
S.A.W.C.-Canada E.C.	1	2	29	2.41	1.87	2.41	1.87	69.19	69.19	0.00	84.90
S.A.W.C.-C.A.E.C.	26	206	636	2.41	1.87	2.41	1.87	65.19	65.19	0.00	80.11
S.A.W.C.-Europe	329	5,753	8,373	2.41	1.87	2.41	1.87	89.68	89.68	0.00	106.41
S.A.W.C.-U.S.E.C.	239	2,340	5,962	2.41	1.87	2.41	1.87	62.12	62.12	0.00	81.53
U.S.E.C.-Asia	284	7,177	9,378	2.41	1.86	2.41	1.86	96.15	96.15	0.00	119.21
U.S.E.C.-C.A.W.C.	22	446	591	2.41	1.86	2.41	1.86	47.68	47.68	0.00	93.27
U.S.E.C.-S.A.W.C.	347	3,443	9,015	2.41	1.87	2.41	1.87	61.84	61.84	0.00	81.01
U.S.E.C.-U.S.W.C.	0	0	0	2.41	1.86	2.41	1.86	58.86	58.86	0.00	98.00
U.S.W.C.-Africa	22	367	910	2.41	1.85	2.41	1.85	85.43	85.43	0.00	102.85

(Continued)

Table B-22. Laden Transits, Tons Carried, Toll Revenue and Toll Rates, Current Toll Structure and Rates, 200,000 DWT Scenario, 2060, by Ship Type, Diversion Status, and Trade Route (1990 US$, except when noted)(continued)

Ship Type, Diversion Status, and Trade Route	Transits	Cargo Tonnage Carried (thousands)	Revenue (thousands) a/	Current Toll Schedule: Toll Per Panama Canal Net Ton	Current Toll Schedule: Toll Per Cargo Ton Carried	New Toll Schedule: Toll Per Panama Canal Net Ton	New Toll Schedule: Toll Per Cargo Ton Carried	Total Transportation Costs per Ton Carried: Via Panama Canal: With Current Toll Structure	Via Panama Canal: With New Toll Structure	Via Panama Canal: Percent Increase	Via Least Costly Alternative Route
Container-Breakbulk (continued)											
Non-Diverted Transits (continued)											
U.S.W.C.-Canada E.C.	1	33	37	2.41	1.85	2.41	1.85	69.85	69.85	0.00	106.00
U.S.W.C.-C.A.E.C.	19	135	477	2.41	1.87	2.41	1.87	66.46	66.46	0.00	101.57
U.S.W.C.-Europe	51	1,343	1,786	2.41	1.86	2.41	1.86	83.60	83.60	0.00	108.54
U.S.W.C.-S.A.E.C.	6	104	147	2.41	1.87	2.41	1.87	79.98	79.98	0.00	82.98
U.S.W.C.-U.S.E.C.	0	6	16	2.41	1.85	2.41	1.85	60.33	60.33	0.00	102.02
Subtotal	2,465	36,996	68,785	2.41	1.86	2.41	1.86	83.70	83.70	0.00	104.44
Dry Bulk Carriers											
Non-Diverted Transits											
Africa-C.A.W.C.	29	1,201	1,221	2.41	1.30	2.41	1.30	15.34	15.34	0.00	27.11
Africa-Canada W.C.	156	7,645	7,494	2.41	1.28	2.41	1.28	17.82	17.82	0.00	19.99
Africa-S.A.W.C.	9	313	376	2.41	1.30	2.41	1.30	18.13	18.13	0.00	26.14
Africa-U.S.W.C.	10	297	489	2.41	1.27	2.41	1.27	16.17	16.17	0.00	19.94
Asia-Canada E.C.	15	695	850	2.41	1.25	2.41	1.25	17.55	17.55	0.00	18.43
Asia-C.A.E.C.	29	527	1,264	2.41	1.30	2.41	1.30	18.85	18.85	0.00	24.40
Asia-U.S.E.C.	386	12,134	19,160	2.41	1.27	2.41	1.27	16.62	16.62	0.00	23.16
C.A.W.C.-Africa	2	52	72	2.41	1.29	2.41	1.29	15.32	15.32	0.00	27.18
C.A.W.C.-C.A.E.C.	63	2,167	2,700	2.41	1.30	2.41	1.30	7.57	7.57	0.00	16.30
C.A.W.C.-Europe	19	626	870	2.41	1.28	2.41	1.28	12.19	12.19	0.00	18.57
C.A.W.C.-S.A.E.C.	16	268	664	2.41	1.30	2.41	1.30	11.59	11.59	0.00	12.04
C.A.W.C.-U.S.E.C.	47	1,854	2,138	2.41	1.29	2.41	1.29	7.69	7.69	0.00	18.15
Canada E.C.-Asia	129	7,535	8,955	2.41	1.22	2.41	1.22	18.78	18.78	0.00	20.41
Canada E.C.-Oceania	7	132	298	2.41	1.29	2.41	1.29	21.09	21.09	0.00	21.80

(Continued)

Table B-22. Laden Transits, Tons Carried, Toll Revenue and Toll Rates, Current Toll Structure and Rates, 200,000 DWT Scenario, 2060, by Ship Type, Diversion Status, and Trade Route (1990 US$, except when noted)(continued)

Ship Type, Diversion Status, and Trade Route	Transits	Cargo Tonnage Carried (thousands)	Revenue (thousands) a/	Current Toll Schedule: Toll Per Panama Canal Net Ton	Current Toll Schedule: Toll Per Cargo Ton Carried	New Toll Schedule: Toll Per Panama Canal Net Ton	New Toll Schedule: Toll Per Cargo Ton Carried	Total Transportation Costs per Ton Carried: Via Panama Canal: With Current Toll Structure	Via Panama Canal: With New Toll Structure	Via Panama Canal: Percent Increase	Via Least Costly Alternative Route
Dry Bulk Carriers (continued)											
Non-Diverted Transits (continued)											
Canada E.C.-S.A.W.C.	12	426	555	2.41	1.29	2.41	1.29	12.85	12.85	0.00	15.56
Canada W.C.-Africa	175	7,689	8,602	2.41	1.28	2.41	1.28	17.49	17.49	0.00	19.57
Canada W.C.-C.A.E.C.	9	270	378	2.41	1.30	2.41	1.30	12.59	12.59	0.00	21.54
Canada W.C.-Europe	301	15,944	18,108	2.41	1.24	2.41	1.24	16.14	16.14	0.00	21.21
Canada W.C.-S.A.E.C.	29	1,820	2,183	2.41	1.22	2.41	1.22	11.69	11.69	0.00	12.24
Canada W.C.-U.S.E.C.	105	3,183	4,392	2.41	1.30	2.41	1.30	13.34	13.34	0.00	23.33
C.A.E.C.-Asia	22	808	903	2.41	1.30	2.41	1.30	18.13	18.13	0.00	23.38
C.A.E.C.-C.A.W.C.	49	1,650	2,045	2.41	1.30	2.41	1.30	7.82	7.82	0.00	16.83
C.A.E.C.-Canada W.C.	3	105	126	2.41	1.30	2.41	1.30	12.61	12.61	0.00	21.59
C.A.E.C.-Oceania	1	22	35	2.41	1.30	2.41	1.30	19.89	19.89	0.00	22.59
C.A.E.C.-S.A.W.C.	24	734	989	2.41	1.30	2.41	1.30	10.61	10.61	0.00	14.07
C.A.E.C.-U.S.W.C.	9	286	366	2.41	1.30	2.41	1.30	11.61	11.61	0.00	20.59
Columbia-Asia	2	352	362	2.41	1.17	2.41	1.17	17.07	17.07	0.00	25.50
Europe-C.A.W.C.	51	1,627	2,113	2.41	1.30	2.41	1.30	12.61	12.61	0.00	22.38
Europe-Canada W.C.	12	408	579	2.41	1.28	2.41	1.28	16.56	16.56	0.00	22.07
Europe-U.S.W.C.	142	4,679	6,793	2.41	1.28	2.41	1.28	15.66	15.66	0.00	20.80
Middle East-S.A.W.C.	2	104	116	2.41	1.25	2.41	1.25	14.08	14.08	0.00	15.83
Oceania-Canada E.C.	23	859	969	2.41	1.30	2.41	1.30	20.84	20.84	0.00	21.54
Oceania-C.A.E.C.	14	469	598	2.41	1.30	2.41	1.30	19.09	19.09	0.00	22.54
Oceania-U.S.E.C.	36	2,218	2,467	2.41	1.23	2.41	1.23	15.65	15.65	0.00	17.42
S.A.E.C.-Asia	60	2,563	2,889	2.41	1.28	2.41	1.28	16.77	16.77	0.00	18.82
S.A.E.C.-C.A.W.C.	12	441	480	2.41	1.30	2.41	1.30	11.61	11.61	0.00	12.07
S.A.E.C.-Canada W.C.	3	97	134	2.41	1.30	2.41	1.30	17.13	17.13	0.00	17.83

(Continued)

Table B-22. Laden Transits, Tons Carried, Toll Revenue and Toll Rates, Current Toll Structure and Rates, 200,000 DWT Scenario, 2060, by Ship Type, Diversion Status, and Trade Route (1990 US$, except when noted)(continued)

Ship Type, Diversion Status, and Trade Route	Transits	Cargo Tonnage Carried (thousands)	Revenue (thousands) a/	Current Toll Schedule: Toll Per Panama Canal Net Ton	Current Toll Schedule: Toll Per Cargo Ton Carried	New Toll Schedule: Toll Per Panama Canal Net Ton	New Toll Schedule: Toll Per Cargo Ton Carried	Total Transportation Costs per Ton Carried, Via Panama Canal: With Current Toll Structure	Via Panama Canal: With New Toll Structure	Via Panama Canal: Percent Increase	Via Least Costly Alternative Route
Dry Bulk Carriers (continued)											
Non-Diverted Transits (continued)											
S.A.W.C.-Africa	5	296	284	2.41	1.25	2.41	1.25	14.34	14.34	0.00	21.40
S.A.W.C.-Canada E.C.	1	24	25	2.41	1.30	2.41	1.30	13.34	13.34	0.00	16.04
S.A.W.C.-C.A.E.C.	12	277	484	2.41	1.30	2.41	1.30	10.59	10.59	0.00	14.04
S.A.W.C.-Europe	251	11,113	12,542	2.41	1.27	2.41	1.27	15.85	15.85	0.00	16.02
S.A.W.C.-U.S.E.C.	90	3,585	3,808	2.41	1.30	2.41	1.30	11.28	11.28	0.00	15.48
U.S.E.C.-Asia	1,629	139,874	154,203	2.41	1.20	2.41	1.20	16.99	16.99	0.00	22.61
U.S.E.C.-C.A.W.C.	375	14,003	16,082	2.41	1.30	2.41	1.30	7.80	7.80	0.00	18.73
U.S.E.C.-Oceania	23	909	1,023	2.41	1.29	2.41	1.29	19.26	19.26	0.00	20.97
U.S.E.C.-S.A.W.C.	82	2,944	3,529	2.41	1.30	2.41	1.30	11.45	11.45	0.00	15.60
U.S.E.C.-U.S.W.C.	1	0	23	2.41	1.30	2.41	1.30	11.61	11.61	0.00	22.38
U.S.W.C.-Africa	198	9,018	10,885	2.41	1.26	2.41	1.26	15.70	15.70	0.00	19.37
U.S.W.C.-Canada E.C.	5	211	240	2.41	1.29	2.41	1.29	13.93	13.93	0.00	22.50
U.S.W.C.-C.A.E.C.	1	30	38	2.41	1.30	2.41	1.30	11.59	11.59	0.00	20.54
U.S.W.C.-Europe	168	9,505	10,565	2.41	1.24	2.41	1.24	14.02	14.02	0.00	18.82
U.S.W.C.-U.S.E.C.	8	215	388	2.41	1.28	2.41	1.28	11.92	11.92	0.00	23.13
Venezuela-Asia	8	1,231	1,266	2.41	1.17	2.41	1.17	17.07	17.07	0.00	23.70
Subtotal	4,871	275,435	318,118	2.41	1.23	2.41	1.23	15.84	15.84	0.00	21.11
Dry Bulk Carriers											
Diverted Transits											
Asia-S.A.E.C.	5	172	202	2.41	1.30	2.41	1.30	21.84	21.84	0.00	21.54
Brazil-Asia	45	6,687	3,885	2.41	1.17	2.41	1.17	18.97	18.97	0.00	18.35
Europe-S.A.W.C.	16	514	781	2.41	1.30	2.41	1.30	16.13	16.13	0.00	16.07

(Continued)

Table B-22. Laden Transits, Tons Carried, Toll Revenue and Toll Rates, Current Toll Structure and Rates, 200,000 DWT Scenario, 2060, by Ship Type, Diversion Status, and Trade Route (1990 US$, except when noted)(continued)

Ship Type, Diversion Status, and Trade Route	Transits	Cargo Tonnage Carried (thousands)	Revenue (thousands) a/	Current Toll Schedule: Toll Per Panama Canal Net Ton	Current Toll Schedule: Toll Per Cargo Ton Carried	New Toll Schedule: Toll Per Panama Canal Net Ton	New Toll Schedule: Toll Per Cargo Ton Carried	Total Transportation Costs per Ton Carried: Via Panama Canal: With Current Toll Structure	Via Panama Canal: With New Toll Structure	Via Panama Canal: Percent Increase	Via Least Costly Alternative Route
Dry Bulk Carriers (continued)											
Diverted Transits (continued)											
S.A.E.C.-U.S.W.C.	34	1,722	2,129	2.41	1.23	2.41	1.23	13.30	13.30	0.00	13.07
U.S.W.C.-S.A.E.C.	13	436	510	2.41	1.30	2.41	1.30	16.09	16.09	0.00	15.79
Subtotal	115	9,530	7,507	2.41	1.20	2.41	1.20	17.71	17.71	0.00	17.21
Subtotal	4,986	284,965	325,625	2.41	1.23	2.41	1.23	15.90	15.90	0.00	20.98
Chemical Tankers											
Non-Diverted Transits											
Africa-S.A.W.C.	2	59	64	2.41	1.34	2.41	1.34	43.34	43.34	0.00	60.00
Asia-C.A.E.C.	4	50	66	2.41	1.34	2.41	1.34	54.00	54.00	0.00	70.82
Asia-S.A.E.C.	4	23	129	2.41	1.34	2.41	1.34	50.34	50.34	0.00	52.00
Asia-U.S.E.C.	39	820	1,116	2.41	1.34	2.41	1.34	43.81	43.81	0.00	59.67
C.A.W.C.-C.A.E.C.	49	306	386	2.41	1.34	2.41	1.34	39.39	39.39	0.00	83.80
C.A.W.C.-Europe	9	169	187	2.41	1.34	2.41	1.34	38.02	38.02	0.00	56.27
C.A.W.C.-U.S.E.C.	63	885	1,077	2.41	1.34	2.41	1.34	27.74	27.74	0.00	58.89
Canada W.C.-Europe	4	106	136	2.41	1.34	2.41	1.34	42.34	42.34	0.00	57.00
Canada W.C.-U.S.E.C.	39	1,042	1,471	2.41	1.34	2.41	1.34	31.94	31.94	0.00	52.60
C.A.E.C.-Asia	9	293	324	2.41	1.34	2.41	1.34	42.34	42.34	0.00	55.00
C.A.E.C.-C.A.W.C.	5	115	160	2.41	1.34	2.41	1.34	21.34	21.34	0.00	42.00
C.A.E.C.-S.A.W.C.	11	217	281	2.41	1.34	2.41	1.34	30.34	30.34	0.00	40.32
C.A.E.C.-U.S.W.C.	2	15	16	2.41	1.34	2.41	1.34	55.94	55.94	0.00	98.40
Europe-C.A.W.C.	10	51	79	2.41	1.34	2.41	1.34	60.84	60.84	0.00	93.55
Europe-S.A.W.C.	9	98	111	2.41	1.34	2.41	1.34	58.65	58.65	0.00	62.50
Europe-U.S.W.C.	10	261	303	2.41	1.34	2.41	1.34	42.05	42.05	0.00	56.46

(Continued)

Table B-22. Laden Transits, Tons Carried, Toll Revenue and Toll Rates, Current Toll Structure and Rates, 200,000 DWT Scenario, 2060, by Ship Type, Diversion Status, and Trade Route (1990 US$, except when noted)(continued)

Ship Type, Diversion Status, and Trade Route	Transits	Cargo Tonnage Carried (thousands)	Revenue (thousands) a/	Current Toll Schedule: Toll Per Panama Canal Net Ton	Current Toll Schedule: Toll Per Cargo Ton Carried	New Toll Schedule: Toll Per Panama Canal Net Ton	New Toll Schedule: Toll Per Cargo Ton Carried	Total Transportation Costs per Ton Carried, Via Panama Canal: With Current Toll Structure	Via Panama Canal: With New Toll Structure	Via Panama Canal: Percent Increase	Via Least Costly Alternative Route
Chemical Tankers (continued)											
Non-Diverted Transits (continued)											
Oceania-U.S.E.C.	17	494	688	2.41	1.34	2.41	1.34	40.63	40.63	0.00	45.24
S.A.E.C.-C.A.W.C.	10	79	101	2.41	1.34	2.41	1.34	50.34	50.34	0.00	54.86
S.A.E.C.-U.S.W.C.	1	43	51	2.41	1.34	2.41	1.34	30.34	30.34	0.00	31.00
S.A.W.C.-C.A.E.C.	36	134	436	2.41	1.34	2.41	1.34	44.18	44.18	0.00	60.24
S.A.W.C.-Europe	12	151	178	2.41	1.34	2.41	1.34	53.51	53.51	0.00	56.81
S.A.W.C.-U.S.E.C.	12	100	208	2.41	1.34	2.41	1.34	39.07	39.07	0.00	53.98
U.S.E.C.-Asia	683	23,746	25,668	2.41	1.34	2.41	1.34	41.54	41.54	0.00	56.40
U.S.E.C.-C.A.W.C.	27	238	308	2.41	1.34	2.41	1.34	34.18	34.18	0.00	74.41
U.S.E.C.-Canada W.C.	8	61	71	2.41	1.34	2.41	1.34	60.04	60.04	0.00	104.95
U.S.E.C.-Oceania	17	545	617	2.41	1.34	2.41	1.34	43.19	43.19	0.00	48.34
U.S.E.C.-S.A.W.C.	53	560	720	2.41	1.34	2.41	1.34	41.25	41.25	0.00	57.19
U.S.E.C.-U.S.W.C.	48	1,814	2,272	2.41	1.34	2.41	1.34	25.49	25.49	0.00	43.29
U.S.W.C.-C.A.E.C.	1	12	20	2.41	1.34	2.41	1.34	29.34	29.34	0.00	49.00
U.S.W.C.-Europe	16	266	356	2.41	1.34	2.41	1.34	45.29	45.29	0.00	61.30
U.S.W.C.-S.A.E.C.	0	6	7	2.41	1.34	2.41	1.34	38.34	38.34	0.00	39.00
U.S.W.C.-U.S.E.C.	12	233	574	2.41	1.34	2.41	1.34	25.79	25.79	0.00	43.90
Subtotal	1,224	32,988	38,182	2.41	1.34	2.41	1.34	39.96	39.96	0.00	55.77
Full Container Ships											
Non-Diverted Transits											
Africa-U.S.W.C.	0	5	11	2.41	4.49	2.41	4.49	247.81	247.81	0.00	284.11
Asia-Canada E.C.	33	739	2,283	2.41	4.70	2.41	4.70	207.29	207.29	0.00	225.70
Asia-S.A.E.C.	4	14	91	2.41	4.49	2.41	4.49	274.66	274.66	0.00	282.11

(Continued)

Table B-22. Laden Transits, Tons Carried, Toll Revenue and Toll Rates, Current Toll Structure and Rates, 200,000 DWT Scenario, 2060, by Ship Type, Diversion Status, and Trade Route (1990 US$, except when noted)(continued)

Ship Type, Diversion Status, and Trade Route	Transits	Cargo Tonnage Carried (thousands)	Revenue (thousands) a/	Current Toll Schedule: Toll Per Panama Canal Net Ton	Current Toll Schedule: Toll Per Cargo Ton Carried	New Toll Schedule: Toll Per Panama Canal Net Ton	New Toll Schedule: Toll Per Cargo Ton Carried	Total Transportation Costs per Ton Carried: Via Panama Canal: With Current Toll Structure	Via Panama Canal: With New Toll Structure	Via Panama Canal: Percent Increase	Via Least Costly Alternative Route
Full Container Ships (continued)											
Non-Diverted Transits (continued)											
Asia-U.S.E.C. (low inv. cost)	186	5,208	21,829	2.41	4.92	2.41	4.92	231.70	231.70	0.00	245.26
C.A.W.C.-C.A.E.C.	1	9	45	2.41	4.44	2.41	4.44	130.00	130.00	0.00	207.98
C.A.W.C.-Europe	2	37	130	2.41	4.42	2.41	4.42	152.02	152.02	0.00	204.85
C.A.W.C.-S.A.E.C.	0	7	21	2.41	4.44	2.41	4.44	162.41	162.41	0.00	169.25
C.A.W.C.-U.S.E.C.	0	5	12	2.41	4.49	2.41	4.49	161.41	161.41	0.00	253.29
Canada E.C.-Asia	35	658	1,697	2.41	4.55	2.41	4.55	226.90	226.90	0.00	236.18
Canada E.C.-Oceania	23	286	779	2.41	4.47	2.41	4.47	257.67	257.67	0.00	260.84
Canada E.C.-U.S.W.C.	8	247	689	2.41	4.77	2.41	4.77	154.77	154.77	0.00	229.00
Canada W.C.-Europe	31	511	1,219	2.41	4.51	2.41	4.51	210.71	210.71	0.00	276.36
C.A.E.C.-Asia	8	116	405	2.41	4.47	2.41	4.47	213.60	213.60	0.00	244.68
C.A.E.C.-C.A.W.C.	1	7	27	2.41	4.47	2.41	4.47	143.12	143.12	0.00	235.87
C.A.E.C.-Oceania	1	8	21	2.41	4.49	2.41	4.49	250.78	250.78	0.00	297.02
C.A.E.C.-S.A.W.C.	2	10	40	2.41	4.49	2.41	4.49	178.89	178.89	0.00	214.04
C.A.E.C.-U.S.W.C.	2	26	82	2.41	4.45	2.41	4.45	152.93	152.93	0.00	218.40
Europe-C.A.W.C.	0	1	6	2.41	4.42	2.41	4.42	152.02	152.02	0.00	243.00
Europe-Canada W.C.	25	336	870	2.41	4.47	2.41	4.47	223.81	223.81	0.00	284.41
Europe-S.A.W.C.	81	1,309	4,322	2.41	4.42	2.41	4.42	191.22	191.22	0.00	221.95
Europe-U.S.W.C.	140	3,123	8,904	2.41	4.67	2.41	4.67	205.80	205.80	0.00	215.66
Middle East-U.S.W.C.	15	247	615	2.41	4.47	2.41	4.47	218.19	218.19	0.00	247.58
Oceania-C.A.E.C.	5	64	135	2.41	4.49	2.41	4.49	250.78	250.78	0.00	297.02
S.A.E.C.-C.A.W.C.	1	8	20	2.41	4.49	2.41	4.49	197.14	197.14	0.00	206.59
S.A.E.C.-U.S.W.C.	2	20	43	2.41	4.49	2.41	4.49	183.23	183.23	0.00	219.50
S.A.W.C.-C.A.E.C.	0	1	7	2.41	4.49	2.41	4.49	178.89	178.89	0.00	214.04

(Continued)

Table B-22. Laden Transits, Tons Carried, Toll Revenue and Toll Rates, Current Toll Structure and Rates, 200,000 DWT Scenario, 2060, by Ship Type, Diversion Status, and Trade Route (1990 US$, except when noted)(continued)

Ship Type, Diversion Status, and Trade Route	Transits	Cargo Tonnage Carried (thousands)	Revenue (thousands) a/	Current Toll Schedule: Toll Per Panama Canal Net Ton	Current Toll Schedule: Toll Per Cargo Ton Carried	New Toll Schedule: Toll Per Panama Canal Net Ton	New Toll Schedule: Toll Per Cargo Ton Carried	Total Transportation Costs per Ton Carried: Via Panama Canal: With Current Toll Structure	Via Panama Canal: With New Toll Structure	Via Panama Canal: Percent Increase	Via Least Costly Alternative Route
Full Container Ships (continued)											
Non-Diverted Transits (continued)											
S.A.W.C.-Europe	144	3,081	7,725	2.41	4.42	2.41	4.42	191.21	191.21	0.00	221.95
S.A.W.C.-U.S.E.C.	99	1,047	2,537	2.41	4.49	2.41	4.49	174.32	174.32	0.00	221.50
U.S.E.C.-Asia (low inv. cost)	234	8,718	25,601	2.41	4.88	2.41	4.88	233.14	233.14	0.00	246.59
U.S.E.C.-C.A.W.C.	13	112	328	2.41	4.49	2.41	4.49	140.53	140.53	0.00	253.29
U.S.E.C.-S.A.W.C.	117	1,005	2,993	2.41	4.49	2.41	4.49	174.32	174.32	0.00	221.50
U.S.E.C.-U.S.W.C.	1	26	77	2.41	4.76	2.41	4.76	138.99	138.99	0.00	224.03
U.S.W.C.-Africa	0	0	0	2.41	4.64	2.41	4.64	193.64	193.64	0.00	233.00
U.S.W.C.-Canada E.C.	0	8	24	2.41	4.57	2.41	4.57	159.49	159.49	0.00	231.46
U.S.W.C.-C.A.E.C.	6	90	249	2.41	4.46	2.41	4.46	161.25	161.25	0.00	232.70
U.S.W.C.-Europe	196	3,835	12,758	2.41	4.68	2.41	4.68	208.75	208.75	0.00	217.65
U.S.W.C.-Middle East	25	356	1,031	2.41	4.47	2.41	4.47	219.26	219.26	0.00	229.43
U.S.W.C.-U.S.E.C.	21	326	1,513	2.41	4.65	2.41	4.65	141.16	141.16	0.00	224.31
Subtotal	1,460	31,607	99,139	2.41	4.72	2.41	4.72	213.85	213.85	0.00	234.46
Full Container Ships											
Diverted Transits											
Oceania-Canada E.C.	10	177	108	2.41	4.47	2.41	4.47	251.62	251.62	0.00	248.23
Oceania-S.A.E.C.	0	2	1	2.41	4.49	2.41	4.49	241.87	241.87	0.00	238.38
Subtotal	10	179	109	2.41	4.47	2.41	4.47	251.49	251.49	0.00	248.10
Subtotal	1,470	31,786	99,249	2.41	4.72	2.41	4.72	214.06	214.06	0.00	234.53
General Cargo Ships											
Non-Diverted Transits											
Africa-C.A.W.C.	3	46	75	2.41	1.39	2.41	1.39	31.04	31.04	0.00	56.35

(Continued)

Table B-22. Laden Transits, Tons Carried, Toll Revenue and Toll Rates, Current Toll Structure and Rates, 200,000 DWT Scenario, 2060, by Ship Type, Diversion Status, and Trade Route (1990 US$, except when noted)(continued)

Ship Type, Diversion Status, and Trade Route	Transits	Cargo Tonnage Carried (thousands)	Revenue (thousands) a/	Current Toll Schedule: Toll Per Panama Canal Net Ton	Current Toll Schedule: Toll Per Cargo Ton Carried	New Toll Schedule: Toll Per Panama Canal Net Ton	New Toll Schedule: Toll Per Cargo Ton Carried	Total Transportation Costs per Ton Carried: Via Panama Canal: With Current Toll Structure	Via Panama Canal: With New Toll Structure	Via Panama Canal: Percent Increase	Via Least Costly Alternative Route
General Cargo Ships (continued)											
Non-Diverted Transits (continued)											
Africa-S.A.W.C.	3	68	76	2.41	1.39	2.41	1.39	37.94	37.94	0.00	54.35
Asia-Canada E.C.	0	3	4	2.41	1.39	2.41	1.39	41.94	41.94	0.00	46.45
Asia-C.A.E.C.	127	1,501	2,947	2.41	1.39	2.41	1.39	36.99	36.99	0.00	49.45
Asia-S.A.E.C.	4	25	96	2.41	1.39	2.41	1.39	45.89	45.89	0.00	46.45
Asia-U.S.E.C.	49	632	1,154	2.41	1.39	2.41	1.39	38.14	38.14	0.00	52.33
C.A.W.C.-Africa	7	139	169	2.41	1.39	2.41	1.39	31.04	31.04	0.00	56.35
C.A.W.C.-C.A.E.C.	55	243	431	2.41	1.46	2.41	1.46	9.72	9.72	0.00	59.62
C.A.W.C.-Europe	51	291	764	2.41	1.41	2.41	1.41	29.65	29.65	0.00	52.03
C.A.W.C.-S.A.E.C.	15	99	225	2.41	1.41	2.41	1.41	27.71	27.71	0.00	32.29
C.A.W.C.-U.S.E.C.	16	84	131	2.41	1.45	2.41	1.45	12.26	12.26	0.00	74.92
Canada E.C.-Asia	10	25	237	2.41	1.39	2.41	1.39	41.94	41.94	0.00	46.45
Canada E.C.-C.A.W.C.	2	36	49	2.41	1.39	2.41	1.39	21.19	21.19	0.00	41.50
Canada E.C.-S.A.W.C.	16	148	380	2.41	1.39	2.41	1.39	28.09	28.09	0.00	35.55
Canada W.C.-C.A.E.C.	16	120	204	2.41	1.42	2.41	1.42	31.71	31.71	0.00	70.25
Canada W.C.-Europe	1	21	22	2.41	1.39	2.41	1.39	37.94	37.94	0.00	52.40
Canada W.C.-S.A.E.C.	14	126	190	2.41	1.41	2.41	1.41	36.39	36.39	0.00	71.10
C.A.E.C.-Asia	28	538	648	2.41	1.39	2.41	1.39	36.99	36.99	0.00	49.45
C.A.E.C.-C.A.W.C.	56	209	459	2.41	1.45	2.41	1.45	8.51	8.51	0.00	63.99
C.A.E.C.-Oceania	1	13	21	2.41	1.39	2.41	1.39	40.94	40.94	0.00	49.45
C.A.E.C.-S.A.W.C.	53	492	799	2.41	1.41	2.41	1.41	22.58	22.58	0.00	34.74
C.A.E.C.-U.S.W.C.	12	42	67	2.41	1.50	2.41	1.50	32.53	32.53	0.00	110.69
Europe-C.A.W.C.	87	598	1,538	2.41	1.40	2.41	1.40	28.49	28.49	0.00	59.50
Europe-Canada W.C.	3	11	16	2.41	1.50	2.41	1.50	80.37	80.37	0.00	136.96

(Continued)

Table B-22. Laden Transits, Tons Carried, Toll Revenue and Toll Rates, Current Toll Structure and Rates, 200,000 DWT Scenario, 2060, by Ship Type, Diversion Status, and Trade Route (1990 US$, except when noted)(continued)

Ship Type, Diversion Status, and Trade Route	Transits	Cargo Tonnage Carried (thousands)	Revenue (thousands) a/	Current Toll Schedule: Toll Per Panama Canal Net Ton	Current Toll Schedule: Toll Per Cargo Ton Carried	New Toll Schedule: Toll Per Panama Canal Net Ton	New Toll Schedule: Toll Per Cargo Ton Carried	Total Transportation Costs per Ton Carried: Via Panama Canal: With Current Toll Structure	Via Panama Canal: With New Toll Structure	Via Panama Canal: Percent Increase	Via Least Costly Alternative Route
General Cargo Ships (continued)											
Non-Diverted Transits (continued)											
Europe-S.A.W.C.	73	734	1,608	2.41	1.39	2.41	1.39	33.84	33.84	0.00	35.65
Europe-U.S.W.C.	4	18	34	2.41	1.44	2.41	1.44	62.15	62.15	0.00	107.39
Middle East-S.A.W.C.	6	3	34	2.41	1.50	2.41	1.50	73.82	73.82	0.00	102.30
Middle East-U.S.W.C.	7	19	157	2.41	1.39	2.41	1.39	40.94	40.94	0.00	47.45
Oceania-C.A.E.C.	1	7	25	2.41	1.39	2.41	1.39	39.94	39.94	0.00	49.45
Oceania-U.S.E.C.	2	9	20	2.41	1.43	2.41	1.43	57.41	57.41	0.00	69.46
S.A.E.C.-C.A.W.C.	13	261	293	2.41	1.39	2.41	1.39	25.14	25.14	0.00	26.70
S.A.E.C.-Canada W.C.	0	2	6	2.41	1.39	2.41	1.39	35.04	35.04	0.00	38.55
S.A.E.C.-U.S.W.C.	17	77	324	2.41	1.40	2.41	1.40	38.23	38.23	0.00	40.19
S.A.W.C.-Africa	8	149	175	2.41	1.39	2.41	1.39	34.04	34.04	0.00	53.35
S.A.W.C.-Canada E.C.	1	14	19	2.41	1.39	2.41	1.39	28.09	28.09	0.00	35.55
S.A.W.C.-C.A.E.C.	82	361	719	2.41	1.45	2.41	1.45	23.90	23.90	0.00	48.57
S.A.W.C.-Europe	171	2,817	3,986	2.41	1.39	2.41	1.39	33.04	33.04	0.00	34.60
S.A.W.C.-Middle East	2	25	39	2.41	1.39	2.41	1.39	35.99	35.99	0.00	42.50
S.A.W.C.-U.S.E.C.	56	430	900	2.41	1.40	2.41	1.40	25.31	25.31	0.00	40.80
U.S.E.C.-Asia	74	1,214	1,745	2.41	1.39	2.41	1.39	38.38	38.38	0.00	52.66
U.S.E.C.-C.A.W.C.	103	776	1,101	2.41	1.43	2.41	1.43	14.67	14.67	0.00	60.90
U.S.E.C.-Oceania	6	89	135	2.41	1.39	2.41	1.39	40.94	40.94	0.00	46.45
U.S.E.C.-S.A.W.C.	187	1,336	2,898	2.41	1.41	2.41	1.41	25.45	25.45	0.00	41.52
U.S.E.C.-U.S.W.C.	1	0	4	2.41	1.50	2.41	1.50	35.37	35.37	0.00	122.89
U.S.W.C.-Africa	7	75	154	2.41	1.39	2.41	1.39	36.99	36.99	0.00	47.45
U.S.W.C.-C.A.E.C.	3	1	18	2.41	1.50	2.41	1.50	32.53	32.53	0.00	110.69
U.S.W.C.-Europe	3	25	31	2.41	1.42	2.41	1.42	44.83	44.83	0.00	69.85

(Continued)

Table B-22. Laden Transits, Tons Carried, Toll Revenue and Toll Rates, Current Toll Structure and Rates, 200,000 DWT Scenario, 2060, by Ship Type, Diversion Status, and Trade Route (1990 US$, except when noted)(continued)

Ship Type, Diversion Status, and Trade Route	Transits	Cargo Tonnage Carried (thousands)	Revenue (thousands) a/	Current Toll Schedule: Toll Per Panama Canal Net Ton	Current Toll Schedule: Toll Per Cargo Ton Carried	New Toll Schedule: Toll Per Panama Canal Net Ton	New Toll Schedule: Toll Per Cargo Ton Carried	Total Transportation Costs per Ton Carried, Via Panama Canal: With Current Toll Structure	Total Transportation Costs per Ton Carried, Via Panama Canal: With New Toll Structure	Total Transportation Costs per Ton Carried, Via Panama Canal: Percent Increase	Total Transportation Costs per Ton Carried: Via Least Costly Alternative Route
General Cargo Ships (continued)											
Non-Diverted Transits (continued)											
U.S.W.C.-S.A.E.C.	8	19	68	2.41	1.45	2.41	1.45	53.26	53.26	0.00	59.12
Subtotal	1,462	13,971	25,195	2.41	1.40	2.41	1.40	30.67	30.67	0.00	46.35
General Cargo Ships											
Diverted Transits											
Canada E.C.-Oceania	0	7	9	2.41	1.39	2.41	1.39	47.84	47.84	0.00	47.45
Canada W.C.-Middle East	2	13	35	2.41	1.39	2.41	1.39	42.89	42.89	0.00	42.50
Subtotal	2	20	43	2.41	1.39	2.41	1.39	44.65	44.65	0.00	44.26
Subtotal	1,464	13,991	25,239	2.41	1.40	2.41	1.40	30.69	30.69	0.00	46.34
Liquid Gas Carriers											
Non-Diverted Transits											
C.A.W.C.-C.A.E.C.	10	43	106	2.41	7.30	2.41	7.30	57.30	57.30	0.00	201.00
C.A.E.C.-Asia	10	53	189	2.41	4.67	2.41	4.67	124.16	124.16	0.00	178.06
C.A.E.C.-C.A.W.C.	56	742	2,143	2.41	3.79	2.41	3.79	26.91	26.91	0.00	81.65
C.A.E.C.-S.A.W.C.	4	60	159	2.41	3.83	2.41	3.83	45.83	45.83	0.00	70.00
C.A.E.C.-U.S.W.C.	0	3	6	2.41	3.83	2.41	3.83	51.83	51.83	0.00	109.00
Europe-C.A.W.C.	2	7	23	2.41	7.30	2.41	7.30	129.30	129.30	0.00	234.00
Europe-S.A.W.C.	0	1	3	2.41	3.82	2.41	3.82	76.82	76.82	0.00	82.00
Oceania-U.S.E.C.	4	57	180	2.41	3.62	2.41	3.62	75.10	75.10	0.00	85.98
S.A.E.C.-Asia	2	30	79	2.41	3.83	2.41	3.83	89.83	89.83	0.00	107.00
S.A.E.C.-C.A.W.C.	12	32	125	2.41	7.30	2.41	7.30	115.30	115.30	0.00	132.00
U.S.E.C.-Asia	3	41	126	2.41	3.86	2.41	3.86	94.04	94.04	0.00	139.47

(Continued)

Table B-22. Laden Transits, Tons Carried, Toll Revenue and Toll Rates, Current Toll Structure and Rates, 200,000 DWT Scenario, 2060, by Ship Type, Diversion Status, and Trade Route (1990 US$, except when noted)(continued)

Ship Type, Diversion Status, and Trade Route	Transits	Cargo Tonnage Carried (thousands)	Revenue (thousands) a/	Current Toll Schedule: Toll Per Panama Canal Net Ton	Current Toll Schedule: Toll Per Cargo Ton Carried	New Toll Schedule: Toll Per Panama Canal Net Ton	New Toll Schedule: Toll Per Cargo Ton Carried	Total Transportation Costs per Ton Carried, Via Panama Canal: With Current Toll Structure	Total Transportation Costs per Ton Carried, Via Panama Canal: With New Toll Structure	Total Transportation Costs per Ton Carried, Via Panama Canal: Percent Increase	Total Transportation Costs per Ton Carried: Via Least Costly Alternative Route
Liquid Gas Carriers (continued)											
Non-Diverted Transits (continued)											
U.S.E.C.-C.A.W.C.	0	1	3	2.41	7.30	2.41	7.30	66.30	66.30	0.00	226.00
U.S.E.C.-S.A.W.C.	1	2	7	2.41	7.30	2.41	7.30	109.30	109.30	0.00	182.00
Subtotal	104	1,071	3,148	2.41	3.99	2.41	3.99	44.45	44.45	0.00	96.49
Passenger Ships											
Non-Diverted Transits											
North-Bound	197	0	2,354	2.41	0.00	2.41	0.00	0.00	0.00	0.00	0.00
South-Bound	238	0	4,340	2.41	0.00	2.41	0.00	0.00	0.00	0.00	0.00
Subtotal	435	0	6,694	2.41	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Refrigerated Ships											
Non-Diverted Transits											
Africa-C.A.W.C.	0	0	2	2.41	4.00	2.41	4.00	120.20	120.20	0.00	224.60
Africa-S.A.W.C.	49	21	1,012	2.41	3.94	2.41	3.94	154.50	154.50	0.00	228.37
Asia-C.A.E.C.	25	95	615	2.41	3.86	2.41	3.86	131.86	131.86	0.00	180.00
Asia-S.A.E.C.	7	5	130	2.41	4.00	2.41	4.00	180.00	180.00	0.00	184.20
Asia-U.S.E.C.	1	0	14	2.41	4.00	2.41	4.00	149.60	149.60	0.00	213.60
C.A.W.C.-Africa	2	7	35	2.41	4.00	2.41	4.00	120.20	120.20	0.00	224.60
C.A.W.C.-Canada E.C.	1	5	11	2.41	4.00	2.41	4.00	79.20	79.20	0.00	163.40
C.A.W.C.-C.A.E.C.	39	294	966	2.41	3.86	2.41	3.86	52.86	52.86	0.00	132.00
C.A.W.C.-Europe	276	1,493	6,811	2.41	3.86	2.41	3.86	92.86	92.86	0.00	150.00
C.A.W.C.-S.A.E.C.	2	9	31	2.41	4.00	2.41	4.00	94.40	94.40	0.00	103.00
C.A.W.C.-U.S.E.C.	1	2	22	2.41	4.00	2.41	4.00	64.00	64.00	0.00	160.40

(Continued)

Table B-22. Laden Transits, Tons Carried, Toll Revenue and Toll Rates, Current Toll Structure and Rates, 200,000 DWT Scenario, 2060, by Ship Type, Diversion Status, and Trade Route (1990 US$, except when noted)(continued)

Ship Type, Diversion Status, and Trade Route	Transits	Cargo Tonnage Carried (thousands)	Revenue (thousands) a/	Current Toll Schedule: Toll Per Panama Canal Net Ton	Current Toll Schedule: Toll Per Cargo Ton Carried	New Toll Schedule: Toll Per Panama Canal Net Ton	New Toll Schedule: Toll Per Cargo Ton Carried	Total Transportation Costs per Ton Carried, Via Panama Canal: With Current Toll Structure	Total Transportation Costs per Ton Carried, Via Panama Canal: With New Toll Structure	Total Transportation Costs per Ton Carried, Via Panama Canal: Percent Increase	Total Transportation Costs per Ton Carried: Via Least Costly Alternative Route
Refrigerated Ships (continued)											
Non-Diverted Transits (continued)											
Canada E.C.-Asia	15	92	274	2.41	4.00	2.41	4.00	165.80	165.80	0.00	182.60
Canada E.C.-C.A.W.C.	11	31	267	2.41	3.86	2.41	3.86	71.86	71.86	0.00	149.00
Canada W.C.-Europe	4	45	92	2.41	3.86	2.41	3.86	132.86	132.86	0.00	190.00
C.A.E.C.-Asia	13	37	269	2.41	3.93	2.41	3.93	144.92	144.92	0.00	197.33
C.A.E.C.-C.A.W.C.	43	11	1,065	2.41	3.86	2.41	3.86	52.86	52.86	0.00	132.00
C.A.E.C.-S.A.W.C.	93	82	2,300	2.41	3.86	2.41	3.86	75.86	75.86	0.00	107.00
Europe-C.A.W.C.	308	26	7,582	2.41	3.86	2.41	3.86	92.86	92.86	0.00	187.00
Europe-Canada W.C.	1	1	19	2.41	4.00	2.41	4.00	145.60	145.60	0.00	204.40
Europe-S.A.W.C.	295	278	6,904	2.41	3.88	2.41	3.88	119.82	119.82	0.00	127.10
Europe-U.S.W.C.	18	16	335	2.41	4.00	2.41	4.00	135.40	135.40	0.00	192.20
Middle East-S.A.W.C.	3	6	49	2.41	4.00	2.41	4.00	138.00	138.00	0.00	165.40
Oceania-C.A.E.C.	6	50	120	2.41	4.00	2.41	4.00	157.20	157.20	0.00	196.80
Oceania-U.S.E.C.	53	207	1,020	2.41	3.98	2.41	3.98	160.43	160.43	0.00	183.47
S.A.E.C.-Asia	12	62	217	2.41	4.00	2.41	4.00	146.60	146.60	0.00	172.00
S.A.W.C.-Africa	27	111	562	2.41	3.94	2.41	3.94	130.08	130.08	0.00	205.85
S.A.W.C.-C.A.E.C.	40	241	967	2.41	3.86	2.41	3.86	76.48	76.48	0.00	107.85
S.A.W.C.-Europe	1,101	6,815	25,105	2.41	3.89	2.41	3.89	119.88	119.88	0.00	127.15
S.A.W.C.-Middle East	5	18	90	2.41	4.00	2.41	4.00	138.00	138.00	0.00	165.40
S.A.W.C.-U.S.E.C.	808	3,821	19,011	2.41	3.88	2.41	3.88	82.93	82.93	0.00	122.50
U.S.E.C.-Asia	46	189	1,080	2.41	3.87	2.41	3.87	139.10	139.10	0.00	198.29
U.S.E.C.-C.A.W.C.	70	196	1,715	2.41	3.86	2.41	3.86	57.86	57.86	0.00	146.00
U.S.E.C.-S.A.W.C.	423	892	10,203	2.41	3.87	2.41	3.87	82.19	82.19	0.00	121.46
U.S.W.C.-Europe	140	804	2,868	2.41	3.95	2.41	3.95	134.45	134.45	0.00	190.92

(Continued)

Table B-22. Laden Transits, Tons Carried, Toll Revenue and Toll Rates, Current Toll Structure and Rates, 200,000 DWT Scenario, 2060, by Ship Type, Diversion Status, and Trade Route (1990 US$, except when noted)(continued)

Ship Type, Diversion Status, and Trade Route	Transits	Cargo Tonnage Carried (thousands)	Revenue (thousands) a/	Current Toll Schedule: Toll Per Panama Canal Net Ton	Current Toll Schedule: Toll Per Cargo Ton Carried	New Toll Schedule: Toll Per Panama Canal Net Ton	New Toll Schedule: Toll Per Cargo Ton Carried	Total Transportation Costs per Ton Carried: Via Panama Canal: With Current Toll Structure	Via Panama Canal: With New Toll Structure	Via Panama Canal: Percent Increase	Via Least Costly Alternative Route
Refrigerated Ships (continued)											
Non-Diverted Transits (continued)											
U.S.W.C.-S.A.E.C.	2	6	36	2.41	3.98	2.41	3.98	131.22	131.22	0.00	135.82
Subtotal	3,937	15,968	91,800	2.41	3.88	2.41	3.88	105.63	105.63	0.00	134.95
Refrigerated Ships											
Diverted Transits											
Africa-Asia	46	292	926	2.41	4.00	2.41	4.00	173.40	173.40	0.00	173.00
Subtotal	46	292	926	2.41	4.00	2.41	4.00	173.40	173.40	0.00	173.00
Subtotal	3,983	16,260	92,726	2.41	3.88	2.41	3.88	106.85	106.85	0.00	135.63
Roll-On Roll-Off											
Non-Diverted Transits											
Asia-Canada E.C.	3	15	97	2.41	9.35	2.41	9.35	298.90	298.90	0.00	324.43
Asia-C.A.E.C.	32	633	2,212	2.41	7.92	2.41	7.92	236.83	236.83	0.00	268.32
Asia-U.S.E.C.	67	1,286	4,478	2.41	7.95	2.41	7.95	248.85	248.85	0.00	304.22
C.A.W.C.-Europe	33	177	1,310	2.41	8.66	2.41	8.66	198.66	198.66	0.00	280.00
C.A.W.C.-U.S.E.C.	3	1	102	2.41	8.66	2.41	8.66	170.66	170.66	0.00	273.00
Canada E.C.-Asia	17	85	508	2.41	9.30	2.41	9.30	355.27	355.27	0.00	370.17
Canada W.C.-C.A.E.C.	0	1	11	2.41	10.19	2.41	10.19	239.87	239.87	0.00	394.39
C.A.E.C.-C.A.W.C.	1	2	26	2.41	9.72	2.41	9.72	167.54	167.54	0.00	296.40
C.A.E.C.-Oceania	7	20	281	2.41	8.66	2.41	8.66	275.66	275.66	0.00	332.00
C.A.E.C.-S.A.W.C.	85	149	1,976	2.41	10.19	2.41	10.19	232.93	232.93	0.00	280.17
Europe-C.A.W.C.	35	221	1,386	2.41	8.66	2.41	8.66	198.66	198.66	0.00	350.00
Europe-S.A.W.C.	0	0	3	2.41	8.67	2.41	8.67	262.67	262.67	0.00	303.00

(Continued)

Table B-22. Laden Transits, Tons Carried, Toll Revenue and Toll Rates, Current Toll Structure and Rates, 200,000 DWT Scenario, 2060, by Ship Type, Diversion Status, and Trade Route (1990 US$, except when noted)(continued)

Ship Type, Diversion Status, and Trade Route	Transits	Cargo Tonnage Carried (thousands)	Revenue (thousands) a/	Current Toll Schedule: Toll Per Panama Canal Net Ton	Current Toll Schedule: Toll Per Cargo Ton Carried	New Toll Schedule: Toll Per Panama Canal Net Ton	New Toll Schedule: Toll Per Cargo Ton Carried	Total Transportation Costs per Ton Carried, Via Panama Canal: With Current Toll Structure	Via Panama Canal: With New Toll Structure	Via Panama Canal: Percent Increase	Via Least Costly Alternative Route
Roll-On Roll-Off (continued)											
Non-Diverted Transits (continued)											
Europe-U.S.W.C.	1	3	24	2.41	8.66	2.41	8.66	262.66	262.66	0.00	350.00
Oceania-C.A.E.C.	0	0	1	2.41	7.97	2.41	7.97	234.97	234.97	0.00	273.80
S.A.W.C.-C.A.E.C.	22	44	511	2.41	10.19	2.41	10.19	232.93	232.93	0.00	280.17
S.A.W.C.-Europe	2	5	68	2.41	8.66	2.41	8.66	262.66	262.66	0.00	311.00
S.A.W.C.-U.S.E.C.	12	25	279	2.41	10.19	2.41	10.19	224.99	224.99	0.00	292.08
U.S.E.C.-Asia	14	93	565	2.41	8.64	2.41	8.64	298.20	298.20	0.00	378.28
U.S.E.C.-C.A.W.C.	4	7	162	2.41	8.66	2.41	8.66	144.66	144.66	0.00	273.00
U.S.E.C.-S.A.W.C.	57	101	1,331	2.41	10.19	2.41	10.19	224.99	224.99	0.00	292.08
U.S.W.C.-Canada E.C.	1	2	17	2.41	10.20	2.41	10.20	263.70	263.70	0.00	414.27
U.S.W.C.-C.A.E.C.	2	48	164	2.41	7.75	2.41	7.75	160.82	160.82	0.00	232.64
U.S.W.C.-Europe	0	1	2	2.41	7.77	2.41	7.77	212.68	212.68	0.00	267.50
U.S.W.C.-U.S.E.C.	0	9	30	2.41	7.86	2.41	7.86	159.45	159.45	0.00	255.79
Subtotal	397	2,929	15,542	2.41	8.68	2.41	8.68	240.41	240.41	0.00	299.63
Roll-On Roll-Off											
Diverted Transits											
C.A.W.C.-S.A.E.C.	0	0	3	2.41	8.66	2.41	8.66	211.66	211.66	0.00	211.00
Canada E.C.-Oceania	3	61	184	2.41	7.77	2.41	7.77	251.49	251.49	0.00	249.02
Subtotal	3	61	188	2.41	7.78	2.41	7.78	251.24	251.24	0.00	248.78
Subtotal	400	2,990	15,730	2.41	8.67	2.41	8.67	240.63	240.63	0.00	298.58
Tankers											
Non-Diverted Transits											
Africa-U.S.W.C.	0	0	0	2.41	1.27	2.41	1.27	18.27	18.27	0.00	24.00

(Continued)

Table B-22. Laden Transits, Tons Carried, Toll Revenue and Toll Rates, Current Toll Structure and Rates, 200,000 DWT Scenario, 2060, by Ship Type, Diversion Status, and Trade Route (1990 US$, except when noted)(continued)

Ship Type, Diversion Status, and Trade Route	Transits	Cargo Tonnage Carried (thousands)	Revenue (thousands) a/	Current Toll Schedule: Toll Per Panama Canal Net Ton	Current Toll Schedule: Toll Per Cargo Ton Carried	New Toll Schedule: Toll Per Panama Canal Net Ton	New Toll Schedule: Toll Per Cargo Ton Carried	Total Transportation Costs per Ton Carried: Via Panama Canal: With Current Toll Structure	Via Panama Canal: With New Toll Structure	Via Panama Canal: Percent Increase	Via Least Costly Alternative Route
Tankers (continued)											
Non-Diverted Transits (continued)											
Asia-U.S.E.C.	3	77	89	2.41	1.27	2.41	1.27	27.11	27.11	0.00	38.76
C.A.W.C.-Africa	0	0	2	2.41	1.27	2.41	1.27	46.27	46.27	0.00	100.00
C.A.W.C.-Canada E.C.	0	8	9	2.41	1.27	2.41	1.27	12.21	12.21	0.00	28.82
C.A.W.C.-C.A.E.C.	16	95	299	2.41	1.27	2.41	1.27	10.26	10.26	0.00	34.99
C.A.W.C.-Europe	4	94	121	2.41	1.27	2.41	1.27	17.17	17.17	0.00	28.84
C.A.W.C.-U.S.E.C.	10	80	187	2.41	1.27	2.41	1.27	11.18	11.18	0.00	37.36
Canada E.C.-Asia	18	707	789	2.41	1.27	2.41	1.27	25.06	25.06	0.00	27.21
Canada W.C.-U.S.E.C.	6	255	320	2.41	1.28	2.41	1.28	13.76	13.76	0.00	26.23
C.A.E.C.-Asia	5	141	191	2.41	1.27	2.41	1.27	22.36	22.36	0.00	31.40
C.A.E.C.-C.A.W.C.	45	750	1,275	2.41	1.27	2.41	1.27	7.38	7.38	0.00	22.70
C.A.E.C.-S.A.W.C.	46	887	1,231	2.41	1.27	2.41	1.27	13.34	13.34	0.00	20.04
C.A.E.C.-U.S.W.C.	5	228	271	2.41	1.27	2.41	1.27	11.93	11.93	0.00	23.43
Europe-C.A.W.C.	17	81	156	2.41	1.27	2.41	1.27	24.95	24.95	0.00	44.78
Europe-S.A.W.C.	4	82	97	2.41	1.27	2.41	1.27	23.34	23.34	0.00	25.18
Europe-U.S.W.C.	4	109	129	2.41	1.27	2.41	1.27	22.50	22.50	0.00	32.22
Oceania-U.S.E.C.	9	162	211	2.41	1.27	2.41	1.27	28.05	28.05	0.00	32.60
S.A.E.C.-Asia	77	14,050	14,868	2.41	1.27	2.41	1.27	14.13	14.13	0.00	16.31
S.A.E.C.-C.A.W.C.	68	3,130	4,524	2.41	1.26	2.41	1.26	10.89	10.89	0.00	11.68
S.A.E.C.-U.S.W.C.	27	978	1,169	2.41	1.27	2.41	1.27	18.67	18.67	0.00	18.82
S.A.W.C.-Canada E.C.	1	14	18	2.41	1.27	2.41	1.27	20.47	20.47	0.00	27.25
S.A.W.C.-C.A.E.C.	15	557	688	2.41	1.27	2.41	1.27	10.99	10.99	0.00	15.42
S.A.W.C.-Europe	19	173	210	2.41	1.27	2.41	1.27	28.01	28.01	0.00	30.35
S.A.W.C.-U.S.E.C.	17	607	731	2.41	1.27	2.41	1.27	11.71	11.71	0.00	18.51

(Continued)

Table B-22. Laden Transits, Tons Carried, Toll Revenue and Toll Rates, Current Toll Structure and Rates, 200,000 DWT Scenario, 2060, by Ship Type, Diversion Status, and Trade Route (1990 US$, except when noted)(continued)

Ship Type, Diversion Status, and Trade Route	Transits	Cargo Tonnage Carried (thousands)	Revenue (thousands) a/	Current Toll Schedule: Toll Per Panama Canal Net Ton	Current Toll Schedule: Toll Per Cargo Ton Carried	New Toll Schedule: Toll Per Panama Canal Net Ton	New Toll Schedule: Toll Per Cargo Ton Carried	Total Transportation Costs per Ton Carried: Via Panama Canal: With Current Toll Structure	Via Panama Canal: With New Toll Structure	Via Panama Canal: Percent Increase	Via Least Costly Alternative Route
Tankers (continued)											
Non-Diverted Transits (continued)											
U.S.E.C.-Asia	90	2,946	3,557	2.41	1.27	2.41	1.27	22.71	22.71	0.00	32.54
U.S.E.C.-C.A.W.C.	14	260	400	2.41	1.27	2.41	1.27	9.23	9.23	0.00	28.15
U.S.E.C.-Canada W.C.	2	7	58	2.41	1.27	2.41	1.27	18.17	18.17	0.00	35.78
U.S.E.C.-Oceania	4	129	157	2.41	1.27	2.41	1.27	26.02	26.02	0.00	30.19
U.S.E.C.-S.A.W.C.	3	49	64	2.41	1.27	2.41	1.27	13.63	13.63	0.00	21.94
U.S.E.C.-U.S.W.C.	21	601	776	2.41	1.27	2.41	1.27	14.06	14.06	0.00	30.95
U.S.W.C.-Africa	10	334	492	2.41	1.26	2.41	1.26	16.39	16.39	0.00	20.19
U.S.W.C.-C.A.E.C.	3	96	131	2.41	1.26	2.41	1.26	11.90	11.90	0.00	23.13
U.S.W.C.-S.A.E.C.	1	29	30	2.41	1.27	2.41	1.27	18.76	18.76	0.00	18.90
U.S.W.C.-U.S.E.C.	4	102	144	2.41	1.27	2.41	1.27	13.36	13.36	0.00	29.10
Subtotal	567	27,821	33,393	2.41	1.27	2.41	1.27	15.12	15.12	0.00	19.64
Tankers											
Diverted Transits											
Middle East-U.S.W.C.	0	0	0	2.41	1.25	2.41	1.25	1.63	1.63	0.00	0.48
Subtotal	0	0	0	2.41	1.25	2.41	1.25	1.63	1.63	0.00	0.48
Subtotal	567	27,821	33,393	2.41	1.27	2.41	1.27	15.12	15.12	0.00	19.64
Vehicle Carriers											
Non-Diverted Transits											
Asia-C.A.E.C.	13	34	878	2.41	29.09	2.41	29.09	417.18	417.18	0.00	496.39
Asia-U.S.E.C.	481	2,251	35,762	2.41	29.20	2.41	29.20	439.57	439.57	0.00	516.31
C.A.W.C.-C.A.E.C.	3	3	117	2.41	28.71	2.41	28.71	266.36	266.36	0.00	440.99

(Continued)

Table B-22. Laden Transits, Tons Carried, Toll Revenue and Toll Rates, Current Toll Structure and Rates, 200,000 DWT Scenario, 2060, by Ship Type, Diversion Status, and Trade Route (1990 US$, except when noted)(continued)

Ship Type, Diversion Status, and Trade Route	Transits	Cargo Tonnage Carried (thousands)	Revenue (thousands) a/	Current Toll Schedule: Toll Per Panama Canal Net Ton	Current Toll Schedule: Toll Per Cargo Ton Carried	New Toll Schedule: Toll Per Panama Canal Net Ton	New Toll Schedule: Toll Per Cargo Ton Carried	Total Transportation Costs per Ton Carried: Via Panama Canal: With Current Toll Structure	Via Panama Canal: With New Toll Structure	Via Panama Canal: Percent Increase	Via Least Costly Alternative Route
Vehicle Carriers (continued)											
Non-Diverted Transits (continued)											
C.A.E.C.-C.A.W.C.	8	3	640	2.41	29.22	2.41	29.22	272.22	272.22	0.00	411.00
C.A.E.C.-Oceania	1	0	75	2.41	29.22	2.41	29.22	434.22	434.22	0.00	482.00
Europe-Canada W.C.	7	16	728	2.41	30.90	2.41	30.90	386.38	386.38	0.00	457.44
Europe-U.S.W.C.	156	299	13,627	2.41	29.95	2.41	29.95	403.00	403.00	0.00	458.96
S.A.W.C.-C.A.E.C.	0	0	8	2.41	28.70	2.41	28.70	323.70	323.70	0.00	380.00
U.S.E.C.-Asia	42	192	3,473	2.41	29.67	2.41	29.67	415.80	415.80	0.00	510.17
U.S.E.C.-Oceania	13	30	965	2.41	29.22	2.41	29.22	433.22	433.22	0.00	453.00
Subtotal	723	2,828	56,272	2.41	29.42	2.41	29.42	433.09	433.09	0.00	508.39
Vehicle Carriers											
Diverted Transits											
Asia-S.A.E.C.	0	0	7	2.41	29.13	2.41	29.13	484.18	484.18	0.00	468.49
Canada E.C.-Asia	1	3	35	2.41	29.22	2.41	29.22	465.22	465.22	0.00	456.00
Subtotal	1	3	42	2.41	29.20	2.41	29.20	466.92	466.92	0.00	457.12
Subtotal	724	2,831	56,314	2.41	29.42	2.41	29.42	433.13	433.13	0.00	508.34
Total Non-Diverting	17,646	441,614	756,269	2.41	1.81	2.41	1.81	45.40	45.40	0.00	55.92
Total Diverting	176	10,086	8,816	2.41	1.32	2.41	1.32	27.98	27.98	0.00	27.41

Notes: These calculations do not include all transits and tons carried forecast by the WEFA Group. For some ship-type and trade-route combinations (accounting for a total of 27 transits and 291695 tons), vessel costs were not available for every DWT size interval. As a result, these transits and tons were excluded. In addition, for 2480 transits and 49528628 tons, the cost by way of the Panama Canal without a toll was higher than the least costly alternative route. As a result, these transits and tons were excluded. Percentages may not calculate exactly as shown due to rounding. A fee of $0.40 per Panama Canal net ton has also been included to account for charges such as handling and agency fees incurred when transitting the Canal. The extra fee is only used to determine diversion status by adding it to the cost per ton carried and is not included in the revenue calculations.

a/ Revenue lost from diversions is measured as the revenue generated by the maximum, nondiverting toll rate increase.

Source: Nathan Associates Inc., based on forecasts of traffic and transportation costs provided by The WEFA Group.

CURRENT TOLL STRUCTURE AND RATES, 250,000-DWT SCENARIO, 2060

Table B-23. Laden Transits, Tons Carried, and Toll Revenue, Current Toll Stucture and Rates, 250,000 DWT Scenario, 2060, by Ship Type

	Transits				Tons Carried(thousands)				Revenue(1990 US$thousands)			
Ship Type	Canal	Diverted	Total	Diverted as a Percent of Total	Canal	Diverted	Total	Diverted as a Percent of Total	Canal	Lost a/	Total	Lost as a Percent of Total
Container-Breakbulk	2,465	0	2,465	0.00	36,996	0	36,996	0.00	68,785	0	68,785	0.00
Dry Bulk Carriers	4,988	69	5,057	1.37	295,921	2,844	298,765	0.95	339,155	3,622	342,777	1.06
Chemical Tankers	1,224	0	1,224	0.00	32,988	0	32,988	0.00	38,182	0	38,182	0.00
Full Container Ships	1,460	10	1,470	0.70	31,607	179	31,786	0.56	99,139	109	99,249	0.11
General Cargo Ships	1,462	2	1,464	0.15	13,971	20	13,991	0.14	25,195	43	25,239	0.17
Liquid Gas Carriers	104	0	104	0.00	1,071	0	1,071	0.00	3,148	0	3,148	0.00
Passenger Ships	435	0	435	0.00	0	0	0	0.00	6,694	0	6,694	0.00
Refrigerated Ships	3,937	46	3,983	1.15	15,968	292	16,260	1.80	91,800	926	92,726	1.00
Roll-On Roll-Off	397	3	400	0.70	2,929	61	2,990	2.05	15,542	188	15,730	1.19
Tankers	553	0	553	0.00	27,821	0	27,821	0.00	33,393	0	33,393	0.00
Vehicle Carriers	723	1	724	0.10	2,828	3	2,831	0.10	56,272	42	56,314	0.07
Total	17,748	131	17,879	0.73	462,101	3,399	465,499	0.73	777,306	4,930	782,236	0.63

Notes: These calculations do not include all transits and tons carried forecast by the WEFA Group. For some ship-type and trade-route combinations (accounting for a total of 27 transits and 291695 tons), vessel costs were not available for every DWT size interval. As a result, these transits and tons were excluded. In addition, for 2480 transits and 49528628 tons, the cost by way of the Panama Canal without a toll was higher than the least costly alternative route. As a result, these transits and tons were excluded. A fee of $0.40 per Panama Canal net ton has also been included to account for charges such as handling and agency fees incurred when transitting the Canal. The extra fee is only used to determine diversion status by adding it to cost per ton carried and is not included in the revenue calculations.

a/ Revenue lost from diversions is measured as the revenue generated by the maximum, nondiverting toll rate increase.

Source: Nathan Associates Inc., based on forecasts of traffic and transportation costs provided by The WEFA Group.

Table B-24. Ballast Transits, Tons Carried, and Toll Revenue, Current Toll Stucture and Rates, 250,000 DWT Scenario, 2060, by Ship Type

	Transits				Tons Carried(thousands)				Revenue(1990 US$thousands)			
Ship Type	Canal	Diverted	Total	Diverted as a Percent of Total	Canal	Diverted	Total	Diverted as a Percent of Total	Canal	Lost	Total	Lost as a Percent of Total
Container-Breakbulk	67	0	67	0.00	0	0	0	0.00	1,629	0	1,629	0.00
Dry Bulk Carriers	338	4	342	1.06	0	0	0	0.00	10,780	115	10,895	1.06
Chemical Tankers	127	0	127	0.00	0	0	0	0.00	3,447	0	3,447	0.00
Full Container Ships	6	0	6	0.11	0	0	0	0.00	260	0	260	0.11
General Cargo Ships	274	0	274	0.17	0	0	0	0.00	3,018	5	3,023	0.17
Liquid Gas Carriers	958	0	958	0.00	0	0	0	0.00	48,680	0	48,680	0.00
Passenger Ships	51	0	51	0.00	0	0	0	0.00	664	0	664	0.00
Refrigerated Ships	1,058	11	1,069	1.00	0	0	0	0.00	18,794	190	18,983	1.00
Roll-On Roll-Off	57	1	58	1.19	0	0	0	0.00	1,696	20	1,716	1.19
Tankers	279	0	279	0.00	0	0	0	0.00	16,039	0	16,039	0.00
Vehicle Carriers	441	0	441	0.07	0	0	0	0.00	26,024	18	26,043	0.07
Total	3,656	16	3,672	0.43	0	0	0	0.00	131,030	349	131,379	0.27

Note: Diversions of ballast transits are computed by diverting a proportion of ballast transits equal to lost revenue as a percent of total potential revenue for a particular laden ship type. See last column on previous table.

Source: Nathan Associates Inc., based on forecasts of traffic and transportation costs provided by The WEFA Group.

Table B-25. Laden Transits, Tons Carried, Toll Revenue and Toll Rates, Current Toll Structure and Rates, 250,000 DWT Scenario, 2060, by Ship Type, Diversion Status, and Trade Route (1990 US$, except when noted)

Ship Type, Diversion Status, and Trade Route	Transits	Cargo Tonnage Carried (thousands)	Revenue (thousands) a/	Current Toll Schedule: Toll Per Panama Canal Net Ton	Current Toll Schedule: Toll Per Cargo Ton Carried	New Toll Schedule: Toll Per Panama Canal Net Ton	New Toll Schedule: Toll Per Cargo Ton Carried	Total Transportation Costs per Ton Carried: Via Panama Canal: With Current Toll Structure	Via Panama Canal: With New Toll Structure	Via Panama Canal: Percent Increase	Via Least Costly Alternative Route
Container-Breakbulk											
Non-Diverted Transits											
Africa-C.A.W.C.	6	185	190	2.41	1.85	2.41	1.85	72.26	72.26	0.00	119.11
Africa-Canada W.C.	0	5	12	2.41	1.87	2.41	1.87	92.01	92.01	0.00	106.57
Africa-U.S.W.C.	2	25	57	2.41	1.87	2.41	1.87	93.01	93.01	0.00	107.78
Asia-Canada E.C.	1	8	21	2.41	1.86	2.41	1.86	93.05	93.05	0.00	100.96
Asia-C.A.E.C.	135	1,246	3,556	2.41	1.87	2.41	1.87	97.20	97.20	0.00	113.04
Asia-S.A.E.C.	48	305	1,197	2.41	1.87	2.41	1.87	105.12	105.12	0.00	107.25
Asia-U.S.E.C.	139	1,759	3,914	2.41	1.86	2.41	1.86	99.37	99.37	0.00	123.49
C.A.W.C.-Africa	6	112	139	2.41	1.87	2.41	1.87	76.03	76.03	0.00	127.35
C.A.W.C.-C.A.E.C.	16	247	412	2.41	1.86	2.41	1.86	51.25	51.25	0.00	91.73
C.A.W.C.-Europe	41	304	1,083	2.41	1.87	2.41	1.87	65.68	65.68	0.00	95.59
C.A.W.C.-S.A.E.C.	23	10	566	2.41	1.87	2.41	1.87	72.11	72.11	0.00	77.11
C.A.W.C.-U.S.E.C.	7	40	169	2.41	1.87	2.41	1.87	57.32	57.32	0.00	95.90
Canada E.C.-Asia	31	815	1,078	2.41	1.85	2.41	1.85	95.14	95.14	0.00	98.29
Canada E.C.-C.A.W.C.	3	25	65	2.41	1.87	2.41	1.87	55.94	55.94	0.00	96.99
Canada E.C.-Oceania	2	25	39	2.41	1.87	2.41	1.87	107.65	107.65	0.00	108.63
Canada E.C.-S.A.W.C.	1	17	26	2.41	1.85	2.41	1.85	65.70	65.70	0.00	79.70
Canada E.C.-U.S.W.C.	0	0	0	2.41	1.86	2.41	1.86	72.57	72.57	0.00	111.42
Canada W.C.-Africa	29	662	852	2.41	1.85	2.41	1.85	93.53	93.53	0.00	106.62
Canada W.C.-Europe	107	3,116	3,851	2.41	1.85	2.41	1.85	81.19	81.19	0.00	109.01
Canada W.C.-S.A.E.C.	22	421	544	2.41	1.87	2.41	1.87	74.11	74.11	0.00	114.56
Canada W.C.-U.S.E.C.	15	303	437	2.41	1.85	2.41	1.85	67.85	67.85	0.00	108.00
C.A.E.C.-Asia	13	270	327	2.41	1.87	2.41	1.87	96.31	96.31	0.00	111.98
C.A.E.C.-C.A.W.C.	13	49	331	2.41	1.87	2.41	1.87	52.15	52.15	0.00	94.93

(Continued)

Table B-25. Laden Transits, Tons Carried, Toll Revenue and Toll Rates, Current Toll Structure and Rates, 250,000 DWT Scenario, 2060, by Ship Type, Diversion Status, and Trade Route (1990 US$, except when noted)(continued)

Ship Type, Diversion Status, and Trade Route	Transits	Cargo Tonnage Carried (thousands)	Revenue (thousands) a/	Current Toll Schedule: Toll Per Panama Canal Net Ton	Current Toll Schedule: Toll Per Cargo Ton Carried	New Toll Schedule: Toll Per Panama Canal Net Ton	New Toll Schedule: Toll Per Cargo Ton Carried	Total Transportation Costs per Ton Carried: Via Panama Canal: With Current Toll Structure	Via Panama Canal: With New Toll Structure	Via Panama Canal: Percent Increase	Via Least Costly Alternative Route
Container-Breakbulk (continued)											
Non-Diverted Transits (continued)											
C.A.E.C.-Canada W.C.	4	59	98	2.41	1.87	2.41	1.87	66.58	66.58	0.00	106.57
C.A.E.C.-Oceania	2	38	61	2.41	1.87	2.41	1.87	94.01	94.01	0.00	112.63
C.A.E.C.-S.A.W.C.	37	286	946	2.41	1.87	2.41	1.87	64.73	64.73	0.00	79.50
C.A.E.C.-U.S.W.C.	6	112	160	2.41	1.86	2.41	1.86	64.27	64.27	0.00	97.78
Europe-C.A.W.C.	44	271	1,125	2.41	1.87	2.41	1.87	66.79	66.79	0.00	118.42
Europe-Canada W.C.	7	217	294	2.41	1.85	2.41	1.85	83.24	83.24	0.00	107.58
Europe-S.A.W.C.	182	1,504	4,696	2.41	1.87	2.41	1.87	90.01	90.01	0.00	104.63
Europe-U.S.W.C.	36	1,115	1,405	2.41	1.85	2.41	1.85	82.41	82.41	0.00	107.84
Oceania-Canada E.C.	4	88	175	2.41	1.85	2.41	1.85	97.85	97.85	0.00	98.00
Oceania-C.A.E.C.	10	99	243	2.41	1.87	2.41	1.87	94.77	94.77	0.00	113.61
S.A.E.C.-C.A.W.C.	16	252	421	2.41	1.87	2.41	1.87	71.65	71.65	0.00	76.57
S.A.E.C.-Canada W.C.	25	335	652	2.41	1.87	2.41	1.87	92.79	92.79	0.00	98.78
S.A.E.C.-U.S.W.C.	84	1,260	2,217	2.41	1.87	2.41	1.87	78.16	78.16	0.00	80.87
S.A.W.C.-Africa	3	52	68	2.41	1.87	2.41	1.87	82.90	82.90	0.00	120.48
S.A.W.C.-Canada E.C.	1	2	29	2.41	1.87	2.41	1.87	69.19	69.19	0.00	84.90
S.A.W.C.-C.A.E.C.	26	206	636	2.41	1.87	2.41	1.87	65.19	65.19	0.00	80.11
S.A.W.C.-Europe	329	5,753	8,373	2.41	1.87	2.41	1.87	89.68	89.68	0.00	106.41
S.A.W.C.-U.S.E.C.	239	2,340	5,962	2.41	1.87	2.41	1.87	62.12	62.12	0.00	81.53
U.S.E.C.-Asia	284	7,177	9,378	2.41	1.86	2.41	1.86	96.15	96.15	0.00	119.21
U.S.E.C.-C.A.W.C.	22	446	591	2.41	1.86	2.41	1.86	47.68	47.68	0.00	93.27
U.S.E.C.-S.A.W.C.	347	3,443	9,015	2.41	1.87	2.41	1.87	61.84	61.84	0.00	81.01
U.S.E.C.-U.S.W.C.	0	0	0	2.41	1.86	2.41	1.86	58.86	58.86	0.00	98.00
U.S.W.C.-Africa	22	367	910	2.41	1.85	2.41	1.85	85.43	85.43	0.00	102.85

(Continued)

Table B-25. Laden Transits, Tons Carried, Toll Revenue and Toll Rates, Current Toll Structure and Rates, 250,000 DWT Scenario, 2060, by Ship Type, Diversion Status, and Trade Route (1990 US$, except when noted)(continued)

Ship Type, Diversion Status, and Trade Route	Transits	Cargo Tonnage Carried (thousands)	Revenue (thousands) a/	Current Toll Schedule: Toll Per Panama Canal Net Ton	Current Toll Schedule: Toll Per Cargo Ton Carried	New Toll Schedule: Toll Per Panama Canal Net Ton	New Toll Schedule: Toll Per Cargo Ton Carried	Total Transportation Costs per Ton Carried: Via Panama Canal: With Current Toll Structure	Via Panama Canal: With New Toll Structure	Via Panama Canal: Percent Increase	Via Least Costly Alternative Route
Container-Breakbulk (continued)											
Non-Diverted Transits (continued)											
U.S.W.C.-Canada E.C.	1	33	37	2.41	1.85	2.41	1.85	69.85	69.85	0.00	106.00
U.S.W.C.-C.A.E.C.	19	135	477	2.41	1.87	2.41	1.87	66.46	66.46	0.00	101.57
U.S.W.C.-Europe	51	1,343	1,786	2.41	1.86	2.41	1.86	83.60	83.60	0.00	108.54
U.S.W.C.-S.A.E.C.	6	104	147	2.41	1.87	2.41	1.87	79.98	79.98	0.00	82.98
U.S.W.C.-U.S.E.C.	0	6	16	2.41	1.85	2.41	1.85	60.33	60.33	0.00	102.02
Subtotal	2,465	36,996	68,785	2.41	1.86	2.41	1.86	83.70	83.70	0.00	104.44
Dry Bulk Carriers											
Non-Diverted Transits											
Africa-C.A.W.C.	29	1,201	1,221	2.41	1.30	2.41	1.30	15.34	15.34	0.00	27.11
Africa-Canada W.C.	156	7,645	7,494	2.41	1.28	2.41	1.28	17.82	17.82	0.00	19.99
Africa-S.A.W.C.	9	313	376	2.41	1.30	2.41	1.30	18.13	18.13	0.00	26.14
Africa-U.S.W.C.	10	297	489	2.41	1.27	2.41	1.27	16.17	16.17	0.00	19.94
Asia-Canada E.C.	15	695	850	2.41	1.25	2.41	1.25	17.55	17.55	0.00	18.43
Asia-C.A.E.C.	29	527	1,264	2.41	1.30	2.41	1.30	18.85	18.85	0.00	24.40
Asia-U.S.E.C.	386	12,134	19,160	2.41	1.27	2.41	1.27	16.62	16.62	0.00	23.16
Brazil-Asia	108	18,541	18,989	2.41	1.16	2.41	1.16	17.30	17.30	0.00	18.35
C.A.W.C.-Africa	2	52	72	2.41	1.29	2.41	1.29	15.32	15.32	0.00	27.18
C.A.W.C.-C.A.E.C.	63	2,167	2,700	2.41	1.30	2.41	1.30	7.57	7.57	0.00	16.30
C.A.W.C.-Europe	19	626	870	2.41	1.28	2.41	1.28	12.19	12.19	0.00	18.57
C.A.W.C.-S.A.E.C.	16	268	664	2.41	1.30	2.41	1.30	11.59	11.59	0.00	12.04
C.A.W.C.-U.S.E.C.	47	1,854	2,138	2.41	1.29	2.41	1.29	7.69	7.69	0.00	18.15
Canada E.C.-Asia	126	7,535	8,942	2.41	1.22	2.41	1.22	18.27	18.27	0.00	20.41

(Continued)

Table B-25. Laden Transits, Tons Carried, Toll Revenue and Toll Rates, Current Toll Structure and Rates, 250,000 DWT Scenario, 2060, by Ship Type, Diversion Status, and Trade Route (1990 US$, except when noted)(continued)

Ship Type, Diversion Status, and Trade Route	Transits	Cargo Tonnage Carried (thousands)	Revenue (thousands) a/	Current Toll Schedule: Toll Per Panama Canal Net Ton	Current Toll Schedule: Toll Per Cargo Ton Carried	New Toll Schedule: Toll Per Panama Canal Net Ton	New Toll Schedule: Toll Per Cargo Ton Carried	Total Transportation Costs per Ton Carried, Via Panama Canal: With Current Toll Structure	Total Transportation Costs per Ton Carried, Via Panama Canal: With New Toll Structure	Total Transportation Costs per Ton Carried, Via Panama Canal: Percent Increase	Total Transportation Costs per Ton Carried: Via Least Costly Alternative Route
Dry Bulk Carriers (continued)											
Non-Diverted Transits (continued)											
Canada E.C.-Oceania	7	132	298	2.41	1.29	2.41	1.29	21.09	21.09	0.00	21.80
Canada E.C.-S.A.W.C.	12	426	555	2.41	1.29	2.41	1.29	12.85	12.85	0.00	15.56
Canada W.C.-Africa	175	7,689	8,602	2.41	1.28	2.41	1.28	17.49	17.49	0.00	19.57
Canada W.C.-C.A.E.C.	9	270	378	2.41	1.30	2.41	1.30	12.59	12.59	0.00	21.54
Canada W.C.-Europe	301	15,944	18,108	2.41	1.24	2.41	1.24	16.14	16.14	0.00	21.21
Canada W.C.-S.A.E.C.	29	1,820	2,183	2.41	1.22	2.41	1.22	11.69	11.69	0.00	12.24
Canada W.C.-U.S.E.C.	105	3,183	4,392	2.41	1.30	2.41	1.30	13.34	13.34	0.00	23.33
C.A.E.C.-Asia	22	808	903	2.41	1.30	2.41	1.30	18.13	18.13	0.00	23.38
C.A.E.C.-C.A.W.C.	49	1,650	2,045	2.41	1.30	2.41	1.30	7.82	7.82	0.00	16.83
C.A.E.C.-Canada W.C.	3	105	126	2.41	1.30	2.41	1.30	12.61	12.61	0.00	21.59
C.A.E.C.-Oceania	1	22	35	2.41	1.30	2.41	1.30	19.89	19.89	0.00	22.59
C.A.E.C.-S.A.W.C.	24	734	989	2.41	1.30	2.41	1.30	10.61	10.61	0.00	14.07
C.A.E.C.-U.S.W.C.	9	286	366	2.41	1.30	2.41	1.30	11.61	11.61	0.00	20.59
Columbia-Asia	2	352	362	2.41	1.17	2.41	1.17	17.07	17.07	0.00	25.50
Europe-C.A.W.C.	51	1,627	2,113	2.41	1.30	2.41	1.30	12.61	12.61	0.00	22.38
Europe-Canada W.C.	12	408	579	2.41	1.28	2.41	1.28	16.56	16.56	0.00	22.07
Europe-U.S.W.C.	142	4,679	6,793	2.41	1.28	2.41	1.28	15.66	15.66	0.00	20.80
Middle East-S.A.W.C.	2	104	116	2.41	1.25	2.41	1.25	14.08	14.08	0.00	15.83
Oceania-Canada E.C.	23	859	969	2.41	1.30	2.41	1.30	20.84	20.84	0.00	21.54
Oceania-C.A.E.C.	14	469	598	2.41	1.30	2.41	1.30	19.09	19.09	0.00	22.54
Oceania-U.S.E.C.	36	2,218	2,467	2.41	1.23	2.41	1.23	15.65	15.65	0.00	17.42
S.A.E.C.-Asia	60	2,563	2,889	2.41	1.28	2.41	1.28	16.77	16.77	0.00	18.93
S.A.E.C.-C.A.W.C.	12	441	480	2.41	1.30	2.41	1.30	11.61	11.61	0.00	12.07

(Continued)

Table B-25. Laden Transits, Tons Carried, Toll Revenue and Toll Rates, Current Toll Structure and Rates, 250,000 DWT Scenario, 2060, by Ship Type, Diversion Status, and Trade Route (1990 US$, except when noted)(continued)

Ship Type, Diversion Status, and Trade Route	Transits	Cargo Tonnage Carried (thousands)	Revenue (thousands) a/	Current Toll Schedule: Toll Per Panama Canal Net Ton	Current Toll Schedule: Toll Per Cargo Ton Carried	New Toll Schedule: Toll Per Panama Canal Net Ton	New Toll Schedule: Toll Per Cargo Ton Carried	Total Transportation Costs per Ton Carried: Via Panama Canal: With Current Toll Structure	Via Panama Canal: With New Toll Structure	Via Panama Canal: Percent Increase	Via Least Costly Alternative Route
Dry Bulk Carriers (continued)											
Non-Diverted Transits (continued)											
S.A.E.C.-Canada W.C.	3	97	134	2.41	1.30	2.41	1.30	17.13	17.13	0.00	17.83
S.A.W.C.-Africa	5	296	284	2.41	1.25	2.41	1.25	14.34	14.34	0.00	21.40
S.A.W.C.-Canada E.C.	1	24	25	2.41	1.30	2.41	1.30	13.34	13.34	0.00	16.04
S.A.W.C.-C.A.E.C.	12	277	484	2.41	1.30	2.41	1.30	10.59	10.59	0.00	14.04
S.A.W.C.-Europe	262	13,060	14,561	2.41	1.25	2.41	1.25	15.70	15.70	0.00	16.02
S.A.W.C.-U.S.E.C.	91	3,585	3,855	2.41	1.30	2.41	1.30	11.28	11.28	0.00	15.48
U.S.E.C.-Asia	1,629	139,874	154,203	2.41	1.20	2.41	1.20	16.99	16.99	0.00	22.61
U.S.E.C.-C.A.W.C.	375	14,003	16,082	2.41	1.30	2.41	1.30	7.80	7.80	0.00	18.73
U.S.E.C.-Oceania	23	909	1,023	2.41	1.29	2.41	1.29	19.26	19.26	0.00	20.97
U.S.E.C.-S.A.W.C.	82	2,944	3,529	2.41	1.30	2.41	1.30	11.45	11.45	0.00	15.60
U.S.E.C.-U.S.W.C.	1	0	23	2.41	1.30	2.41	1.30	11.61	11.61	0.00	22.38
U.S.W.C.-Africa	198	9,018	10,885	2.41	1.26	2.41	1.26	15.70	15.70	0.00	19.37
U.S.W.C.-Canada E.C.	5	211	240	2.41	1.29	2.41	1.29	13.93	13.93	0.00	22.50
U.S.W.C.-C.A.E.C.	1	30	38	2.41	1.30	2.41	1.30	11.59	11.59	0.00	20.54
U.S.W.C.-Europe	168	9,505	10,565	2.41	1.24	2.41	1.24	14.02	14.02	0.00	18.82
U.S.W.C.-U.S.E.C.	8	215	388	2.41	1.28	2.41	1.28	11.92	11.92	0.00	23.13
Venezuela-Asia	7	1,230	1,261	2.41	1.16	2.41	1.16	15.96	15.96	0.00	23.70
Subtotal	4,988	295,921	339,155	2.41	1.23	2.41	1.23	15.90	15.90	0.00	20.91
Dry Bulk Carriers											
Diverted Transits											
Asia-S.A.E.C.	5	172	202	2.41	1.30	2.41	1.30	21.84	21.84	0.00	21.54
Europe-S.A.W.C.	16	514	781	2.41	1.30	2.41	1.30	16.13	16.13	0.00	16.07

(Continued)

Table B-25. Laden Transits, Tons Carried, Toll Revenue and Toll Rates, Current Toll Structure and Rates, 250,000 DWT Scenario, 2060, by Ship Type, Diversion Status, and Trade Route (1990 US$, except when noted)(continued)

Ship Type, Diversion Status, and Trade Route	Transits	Cargo Tonnage Carried (thousands)	Revenue (thousands) a/	Current Toll Schedule: Toll Per Panama Canal Net Ton	Current Toll Schedule: Toll Per Cargo Ton Carried	New Toll Schedule: Toll Per Panama Canal Net Ton	New Toll Schedule: Toll Per Cargo Ton Carried	Total Transportation Costs per Ton Carried, Via Panama Canal: With Current Toll Structure	Total Transportation Costs per Ton Carried, Via Panama Canal: With New Toll Structure	Total Transportation Costs per Ton Carried, Via Panama Canal: Percent Increase	Total Transportation Costs per Ton Carried: Via Least Costly Alternative Route
Dry Bulk Carriers (continued)											
Diverted Transits (continued)											
S.A.E.C.-U.S.W.C.	34	1,722	2,129	2.41	1.23	2.41	1.23	13.30	13.30	0.00	13.07
U.S.W.C.-S.A.E.C.	13	436	510	2.41	1.30	2.41	1.30	16.09	16.09	0.00	15.79
Subtotal	69	2,844	3,622	2.41	1.26	2.41	1.26	14.76	14.76	0.00	14.54
Subtotal	5,057	298,765	342,777	2.41	1.23	2.41	1.23	15.89	15.89	0.00	20.84
Chemical Tankers											
Non-Diverted Transits											
Africa-S.A.W.C.	2	59	64	2.41	1.34	2.41	1.34	43.34	43.34	0.00	60.00
Asia-C.A.E.C.	4	50	66	2.41	1.34	2.41	1.34	54.00	54.00	0.00	70.82
Asia-S.A.E.C.	4	23	129	2.41	1.34	2.41	1.34	50.34	50.34	0.00	52.00
Asia-U.S.E.C.	39	820	1,116	2.41	1.34	2.41	1.34	43.81	43.81	0.00	59.67
C.A.W.C.-C.A.E.C.	49	306	386	2.41	1.34	2.41	1.34	39.39	39.39	0.00	83.80
C.A.W.C.-Europe	9	169	187	2.41	1.34	2.41	1.34	38.02	38.02	0.00	56.27
C.A.W.C.-U.S.E.C.	63	885	1,077	2.41	1.34	2.41	1.34	27.74	27.74	0.00	58.89
Canada W.C.-Europe	4	106	136	2.41	1.34	2.41	1.34	42.34	42.34	0.00	57.00
Canada W.C.-U.S.E.C.	39	1,042	1,471	2.41	1.34	2.41	1.34	31.94	31.94	0.00	52.60
C.A.E.C.-Asia	9	293	324	2.41	1.34	2.41	1.34	42.34	42.34	0.00	55.00
C.A.E.C.-C.A.W.C.	5	115	160	2.41	1.34	2.41	1.34	21.34	21.34	0.00	42.00
C.A.E.C.-S.A.W.C.	11	217	281	2.41	1.34	2.41	1.34	30.34	30.34	0.00	40.32
C.A.E.C.-U.S.W.C.	2	15	16	2.41	1.34	2.41	1.34	55.94	55.94	0.00	98.40
Europe-C.A.W.C.	10	51	79	2.41	1.34	2.41	1.34	60.84	60.84	0.00	93.55
Europe-S.A.W.C.	9	98	111	2.41	1.34	2.41	1.34	58.65	58.65	0.00	62.50
Europe-U.S.W.C.	10	261	303	2.41	1.34	2.41	1.34	42.05	42.05	0.00	56.46

(Continued)

Table B-25. Laden Transits, Tons Carried, Toll Revenue and Toll Rates, Current Toll Structure and Rates, 250,000 DWT Scenario, 2060, by Ship Type, Diversion Status, and Trade Route (1990 US$, except when noted)(continued)

Ship Type, Diversion Status, and Trade Route	Transits	Cargo Tonnage Carried (thousands)	Revenue (thousands) a/	Current Toll Schedule: Toll Per Panama Canal Net Ton	Current Toll Schedule: Toll Per Cargo Ton Carried	New Toll Schedule: Toll Per Panama Canal Net Ton	New Toll Schedule: Toll Per Cargo Ton Carried	Total Transportation Costs per Ton Carried: Via Panama Canal: With Current Toll Structure	Via Panama Canal: With New Toll Structure	Via Panama Canal: Percent Increase	Via Least Costly Alternative Route
Chemical Tankers (continued)											
Non-Diverted Transits (continued)											
Oceania-U.S.E.C.	17	494	688	2.41	1.34	2.41	1.34	40.63	40.63	0.00	45.24
S.A.E.C.-C.A.W.C.	10	79	101	2.41	1.34	2.41	1.34	50.34	50.34	0.00	54.86
S.A.E.C.-U.S.W.C.	1	43	51	2.41	1.34	2.41	1.34	30.34	30.34	0.00	31.00
S.A.W.C.-C.A.E.C.	36	134	436	2.41	1.34	2.41	1.34	44.18	44.18	0.00	60.24
S.A.W.C.-Europe	12	151	178	2.41	1.34	2.41	1.34	53.51	53.51	0.00	56.81
S.A.W.C.-U.S.E.C.	12	100	208	2.41	1.34	2.41	1.34	39.07	39.07	0.00	53.98
U.S.E.C.-Asia	683	23,746	25,668	2.41	1.34	2.41	1.34	41.54	41.54	0.00	56.40
U.S.E.C.-C.A.W.C.	27	238	308	2.41	1.34	2.41	1.34	34.18	34.18	0.00	74.41
U.S.E.C.-Canada W.C.	8	61	71	2.41	1.34	2.41	1.34	60.04	60.04	0.00	104.95
U.S.E.C.-Oceania	17	545	617	2.41	1.34	2.41	1.34	43.19	43.19	0.00	48.34
U.S.E.C.-S.A.W.C.	53	560	720	2.41	1.34	2.41	1.34	41.25	41.25	0.00	57.19
U.S.E.C.-U.S.W.C.	48	1,814	2,272	2.41	1.34	2.41	1.34	25.49	25.49	0.00	43.29
U.S.W.C.-C.A.E.C.	1	12	20	2.41	1.34	2.41	1.34	29.34	29.34	0.00	49.00
U.S.W.C.-Europe	16	266	356	2.41	1.34	2.41	1.34	45.29	45.29	0.00	61.30
U.S.W.C.-S.A.E.C.	0	6	7	2.41	1.34	2.41	1.34	38.34	38.34	0.00	39.00
U.S.W.C.-U.S.E.C.	12	233	574	2.41	1.34	2.41	1.34	25.79	25.79	0.00	43.90
Subtotal	1,224	32,988	38,182	2.41	1.34	2.41	1.34	39.96	39.96	0.00	55.77
Full Container Ships											
Non-Diverted Transits											
Africa-U.S.W.C.	0	5	11	2.41	4.49	2.41	4.49	247.81	247.81	0.00	284.11
Asia-Canada E.C.	33	739	2,283	2.41	4.70	2.41	4.70	207.29	207.29	0.00	225.70
Asia-S.A.E.C.	4	14	91	2.41	4.49	2.41	4.49	274.66	274.66	0.00	282.11

(Continued)

Table B-25. Laden Transits, Tons Carried, Toll Revenue and Toll Rates, Current Toll Structure and Rates, 250,000 DWT Scenario, 2060, by Ship Type, Diversion Status, and Trade Route (1990 US$, except when noted)(continued)

Ship Type, Diversion Status, and Trade Route	Transits	Cargo Tonnage Carried (thousands)	Revenue (thousands) a/	Current Toll Schedule: Toll Per Panama Canal Net Ton	Current Toll Schedule: Toll Per Cargo Ton Carried	New Toll Schedule: Toll Per Panama Canal Net Ton	New Toll Schedule: Toll Per Cargo Ton Carried	Total Transportation Costs per Ton Carried: Via Panama Canal: With Current Toll Structure	Via Panama Canal: With New Toll Structure	Via Panama Canal: Percent Increase	Via Least Costly Alternative Route
Full Container Ships (continued)											
Non-Diverted Transits (continued)											
Asia-U.S.E.C. (low inv. cost)	186	5,208	21,829	2.41	4.92	2.41	4.92	231.70	231.70	0.00	245.26
C.A.W.C.-C.A.E.C.	1	9	45	2.41	4.44	2.41	4.44	130.00	130.00	0.00	207.98
C.A.W.C.-Europe	2	37	130	2.41	4.42	2.41	4.42	152.02	152.02	0.00	204.85
C.A.W.C.-S.A.E.C.	0	7	21	2.41	4.44	2.41	4.44	162.41	162.41	0.00	169.25
C.A.W.C.-U.S.E.C.	0	5	12	2.41	4.49	2.41	4.49	161.41	161.41	0.00	253.29
Canada E.C.-Asia	35	658	1,697	2.41	4.55	2.41	4.55	226.90	226.90	0.00	236.18
Canada E.C.-Oceania	23	286	779	2.41	4.47	2.41	4.47	257.67	257.67	0.00	260.84
Canada E.C.-U.S.W.C.	8	247	689	2.41	4.77	2.41	4.77	154.77	154.77	0.00	229.00
Canada W.C.-Europe	31	511	1,219	2.41	4.51	2.41	4.51	210.71	210.71	0.00	276.36
C.A.E.C.-Asia	8	116	405	2.41	4.47	2.41	4.47	213.60	213.60	0.00	244.68
C.A.E.C.-C.A.W.C.	1	7	27	2.41	4.47	2.41	4.47	143.12	143.12	0.00	235.87
C.A.E.C.-Oceania	1	8	21	2.41	4.49	2.41	4.49	250.78	250.78	0.00	297.02
C.A.E.C.-S.A.W.C.	2	10	40	2.41	4.49	2.41	4.49	178.89	178.89	0.00	214.04
C.A.E.C.-U.S.W.C.	2	26	82	2.41	4.45	2.41	4.45	152.93	152.93	0.00	218.40
Europe-C.A.W.C.	0	1	6	2.41	4.42	2.41	4.42	152.02	152.02	0.00	243.00
Europe-Canada W.C.	25	336	870	2.41	4.47	2.41	4.47	223.81	223.81	0.00	284.41
Europe-S.A.W.C.	81	1,309	4,322	2.41	4.42	2.41	4.42	191.22	191.22	0.00	221.95
Europe-U.S.W.C.	140	3,123	8,904	2.41	4.67	2.41	4.67	205.80	205.80	0.00	215.66
Middle East-U.S.W.C.	15	247	615	2.41	4.47	2.41	4.47	218.19	218.19	0.00	247.58
Oceania-C.A.E.C.	5	64	135	2.41	4.49	2.41	4.49	250.78	250.78	0.00	297.02
S.A.E.C.-C.A.W.C.	1	8	20	2.41	4.49	2.41	4.49	197.14	197.14	0.00	206.59
S.A.E.C.-U.S.W.C.	2	20	43	2.41	4.49	2.41	4.49	183.23	183.23	0.00	219.50
S.A.W.C.-C.A.E.C.	0	1	7	2.41	4.49	2.41	4.49	178.89	178.89	0.00	214.04

(Continued)

Table B-25. Laden Transits, Tons Carried, Toll Revenue and Toll Rates, Current Toll Structure and Rates, 250,000 DWT Scenario, 2060, by Ship Type, Diversion Status, and Trade Route (1990 US$, except when noted)(continued)

Ship Type, Diversion Status, and Trade Route	Transits	Cargo Tonnage Carried (thousands)	Revenue (thousands) a/	Current Toll Schedule: Toll Per Panama Canal Net Ton	Current Toll Schedule: Toll Per Cargo Ton Carried	New Toll Schedule: Toll Per Panama Canal Net Ton	New Toll Schedule: Toll Per Cargo Ton Carried	Total Transportation Costs per Ton Carried: Via Panama Canal: With Current Toll Structure	Via Panama Canal: With New Toll Structure	Via Panama Canal: Percent Increase	Via Least Costly Alternative Route
Full Container Ships (continued)											
Non-Diverted Transits (continued)											
S.A.W.C.-Europe	144	3,081	7,725	2.41	4.42	2.41	4.42	191.21	191.21	0.00	221.95
S.A.W.C.-U.S.E.C.	99	1,047	2,537	2.41	4.49	2.41	4.49	174.32	174.32	0.00	221.50
U.S.E.C.-Asia (low inv. cost)	234	8,718	25,601	2.41	4.88	2.41	4.88	233.14	233.14	0.00	246.59
U.S.E.C.-C.A.W.C.	13	112	328	2.41	4.49	2.41	4.49	140.53	140.53	0.00	253.29
U.S.E.C.-S.A.W.C.	117	1,005	2,993	2.41	4.49	2.41	4.49	174.32	174.32	0.00	221.50
U.S.E.C.-U.S.W.C.	1	26	77	2.41	4.76	2.41	4.76	138.99	138.99	0.00	224.03
U.S.W.C.-Africa	0	0	0	2.41	4.64	2.41	4.64	193.64	193.64	0.00	233.00
U.S.W.C.-Canada E.C.	0	8	24	2.41	4.57	2.41	4.57	159.49	159.49	0.00	231.46
U.S.W.C.-C.A.E.C.	6	90	249	2.41	4.46	2.41	4.46	161.25	161.25	0.00	232.70
U.S.W.C.-Europe	196	3,835	12,758	2.41	4.68	2.41	4.68	208.75	208.75	0.00	217.65
U.S.W.C.-Middle East	25	356	1,031	2.41	4.47	2.41	4.47	219.26	219.26	0.00	229.43
U.S.W.C.-U.S.E.C.	21	326	1,513	2.41	4.65	2.41	4.65	141.16	141.16	0.00	224.31
Subtotal	1,460	31,607	99,139	2.41	4.72	2.41	4.72	213.85	213.85	0.00	234.46
Full Container Ships											
Diverted Transits											
Oceania-Canada E.C.	10	177	108	2.41	4.47	2.41	4.47	251.62	251.62	0.00	248.23
Oceania-S.A.E.C.	0	2	1	2.41	4.49	2.41	4.49	241.87	241.87	0.00	238.38
Subtotal	10	179	109	2.41	4.47	2.41	4.47	251.49	251.49	0.00	248.10
Subtotal	1,470	31,786	99,249	2.41	4.72	2.41	4.72	214.06	214.06	0.00	234.53
General Cargo Ships											
Non-Diverted Transits											
Africa-C.A.W.C.	3	46	75	2.41	1.39	2.41	1.39	31.04	31.04	0.00	56.35

(Continued)

Table B-25. Laden Transits, Tons Carried, Toll Revenue and Toll Rates, Current Toll Structure and Rates, 250,000 DWT Scenario, 2060, by Ship Type, Diversion Status, and Trade Route (1990 US$, except when noted)(continued)

Ship Type, Diversion Status, and Trade Route	Transits	Cargo Tonnage Carried (thousands)	Revenue (thousands) a/	Current Toll Schedule: Toll Per Panama Canal Net Ton	Current Toll Schedule: Toll Per Cargo Ton Carried	New Toll Schedule: Toll Per Panama Canal Net Ton	New Toll Schedule: Toll Per Cargo Ton Carried	Total Transportation Costs per Ton Carried: Via Panama Canal: With Current Toll Structure	Via Panama Canal: With New Toll Structure	Via Panama Canal: Percent Increase	Via Least Costly Alternative Route
General Cargo Ships (continued)											
Non-Diverted Transits (continued)											
Africa-S.A.W.C.	3	68	76	2.41	1.39	2.41	1.39	37.94	37.94	0.00	54.35
Asia-Canada E.C.	0	3	4	2.41	1.39	2.41	1.39	41.94	41.94	0.00	46.45
Asia-C.A.E.C.	127	1,501	2,947	2.41	1.39	2.41	1.39	36.99	36.99	0.00	49.45
Asia-S.A.E.C.	4	25	96	2.41	1.39	2.41	1.39	45.89	45.89	0.00	46.45
Asia-U.S.E.C.	49	632	1,154	2.41	1.39	2.41	1.39	38.14	38.14	0.00	52.33
C.A.W.C.-Africa	7	139	169	2.41	1.39	2.41	1.39	31.04	31.04	0.00	56.35
C.A.W.C.-C.A.E.C.	55	243	431	2.41	1.46	2.41	1.46	9.72	9.72	0.00	59.62
C.A.W.C.-Europe	51	291	764	2.41	1.41	2.41	1.41	29.65	29.65	0.00	52.03
C.A.W.C.-S.A.E.C.	15	99	225	2.41	1.41	2.41	1.41	27.71	27.71	0.00	32.29
C.A.W.C.-U.S.E.C.	16	84	131	2.41	1.45	2.41	1.45	12.26	12.26	0.00	74.92
Canada E.C.-Asia	10	25	237	2.41	1.39	2.41	1.39	41.94	41.94	0.00	46.45
Canada E.C.-C.A.W.C.	2	36	49	2.41	1.39	2.41	1.39	21.19	21.19	0.00	41.50
Canada E.C.-S.A.W.C.	16	148	380	2.41	1.39	2.41	1.39	28.09	28.09	0.00	35.55
Canada W.C.-C.A.E.C.	16	120	204	2.41	1.42	2.41	1.42	31.71	31.71	0.00	70.25
Canada W.C.-Europe	1	21	22	2.41	1.39	2.41	1.39	37.94	37.94	0.00	52.40
Canada W.C.-S.A.E.C.	14	126	190	2.41	1.41	2.41	1.41	36.39	36.39	0.00	71.10
C.A.E.C.-Asia	28	538	648	2.41	1.39	2.41	1.39	36.99	36.99	0.00	49.45
C.A.E.C.-C.A.W.C.	56	209	459	2.41	1.45	2.41	1.45	8.51	8.51	0.00	63.99
C.A.E.C.-Oceania	1	13	21	2.41	1.39	2.41	1.39	40.94	40.94	0.00	49.45
C.A.E.C.-S.A.W.C.	53	492	799	2.41	1.41	2.41	1.41	22.58	22.58	0.00	34.74
C.A.E.C.-U.S.W.C.	12	42	67	2.41	1.50	2.41	1.50	32.53	32.53	0.00	110.69
Europe-C.A.W.C.	87	598	1,538	2.41	1.40	2.41	1.40	28.49	28.49	0.00	59.50
Europe-Canada W.C.	3	11	16	2.41	1.50	2.41	1.50	80.37	80.37	0.00	136.96

(Continued)

Table B-25. Laden Transits, Tons Carried, Toll Revenue and Toll Rates, Current Toll Structure and Rates, 250,000 DWT Scenario, 2060, by Ship Type, Diversion Status, and Trade Route (1990 US$, except when noted)(continued)

Ship Type, Diversion Status, and Trade Route	Transits	Cargo Tonnage Carried (thousands)	Revenue (thousands) a/	Current Toll Schedule: Toll Per Panama Canal Net Ton	Current Toll Schedule: Toll Per Cargo Ton Carried	New Toll Schedule: Toll Per Panama Canal Net Ton	New Toll Schedule: Toll Per Cargo Ton Carried	Total Transportation Costs per Ton Carried: Via Panama Canal: With Current Toll Structure	Via Panama Canal: With New Toll Structure	Via Panama Canal: Percent Increase	Via Least Costly Alternative Route
General Cargo Ships (continued)											
Non-Diverted Transits (continued)											
Europe-S.A.W.C.	73	734	1,608	2.41	1.39	2.41	1.39	33.84	33.84	0.00	35.65
Europe-U.S.W.C.	4	18	34	2.41	1.44	2.41	1.44	62.15	62.15	0.00	107.39
Middle East-S.A.W.C.	6	3	34	2.41	1.50	2.41	1.50	73.82	73.82	0.00	102.30
Middle East-U.S.W.C.	7	19	157	2.41	1.39	2.41	1.39	40.94	40.94	0.00	47.45
Oceania-C.A.E.C.	1	7	25	2.41	1.39	2.41	1.39	39.94	39.94	0.00	49.45
Oceania-U.S.E.C.	2	9	20	2.41	1.43	2.41	1.43	57.41	57.41	0.00	69.46
S.A.E.C.-C.A.W.C.	13	261	293	2.41	1.39	2.41	1.39	25.14	25.14	0.00	26.70
S.A.E.C.-Canada W.C.	0	2	6	2.41	1.39	2.41	1.39	35.04	35.04	0.00	38.55
S.A.E.C.-U.S.W.C.	17	77	324	2.41	1.40	2.41	1.40	38.23	38.23	0.00	40.19
S.A.W.C.-Africa	8	149	175	2.41	1.39	2.41	1.39	34.04	34.04	0.00	53.35
S.A.W.C.-Canada E.C.	1	14	19	2.41	1.39	2.41	1.39	28.09	28.09	0.00	35.55
S.A.W.C.-C.A.E.C.	82	361	719	2.41	1.45	2.41	1.45	23.90	23.90	0.00	48.57
S.A.W.C.-Europe	171	2,817	3,986	2.41	1.39	2.41	1.39	33.04	33.04	0.00	34.60
S.A.W.C.-Middle East	2	25	39	2.41	1.39	2.41	1.39	35.99	35.99	0.00	42.50
S.A.W.C.-U.S.E.C.	56	430	900	2.41	1.40	2.41	1.40	25.31	25.31	0.00	40.80
U.S.E.C.-Asia	74	1,214	1,745	2.41	1.39	2.41	1.39	38.38	38.38	0.00	52.66
U.S.E.C.-C.A.W.C.	103	776	1,101	2.41	1.43	2.41	1.43	14.67	14.67	0.00	60.90
U.S.E.C.-Oceania	6	89	135	2.41	1.39	2.41	1.39	40.94	40.94	0.00	46.45
U.S.E.C.-S.A.W.C.	187	1,336	2,898	2.41	1.41	2.41	1.41	25.45	25.45	0.00	41.52
U.S.E.C.-U.S.W.C.	1	0	4	2.41	1.50	2.41	1.50	35.37	35.37	0.00	122.89
U.S.W.C.-Africa	7	75	154	2.41	1.39	2.41	1.39	36.99	36.99	0.00	47.45
U.S.W.C.-C.A.E.C.	3	1	18	2.41	1.50	2.41	1.50	32.53	32.53	0.00	110.69
U.S.W.C.-Europe	3	25	31	2.41	1.42	2.41	1.42	44.83	44.83	0.00	69.85

(Continued)

Table B-25. Laden Transits, Tons Carried, Toll Revenue and Toll Rates, Current Toll Structure and Rates, 250,000 DWT Scenario, 2060, by Ship Type, Diversion Status, and Trade Route (1990 US$, except when noted)(continued)

Ship Type, Diversion Status, and Trade Route	Transits	Cargo Tonnage Carried (thousands)	Revenue (thousands) a/	Current Toll Schedule: Toll Per Panama Canal Net Ton	Current Toll Schedule: Toll Per Cargo Ton Carried	New Toll Schedule: Toll Per Panama Canal Net Ton	New Toll Schedule: Toll Per Cargo Ton Carried	Total Transportation Costs per Ton Carried: Via Panama Canal: With Current Toll Structure	Via Panama Canal: With New Toll Structure	Via Panama Canal: Percent Increase	Via Least Costly Alternative Route
General Cargo Ships (continued)											
Non-Diverted Transits (continued)											
U.S.W.C.-S.A.E.C.	8	19	68	2.41	1.45	2.41	1.45	53.26	53.26	0.00	59.12
Subtotal	1,462	13,971	25,195	2.41	1.40	2.41	1.40	30.67	30.67	0.00	46.35
General Cargo Ships											
Diverted Transits											
Canada E.C.-Oceania	0	7	9	2.41	1.39	2.41	1.39	47.84	47.84	0.00	47.45
Canada W.C.-Middle East	2	13	35	2.41	1.39	2.41	1.39	42.89	42.89	0.00	42.50
Subtotal	2	20	43	2.41	1.39	2.41	1.39	44.65	44.65	0.00	44.26
Subtotal	1,464	13,991	25,239	2.41	1.40	2.41	1.40	30.69	30.69	0.00	46.34
Liquid Gas Carriers											
Non-Diverted Transits											
C.A.W.C.-C.A.E.C.	10	43	106	2.41	7.30	2.41	7.30	57.30	57.30	0.00	201.00
C.A.E.C.-Asia	10	53	189	2.41	4.67	2.41	4.67	124.16	124.16	0.00	178.06
C.A.E.C.-C.A.W.C.	56	742	2,143	2.41	3.79	2.41	3.79	26.91	26.91	0.00	81.65
C.A.E.C.-S.A.W.C.	4	60	159	2.41	3.83	2.41	3.83	45.83	45.83	0.00	70.00
C.A.E.C.-U.S.W.C.	0	3	6	2.41	3.83	2.41	3.83	51.83	51.83	0.00	109.00
Europe-C.A.W.C.	2	7	23	2.41	7.30	2.41	7.30	129.30	129.30	0.00	234.00
Europe-S.A.W.C.	0	1	3	2.41	3.82	2.41	3.82	76.82	76.82	0.00	82.00
Oceania-U.S.E.C.	4	57	180	2.41	3.62	2.41	3.62	75.10	75.10	0.00	85.98
S.A.E.C.-Asia	2	30	79	2.41	3.83	2.41	3.83	89.83	89.83	0.00	107.00
S.A.E.C.-C.A.W.C.	12	32	125	2.41	7.30	2.41	7.30	115.30	115.30	0.00	132.00
U.S.E.C.-Asia	3	41	126	2.41	3.86	2.41	3.86	94.04	94.04	0.00	139.47

(Continued)

Table B-25. Laden Transits, Tons Carried, Toll Revenue and Toll Rates, Current Toll Structure and Rates, 250,000 DWT Scenario, 2060, by Ship Type, Diversion Status, and Trade Route (1990 US$, except when noted)(continued)

Ship Type, Diversion Status, and Trade Route	Transits	Cargo Tonnage Carried (thousands)	Revenue (thousands) a/	Current Toll Schedule: Toll Per Panama Canal Net Ton	Current Toll Schedule: Toll Per Cargo Ton Carried	New Toll Schedule: Toll Per Panama Canal Net Ton	New Toll Schedule: Toll Per Cargo Ton Carried	Total Transportation Costs per Ton Carried: Via Panama Canal: With Current Toll Structure	Via Panama Canal: With New Toll Structure	Via Panama Canal: Percent Increase	Via Least Costly Alternative Route
Liquid Gas Carriers (continued)											
Non-Diverted Transits (continued)											
U.S.E.C.-C.A.W.C.	0	1	3	2.41	7.30	2.41	7.30	66.30	66.30	0.00	226.00
U.S.E.C.-S.A.W.C.	1	2	7	2.41	7.30	2.41	7.30	109.30	109.30	0.00	182.00
Subtotal	104	1,071	3,148	2.41	3.99	2.41	3.99	44.45	44.45	0.00	96.49
Passenger Ships											
Non-Diverted Transits											
North-Bound	197	0	2,354	2.41	0.00	2.41	0.00	0.00	0.00	0.00	0.00
South-Bound	238	0	4,340	2.41	0.00	2.41	0.00	0.00	0.00	0.00	0.00
Subtotal	435	0	6,694	2.41	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Refrigerated Ships											
Non-Diverted Transits											
Africa-C.A.W.C.	0	0	2	2.41	4.00	2.41	4.00	120.20	120.20	0.00	224.60
Africa-S.A.W.C.	49	21	1,012	2.41	3.94	2.41	3.94	154.50	154.50	0.00	228.37
Asia-C.A.E.C.	25	95	615	2.41	3.86	2.41	3.86	131.86	131.86	0.00	180.00
Asia-S.A.E.C.	7	5	130	2.41	4.00	2.41	4.00	180.00	180.00	0.00	184.20
Asia-U.S.E.C.	1	0	14	2.41	4.00	2.41	4.00	149.60	149.60	0.00	213.60
C.A.W.C.-Africa	2	7	35	2.41	4.00	2.41	4.00	120.20	120.20	0.00	224.60
C.A.W.C.-Canada E.C.	1	5	11	2.41	4.00	2.41	4.00	79.20	79.20	0.00	163.40
C.A.W.C.-C.A.E.C.	39	294	966	2.41	3.86	2.41	3.86	52.86	52.86	0.00	132.00
C.A.W.C.-Europe	276	1,493	6,811	2.41	3.86	2.41	3.86	92.86	92.86	0.00	150.00
C.A.W.C.-S.A.E.C.	2	9	31	2.41	4.00	2.41	4.00	94.40	94.40	0.00	103.00
C.A.W.C.-U.S.E.C.	1	2	22	2.41	4.00	2.41	4.00	64.00	64.00	0.00	160.40

(Continued)

Table B-25. Laden Transits, Tons Carried, Toll Revenue and Toll Rates, Current Toll Structure and Rates, 250,000 DWT Scenario, 2060, by Ship Type, Diversion Status, and Trade Route (1990 US$, except when noted)(continued)

Ship Type, Diversion Status, and Trade Route	Transits	Cargo Tonnage Carried (thousands)	Revenue (thousands) a/	Current Toll Schedule: Toll Per Panama Canal Net Ton	Current Toll Schedule: Toll Per Cargo Ton Carried	New Toll Schedule: Toll Per Panama Canal Net Ton	New Toll Schedule: Toll Per Cargo Ton Carried	Total Transportation Costs per Ton Carried: Via Panama Canal: With Current Toll Structure	Via Panama Canal: With New Toll Structure	Via Panama Canal: Percent Increase	Via Least Costly Alternative Route
Refrigerated Ships (continued)											
Non-Diverted Transits (continued)											
Canada E.C.-Asia	15	92	274	2.41	4.00	2.41	4.00	165.80	165.80	0.00	182.60
Canada E.C.-C.A.W.C.	11	31	267	2.41	3.86	2.41	3.86	71.86	71.86	0.00	149.00
Canada W.C.-Europe	4	45	92	2.41	3.86	2.41	3.86	132.86	132.86	0.00	190.00
C.A.E.C.-Asia	13	37	269	2.41	3.93	2.41	3.93	144.92	144.92	0.00	197.33
C.A.E.C.-C.A.W.C.	43	11	1,065	2.41	3.86	2.41	3.86	52.86	52.86	0.00	132.00
C.A.E.C.-S.A.W.C.	93	82	2,300	2.41	3.86	2.41	3.86	75.86	75.86	0.00	107.00
Europe-C.A.W.C.	308	26	7,582	2.41	3.86	2.41	3.86	92.86	92.86	0.00	187.00
Europe-Canada W.C.	1	1	19	2.41	4.00	2.41	4.00	145.60	145.60	0.00	204.40
Europe-S.A.W.C.	295	278	6,904	2.41	3.88	2.41	3.88	119.82	119.82	0.00	127.10
Europe-U.S.W.C.	18	16	335	2.41	4.00	2.41	4.00	135.40	135.40	0.00	192.20
Middle East-S.A.W.C.	3	6	49	2.41	4.00	2.41	4.00	138.00	138.00	0.00	165.40
Oceania-C.A.E.C.	6	50	120	2.41	4.00	2.41	4.00	157.20	157.20	0.00	196.80
Oceania-U.S.E.C.	53	207	1,020	2.41	3.98	2.41	3.98	160.43	160.43	0.00	183.47
S.A.E.C.-Asia	12	62	217	2.41	4.00	2.41	4.00	146.60	146.60	0.00	172.00
S.A.W.C.-Africa	27	111	562	2.41	3.94	2.41	3.94	130.08	130.08	0.00	205.85
S.A.W.C.-C.A.E.C.	40	241	967	2.41	3.86	2.41	3.86	76.48	76.48	0.00	107.85
S.A.W.C.-Europe	1,101	6,815	25,105	2.41	3.89	2.41	3.89	119.88	119.88	0.00	127.15
S.A.W.C.-Middle East	5	18	90	2.41	4.00	2.41	4.00	138.00	138.00	0.00	165.40
S.A.W.C.-U.S.E.C.	808	3,821	19,011	2.41	3.88	2.41	3.88	82.93	82.93	0.00	122.50
U.S.E.C.-Asia	46	189	1,080	2.41	3.87	2.41	3.87	139.10	139.10	0.00	198.29
U.S.E.C.-C.A.W.C.	70	196	1,715	2.41	3.86	2.41	3.86	57.86	57.86	0.00	146.00
U.S.E.C.-S.A.W.C.	423	892	10,203	2.41	3.87	2.41	3.87	82.19	82.19	0.00	121.46
U.S.W.C.-Europe	140	804	2,868	2.41	3.95	2.41	3.95	134.45	134.45	0.00	190.92

(Continued)

Table B-25. Laden Transits, Tons Carried, Toll Revenue and Toll Rates, Current Toll Structure and Rates, 250,000 DWT Scenario, 2060, by Ship Type, Diversion Status, and Trade Route (1990 US$, except when noted)(continued)

Ship Type, Diversion Status, and Trade Route	Transits	Cargo Tonnage Carried (thousands)	Revenue (thousands) a/	Current Toll Schedule: Toll Per Panama Canal Net Ton	Current Toll Schedule: Toll Per Cargo Ton Carried	New Toll Schedule: Toll Per Panama Canal Net Ton	New Toll Schedule: Toll Per Cargo Ton Carried	Total Transportation Costs per Ton Carried: Via Panama Canal: With Current Toll Structure	Via Panama Canal: With New Toll Structure	Via Panama Canal: Percent Increase	Via Least Costly Alternative Route
Refrigerated Ships (continued)											
Non-Diverted Transits (continued)											
U.S.W.C.-S.A.E.C.	2	6	36	2.41	3.98	2.41	3.98	131.22	131.22	0.00	135.82
Subtotal	3,937	15,968	91,800	2.41	3.88	2.41	3.88	105.63	105.63	0.00	134.95
Refrigerated Ships											
Diverted Transits											
Africa-Asia	46	292	926	2.41	4.00	2.41	4.00	173.40	173.40	0.00	173.00
Subtotal	46	292	926	2.41	4.00	2.41	4.00	173.40	173.40	0.00	173.00
Subtotal	3,983	16,260	92,726	2.41	3.88	2.41	3.88	106.85	106.85	0.00	135.63
Roll-On Roll-Off											
Non-Diverted Transits											
Asia-Canada E.C.	3	15	97	2.41	9.35	2.41	9.35	298.90	298.90	0.00	324.43
Asia-C.A.E.C.	32	633	2,212	2.41	7.92	2.41	7.92	236.83	236.83	0.00	268.32
Asia-U.S.E.C.	67	1,286	4,478	2.41	7.95	2.41	7.95	248.85	248.85	0.00	304.22
C.A.W.C.-Europe	33	177	1,310	2.41	8.66	2.41	8.66	198.66	198.66	0.00	280.00
C.A.W.C.-U.S.E.C.	3	1	102	2.41	8.66	2.41	8.66	170.66	170.66	0.00	273.00
Canada E.C.-Asia	17	85	508	2.41	9.30	2.41	9.30	355.27	355.27	0.00	370.17
Canada W.C.-C.A.E.C.	0	1	11	2.41	10.19	2.41	10.19	239.87	239.87	0.00	394.39
C.A.E.C.-C.A.W.C.	1	2	26	2.41	9.72	2.41	9.72	167.54	167.54	0.00	296.40
C.A.E.C.-Oceania	7	20	281	2.41	8.66	2.41	8.66	275.66	275.66	0.00	332.00
C.A.E.C.-S.A.W.C.	85	149	1,976	2.41	10.19	2.41	10.19	232.93	232.93	0.00	280.17
Europe-C.A.W.C.	35	221	1,386	2.41	8.66	2.41	8.66	198.66	198.66	0.00	350.00
Europe-S.A.W.C.	0	0	3	2.41	8.67	2.41	8.67	262.67	262.67	0.00	303.00

(Continued)

Table B-25. Laden Transits, Tons Carried, Toll Revenue and Toll Rates, Current Toll Structure and Rates, 250,000 DWT Scenario, 2060, by Ship Type, Diversion Status, and Trade Route (1990 US$, except when noted)(continued)

Ship Type, Diversion Status, and Trade Route	Transits	Cargo Tonnage Carried (thousands)	Revenue (thousands) a/	Current Toll Schedule: Toll Per Panama Canal Net Ton	Current Toll Schedule: Toll Per Cargo Ton Carried	New Toll Schedule: Toll Per Panama Canal Net Ton	New Toll Schedule: Toll Per Cargo Ton Carried	Total Transportation Costs per Ton Carried: Via Panama Canal: With Current Toll Structure	Via Panama Canal: With New Toll Structure	Via Panama Canal: Percent Increase	Via Least Costly Alternative Route
Roll-On Roll-Off (continued)											
Non-Diverted Transits (continued)											
Europe-U.S.W.C.	1	3	24	2.41	8.66	2.41	8.66	262.66	262.66	0.00	350.00
Oceania-C.A.E.C.	0	0	1	2.41	7.97	2.41	7.97	234.97	234.97	0.00	273.80
S.A.W.C.-C.A.E.C.	22	44	511	2.41	10.19	2.41	10.19	232.93	232.93	0.00	280.17
S.A.W.C.-Europe	2	5	68	2.41	8.66	2.41	8.66	262.66	262.66	0.00	311.00
S.A.W.C.-U.S.E.C.	12	25	279	2.41	10.19	2.41	10.19	224.99	224.99	0.00	292.08
U.S.E.C.-Asia	14	93	565	2.41	8.64	2.41	8.64	298.20	298.20	0.00	378.28
U.S.E.C.-C.A.W.C.	4	7	162	2.41	8.66	2.41	8.66	144.66	144.66	0.00	273.00
U.S.E.C.-S.A.W.C.	57	101	1,331	2.41	10.19	2.41	10.19	224.99	224.99	0.00	292.08
U.S.W.C.-Canada E.C.	1	2	17	2.41	10.20	2.41	10.20	263.70	263.70	0.00	414.27
U.S.W.C.-C.A.E.C.	2	48	164	2.41	7.75	2.41	7.75	160.82	160.82	0.00	232.64
U.S.W.C.-Europe	0	1	2	2.41	7.77	2.41	7.77	212.68	212.68	0.00	267.50
U.S.W.C.-U.S.E.C.	0	9	30	2.41	7.86	2.41	7.86	159.45	159.45	0.00	255.79
Subtotal	397	2,929	15,542	2.41	8.68	2.41	8.68	240.41	240.41	0.00	299.63
Roll-On Roll-Off											
Diverted Transits											
C.A.W.C.-S.A.E.C.	0	0	3	2.41	8.66	2.41	8.66	211.66	211.66	0.00	211.00
Canada E.C.-Oceania	3	61	184	2.41	7.77	2.41	7.77	251.49	251.49	0.00	249.02
Subtotal	3	61	188	2.41	7.78	2.41	7.78	251.24	251.24	0.00	248.78
Subtotal	400	2,990	15,730	2.41	8.67	2.41	8.67	240.63	240.63	0.00	298.58
Tankers											
Non-Diverted Transits											
Africa-U.S.W.C.	0	0	0	2.41	1.27	2.41	1.27	18.27	18.27	0.00	24.00

(Continued)

Table B-25. Laden Transits, Tons Carried, Toll Revenue and Toll Rates, Current Toll Structure and Rates, 250,000 DWT Scenario, 2060, by Ship Type, Diversion Status, and Trade Route (1990 US$, except when noted)(continued)

Ship Type, Diversion Status, and Trade Route	Transits	Cargo Tonnage Carried (thousands)	Revenue (thousands) a/	Current Toll Schedule: Toll Per Panama Canal Net Ton	Current Toll Schedule: Toll Per Cargo Ton Carried	New Toll Schedule: Toll Per Panama Canal Net Ton	New Toll Schedule: Toll Per Cargo Ton Carried	Total Transportation Costs per Ton Carried: Via Panama Canal: With Current Toll Structure	Via Panama Canal: With New Toll Structure	Via Panama Canal: Percent Increase	Via Least Costly Alternative Route
Tankers (continued)											
Non-Diverted Transits (continued)											
Asia-U.S.E.C.	3	77	89	2.41	1.27	2.41	1.27	27.11	27.11	0.00	38.76
C.A.W.C.-Africa	0	0	2	2.41	1.27	2.41	1.27	46.27	46.27	0.00	100.00
C.A.W.C.-Canada E.C.	0	8	9	2.41	1.27	2.41	1.27	12.21	12.21	0.00	28.82
C.A.W.C.-C.A.E.C.	16	95	299	2.41	1.27	2.41	1.27	10.26	10.26	0.00	34.99
C.A.W.C.-Europe	4	94	121	2.41	1.27	2.41	1.27	17.17	17.17	0.00	28.84
C.A.W.C.-U.S.E.C.	10	80	187	2.41	1.27	2.41	1.27	11.18	11.18	0.00	37.36
Canada E.C.-Asia	18	707	789	2.41	1.27	2.41	1.27	25.06	25.06	0.00	27.21
Canada W.C.-U.S.E.C.	6	255	320	2.41	1.28	2.41	1.28	13.76	13.76	0.00	26.23
C.A.E.C.-Asia	5	141	191	2.41	1.27	2.41	1.27	22.36	22.36	0.00	31.40
C.A.E.C.-C.A.W.C.	45	750	1,275	2.41	1.27	2.41	1.27	7.38	7.38	0.00	22.70
C.A.E.C.-S.A.W.C.	46	887	1,231	2.41	1.27	2.41	1.27	13.34	13.34	0.00	20.04
C.A.E.C.-U.S.W.C.	5	228	271	2.41	1.27	2.41	1.27	11.93	11.93	0.00	23.43
Europe-C.A.W.C.	17	81	156	2.41	1.27	2.41	1.27	24.95	24.95	0.00	44.78
Europe-S.A.W.C.	4	82	97	2.41	1.27	2.41	1.27	23.34	23.34	0.00	25.18
Europe-U.S.W.C.	4	109	129	2.41	1.27	2.41	1.27	22.50	22.50	0.00	32.22
Oceania-U.S.E.C.	9	162	211	2.41	1.27	2.41	1.27	28.05	28.05	0.00	32.60
S.A.E.C.-Asia	64	14,050	14,868	2.41	1.27	2.41	1.27	12.29	12.29	0.00	16.31
S.A.E.C.-C.A.W.C.	68	3,130	4,524	2.41	1.26	2.41	1.26	10.89	10.89	0.00	11.68
S.A.E.C.-U.S.W.C.	27	978	1,169	2.41	1.27	2.41	1.27	18.67	18.67	0.00	18.82
S.A.W.C.-Canada E.C.	1	14	18	2.41	1.27	2.41	1.27	20.47	20.47	0.00	27.25
S.A.W.C.-C.A.E.C.	15	557	688	2.41	1.27	2.41	1.27	10.99	10.99	0.00	15.42
S.A.W.C.-Europe	19	173	210	2.41	1.27	2.41	1.27	28.01	28.01	0.00	30.35
S.A.W.C.-U.S.E.C.	17	607	731	2.41	1.27	2.41	1.27	11.71	11.71	0.00	18.51

(Continued)

Table B-25. Laden Transits, Tons Carried, Toll Revenue and Toll Rates, Current Toll Structure and Rates, 250,000 DWT Scenario, 2060, by Ship Type, Diversion Status, and Trade Route (1990 US$, except when noted)(continued)

Ship Type, Diversion Status, and Trade Route	Transits	Cargo Tonnage Carried (thousands)	Revenue (thousands) a/	Current Toll Schedule: Toll Per Panama Canal Net Ton	Current Toll Schedule: Toll Per Cargo Ton Carried	New Toll Schedule: Toll Per Panama Canal Net Ton	New Toll Schedule: Toll Per Cargo Ton Carried	Total Transportation Costs per Ton Carried: Via Panama Canal: With Current Toll Structure	Via Panama Canal: With New Toll Structure	Via Panama Canal: Percent Increase	Via Least Costly Alternative Route
Tankers (continued)											
Non-Diverted Transits (continued)											
U.S.E.C.-Asia	90	2,946	3,557	2.41	1.27	2.41	1.27	22.71	22.71	0.00	32.54
U.S.E.C.-C.A.W.C.	14	260	400	2.41	1.27	2.41	1.27	9.23	9.23	0.00	28.15
U.S.E.C.-Canada W.C.	2	7	58	2.41	1.27	2.41	1.27	18.17	18.17	0.00	35.78
U.S.E.C.-Oceania	4	129	157	2.41	1.27	2.41	1.27	26.02	26.02	0.00	30.19
U.S.E.C.-S.A.W.C.	3	49	64	2.41	1.27	2.41	1.27	13.63	13.63	0.00	21.94
U.S.E.C.-U.S.W.C.	21	601	776	2.41	1.27	2.41	1.27	14.06	14.06	0.00	30.95
U.S.W.C.-Africa	10	334	492	2.41	1.26	2.41	1.26	16.39	16.39	0.00	20.19
U.S.W.C.-C.A.E.C.	3	96	131	2.41	1.26	2.41	1.26	11.90	11.90	0.00	23.13
U.S.W.C.-S.A.E.C.	1	29	30	2.41	1.27	2.41	1.27	18.76	18.76	0.00	18.90
U.S.W.C.-U.S.E.C.	4	102	144	2.41	1.27	2.41	1.27	13.36	13.36	0.00	29.10
Subtotal	553	27,821	33,393	2.41	1.27	2.41	1.27	14.19	14.19	0.00	19.64
Tankers											
Diverted Transits											
Middle East-U.S.W.C.	0	0	0	2.41	1.25	2.41	1.25	1.63	1.63	0.00	0.48
Subtotal	0	0	0	2.41	1.25	2.41	1.25	1.63	1.63	0.00	0.48
Subtotal	553	27,821	33,393	2.41	1.27	2.41	1.27	14.19	14.19	0.00	19.64
Vehicle Carriers											
Non-Diverted Transits											
Asia-C.A.E.C.	13	34	878	2.41	29.09	2.41	29.09	417.18	417.18	0.00	496.39
Asia-U.S.E.C.	481	2,251	35,762	2.41	29.20	2.41	29.20	439.57	439.57	0.00	516.31
C.A.W.C.-C.A.E.C.	3	3	117	2.41	28.71	2.41	28.71	266.36	266.36	0.00	440.99

(Continued)

Table B-25. Laden Transits, Tons Carried, Toll Revenue and Toll Rates, Current Toll Structure and Rates, 250,000 DWT Scenario, 2060, by Ship Type, Diversion Status, and Trade Route (1990 US$, except when noted)(continued)

Ship Type, Diversion Status, and Trade Route	Transits	Cargo Tonnage Carried (thousands)	Revenue (thousands) a/	Current Toll Schedule: Toll Per Panama Canal Net Ton	Current Toll Schedule: Toll Per Cargo Ton Carried	New Toll Schedule: Toll Per Panama Canal Net Ton	New Toll Schedule: Toll Per Cargo Ton Carried	Total Transportation Costs per Ton Carried: Via Panama Canal: With Current Toll Structure	Via Panama Canal: With New Toll Structure	Via Panama Canal: Percent Increase	Via Least Costly Alternative Route
Vehicle Carriers (continued)											
Non-Diverted Transits (continued)											
C.A.E.C.-C.A.W.C.	8	3	640	2.41	29.22	2.41	29.22	272.22	272.22	0.00	411.00
C.A.E.C.-Oceania	1	0	75	2.41	29.22	2.41	29.22	434.22	434.22	0.00	482.00
Europe-Canada W.C.	7	16	728	2.41	30.90	2.41	30.90	386.38	386.38	0.00	457.44
Europe-U.S.W.C.	156	299	13,627	2.41	29.95	2.41	29.95	403.00	403.00	0.00	458.96
S.A.W.C.-C.A.E.C.	0	0	8	2.41	28.70	2.41	28.70	323.70	323.70	0.00	380.00
U.S.E.C.-Asia	42	192	3,473	2.41	29.67	2.41	29.67	415.80	415.80	0.00	510.17
U.S.E.C.-Oceania	13	30	965	2.41	29.22	2.41	29.22	433.22	433.22	0.00	453.00
Subtotal	723	2,828	56,272	2.41	29.42	2.41	29.42	433.09	433.09	0.00	508.39
Vehicle Carriers											
Diverted Transits											
Asia-S.A.E.C.	0	0	7	2.41	29.13	2.41	29.13	484.18	484.18	0.00	468.49
Canada E.C.-Asia	1	3	35	2.41	29.22	2.41	29.22	465.22	465.22	0.00	456.00
Subtotal	1	3	42	2.41	29.20	2.41	29.20	466.92	466.92	0.00	457.12
Subtotal	724	2,831	56,314	2.41	29.42	2.41	29.42	433.13	433.13	0.00	508.34
Total Non-Diverting	17,748	462,101	777,306	2.41	1.79	2.41	1.79	44.07	44.07	0.00	54.25
Total Diverting	131	3,399	4,930	2.41	1.60	2.41	1.60	45.70	45.70	0.00	45.25

Notes: These calculations do not include all transits and tons carried forecast by the WEFA Group. For some ship-type and trade-route combinations (accounting for a total of 27 transits and 291695 tons), vessel costs were not available for every DWT size interval. As a result, these transits and tons were excluded. In addition, for 2480 transits and 49528628 tons, the cost by way of the Panama Canal without a toll was higher than the least costly alternative route. As a result, these transits and tons were excluded. Percentages may not calculate exactly as shown due to rounding. A fee of $0.40 per Panama Canal net ton has also been included to account for charges such as handling and agency fees incurred when transitting the Canal. The extra fee is only used to determine divesion status by adding it to the cost per ton carried and is not included in the revenue calculations.

a/ Revenue lost from diversions is measured as the revenue generated by the maximum, nondiverting toll rate increase.

Source: Nathan Associates Inc., based on forecasts of traffic and transportation costs provided by The WEFA Group.

Appendix C

CURRENT TOLL STRUCTURE AND 50 PERCENT INCREASE IN RATES

Table C-1. Summary of Estimated Revenues by Project Scenario and Year from Current Toll Structure With 50 Percent Increase in Rates (1990 US$millions)

Year and Project Scenario	Laden	Ballast	Total
2020			
Status Quo a/	605	97	702
150,000 DWT	783	121	904
200,000 DWT	784	120	904
250,000 DWT	817	121	938
2060			
Status Quo a/	757	104	861
150,000 DWT	1,084	195	1,279
200,000 DWT	1,112	207	1,319
250,000 DWT	1,140	195	1,335

Note: Toll rates are $3.02 per Panama Canal net ton for laden vessesls and $2.40 per Panama Canal net ton for vessels in ballast.

a/ Status Quo is a 65,000 DWT Scenario.

Source: Nathan Associates Inc., based on "no toll" forecasts of traffic and transportation costs provided by The WEFA Group.

CURRENT TOLL STRUCTURE WITH 50 PERCENT INCREASE IN RATES, STATUS QUO SCENARIO, 2020

Table C-2. Laden Transits, Tons Carried, and Toll Revenue, Current Toll Structure With 50 Percent Increase in Rates, Status Quo Scenario, 2020, by Ship Type

	Transits				Tons Carried(thousands)				Revenue(1990 US$thousands)			
Ship Type	Canal	Diverted	Total	Diverted as a Percent of Total	Canal	Diverted	Total	Diverted as a Percent of Total	Canal	Lost a/	Total	Lost as a Percent of Total
Container-Breakbulk	1,314	10	1,325	0.79	20,365	155	20,519	0.75	55,315	194	55,509	0.35
Dry Bulk Carriers	3,082	395	3,477	11.36	109,510	13,889	123,399	11.26	197,280	21,978	219,259	10.02
Chemical Tankers	992	2	994	0.22	22,841	84	22,925	0.37	40,095	90	40,184	0.22
Full Container Ships	957	350	1,307	26.81	17,031	5,508	22,539	24.44	78,627	15,849	94,476	16.78
General Cargo Ships	755	3	758	0.42	7,476	22	7,499	0.30	19,695	88	19,783	0.45
Liquid Gas Carriers	172	0	172	0.00	1,947	0	1,947	0.00	8,608	0	8,608	0.00
Passenger Ships	336	0	336	0.00	0	0	0	0.00	9,217	0	9,217	0.00
Refrigerated Ships	2,819	29	2,847	1.00	10,116	151	10,266	1.47	82,477	398	82,875	0.48
Roll-On Roll-Off	211	1	213	0.67	1,731	31	1,762	1.78	12,953	108	13,060	0.82
Tankers	521	172	693	24.84	13,672	6,396	20,068	31.87	27,690	9,165	36,855	24.87
Vehicle Carriers	623	0	623	0.05	2,423	1	2,424	0.04	72,758	14	72,771	0.02
Total	11,780	964	12,744	7.56	207,112	26,238	233,349	11.24	604,714	47,884	652,598	7.34

Notes: These calculations do not include all transits and tons carried forecast by the WEFA Group. For some ship-type and trade-route combinations (accounting for a total of 18 transits and 179803 tons), vessel costs were not available for every DWT size interval. As a result, these transits and tons were excluded. In addition, for 2098 transits and 35979616 tons, the cost by way of the Panama Canal without a toll was higher than the least costly alternative route. As a result, these transits and tons were excluded. A fee of $0.40 per Panama Canal net ton has also been included to account for charges such as handling and agency fees incurred when transitting the Canal. The extra fee is only used to determine diversion status by adding it to cost per ton carried and is not included in the revenue calculations.

a/ Revenue lost from diversions is measured as the revenue generated by the maximum, nondiverting toll rate increase.

Source: Nathan Associates Inc., based on forecasts of traffic and transportation costs provided by the WEFA Group.

Table C-3. Ballast Transits, Tons Carried, and Toll Revenue, Current Toll Structure With 50 Percent Increase in Rates, Status Quo Scenario, 2020, by Ship Type

	Transits				Tons Carried(thousands)				Revenue(1990 US$thousands)			
Ship Type	Canal	Diverted	Total	Diverted as a Percent of Total	Canal	Diverted	Total	Diverted as a Percent of Total	Canal	Lost	Total	Lost as a Percent of Total
Container-Breakbulk	41	0	41	0.35	0	0	0	0.00	1,524	5	1,529	0.35
Dry Bulk Carriers	337	38	375	10.02	0	0	0	0.00	17,074	1,901	18,976	10.02
Chemical Tankers	82	0	82	0.22	0	0	0	0.00	2,632	6	2,638	0.22
Full Container Ships	8	2	10	16.78	0	0	0	0.00	383	77	460	16.78
General Cargo Ships	139	1	140	0.45	0	0	0	0.00	2,286	10	2,297	0.45
Liquid Gas Carriers	128	0	128	0.00	0	0	0	0.00	5,595	0	5,595	0.00
Passenger Ships	11	0	11	0.00	0	0	0	0.00	196	0	196	0.00
Refrigerated Ships	928	4	932	0.48	0	0	0	0.00	20,568	99	20,667	0.48
Roll-On Roll-Off	30	0	30	0.82	0	0	0	0.00	1,187	10	1,197	0.82
Tankers	250	83	333	24.87	0	0	0	0.00	11,285	3,735	15,020	24.87
Vehicle Carriers	383	0	383	0.02	0	0	0	0.00	33,913	7	33,920	0.02
Total	2,337	128	2,465	5.19	0	0	0	0.00	96,643	5,851	102,495	5.71

Note: Diversions of ballast transits are computed by diverting a proportion of ballast transits equal to lost revenue as a percent of total potential revenue for a particular laden ship type. See last column on previous table.

Source: Nathan Associates Inc., based on forecasts of traffic and transportation costs provided by the WEFA Group.

Table C-4. Laden Transits, Tons Carried, Toll Revenue and Toll Rates, Current Toll Structure With 50 Percent Increase in Rates, Status Quo Scenario, 2020, by Ship Type, Diversion Status, and Trade Route (1990 US$, except when noted)

Ship Type, Diversion Status, and Trade Route	Transits	Cargo Tonnage Carried (thousands)	Revenue (thousands) a/	Current Toll Schedule: Toll Per Panama Canal Net Ton	Current Toll Schedule: Toll Per Cargo Ton Carried	New Toll Schedule: Toll Per Panama Canal Net Ton	New Toll Schedule: Toll Per Cargo Ton Carried	Total Transportation Costs per Ton Carried: Via Panama Canal: With Current Toll Structure	Via Panama Canal: With New Toll Structure	Via Panama Canal: Percent Increase	Via Least Costly Alternative Route
Container-Breakbulk											
Non-Diverted Transits											
Africa-C.A.W.C.	3	77	119	2.41	1.85	3.42	2.63	68.56	69.34	1.13	113.26
Africa-Canada W.C.	0	2	6	2.41	1.87	3.42	2.65	88.16	88.94	0.88	100.93
Africa-U.S.W.C.	1	9	30	2.41	1.87	3.42	2.65	89.16	89.94	0.87	102.87
Asia-Canada E.C.	0	4	17	2.41	1.86	3.42	2.64	88.65	89.43	0.88	96.19
Asia-C.A.E.C.	91	837	3,583	2.41	1.87	3.42	2.64	93.07	93.84	0.84	107.91
Asia-S.A.E.C.	27	175	1,032	2.41	1.87	3.42	2.65	100.20	100.98	0.78	102.23
Asia-U.S.E.C.	82	1,031	3,440	2.41	1.86	3.42	2.64	94.52	95.30	0.82	116.80
C.A.W.C.-Africa	3	70	131	2.41	1.87	3.42	2.65	73.06	73.84	1.07	120.56
C.A.W.C.-C.A.E.C.	7	118	296	2.41	1.86	3.42	2.64	49.37	50.15	1.57	87.53
C.A.W.C.-Europe	15	110	587	2.41	1.87	3.42	2.65	63.64	64.42	1.22	91.28
C.A.W.C.-S.A.E.C.	12	6	463	2.41	1.87	3.42	2.65	69.19	69.97	1.13	74.19
C.A.W.C.-U.S.E.C.	3	19	121	2.41	1.87	3.42	2.65	55.40	56.18	1.41	91.85
Canada E.C.-Asia	14	367	728	2.41	1.85	3.42	2.62	90.68	91.45	0.85	93.83
Canada E.C.-C.A.W.C.	1	9	34	2.41	1.87	3.42	2.65	54.09	54.87	1.44	92.29
Canada E.C.-S.A.W.C.	1	10	22	2.41	1.85	3.42	2.63	62.78	63.56	1.23	75.85
Canada E.C.-U.S.W.C.	0	0	0	2.41	1.85	3.42	2.63	69.71	70.49	1.11	105.87
Canada W.C.-Africa	8	179	345	2.41	1.85	3.42	2.63	88.66	89.44	0.87	100.74
Canada W.C.-Europe	63	1,844	3,415	2.41	1.85	3.42	2.62	77.86	78.63	0.99	104.01
Canada W.C.-S.A.E.C.	11	210	406	2.41	1.87	3.42	2.65	71.19	71.97	1.10	108.72
Canada W.C.-U.S.E.C.	8	149	323	2.41	1.85	3.42	2.63	64.85	65.63	1.19	102.00
C.A.E.C.-Asia	9	196	356	2.41	1.87	3.42	2.65	92.37	93.15	0.84	107.04
C.A.E.C.-C.A.W.C.	7	27	271	2.41	1.87	3.42	2.65	50.30	51.08	1.55	90.29
C.A.E.C.-Canada W.C.	2	31	78	2.41	1.87	3.42	2.65	63.73	64.51	1.22	101.08

(Continued)

Table C-4. Laden Transits, Tons Carried, Toll Revenue and Toll Rates, Current Toll Structure With 50 Percent Increase in Rates, Status Quo Scenario, 2020, by Ship Type, Diversion Status, and Trade Route (1990 US$, except when noted)(continued)

Ship Type, Diversion Status, and Trade Route	Transits	Cargo Tonnage Carried (thousands)	Revenue (thousands) a/	Current Toll Schedule: Toll Per Panama Canal Net Ton	Current Toll Schedule: Toll Per Cargo Ton Carried	New Toll Schedule: Toll Per Panama Canal Net Ton	New Toll Schedule: Toll Per Cargo Ton Carried	Total Transportation Costs per Ton Carried, Via Panama Canal: With Current Toll Structure	Total Transportation Costs per Ton Carried, Via Panama Canal: With New Toll Structure	Total Transportation Costs per Ton Carried, Via Panama Canal: Percent Increase	Total Transportation Costs per Ton Carried: Via Least Costly Alternative Route
Container-Breakbulk (continued)											
Non-Diverted Transits (continued)											
C.A.E.C.-Oceania	1	20	47	2.41	1.87	3.42	2.65	90.16	90.94	0.86	107.72
C.A.E.C.-S.A.W.C.	18	144	713	2.41	1.87	3.42	2.65	61.88	62.66	1.26	76.44
C.A.E.C.-U.S.W.C.	4	73	157	2.41	1.86	3.42	2.64	61.48	62.26	1.26	93.18
Europe-C.A.W.C.	22	137	854	2.41	1.87	3.42	2.65	64.73	65.51	1.20	112.66
Europe-Canada W.C.	4	123	249	2.41	1.85	3.42	2.62	80.14	80.91	0.96	103.29
Europe-S.A.W.C.	91	752	3,523	2.41	1.87	3.42	2.65	85.37	86.15	0.91	99.08
Europe-U.S.W.C.	24	732	1,382	2.41	1.85	3.42	2.62	79.27	80.04	0.97	103.43
Oceania-C.A.E.C.	4	42	155	2.41	1.87	3.42	2.65	90.85	91.63	0.86	108.64
S.A.E.C.-C.A.W.C.	9	141	353	2.41	1.87	3.42	2.65	68.77	69.55	1.13	73.69
S.A.E.C.-Canada W.C.	11	152	443	2.41	1.87	3.42	2.65	87.94	88.72	0.89	93.92
S.A.E.C.-U.S.W.C.	38	572	1,510	2.41	1.87	3.42	2.64	74.36	75.13	1.05	77.06
S.A.W.C.-Canada E.C.	1	2	36	2.41	1.87	3.42	2.65	66.27	67.05	1.18	81.06
S.A.W.C.-C.A.E.C.	13	108	502	2.41	1.87	3.42	2.65	62.27	63.05	1.25	77.06
S.A.W.C.-Europe	191	3,350	7,312	2.41	1.87	3.42	2.65	85.09	85.87	0.92	101.37
S.A.W.C.-U.S.E.C.	108	1,055	4,032	2.41	1.87	3.42	2.65	59.46	60.24	1.31	77.72
U.S.E.C.-Asia	172	4,347	8,517	2.41	1.86	3.42	2.63	91.67	92.44	0.84	113.24
U.S.E.C.-C.A.W.C.	10	201	400	2.41	1.86	3.42	2.64	46.17	46.95	1.68	88.94
U.S.E.C.-S.A.W.C.	160	1,595	6,202	2.41	1.87	3.42	2.65	59.27	60.05	1.31	77.44
U.S.E.C.-U.S.W.C.	0	0	1	2.41	1.86	3.42	2.63	56.86	57.63	1.36	94.00
U.S.W.C.-Africa	9	143	532	2.41	1.85	3.42	2.62	82.33	83.10	0.94	98.63
U.S.W.C.-Canada E.C.	2	40	67	2.41	1.85	3.42	2.63	66.85	67.63	1.16	100.00
U.S.W.C.-C.A.E.C.	9	63	335	2.41	1.87	3.42	2.65	63.58	64.36	1.23	96.80
U.S.W.C.-Europe	38	1,010	2,014	2.41	1.85	3.42	2.63	80.25	81.03	0.96	103.86

(Continued)

Table C-4. Laden Transits, Tons Carried, Toll Revenue and Toll Rates, Current Toll Structure With 50 Percent Increase in Rates, Status Quo Scenario, 2020, by Ship Type, Diversion Status, and Trade Route (1990 US$, except when noted)(continued)

Ship Type, Diversion Status, and Trade Route	Transits	Cargo Tonnage Carried (thousands)	Revenue (thousands) a/	Current Toll Schedule: Toll Per Panama Canal Net Ton	Current Toll Schedule: Toll Per Cargo Ton Carried	New Toll Schedule: Toll Per Panama Canal Net Ton	New Toll Schedule: Toll Per Cargo Ton Carried	Total Transportation Costs per Ton Carried: Via Panama Canal: With Current Toll Structure	Via Panama Canal: With New Toll Structure	Via Panama Canal: Percent Increase	Via Least Costly Alternative Route
Container-Breakbulk (continued)											
Non-Diverted Transits (continued)											
U.S.W.C.-S.A.E.C.	4	79	166	2.41	1.87	3.42	2.65	76.06	76.84	1.02	79.06
U.S.W.C.-U.S.E.C.	0	3	12	2.41	1.85	3.42	2.63	58.25	59.03	1.33	96.88
Subtotal	1,314	20,365	55,315	2.41	1.86	3.42	2.64	80.88	81.65	0.96	100.73
Container-Breakbulk											
Diverted Transits											
Canada E.C.-Oceania	1	13	26	2.41	1.87	3.42	2.65	102.74	103.52	0.76	102.93
Oceania-Canada E.C.	2	46	119	2.41	1.85	3.42	2.62	93.85	94.62	0.82	94.00
Oceania-S.A.E.C.	7	95	48	2.41	1.86	3.42	2.64	84.47	85.25	0.92	82.99
Subtotal	10	155	194	2.41	1.86	3.42	2.64	88.83	89.60	0.87	87.97
Subtotal	1,325	20,519	55,509	2.41	1.86	3.42	2.64	80.94	81.71	0.96	100.64
Dry Bulk Carriers											
Non-Diverted Transits											
Africa-C.A.W.C.	15	483	765	2.41	1.35	3.42	1.92	15.05	15.62	3.75	26.10
Africa-Canada W.C.	36	1,354	2,064	2.41	1.32	3.42	1.88	17.69	18.25	3.12	19.77
Africa-S.A.W.C.	5	128	239	2.41	1.35	3.42	1.92	18.05	18.62	3.13	25.10
Africa-U.S.W.C.	7	161	422	2.41	1.31	3.42	1.86	16.45	17.00	3.32	19.23
Asia-Canada E.C.	9	302	570	2.41	1.29	3.42	1.83	17.41	17.95	3.10	18.32
Asia-C.A.E.C.	21	345	1,109	2.41	1.35	3.42	1.91	18.17	18.73	3.09	22.65
Asia-U.S.E.C.	259	6,345	15,255	2.41	1.32	3.42	1.87	16.82	17.37	3.26	22.26
C.A.W.C.-Africa	1	34	67	2.41	1.34	3.42	1.90	14.93	15.49	3.74	25.81
C.A.W.C.-C.A.E.C.	36	961	1,905	2.41	1.35	3.42	1.91	7.94	8.50	7.07	15.77

(Continued)

Table C-4. Laden Transits, Tons Carried, Toll Revenue and Toll Rates, Current Toll Structure With 50 Percent Increase in Rates, Status Quo Scenario, 2020, by Ship Type, Diversion Status, and Trade Route (1990 US$, except when noted)(continued)

Ship Type, Diversion Status, and Trade Route	Transits	Cargo Tonnage Carried (thousands)	Revenue (thousands) a/	Current Toll Schedule: Toll Per Panama Canal Net Ton	Current Toll Schedule: Toll Per Cargo Ton Carried	New Toll Schedule: Toll Per Panama Canal Net Ton	New Toll Schedule: Toll Per Cargo Ton Carried	Total Transportation Costs per Ton Carried: Via Panama Canal: With Current Toll Structure	Via Panama Canal: With New Toll Structure	Via Panama Canal: Percent Increase	Via Least Costly Alternative Route
Dry Bulk Carriers (continued)											
Non-Diverted Transits (continued)											
C.A.W.C.-Europe	17	462	969	2.41	1.33	3.42	1.88	12.42	12.97	4.46	18.24
C.A.W.C.-U.S.E.C.	41	1,292	2,248	2.41	1.33	3.42	1.89	8.06	8.62	6.89	17.55
Canada E.C.-Asia	75	2,498	4,468	2.41	1.31	3.42	1.86	18.36	18.91	2.98	20.40
Canada E.C.-Oceania	3	58	185	2.41	1.34	3.42	1.90	19.86	20.42	2.81	21.08
Canada E.C.-S.A.W.C.	6	163	325	2.41	1.33	3.42	1.89	12.78	13.34	4.35	14.98
Canada W.C.-Africa	104	3,500	6,097	2.41	1.32	3.42	1.87	17.34	17.89	3.18	19.42
Canada W.C.-C.A.E.C.	5	105	230	2.41	1.35	3.42	1.92	13.05	13.62	4.32	21.30
Canada W.C.-Europe	261	9,815	17,274	2.41	1.29	3.42	1.83	15.96	16.50	3.38	21.25
Canada W.C.-U.S.E.C.	66	1,569	3,373	2.41	1.35	3.42	1.92	13.15	13.72	4.29	23.15
C.A.E.C.-Asia	22	639	1,112	2.41	1.35	3.42	1.92	17.95	18.52	3.14	22.30
C.A.E.C.-C.A.W.C.	26	682	1,315	2.41	1.35	3.42	1.92	8.15	8.72	6.92	16.45
C.A.E.C.-Canada W.C.	2	55	101	2.41	1.35	3.42	1.92	13.05	13.62	4.32	21.60
C.A.E.C.-Oceania	1	11	27	2.41	1.35	3.42	1.92	19.95	20.52	2.83	22.60
C.A.E.C.-S.A.W.C.	13	313	656	2.41	1.35	3.42	1.92	11.15	11.72	5.06	13.50
C.A.E.C.-U.S.W.C.	9	236	468	2.41	1.35	3.42	1.92	12.05	12.62	4.68	20.30
Europe-C.A.W.C.	32	797	1,610	2.41	1.35	3.42	1.92	13.05	13.62	4.32	21.20
Europe-Canada W.C.	12	286	657	2.41	1.33	3.42	1.88	16.94	17.49	3.26	21.24
Europe-U.S.W.C.	126	3,102	7,163	2.41	1.32	3.42	1.88	16.00	16.56	3.45	20.10
Middle East-S.A.W.C.	1	52	88	2.41	1.27	3.42	1.79	14.27	14.79	3.70	16.00
Oceania-Canada E.C.	23	661	1,160	2.41	1.35	3.42	1.92	19.95	20.52	2.83	21.25
Oceania-C.A.E.C.	6	166	329	2.41	1.35	3.42	1.92	19.05	19.62	2.96	22.25
S.A.E.C.-Asia	73	2,384	4,182	2.41	1.32	3.42	1.87	17.06	17.61	3.23	18.40
S.A.W.C.-Africa	4	157	239	2.41	1.29	3.42	1.83	14.00	14.54	3.85	20.54

(Continued)

Table C-4. Laden Transits, Tons Carried, Toll Revenue and Toll Rates, Current Toll Structure With 50 Percent Increase in Rates, Status Quo Scenario, 2020, by Ship Type, Diversion Status, and Trade Route (1990 US$, except when noted)(continued)

Ship Type, Diversion Status, and Trade Route	Transits	Cargo Tonnage Carried (thousands)	Revenue (thousands) a/	Current Toll Schedule: Toll Per Panama Canal Net Ton	Current Toll Schedule: Toll Per Cargo Ton Carried	New Toll Schedule: Toll Per Panama Canal Net Ton	New Toll Schedule: Toll Per Cargo Ton Carried	Total Transportation Costs per Ton Carried: Via Panama Canal: With Current Toll Structure	Via Panama Canal: With New Toll Structure	Via Panama Canal: Percent Increase	Via Least Costly Alternative Route
Dry Bulk Carriers (continued)											
Non-Diverted Transits (continued)											
S.A.W.C.-Canada E.C.	0	10	17	2.41	1.35	3.42	1.92	13.15	13.72	4.29	15.50
S.A.W.C.-C.A.E.C.	8	144	392	2.41	1.35	3.42	1.92	11.15	11.72	5.06	13.50
S.A.W.C.-U.S.E.C.	56	1,732	2,909	2.41	1.35	3.42	1.91	10.97	11.53	5.12	15.18
U.S.E.C.-Asia	1,108	48,574	81,742	2.41	1.27	3.42	1.80	15.30	15.83	3.47	22.99
U.S.E.C.-C.A.W.C.	212	6,232	10,984	2.41	1.35	3.42	1.91	8.22	8.78	6.84	18.25
U.S.E.C.-Canada W.C.	1	30	49	2.41	1.33	3.42	1.89	12.67	13.23	4.38	21.71
U.S.E.C.-Oceania	21	646	1,113	2.41	1.34	3.42	1.90	18.67	19.23	3.00	20.47
U.S.E.C.-S.A.W.C.	54	1,456	2,788	2.41	1.35	3.42	1.91	11.05	11.61	5.09	15.31
U.S.E.C.-U.S.W.C.	1	0	37	2.41	1.35	3.42	1.92	12.15	12.72	4.64	21.30
U.S.W.C.-Africa	133	4,599	8,584	2.41	1.30	3.42	1.84	16.19	16.73	3.34	18.62
U.S.W.C.-Canada E.C.	7	217	387	2.41	1.34	3.42	1.90	13.89	14.45	4.03	21.26
U.S.W.C.-C.A.E.C.	2	48	93	2.41	1.35	3.42	1.92	12.05	12.62	4.68	20.30
U.S.W.C.-Europe	156	6,524	11,092	2.41	1.28	3.42	1.81	14.48	15.01	3.68	17.96
U.S.W.C.-U.S.E.C.	7	183	417	2.41	1.33	3.42	1.88	12.16	12.71	4.55	21.48
Subtotal	3,082	109,510	197,280	2.41	1.30	3.42	1.84	14.93	15.47	3.62	21.11
Dry Bulk Carriers											
Diverted Transits											
Asia-S.A.E.C.	6	152	125	2.41	1.35	3.42	1.92	21.95	22.52	2.57	21.30
C.A.W.C.-S.A.E.C.	10	136	264	2.41	1.35	3.42	1.92	12.15	12.72	4.64	11.65
Europe-S.A.W.C.	12	298	292	2.41	1.35	3.42	1.92	16.05	16.62	3.52	15.50
Oceania-U.S.E.C.	141	6,406	10,837	2.41	1.26	3.42	1.79	15.77	16.30	3.34	16.07
S.A.E.C.-C.A.W.C.	8	247	210	2.41	1.35	3.42	1.92	12.15	12.72	4.64	11.65

(Continued)

Table C-4. Laden Transits, Tons Carried, Toll Revenue and Toll Rates, Current Toll Structure With 50 Percent Increase in Rates, Status Quo Scenario, 2020, by Ship Type, Diversion Status, and Trade Route (1990 US$, except when noted)(continued)

Ship Type, Diversion Status, and Trade Route	Transits	Cargo Tonnage Carried (thousands)	Revenue (thousands) a/	Current Toll Schedule: Toll Per Panama Canal Net Ton	Current Toll Schedule: Toll Per Cargo Ton Carried	New Toll Schedule: Toll Per Panama Canal Net Ton	New Toll Schedule: Toll Per Cargo Ton Carried	Total Transportation Costs per Ton Carried: Via Panama Canal: With Current Toll Structure	Via Panama Canal: With New Toll Structure	Via Panama Canal: Percent Increase	Via Least Costly Alternative Route
Dry Bulk Carriers (continued)											
Diverted Transits (continued)											
S.A.E.C.-Canada W.C.	3	66	139	2.41	1.35	3.42	1.92	17.05	17.62	3.31	17.35
S.A.E.C.-U.S.W.C.	31	1,128	631	2.41	1.28	3.42	1.82	13.48	14.02	3.97	12.67
S.A.W.C.-Europe	172	5,176	9,235	2.41	1.34	3.42	1.90	15.62	16.18	3.58	15.96
U.S.W.C.-S.A.E.C.	11	279	244	2.41	1.35	3.42	1.92	16.05	16.62	3.52	15.45
Subtotal	395	13,889	21,978	2.41	1.30	3.41	1.84	15.52	16.06	3.50	15.67
Subtotal	3,477	123,399	219,259	2.41	1.30	3.42	1.84	14.99	15.54	3.61	20.49
Chemical Tankers											
Non-Diverted Transits											
Africa-S.A.W.C.	1	32	52	2.41	1.34	3.42	1.90	42.34	42.90	1.32	58.00
Asia-C.A.E.C.	3	34	68	2.41	1.34	3.42	1.90	52.46	53.02	1.06	69.37
Asia-S.A.E.C.	3	16	134	2.41	1.34	3.42	1.90	49.34	49.90	1.13	51.00
Asia-U.S.E.C.	32	537	1,116	2.41	1.34	3.42	1.90	44.74	45.30	1.25	60.33
C.A.W.C.-C.A.E.C.	23	139	263	2.41	1.34	3.42	1.90	36.34	36.90	1.54	77.00
C.A.W.C.-Europe	8	126	209	2.41	1.34	3.42	1.90	37.28	37.84	1.50	55.50
C.A.W.C.-U.S.E.C.	38	470	858	2.41	1.34	3.42	1.90	28.06	28.62	1.99	58.14
Canada W.C.-Europe	4	87	168	2.41	1.34	3.42	1.90	41.34	41.90	1.35	55.00
Canada W.C.-U.S.E.C.	32	744	1,574	2.41	1.34	3.42	1.90	31.74	32.30	1.76	52.80
C.A.E.C.-Asia	9	248	412	2.41	1.34	3.42	1.90	41.66	42.22	1.34	54.44
C.A.E.C.-C.A.W.C.	9	207	432	2.41	1.34	3.42	1.90	21.34	21.90	2.62	41.00
C.A.E.C.-S.A.W.C.	11	186	358	2.41	1.34	3.42	1.90	31.03	31.59	1.80	40.27
C.A.E.C.-U.S.W.C.	1	10	17	2.41	1.34	3.42	1.90	51.34	51.90	1.09	90.00
Europe-C.A.W.C.	6	30	71	2.41	1.34	3.42	1.90	56.34	56.90	0.99	86.00

(Continued)

Table C-4. Laden Transits, Tons Carried, Toll Revenue and Toll Rates, Current Toll Structure With 50 Percent Increase in Rates, Status Quo Scenario, 2020, by Ship Type, Diversion Status, and Trade Route (1990 US$, except when noted)(continued)

Ship Type, Diversion Status, and Trade Route	Transits	Cargo Tonnage Carried (thousands)	Revenue (thousands) a/	Current Toll Schedule: Toll Per Panama Canal Net Ton	Current Toll Schedule: Toll Per Cargo Ton Carried	New Toll Schedule: Toll Per Panama Canal Net Ton	New Toll Schedule: Toll Per Cargo Ton Carried	Total Transportation Costs per Ton Carried: Via Panama Canal: With Current Toll Structure	Via Panama Canal: With New Toll Structure	Via Panama Canal: Percent Increase	Via Least Costly Alternative Route
Chemical Tankers (continued)											
Non-Diverted Transits (continued)											
Europe-S.A.W.C.	6	60	103	2.41	1.34	3.42	1.90	55.90	56.46	1.00	59.35
Europe-U.S.W.C.	9	182	317	2.41	1.34	3.42	1.90	42.34	42.90	1.32	56.41
Oceania-U.S.E.C.	18	455	971	2.41	1.34	3.42	1.90	40.54	41.10	1.38	45.36
S.A.E.C.-C.A.W.C.	8	61	115	2.41	1.34	3.42	1.90	46.87	47.43	1.19	51.82
S.A.W.C.-C.A.E.C.	22	79	377	2.41	1.34	3.42	1.90	42.38	42.94	1.32	56.49
S.A.W.C.-Europe	8	92	160	2.41	1.34	3.42	1.90	51.64	52.20	1.08	54.68
S.A.W.C.-U.S.E.C.	7	47	146	2.41	1.34	3.42	1.90	38.35	38.91	1.46	53.28
U.S.E.C.-Asia	565	15,828	25,713	2.41	1.34	3.42	1.90	42.38	42.94	1.32	56.99
U.S.E.C.-C.A.W.C.	18	146	283	2.41	1.34	3.42	1.90	33.25	33.81	1.68	70.02
U.S.E.C.-Canada W.C.	5	36	62	2.41	1.34	3.42	1.90	55.76	56.32	1.00	96.33
U.S.E.C.-Oceania	17	409	699	2.41	1.34	3.42	1.90	44.76	45.32	1.25	50.35
U.S.E.C.-S.A.W.C.	45	434	834	2.41	1.34	3.42	1.90	39.65	40.21	1.41	55.15
U.S.E.C.-U.S.W.C.	50	1,635	3,099	2.41	1.35	3.42	1.91	25.70	26.26	2.19	43.31
U.S.W.C.-C.A.E.C.	2	38	95	2.41	1.34	3.42	1.90	29.34	29.90	1.90	48.00
U.S.W.C.-Europe	16	215	432	2.41	1.34	3.42	1.90	45.63	46.19	1.22	61.31
U.S.W.C.-S.A.E.C.	0	3	7	2.41	1.34	3.42	1.90	37.34	37.90	1.50	38.00
U.S.W.C.-U.S.E.C.	15	256	949	2.41	1.35	3.42	1.91	25.80	26.36	2.18	43.41
Subtotal	992	22,841	40,095	2.41	1.34	3.42	1.90	40.10	40.66	1.39	55.44
Chemical Tankers											
Diverted Transits											
S.A.E.C.-U.S.W.C.	2	84	90	2.41	1.35	3.42	1.91	30.35	30.91	1.86	30.00
Subtotal	2	84	90	2.41	1.35	3.41	1.91	30.35	30.91	1.86	30.00
Subtotal	994	22,925	40,184	2.41	1.34	3.42	1.90	40.06	40.62	1.40	55.35

(Continued)

Table C-4. Laden Transits, Tons Carried, Toll Revenue and Toll Rates, Current Toll Structure With 50 Percent Increase in Rates, Status Quo Scenario, 2020, by Ship Type, Diversion Status, and Trade Route (1990 US$, except when noted)(continued)

Ship Type, Diversion Status, and Trade Route	Transits	Cargo Tonnage Carried (thousands)	Revenue (thousands) a/	Current Toll Schedule: Toll Per Panama Canal Net Ton	Current Toll Schedule: Toll Per Cargo Ton Carried	New Toll Schedule: Toll Per Panama Canal Net Ton	New Toll Schedule: Toll Per Cargo Ton Carried	Total Transportation Costs per Ton Carried: Via Panama Canal: With Current Toll Structure	Via Panama Canal: With New Toll Structure	Via Panama Canal: Percent Increase	Via Least Costly Alternative Route
Full Container Ships (continued)											
Non-Diverted Transits (continued)											
Africa-U.S.W.C.	0	2	6	2.41	4.48	3.42	6.35	246.46	248.33	0.76	281.72
Asia-Canada E.C.	35	682	3,120	2.41	4.65	3.42	6.59	210.85	212.79	0.92	223.41
Asia-S.A.E.C.	2	7	65	2.41	4.48	3.42	6.35	274.32	276.19	0.68	278.74
Asia-U.S.E.C. (low inv. cost)	228	3,885	23,693	2.41	4.69	3.42	6.65	247.19	249.15	0.79	251.75
C.A.W.C.-C.A.E.C.	1	5	35	2.41	4.38	3.42	6.21	129.97	131.80	1.41	209.77
C.A.W.C.-Europe	2	22	111	2.41	4.36	3.42	6.18	153.30	155.12	1.19	206.86
C.A.W.C.-S.A.E.C.	0	4	17	2.41	4.38	3.42	6.20	163.77	165.59	1.11	170.68
C.A.W.C.-U.S.E.C.	0	3	12	2.41	4.48	3.42	6.35	157.98	159.85	1.18	250.90
Canada E.C.-Asia	32	561	2,123	2.41	4.50	3.42	6.38	230.54	232.42	0.81	235.78
Canada E.C.-U.S.W.C.	5	136	566	2.41	4.73	3.42	6.71	160.73	162.71	1.23	225.00
Canada W.C.-Europe	32	491	1,739	2.41	4.46	3.42	6.32	212.22	214.08	0.88	275.57
C.A.E.C.-Asia	8	99	512	2.41	4.41	3.42	6.25	217.31	219.15	0.85	245.58
C.A.E.C.-C.A.W.C.	1	3	17	2.41	4.51	3.42	6.40	184.21	186.10	1.02	324.09
C.A.E.C.-Oceania	0	3	11	2.41	4.48	3.42	6.35	248.46	250.33	0.75	293.66
C.A.E.C.-S.A.W.C.	6	6	88	2.41	4.64	3.42	6.57	187.15	189.08	1.03	226.38
C.A.E.C.-U.S.W.C.	1	12	54	2.41	4.38	3.42	6.21	154.50	156.33	1.18	220.28
Europe-C.A.W.C.	0	1	5	2.41	4.36	3.42	6.18	153.30	155.12	1.19	244.84
Europe-Canada W.C.	24	311	1,184	2.41	4.43	3.42	6.28	224.73	226.58	0.82	283.75
Europe-S.A.W.C.	51	731	3,524	2.41	4.36	3.42	6.18	194.28	196.10	0.94	223.86
Middle East-U.S.W.C.	8	116	425	2.41	4.42	3.42	6.26	221.09	222.93	0.83	248.07
Oceania-C.A.E.C.	2	24	76	2.41	4.48	3.42	6.35	248.46	250.33	0.75	293.66
S.A.E.C.-C.A.W.C.	0	4	16	2.41	4.48	3.42	6.35	193.78	195.65	0.96	205.16
S.A.E.C.-U.S.W.C.	1	9	31	2.41	4.48	3.42	6.35	179.84	181.71	1.04	217.10

(Continued)

Table C-4. Laden Transits, Tons Carried, Toll Revenue and Toll Rates, Current Toll Structure With 50 Percent Increase in Rates, Status Quo Scenario, 2020, by Ship Type, Diversion Status, and Trade Route (1990 US$, except when noted)(continued)

Ship Type, Diversion Status, and Trade Route	Transits	Cargo Tonnage Carried (thousands)	Revenue (thousands) a/	Current Toll Schedule: Toll Per Panama Canal Net Ton	Current Toll Schedule: Toll Per Cargo Ton Carried	New Toll Schedule: Toll Per Panama Canal Net Ton	New Toll Schedule: Toll Per Cargo Ton Carried	Total Transportation Costs per Ton Carried: Via Panama Canal: With Current Toll Structure	Via Panama Canal: With New Toll Structure	Via Panama Canal: Percent Increase	Via Least Costly Alternative Route
Full Container Ships (continued)											
Non-Diverted Transits (continued)											
S.A.W.C.-C.A.E.C.	0	1	5	2.41	4.50	3.42	6.38	191.66	193.54	0.98	232.72
S.A.W.C.-Europe	103	1,966	7,202	2.41	4.36	3.42	6.18	194.27	196.09	0.94	223.85
S.A.W.C.-U.S.E.C.	46	483	1,751	2.41	4.48	3.42	6.35	170.90	172.77	1.09	219.08
U.S.E.C.-Asia (low inv. cost)	275	6,579	27,879	2.41	4.67	3.42	6.62	247.48	249.43	0.79	252.86
U.S.E.C.-C.A.W.C.	6	55	241	2.41	4.48	3.42	6.35	136.10	137.97	1.37	250.90
U.S.E.C.-S.A.W.C.	57	487	2,168	2.41	4.48	3.42	6.35	170.90	172.77	1.09	219.08
U.S.E.C.-U.S.W.C.	1	26	115	2.41	4.71	3.42	6.67	144.82	146.78	1.36	220.39
U.S.W.C.-Africa	0	0	0	2.41	5.04	3.42	7.15	197.04	199.15	1.07	228.00
U.S.W.C.-Canada E.C.	0	5	24	2.41	4.51	3.42	6.39	163.61	165.49	1.15	231.49
U.S.W.C.-C.A.E.C.	7	42	223	2.41	4.46	3.42	6.32	159.01	160.87	1.17	227.84
U.S.W.C.-Middle East	8	103	439	2.41	4.42	3.42	6.27	221.46	223.31	0.83	229.44
U.S.W.C.-U.S.E.C.	13	168	1,152	2.41	4.59	3.42	6.51	145.28	147.20	1.32	222.40
Subtotal	957	17,031	78,627	2.41	4.60	3.41	6.52	227.87	229.79	0.84	244.64
Full Container Ships											
Diverted Transits											
Canada E.C.-Oceania	12	145	474	2.41	4.43	3.42	6.28	259.72	261.57	0.71	259.79
Europe-U.S.W.C.	167	2,735	6,941	2.41	4.55	3.42	6.45	218.21	220.11	0.87	217.16
U.S.W.C.-Europe	171	2,628	8,434	2.41	4.57	3.42	6.48	219.57	221.48	0.87	219.05
Subtotal	350	5,508	15,849	2.41	4.56	3.42	6.46	219.96	221.86	0.86	219.19
Subtotal	1,307	22,539	94,476	2.41	4.59	3.42	6.51	225.94	227.85	0.85	238.42
General Cargo Ships											
Non-Diverted Transits											
Africa-C.A.W.C.	2	23	57	2.41	1.39	3.42	1.97	28.19	28.77	2.05	50.55

(Continued)

Table C-4. Laden Transits, Tons Carried, Toll Revenue and Toll Rates, Current Toll Structure With 50 Percent Increase in Rates, Status Quo Scenario, 2020, by Ship Type, Diversion Status, and Trade Route (1990 US$, except when noted)(continued)

Ship Type, Diversion Status, and Trade Route	Transits	Cargo Tonnage Carried (thousands)	Revenue (thousands) a/	Current Toll Schedule: Toll Per Panama Canal Net Ton	Current Toll Schedule: Toll Per Cargo Ton Carried	New Toll Schedule: Toll Per Panama Canal Net Ton	New Toll Schedule: Toll Per Cargo Ton Carried	Total Transportation Costs per Ton Carried: Via Panama Canal: With Current Toll Structure	Via Panama Canal: With New Toll Structure	Via Panama Canal: Percent Increase	Via Least Costly Alternative Route
General Cargo Ships (continued)											
Non-Diverted Transits (continued)											
Africa-S.A.W.C.	2	35	59	2.41	1.39	3.42	1.97	34.14	34.72	1.70	49.55
Asia-Canada E.C.	0	2	3	2.41	1.39	3.42	1.97	38.09	38.67	1.52	41.65
Asia-C.A.E.C.	71	844	2,486	2.41	1.39	3.42	1.97	34.09	34.67	1.70	44.60
Asia-U.S.E.C.	26	339	930	2.41	1.39	3.42	1.97	34.56	35.14	1.67	47.75
C.A.W.C.-Africa	5	94	171	2.41	1.39	3.42	1.97	28.19	28.77	2.05	50.55
C.A.W.C.-C.A.E.C.	25	109	290	2.41	1.46	3.42	2.07	10.10	10.71	6.03	52.77
C.A.W.C.-Europe	21	120	470	2.41	1.41	3.42	1.99	26.48	27.06	2.22	46.59
C.A.W.C.-S.A.E.C.	8	51	172	2.41	1.41	3.42	2.00	25.50	26.09	2.30	29.62
C.A.W.C.-U.S.E.C.	10	51	121	2.41	1.45	3.42	2.06	11.45	12.06	5.29	65.61
Canada E.C.-Asia	5	12	163	2.41	1.39	3.42	1.97	38.09	38.67	1.52	41.65
Canada E.C.-C.A.W.C.	1	15	31	2.41	1.39	3.42	1.97	19.29	19.87	3.00	37.65
Canada E.C.-S.A.W.C.	6	53	206	2.41	1.39	3.42	1.97	25.19	25.77	2.30	31.75
Canada W.C.-C.A.E.C.	6	45	115	2.41	1.42	3.42	2.01	28.50	29.09	2.08	62.09
Canada W.C.-Europe	1	12	20	2.41	1.39	3.42	1.97	34.09	34.67	1.70	47.55
Canada W.C.-S.A.E.C.	6	58	130	2.41	1.41	3.42	2.00	33.28	33.87	1.77	62.32
C.A.E.C.-Asia	22	415	750	2.41	1.39	3.42	1.97	34.09	34.67	1.70	44.60
C.A.E.C.-C.A.W.C.	25	89	295	2.41	1.45	3.42	2.06	9.12	9.73	6.65	56.51
C.A.E.C.-Oceania	0	7	16	2.41	1.39	3.42	1.97	37.09	37.67	1.56	44.60
C.A.E.C.-S.A.W.C.	24	218	533	2.41	1.41	3.42	1.99	20.63	21.21	2.84	31.22
C.A.E.C.-U.S.W.C.	9	28	68	2.41	1.51	3.42	2.14	30.51	31.14	2.07	102.00
Europe-C.A.W.C.	44	300	1,157	2.41	1.40	3.42	1.98	25.47	26.05	2.29	53.48
Europe-Canada W.C.	2	9	20	2.41	1.50	3.42	2.13	71.00	71.63	0.88	119.28
Europe-S.A.W.C.	39	385	1,265	2.41	1.39	3.42	1.97	30.83	31.41	1.88	32.64

(Continued)

Table C-4. Laden Transits, Tons Carried, Toll Revenue and Toll Rates, Current Toll Structure With 50 Percent Increase in Rates, Status Quo Scenario, 2020, by Ship Type, Diversion Status, and Trade Route (1990 US$, except when noted)(continued)

Ship Type, Diversion Status, and Trade Route	Transits	Cargo Tonnage Carried (thousands)	Revenue (thousands) a/	Current Toll Schedule: Toll Per Panama Canal Net Ton	Current Toll Schedule: Toll Per Cargo Ton Carried	New Toll Schedule: Toll Per Panama Canal Net Ton	New Toll Schedule: Toll Per Cargo Ton Carried	Total Transportation Costs per Ton Carried: Via Panama Canal: With Current Toll Structure	Via Panama Canal: With New Toll Structure	Via Panama Canal: Percent Increase	Via Least Costly Alternative Route
General Cargo Ships (continued)											
Non-Diverted Transits (continued)											
Europe-U.S.W.C.	2	11	33	2.41	1.44	3.42	2.05	55.78	56.39	1.08	93.53
Middle East-S.A.W.C.	4	2	35	2.41	1.50	3.42	2.13	64.45	65.08	0.97	89.22
Middle East-U.S.W.C.	2	4	54	2.41	1.39	3.42	1.97	37.09	37.67	1.56	42.65
Oceania-C.A.E.C.	0	3	16	2.41	1.39	3.42	1.97	36.09	36.67	1.60	44.60
Oceania-U.S.E.C.	1	7	22	2.41	1.43	3.42	2.03	51.18	51.78	1.17	61.38
S.A.E.C.-C.A.W.C.	7	148	250	2.41	1.39	3.42	1.97	23.19	23.77	2.50	24.80
S.A.E.C.-Canada W.C.	0	1	4	2.41	1.39	3.42	1.97	32.14	32.72	1.80	34.70
S.A.E.C.-U.S.W.C.	8	36	227	2.41	1.40	3.42	1.98	34.56	35.14	1.68	36.22
S.A.W.C.-Africa	4	81	143	2.41	1.39	3.42	1.97	31.14	31.72	1.86	47.60
S.A.W.C.-Canada E.C.	0	6	12	2.41	1.39	3.42	1.97	25.19	25.77	2.30	31.75
S.A.W.C.-C.A.E.C.	41	177	530	2.41	1.45	3.42	2.05	21.94	22.54	2.75	42.95
S.A.W.C.-Europe	98	1,601	3,400	2.41	1.39	3.42	1.97	30.14	30.72	1.92	31.75
S.A.W.C.-Middle East	2	23	54	2.41	1.39	3.42	1.97	32.14	32.72	1.80	37.70
S.A.W.C.-U.S.E.C.	27	205	643	2.41	1.40	3.42	1.99	23.26	23.85	2.52	36.08
U.S.E.C.-Asia	48	782	1,687	2.41	1.39	3.42	1.97	34.72	35.30	1.67	47.99
U.S.E.C.-C.A.W.C.	48	352	750	2.41	1.43	3.42	2.03	13.42	14.02	4.44	53.82
U.S.E.C.-Oceania	3	46	106	2.41	1.39	3.42	1.97	37.09	37.67	1.56	41.65
U.S.E.C.-S.A.W.C.	86	605	1,970	2.41	1.41	3.42	1.99	23.39	23.97	2.51	36.70
U.S.E.C.-U.S.W.C.	1	0	6	2.41	1.50	3.42	2.13	32.50	33.13	1.93	107.05
U.S.W.C.-Africa	2	25	78	2.41	1.39	3.42	1.97	34.09	34.67	1.70	42.60
U.S.W.C.-C.A.E.C.	1	0	12	2.41	1.50	3.42	2.13	29.71	30.34	2.11	96.69
U.S.W.C.-Europe	3	31	57	2.41	1.42	3.42	2.02	40.73	41.33	1.46	61.78
U.S.W.C.-S.A.E.C.	6	15	79	2.41	1.45	3.42	2.05	47.38	47.98	1.28	52.07
Subtotal	755	7,476	19,695	2.41	1.40	3.42	1.98	28.70	29.29	2.03	41.85

(Continued)

Table C-4. Laden Transits, Tons Carried, Toll Revenue and Toll Rates, Current Toll Structure With 50 Percent Increase in Rates, Status Quo Scenario, 2020, by Ship Type, Diversion Status, and Trade Route (1990 US$, except when noted)(continued)

Ship Type, Diversion Status, and Trade Route	Transits	Cargo Tonnage Carried (thousands)	Revenue (thousands) a/	Current Toll Schedule: Toll Per Panama Canal Net Ton	Current Toll Schedule: Toll Per Cargo Ton Carried	New Toll Schedule: Toll Per Panama Canal Net Ton	New Toll Schedule: Toll Per Cargo Ton Carried	Total Transportation Costs per Ton Carried: Via Panama Canal: With Current Toll Structure	Via Panama Canal: With New Toll Structure	Via Panama Canal: Percent Increase	Via Least Costly Alternative Route
General Cargo Ships (continued)											
Diverted Transits (continued)											
Asia-S.A.E.C.	2	13	83	2.41	1.39	3.42	1.97	41.09	41.67	1.41	41.65
Canada E.C.-Oceania	0	4	4	2.41	1.39	3.42	1.97	43.04	43.62	1.35	42.65
Canada W.C.-Middle East	1	6	1	2.41	1.39	3.42	1.97	39.04	39.62	1.48	37.70
Subtotal	3	22	88	2.41	1.39	3.41	1.97	40.86	41.44	1.42	40.76
Subtotal	758	7,499	19,783	2.41	1.40	3.41	1.98	28.74	29.32	2.03	41.84
Liquid Gas Carriers											
Non-Diverted Transits											
C.A.W.C.-C.A.E.C.	4	18	68	2.41	7.30	3.42	10.35	49.30	52.35	6.18	170.00
C.A.E.C.-Asia	15	82	441	2.41	4.67	3.42	6.62	107.52	109.47	1.81	152.78
C.A.E.C.-C.A.W.C.	96	1,270	5,504	2.41	3.79	3.42	5.37	23.91	25.49	6.61	71.88
C.A.E.C.-S.A.W.C.	8	119	470	2.41	3.83	3.42	5.42	40.83	42.42	3.91	61.00
C.A.E.C.-U.S.W.C.	1	12	45	2.41	3.83	3.42	5.42	45.83	47.42	3.48	95.00
Europe-C.A.W.C.	2	5	25	2.41	7.30	3.42	10.35	110.30	113.35	2.76	197.00
Europe-S.A.W.C.	0	1	2	2.41	3.82	3.42	5.42	67.82	69.42	2.35	72.00
Oceania-U.S.E.C.	6	91	429	2.41	3.62	3.42	5.13	66.11	67.62	2.28	75.48
S.A.E.C.-Asia	2	27	104	2.41	3.83	3.42	5.42	78.83	80.42	2.02	94.00
S.A.E.C.-C.A.W.C.	11	31	182	2.41	7.30	3.42	10.35	99.30	102.35	3.07	112.00
U.S.E.C.-Asia	23	273	1,243	2.41	3.86	3.42	5.47	82.65	84.26	1.95	121.83
U.S.E.C.-C.A.W.C.	1	2	12	2.41	7.30	3.42	10.35	57.30	60.35	5.31	191.00
U.S.E.C.-Oceania	1	11	50	2.41	3.83	3.42	5.42	86.83	88.42	1.84	100.00
U.S.E.C.-S.A.W.C.	2	6	32	2.41	7.30	3.42	10.35	94.30	97.35	3.23	153.00
Subtotal	172	1,947	8,608	2.41	3.90	3.41	5.53	41.82	43.47	3.93	84.66

(Continued)

Table C-4. Laden Transits, Tons Carried, Toll Revenue and Toll Rates, Current Toll Structure With 50 Percent Increase in Rates, Status Quo Scenario, 2020, by Ship Type, Diversion Status, and Trade Route (1990 US$, except when noted)(continued)

Ship Type, Diversion Status, and Trade Route	Transits	Cargo Tonnage Carried (thousands)	Revenue (thousands) a/	Current Toll Schedule: Toll Per Panama Canal Net Ton	Current Toll Schedule: Toll Per Cargo Ton Carried	New Toll Schedule: Toll Per Panama Canal Net Ton	New Toll Schedule: Toll Per Cargo Ton Carried	Total Transportation Costs per Ton Carried: Via Panama Canal: With Current Toll Structure	Via Panama Canal: With New Toll Structure	Via Panama Canal: Percent Increase	Via Least Costly Alternative Route
Passenger Ships (continued)											
Non-Diverted Transits (continued)											
North-Bound	153	0	3,376	2.41	0.00	3.42	0.00	0.00	0.00	0.00	0.00
South-Bound	183	0	5,841	2.41	0.00	3.42	0.00	0.00	0.00	0.00	0.00
Subtotal	336	0	9,217	2.41	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Refrigerated Ships											
Non-Diverted Transits											
Africa-C.A.W.C.	0	0	4	2.41	4.27	3.42	6.06	113.87	115.66	1.57	208.00
Africa-S.A.W.C.	9	9	250	2.41	4.15	3.42	5.89	133.93	135.67	1.29	196.56
Asia-C.A.E.C.	20	71	609	2.41	3.97	3.42	5.62	128.09	129.74	1.29	173.29
Asia-S.A.E.C.	5	3	129	2.41	4.28	3.42	6.06	168.08	169.86	1.06	171.60
Asia-U.S.E.C.	0	0	11	2.41	4.28	3.42	6.06	140.48	142.26	1.27	198.20
C.A.W.C.-Africa	1	3	25	2.41	4.28	3.42	6.06	113.88	115.66	1.57	208.00
C.A.W.C.-Canada E.C.	0	2	9	2.41	4.28	3.42	6.06	76.48	78.26	2.33	152.00
C.A.W.C.-C.A.E.C.	20	132	655	2.41	3.88	3.42	5.49	50.94	52.55	3.17	124.12
C.A.W.C.-Europe	219	987	6,785	2.41	3.94	3.42	5.58	89.55	91.19	1.83	143.20
C.A.W.C.-S.A.E.C.	1	4	23	2.41	4.28	3.42	6.06	89.28	91.06	2.00	96.80
C.A.W.C.-U.S.E.C.	1	2	23	2.41	4.28	3.42	6.06	61.68	63.46	2.89	149.80
Canada E.C.-Asia	12	63	302	2.41	4.28	3.42	6.06	155.08	156.86	1.15	169.60
Canada E.C.-C.A.W.C.	5	10	141	2.41	3.95	3.42	5.60	70.22	71.87	2.35	142.12
Canada W.C.-Europe	3	28	93	2.41	4.12	3.42	5.83	131.88	133.59	1.30	187.18
C.A.E.C.-Asia	10	32	276	2.41	4.12	3.42	5.84	135.20	136.92	1.27	182.25
C.A.E.C.-C.A.W.C.	23	5	751	2.41	3.87	3.42	5.49	50.87	52.49	3.18	124.00
C.A.E.C.-S.A.W.C.	54	42	1,766	2.41	3.87	3.42	5.49	71.87	73.49	2.25	101.00

(Continued)

Table C-4. Laden Transits, Tons Carried, Toll Revenue and Toll Rates, Current Toll Structure With 50 Percent Increase in Rates, Status Quo Scenario, 2020, by Ship Type, Diversion Status, and Trade Route (1990 US$, except when noted)(continued)

Ship Type, Diversion Status, and Trade Route	Transits	Cargo Tonnage Carried (thousands)	Revenue (thousands) a/	Current Toll Schedule: Toll Per Panama Canal Net Ton	Current Toll Schedule: Toll Per Cargo Ton Carried	New Toll Schedule: Toll Per Panama Canal Net Ton	New Toll Schedule: Toll Per Cargo Ton Carried	Total Transportation Costs per Ton Carried, Via Panama Canal: With Current Toll Structure	Via Panama Canal: With New Toll Structure	Via Panama Canal: Percent Increase	Via Least Costly Alternative Route
Refrigerated Ships (continued)											
Non-Diverted Transits (continued)											
Europe-C.A.W.C.	160	13	5,194	2.41	3.89	3.42	5.51	89.41	91.03	1.81	177.49
Europe-Canada W.C.	1	1	21	2.41	4.28	3.42	6.06	136.48	138.26	1.31	189.40
Europe-S.A.W.C.	169	145	4,923	2.41	4.02	3.42	5.70	116.06	117.74	1.45	121.88
Europe-U.S.W.C.	14	10	341	2.41	4.28	3.42	6.06	126.88	128.66	1.41	178.40
Middle East-S.A.W.C.	2	3	42	2.41	4.28	3.42	6.06	129.48	131.26	1.38	153.80
Oceania-C.A.E.C.	3	18	70	2.41	4.28	3.42	6.06	147.28	149.06	1.21	182.40
Oceania-U.S.E.C.	33	116	825	2.41	4.24	3.42	6.01	148.70	150.47	1.19	169.13
S.A.E.C.-Asia	11	50	278	2.41	4.28	3.42	6.06	137.48	139.26	1.30	159.80
S.A.W.C.-Africa	14	50	377	2.41	4.15	3.42	5.88	123.33	125.06	1.40	191.96
S.A.W.C.-C.A.E.C.	21	111	634	2.41	3.99	3.42	5.66	75.06	76.73	2.22	104.68
S.A.W.C.-Europe	928	4,670	26,535	2.41	4.05	3.42	5.74	115.41	117.10	1.46	121.08
S.A.W.C.-Middle East	5	17	131	2.41	4.28	3.42	6.06	129.48	131.26	1.38	153.80
S.A.W.C.-U.S.E.C.	607	2,226	17,750	2.41	4.02	3.42	5.69	80.58	82.25	2.08	117.32
U.S.E.C.-Asia	32	114	927	2.41	4.01	3.42	5.68	134.04	135.71	1.25	189.83
U.S.E.C.-C.A.W.C.	27	66	831	2.41	3.93	3.42	5.57	56.28	57.92	2.91	139.70
U.S.E.C.-S.A.W.C.	282	434	8,393	2.41	3.99	3.42	5.66	79.55	81.22	2.09	116.03
U.S.W.C.-Europe	126	672	3,330	2.41	4.17	3.42	5.91	126.00	127.74	1.38	177.24
U.S.W.C.-S.A.E.C.	1	3	21	2.41	4.24	3.42	6.01	121.95	123.72	1.45	124.71
Subtotal	2,819	10,116	82,477	2.41	4.02	3.41	5.69	103.72	105.40	1.62	129.20
Refrigerated Ships											
Diverted Transits											
Africa-Asia	29	151	398	2.41	4.28	3.42	6.06	162.08	163.86	1.10	160.80
Subtotal	29	151	398	2.41	4.28	3.42	6.06	162.08	163.86	1.10	160.80
Subtotal	2,847	10,266	82,875	2.41	4.02	3.41	5.70	104.57	106.26	1.61	129.67

(Continued)

Table C-4. Laden Transits, Tons Carried, Toll Revenue and Toll Rates, Current Toll Structure With 50 Percent Increase in Rates, Status Quo Scenario, 2020, by Ship Type, Diversion Status, and Trade Route (1990 US$, except when noted)(continued)

Ship Type, Diversion Status, and Trade Route	Transits	Cargo Tonnage Carried (thousands)	Revenue (thousands) a/	Current Toll Schedule: Toll Per Panama Canal Net Ton	Current Toll Schedule: Toll Per Cargo Ton Carried	New Toll Schedule: Toll Per Panama Canal Net Ton	New Toll Schedule: Toll Per Cargo Ton Carried	Total Transportation Costs per Ton Carried: Via Panama Canal: With Current Toll Structure	Via Panama Canal: With New Toll Structure	Via Panama Canal: Percent Increase	Via Least Costly Alternative Route
Roll-On Roll-Off (continued)											
Non-Diverted Transits (continued)											
Asia-Canada E.C.	2	8	80	2.41	9.35	3.42	13.25	278.31	282.21	1.40	298.63
Asia-C.A.E.C.	24	473	2,477	2.41	7.92	3.42	11.23	225.40	228.71	1.47	256.05
Asia-U.S.E.C.	40	766	4,004	2.41	7.95	3.42	11.27	237.11	240.43	1.40	288.42
C.A.W.C.-Europe	12	64	710	2.41	8.66	3.42	12.27	181.66	185.27	1.99	257.00
C.A.W.C.-S.A.E.C.	0	0	2	2.41	8.67	3.42	12.29	193.67	197.29	1.87	203.00
C.A.W.C.-U.S.E.C.	1	1	72	2.41	8.66	3.42	12.27	155.66	159.27	2.32	251.00
Canada E.C.-Asia	8	41	367	2.41	9.30	3.42	13.18	327.47	331.35	1.18	336.67
Canada W.C.-C.A.E.C.	0	0	7	2.41	10.19	3.42	14.45	224.84	229.10	1.89	359.54
C.A.E.C.-C.A.W.C.	0	1	18	2.41	9.72	3.42	13.77	154.90	158.95	2.62	273.04
C.A.E.C.-Oceania	2	7	147	2.41	8.66	3.42	12.27	252.66	256.27	1.43	297.00
C.A.E.C.-S.A.W.C.	46	81	1,615	2.41	10.19	3.42	14.45	217.90	222.16	1.95	266.26
Europe-C.A.W.C.	18	112	1,054	2.41	8.66	3.42	12.27	181.66	185.27	1.99	311.00
Europe-S.A.W.C.	0	0	2	2.41	8.67	3.42	12.29	240.67	244.29	1.50	275.00
Europe-U.S.W.C.	0	2	24	2.41	8.66	3.42	12.27	241.66	245.27	1.49	311.00
Oceania-C.A.E.C.	0	0	1	2.41	8.01	3.42	11.35	223.21	226.55	1.50	261.95
S.A.W.C.-C.A.E.C.	12	23	407	2.41	10.19	3.42	14.45	217.90	222.16	1.95	266.26
S.A.W.C.-Europe	1	3	59	2.41	8.66	3.42	12.27	240.66	244.27	1.50	281.00
S.A.W.C.-U.S.E.C.	6	13	214	2.41	10.19	3.42	14.45	210.96	215.22	2.02	275.20
U.S.E.C.-Asia	8	56	509	2.41	8.64	3.42	12.24	275.58	279.18	1.31	337.50
U.S.E.C.-C.A.W.C.	2	3	113	2.41	8.66	3.42	12.27	132.66	136.27	2.72	251.00
U.S.E.C.-S.A.W.C.	26	45	899	2.41	10.19	3.42	14.45	210.96	215.22	2.02	275.20
U.S.W.C.-Canada E.C.	1	2	30	2.41	10.20	3.42	14.45	245.70	249.95	1.73	375.45
U.S.W.C.-C.A.E.C.	1	23	116	2.41	7.75	3.42	10.98	153.28	156.51	2.11	223.78

(Continued)

Table C-4. Laden Transits, Tons Carried, Toll Revenue and Toll Rates, Current Toll Structure With 50 Percent Increase in Rates, Status Quo Scenario, 2020, by Ship Type, Diversion Status, and Trade Route (1990 US$, except when noted)(continued)

Ship Type, Diversion Status, and Trade Route	Transits	Cargo Tonnage Carried (thousands)	Revenue (thousands) a/	Current Toll Schedule: Toll Per Panama Canal Net Ton	Current Toll Schedule: Toll Per Cargo Ton Carried	New Toll Schedule: Toll Per Panama Canal Net Ton	New Toll Schedule: Toll Per Cargo Ton Carried	Total Transportation Costs per Ton Carried: Via Panama Canal: With Current Toll Structure	Via Panama Canal: With New Toll Structure	Via Panama Canal: Percent Increase	Via Least Costly Alternative Route
Roll-On Roll-Off (continued)											
Non-Diverted Transits (continued)											
U.S.W.C.-Europe	0	0	2	2.41	7.80	3.42	11.05	203.42	206.67	1.60	256.35
U.S.W.C.-U.S.E.C.	0	5	24	2.41	7.86	3.42	11.14	151.24	154.52	2.17	244.92
Subtotal	211	1,731	12,953	2.41	8.60	3.41	12.19	228.26	231.72	1.52	279.97
Roll-On Roll-Off											
Diverted Transits											
Canada E.C.-Oceania	1	31	108	2.41	7.77	3.42	11.00	240.88	244.11	1.34	239.11
Subtotal	1	31	108	2.41	7.77	3.42	11.00	240.88	244.11	1.34	239.11
Subtotal	213	1,762	13,060	2.41	8.59	3.41	12.17	228.49	231.94	1.51	279.24
Tankers											
Non-Diverted Transits											
Africa-U.S.W.C.	0	0	0	2.41	1.27	3.42	1.80	15.27	15.80	3.48	20.00
Asia-U.S.E.C.	1	30	52	2.41	1.27	3.42	1.80	22.15	22.68	2.39	31.82
C.A.W.C.-Africa	0	0	1	2.41	1.27	3.42	1.80	37.27	37.80	1.42	80.00
C.A.W.C.-Canada E.C.	0	4	6	2.41	1.27	3.42	1.80	10.23	10.76	5.17	23.86
C.A.W.C.-C.A.E.C.	14	85	402	2.41	1.27	3.42	1.80	8.68	9.21	6.10	28.70
C.A.W.C.-Europe	3	70	134	2.41	1.27	3.42	1.80	14.19	14.72	3.73	23.86
C.A.W.C.-U.S.E.C.	7	53	186	2.41	1.27	3.42	1.80	9.70	10.23	5.45	30.45
Canada E.C.-Asia	10	393	657	2.41	1.27	3.42	1.80	20.80	21.33	2.54	22.37
Canada W.C.-U.S.E.C.	6	253	493	2.41	1.29	3.42	1.82	11.44	11.97	4.69	21.15
C.A.E.C.-Asia	7	180	373	2.41	1.29	3.42	1.83	18.67	19.21	2.89	25.59
C.A.E.C.-C.A.W.C.	96	1,762	4,516	2.41	1.27	3.42	1.80	6.05	6.58	8.74	17.83

(Continued)

Table C-4. Laden Transits, Tons Carried, Toll Revenue and Toll Rates, Current Toll Structure With 50 Percent Increase in Rates, Status Quo Scenario, 2020, by Ship Type, Diversion Status, and Trade Route (1990 US$, except when noted)(continued)

Ship Type, Diversion Status, and Trade Route	Transits	Cargo Tonnage Carried (thousands)	Revenue (thousands) a/	Current Toll Schedule: Toll Per Panama Canal Net Ton	Current Toll Schedule: Toll Per Cargo Ton Carried	New Toll Schedule: Toll Per Panama Canal Net Ton	New Toll Schedule: Toll Per Cargo Ton Carried	Total Transportation Costs per Ton Carried: Via Panama Canal: With Current Toll Structure	Via Panama Canal: With New Toll Structure	Via Panama Canal: Percent Increase	Via Least Costly Alternative Route
Tankers (continued)											
Non-Diverted Transits (continued)											
C.A.E.C.-S.A.W.C.	41	879	1,835	2.41	1.27	3.42	1.80	10.87	11.40	4.87	15.66
C.A.E.C.-U.S.W.C.	17	712	1,280	2.41	1.28	3.42	1.81	9.68	10.21	5.50	18.88
Europe-C.A.W.C.	12	54	156	2.41	1.27	3.42	1.80	20.41	20.94	2.59	36.30
Europe-S.A.W.C.	2	52	93	2.41	1.27	3.42	1.80	19.11	19.64	2.77	19.97
Europe-U.S.W.C.	6	196	347	2.41	1.27	3.42	1.80	18.01	18.54	2.94	25.98
Middle East-U.S.W.C.	0	0	0	2.41	1.25	3.42	1.77	23.25	23.77	2.24	28.00
Oceania-U.S.E.C.	9	153	299	2.41	1.27	3.42	1.80	23.22	23.75	2.28	26.68
S.A.W.C.-Canada E.C.	2	36	70	2.41	1.27	3.42	1.80	16.94	17.47	3.12	21.75
S.A.W.C.-C.A.E.C.	45	1,636	3,032	2.41	1.27	3.42	1.80	8.90	9.43	5.95	12.32
S.A.W.C.-Europe	12	106	194	2.41	1.27	3.42	1.80	22.77	23.30	2.32	24.13
S.A.W.C.-U.S.E.C.	47	1,758	3,176	2.41	1.27	3.42	1.80	10.31	10.84	5.13	15.73
U.S.E.C.-Asia	82	2,655	4,898	2.41	1.29	3.42	1.82	18.81	19.34	2.85	26.64
U.S.E.C.-C.A.W.C.	33	614	1,415	2.41	1.27	3.42	1.80	8.14	8.67	6.50	23.15
U.S.E.C.-Canada W.C.	1	4	52	2.41	1.27	3.42	1.80	15.19	15.72	3.48	28.84
U.S.E.C.-Oceania	6	192	351	2.41	1.27	3.42	1.80	21.59	22.12	2.45	24.75
U.S.E.C.-S.A.W.C.	8	147	287	2.41	1.27	3.42	1.80	12.12	12.65	4.37	18.87
U.S.E.C.-U.S.W.C.	30	877	1,704	2.41	1.27	3.42	1.80	12.30	12.83	4.32	25.53
U.S.W.C.-Africa	8	224	525	2.41	1.33	3.42	1.89	13.43	13.99	4.14	17.15
U.S.W.C.-Canada E.C.	1	21	37	2.41	1.27	3.42	1.80	16.19	16.72	3.27	27.84
U.S.W.C.-C.A.E.C.	8	301	630	2.41	1.30	3.42	1.84	9.68	10.22	5.59	18.60
U.S.W.C.-U.S.E.C.	8	226	491	2.41	1.29	3.42	1.82	11.53	12.06	4.66	23.92
Subtotal	521	13,672	27,690	2.41	1.28	3.42	1.81	12.43	12.96	4.28	20.32
Tankers											
Diverted Transits											
S.A.E.C.-C.A.W.C.	117	4,342	7,395	2.41	1.27	3.42	1.80	9.42	9.95	5.62	9.39

(Continued)

Table C-4. Laden Transits, Tons Carried, Toll Revenue and Toll Rates, Current Toll Structure With 50 Percent Increase in Rates, Status Quo Scenario, 2020, by Ship Type, Diversion Status, and Trade Route (1990 US$, except when noted)(continued)

Ship Type, Diversion Status, and Trade Route	Transits	Cargo Tonnage Carried (thousands)	Revenue (thousands) a/	Current Toll Schedule: Toll Per Panama Canal Net Ton	Current Toll Schedule: Toll Per Cargo Ton Carried	New Toll Schedule: Toll Per Panama Canal Net Ton	New Toll Schedule: Toll Per Cargo Ton Carried	Total Transportation Costs per Ton Carried: Via Panama Canal: With Current Toll Structure	Via Panama Canal: With New Toll Structure	Via Panama Canal: Percent Increase	Via Least Costly Alternative Route
Tankers (continued)											
Diverted Transits (continued)											
S.A.E.C.-U.S.W.C.	53	1,967	1,649	2.41	1.27	3.42	1.80	15.19	15.72	3.49	14.66
U.S.W.C.-S.A.E.C.	2	87	121	2.41	1.27	3.42	1.80	15.34	15.87	3.45	15.48
Subtotal	172	6,396	9,165	2.41	1.27	3.42	1.80	11.27	11.80	4.70	11.09
Subtotal	693	20,068	36,855	2.41	1.27	3.42	1.80	12.06	12.59	4.40	17.38
Vehicle Carriers											
Non-Diverted Transits											
Asia-C.A.E.C.	13	33	1,277	2.41	29.09	3.42	41.22	392.50	404.63	3.09	459.78
Asia-U.S.E.C.	419	1,959	46,692	2.41	29.20	3.42	41.37	413.17	425.34	2.95	479.68
C.A.W.C.-C.A.E.C.	1	1	77	2.41	28.71	3.42	40.69	257.39	269.37	4.65	407.18
C.A.E.C.-C.A.W.C.	4	1	419	2.41	29.22	3.42	41.41	263.22	275.41	4.63	385.00
C.A.E.C.-Oceania	1	0	108	2.41	29.22	3.42	41.41	409.22	421.41	2.98	448.00
Europe-Canada W.C.	5	11	744	2.41	30.90	3.42	43.78	368.26	381.14	3.50	430.05
Europe-U.S.W.C.	149	285	19,489	2.41	29.95	3.42	42.43	381.68	394.16	3.27	429.50
S.A.W.C.-C.A.E.C.	0	0	5	2.41	28.69	3.42	40.65	307.69	319.65	3.89	354.00
U.S.E.C.-Asia	25	114	3,095	2.41	29.67	3.42	42.05	392.18	404.56	3.16	474.71
U.S.E.C.-Oceania	7	18	853	2.41	29.22	3.42	41.41	408.22	420.41	2.98	423.00
Subtotal	623	2,423	72,758	2.41	29.43	3.41	41.70	407.79	420.01	3.00	472.54
Vehicle Carriers											
Diverted Transits											
Asia-S.A.E.C.	0	0	4	2.41	29.13	3.42	41.28	453.29	465.44	2.68	435.60
Canada E.C.-Asia	0	1	10	2.41	29.22	3.42	41.40	437.22	449.40	2.79	425.00
Subtotal	0	1	14	2.41	29.18	3.41	41.35	440.32	452.50	2.77	427.05
Subtotal	623	2,424	72,771	2.41	29.43	3.41	41.70	407.80	420.03	3.00	472.52

(Continued)

Table C-4. Laden Transits, Tons Carried, Toll Revenue and Toll Rates, Current Toll Structure With 50 Percent Increase in Rates, Status Quo Scenario, 2020, by Ship Type, Diversion Status, and Trade Route (1990 US$, except when noted)(continued)

Ship Type, Diversion Status, and Trade Route	Transits	Cargo Tonnage Carried (thousands)	Revenue (thousands) a/	Current Toll Schedule: Toll Per Panama Canal Net Ton	Current Toll Schedule: Toll Per Cargo Ton Carried	New Toll Schedule: Toll Per Panama Canal Net Ton	New Toll Schedule: Toll Per Cargo Ton Carried	Total Transportation Costs per Ton Carried: Via Panama Canal: With Current Toll Structure	Total Transportation Costs per Ton Carried: Via Panama Canal: With New Toll Structure	Total Transportation Costs per Ton Carried: Via Panama Canal: Percent Increase	Total Transportation Costs per Ton Carried: Via Least Costly Alternative Route
Total Non-Diverting	11,780	207,112	604,714	2.41	2.08	3.42	2.94	53.00	53.91	1.71	65.12
Total Diverting	964	26,238	47,884	2.41	1.80	3.41	2.55	59.03	59.87	1.42	58.89

Notes: These calculations do not include all transits and tons carried forecast by the WEFA Group. For some ship-type and trade-route combinations (accounting for a total of 18 transits and 179803 tons), vessel costs were not available for every DWT size interval. As a result, these transits and tons were excluded. In addition, for 2098 transits and 35979616 tons, the cost by way of the Panama Canal without a toll was higher than the least costly alternative route. As a result, these transits and tons were excluded. Percentages may not calculate exactly as shown due to rounding. A fee of $0.40 per Panama Canal net ton has also been included to account for charges such as handling and agency fees incurred when transitting the Canal. The extra fee is only used to determine divesion status by adding it to the cost per ton carried and is not included in the revenue calculations.

a/ Revenue lost from diversions is measured as the revenue generated by the maximum, nondiverting toll rate increase.

Source: Nathan Associates Inc., based on forecasts of traffic and transportation costs provided by the WEFA Group.

CURRENT TOLL STRUCTURE WITH 50 PERCENT INCREASE IN RATES, 150,000-DWT SCENARIO, 2020

Table C-5. Laden Transits, Tons Carried, and Toll Revenue, Current Toll Structure With 50 Percent Increase in Rates, 150,000 DWT Scenario, 2020, by Ship Type

	Transits				Tons Carried(thousands)				Revenue(1990 US$thousands)			
Ship Type	Canal	Diverted	Total	Diverted as a Percent of Total	Canal	Diverted	Total	Diverted as a Percent of Total	Canal	Lost a/	Total	Lost as a Percent of Total
Container-Breakbulk	1,314	10	1,325	0.79	20,365	155	20,519	0.75	55,315	194	55,509	0.35
Dry Bulk Carriers	3,606	275	3,881	7.08	176,352	9,901	186,253	5.32	307,668	14,843	322,511	4.60
Chemical Tankers	992	2	994	0.22	22,841	84	22,925	0.37	40,095	90	40,184	0.22
Full Container Ships	1,239	12	1,251	0.97	24,474	145	24,619	0.59	114,477	474	114,951	0.41
General Cargo Ships	755	3	758	0.42	7,476	22	7,499	0.30	19,695	88	19,783	0.45
Liquid Gas Carriers	172	0	172	0.00	1,947	0	1,947	0.00	8,608	0	8,608	0.00
Passenger Ships	336	0	336	0.00	0	0	0	0.00	9,217	0	9,217	0.00
Refrigerated Ships	2,819	29	2,847	1.00	10,116	151	10,266	1.47	82,477	398	82,875	0.48
Roll-On Roll-Off	211	1	213	0.67	1,731	31	1,762	1.78	12,953	108	13,060	0.82
Tankers	700	51	751	6.77	32,162	2,054	34,216	6.00	59,522	2,460	61,982	3.97
Vehicle Carriers	623	0	623	0.05	2,423	1	2,424	0.04	72,758	14	72,771	0.02
Total	12,766	384	13,150	2.92	299,887	12,544	312,431	4.02	782,784	18,668	801,452	2.33

Notes: These calculations do not include all transits and tons carried forecast by the WEFA Group. For some ship-type and trade-route combinations (accounting for a total of 18 transits and 179803 tons), vessel costs were not available for every DWT size interval. As a result, these transits and tons were excluded. In addition, for 2111 transits and 51867350 tons, the cost by way of the Panama Canal without a toll was higher than the least costly alternative route. As a result, these transits and tons were excluded. A fee of $0.40 per Panama Canal net ton has also been included to account for charges such as handling and agency fees incurred when transitting the Canal. The extra fee is only used to determine diversion status by adding it to cost per ton carried and is not included in the revenue calculations.

a/ Revenue lost from diversions is measured as the revenue generated by the maximum, nondiverting toll rate increase.

Source: Nathan Associates Inc., based on forecasts of traffic and transportation costs provided by The WEFA Group.

Table C-6. Ballast Transits, Tons Carried, and Toll Revenue, Current Toll Structure With 50 Percent Increase in Rates, 150,000 DWT Scenario, 2020, by Ship Type

	Transits				Tons Carried(thousands)				Revenue(1990 US$thousands)			
Ship Type	Canal	Diverted	Total	Diverted as a Percent of Total	Canal	Diverted	Total	Diverted as a Percent of Total	Canal	Lost	Total	Lost as a Percent of Total
Container-Breakbulk	41	0	41	0.35	0	0	0	0.00	1,524	5	1,529	0.35
Dry Bulk Carriers	382	18	400	4.60	0	0	0	0.00	22,089	1,065	23,155	4.60
Chemical Tankers	82	0	82	0.22	0	0	0	0.00	2,632	6	2,638	0.22
Full Container Ships	9	0	9	0.41	0	0	0	0.00	337	1	339	0.41
General Cargo Ships	139	1	140	0.45	0	0	0	0.00	2,286	10	2,297	0.45
Liquid Gas Carriers	128	0	128	0.00	0	0	0	0.00	5,595	0	5,595	0.00
Passenger Ships	11	0	11	0.00	0	0	0	0.00	196	0	196	0.00
Refrigerated Ships	928	4	932	0.48	0	0	0	0.00	20,568	99	20,667	0.48
Roll-On Roll-Off	30	0	30	0.82	0	0	0	0.00	1,187	10	1,197	0.82
Tankers	409	17	426	3.97	0	0	0	0.00	30,520	1,262	31,781	3.97
Vehicle Carriers	383	0	383	0.02	0	0	0	0.00	33,913	7	33,920	0.02
Total	2,541	41	2,582	1.59	0	0	0	0.00	120,848	2,466	123,314	2.00

Note: Diversions of ballast transits are computed by diverting a proportion of ballast transits equal to lost revenue as a percent of total potential revenue for a particular laden ship type. See last column on previous table.

Source: Nathan Associates Inc., based on forecasts of traffic and transportation costs provided by The WEFA Group.

Table C-7. Laden Transits, Tons Carried, Toll Revenue and Toll Rates, Current Toll Structure With 50 Percent Increase in Rates, 150,000 DWT Scenario, 2020, by Ship Type, Diversion Status, and Trade Route (1990 US$, except when noted)

Ship Type, Diversion Status, and Trade Route	Transits	Cargo Tonnage Carried (thousands)	Revenue (thousands) a/	Current Toll Schedule: Toll Per Panama Canal Net Ton	Current Toll Schedule: Toll Per Cargo Ton Carried	New Toll Schedule: Toll Per Panama Canal Net Ton	New Toll Schedule: Toll Per Cargo Ton Carried	Total Transportation Costs per Ton Carried, Via Panama Canal: With Current Toll Structure	Total Transportation Costs per Ton Carried, Via Panama Canal: With New Toll Structure	Total Transportation Costs per Ton Carried, Via Panama Canal: Percent Increase	Total Transportation Costs per Ton Carried: Via Least Costly Alternative Route
Container-Breakbulk											
Non-Diverted Transits											
Africa-C.A.W.C.	3	77	119	2.41	1.85	3.42	2.63	68.56	69.34	1.13	113.26
Africa-Canada W.C.	0	2	6	2.41	1.87	3.42	2.65	88.16	88.94	0.88	100.93
Africa-U.S.W.C.	1	9	30	2.41	1.87	3.42	2.65	89.16	89.94	0.87	102.87
Asia-Canada E.C.	0	4	17	2.41	1.86	3.42	2.64	88.65	89.43	0.88	96.19
Asia-C.A.E.C.	91	837	3,583	2.41	1.87	3.42	2.64	93.07	93.84	0.84	107.91
Asia-S.A.E.C.	27	175	1,032	2.41	1.87	3.42	2.65	100.20	100.98	0.78	102.23
Asia-U.S.E.C.	82	1,031	3,440	2.41	1.86	3.42	2.64	94.52	95.30	0.82	116.80
C.A.W.C.-Africa	3	70	131	2.41	1.87	3.42	2.65	73.06	73.84	1.07	120.56
C.A.W.C.-C.A.E.C.	7	118	296	2.41	1.86	3.42	2.64	49.37	50.15	1.57	87.53
C.A.W.C.-Europe	15	110	587	2.41	1.87	3.42	2.65	63.64	64.42	1.22	91.28
C.A.W.C.-S.A.E.C.	12	6	463	2.41	1.87	3.42	2.65	69.19	69.97	1.13	74.19
C.A.W.C.-U.S.E.C.	3	19	121	2.41	1.87	3.42	2.65	55.40	56.18	1.41	91.85
Canada E.C.-Asia	14	367	728	2.41	1.85	3.42	2.62	90.68	91.45	0.85	93.83
Canada E.C.-C.A.W.C.	1	9	34	2.41	1.87	3.42	2.65	54.09	54.87	1.44	92.29
Canada E.C.-S.A.W.C.	1	10	22	2.41	1.85	3.42	2.63	62.78	63.56	1.23	75.85
Canada E.C.-U.S.W.C.	0	0	0	2.41	1.85	3.42	2.63	69.71	70.49	1.11	105.87
Canada W.C.-Africa	8	179	345	2.41	1.85	3.42	2.63	88.66	89.44	0.87	100.74
Canada W.C.-Europe	63	1,844	3,415	2.41	1.85	3.42	2.62	77.86	78.63	0.99	104.01
Canada W.C.-S.A.E.C.	11	210	406	2.41	1.87	3.42	2.65	71.19	71.97	1.10	108.72
Canada W.C.-U.S.E.C.	8	149	323	2.41	1.85	3.42	2.63	64.85	65.63	1.19	102.00
C.A.E.C.-Asia	9	196	356	2.41	1.87	3.42	2.65	92.37	93.15	0.84	107.04
C.A.E.C.-C.A.W.C.	7	27	271	2.41	1.87	3.42	2.65	50.30	51.08	1.55	90.29
C.A.E.C.-Canada W.C.	2	31	78	2.41	1.87	3.42	2.65	63.73	64.51	1.22	101.08

(Continued)

Table C-7. Laden Transits, Tons Carried, Toll Revenue and Toll Rates, Current Toll Structure With 50 Percent Increase in Rates, 150,000 DWT Scenario, 2020, by Ship Type, Diversion Status, and Trade Route (1990 US$, except when noted)(continued)

Ship Type, Diversion Status, and Trade Route	Transits	Cargo Tonnage Carried (thousands)	Revenue (thousands) a/	Current Toll Schedule: Toll Per Panama Canal Net Ton	Current Toll Schedule: Toll Per Cargo Ton Carried	New Toll Schedule: Toll Per Panama Canal Net Ton	New Toll Schedule: Toll Per Cargo Ton Carried	Total Transportation Costs per Ton Carried, Via Panama Canal: With Current Toll Structure	Total Transportation Costs per Ton Carried, Via Panama Canal: With New Toll Structure	Total Transportation Costs per Ton Carried, Via Panama Canal: Percent Increase	Total Transportation Costs per Ton Carried: Via Least Costly Alternative Route
Container-Breakbulk (continued)											
Non-Diverted Transits (continued)											
C.A.E.C.-Oceania	1	20	47	2.41	1.87	3.42	2.65	90.16	90.94	0.86	107.72
C.A.E.C.-S.A.W.C.	18	144	713	2.41	1.87	3.42	2.65	61.88	62.66	1.26	76.44
C.A.E.C.-U.S.W.C.	4	73	157	2.41	1.86	3.42	2.64	61.48	62.26	1.26	93.18
Europe-C.A.W.C.	22	137	854	2.41	1.87	3.42	2.65	64.73	65.51	1.20	112.66
Europe-Canada W.C.	4	123	249	2.41	1.85	3.42	2.62	80.14	80.91	0.96	103.29
Europe-S.A.W.C.	91	752	3,523	2.41	1.87	3.42	2.65	85.37	86.15	0.91	99.08
Europe-U.S.W.C.	24	732	1,382	2.41	1.85	3.42	2.62	79.27	80.04	0.97	103.43
Oceania-C.A.E.C.	4	42	155	2.41	1.87	3.42	2.65	90.85	91.63	0.86	108.64
S.A.E.C.-C.A.W.C.	9	141	353	2.41	1.87	3.42	2.65	68.77	69.55	1.13	73.69
S.A.E.C.-Canada W.C.	11	152	443	2.41	1.87	3.42	2.65	87.94	88.72	0.89	93.92
S.A.E.C.-U.S.W.C.	38	572	1,510	2.41	1.87	3.42	2.64	74.36	75.13	1.05	77.06
S.A.W.C.-Canada E.C.	1	2	36	2.41	1.87	3.42	2.65	66.27	67.05	1.18	81.06
S.A.W.C.-C.A.E.C.	13	108	502	2.41	1.87	3.42	2.65	62.27	63.05	1.25	77.06
S.A.W.C.-Europe	191	3,350	7,312	2.41	1.87	3.42	2.65	85.09	85.87	0.92	101.37
S.A.W.C.-U.S.E.C.	108	1,055	4,032	2.41	1.87	3.42	2.65	59.46	60.24	1.31	77.72
U.S.E.C.-Asia	172	4,347	8,517	2.41	1.85	3.42	2.63	91.66	92.44	0.84	113.24
U.S.E.C.-C.A.W.C.	10	201	400	2.41	1.86	3.42	2.64	46.17	46.95	1.68	88.94
U.S.E.C.-S.A.W.C.	160	1,595	6,202	2.41	1.87	3.42	2.65	59.27	60.05	1.31	77.44
U.S.E.C.-U.S.W.C.	0	0	1	2.41	1.86	3.42	2.63	56.86	57.63	1.36	94.00
U.S.W.C.-Africa	9	143	532	2.41	1.85	3.42	2.62	82.33	83.10	0.94	98.63
U.S.W.C.-Canada E.C.	2	40	67	2.41	1.85	3.42	2.63	66.85	67.63	1.16	100.00
U.S.W.C.-C.A.E.C.	9	63	335	2.41	1.87	3.42	2.65	63.58	64.36	1.23	96.80
U.S.W.C.-Europe	38	1,010	2,014	2.41	1.85	3.42	2.63	80.25	81.03	0.96	103.86

(Continued)

Table C-7. Laden Transits, Tons Carried, Toll Revenue and Toll Rates, Current Toll Structure With 50 Percent Increase in Rates, 150,000 DWT Scenario, 2020, by Ship Type, Diversion Status, and Trade Route (1990 US$, except when noted)(continued)

Ship Type, Diversion Status, and Trade Route	Transits	Cargo Tonnage Carried (thousands)	Revenue (thousands) a/	Current Toll Schedule: Toll Per Panama Canal Net Ton	Current Toll Schedule: Toll Per Cargo Ton Carried	New Toll Schedule: Toll Per Panama Canal Net Ton	New Toll Schedule: Toll Per Cargo Ton Carried	Total Transportation Costs per Ton Carried: Via Panama Canal: With Current Toll Structure	Via Panama Canal: With New Toll Structure	Via Panama Canal: Percent Increase	Via Least Costly Alternative Route
Container-Breakbulk (continued)											
Non-Diverted Transits (continued)											
U.S.W.C.-S.A.E.C.	4	79	166	2.41	1.87	3.42	2.65	76.06	76.84	1.02	79.06
U.S.W.C.-U.S.E.C.	0	3	12	2.41	1.85	3.42	2.63	58.25	59.03	1.33	96.88
Subtotal	1,314	20,365	55,315	2.41	1.86	3.42	2.64	80.88	81.65	0.96	100.73
Container-Breakbulk											
Diverted Transits											
Canada E.C.-Oceania	1	13	26	2.41	1.87	3.42	2.65	102.74	103.52	0.76	102.93
Oceania-Canada E.C.	2	46	119	2.41	1.85	3.42	2.62	93.85	94.62	0.82	94.00
Oceania-S.A.E.C.	7	95	48	2.41	1.86	3.42	2.64	84.47	85.25	0.92	82.99
Subtotal	10	155	194	2.41	1.86	3.42	2.64	88.83	89.60	0.87	87.97
Subtotal	1,325	20,519	55,509	2.41	1.86	3.42	2.64	80.94	81.71	0.96	100.64
Dry Bulk Carriers											
Non-Diverted Transits											
Africa-C.A.W.C.	15	483	761	2.41	1.35	3.42	1.91	14.85	15.41	3.78	26.10
Africa-Canada W.C.	34	1,354	2,042	2.41	1.31	3.42	1.86	17.28	17.83	3.16	19.77
Africa-S.A.W.C.	5	128	238	2.41	1.35	3.42	1.91	17.80	18.36	3.15	25.10
Africa-U.S.W.C.	7	161	414	2.41	1.30	3.42	1.85	16.19	16.74	3.36	19.23
Asia-Canada E.C.	8	302	564	2.41	1.28	3.42	1.81	17.00	17.53	3.14	18.32
Asia-C.A.E.C.	21	345	1,150	2.41	1.33	3.42	1.89	18.03	18.59	3.08	22.65
Asia-U.S.E.C.	242	6,345	15,356	2.41	1.30	3.42	1.84	16.31	16.85	3.33	22.26
C.A.W.C.-Africa	1	34	68	2.41	1.32	3.42	1.88	14.69	15.25	3.76	25.81
C.A.W.C.-C.A.E.C.	34	961	1,871	2.41	1.33	3.42	1.89	7.81	8.37	7.10	15.77

(Continued)

Table C-7. Laden Transits, Tons Carried, Toll Revenue and Toll Rates, Current Toll Structure With 50 Percent Increase in Rates, 150,000 DWT Scenario, 2020, by Ship Type, Diversion Status, and Trade Route (1990 US$, except when noted)(continued)

Ship Type, Diversion Status, and Trade Route	Transits	Cargo Tonnage Carried (thousands)	Revenue (thousands) a/	Current Toll Schedule: Toll Per Panama Canal Net Ton	Current Toll Schedule: Toll Per Cargo Ton Carried	New Toll Schedule: Toll Per Panama Canal Net Ton	New Toll Schedule: Toll Per Cargo Ton Carried	Total Transportation Costs per Ton Carried, Via Panama Canal: With Current Toll Structure	Total Transportation Costs per Ton Carried, Via Panama Canal: With New Toll Structure	Total Transportation Costs per Ton Carried, Via Panama Canal: Percent Increase	Total Transportation Costs per Ton Carried: Via Least Costly Alternative Route
Dry Bulk Carriers (continued)											
Non-Diverted Transits (continued)											
C.A.W.C.-Europe	16	462	968	2.41	1.31	3.42	1.86	12.08	12.63	4.54	18.24
C.A.W.C.-U.S.E.C.	38	1,292	2,246	2.41	1.32	3.42	1.87	7.83	8.38	7.02	17.55
Canada E.C.-Asia	87	3,754	6,735	2.41	1.26	3.42	1.79	18.86	19.39	2.80	20.40
Canada E.C.-Oceania	3	58	189	2.41	1.33	3.42	1.88	19.62	20.17	2.82	21.08
Canada E.C.-S.A.W.C.	6	163	324	2.41	1.33	3.42	1.88	12.63	13.18	4.38	14.98
Canada W.C.-Africa	96	3,500	6,012	2.41	1.31	3.42	1.85	16.93	17.47	3.22	19.42
Canada W.C.-C.A.E.C.	4	105	229	2.41	1.35	3.42	1.91	12.85	13.41	4.37	21.30
Canada W.C.-Europe	242	11,174	19,323	2.41	1.26	3.42	1.79	16.88	17.41	3.12	21.25
Canada W.C.-U.S.E.C.	64	1,569	3,355	2.41	1.35	3.42	1.91	13.00	13.56	4.32	23.15
C.A.E.C.-Asia	21	639	1,106	2.41	1.35	3.42	1.91	17.70	18.26	3.17	22.30
C.A.E.C.-C.A.W.C.	25	682	1,308	2.41	1.35	3.42	1.91	8.05	8.61	6.98	16.45
C.A.E.C.-Canada W.C.	2	55	101	2.41	1.35	3.42	1.92	13.05	13.62	4.32	21.60
C.A.E.C.-Oceania	1	11	27	2.41	1.35	3.42	1.92	19.95	20.52	2.83	22.60
C.A.E.C.-S.A.W.C.	12	313	652	2.41	1.35	3.42	1.91	11.00	11.56	5.10	13.50
C.A.E.C.-U.S.W.C.	9	236	465	2.41	1.35	3.42	1.91	11.85	12.41	4.74	20.30
Columbia-Asia	3	288	449	2.41	1.18	3.42	1.67	17.58	18.07	2.80	24.67
Europe-C.A.W.C.	30	797	1,599	2.41	1.34	3.42	1.90	12.79	13.35	4.38	21.20
Europe-Canada W.C.	11	286	640	2.41	1.31	3.42	1.86	16.30	16.85	3.35	21.24
Europe-U.S.W.C.	116	3,102	7,029	2.41	1.31	3.42	1.86	15.40	15.95	3.55	20.10
Middle East-S.A.W.C.	1	52	88	2.41	1.27	3.42	1.79	14.27	14.79	3.70	16.00
Oceania-Canada E.C.	22	661	1,154	2.41	1.35	3.42	1.91	19.70	20.26	2.85	21.25
Oceania-C.A.E.C.	6	166	328	2.41	1.35	3.42	1.91	18.80	19.36	2.99	22.25
Oceania-U.S.E.C.	119	6,406	10,844	2.41	1.24	3.42	1.76	15.19	15.71	3.41	16.07

(Continued)

Table C-7. Laden Transits, Tons Carried, Toll Revenue and Toll Rates, Current Toll Structure With 50 Percent Increase in Rates, 150,000 DWT Scenario, 2020, by Ship Type, Diversion Status, and Trade Route (1990 US$, except when noted)(continued)

Ship Type, Diversion Status, and Trade Route	Transits	Cargo Tonnage Carried (thousands)	Revenue (thousands) a/	Current Toll Schedule: Toll Per Panama Canal Net Ton	Current Toll Schedule: Toll Per Cargo Ton Carried	New Toll Schedule: Toll Per Panama Canal Net Ton	New Toll Schedule: Toll Per Cargo Ton Carried	Total Transportation Costs per Ton Carried: Via Panama Canal: With Current Toll Structure	Via Panama Canal: With New Toll Structure	Via Panama Canal: Percent Increase	Via Least Costly Alternative Route
Dry Bulk Carriers (continued)											
Non-Diverted Transits (continued)											
S.A.E.C.-Asia	68	2,384	4,143	2.41	1.31	3.42	1.86	16.60	17.15	3.29	18.40
S.A.W.C.-Africa	4	157	239	2.41	1.29	3.42	1.83	14.00	14.54	3.85	20.54
S.A.W.C.-Canada E.C.	0	10	17	2.41	1.35	3.42	1.92	13.15	13.72	4.29	15.50
S.A.W.C.-C.A.E.C.	7	144	390	2.41	1.35	3.42	1.91	11.00	11.56	5.10	13.50
S.A.W.C.-U.S.E.C.	54	1,732	2,888	2.41	1.34	3.42	1.90	10.81	11.37	5.16	15.18
U.S.E.C.-Asia	1,601	104,329	174,081	2.41	1.22	3.42	1.73	17.29	17.80	2.94	22.99
U.S.E.C.-C.A.W.C.	207	6,232	11,055	2.41	1.34	3.42	1.90	8.12	8.68	6.88	18.25
U.S.E.C.-Canada W.C.	1	30	49	2.41	1.32	3.42	1.87	12.36	12.91	4.44	21.71
U.S.E.C.-Oceania	21	646	1,177	2.41	1.33	3.42	1.88	18.34	18.89	3.02	20.47
U.S.E.C.-S.A.W.C.	50	1,456	2,655	2.41	1.34	3.42	1.90	10.90	11.46	5.13	15.31
U.S.E.C.-U.S.W.C.	1	0	36	2.41	1.35	3.42	1.91	12.00	12.56	4.68	21.30
U.S.W.C.-Africa	121	4,599	8,498	2.41	1.28	3.42	1.82	15.62	16.16	3.42	18.62
U.S.W.C.-Canada E.C.	7	217	382	2.41	1.33	3.42	1.88	13.35	13.90	4.15	21.26
U.S.W.C.-C.A.E.C.	2	48	93	2.41	1.35	3.42	1.91	11.85	12.41	4.74	20.30
U.S.W.C.-Europe	140	6,524	11,115	2.41	1.26	3.42	1.79	13.94	14.47	3.77	17.96
U.S.W.C.-U.S.E.C.	7	183	440	2.41	1.31	3.42	1.86	12.05	12.60	4.54	21.48
Venezuela-Asia	15	1,778	2,774	2.41	1.18	3.42	1.67	-0.49	0.00	***.**	0.00
Subtotal	3,606	176,352	307,668	2.41	1.26	3.38	1.77	16.08	16.60	3.24	21.31
Dry Bulk Carriers											
Diverted Transits											
Asia-S.A.E.C.	6	152	179	2.41	1.35	3.42	1.91	21.65	22.21	2.59	21.30
C.A.W.C.-S.A.E.C.	10	136	311	2.41	1.35	3.42	1.91	12.00	12.56	4.68	11.65

(Continued)

Table C-7. Laden Transits, Tons Carried, Toll Revenue and Toll Rates, Current Toll Structure With 50 Percent Increase in Rates, 150,000 DWT Scenario, 2020, by Ship Type, Diversion Status, and Trade Route (1990 US$, except when noted)(continued)

Ship Type, Diversion Status, and Trade Route	Transits	Cargo Tonnage Carried (thousands)	Revenue (thousands) a/	Current Toll Schedule: Toll Per Panama Canal Net Ton	Current Toll Schedule: Toll Per Cargo Ton Carried	New Toll Schedule: Toll Per Panama Canal Net Ton	New Toll Schedule: Toll Per Cargo Ton Carried	Total Transportation Costs per Ton Carried: Via Panama Canal: With Current Toll Structure	Via Panama Canal: With New Toll Structure	Via Panama Canal: Percent Increase	Via Least Costly Alternative Route
Dry Bulk Carriers (continued)											
Diverted Transits (continued)											
Canada W.C.-S.A.E.C.	24	1,374	2,469	2.41	1.22	3.42	1.74	10.63	11.15	4.80	10.92
Europe-S.A.W.C.	12	298	365	2.41	1.35	3.42	1.91	15.85	16.41	3.54	15.50
S.A.E.C.-C.A.W.C.	8	247	247	2.41	1.35	3.42	1.91	12.00	12.56	4.68	11.65
S.A.E.C.-Canada W.C.	3	66	160	2.41	1.35	3.42	1.91	16.80	17.36	3.34	17.35
S.A.E.C.-U.S.W.C.	28	1,128	1,383	2.41	1.26	3.42	1.79	12.93	13.46	4.07	12.67
S.A.W.C.-Europe	175	6,221	9,403	2.41	1.31	3.42	1.85	15.85	16.39	3.44	15.96
U.S.W.C.-S.A.E.C.	11	279	326	2.41	1.35	3.42	1.91	15.80	16.36	3.55	15.45
Subtotal	275	9,901	14,843	2.41	1.29	3.42	1.83	14.74	15.28	3.66	14.78
Subtotal	3,881	186,253	322,511	2.41	1.26	3.39	1.78	16.01	16.53	3.26	20.96
Chemical Tankers											
Non-Diverted Transits											
Africa-S.A.W.C.	1	32	52	2.41	1.34	3.42	1.90	42.34	42.90	1.32	58.00
Asia-C.A.E.C.	3	34	68	2.41	1.34	3.42	1.90	52.46	53.02	1.06	69.37
Asia-S.A.E.C.	3	16	134	2.41	1.34	3.42	1.90	49.34	49.90	1.13	51.00
Asia-U.S.E.C.	32	537	1,116	2.41	1.34	3.42	1.90	44.74	45.30	1.25	60.33
C.A.W.C.-C.A.E.C.	23	139	263	2.41	1.34	3.42	1.90	36.34	36.90	1.54	77.00
C.A.W.C.-Europe	8	126	209	2.41	1.34	3.42	1.90	37.28	37.84	1.50	55.50
C.A.W.C.-U.S.E.C.	38	470	858	2.41	1.34	3.42	1.90	28.06	28.62	1.99	58.14
Canada W.C.-Europe	4	87	168	2.41	1.34	3.42	1.90	41.34	41.90	1.35	55.00
Canada W.C.-U.S.E.C.	32	744	1,574	2.41	1.34	3.42	1.90	31.74	32.30	1.76	52.80
C.A.E.C.-Asia	9	248	412	2.41	1.34	3.42	1.90	41.66	42.22	1.34	54.44
C.A.E.C.-C.A.W.C.	9	207	432	2.41	1.34	3.42	1.90	21.34	21.90	2.62	41.00

(Continued)

Table C-7. Laden Transits, Tons Carried, Toll Revenue and Toll Rates, Current Toll Structure With 50 Percent Increase in Rates, 150,000 DWT Scenario, 2020, by Ship Type, Diversion Status, and Trade Route (1990 US$, except when noted)(continued)

Ship Type, Diversion Status, and Trade Route	Transits	Cargo Tonnage Carried (thousands)	Revenue (thousands) a/	Current Toll Schedule: Toll Per Panama Canal Net Ton	Current Toll Schedule: Toll Per Cargo Ton Carried	New Toll Schedule: Toll Per Panama Canal Net Ton	New Toll Schedule: Toll Per Cargo Ton Carried	Total Transportation Costs per Ton Carried: Via Panama Canal: With Current Toll Structure	Via Panama Canal: With New Toll Structure	Via Panama Canal: Percent Increase	Via Least Costly Alternative Route
Chemical Tankers (continued)											
Non-Diverted Transits (continued)											
C.A.E.C.-S.A.W.C.	11	186	358	2.41	1.34	3.42	1.90	31.03	31.59	1.80	40.27
C.A.E.C.-U.S.W.C.	1	10	17	2.41	1.34	3.42	1.90	51.34	51.90	1.09	90.00
Europe-C.A.W.C.	6	30	71	2.41	1.34	3.42	1.90	56.34	56.90	0.99	86.00
Europe-S.A.W.C.	6	60	103	2.41	1.34	3.42	1.90	55.90	56.46	1.00	59.35
Europe-U.S.W.C.	9	182	317	2.41	1.34	3.42	1.90	42.34	42.90	1.32	56.41
Oceania-U.S.E.C.	18	455	971	2.41	1.34	3.42	1.90	40.54	41.10	1.38	45.36
S.A.E.C.-C.A.W.C.	8	61	115	2.41	1.34	3.42	1.90	46.87	47.43	1.19	51.82
S.A.W.C.-C.A.E.C.	22	79	377	2.41	1.34	3.42	1.90	42.38	42.94	1.32	56.49
S.A.W.C.-Europe	8	92	160	2.41	1.34	3.42	1.90	51.64	52.20	1.08	54.68
S.A.W.C.-U.S.E.C.	7	47	146	2.41	1.34	3.42	1.90	38.35	38.91	1.46	53.28
U.S.E.C.-Asia	565	15,828	25,713	2.41	1.34	3.42	1.90	42.38	42.94	1.32	56.99
U.S.E.C.-C.A.W.C.	18	146	283	2.41	1.34	3.42	1.90	33.25	33.81	1.68	70.02
U.S.E.C.-Canada W.C.	5	36	62	2.41	1.34	3.42	1.90	55.76	56.32	1.00	96.33
U.S.E.C.-Oceania	17	409	699	2.41	1.34	3.42	1.90	44.76	45.32	1.25	50.35
U.S.E.C.-S.A.W.C.	45	434	834	2.41	1.34	3.42	1.90	39.65	40.21	1.41	55.15
U.S.E.C.-U.S.W.C.	50	1,635	3,099	2.41	1.35	3.42	1.91	25.70	26.26	2.19	43.31
U.S.W.C.-C.A.E.C.	2	38	95	2.41	1.34	3.42	1.90	29.34	29.90	1.90	48.00
U.S.W.C.-Europe	16	215	432	2.41	1.34	3.42	1.90	45.63	46.19	1.22	61.31
U.S.W.C.-S.A.E.C.	0	3	7	2.41	1.34	3.42	1.90	37.34	37.90	1.50	38.00
U.S.W.C.-U.S.E.C.	15	256	949	2.41	1.35	3.42	1.91	25.80	26.36	2.18	43.41
Subtotal	992	22,841	40,095	2.41	1.34	3.42	1.90	40.10	40.66	1.39	55.44
Chemical Tankers											
Diverted Transits											
S.A.E.C.-U.S.W.C.	2	84	90	2.41	1.35	3.42	1.91	30.35	30.91	1.86	30.00
Subtotal	2	84	90	2.41	1.35	3.41	1.91	30.35	30.91	1.86	30.00
Subtotal	994	22,925	40,184	2.41	1.34	3.42	1.90	40.06	40.62	1.40	55.35

(Continued)

Table C-7. Laden Transits, Tons Carried, Toll Revenue and Toll Rates, Current Toll Structure With 50 Percent Increase in Rates, 150,000 DWT Scenario, 2020, by Ship Type, Diversion Status, and Trade Route (1990 US$, except when noted)(continued)

Ship Type, Diversion Status, and Trade Route	Transits	Cargo Tonnage Carried (thousands)	Revenue (thousands) a/	Current Toll Schedule: Toll Per Panama Canal Net Ton	Current Toll Schedule: Toll Per Cargo Ton Carried	New Toll Schedule: Toll Per Panama Canal Net Ton	New Toll Schedule: Toll Per Cargo Ton Carried	Total Transportation Costs per Ton Carried: Via Panama Canal: With Current Toll Structure	Via Panama Canal: With New Toll Structure	Via Panama Canal: Percent Increase	Via Least Costly Alternative Route
Full Container Ships (continued)											
Non-Diverted Transits (continued)											
Africa-U.S.W.C.	0	2	6	2.41	4.48	3.42	6.35	246.46	248.33	0.76	281.72
Asia-Canada E.C.	35	682	3,120	2.41	4.65	3.42	6.59	210.85	212.79	0.92	223.41
Asia-S.A.E.C.	2	7	65	2.41	4.48	3.42	6.35	274.32	276.19	0.68	278.74
Asia-U.S.E.C. (low inv. cost)	206	4,485	27,864	2.41	4.76	3.42	6.75	238.55	240.54	0.83	251.75
C.A.W.C.-C.A.E.C.	1	5	35	2.41	4.38	3.42	6.21	129.97	131.80	1.41	209.77
C.A.W.C.-Europe	2	22	111	2.41	4.36	3.42	6.18	153.30	155.12	1.19	206.86
C.A.W.C.-S.A.E.C.	0	4	17	2.41	4.38	3.42	6.20	163.77	165.59	1.11	170.68
C.A.W.C.-U.S.E.C.	0	3	12	2.41	4.48	3.42	6.35	157.98	159.85	1.18	250.90
Canada E.C.-Asia	32	561	2,123	2.41	4.50	3.42	6.38	230.54	232.42	0.81	235.78
Canada E.C.-U.S.W.C.	5	136	566	2.41	4.73	3.42	6.71	160.73	162.71	1.23	225.00
Canada W.C.-Europe	32	491	1,739	2.41	4.46	3.42	6.32	212.22	214.08	0.88	275.57
C.A.E.C.-Asia	8	99	512	2.41	4.41	3.42	6.25	217.31	219.15	0.85	245.58
C.A.E.C.-C.A.W.C.	1	3	17	2.41	4.51	3.42	6.40	184.21	186.10	1.02	324.09
C.A.E.C.-Oceania	0	3	11	2.41	4.48	3.42	6.35	248.46	250.33	0.75	293.66
C.A.E.C.-S.A.W.C.	6	6	88	2.41	4.64	3.42	6.57	187.15	189.08	1.03	226.38
C.A.E.C.-U.S.W.C.	1	12	54	2.41	4.38	3.42	6.21	154.50	156.33	1.18	220.28
Europe-C.A.W.C.	0	1	5	2.41	4.36	3.42	6.18	153.30	155.12	1.19	244.84
Europe-Canada W.C.	24	311	1,184	2.41	4.43	3.42	6.28	224.73	226.58	0.82	283.75
Europe-S.A.W.C.	51	731	3,524	2.41	4.36	3.42	6.18	194.28	196.10	0.94	223.86
Europe-U.S.W.C.	144	2,855	12,050	2.41	4.62	3.42	6.55	209.75	211.68	0.92	217.16
Middle East-U.S.W.C.	8	116	425	2.41	4.42	3.42	6.26	221.09	222.93	0.83	248.07
Oceania-C.A.E.C.	2	24	76	2.41	4.48	3.42	6.35	248.46	250.33	0.75	293.66
S.A.E.C.-C.A.W.C.	0	4	16	2.41	4.48	3.42	6.35	193.78	195.65	0.96	205.16

(Continued)

Table C-7. Laden Transits, Tons Carried, Toll Revenue and Toll Rates, Current Toll Structure With 50 Percent Increase in Rates, 150,000 DWT Scenario, 2020, by Ship Type, Diversion Status, and Trade Route (1990 US$, except when noted)(continued)

Ship Type, Diversion Status, and Trade Route	Transits	Cargo Tonnage Carried (thousands)	Revenue (thousands) a/	Current Toll Schedule: Toll Per Panama Canal Net Ton	Current Toll Schedule: Toll Per Cargo Ton Carried	New Toll Schedule: Toll Per Panama Canal Net Ton	New Toll Schedule: Toll Per Cargo Ton Carried	Total Transportation Costs per Ton Carried: Via Panama Canal: With Current Toll Structure	Via Panama Canal: With New Toll Structure	Via Panama Canal: Percent Increase	Via Least Costly Alternative Route
Full Container Ships (continued)											
Non-Diverted Transits (continued)											
S.A.E.C.-U.S.W.C.	1	9	31	2.41	4.48	3.42	6.35	179.84	181.71	1.04	217.10
S.A.W.C.-C.A.E.C.	0	1	5	2.41	4.50	3.42	6.38	191.66	193.54	0.98	232.72
S.A.W.C.-Europe	103	1,966	7,202	2.41	4.36	3.42	6.18	194.27	196.09	0.94	223.85
S.A.W.C.-U.S.E.C.	46	483	1,751	2.41	4.48	3.42	6.35	170.90	172.77	1.09	219.08
U.S.E.C.-Asia (low inv. cost)	243	7,139	30,956	2.41	4.74	3.42	6.71	239.88	241.85	0.82	252.86
U.S.E.C.-C.A.W.C.	6	55	241	2.41	4.48	3.42	6.35	136.10	137.97	1.37	250.90
U.S.E.C.-S.A.W.C.	57	487	2,168	2.41	4.48	3.42	6.35	170.90	172.77	1.09	219.08
U.S.E.C.-U.S.W.C.	1	26	115	2.41	4.71	3.42	6.67	144.82	146.78	1.36	220.39
U.S.W.C.-Africa	0	0	0	2.41	5.04	3.42	7.15	197.04	199.15	1.07	228.00
U.S.W.C.-Canada E.C.	0	5	24	2.41	4.51	3.42	6.39	163.61	165.49	1.15	231.49
U.S.W.C.-C.A.E.C.	7	42	223	2.41	4.46	3.42	6.32	159.01	160.87	1.17	227.84
U.S.W.C.-Europe	194	3,428	16,553	2.41	4.64	3.42	6.58	212.59	214.53	0.91	219.05
U.S.W.C.-Middle East	8	103	439	2.41	4.42	3.42	6.27	221.46	223.31	0.83	229.44
U.S.W.C.-U.S.E.C.	13	168	1,152	2.41	4.59	3.42	6.51	145.28	147.20	1.32	222.40
Subtotal	1,239	24,474	114,477	2.41	4.65	3.42	6.59	220.74	222.67	0.88	238.21
Full Container Ships											
Diverted Transits											
Canada E.C.-Oceania	12	145	474	2.41	4.43	3.42	6.28	259.72	261.57	0.71	259.79
Subtotal	12	145	474	2.41	4.43	3.42	6.28	259.72	261.57	0.71	259.79
Subtotal	1,251	24,619	114,951	2.41	4.65	3.42	6.58	220.97	222.90	0.88	238.34
General Cargo Ships											
Non-Diverted Transits											
Africa-C.A.W.C.	2	23	57	2.41	1.39	3.42	1.97	28.19	28.77	2.05	50.55

(Continued)

Table C-7. Laden Transits, Tons Carried, Toll Revenue and Toll Rates, Current Toll Structure With 50 Percent Increase in Rates, 150,000 DWT Scenario, 2020, by Ship Type, Diversion Status, and Trade Route (1990 US$, except when noted)(continued)

Ship Type, Diversion Status, and Trade Route	Transits	Cargo Tonnage Carried (thousands)	Revenue (thousands) a/	Current Toll Schedule: Toll Per Panama Canal Net Ton	Current Toll Schedule: Toll Per Cargo Ton Carried	New Toll Schedule: Toll Per Panama Canal Net Ton	New Toll Schedule: Toll Per Cargo Ton Carried	Total Transportation Costs per Ton Carried, Via Panama Canal: With Current Toll Structure	Total Transportation Costs per Ton Carried, Via Panama Canal: With New Toll Structure	Total Transportation Costs per Ton Carried, Via Panama Canal: Percent Increase	Total Transportation Costs per Ton Carried: Via Least Costly Alternative Route
General Cargo Ships (continued)											
Non-Diverted Transits (continued)											
Africa-S.A.W.C.	2	35	59	2.41	1.39	3.42	1.97	34.14	34.72	1.70	49.55
Asia-Canada E.C.	0	2	3	2.41	1.39	3.42	1.97	38.09	38.67	1.52	41.65
Asia-C.A.E.C.	71	844	2,486	2.41	1.39	3.42	1.97	34.09	34.67	1.70	44.60
Asia-U.S.E.C.	26	339	930	2.41	1.39	3.42	1.97	34.56	35.14	1.67	47.75
C.A.W.C.-Africa	5	94	171	2.41	1.39	3.42	1.97	28.19	28.77	2.05	50.55
C.A.W.C.-C.A.E.C.	25	109	290	2.41	1.46	3.42	2.07	10.10	10.71	6.03	52.77
C.A.W.C.-Europe	21	120	470	2.41	1.41	3.42	1.99	26.48	27.06	2.22	46.59
C.A.W.C.-S.A.E.C.	8	51	172	2.41	1.41	3.42	2.00	25.50	26.09	2.30	29.62
C.A.W.C.-U.S.E.C.	10	51	121	2.41	1.45	3.42	2.06	11.45	12.06	5.29	65.61
Canada E.C.-Asia	5	12	163	2.41	1.39	3.42	1.97	38.09	38.67	1.52	41.65
Canada E.C.-C.A.W.C.	1	15	31	2.41	1.39	3.42	1.97	19.29	19.87	3.00	37.65
Canada E.C.-S.A.W.C.	6	53	206	2.41	1.39	3.42	1.97	25.19	25.77	2.30	31.75
Canada W.C.-C.A.E.C.	6	45	115	2.41	1.42	3.42	2.01	28.50	29.09	2.08	62.09
Canada W.C.-Europe	1	12	20	2.41	1.39	3.42	1.97	34.09	34.67	1.70	47.55
Canada W.C.-S.A.E.C.	6	58	130	2.41	1.41	3.42	2.00	33.28	33.87	1.77	62.32
C.A.E.C.-Asia	22	415	750	2.41	1.39	3.42	1.97	34.09	34.67	1.70	44.60
C.A.E.C.-C.A.W.C.	25	89	295	2.41	1.45	3.42	2.06	9.12	9.73	6.65	56.51
C.A.E.C.-Oceania	0	7	16	2.41	1.39	3.42	1.97	37.09	37.67	1.56	44.60
C.A.E.C.-S.A.W.C.	24	218	533	2.41	1.41	3.42	1.99	20.63	21.21	2.84	31.22
C.A.E.C.-U.S.W.C.	9	28	68	2.41	1.51	3.42	2.14	30.51	31.14	2.07	102.00
Europe-C.A.W.C.	44	300	1,157	2.41	1.40	3.42	1.98	25.47	26.05	2.29	53.48
Europe-Canada W.C.	2	9	20	2.41	1.50	3.42	2.13	71.00	71.63	0.88	119.28
Europe-S.A.W.C.	39	385	1,265	2.41	1.39	3.42	1.97	30.83	31.41	1.88	32.64

(Continued)

Table C-7. Laden Transits, Tons Carried, Toll Revenue and Toll Rates, Current Toll Structure With 50 Percent Increase in Rates, 150,000 DWT Scenario, 2020, by Ship Type, Diversion Status, and Trade Route (1990 US$, except when noted)(continued)

Ship Type, Diversion Status, and Trade Route	Transits	Cargo Tonnage Carried (thousands)	Revenue (thousands) a/	Current Toll Schedule: Toll Per Panama Canal Net Ton	Current Toll Schedule: Toll Per Cargo Ton Carried	New Toll Schedule: Toll Per Panama Canal Net Ton	New Toll Schedule: Toll Per Cargo Ton Carried	Total Transportation Costs per Ton Carried: Via Panama Canal: With Current Toll Structure	Via Panama Canal: With New Toll Structure	Via Panama Canal: Percent Increase	Via Least Costly Alternative Route
General Cargo Ships (continued)											
Non-Diverted Transits (continued)											
Europe-U.S.W.C.	2	11	33	2.41	1.44	3.42	2.05	55.78	56.39	1.08	93.53
Middle East-S.A.W.C.	4	2	35	2.41	1.50	3.42	2.13	64.45	65.08	0.97	89.22
Middle East-U.S.W.C.	2	4	54	2.41	1.39	3.42	1.97	37.09	37.67	1.56	42.65
Oceania-C.A.E.C.	0	3	16	2.41	1.39	3.42	1.97	36.09	36.67	1.60	44.60
Oceania-U.S.E.C.	1	7	22	2.41	1.43	3.42	2.03	51.18	51.78	1.17	61.38
S.A.E.C.-C.A.W.C.	7	148	250	2.41	1.39	3.42	1.97	23.19	23.77	2.50	24.80
S.A.E.C.-Canada W.C.	0	1	4	2.41	1.39	3.42	1.97	32.14	32.72	1.80	34.70
S.A.E.C.-U.S.W.C.	8	36	227	2.41	1.40	3.42	1.98	34.56	35.14	1.68	36.22
S.A.W.C.-Africa	4	81	143	2.41	1.39	3.42	1.97	31.14	31.72	1.86	47.60
S.A.W.C.-Canada E.C.	0	6	12	2.41	1.39	3.42	1.97	25.19	25.77	2.30	31.75
S.A.W.C.-C.A.E.C.	41	177	530	2.41	1.45	3.42	2.05	21.94	22.54	2.75	42.95
S.A.W.C.-Europe	98	1,601	3,400	2.41	1.39	3.42	1.97	30.14	30.72	1.92	31.75
S.A.W.C.-Middle East	2	23	54	2.41	1.39	3.42	1.97	32.14	32.72	1.80	37.70
S.A.W.C.-U.S.E.C.	27	205	643	2.41	1.40	3.42	1.99	23.26	23.85	2.52	36.08
U.S.E.C.-Asia	48	782	1,687	2.41	1.39	3.42	1.97	34.72	35.30	1.67	47.99
U.S.E.C.-C.A.W.C.	48	352	750	2.41	1.43	3.42	2.03	13.42	14.02	4.44	53.82
U.S.E.C.-Oceania	3	46	106	2.41	1.39	3.42	1.97	37.09	37.67	1.56	41.65
U.S.E.C.-S.A.W.C.	86	605	1,970	2.41	1.41	3.42	1.99	23.39	23.97	2.51	36.70
U.S.E.C.-U.S.W.C.	1	0	6	2.41	1.50	3.42	2.13	32.50	33.13	1.93	107.05
U.S.W.C.-Africa	2	25	78	2.41	1.39	3.42	1.97	34.09	34.67	1.70	42.60
U.S.W.C.-C.A.E.C.	1	0	12	2.41	1.50	3.42	2.13	29.71	30.34	2.11	96.69
U.S.W.C.-Europe	3	31	57	2.41	1.42	3.42	2.02	40.73	41.33	1.46	61.78
U.S.W.C.-S.A.E.C.	6	15	79	2.41	1.45	3.42	2.05	47.38	47.98	1.28	52.07
Subtotal	755	7,476	19,695	2.41	1.40	3.42	1.98	28.70	29.29	2.03	41.85

(Continued)

Table C-7. Laden Transits, Tons Carried, Toll Revenue and Toll Rates, Current Toll Structure With 50 Percent Increase in Rates, 150,000 DWT Scenario, 2020, by Ship Type, Diversion Status, and Trade Route (1990 US$, except when noted)(continued)

Ship Type, Diversion Status, and Trade Route	Transits	Cargo Tonnage Carried (thousands)	Revenue (thousands) a/	Current Toll Schedule: Toll Per Panama Canal Net Ton	Current Toll Schedule: Toll Per Cargo Ton Carried	New Toll Schedule: Toll Per Panama Canal Net Ton	New Toll Schedule: Toll Per Cargo Ton Carried	Total Transportation Costs per Ton Carried, Via Panama Canal: With Current Toll Structure	Total Transportation Costs per Ton Carried, Via Panama Canal: With New Toll Structure	Total Transportation Costs per Ton Carried, Via Panama Canal: Percent Increase	Total Transportation Costs per Ton Carried: Via Least Costly Alternative Route
General Cargo Ships (continued)											
Diverted Transits (continued)											
Asia-S.A.E.C.	2	13	83	2.41	1.39	3.42	1.97	41.09	41.67	1.41	41.65
Canada E.C.-Oceania	0	4	4	2.41	1.39	3.42	1.97	43.04	43.62	1.35	42.65
Canada W.C.-Middle East	1	6	1	2.41	1.39	3.42	1.97	39.04	39.62	1.48	37.70
Subtotal	3	22	88	2.41	1.39	3.41	1.97	40.86	41.44	1.42	40.76
Subtotal	758	7,499	19,783	2.41	1.40	3.41	1.98	28.74	29.32	2.03	41.84
Liquid Gas Carriers											
Non-Diverted Transits											
C.A.W.C.-C.A.E.C.	4	18	68	2.41	7.30	3.42	10.35	49.30	52.35	6.18	170.00
C.A.E.C.-Asia	15	82	441	2.41	4.67	3.42	6.62	107.52	109.47	1.81	152.78
C.A.E.C.-C.A.W.C.	96	1,270	5,504	2.41	3.79	3.42	5.37	23.91	25.49	6.61	71.88
C.A.E.C.-S.A.W.C.	8	119	470	2.41	3.83	3.42	5.42	40.83	42.42	3.91	61.00
C.A.E.C.-U.S.W.C.	1	12	45	2.41	3.83	3.42	5.42	45.83	47.42	3.48	95.00
Europe-C.A.W.C.	2	5	25	2.41	7.30	3.42	10.35	110.30	113.35	2.76	197.00
Europe-S.A.W.C.	0	1	2	2.41	3.82	3.42	5.42	67.82	69.42	2.35	72.00
Oceania-U.S.E.C.	6	91	429	2.41	3.62	3.42	5.13	66.11	67.62	2.28	75.48
S.A.E.C.-Asia	2	27	104	2.41	3.83	3.42	5.42	78.83	80.42	2.02	94.00
S.A.E.C.-C.A.W.C.	11	31	182	2.41	7.30	3.42	10.35	99.30	102.35	3.07	112.00
U.S.E.C.-Asia	23	273	1,243	2.41	3.86	3.42	5.47	82.65	84.26	1.95	121.83
U.S.E.C.-C.A.W.C.	1	2	12	2.41	7.30	3.42	10.35	57.30	60.35	5.31	191.00
U.S.E.C.-Oceania	1	11	50	2.41	3.83	3.42	5.42	86.83	88.42	1.84	100.00
U.S.E.C.-S.A.W.C.	2	6	32	2.41	7.30	3.42	10.35	94.30	97.35	3.23	153.00
Subtotal	172	1,947	8,608	2.41	3.90	3.41	5.53	41.82	43.47	3.93	84.66

(Continued)

Table C-7. Laden Transits, Tons Carried, Toll Revenue and Toll Rates, Current Toll Structure With 50 Percent Increase in Rates, 150,000 DWT Scenario, 2020, by Ship Type, Diversion Status, and Trade Route (1990 US$, except when noted)(continued)

Ship Type, Diversion Status, and Trade Route	Transits	Cargo Tonnage Carried (thousands)	Revenue (thousands) a/	Current Toll Schedule: Toll Per Panama Canal Net Ton	Current Toll Schedule: Toll Per Cargo Ton Carried	New Toll Schedule: Toll Per Panama Canal Net Ton	New Toll Schedule: Toll Per Cargo Ton Carried	Total Transportation Costs per Ton Carried: Via Panama Canal: With Current Toll Structure	Via Panama Canal: With New Toll Structure	Via Panama Canal: Percent Increase	Via Least Costly Alternative Route
Passenger Ships (continued)											
Non-Diverted Transits (continued)											
North-Bound	153	0	3,376	2.41	0.00	3.42	0.00	0.00	0.00	0.00	0.00
South-Bound	183	0	5,841	2.41	0.00	3.42	0.00	0.00	0.00	0.00	0.00
Subtotal	336	0	9,217	2.41	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Refrigerated Ships											
Non-Diverted Transits											
Africa-C.A.W.C.	0	0	4	2.41	4.27	3.42	6.06	113.87	115.66	1.57	208.00
Africa-S.A.W.C.	9	9	250	2.41	4.15	3.42	5.89	133.93	135.67	1.29	196.56
Asia-C.A.E.C.	20	71	609	2.41	3.97	3.42	5.62	128.09	129.74	1.29	173.29
Asia-S.A.E.C.	5	3	129	2.41	4.28	3.42	6.06	168.08	169.86	1.06	171.60
Asia-U.S.E.C.	0	0	11	2.41	4.28	3.42	6.06	140.48	142.26	1.27	198.20
C.A.W.C.-Africa	1	3	25	2.41	4.28	3.42	6.06	113.88	115.66	1.57	208.00
C.A.W.C.-Canada E.C.	0	2	9	2.41	4.28	3.42	6.06	76.48	78.26	2.33	152.00
C.A.W.C.-C.A.E.C.	20	132	655	2.41	3.88	3.42	5.49	50.94	52.55	3.17	124.12
C.A.W.C.-Europe	219	987	6,785	2.41	3.94	3.42	5.58	89.55	91.19	1.83	143.20
C.A.W.C.-S.A.E.C.	1	4	23	2.41	4.28	3.42	6.06	89.28	91.06	2.00	96.80
C.A.W.C.-U.S.E.C.	1	2	23	2.41	4.28	3.42	6.06	61.68	63.46	2.89	149.80
Canada E.C.-Asia	12	63	302	2.41	4.28	3.42	6.06	155.08	156.86	1.15	169.60
Canada E.C.-C.A.W.C.	5	10	141	2.41	3.95	3.42	5.60	70.22	71.87	2.35	142.12
Canada W.C.-Europe	3	28	93	2.41	4.12	3.42	5.83	131.88	133.59	1.30	187.18
C.A.E.C.-Asia	10	32	276	2.41	4.12	3.42	5.84	135.20	136.92	1.27	182.25
C.A.E.C.-C.A.W.C.	23	5	751	2.41	3.87	3.42	5.49	50.87	52.49	3.18	124.00
C.A.E.C.-S.A.W.C.	54	42	1,766	2.41	3.87	3.42	5.49	71.87	73.49	2.25	101.00

(Continued)

Table C-7. Laden Transits, Tons Carried, Toll Revenue and Toll Rates, Current Toll Structure With 50 Percent Increase in Rates, 150,000 DWT Scenario, 2020, by Ship Type, Diversion Status, and Trade Route (1990 US$, except when noted)(continued)

Ship Type, Diversion Status, and Trade Route	Transits	Cargo Tonnage Carried (thousands)	Revenue (thousands) a/	Current Toll Schedule: Toll Per Panama Canal Net Ton	Current Toll Schedule: Toll Per Cargo Ton Carried	New Toll Schedule: Toll Per Panama Canal Net Ton	New Toll Schedule: Toll Per Cargo Ton Carried	Total Transportation Costs per Ton Carried, Via Panama Canal: With Current Toll Structure	Total Transportation Costs per Ton Carried, Via Panama Canal: With New Toll Structure	Total Transportation Costs per Ton Carried, Via Panama Canal: Percent Increase	Total Transportation Costs per Ton Carried: Via Least Costly Alternative Route
Refrigerated Ships (continued)											
Non-Diverted Transits (continued)											
Europe-C.A.W.C.	160	13	5,194	2.41	3.89	3.42	5.51	89.41	91.03	1.81	177.49
Europe-Canada W.C.	1	1	21	2.41	4.28	3.42	6.06	136.48	138.26	1.31	189.40
Europe-S.A.W.C.	169	145	4,923	2.41	4.02	3.42	5.70	116.06	117.74	1.45	121.88
Europe-U.S.W.C.	14	10	341	2.41	4.28	3.42	6.06	126.88	128.66	1.41	178.40
Middle East-S.A.W.C.	2	3	42	2.41	4.28	3.42	6.06	129.48	131.26	1.38	153.80
Oceania-C.A.E.C.	3	18	70	2.41	4.28	3.42	6.06	147.28	149.06	1.21	182.40
Oceania-U.S.E.C.	33	116	825	2.41	4.24	3.42	6.01	148.70	150.47	1.19	169.13
S.A.E.C.-Asia	11	50	278	2.41	4.28	3.42	6.06	137.48	139.26	1.30	159.80
S.A.W.C.-Africa	14	50	377	2.41	4.15	3.42	5.88	123.33	125.06	1.40	191.96
S.A.W.C.-C.A.E.C.	21	111	634	2.41	3.99	3.42	5.66	75.06	76.73	2.22	104.68
S.A.W.C.-Europe	928	4,670	26,535	2.41	4.05	3.42	5.74	115.41	117.10	1.46	121.08
S.A.W.C.-Middle East	5	17	131	2.41	4.28	3.42	6.06	129.48	131.26	1.38	153.80
S.A.W.C.-U.S.E.C.	607	2,226	17,750	2.41	4.02	3.42	5.69	80.58	82.25	2.08	117.32
U.S.E.C.-Asia	32	114	927	2.41	4.01	3.42	5.68	134.04	135.71	1.25	189.83
U.S.E.C.-C.A.W.C.	27	66	831	2.41	3.93	3.42	5.57	56.28	57.92	2.91	139.70
U.S.E.C.-S.A.W.C.	282	434	8,393	2.41	3.99	3.42	5.66	79.55	81.22	2.09	116.03
U.S.W.C.-Europe	126	672	3,330	2.41	4.17	3.42	5.91	126.00	127.74	1.38	177.24
U.S.W.C.-S.A.E.C.	1	3	21	2.41	4.24	3.42	6.01	121.95	123.72	1.45	124.71
Subtotal	2,819	10,116	82,477	2.41	4.02	3.41	5.69	103.72	105.40	1.62	129.20
Refrigerated Ships											
Diverted Transits											
Africa-Asia	29	151	398	2.41	4.28	3.42	6.06	162.08	163.86	1.10	160.80
Subtotal	29	151	398	2.41	4.28	3.42	6.06	162.08	163.86	1.10	160.80
Subtotal	2,847	10,266	82,875	2.41	4.02	3.41	5.70	104.57	106.26	1.61	129.67

(Continued)

Table C-7. Laden Transits, Tons Carried, Toll Revenue and Toll Rates, Current Toll Structure With 50 Percent Increase in Rates, 150,000 DWT Scenario, 2020, by Ship Type, Diversion Status, and Trade Route (1990 US$, except when noted)(continued)

Ship Type, Diversion Status, and Trade Route	Transits	Cargo Tonnage Carried (thousands)	Revenue (thousands) a/	Current Toll Schedule: Toll Per Panama Canal Net Ton	Current Toll Schedule: Toll Per Cargo Ton Carried	New Toll Schedule: Toll Per Panama Canal Net Ton	New Toll Schedule: Toll Per Cargo Ton Carried	Total Transportation Costs per Ton Carried, Via Panama Canal: With Current Toll Structure	Total Transportation Costs per Ton Carried, Via Panama Canal: With New Toll Structure	Total Transportation Costs per Ton Carried, Via Panama Canal: Percent Increase	Total Transportation Costs per Ton Carried: Via Least Costly Alternative Route
Roll-On Roll-Off (continued)											
Non-Diverted Transits (continued)											
Asia-Canada E.C.	2	8	80	2.41	9.35	3.42	13.25	278.31	282.21	1.40	298.63
Asia-C.A.E.C.	24	473	2,477	2.41	7.92	3.42	11.23	225.40	228.71	1.47	256.05
Asia-U.S.E.C.	40	766	4,004	2.41	7.95	3.42	11.27	237.11	240.43	1.40	288.42
C.A.W.C.-Europe	12	64	710	2.41	8.66	3.42	12.27	181.66	185.27	1.99	257.00
C.A.W.C.-S.A.E.C.	0	0	2	2.41	8.67	3.42	12.29	193.67	197.29	1.87	203.00
C.A.W.C.-U.S.E.C.	1	1	72	2.41	8.66	3.42	12.27	155.66	159.27	2.32	251.00
Canada E.C.-Asia	8	41	367	2.41	9.30	3.42	13.18	327.47	331.35	1.18	336.67
Canada W.C.-C.A.E.C.	0	0	7	2.41	10.19	3.42	14.45	224.84	229.10	1.89	359.54
C.A.E.C.-C.A.W.C.	0	1	18	2.41	9.72	3.42	13.77	154.90	158.95	2.62	273.04
C.A.E.C.-Oceania	2	7	147	2.41	8.66	3.42	12.27	252.66	256.27	1.43	297.00
C.A.E.C.-S.A.W.C.	46	81	1,615	2.41	10.19	3.42	14.45	217.90	222.16	1.95	266.26
Europe-C.A.W.C.	18	112	1,054	2.41	8.66	3.42	12.27	181.66	185.27	1.99	311.00
Europe-S.A.W.C.	0	0	2	2.41	8.67	3.42	12.29	240.67	244.29	1.50	275.00
Europe-U.S.W.C.	0	2	24	2.41	8.66	3.42	12.27	241.66	245.27	1.49	311.00
Oceania-C.A.E.C.	0	0	1	2.41	8.01	3.42	11.35	223.21	226.55	1.50	261.95
S.A.W.C.-C.A.E.C.	12	23	407	2.41	10.19	3.42	14.45	217.90	222.16	1.95	266.26
S.A.W.C.-Europe	1	3	59	2.41	8.66	3.42	12.27	240.66	244.27	1.50	281.00
S.A.W.C.-U.S.E.C.	6	13	214	2.41	10.19	3.42	14.45	210.96	215.22	2.02	275.20
U.S.E.C.-Asia	8	56	509	2.41	8.64	3.42	12.24	275.58	279.18	1.31	337.50
U.S.E.C.-C.A.W.C.	2	3	113	2.41	8.66	3.42	12.27	132.66	136.27	2.72	251.00
U.S.E.C.-S.A.W.C.	26	45	899	2.41	10.19	3.42	14.45	210.96	215.22	2.02	275.20
U.S.W.C.-Canada E.C.	1	2	30	2.41	10.20	3.42	14.45	245.70	249.95	1.73	375.45
U.S.W.C.-C.A.E.C.	1	23	116	2.41	7.75	3.42	10.98	153.28	156.51	2.11	223.78

(Continued)

Table C-7. Laden Transits, Tons Carried, Toll Revenue and Toll Rates, Current Toll Structure With 50 Percent Increase in Rates, 150,000 DWT Scenario, 2020, by Ship Type, Diversion Status, and Trade Route (1990 US$, except when noted)(continued)

Ship Type, Diversion Status, and Trade Route	Transits	Cargo Tonnage Carried (thousands)	Revenue (thousands) a/	Current Toll Schedule: Toll Per Panama Canal Net Ton	Current Toll Schedule: Toll Per Cargo Ton Carried	New Toll Schedule: Toll Per Panama Canal Net Ton	New Toll Schedule: Toll Per Cargo Ton Carried	Total Transportation Costs per Ton Carried, Via Panama Canal: With Current Toll Structure	Total Transportation Costs per Ton Carried, Via Panama Canal: With New Toll Structure	Total Transportation Costs per Ton Carried, Via Panama Canal: Percent Increase	Total Transportation Costs per Ton Carried: Via Least Costly Alternative Route
Roll-On Roll-Off (continued)											
Non-Diverted Transits (continued)											
U.S.W.C.-Europe	0	0	2	2.41	7.80	3.42	11.05	203.42	206.67	1.60	256.35
U.S.W.C.-U.S.E.C.	0	5	24	2.41	7.86	3.42	11.14	151.24	154.52	2.17	244.92
Subtotal	211	1,731	12,953	2.41	8.60	3.41	12.19	228.26	231.72	1.52	279.97
Roll-On Roll-Off											
Diverted Transits											
Canada E.C.-Oceania	1	31	108	2.41	7.77	3.42	11.00	240.88	244.11	1.34	239.11
Subtotal	1	31	108	2.41	7.77	3.42	11.00	240.88	244.11	1.34	239.11
Subtotal	213	1,762	13,060	2.41	8.59	3.41	12.17	228.49	231.94	1.51	279.24
Tankers											
Non-Diverted Transits											
Africa-U.S.W.C.	0	0	0	2.41	1.27	3.42	1.80	15.27	15.80	3.48	20.00
Asia-U.S.E.C.	1	30	52	2.41	1.27	3.42	1.80	22.15	22.68	2.39	31.82
C.A.W.C.-Africa	0	0	1	2.41	1.27	3.42	1.80	37.27	37.80	1.42	80.00
C.A.W.C.-Canada E.C.	0	4	6	2.41	1.27	3.42	1.80	10.23	10.76	5.17	23.86
C.A.W.C.-C.A.E.C.	14	85	402	2.41	1.27	3.42	1.80	8.68	9.21	6.10	28.70
C.A.W.C.-Europe	3	70	134	2.41	1.27	3.42	1.80	14.19	14.72	3.73	23.86
C.A.W.C.-U.S.E.C.	7	53	186	2.41	1.27	3.42	1.80	9.70	10.23	5.45	30.45
Canada E.C.-Asia	10	393	657	2.41	1.27	3.42	1.80	20.80	21.33	2.54	22.37
Canada W.C.-U.S.E.C.	5	253	485	2.41	1.27	3.42	1.79	11.42	11.94	4.63	21.15
C.A.E.C.-Asia	6	180	365	2.41	1.27	3.42	1.79	18.65	19.17	2.83	25.59
C.A.E.C.-C.A.W.C.	93	1,762	4,510	2.41	1.27	3.42	1.80	6.05	6.58	8.74	17.83

(Continued)

Table C-7. Laden Transits, Tons Carried, Toll Revenue and Toll Rates, Current Toll Structure With 50 Percent Increase in Rates, 150,000 DWT Scenario, 2020, by Ship Type, Diversion Status, and Trade Route (1990 US$, except when noted)(continued)

Ship Type, Diversion Status, and Trade Route	Transits	Cargo Tonnage Carried (thousands)	Revenue (thousands) a/	Current Toll Schedule: Toll Per Panama Canal Net Ton	Current Toll Schedule: Toll Per Cargo Ton Carried	New Toll Schedule: Toll Per Panama Canal Net Ton	New Toll Schedule: Toll Per Cargo Ton Carried	Total Transportation Costs per Ton Carried: Via Panama Canal: With Current Toll Structure	Via Panama Canal: With New Toll Structure	Via Panama Canal: Percent Increase	Via Least Costly Alternative Route
Tankers (continued)											
Non-Diverted Transits (continued)											
C.A.E.C.-S.A.W.C.	41	879	1,835	2.41	1.27	3.42	1.80	10.87	11.40	4.87	15.66
C.A.E.C.-U.S.W.C.	17	712	1,271	2.41	1.27	3.42	1.80	9.67	10.20	5.47	18.88
Europe-C.A.W.C.	12	54	156	2.41	1.27	3.42	1.80	20.41	20.94	2.59	36.30
Europe-S.A.W.C.	2	52	93	2.41	1.27	3.42	1.80	19.11	19.64	2.77	19.97
Europe-U.S.W.C.	6	196	347	2.41	1.27	3.42	1.80	18.01	18.54	2.94	25.98
Middle East-U.S.W.C.	0	0	0	2.41	1.25	3.42	1.77	23.25	23.77	2.24	28.00
Oceania-U.S.E.C.	9	153	299	2.41	1.27	3.42	1.80	23.22	23.75	2.28	26.68
S.A.E.C.-Asia	104	14,147	22,472	2.41	1.27	3.42	1.80	13.83	14.36	3.83	14.70
S.A.E.C.-C.A.W.C.	85	4,342	9,413	2.41	1.26	3.42	1.79	8.64	9.17	6.09	9.39
S.A.W.C.-Canada E.C.	2	36	70	2.41	1.27	3.42	1.80	16.94	17.47	3.12	21.75
S.A.W.C.-C.A.E.C.	42	1,636	3,143	2.41	1.27	3.42	1.79	8.64	9.16	6.11	12.32
S.A.W.C.-Europe	12	106	194	2.41	1.27	3.42	1.80	22.77	23.30	2.32	24.13
S.A.W.C.-U.S.E.C.	47	1,758	3,174	2.41	1.27	3.42	1.80	10.31	10.84	5.13	15.73
U.S.E.C.-Asia	80	2,655	4,826	2.41	1.27	3.42	1.79	18.79	19.31	2.81	26.64
U.S.E.C.-C.A.W.C.	33	614	1,415	2.41	1.27	3.42	1.80	8.14	8.67	6.50	23.15
U.S.E.C.-Canada W.C.	1	4	52	2.41	1.27	3.42	1.80	15.19	15.72	3.48	28.84
U.S.E.C.-Oceania	6	192	351	2.41	1.27	3.42	1.80	21.59	22.12	2.45	24.75
U.S.E.C.-S.A.W.C.	8	147	287	2.41	1.27	3.42	1.80	12.12	12.65	4.37	18.87
U.S.E.C.-U.S.W.C.	30	877	1,696	2.41	1.27	3.42	1.80	12.30	12.83	4.30	25.53
U.S.W.C.-Africa	7	224	495	2.41	1.26	3.42	1.79	13.36	13.89	3.93	17.15
U.S.W.C.-Canada E.C.	1	21	37	2.41	1.27	3.42	1.80	16.19	16.72	3.27	27.84
U.S.W.C.-C.A.E.C.	8	301	615	2.41	1.26	3.42	1.79	9.64	10.17	5.47	18.60
U.S.W.C.-U.S.E.C.	8	226	482	2.41	1.27	3.42	1.79	11.51	12.03	4.59	23.92
Subtotal	700	32,162	59,522	2.41	1.27	3.42	1.79	12.52	13.04	4.22	16.37

(Continued)

Table C-7. Laden Transits, Tons Carried, Toll Revenue and Toll Rates, Current Toll Structure With 50 Percent Increase in Rates, 150,000 DWT Scenario, 2020, by Ship Type, Diversion Status, and Trade Route (1990 US$, except when noted)(continued)

Ship Type, Diversion Status, and Trade Route	Transits	Cargo Tonnage Carried (thousands)	Revenue (thousands) a/	Current Toll Schedule: Toll Per Panama Canal Net Ton	Current Toll Schedule: Toll Per Cargo Ton Carried	New Toll Schedule: Toll Per Panama Canal Net Ton	New Toll Schedule: Toll Per Cargo Ton Carried	Total Transportation Costs per Ton Carried, Via Panama Canal: With Current Toll Structure	Via Panama Canal: With New Toll Structure	Via Panama Canal: Percent Increase	Via Least Costly Alternative Route
Tankers (continued)											
Diverted Transits (continued)											
S.A.E.C.-U.S.W.C.	49	1,967	2,339	2.41	1.26	3.42	1.79	14.90	15.43	3.54	14.66
U.S.W.C.-S.A.E.C.	2	87	121	2.41	1.27	3.42	1.80	15.34	15.87	3.45	15.48
Subtotal	51	2,054	2,460	2.41	1.26	3.41	1.79	14.92	15.45	3.53	14.69
Subtotal	751	34,216	61,982	2.41	1.27	3.42	1.79	12.66	13.19	4.17	16.27
Vehicle Carriers											
Non-Diverted Transits											
Asia-C.A.E.C.	13	33	1,277	2.41	29.09	3.42	41.22	392.50	404.63	3.09	459.78
Asia-U.S.E.C.	419	1,959	46,692	2.41	29.20	3.42	41.37	413.17	425.34	2.95	479.68
C.A.W.C.-C.A.E.C.	1	1	77	2.41	28.71	3.42	40.69	257.39	269.37	4.65	407.18
C.A.E.C.-C.A.W.C.	4	1	419	2.41	29.22	3.42	41.41	263.22	275.41	4.63	385.00
C.A.E.C.-Oceania	1	0	108	2.41	29.22	3.42	41.41	409.22	421.41	2.98	448.00
Europe-Canada W.C.	5	11	744	2.41	30.90	3.42	43.78	368.26	381.14	3.50	430.05
Europe-U.S.W.C.	149	285	19,489	2.41	29.95	3.42	42.43	381.68	394.16	3.27	429.50
S.A.W.C.-C.A.E.C.	0	0	5	2.41	28.69	3.42	40.65	307.69	319.65	3.89	354.00
U.S.E.C.-Asia	25	114	3,095	2.41	29.67	3.42	42.05	392.18	404.56	3.16	474.71
U.S.E.C.-Oceania	7	18	853	2.41	29.22	3.42	41.41	408.22	420.41	2.98	423.00
Subtotal	623	2,423	72,758	2.41	29.43	3.41	41.70	407.79	420.01	3.00	472.54
Vehicle Carriers											
Diverted Transits											
Asia-S.A.E.C.	0	0	4	2.41	29.13	3.42	41.28	453.29	465.44	2.68	435.60
Canada E.C.-Asia	0	1	10	2.41	29.22	3.42	41.40	437.22	449.40	2.79	425.00
Subtotal	0	1	14	2.41	29.18	3.41	41.35	440.32	452.50	2.77	427.05
Subtotal	623	2,424	72,771	2.41	29.43	3.41	41.70	407.80	420.03	3.00	472.52

(Continued)

Table C-7. Laden Transits, Tons Carried, Toll Revenue and Toll Rates, Current Toll Structure With 50 Percent Increase in Rates, 150,000 DWT Scenario, 2020, by Ship Type, Diversion Status, and Trade Route (1990 US$, except when noted)(continued)

Ship Type, Diversion Status, and Trade Route	Transits	Cargo Tonnage Carried (thousands)	Revenue (thousands) a/	Current Toll Schedule: Toll Per Panama Canal Net Ton	Current Toll Schedule: Toll Per Cargo Ton Carried	New Toll Schedule: Toll Per Panama Canal Net Ton	New Toll Schedule: Toll Per Cargo Ton Carried	Total Transportation Costs per Ton Carried: Via Panama Canal: With Current Toll Structure	Via Panama Canal: With New Toll Structure	Via Panama Canal: Percent Increase	Via Least Costly Alternative Route
Total Non-Diverting	12,766	299,887	782,784	2.41	1.88	3.40	2.66	46.46	47.27	1.76	56.18
Total Diverting	384	12,544	18,668	2.41	1.36	3.42	1.93	21.04	21.62	2.75	21.01

Notes: These calculations do not include all transits and tons carried forecast by the WEFA Group. For some ship-type and trade-route combinations (accounting for a total of 18 transits and 179803 tons), vessel costs were not available for every DWT size interval. As a result, these transits and tons were excluded. In addition, for 2111 transits and 51867350 tons, the cost by way of the Panama Canal without a toll was higher than the least costly alternative route. As a result, these transits and tons were excluded. Percentages may not calculate exactly as shown due to rounding. A fee of $0.40 per Panama Canal net ton has also been included to account for charges such as handling and agency fees incurred when transitting the Canal. The extra fee is only used to determine diversion status by adding it to the cost per ton carried and is not included in the revenue calculations.

a/ Revenue lost from diversions is measured as the revenue generated by the maximum, nondiverting toll rate increase.

Source: Nathan Associates Inc., based on forecasts of traffic and transportation costs provided by The WEFA Group.

CURRENT TOLL STRUCTURE WITH 50 PERCENT INCREASE IN RATES, 200,000-DWT SCENARIO, 2020

Table C-8. Laden Transits, Tons Carried, and Toll Revenue, Current Toll Structure With 50 Percent Increase in Rates, 200,000 DWT Scenario, 2020, by Ship Type

	Transits				Tons Carried(thousands)				Revenue(1990 US$thousands)			
Ship Type	Canal	Diverted	Total	Diverted as a Percent of Total	Canal	Diverted	Total	Diverted as a Percent of Total	Canal	Lost a/	Total	Lost as a Percent of Total
Container-Breakbulk	1,314	10	1,325	0.79	20,365	155	20,519	0.75	55,315	194	55,509	0.35
Dry Bulk Carriers	3,600	396	3,997	9.91	176,815	26,624	203,439	13.09	308,406	37,453	345,859	10.83
Chemical Tankers	992	2	994	0.22	22,841	84	22,925	0.37	40,095	90	40,184	0.22
Full Container Ships	1,239	12	1,251	0.97	24,474	145	24,619	0.59	114,477	474	114,951	0.41
General Cargo Ships	755	3	758	0.42	7,476	22	7,499	0.30	19,695	88	19,783	0.45
Liquid Gas Carriers	172	0	172	0.00	1,947	0	1,947	0.00	8,608	0	8,608	0.00
Passenger Ships	336	0	336	0.00	0	0	0	0.00	9,217	0	9,217	0.00
Refrigerated Ships	2,819	29	2,847	1.00	10,116	151	10,266	1.47	82,477	398	82,875	0.48
Roll-On Roll-Off	211	1	213	0.67	1,731	31	1,762	1.78	12,953	108	13,060	0.82
Tankers	678	51	728	6.98	32,162	2,054	34,216	6.00	59,521	2,460	61,981	3.97
Vehicle Carriers	623	0	623	0.05	2,423	1	2,424	0.04	72,758	14	72,771	0.02
Total	12,738	505	13,243	3.81	300,349	29,267	329,616	8.88	783,521	41,278	824,799	5.00

Notes: These calculations do not include all transits and tons carried forecast by the WEFA Group. For some ship-type and trade-route combinations (accounting for a total of 18 transits and 179803 tons), vessel costs were not available for every DWT size interval. As a result, these transits and tons were excluded. In addition, for 1981 transits and 37003606 tons, the cost by way of the Panama Canal without a toll was higher than the least costly alternative route. As a result, these transits and tons were excluded. A fee of $0.40 per Panama Canal net ton has also been included to account for charges such as handling and agency fees incurred when transitting the Canal. The extra fee is only used to determine diversion status by adding it to cost per ton carried and is not included in the revenue calculations.

a/ Revenue lost from diversions is measured as the revenue generated by the maximum, nondiverting toll rate increase.

Source: Nathan Associates Inc., based on forecasts of traffic and transportation costs provided by The WEFA Group.

Table C-9. Ballast Transits, Tons Carried, and Toll Revenue, Current Toll Structure With 50 Percent Increase in Rates, 200,000 DWT Scenario, 2020, by Ship Type

	Transits				Tons Carried(thousands)				Revenue(1990 US$thousands)			
Ship Type	Canal	Diverted	Total	Diverted as a Percent of Total	Canal	Diverted	Total	Diverted as a Percent of Total	Canal	Lost	Total	Lost as a Percent of Total
Container-Breakbulk	41	0	41	0.35	0	0	0	0.00	1,524	5	1,529	0.35
Dry Bulk Carriers	373	45	418	10.83	0	0	0	0.00	21,224	2,578	23,801	10.83
Chemical Tankers	82	0	82	0.22	0	0	0	0.00	2,632	6	2,638	0.22
Full Container Ships	9	0	9	0.41	0	0	0	0.00	340	1	342	0.41
General Cargo Ships	139	1	140	0.45	0	0	0	0.00	2,286	10	2,297	0.45
Liquid Gas Carriers	128	0	128	0.00	0	0	0	0.00	5,595	0	5,595	0.00
Passenger Ships	11	0	11	0.00	0	0	0	0.00	196	0	196	0.00
Refrigerated Ships	928	4	932	0.48	0	0	0	0.00	20,568	99	20,667	0.48
Roll-On Roll-Off	30	0	30	0.82	0	0	0	0.00	1,187	10	1,197	0.82
Tankers	376	16	392	3.97	0	0	0	0.00	29,948	1,238	31,186	3.97
Vehicle Carriers	383	0	383	0.02	0	0	0	0.00	33,913	7	33,920	0.02
Total	2,499	67	2,566	2.60	0	0	0	0.00	119,414	3,954	123,368	3.21

Note: Diversions of ballast transits are computed by diverting a proportion of ballast transits equal to lost revenue as a percent of total potential revenue for a particular laden ship type. See last column on previous table.

Source: Nathan Associates Inc., based on forecasts of traffic and transportation costs provided by The WEFA Group.

Table C-10. Laden Transits, Tons Carried, Toll Revenue and Toll Rates, Current Toll Structure With 50 Percent Increase in Rates, 200,000 DWT Scenario, 2020, by Ship Type, Diversion Status, and Trade Route (1990 US$, except when noted)

Ship Type, Diversion Status, and Trade Route	Transits	Cargo Tonnage Carried (thousands)	Revenue (thousands) a/	Current Toll Schedule: Toll Per Panama Canal Net Ton	Current Toll Schedule: Toll Per Cargo Ton Carried	New Toll Schedule: Toll Per Panama Canal Net Ton	New Toll Schedule: Toll Per Cargo Ton Carried	Total Transportation Costs per Ton Carried: Via Panama Canal: With Current Toll Structure	Via Panama Canal: With New Toll Structure	Via Panama Canal: Percent Increase	Via Least Costly Alternative Route
Container-Breakbulk											
Non-Diverted Transits											
Africa-C.A.W.C.	3	77	119	2.41	1.85	3.42	2.63	68.56	69.34	1.13	113.26
Africa-Canada W.C.	0	2	6	2.41	1.87	3.42	2.65	88.16	88.94	0.88	100.93
Africa-U.S.W.C.	1	9	30	2.41	1.87	3.42	2.65	89.16	89.94	0.87	102.87
Asia-Canada E.C.	0	4	17	2.41	1.86	3.42	2.64	88.65	89.43	0.88	96.19
Asia-C.A.E.C.	91	837	3,583	2.41	1.87	3.42	2.64	93.07	93.84	0.84	107.91
Asia-S.A.E.C.	27	175	1,032	2.41	1.87	3.42	2.65	100.20	100.98	0.78	102.23
Asia-U.S.E.C.	82	1,031	3,440	2.41	1.86	3.42	2.64	94.52	95.30	0.82	116.80
C.A.W.C.-Africa	3	70	131	2.41	1.87	3.42	2.65	73.06	73.84	1.07	120.56
C.A.W.C.-C.A.E.C.	7	118	296	2.41	1.86	3.42	2.64	49.37	50.15	1.57	87.53
C.A.W.C.-Europe	15	110	587	2.41	1.87	3.42	2.65	63.64	64.42	1.22	91.28
C.A.W.C.-S.A.E.C.	12	6	463	2.41	1.87	3.42	2.65	69.19	69.97	1.13	74.19
C.A.W.C.-U.S.E.C.	3	19	121	2.41	1.87	3.42	2.65	55.40	56.18	1.41	91.85
Canada E.C.-Asia	14	367	728	2.41	1.85	3.42	2.62	90.68	91.45	0.85	93.83
Canada E.C.-C.A.W.C.	1	9	34	2.41	1.87	3.42	2.65	54.09	54.87	1.44	92.29
Canada E.C.-S.A.W.C.	1	10	22	2.41	1.85	3.42	2.63	62.78	63.56	1.23	75.85
Canada E.C.-U.S.W.C.	0	0	0	2.41	1.85	3.42	2.63	69.71	70.49	1.11	105.87
Canada W.C.-Africa	8	179	345	2.41	1.85	3.42	2.63	88.66	89.44	0.87	100.74
Canada W.C.-Europe	63	1,844	3,415	2.41	1.85	3.42	2.62	77.86	78.63	0.99	104.01
Canada W.C.-S.A.E.C.	11	210	406	2.41	1.87	3.42	2.65	71.19	71.97	1.10	108.72
Canada W.C.-U.S.E.C.	8	149	323	2.41	1.85	3.42	2.63	64.85	65.63	1.19	102.00
C.A.E.C.-Asia	9	196	356	2.41	1.87	3.42	2.65	92.37	93.15	0.84	107.04
C.A.E.C.-C.A.W.C.	7	27	271	2.41	1.87	3.42	2.65	50.30	51.08	1.55	90.29
C.A.E.C.-Canada W.C.	2	31	78	2.41	1.87	3.42	2.65	63.73	64.51	1.22	101.08

(Continued)

Table C-10. Laden Transits, Tons Carried, Toll Revenue and Toll Rates, Current Toll Structure With 50 Percent Increase in Rates, 200,000 DWT Scenario, 2020, by Ship Type, Diversion Status, and Trade Route (1990 US$, except when noted)(continued)

Ship Type, Diversion Status, and Trade Route	Transits	Cargo Tonnage Carried (thousands)	Revenue (thousands) a/	Current Toll Schedule: Toll Per Panama Canal Net Ton	Current Toll Schedule: Toll Per Cargo Ton Carried	New Toll Schedule: Toll Per Panama Canal Net Ton	New Toll Schedule: Toll Per Cargo Ton Carried	Total Transportation Costs per Ton Carried: Via Panama Canal: With Current Toll Structure	Via Panama Canal: With New Toll Structure	Via Panama Canal: Percent Increase	Via Least Costly Alternative Route
Container-Breakbulk (continued)											
Non-Diverted Transits (continued)											
C.A.E.C.-Oceania	1	20	47	2.41	1.87	3.42	2.65	90.16	90.94	0.86	107.72
C.A.E.C.-S.A.W.C.	18	144	713	2.41	1.87	3.42	2.65	61.88	62.66	1.26	76.44
C.A.E.C.-U.S.W.C.	4	73	157	2.41	1.86	3.42	2.64	61.48	62.26	1.26	93.18
Europe-C.A.W.C.	22	137	854	2.41	1.87	3.42	2.65	64.73	65.51	1.20	112.66
Europe-Canada W.C.	4	123	249	2.41	1.85	3.42	2.62	80.14	80.91	0.96	103.29
Europe-S.A.W.C.	91	752	3,523	2.41	1.87	3.42	2.65	85.37	86.15	0.91	99.08
Europe-U.S.W.C.	24	732	1,382	2.41	1.85	3.42	2.62	79.27	80.04	0.97	103.43
Oceania-C.A.E.C.	4	42	155	2.41	1.87	3.42	2.65	90.85	91.63	0.86	108.64
S.A.E.C.-C.A.W.C.	9	141	353	2.41	1.87	3.42	2.65	68.77	69.55	1.13	73.69
S.A.E.C.-Canada W.C.	11	152	443	2.41	1.87	3.42	2.65	87.94	88.72	0.89	93.92
S.A.E.C.-U.S.W.C.	38	572	1,510	2.41	1.87	3.42	2.64	74.36	75.13	1.05	77.06
S.A.W.C.-Canada E.C.	1	2	36	2.41	1.87	3.42	2.65	66.27	67.05	1.18	81.06
S.A.W.C.-C.A.E.C.	13	108	502	2.41	1.87	3.42	2.65	62.27	63.05	1.25	77.06
S.A.W.C.-Europe	191	3,350	7,312	2.41	1.87	3.42	2.65	85.09	85.87	0.92	101.37
S.A.W.C.-U.S.E.C.	108	1,055	4,032	2.41	1.87	3.42	2.65	59.46	60.24	1.31	77.72
U.S.E.C.-Asia	172	4,347	8,517	2.41	1.86	3.42	2.63	91.67	92.44	0.84	113.24
U.S.E.C.-C.A.W.C.	10	201	400	2.41	1.86	3.42	2.64	46.17	46.95	1.68	88.94
U.S.E.C.-S.A.W.C.	160	1,595	6,202	2.41	1.87	3.42	2.65	59.27	60.05	1.31	77.44
U.S.E.C.-U.S.W.C.	0	0	1	2.41	1.86	3.42	2.63	56.86	57.63	1.36	94.00
U.S.W.C.-Africa	9	143	532	2.41	1.85	3.42	2.62	82.33	83.10	0.94	98.63
U.S.W.C.-Canada E.C.	2	40	67	2.41	1.85	3.42	2.63	66.85	67.63	1.16	100.00
U.S.W.C.-C.A.E.C.	9	63	335	2.41	1.87	3.42	2.65	63.58	64.36	1.23	96.80
U.S.W.C.-Europe	38	1,010	2,014	2.41	1.85	3.42	2.63	80.25	81.03	0.96	103.86

(Continued)

Table C-10. Laden Transits, Tons Carried, Toll Revenue and Toll Rates, Current Toll Structure With 50 Percent Increase in Rates, 200,000 DWT Scenario, 2020, by Ship Type, Diversion Status, and Trade Route (1990 US$, except when noted)(continued)

Ship Type, Diversion Status, and Trade Route	Transits	Cargo Tonnage Carried (thousands)	Revenue (thousands) a/	Current Toll Schedule: Toll Per Panama Canal Net Ton	Current Toll Schedule: Toll Per Cargo Ton Carried	New Toll Schedule: Toll Per Panama Canal Net Ton	New Toll Schedule: Toll Per Cargo Ton Carried	Total Transportation Costs per Ton Carried: Via Panama Canal: With Current Toll Structure	Via Panama Canal: With New Toll Structure	Via Panama Canal: Percent Increase	Via Least Costly Alternative Route
Container-Breakbulk (continued)											
Non-Diverted Transits (continued)											
U.S.W.C.-S.A.E.C.	4	79	166	2.41	1.87	3.42	2.65	76.06	76.84	1.02	79.06
U.S.W.C.-U.S.E.C.	0	3	12	2.41	1.85	3.42	2.63	58.25	59.03	1.33	96.88
Subtotal	1,314	20,365	55,315	2.41	1.86	3.42	2.64	80.88	81.65	0.96	100.73
Container-Breakbulk											
Diverted Transits											
Canada E.C.-Oceania	1	13	26	2.41	1.87	3.42	2.65	102.74	103.52	0.76	102.93
Oceania-Canada E.C.	2	46	119	2.41	1.85	3.42	2.62	93.85	94.62	0.82	94.00
Oceania-S.A.E.C.	7	95	48	2.41	1.86	3.42	2.64	84.47	85.25	0.92	82.99
Subtotal	10	155	194	2.41	1.86	3.42	2.64	88.83	89.60	0.87	87.97
Subtotal	1,325	20,519	55,509	2.41	1.86	3.42	2.64	80.94	81.71	0.96	100.64
Dry Bulk Carriers											
Non-Diverted Transits											
Africa-C.A.W.C.	15	483	761	2.41	1.35	3.42	1.91	14.85	15.41	3.78	26.10
Africa-Canada W.C.	34	1,354	2,042	2.41	1.31	3.42	1.86	17.28	17.83	3.16	19.77
Africa-S.A.W.C.	5	128	238	2.41	1.35	3.42	1.91	17.80	18.36	3.15	25.10
Africa-U.S.W.C.	7	161	414	2.41	1.30	3.42	1.85	16.19	16.74	3.36	19.23
Asia-Canada E.C.	8	302	564	2.41	1.28	3.42	1.81	17.00	17.53	3.14	18.32
Asia-C.A.E.C.	21	345	1,150	2.41	1.33	3.42	1.89	18.03	18.59	3.08	22.65
Asia-U.S.E.C.	242	6,345	15,356	2.41	1.30	3.42	1.84	16.31	16.85	3.33	22.26
C.A.W.C.-Africa	1	34	68	2.41	1.32	3.42	1.88	14.69	15.25	3.76	25.81
C.A.W.C.-C.A.E.C.	34	961	1,871	2.41	1.33	3.42	1.89	7.81	8.37	7.10	15.77

(Continued)

Table C-10. Laden Transits, Tons Carried, Toll Revenue and Toll Rates, Current Toll Structure With 50 Percent Increase in Rates, 200,000 DWT Scenario, 2020, by Ship Type, Diversion Status, and Trade Route (1990 US$, except when noted)(continued)

Ship Type, Diversion Status, and Trade Route	Transits	Cargo Tonnage Carried (thousands)	Revenue (thousands) a/	Current Toll Schedule: Toll Per Panama Canal Net Ton	Current Toll Schedule: Toll Per Cargo Ton Carried	New Toll Schedule: Toll Per Panama Canal Net Ton	New Toll Schedule: Toll Per Cargo Ton Carried	Total Transportation Costs per Ton Carried, Via Panama Canal: With Current Toll Structure	Total Transportation Costs per Ton Carried, Via Panama Canal: With New Toll Structure	Total Transportation Costs per Ton Carried, Via Panama Canal: Percent Increase	Total Transportation Costs per Ton Carried: Via Least Costly Alternative Route
Dry Bulk Carriers (continued)											
Non-Diverted Transits (continued)											
C.A.W.C.-Europe	16	462	968	2.41	1.31	3.42	1.86	12.08	12.63	4.54	18.24
C.A.W.C.-U.S.E.C.	38	1,292	2,246	2.41	1.32	3.42	1.87	7.83	8.38	7.02	17.55
Canada E.C.-Asia	89	4,219	7,548	2.41	1.25	3.42	1.77	18.32	18.84	2.85	20.40
Canada E.C.-Oceania	3	58	189	2.41	1.33	3.42	1.88	19.62	20.17	2.82	21.08
Canada E.C.-S.A.W.C.	6	163	324	2.41	1.33	3.42	1.88	12.63	13.18	4.38	14.98
Canada W.C.-Africa	96	3,500	6,012	2.41	1.31	3.42	1.85	16.93	17.47	3.22	19.42
Canada W.C.-C.A.E.C.	4	105	229	2.41	1.35	3.42	1.91	12.85	13.41	4.37	21.30
Canada W.C.-Europe	238	11,174	19,289	2.41	1.26	3.42	1.78	16.52	17.04	3.18	21.25
Canada W.C.-U.S.E.C.	64	1,569	3,355	2.41	1.35	3.42	1.91	13.00	13.56	4.32	23.15
C.A.E.C.-Asia	21	639	1,106	2.41	1.35	3.42	1.91	17.70	18.26	3.17	22.30
C.A.E.C.-C.A.W.C.	25	682	1,308	2.41	1.35	3.42	1.91	8.05	8.61	6.98	16.45
C.A.E.C.-Canada W.C.	2	55	101	2.41	1.35	3.42	1.92	13.05	13.62	4.32	21.60
C.A.E.C.-Oceania	1	11	27	2.41	1.35	3.42	1.92	19.95	20.52	2.83	22.60
C.A.E.C.-S.A.W.C.	12	313	652	2.41	1.35	3.42	1.91	11.00	11.56	5.10	13.50
C.A.E.C.-U.S.W.C.	9	236	465	2.41	1.35	3.42	1.91	11.85	12.41	4.74	20.30
Columbia-Asia	2	295	458	2.41	1.17	3.42	1.66	16.65	17.14	2.94	24.67
Europe-C.A.W.C.	30	797	1,599	2.41	1.34	3.42	1.90	12.79	13.35	4.38	21.20
Europe-Canada W.C.	11	286	640	2.41	1.31	3.42	1.86	16.30	16.85	3.35	21.24
Europe-U.S.W.C.	116	3,102	7,029	2.41	1.31	3.42	1.86	15.40	15.95	3.55	20.10
Middle East-S.A.W.C.	1	52	88	2.41	1.27	3.42	1.79	14.27	14.79	3.70	16.00
Oceania-Canada E.C.	22	661	1,154	2.41	1.35	3.42	1.91	19.70	20.26	2.85	21.25
Oceania-C.A.E.C.	6	166	328	2.41	1.35	3.42	1.91	18.80	19.36	2.99	22.25
Oceania-U.S.E.C.	119	6,406	10,844	2.41	1.24	3.42	1.76	15.19	15.71	3.41	16.07

(Continued)

Table C-10. Laden Transits, Tons Carried, Toll Revenue and Toll Rates, Current Toll Structure With 50 Percent Increase in Rates, 200,000 DWT Scenario, 2020, by Ship Type, Diversion Status, and Trade Route (1990 US$, except when noted)(continued)

Ship Type, Diversion Status, and Trade Route	Transits	Cargo Tonnage Carried (thousands)	Revenue (thousands) a/	Current Toll Schedule: Toll Per Panama Canal Net Ton	Current Toll Schedule: Toll Per Cargo Ton Carried	New Toll Schedule: Toll Per Panama Canal Net Ton	New Toll Schedule: Toll Per Cargo Ton Carried	Total Transportation Costs per Ton Carried: Via Panama Canal: With Current Toll Structure	Via Panama Canal: With New Toll Structure	Via Panama Canal: Percent Increase	Via Least Costly Alternative Route
Dry Bulk Carriers (continued)											
Non-Diverted Transits (continued)											
S.A.E.C.-Asia	68	2,384	4,143	2.41	1.31	3.42	1.86	16.60	17.15	3.29	18.40
S.A.W.C.-Africa	3	157	235	2.41	1.28	3.42	1.81	13.65	14.18	3.91	20.54
S.A.W.C.-Canada E.C.	0	10	17	2.41	1.35	3.42	1.91	13.00	13.56	4.32	15.50
S.A.W.C.-C.A.E.C.	7	144	390	2.41	1.35	3.42	1.91	11.00	11.56	5.10	13.50
S.A.W.C.-U.S.E.C.	54	1,732	2,888	2.41	1.34	3.42	1.90	10.81	11.37	5.16	15.18
U.S.E.C.-Asia	1,601	104,329	174,081	2.41	1.22	3.42	1.73	17.29	17.80	2.94	22.99
U.S.E.C.-C.A.W.C.	207	6,232	11,055	2.41	1.34	3.42	1.90	8.12	8.68	6.88	18.25
U.S.E.C.-Canada W.C.	1	30	49	2.41	1.32	3.42	1.87	12.36	12.91	4.44	21.71
U.S.E.C.-Oceania	21	646	1,177	2.41	1.33	3.42	1.88	18.34	18.89	3.02	20.47
U.S.E.C.-S.A.W.C.	50	1,456	2,655	2.41	1.34	3.42	1.90	10.90	11.46	5.13	15.31
U.S.E.C.-U.S.W.C.	1	0	36	2.41	1.35	3.42	1.91	12.00	12.56	4.68	21.30
U.S.W.C.-Africa	121	4,599	8,498	2.41	1.28	3.42	1.82	15.62	16.16	3.42	18.62
U.S.W.C.-Canada E.C.	7	217	382	2.41	1.33	3.42	1.88	13.35	13.90	4.15	21.26
U.S.W.C.-C.A.E.C.	2	48	93	2.41	1.35	3.42	1.91	11.85	12.41	4.74	20.30
U.S.W.C.-Europe	140	6,524	11,115	2.41	1.26	3.42	1.79	13.94	14.47	3.77	17.96
U.S.W.C.-U.S.E.C.	7	183	440	2.41	1.31	3.42	1.86	12.05	12.60	4.54	21.48
Venezuela-Asia	12	1,768	2,728	2.41	1.17	3.42	1.65	16.47	16.95	2.96	19.90
Subtotal	3,600	176,815	308,406	2.41	1.25	3.42	1.77	16.22	16.74	3.21	21.51
Dry Bulk Carriers											
Diverted Transits											
Asia-S.A.E.C.	6	152	179	2.41	1.35	3.42	1.91	21.65	22.21	2.59	21.30
Brazil-Asia	109	14,866	20,103	2.41	1.17	3.42	1.66	18.03	18.52	2.71	18.14

(Continued)

Table C-10. Laden Transits, Tons Carried, Toll Revenue and Toll Rates, Current Toll Structure With 50 Percent Increase in Rates, 200,000 DWT Scenario, 2020, by Ship Type, Diversion Status, and Trade Route (1990 US$, except when noted)(continued)

Ship Type, Diversion Status, and Trade Route	Transits	Cargo Tonnage Carried (thousands)	Revenue (thousands) a/	Current Toll Schedule: Toll Per Panama Canal Net Ton	Current Toll Schedule: Toll Per Cargo Ton Carried	New Toll Schedule: Toll Per Panama Canal Net Ton	New Toll Schedule: Toll Per Cargo Ton Carried	Total Transportation Costs per Ton Carried: Via Panama Canal: With Current Toll Structure	Via Panama Canal: With New Toll Structure	Via Panama Canal: Percent Increase	Via Least Costly Alternative Route
Dry Bulk Carriers (continued)											
Diverted Transits (continued)											
C.A.W.C.-S.A.E.C.	10	136	311	2.41	1.35	3.42	1.91	12.00	12.56	4.68	11.65
Canada W.C.-S.A.E.C.	23	1,374	2,665	2.41	1.22	3.42	1.73	10.51	11.02	4.84	10.92
Europe-S.A.W.C.	12	298	365	2.41	1.35	3.42	1.91	15.85	16.41	3.54	15.50
S.A.E.C.-C.A.W.C.	8	247	247	2.41	1.35	3.42	1.91	12.00	12.56	4.68	11.65
S.A.E.C.-Canada W.C.	3	66	160	2.41	1.35	3.42	1.91	16.80	17.36	3.34	17.35
S.A.E.C.-U.S.W.C.	28	1,128	1,383	2.41	1.26	3.42	1.79	12.93	13.46	4.07	12.67
S.A.W.C.-Europe	187	8,078	11,714	2.41	1.27	3.42	1.80	15.87	16.40	3.35	15.96
U.S.W.C.-S.A.E.C.	11	279	326	2.41	1.35	3.42	1.91	15.80	16.36	3.55	15.45
Subtotal	396	26,624	37,453	2.41	1.22	3.42	1.73	16.66	17.16	3.05	16.74
Subtotal	3,997	203,439	345,859	2.41	1.25	3.42	1.77	16.28	16.80	3.19	20.88
Chemical Tankers											
Non-Diverted Transits											
Africa-S.A.W.C.	1	32	52	2.41	1.34	3.42	1.90	42.34	42.90	1.32	58.00
Asia-C.A.E.C.	3	34	68	2.41	1.34	3.42	1.90	52.46	53.02	1.06	69.37
Asia-S.A.E.C.	3	16	134	2.41	1.34	3.42	1.90	49.34	49.90	1.13	51.00
Asia-U.S.E.C.	32	537	1,116	2.41	1.34	3.42	1.90	44.74	45.30	1.25	60.33
C.A.W.C.-C.A.E.C.	23	139	263	2.41	1.34	3.42	1.90	36.34	36.90	1.54	77.00
C.A.W.C.-Europe	8	126	209	2.41	1.34	3.42	1.90	37.28	37.84	1.50	55.50
C.A.W.C.-U.S.E.C.	38	470	858	2.41	1.34	3.42	1.90	28.06	28.62	1.99	58.14
Canada W.C.-Europe	4	87	168	2.41	1.34	3.42	1.90	41.34	41.90	1.35	55.00
Canada W.C.-U.S.E.C.	32	744	1,574	2.41	1.34	3.42	1.90	31.74	32.30	1.76	52.80
C.A.E.C.-Asia	9	248	412	2.41	1.34	3.42	1.90	41.66	42.22	1.34	54.44

(Continued)

Table C-10. Laden Transits, Tons Carried, Toll Revenue and Toll Rates, Current Toll Structure With 50 Percent Increase in Rates, 200,000 DWT Scenario, 2020, by Ship Type, Diversion Status, and Trade Route (1990 US$, except when noted)(continued)

Ship Type, Diversion Status, and Trade Route	Transits	Cargo Tonnage Carried (thousands)	Revenue (thousands) a/	Current Toll Schedule: Toll Per Panama Canal Net Ton	Current Toll Schedule: Toll Per Cargo Ton Carried	New Toll Schedule: Toll Per Panama Canal Net Ton	New Toll Schedule: Toll Per Cargo Ton Carried	Total Transportation Costs per Ton Carried: Via Panama Canal: With Current Toll Structure	Via Panama Canal: With New Toll Structure	Via Panama Canal: Percent Increase	Via Least Costly Alternative Route
Chemical Tankers (continued)											
Non-Diverted Transits (continued)											
C.A.E.C.-C.A.W.C.	9	207	432	2.41	1.34	3.42	1.90	21.34	21.90	2.62	41.00
C.A.E.C.-S.A.W.C.	11	186	358	2.41	1.34	3.42	1.90	31.03	31.59	1.80	40.27
C.A.E.C.-U.S.W.C.	1	10	17	2.41	1.34	3.42	1.90	51.34	51.90	1.09	90.00
Europe-C.A.W.C.	6	30	71	2.41	1.34	3.42	1.90	56.34	56.90	0.99	86.00
Europe-S.A.W.C.	6	60	103	2.41	1.34	3.42	1.90	55.90	56.46	1.00	59.35
Europe-U.S.W.C.	9	182	317	2.41	1.34	3.42	1.90	42.34	42.90	1.32	56.41
Oceania-U.S.E.C.	18	455	971	2.41	1.34	3.42	1.90	40.54	41.10	1.38	45.36
S.A.E.C.-C.A.W.C.	8	61	115	2.41	1.34	3.42	1.90	46.87	47.43	1.19	51.82
S.A.W.C.-C.A.E.C.	22	79	377	2.41	1.34	3.42	1.90	42.38	42.94	1.32	56.49
S.A.W.C.-Europe	8	92	160	2.41	1.34	3.42	1.90	51.64	52.20	1.08	54.68
S.A.W.C.-U.S.E.C.	7	47	146	2.41	1.34	3.42	1.90	38.35	38.91	1.46	53.28
U.S.E.C.-Asia	565	15,828	25,713	2.41	1.34	3.42	1.90	42.38	42.94	1.32	56.99
U.S.E.C.-C.A.W.C.	18	146	283	2.41	1.34	3.42	1.90	33.25	33.81	1.68	70.02
U.S.E.C.-Canada W.C.	5	36	62	2.41	1.34	3.42	1.90	55.76	56.32	1.00	96.33
U.S.E.C.-Oceania	17	409	699	2.41	1.34	3.42	1.90	44.76	45.32	1.25	50.35
U.S.E.C.-S.A.W.C.	45	434	834	2.41	1.34	3.42	1.90	39.65	40.21	1.41	55.15
U.S.E.C.-U.S.W.C.	50	1,635	3,099	2.41	1.35	3.42	1.91	25.70	26.26	2.19	43.31
U.S.W.C.-C.A.E.C.	2	38	95	2.41	1.34	3.42	1.90	29.34	29.90	1.90	48.00
U.S.W.C.-Europe	16	215	432	2.41	1.34	3.42	1.90	45.63	46.19	1.22	61.31
U.S.W.C.-S.A.E.C.	0	3	7	2.41	1.34	3.42	1.90	37.34	37.90	1.50	38.00
U.S.W.C.-U.S.E.C.	15	256	949	2.41	1.35	3.42	1.91	25.80	26.36	2.18	43.41
Subtotal	992	22,841	40,095	2.41	1.34	3.42	1.90	40.10	40.66	1.39	55.44
Chemical Tankers											
Diverted Transits											
S.A.E.C.-U.S.W.C.	2	84	90	2.41	1.35	3.42	1.91	30.35	30.91	1.86	30.00
Subtotal	2	84	90	2.41	1.35	3.41	1.91	30.35	30.91	1.86	30.00
Subtotal	994	22,925	40,184	2.41	1.34	3.42	1.90	40.06	40.62	1.40	55.35

(Continued)

Table C-10. Laden Transits, Tons Carried, Toll Revenue and Toll Rates, Current Toll Structure With 50 Percent Increase in Rates, 200,000 DWT Scenario, 2020, by Ship Type, Diversion Status, and Trade Route (1990 US$, except when noted)(continued)

Ship Type, Diversion Status, and Trade Route	Transits	Cargo Tonnage Carried (thousands)	Revenue (thousands) a/	Current Toll Schedule: Toll Per Panama Canal Net Ton	Current Toll Schedule: Toll Per Cargo Ton Carried	New Toll Schedule: Toll Per Panama Canal Net Ton	New Toll Schedule: Toll Per Cargo Ton Carried	Total Transportation Costs per Ton Carried, Via Panama Canal: With Current Toll Structure	Total Transportation Costs per Ton Carried, Via Panama Canal: With New Toll Structure	Total Transportation Costs per Ton Carried, Via Panama Canal: Percent Increase	Total Transportation Costs per Ton Carried: Via Least Costly Alternative Route
Full Container Ships (continued)											
Non-Diverted Transits (continued)											
Africa-U.S.W.C.	0	2	6	2.41	4.48	3.42	6.35	246.46	248.33	0.76	281.72
Asia-Canada E.C.	35	682	3,120	2.41	4.65	3.42	6.59	210.85	212.79	0.92	223.41
Asia-S.A.E.C.	2	7	65	2.41	4.48	3.42	6.35	274.32	276.19	0.68	278.74
Asia-U.S.E.C. (low inv. cost)	206	4,485	27,864	2.41	4.76	3.42	6.75	238.55	240.54	0.83	251.75
C.A.W.C.-C.A.E.C.	1	5	35	2.41	4.38	3.42	6.21	129.97	131.80	1.41	209.77
C.A.W.C.-Europe	2	22	111	2.41	4.36	3.42	6.18	153.30	155.12	1.19	206.86
C.A.W.C.-S.A.E.C.	0	4	17	2.41	4.38	3.42	6.20	163.77	165.59	1.11	170.68
C.A.W.C.-U.S.E.C.	0	3	12	2.41	4.48	3.42	6.35	157.98	159.85	1.18	250.90
Canada E.C.-Asia	32	561	2,123	2.41	4.50	3.42	6.38	230.54	232.42	0.81	235.78
Canada E.C.-U.S.W.C.	5	136	566	2.41	4.73	3.42	6.71	160.73	162.71	1.23	225.00
Canada W.C.-Europe	32	491	1,739	2.41	4.46	3.42	6.32	212.22	214.08	0.88	275.57
C.A.E.C.-Asia	8	99	512	2.41	4.41	3.42	6.25	217.31	219.15	0.85	245.58
C.A.E.C.-C.A.W.C.	1	3	17	2.41	4.51	3.42	6.40	184.21	186.10	1.02	324.09
C.A.E.C.-Oceania	0	3	11	2.41	4.48	3.42	6.35	248.46	250.33	0.75	293.66
C.A.E.C.-S.A.W.C.	6	6	88	2.41	4.64	3.42	6.57	187.15	189.08	1.03	226.38
C.A.E.C.-U.S.W.C.	1	12	54	2.41	4.38	3.42	6.21	154.50	156.33	1.18	220.28
Europe-C.A.W.C.	0	1	5	2.41	4.36	3.42	6.18	153.30	155.12	1.19	244.84
Europe-Canada W.C.	24	311	1,184	2.41	4.43	3.42	6.28	224.73	226.58	0.82	283.75
Europe-S.A.W.C.	51	731	3,524	2.41	4.36	3.42	6.18	194.28	196.10	0.94	223.86
Europe-U.S.W.C.	144	2,855	12,050	2.41	4.62	3.42	6.55	209.75	211.68	0.92	217.16
Middle East-U.S.W.C.	8	116	425	2.41	4.42	3.42	6.26	221.09	222.93	0.83	248.07
Oceania-C.A.E.C.	2	24	76	2.41	4.48	3.42	6.35	248.46	250.33	0.75	293.66
S.A.E.C.-C.A.W.C.	0	4	16	2.41	4.48	3.42	6.35	193.78	195.65	0.96	205.16

(Continued)

Table C-10. Laden Transits, Tons Carried, Toll Revenue and Toll Rates, Current Toll Structure With 50 Percent Increase in Rates, 200,000 DWT Scenario, 2020, by Ship Type, Diversion Status, and Trade Route (1990 US$, except when noted)(continued)

Ship Type, Diversion Status, and Trade Route	Transits	Cargo Tonnage Carried (thousands)	Revenue (thousands) a/	Current Toll Schedule: Toll Per Panama Canal Net Ton	Current Toll Schedule: Toll Per Cargo Ton Carried	New Toll Schedule: Toll Per Panama Canal Net Ton	New Toll Schedule: Toll Per Cargo Ton Carried	Total Transportation Costs per Ton Carried: Via Panama Canal: With Current Toll Structure	Via Panama Canal: With New Toll Structure	Via Panama Canal: Percent Increase	Via Least Costly Alternative Route
Full Container Ships (continued)											
Non-Diverted Transits (continued)											
S.A.E.C.-U.S.W.C.	1	9	31	2.41	4.48	3.42	6.35	179.84	181.71	1.04	217.10
S.A.W.C.-C.A.E.C.	0	1	5	2.41	4.50	3.42	6.38	191.66	193.54	0.98	232.72
S.A.W.C.-Europe	103	1,966	7,202	2.41	4.36	3.42	6.18	194.27	196.09	0.94	223.85
S.A.W.C.-U.S.E.C.	46	483	1,751	2.41	4.48	3.42	6.35	170.90	172.77	1.09	219.08
U.S.E.C.-Asia (low inv. cost)	243	7,139	30,956	2.41	4.74	3.42	6.71	239.88	241.85	0.82	252.86
U.S.E.C.-C.A.W.C.	6	55	241	2.41	4.48	3.42	6.35	136.10	137.97	1.37	250.90
U.S.E.C.-S.A.W.C.	57	487	2,168	2.41	4.48	3.42	6.35	170.90	172.77	1.09	219.08
U.S.E.C.-U.S.W.C.	1	26	115	2.41	4.71	3.42	6.67	144.82	146.78	1.36	220.39
U.S.W.C.-Africa	0	0	0	2.41	5.04	3.42	7.15	197.04	199.15	1.07	228.00
U.S.W.C.-Canada E.C.	0	5	24	2.41	4.51	3.42	6.39	163.61	165.49	1.15	231.49
U.S.W.C.-C.A.E.C.	7	42	223	2.41	4.46	3.42	6.32	159.01	160.87	1.17	227.84
U.S.W.C.-Europe	194	3,428	16,553	2.41	4.64	3.42	6.58	212.59	214.53	0.91	219.05
U.S.W.C.-Middle East	8	103	439	2.41	4.42	3.42	6.27	221.46	223.31	0.83	229.44
U.S.W.C.-U.S.E.C.	13	168	1,152	2.41	4.59	3.42	6.51	145.28	147.20	1.32	222.40
Subtotal	1,239	24,474	114,477	2.41	4.65	3.42	6.59	220.74	222.67	0.88	238.21
Full Container Ships											
Diverted Transits											
Canada E.C.-Oceania	12	145	474	2.41	4.43	3.42	6.28	259.72	261.57	0.71	259.79
Subtotal	12	145	474	2.41	4.43	3.42	6.28	259.72	261.57	0.71	259.79
Subtotal	1,251	24,619	114,951	2.41	4.65	3.42	6.58	220.97	222.90	0.88	238.34
General Cargo Ships											
Non-Diverted Transits											
Africa-C.A.W.C.	2	23	57	2.41	1.39	3.42	1.97	28.19	28.77	2.05	50.55

(Continued)

Table C-10. Laden Transits, Tons Carried, Toll Revenue and Toll Rates, Current Toll Structure With 50 Percent Increase in Rates, 200,000 DWT Scenario, 2020, by Ship Type, Diversion Status, and Trade Route (1990 US$, except when noted)(continued)

Ship Type, Diversion Status, and Trade Route	Transits	Cargo Tonnage Carried (thousands)	Revenue (thousands) a/	Current Toll Schedule: Toll Per Panama Canal Net Ton	Current Toll Schedule: Toll Per Cargo Ton Carried	New Toll Schedule: Toll Per Panama Canal Net Ton	New Toll Schedule: Toll Per Cargo Ton Carried	Total Transportation Costs per Ton Carried: Via Panama Canal: With Current Toll Structure	Via Panama Canal: With New Toll Structure	Via Panama Canal: Percent Increase	Via Least Costly Alternative Route
General Cargo Ships (continued)											
Non-Diverted Transits (continued)											
Africa-S.A.W.C.	2	35	59	2.41	1.39	3.42	1.97	34.14	34.72	1.70	49.55
Asia-Canada E.C.	0	2	3	2.41	1.39	3.42	1.97	38.09	38.67	1.52	41.65
Asia-C.A.E.C.	71	844	2,486	2.41	1.39	3.42	1.97	34.09	34.67	1.70	44.60
Asia-U.S.E.C.	26	339	930	2.41	1.39	3.42	1.97	34.56	35.14	1.67	47.75
C.A.W.C.-Africa	5	94	171	2.41	1.39	3.42	1.97	28.19	28.77	2.05	50.55
C.A.W.C.-C.A.E.C.	25	109	290	2.41	1.46	3.42	2.07	10.10	10.71	6.03	52.77
C.A.W.C.-Europe	21	120	470	2.41	1.41	3.42	1.99	26.48	27.06	2.22	46.59
C.A.W.C.-S.A.E.C.	8	51	172	2.41	1.41	3.42	2.00	25.50	26.09	2.30	29.62
C.A.W.C.-U.S.E.C.	10	51	121	2.41	1.45	3.42	2.06	11.45	12.06	5.29	65.61
Canada E.C.-Asia	5	12	163	2.41	1.39	3.42	1.97	38.09	38.67	1.52	41.65
Canada E.C.-C.A.W.C.	1	15	31	2.41	1.39	3.42	1.97	19.29	19.87	3.00	37.65
Canada E.C.-S.A.W.C.	6	53	206	2.41	1.39	3.42	1.97	25.19	25.77	2.30	31.75
Canada W.C.-C.A.E.C.	6	45	115	2.41	1.42	3.42	2.01	28.50	29.09	2.08	62.09
Canada W.C.-Europe	1	12	20	2.41	1.39	3.42	1.97	34.09	34.67	1.70	47.55
Canada W.C.-S.A.E.C.	6	58	130	2.41	1.41	3.42	2.00	33.28	33.87	1.77	62.32
C.A.E.C.-Asia	22	415	750	2.41	1.39	3.42	1.97	34.09	34.67	1.70	44.60
C.A.E.C.-C.A.W.C.	25	89	295	2.41	1.45	3.42	2.06	9.12	9.73	6.65	56.51
C.A.E.C.-Oceania	0	7	16	2.41	1.39	3.42	1.97	37.09	37.67	1.56	44.60
C.A.E.C.-S.A.W.C.	24	218	533	2.41	1.41	3.42	1.99	20.63	21.21	2.84	31.22
C.A.E.C.-U.S.W.C.	9	28	68	2.41	1.51	3.42	2.14	30.51	31.14	2.07	102.00
Europe-C.A.W.C.	44	300	1,157	2.41	1.40	3.42	1.98	25.47	26.05	2.29	53.48
Europe-Canada W.C.	2	9	20	2.41	1.50	3.42	2.13	71.00	71.63	0.88	119.28
Europe-S.A.W.C.	39	385	1,265	2.41	1.39	3.42	1.97	30.83	31.41	1.88	32.64

(Continued)

Table C-10. Laden Transits, Tons Carried, Toll Revenue and Toll Rates, Current Toll Structure With 50 Percent Increase in Rates, 200,000 DWT Scenario, 2020, by Ship Type, Diversion Status, and Trade Route (1990 US$, except when noted)(continued)

Ship Type, Diversion Status, and Trade Route	Transits	Cargo Tonnage Carried (thousands)	Revenue (thousands) a/	Current Toll Schedule: Toll Per Panama Canal Net Ton	Current Toll Schedule: Toll Per Cargo Ton Carried	New Toll Schedule: Toll Per Panama Canal Net Ton	New Toll Schedule: Toll Per Cargo Ton Carried	Total Transportation Costs per Ton Carried: Via Panama Canal: With Current Toll Structure	Via Panama Canal: With New Toll Structure	Via Panama Canal: Percent Increase	Via Least Costly Alternative Route
General Cargo Ships (continued)											
Non-Diverted Transits (continued)											
Europe-U.S.W.C.	2	11	33	2.41	1.44	3.42	2.05	55.78	56.39	1.08	93.53
Middle East-S.A.W.C.	4	2	35	2.41	1.50	3.42	2.13	64.45	65.08	0.97	89.22
Middle East-U.S.W.C.	2	4	54	2.41	1.39	3.42	1.97	37.09	37.67	1.56	42.65
Oceania-C.A.E.C.	0	3	16	2.41	1.39	3.42	1.97	36.09	36.67	1.60	44.60
Oceania-U.S.E.C.	1	7	22	2.41	1.43	3.42	2.03	51.18	51.78	1.17	61.38
S.A.E.C.-C.A.W.C.	7	148	250	2.41	1.39	3.42	1.97	23.19	23.77	2.50	24.80
S.A.E.C.-Canada W.C.	0	1	4	2.41	1.39	3.42	1.97	32.14	32.72	1.80	34.70
S.A.E.C.-U.S.W.C.	8	36	227	2.41	1.40	3.42	1.98	34.56	35.14	1.68	36.22
S.A.W.C.-Africa	4	81	143	2.41	1.39	3.42	1.97	31.14	31.72	1.86	47.60
S.A.W.C.-Canada E.C.	0	6	12	2.41	1.39	3.42	1.97	25.19	25.77	2.30	31.75
S.A.W.C.-C.A.E.C.	41	177	530	2.41	1.45	3.42	2.05	21.94	22.54	2.75	42.95
S.A.W.C.-Europe	98	1,601	3,400	2.41	1.39	3.42	1.97	30.14	30.72	1.92	31.75
S.A.W.C.-Middle East	2	23	54	2.41	1.39	3.42	1.97	32.14	32.72	1.80	37.70
S.A.W.C.-U.S.E.C.	27	205	643	2.41	1.40	3.42	1.99	23.26	23.85	2.52	36.08
U.S.E.C.-Asia	48	782	1,687	2.41	1.39	3.42	1.97	34.72	35.30	1.67	47.99
U.S.E.C.-C.A.W.C.	48	352	750	2.41	1.43	3.42	2.03	13.42	14.02	4.44	53.82
U.S.E.C.-Oceania	3	46	106	2.41	1.39	3.42	1.97	37.09	37.67	1.56	41.65
U.S.E.C.-S.A.W.C.	86	605	1,970	2.41	1.41	3.42	1.99	23.39	23.97	2.51	36.70
U.S.E.C.-U.S.W.C.	1	0	6	2.41	1.50	3.42	2.13	32.50	33.13	1.93	107.05
U.S.W.C.-Africa	2	25	78	2.41	1.39	3.42	1.97	34.09	34.67	1.70	42.60
U.S.W.C.-C.A.E.C.	1	0	12	2.41	1.50	3.42	2.13	29.71	30.34	2.11	96.69
U.S.W.C.-Europe	3	31	57	2.41	1.42	3.42	2.02	40.73	41.33	1.46	61.78
U.S.W.C.-S.A.E.C.	6	15	79	2.41	1.45	3.42	2.05	47.38	47.98	1.28	52.07
Subtotal	755	7,476	19,695	2.41	1.40	3.42	1.98	28.70	29.29	2.03	41.85

(Continued)

Table C-10. Laden Transits, Tons Carried, Toll Revenue and Toll Rates, Current Toll Structure With 50 Percent Increase in Rates, 200,000 DWT Scenario, 2020, by Ship Type, Diversion Status, and Trade Route (1990 US$, except when noted)(continued)

Ship Type, Diversion Status, and Trade Route	Transits	Cargo Tonnage Carried (thousands)	Revenue (thousands) a/	Current Toll Schedule: Toll Per Panama Canal Net Ton	Current Toll Schedule: Toll Per Cargo Ton Carried	New Toll Schedule: Toll Per Panama Canal Net Ton	New Toll Schedule: Toll Per Cargo Ton Carried	Total Transportation Costs per Ton Carried, Via Panama Canal: With Current Toll Structure	Total Transportation Costs per Ton Carried, Via Panama Canal: With New Toll Structure	Total Transportation Costs per Ton Carried, Via Panama Canal: Percent Increase	Total Transportation Costs per Ton Carried: Via Least Costly Alternative Route
General Cargo Ships (continued)											
Diverted Transits (continued)											
Asia-S.A.E.C.	2	13	83	2.41	1.39	3.42	1.97	41.09	41.67	1.41	41.65
Canada E.C.-Oceania	0	4	4	2.41	1.39	3.42	1.97	43.04	43.62	1.35	42.65
Canada W.C.-Middle East	1	6	1	2.41	1.39	3.42	1.97	39.04	39.62	1.48	37.70
Subtotal	3	22	88	2.41	1.39	3.41	1.97	40.86	41.44	1.42	40.76
Subtotal	758	7,499	19,783	2.41	1.40	3.41	1.98	28.74	29.32	2.03	41.84
Liquid Gas Carriers											
Non-Diverted Transits											
C.A.W.C.-C.A.E.C.	4	18	68	2.41	7.30	3.42	10.35	49.30	52.35	6.18	170.00
C.A.E.C.-Asia	15	82	441	2.41	4.67	3.42	6.62	107.52	109.47	1.81	152.78
C.A.E.C.-C.A.W.C.	96	1,270	5,504	2.41	3.79	3.42	5.37	23.91	25.49	6.61	71.88
C.A.E.C.-S.A.W.C.	8	119	470	2.41	3.83	3.42	5.42	40.83	42.42	3.91	61.00
C.A.E.C.-U.S.W.C.	1	12	45	2.41	3.83	3.42	5.42	45.83	47.42	3.48	95.00
Europe-C.A.W.C.	2	5	25	2.41	7.30	3.42	10.35	110.30	113.35	2.76	197.00
Europe-S.A.W.C.	0	1	2	2.41	3.82	3.42	5.42	67.82	69.42	2.35	72.00
Oceania-U.S.E.C.	6	91	429	2.41	3.62	3.42	5.13	66.11	67.62	2.28	75.48
S.A.E.C.-Asia	2	27	104	2.41	3.83	3.42	5.42	78.83	80.42	2.02	94.00
S.A.E.C.-C.A.W.C.	11	31	182	2.41	7.30	3.42	10.35	99.30	102.35	3.07	112.00
U.S.E.C.-Asia	23	273	1,243	2.41	3.86	3.42	5.47	82.65	84.26	1.95	121.83
U.S.E.C.-C.A.W.C.	1	2	12	2.41	7.30	3.42	10.35	57.30	60.35	5.31	191.00
U.S.E.C.-Oceania	1	11	50	2.41	3.83	3.42	5.42	86.83	88.42	1.84	100.00
U.S.E.C.-S.A.W.C.	2	6	32	2.41	7.30	3.42	10.35	94.30	97.35	3.23	153.00
Subtotal	172	1,947	8,608	2.41	3.90	3.41	5.53	41.82	43.47	3.93	84.66

(Continued)

Table C-10. Laden Transits, Tons Carried, Toll Revenue and Toll Rates, Current Toll Structure With 50 Percent Increase in Rates, 200,000 DWT Scenario, 2020, by Ship Type, Diversion Status, and Trade Route (1990 US$, except when noted)(continued)

Ship Type, Diversion Status, and Trade Route	Transits	Cargo Tonnage Carried (thousands)	Revenue (thousands) a/	Current Toll Schedule: Toll Per Panama Canal Net Ton	Current Toll Schedule: Toll Per Cargo Ton Carried	New Toll Schedule: Toll Per Panama Canal Net Ton	New Toll Schedule: Toll Per Cargo Ton Carried	Total Transportation Costs per Ton Carried: Via Panama Canal: With Current Toll Structure	Via Panama Canal: With New Toll Structure	Via Panama Canal: Percent Increase	Via Least Costly Alternative Route
Passenger Ships (continued)											
Non-Diverted Transits (continued)											
North-Bound	153	0	3,376	2.41	0.00	3.42	0.00	0.00	0.00	0.00	0.00
South-Bound	183	0	5,841	2.41	0.00	3.42	0.00	0.00	0.00	0.00	0.00
Subtotal	336	0	9,217	2.41	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Refrigerated Ships											
Non-Diverted Transits											
Africa-C.A.W.C.	0	0	4	2.41	4.27	3.42	6.06	113.87	115.66	1.57	208.00
Africa-S.A.W.C.	9	9	250	2.41	4.15	3.42	5.89	133.93	135.67	1.29	196.56
Asia-C.A.E.C.	20	71	609	2.41	3.97	3.42	5.62	128.09	129.74	1.29	173.29
Asia-S.A.E.C.	5	3	129	2.41	4.28	3.42	6.06	168.08	169.86	1.06	171.60
Asia-U.S.E.C.	0	0	11	2.41	4.28	3.42	6.06	140.48	142.26	1.27	198.20
C.A.W.C.-Africa	1	3	25	2.41	4.28	3.42	6.06	113.88	115.66	1.57	208.00
C.A.W.C.-Canada E.C.	0	2	9	2.41	4.28	3.42	6.06	76.48	78.26	2.33	152.00
C.A.W.C.-C.A.E.C.	20	132	655	2.41	3.88	3.42	5.49	50.94	52.55	3.17	124.12
C.A.W.C.-Europe	219	987	6,785	2.41	3.94	3.42	5.58	89.55	91.19	1.83	143.20
C.A.W.C.-S.A.E.C.	1	4	23	2.41	4.28	3.42	6.06	89.28	91.06	2.00	96.80
C.A.W.C.-U.S.E.C.	1	2	23	2.41	4.28	3.42	6.06	61.68	63.46	2.89	149.80
Canada E.C.-Asia	12	63	302	2.41	4.28	3.42	6.06	155.08	156.86	1.15	169.60
Canada E.C.-C.A.W.C.	5	10	141	2.41	3.95	3.42	5.60	70.22	71.87	2.35	142.12
Canada W.C.-Europe	3	28	93	2.41	4.12	3.42	5.83	131.88	133.59	1.30	187.18
C.A.E.C.-Asia	10	32	276	2.41	4.12	3.42	5.84	135.20	136.92	1.27	182.25
C.A.E.C.-C.A.W.C.	23	5	751	2.41	3.87	3.42	5.49	50.87	52.49	3.18	124.00
C.A.E.C.-S.A.W.C.	54	42	1,766	2.41	3.87	3.42	5.49	71.87	73.49	2.25	101.00

(Continued)

Table C-10. Laden Transits, Tons Carried, Toll Revenue and Toll Rates, Current Toll Structure With 50 Percent Increase in Rates, 200,000 DWT Scenario, 2020, by Ship Type, Diversion Status, and Trade Route (1990 US$, except when noted)(continued)

Ship Type, Diversion Status, and Trade Route	Transits	Cargo Tonnage Carried (thousands)	Revenue (thousands) a/	Current Toll Schedule: Toll Per Panama Canal Net Ton	Current Toll Schedule: Toll Per Cargo Ton Carried	New Toll Schedule: Toll Per Panama Canal Net Ton	New Toll Schedule: Toll Per Cargo Ton Carried	Total Transportation Costs per Ton Carried: Via Panama Canal: With Current Toll Structure	Via Panama Canal: With New Toll Structure	Via Panama Canal: Percent Increase	Via Least Costly Alternative Route
Refrigerated Ships (continued)											
Non-Diverted Transits (continued)											
Europe-C.A.W.C.	160	13	5,194	2.41	3.89	3.42	5.51	89.41	91.03	1.81	177.49
Europe-Canada W.C.	1	1	21	2.41	4.28	3.42	6.06	136.48	138.26	1.31	189.40
Europe-S.A.W.C.	169	145	4,923	2.41	4.02	3.42	5.70	116.06	117.74	1.45	121.88
Europe-U.S.W.C.	14	10	341	2.41	4.28	3.42	6.06	126.88	128.66	1.41	178.40
Middle East-S.A.W.C.	2	3	42	2.41	4.28	3.42	6.06	129.48	131.26	1.38	153.80
Oceania-C.A.E.C.	3	18	70	2.41	4.28	3.42	6.06	147.28	149.06	1.21	182.40
Oceania-U.S.E.C.	33	116	825	2.41	4.24	3.42	6.01	148.70	150.47	1.19	169.13
S.A.E.C.-Asia	11	50	278	2.41	4.28	3.42	6.06	137.48	139.26	1.30	159.80
S.A.W.C.-Africa	14	50	377	2.41	4.15	3.42	5.88	123.33	125.06	1.40	191.96
S.A.W.C.-C.A.E.C.	21	111	634	2.41	3.99	3.42	5.66	75.06	76.73	2.22	104.68
S.A.W.C.-Europe	928	4,670	26,535	2.41	4.05	3.42	5.74	115.41	117.10	1.46	121.08
S.A.W.C.-Middle East	5	17	131	2.41	4.28	3.42	6.06	129.48	131.26	1.38	153.80
S.A.W.C.-U.S.E.C.	607	2,226	17,750	2.41	4.02	3.42	5.69	80.58	82.25	2.08	117.32
U.S.E.C.-Asia	32	114	927	2.41	4.01	3.42	5.68	134.04	135.71	1.25	189.83
U.S.E.C.-C.A.W.C.	27	66	831	2.41	3.93	3.42	5.57	56.28	57.92	2.91	139.70
U.S.E.C.-S.A.W.C.	282	434	8,393	2.41	3.99	3.42	5.66	79.55	81.22	2.09	116.03
U.S.W.C.-Europe	126	672	3,330	2.41	4.17	3.42	5.91	126.00	127.74	1.38	177.24
U.S.W.C.-S.A.E.C.	1	3	21	2.41	4.24	3.42	6.01	121.95	123.72	1.45	124.71
Subtotal	2,819	10,116	82,477	2.41	4.02	3.41	5.69	103.72	105.40	1.62	129.20
Refrigerated Ships											
Diverted Transits											
Africa-Asia	29	151	398	2.41	4.28	3.42	6.06	162.08	163.86	1.10	160.80
Subtotal	29	151	398	2.41	4.28	3.42	6.06	162.08	163.86	1.10	160.80
Subtotal	2,847	10,266	82,875	2.41	4.02	3.41	5.70	104.57	106.26	1.61	129.67

(Continued)

Table C-10. Laden Transits, Tons Carried, Toll Revenue and Toll Rates, Current Toll Structure With 50 Percent Increase in Rates, 200,000 DWT Scenario, 2020, by Ship Type, Diversion Status, and Trade Route (1990 US$, except when noted)(continued)

Ship Type, Diversion Status, and Trade Route	Transits	Cargo Tonnage Carried (thousands)	Revenue (thousands) a/	Current Toll Schedule: Toll Per Panama Canal Net Ton	Current Toll Schedule: Toll Per Cargo Ton Carried	New Toll Schedule: Toll Per Panama Canal Net Ton	New Toll Schedule: Toll Per Cargo Ton Carried	Total Transportation Costs per Ton Carried, Via Panama Canal: With Current Toll Structure	Total Transportation Costs per Ton Carried, Via Panama Canal: With New Toll Structure	Total Transportation Costs per Ton Carried, Via Panama Canal: Percent Increase	Total Transportation Costs per Ton Carried: Via Least Costly Alternative Route
Roll-On Roll-Off (continued)											
Non-Diverted Transits (continued)											
Asia-Canada E.C.	2	8	80	2.41	9.35	3.42	13.25	278.31	282.21	1.40	298.63
Asia-C.A.E.C.	24	473	2,477	2.41	7.92	3.42	11.23	225.40	228.71	1.47	256.05
Asia-U.S.E.C.	40	766	4,004	2.41	7.95	3.42	11.27	237.11	240.43	1.40	288.42
C.A.W.C.-Europe	12	64	710	2.41	8.66	3.42	12.27	181.66	185.27	1.99	257.00
C.A.W.C.-S.A.E.C.	0	0	2	2.41	8.67	3.42	12.29	193.67	197.29	1.87	203.00
C.A.W.C.-U.S.E.C.	1	1	72	2.41	8.66	3.42	12.27	155.66	159.27	2.32	251.00
Canada E.C.-Asia	8	41	367	2.41	9.30	3.42	13.18	327.47	331.35	1.18	336.67
Canada W.C.-C.A.E.C.	0	0	7	2.41	10.19	3.42	14.45	224.84	229.10	1.89	359.54
C.A.E.C.-C.A.W.C.	0	1	18	2.41	9.72	3.42	13.77	154.90	158.95	2.62	273.04
C.A.E.C.-Oceania	2	7	147	2.41	8.66	3.42	12.27	252.66	256.27	1.43	297.00
C.A.E.C.-S.A.W.C.	46	81	1,615	2.41	10.19	3.42	14.45	217.90	222.16	1.95	266.26
Europe-C.A.W.C.	18	112	1,054	2.41	8.66	3.42	12.27	181.66	185.27	1.99	311.00
Europe-S.A.W.C.	0	0	2	2.41	8.67	3.42	12.29	240.67	244.29	1.50	275.00
Europe-U.S.W.C.	0	2	24	2.41	8.66	3.42	12.27	241.66	245.27	1.49	311.00
Oceania-C.A.E.C.	0	0	1	2.41	8.01	3.42	11.35	223.21	226.55	1.50	261.95
S.A.W.C.-C.A.E.C.	12	23	407	2.41	10.19	3.42	14.45	217.90	222.16	1.95	266.26
S.A.W.C.-Europe	1	3	59	2.41	8.66	3.42	12.27	240.66	244.27	1.50	281.00
S.A.W.C.-U.S.E.C.	6	13	214	2.41	10.19	3.42	14.45	210.96	215.22	2.02	275.20
U.S.E.C.-Asia	8	56	509	2.41	8.64	3.42	12.24	275.58	279.18	1.31	337.50
U.S.E.C.-C.A.W.C.	2	3	113	2.41	8.66	3.42	12.27	132.66	136.27	2.72	251.00
U.S.E.C.-S.A.W.C.	26	45	899	2.41	10.19	3.42	14.45	210.96	215.22	2.02	275.20
U.S.W.C.-Canada E.C.	1	2	30	2.41	10.20	3.42	14.45	245.70	249.95	1.73	375.45
U.S.W.C.-C.A.E.C.	1	23	116	2.41	7.75	3.42	10.98	153.28	156.51	2.11	223.78

(Continued)

Table C-10. Laden Transits, Tons Carried, Toll Revenue and Toll Rates, Current Toll Structure With 50 Percent Increase in Rates, 200,000 DWT Scenario, 2020, by Ship Type, Diversion Status, and Trade Route (1990 US$, except when noted)(continued)

Ship Type, Diversion Status, and Trade Route	Transits	Cargo Tonnage Carried (thousands)	Revenue (thousands) a/	Current Toll Schedule: Toll Per Panama Canal Net Ton	Current Toll Schedule: Toll Per Cargo Ton Carried	New Toll Schedule: Toll Per Panama Canal Net Ton	New Toll Schedule: Toll Per Cargo Ton Carried	Total Transportation Costs per Ton Carried: Via Panama Canal: With Current Toll Structure	Via Panama Canal: With New Toll Structure	Via Panama Canal: Percent Increase	Via Least Costly Alternative Route
Roll-On Roll-Off (continued)											
Non-Diverted Transits (continued)											
U.S.W.C.-Europe	0	0	2	2.41	7.80	3.42	11.05	203.42	206.67	1.60	256.35
U.S.W.C.-U.S.E.C.	0	5	24	2.41	7.86	3.42	11.14	151.24	154.52	2.17	244.92
Subtotal	211	1,731	12,953	2.41	8.60	3.41	12.19	228.26	231.72	1.52	279.97
Roll-On Roll-Off											
Diverted Transits											
Canada E.C.-Oceania	1	31	108	2.41	7.77	3.42	11.00	240.88	244.11	1.34	239.11
Subtotal	1	31	108	2.41	7.77	3.42	11.00	240.88	244.11	1.34	239.11
Subtotal	213	1,762	13,060	2.41	8.59	3.41	12.17	228.49	231.94	1.51	279.24
Tankers											
Non-Diverted Transits											
Africa-U.S.W.C.	0	0	0	2.41	1.27	3.42	1.80	15.27	15.80	3.48	20.00
Asia-U.S.E.C.	1	30	52	2.41	1.27	3.42	1.80	22.15	22.68	2.39	31.82
C.A.W.C.-Africa	0	0	1	2.41	1.27	3.42	1.80	37.27	37.80	1.42	80.00
C.A.W.C.-Canada E.C.	0	4	6	2.41	1.27	3.42	1.80	10.23	10.76	5.17	23.86
C.A.W.C.-C.A.E.C.	14	85	402	2.41	1.27	3.42	1.80	8.68	9.21	6.10	28.70
C.A.W.C.-Europe	3	70	134	2.41	1.27	3.42	1.80	14.19	14.72	3.73	23.86
C.A.W.C.-U.S.E.C.	7	53	186	2.41	1.27	3.42	1.80	9.70	10.23	5.45	30.45
Canada E.C.-Asia	10	393	657	2.41	1.27	3.42	1.80	20.80	21.33	2.54	22.37
Canada W.C.-U.S.E.C.	5	253	485	2.41	1.27	3.42	1.79	11.42	11.94	4.63	21.15
C.A.E.C.-Asia	6	180	365	2.41	1.27	3.42	1.79	18.65	19.17	2.83	25.59
C.A.E.C.-C.A.W.C.	93	1,762	4,510	2.41	1.27	3.42	1.80	6.05	6.58	8.74	17.83

(Continued)

Table C-10. Laden Transits, Tons Carried, Toll Revenue and Toll Rates, Current Toll Structure With 50 Percent Increase in Rates, 200,000 DWT Scenario, 2020, by Ship Type, Diversion Status, and Trade Route (1990 US$, except when noted)(continued)

Ship Type, Diversion Status, and Trade Route	Transits	Cargo Tonnage Carried (thousands)	Revenue (thousands) a/	Current Toll Schedule: Toll Per Panama Canal Net Ton	Current Toll Schedule: Toll Per Cargo Ton Carried	New Toll Schedule: Toll Per Panama Canal Net Ton	New Toll Schedule: Toll Per Cargo Ton Carried	Total Transportation Costs per Ton Carried: Via Panama Canal: With Current Toll Structure	Via Panama Canal: With New Toll Structure	Via Panama Canal: Percent Increase	Via Least Costly Alternative Route
Tankers (continued)											
Non-Diverted Transits (continued)											
C.A.E.C.-S.A.W.C.	41	879	1,835	2.41	1.27	3.42	1.80	10.87	11.40	4.87	15.66
C.A.E.C.-U.S.W.C.	17	712	1,271	2.41	1.27	3.42	1.80	9.67	10.20	5.47	18.88
Europe-C.A.W.C.	12	54	156	2.41	1.27	3.42	1.80	20.41	20.94	2.59	36.30
Europe-S.A.W.C.	2	52	93	2.41	1.27	3.42	1.80	19.11	19.64	2.77	19.97
Europe-U.S.W.C.	6	196	347	2.41	1.27	3.42	1.80	18.01	18.54	2.94	25.98
Middle East-U.S.W.C.	0	0	0	2.41	1.25	3.42	1.77	23.25	23.77	2.24	28.00
Oceania-U.S.E.C.	9	153	299	2.41	1.27	3.42	1.80	23.22	23.75	2.28	26.68
S.A.E.C.-Asia	81	14,147	22,472	2.41	1.27	3.42	1.80	12.89	13.42	4.10	14.70
S.A.E.C.-C.A.W.C.	85	4,342	9,413	2.41	1.26	3.42	1.79	8.64	9.17	6.09	9.39
S.A.W.C.-Canada E.C.	2	36	70	2.41	1.27	3.42	1.80	16.94	17.47	3.12	21.75
S.A.W.C.-C.A.E.C.	42	1,636	3,143	2.41	1.27	3.42	1.79	8.64	9.16	6.11	12.32
S.A.W.C.-Europe	12	106	194	2.41	1.27	3.42	1.80	22.77	23.30	2.32	24.13
S.A.W.C.-U.S.E.C.	47	1,758	3,174	2.41	1.27	3.42	1.80	10.31	10.84	5.13	15.73
U.S.E.C.-Asia	80	2,655	4,826	2.41	1.27	3.42	1.79	18.79	19.31	2.81	26.64
U.S.E.C.-C.A.W.C.	33	614	1,415	2.41	1.27	3.42	1.80	8.14	8.67	6.50	23.15
U.S.E.C.-Canada W.C.	1	4	52	2.41	1.27	3.42	1.80	15.19	15.72	3.48	28.84
U.S.E.C.-Oceania	6	192	351	2.41	1.27	3.42	1.80	21.59	22.12	2.45	24.75
U.S.E.C.-S.A.W.C.	8	147	287	2.41	1.27	3.42	1.80	12.12	12.65	4.37	18.87
U.S.E.C.-U.S.W.C.	30	877	1,696	2.41	1.27	3.42	1.80	12.30	12.83	4.30	25.53
U.S.W.C.-Africa	7	224	495	2.41	1.26	3.42	1.79	13.36	13.89	3.93	17.15
U.S.W.C.-Canada E.C.	1	21	37	2.41	1.27	3.42	1.80	16.19	16.72	3.27	27.84
U.S.W.C.-C.A.E.C.	8	301	615	2.41	1.26	3.42	1.79	9.64	10.17	5.47	18.60
U.S.W.C.-U.S.E.C.	8	226	482	2.41	1.27	3.42	1.79	11.51	12.03	4.59	23.92
Subtotal	678	32,162	59,521	2.41	1.27	3.42	1.79	12.10	12.63	4.37	16.37

(Continued)

Table C-10. Laden Transits, Tons Carried, Toll Revenue and Toll Rates, Current Toll Structure With 50 Percent Increase in Rates, 200,000 DWT Scenario, 2020, by Ship Type, Diversion Status, and Trade Route (1990 US$, except when noted)(continued)

Ship Type, Diversion Status, and Trade Route	Transits	Cargo Tonnage Carried (thousands)	Revenue (thousands) a/	Current Toll Schedule: Toll Per Panama Canal Net Ton	Current Toll Schedule: Toll Per Cargo Ton Carried	New Toll Schedule: Toll Per Panama Canal Net Ton	New Toll Schedule: Toll Per Cargo Ton Carried	Total Transportation Costs per Ton Carried: Via Panama Canal: With Current Toll Structure	Via Panama Canal: With New Toll Structure	Via Panama Canal: Percent Increase	Via Least Costly Alternative Route
Tankers (continued)											
Diverted Transits (continued)											
S.A.E.C.-U.S.W.C.	49	1,967	2,339	2.41	1.26	3.42	1.79	14.90	15.43	3.54	14.66
U.S.W.C.-S.A.E.C.	2	87	121	2.41	1.27	3.42	1.80	15.34	15.87	3.45	15.48
Subtotal	51	2,054	2,460	2.41	1.26	3.41	1.79	14.92	15.45	3.53	14.69
Subtotal	728	34,216	61,981	2.41	1.27	3.42	1.79	12.27	12.80	4.30	16.27
Vehicle Carriers											
Non-Diverted Transits											
Asia-C.A.E.C.	13	33	1,277	2.41	29.09	3.42	41.22	392.50	404.63	3.09	459.78
Asia-U.S.E.C.	419	1,959	46,692	2.41	29.20	3.42	41.37	413.17	425.34	2.95	479.68
C.A.W.C.-C.A.E.C.	1	1	77	2.41	28.71	3.42	40.69	257.39	269.37	4.65	407.18
C.A.E.C.-C.A.W.C.	4	1	419	2.41	29.22	3.42	41.41	263.22	275.41	4.63	385.00
C.A.E.C.-Oceania	1	0	108	2.41	29.22	3.42	41.41	409.22	421.41	2.98	448.00
Europe-Canada W.C.	5	11	744	2.41	30.90	3.42	43.78	368.26	381.14	3.50	430.05
Europe-U.S.W.C.	149	285	19,489	2.41	29.95	3.42	42.43	381.68	394.16	3.27	429.50
S.A.W.C.-C.A.E.C.	0	0	5	2.41	28.69	3.42	40.65	307.69	319.65	3.89	354.00
U.S.E.C.-Asia	25	114	3,095	2.41	29.67	3.42	42.05	392.18	404.56	3.16	474.71
U.S.E.C.-Oceania	7	18	853	2.41	29.22	3.42	41.41	408.22	420.41	2.98	423.00
Subtotal	623	2,423	72,758	2.41	29.43	3.41	41.70	407.79	420.01	3.00	472.54
Vehicle Carriers											
Diverted Transits											
Asia-S.A.E.C.	0	0	4	2.41	29.13	3.42	41.28	453.29	465.44	2.68	435.60
Canada E.C.-Asia	0	1	10	2.41	29.22	3.42	41.40	437.22	449.40	2.79	425.00
Subtotal	0	1	14	2.41	29.18	3.41	41.35	440.32	452.50	2.77	427.05
Subtotal	623	2,424	72,771	2.41	29.43	3.41	41.70	407.80	420.03	3.00	472.52

(Continued)

Table C-10. Laden Transits, Tons Carried, Toll Revenue and Toll Rates, Current Toll Structure With 50 Percent Increase in Rates, 200,000 DWT Scenario, 2020, by Ship Type, Diversion Status, and Trade Route (1990 US$, except when noted)(continued)

Ship Type, Diversion Status, and Trade Route	Transits	Cargo Tonnage Carried (thousands)	Revenue (thousands) a/	Current Toll Schedule: Toll Per Panama Canal Net Ton	Current Toll Schedule: Toll Per Cargo Ton Carried	New Toll Schedule: Toll Per Panama Canal Net Ton	New Toll Schedule: Toll Per Cargo Ton Carried	Total Transportation Costs per Ton Carried: Via Panama Canal: With Current Toll Structure	Total Transportation Costs per Ton Carried: Via Panama Canal: With New Toll Structure	Total Transportation Costs per Ton Carried: Via Panama Canal: Percent Increase	Total Transportation Costs per Ton Carried: Via Least Costly Alternative Route
Total Non-Diverting	12,738	300,349	783,521	2.41	1.87	3.42	2.65	46.45	47.27	1.76	56.24
Total Diverting	505	29,267	41,278	2.41	1.25	3.42	1.78	19.18	19.71	2.75	19.23

Notes: These calculations do not include all transits and tons carried forecast by the WEFA Group. For some ship-type and trade-route combinations (accounting for a total of 18 transits and 179803 tons), vessel costs were not available for every DWT size interval. As a result, these transits and tons were excluded. In addition, for 1981 transits and 37003606 tons, the cost by way of the Panama Canal without a toll was higher than the least costly alternative route. As a result, these transits and tons were excluded. Percentages may not calculate exactly as shown due to rounding. A fee of $0.40 per Panama Canal net ton has also been included to account for charges such as handling and agency fees incurred when transitting the Canal. The extra fee is only used to determine divesion status by adding it to the cost per ton carried and is not included in the revenue calculations.

a/ Revenue lost from diversions is measured as the revenue generated by the maximum, nondiverting toll rate increase.

Source: Nathan Associates Inc., based on forecasts of traffic and transportation costs provided by The WEFA Group.

CURRENT TOLL STRUCTURE WITH 50 PERCENT INCREASE IN RATES, 250,000-DWT SCENARIO, 2020

Table C-11. Laden Transits, Tons Carried, and Toll Revenue, Current Toll Structure With 50 Percent Increase in Rates, 250,000 DWT Scenario, 2020, by Ship Type

	Transits				Tons Carried(thousands)				Revenue(1990 US$thousands)			
Ship Type	Canal	Diverted	Total	Diverted as a Percent of Total	Canal	Diverted	Total	Diverted as a Percent of Total	Canal	Lost a/	Total	Lost as a Percent of Total
Container-Breakbulk	1,314	10	1,325	0.79	20,365	155	20,519	0.75	55,315	194	55,509	0.35
Dry Bulk Carriers	3,744	287	4,030	7.12	198,202	11,758	209,960	5.60	341,408	17,350	358,758	4.84
Chemical Tankers	992	2	994	0.22	22,841	84	22,925	0.37	40,095	90	40,184	0.22
Full Container Ships	1,239	12	1,251	0.97	24,474	145	24,619	0.59	114,477	474	114,951	0.41
General Cargo Ships	755	3	758	0.42	7,476	22	7,499	0.30	19,695	88	19,783	0.45
Liquid Gas Carriers	172	0	172	0.00	1,947	0	1,947	0.00	8,608	0	8,608	0.00
Passenger Ships	336	0	336	0.00	0	0	0	0.00	9,217	0	9,217	0.00
Refrigerated Ships	2,819	29	2,847	1.00	10,116	151	10,266	1.47	82,477	398	82,875	0.48
Roll-On Roll-Off	211	1	213	0.67	1,731	31	1,762	1.78	12,953	108	13,060	0.82
Tankers	664	51	715	7.11	32,162	2,054	34,216	6.00	59,521	2,460	61,981	3.97
Vehicle Carriers	623	0	623	0.05	2,423	1	2,424	0.04	72,758	14	72,771	0.02
Total	12,867	396	13,263	2.98	321,737	14,401	336,138	4.28	816,523	21,175	837,698	2.53

Notes: These calculations do not include all transits and tons carried forecast by the WEFA Group. For some ship-type and trade-route combinations (accounting for a total of 18 transits and 179803 tons), vessel costs were not available for every DWT size interval. As a result, these transits and tons were excluded. In addition, for 1981 transits and 37003606 tons, the cost by way of the Panama Canal without a toll was higher than the least costly alternative route. As a result, these transits and tons were excluded. A fee of $0.40 per Panama Canal net ton has also been included to account for charges such as handling and agency fees incurred when transitting the Canal. The extra fee is only used to determine diversion status by adding it to cost per ton carried and is not included in the revenue calculations.

a/ Revenue lost from diversions is measured as the revenue generated by the maximum, nondiverting toll rate increase.

Source: Nathan Associates Inc., based on forecasts of traffic and transportation costs provided by The WEFA Group.

Table C-12. Ballast Transits, Tons Carried, and Toll Revenue, Current Toll Structure With 50 Percent Increase in Rates, 250,000 DWT Scenario, 2020, by Ship Type

	Transits				Tons Carried(thousands)				Revenue(1990 US$thousands)			
Ship Type	Canal	Diverted	Total	Diverted as a Percent of Total	Canal	Diverted	Total	Diverted as a Percent of Total	Canal	Lost	Total	Lost as a Percent of Total
Container-Breakbulk	41	0	41	0.35	0	0	0	0.00	1,524	5	1,529	0.35
Dry Bulk Carriers	400	20	420	4.84	0	0	0	0.00	23,086	1,174	24,260	4.84
Chemical Tankers	82	0	82	0.22	0	0	0	0.00	2,632	6	2,638	0.22
Full Container Ships	9	0	9	0.41	0	0	0	0.00	340	1	342	0.41
General Cargo Ships	139	1	140	0.45	0	0	0	0.00	2,286	10	2,297	0.45
Liquid Gas Carriers	128	0	128	0.00	0	0	0	0.00	5,595	0	5,595	0.00
Passenger Ships	11	0	11	0.00	0	0	0	0.00	196	0	196	0.00
Refrigerated Ships	928	4	932	0.48	0	0	0	0.00	20,568	99	20,667	0.48
Roll-On Roll-Off	30	0	30	0.82	0	0	0	0.00	1,187	10	1,197	0.82
Tankers	367	15	382	3.97	0	0	0	0.00	29,931	1,237	31,168	3.97
Vehicle Carriers	383	0	383	0.02	0	0	0	0.00	33,913	7	33,920	0.02
Total	2,517	41	2,558	1.61	0	0	0	0.00	121,259	2,550	123,809	2.06

Note: Diversions of ballast transits are computed by diverting a proportion of ballast transits equal to lost revenue as a percent of total potential revenue for a particular laden ship type. See last column on previous table.

Source: Nathan Associates Inc., based on forecasts of traffic and transportation costs provided by The WEFA Group.

Table C-13. Laden Transits, Tons Carried, Toll Revenue and Toll Rates, Current Toll Structure With 50 Percent Increase in Rates, 250,000 DWT Scenario, 2020, by Ship Type, Diversion Status, and Trade Route (1990 US$, except when noted)

Ship Type, Diversion Status, and Trade Route	Transits	Cargo Tonnage Carried (thousands)	Revenue (thousands) a/	Current Toll Schedule: Toll Per Panama Canal Net Ton	Current Toll Schedule: Toll Per Cargo Ton Carried	New Toll Schedule: Toll Per Panama Canal Net Ton	New Toll Schedule: Toll Per Cargo Ton Carried	Total Transportation Costs per Ton Carried: Via Panama Canal: With Current Toll Structure	Via Panama Canal: With New Toll Structure	Via Panama Canal: Percent Increase	Via Least Costly Alternative Route
Container-Breakbulk											
Non-Diverted Transits											
Africa-C.A.W.C.	3	77	119	2.41	1.85	3.42	2.63	68.56	69.34	1.13	113.26
Africa-Canada W.C.	0	2	6	2.41	1.87	3.42	2.65	88.16	88.94	0.88	100.93
Africa-U.S.W.C.	1	9	30	2.41	1.87	3.42	2.65	89.16	89.94	0.87	102.87
Asia-Canada E.C.	0	4	17	2.41	1.86	3.42	2.64	88.65	89.43	0.88	96.19
Asia-C.A.E.C.	91	837	3,583	2.41	1.87	3.42	2.64	93.07	93.84	0.84	107.91
Asia-S.A.E.C.	27	175	1,032	2.41	1.87	3.42	2.65	100.20	100.98	0.78	102.23
Asia-U.S.E.C.	82	1,031	3,440	2.41	1.86	3.42	2.64	94.52	95.30	0.82	116.80
C.A.W.C.-Africa	3	70	131	2.41	1.87	3.42	2.65	73.06	73.84	1.07	120.56
C.A.W.C.-C.A.E.C.	7	118	296	2.41	1.86	3.42	2.64	49.37	50.15	1.57	87.53
C.A.W.C.-Europe	15	110	587	2.41	1.87	3.42	2.65	63.64	64.42	1.22	91.28
C.A.W.C.-S.A.E.C.	12	6	463	2.41	1.87	3.42	2.65	69.19	69.97	1.13	74.19
C.A.W.C.-U.S.E.C.	3	19	121	2.41	1.87	3.42	2.65	55.40	56.18	1.41	91.85
Canada E.C.-Asia	14	367	728	2.41	1.85	3.42	2.62	90.68	91.45	0.85	93.83
Canada E.C.-C.A.W.C.	1	9	34	2.41	1.87	3.42	2.65	54.09	54.87	1.44	92.29
Canada E.C.-S.A.W.C.	1	10	22	2.41	1.85	3.42	2.63	62.78	63.56	1.23	75.85
Canada E.C.-U.S.W.C.	0	0	0	2.41	1.85	3.42	2.63	69.71	70.49	1.11	105.87
Canada W.C.-Africa	8	179	345	2.41	1.85	3.42	2.63	88.66	89.44	0.87	100.74
Canada W.C.-Europe	63	1,844	3,415	2.41	1.85	3.42	2.62	77.86	78.63	0.99	104.01
Canada W.C.-S.A.E.C.	11	210	406	2.41	1.87	3.42	2.65	71.19	71.97	1.10	108.72
Canada W.C.-U.S.E.C.	8	149	323	2.41	1.85	3.42	2.63	64.85	65.63	1.19	102.00
C.A.E.C.-Asia	9	196	356	2.41	1.87	3.42	2.65	92.37	93.15	0.84	107.04
C.A.E.C.-C.A.W.C.	7	27	271	2.41	1.87	3.42	2.65	50.30	51.08	1.55	90.29
C.A.E.C.-Canada W.C.	2	31	78	2.41	1.87	3.42	2.65	63.73	64.51	1.22	101.08

(Continued)

Table C-13. Laden Transits, Tons Carried, Toll Revenue and Toll Rates, Current Toll Structure With 50 Percent Increase in Rates, 250,000 DWT Scenario, 2020, by Ship Type, Diversion Status, and Trade Route (1990 US$, except when noted)(continued)

Ship Type, Diversion Status, and Trade Route	Transits	Cargo Tonnage Carried (thousands)	Revenue (thousands) a/	Current Toll Schedule: Toll Per Panama Canal Net Ton	Current Toll Schedule: Toll Per Cargo Ton Carried	New Toll Schedule: Toll Per Panama Canal Net Ton	New Toll Schedule: Toll Per Cargo Ton Carried	Total Transportation Costs per Ton Carried: Via Panama Canal: With Current Toll Structure	Via Panama Canal: With New Toll Structure	Via Panama Canal: Percent Increase	Via Least Costly Alternative Route
Container-Breakbulk (continued)											
Non-Diverted Transits (continued)											
C.A.E.C.-Oceania	1	20	47	2.41	1.87	3.42	2.65	90.16	90.94	0.86	107.72
C.A.E.C.-S.A.W.C.	18	144	713	2.41	1.87	3.42	2.65	61.88	62.66	1.26	76.44
C.A.E.C.-U.S.W.C.	4	73	157	2.41	1.86	3.42	2.64	61.48	62.26	1.26	93.18
Europe-C.A.W.C.	22	137	854	2.41	1.87	3.42	2.65	64.73	65.51	1.20	112.66
Europe-Canada W.C.	4	123	249	2.41	1.85	3.42	2.62	80.14	80.91	0.96	103.29
Europe-S.A.W.C.	91	752	3,523	2.41	1.87	3.42	2.65	85.37	86.15	0.91	99.08
Europe-U.S.W.C.	24	732	1,382	2.41	1.85	3.42	2.62	79.27	80.04	0.97	103.43
Oceania-C.A.E.C.	4	42	155	2.41	1.87	3.42	2.65	90.85	91.63	0.86	108.64
S.A.E.C.-C.A.W.C.	9	141	353	2.41	1.87	3.42	2.65	68.77	69.55	1.13	73.69
S.A.E.C.-Canada W.C.	11	152	443	2.41	1.87	3.42	2.65	87.94	88.72	0.89	93.92
S.A.E.C.-U.S.W.C.	38	572	1,510	2.41	1.87	3.42	2.64	74.36	75.13	1.05	77.06
S.A.W.C.-Canada E.C.	1	2	36	2.41	1.87	3.42	2.65	66.27	67.05	1.18	81.06
S.A.W.C.-C.A.E.C.	13	108	502	2.41	1.87	3.42	2.65	62.27	63.05	1.25	77.06
S.A.W.C.-Europe	191	3,350	7,312	2.41	1.87	3.42	2.65	85.09	85.87	0.92	101.37
S.A.W.C.-U.S.E.C.	108	1,055	4,032	2.41	1.87	3.42	2.65	59.46	60.24	1.31	77.72
U.S.E.C.-Asia	172	4,347	8,517	2.41	1.86	3.42	2.63	91.67	92.44	0.84	113.24
U.S.E.C.-C.A.W.C.	10	201	400	2.41	1.86	3.42	2.64	46.17	46.95	1.68	88.94
U.S.E.C.-S.A.W.C.	160	1,595	6,202	2.41	1.87	3.42	2.65	59.27	60.05	1.31	77.44
U.S.E.C.-U.S.W.C.	0	0	1	2.41	1.86	3.42	2.63	56.86	57.63	1.36	94.00
U.S.W.C.-Africa	9	143	532	2.41	1.85	3.42	2.62	82.33	83.10	0.94	98.63
U.S.W.C.-Canada E.C.	2	40	67	2.41	1.85	3.42	2.63	66.85	67.63	1.16	100.00
U.S.W.C.-C.A.E.C.	9	63	335	2.41	1.87	3.42	2.65	63.58	64.36	1.23	96.80
U.S.W.C.-Europe	38	1,010	2,014	2.41	1.85	3.42	2.63	80.25	81.03	0.96	103.86

(Continued)

Table C-13. Laden Transits, Tons Carried, Toll Revenue and Toll Rates, Current Toll Structure With 50 Percent Increase in Rates, 250,000 DWT Scenario, 2020, by Ship Type, Diversion Status, and Trade Route (1990 US$, except when noted)(continued)

Ship Type, Diversion Status, and Trade Route	Transits	Cargo Tonnage Carried (thousands)	Revenue (thousands) a/	Current Toll Schedule: Toll Per Panama Canal Net Ton	Current Toll Schedule: Toll Per Cargo Ton Carried	New Toll Schedule: Toll Per Panama Canal Net Ton	New Toll Schedule: Toll Per Cargo Ton Carried	Total Transportation Costs per Ton Carried: Via Panama Canal: With Current Toll Structure	Via Panama Canal: With New Toll Structure	Via Panama Canal: Percent Increase	Via Least Costly Alternative Route
Container-Breakbulk (continued)											
Non-Diverted Transits (continued)											
U.S.W.C.-S.A.E.C.	4	79	166	2.41	1.87	3.42	2.65	76.06	76.84	1.02	79.06
U.S.W.C.-U.S.E.C.	0	3	12	2.41	1.85	3.42	2.63	58.25	59.03	1.33	96.88
Subtotal	1,314	20,365	55,315	2.41	1.86	3.42	2.64	80.88	81.65	0.96	100.73
Container-Breakbulk											
Diverted Transits											
Canada E.C.-Oceania	1	13	26	2.41	1.87	3.42	2.65	102.74	103.52	0.76	102.93
Oceania-Canada E.C.	2	46	119	2.41	1.85	3.42	2.62	93.85	94.62	0.82	94.00
Oceania-S.A.E.C.	7	95	48	2.41	1.86	3.42	2.64	84.47	85.25	0.92	82.99
Subtotal	10	155	194	2.41	1.86	3.42	2.64	88.83	89.60	0.87	87.97
Subtotal	1,325	20,519	55,509	2.41	1.86	3.42	2.64	80.94	81.71	0.96	100.64
Dry Bulk Carriers											
Non-Diverted Transits											
Africa-C.A.W.C.	15	483	761	2.41	1.35	3.42	1.91	14.85	15.41	3.78	26.10
Africa-Canada W.C.	34	1,354	2,042	2.41	1.31	3.42	1.86	17.28	17.83	3.16	19.77
Africa-S.A.W.C.	5	128	238	2.41	1.35	3.42	1.91	17.80	18.36	3.15	25.10
Africa-U.S.W.C.	7	161	414	2.41	1.30	3.42	1.85	16.19	16.74	3.36	19.23
Asia-Canada E.C.	8	302	564	2.41	1.28	3.42	1.81	17.00	17.53	3.14	18.32
Asia-C.A.E.C.	21	345	1,150	2.41	1.33	3.42	1.89	18.03	18.59	3.08	22.65
Asia-U.S.E.C.	242	6,345	15,356	2.41	1.30	3.42	1.84	16.31	16.85	3.33	22.26
Brazil-Asia	144	21,387	33,008	2.41	1.17	3.42	1.65	17.13	17.61	2.84	18.14
C.A.W.C.-Africa	1	34	68	2.41	1.32	3.42	1.88	14.69	15.25	3.76	25.81

(Continued)

Table C-13. Laden Transits, Tons Carried, Toll Revenue and Toll Rates, Current Toll Structure With 50 Percent Increase in Rates, 250,000 DWT Scenario, 2020, by Ship Type, Diversion Status, and Trade Route (1990 US$, except when noted)(continued)

Ship Type, Diversion Status, and Trade Route	Transits	Cargo Tonnage Carried (thousands)	Revenue (thousands) a/	Current Toll Schedule: Toll Per Panama Canal Net Ton	Current Toll Schedule: Toll Per Cargo Ton Carried	New Toll Schedule: Toll Per Panama Canal Net Ton	New Toll Schedule: Toll Per Cargo Ton Carried	Total Transportation Costs per Ton Carried: Via Panama Canal: With Current Toll Structure	Via Panama Canal: With New Toll Structure	Via Panama Canal: Percent Increase	Via Least Costly Alternative Route
Dry Bulk Carriers (continued)											
Non-Diverted Transits (continued)											
C.A.W.C.-C.A.E.C.	34	961	1,871	2.41	1.33	3.42	1.89	7.81	8.37	7.10	15.77
C.A.W.C.-Europe	16	462	968	2.41	1.31	3.42	1.86	12.08	12.63	4.54	18.24
C.A.W.C.-U.S.E.C.	38	1,292	2,246	2.41	1.32	3.42	1.87	7.83	8.38	7.02	17.55
Canada E.C.-Asia	88	4,219	7,542	2.41	1.25	3.42	1.77	18.06	18.58	2.89	20.40
Canada E.C.-Oceania	3	58	189	2.41	1.33	3.42	1.88	19.62	20.17	2.82	21.08
Canada E.C.-S.A.W.C.	6	163	324	2.41	1.33	3.42	1.88	12.63	13.18	4.38	14.98
Canada W.C.-Africa	96	3,500	6,012	2.41	1.31	3.42	1.85	16.93	17.47	3.22	19.42
Canada W.C.-C.A.E.C.	4	105	229	2.41	1.35	3.42	1.91	12.85	13.41	4.37	21.30
Canada W.C.-Europe	238	11,174	19,289	2.41	1.26	3.42	1.78	16.52	17.04	3.18	21.25
Canada W.C.-U.S.E.C.	64	1,569	3,355	2.41	1.35	3.42	1.91	13.00	13.56	4.32	23.15
C.A.E.C.-Asia	21	639	1,106	2.41	1.35	3.42	1.91	17.70	18.26	3.17	22.30
C.A.E.C.-C.A.W.C.	25	682	1,308	2.41	1.35	3.42	1.91	8.05	8.61	6.98	16.45
C.A.E.C.-Canada W.C.	2	55	101	2.41	1.35	3.42	1.92	13.05	13.62	4.32	21.60
C.A.E.C.-Oceania	1	11	27	2.41	1.35	3.42	1.92	19.95	20.52	2.83	22.60
C.A.E.C.-S.A.W.C.	12	313	652	2.41	1.35	3.42	1.91	11.00	11.56	5.10	13.50
C.A.E.C.-U.S.W.C.	9	236	465	2.41	1.35	3.42	1.91	11.85	12.41	4.74	20.30
Columbia-Asia	2	295	458	2.41	1.17	3.42	1.66	16.65	17.14	2.94	24.67
Europe-C.A.W.C.	30	797	1,599	2.41	1.34	3.42	1.90	12.79	13.35	4.38	21.20
Europe-Canada W.C.	11	286	640	2.41	1.31	3.42	1.86	16.30	16.85	3.35	21.24
Europe-U.S.W.C.	116	3,102	7,029	2.41	1.31	3.42	1.86	15.40	15.95	3.55	20.10
Middle East-S.A.W.C.	1	52	88	2.41	1.27	3.42	1.79	14.27	14.79	3.70	16.00
Oceania-Canada E.C.	22	661	1,154	2.41	1.35	3.42	1.91	19.70	20.26	2.85	21.25
Oceania-C.A.E.C.	6	166	328	2.41	1.35	3.42	1.91	18.80	19.36	2.99	22.25

(Continued)

Table C-13. Laden Transits, Tons Carried, Toll Revenue and Toll Rates, Current Toll Structure With 50 Percent Increase in Rates, 250,000 DWT Scenario, 2020, by Ship Type, Diversion Status, and Trade Route (1990 US$, except when noted)(continued)

Ship Type, Diversion Status, and Trade Route	Transits	Cargo Tonnage Carried (thousands)	Revenue (thousands) a/	Current Toll Schedule: Toll Per Panama Canal Net Ton	Current Toll Schedule: Toll Per Cargo Ton Carried	New Toll Schedule: Toll Per Panama Canal Net Ton	New Toll Schedule: Toll Per Cargo Ton Carried	Total Transportation Costs per Ton Carried: Via Panama Canal: With Current Toll Structure	Via Panama Canal: With New Toll Structure	Via Panama Canal: Percent Increase	Via Least Costly Alternative Route
Dry Bulk Carriers (continued)											
Non-Diverted Transits (continued)											
Oceania-U.S.E.C.	119	6,406	10,844	2.41	1.24	3.42	1.76	15.19	15.71	3.41	16.07
S.A.E.C.-Asia	68	2,384	4,143	2.41	1.31	3.42	1.86	16.60	17.15	3.29	18.82
S.A.W.C.-Africa	3	157	235	2.41	1.28	3.42	1.81	13.65	14.18	3.91	20.54
S.A.W.C.-Canada E.C.	0	10	17	2.41	1.35	3.42	1.91	13.00	13.56	4.32	15.50
S.A.W.C.-C.A.E.C.	7	144	390	2.41	1.35	3.42	1.91	11.00	11.56	5.10	13.50
S.A.W.C.-U.S.E.C.	54	1,732	2,888	2.41	1.34	3.42	1.90	10.81	11.37	5.16	15.18
U.S.E.C.-Asia	1,601	104,329	174,081	2.41	1.22	3.42	1.73	17.29	17.80	2.94	22.99
U.S.E.C.-C.A.W.C.	207	6,232	11,055	2.41	1.34	3.42	1.90	8.12	8.68	6.88	18.25
U.S.E.C.-Canada W.C.	1	30	49	2.41	1.32	3.42	1.87	12.36	12.91	4.44	21.71
U.S.E.C.-Oceania	21	646	1,177	2.41	1.33	3.42	1.88	18.34	18.89	3.02	20.47
U.S.E.C.-S.A.W.C.	50	1,456	2,655	2.41	1.34	3.42	1.90	10.90	11.46	5.13	15.31
U.S.E.C.-U.S.W.C.	1	0	36	2.41	1.35	3.42	1.91	12.00	12.56	4.68	21.30
U.S.W.C.-Africa	121	4,599	8,498	2.41	1.28	3.42	1.82	15.62	16.16	3.42	18.62
U.S.W.C.-Canada E.C.	7	217	382	2.41	1.33	3.42	1.88	13.35	13.90	4.15	21.26
U.S.W.C.-C.A.E.C.	2	48	93	2.41	1.35	3.42	1.91	11.85	12.41	4.74	20.30
U.S.W.C.-Europe	140	6,524	11,115	2.41	1.26	3.42	1.79	13.94	14.47	3.77	17.96
U.S.W.C.-U.S.E.C.	7	183	440	2.41	1.31	3.42	1.86	12.05	12.60	4.54	21.48
Venezuela-Asia	12	1,768	2,728	2.41	1.17	3.42	1.65	16.47	16.95	2.96	19.90
Subtotal	3,744	198,202	341,408	2.41	1.24	3.42	1.76	16.31	16.83	3.17	21.15
Dry Bulk Carriers											
Diverted Transits											
Asia-S.A.E.C.	6	152	179	2.41	1.35	3.42	1.91	21.65	22.21	2.59	21.30

(Continued)

Table C-13. Laden Transits, Tons Carried, Toll Revenue and Toll Rates, Current Toll Structure With 50 Percent Increase in Rates, 250,000 DWT Scenario, 2020, by Ship Type, Diversion Status, and Trade Route (1990 US$, except when noted)(continued)

Ship Type, Diversion Status, and Trade Route	Transits	Cargo Tonnage Carried (thousands)	Revenue (thousands) a/	Current Toll Schedule: Toll Per Panama Canal Net Ton	Current Toll Schedule: Toll Per Cargo Ton Carried	New Toll Schedule: Toll Per Panama Canal Net Ton	New Toll Schedule: Toll Per Cargo Ton Carried	Total Transportation Costs per Ton Carried: Via Panama Canal: With Current Toll Structure	Via Panama Canal: With New Toll Structure	Via Panama Canal: Percent Increase	Via Least Costly Alternative Route
Dry Bulk Carriers (continued)											
Diverted Transits (continued)											
C.A.W.C.-S.A.E.C.	10	136	311	2.41	1.35	3.42	1.91	12.00	12.56	4.68	11.65
Canada W.C.-S.A.E.C.	23	1,374	2,665	2.41	1.22	3.42	1.73	10.51	11.02	4.84	10.92
Europe-S.A.W.C.	12	298	365	2.41	1.35	3.42	1.91	15.85	16.41	3.54	15.50
S.A.E.C.-C.A.W.C.	8	247	247	2.41	1.35	3.42	1.91	12.00	12.56	4.68	11.65
S.A.E.C.-Canada W.C.	3	66	160	2.41	1.35	3.42	1.91	16.80	17.36	3.34	17.35
S.A.E.C.-U.S.W.C.	28	1,128	1,383	2.41	1.26	3.42	1.79	12.93	13.46	4.07	12.67
S.A.W.C.-Europe	187	8,078	11,714	2.41	1.27	3.42	1.80	15.87	16.40	3.35	15.96
U.S.W.C.-S.A.E.C.	11	279	326	2.41	1.35	3.42	1.91	15.80	16.36	3.55	15.45
Subtotal	287	11,758	17,350	2.41	1.27	3.42	1.81	14.92	15.45	3.56	14.97
Subtotal	4,030	209,960	358,758	2.41	1.24	3.42	1.76	16.24	16.75	3.19	20.80
Chemical Tankers											
Non-Diverted Transits											
Africa-S.A.W.C.	1	32	52	2.41	1.34	3.42	1.90	42.34	42.90	1.32	58.00
Asia-C.A.E.C.	3	34	68	2.41	1.34	3.42	1.90	52.46	53.02	1.06	69.37
Asia-S.A.E.C.	3	16	134	2.41	1.34	3.42	1.90	49.34	49.90	1.13	51.00
Asia-U.S.E.C.	32	537	1,116	2.41	1.34	3.42	1.90	44.74	45.30	1.25	60.33
C.A.W.C.-C.A.E.C.	23	139	263	2.41	1.34	3.42	1.90	36.34	36.90	1.54	77.00
C.A.W.C.-Europe	8	126	209	2.41	1.34	3.42	1.90	37.28	37.84	1.50	55.50
C.A.W.C.-U.S.E.C.	38	470	858	2.41	1.34	3.42	1.90	28.06	28.62	1.99	58.14
Canada W.C.-Europe	4	87	168	2.41	1.34	3.42	1.90	41.34	41.90	1.35	55.00
Canada W.C.-U.S.E.C.	32	744	1,574	2.41	1.34	3.42	1.90	31.74	32.30	1.76	52.80
C.A.E.C.-Asia	9	248	412	2.41	1.34	3.42	1.90	41.66	42.22	1.34	54.44

(Continued)

Table C-13. Laden Transits, Tons Carried, Toll Revenue and Toll Rates, Current Toll Structure With 50 Percent Increase in Rates, 250,000 DWT Scenario, 2020, by Ship Type, Diversion Status, and Trade Route (1990 US$, except when noted)(continued)

Ship Type, Diversion Status, and Trade Route	Transits	Cargo Tonnage Carried (thousands)	Revenue (thousands) a/	Current Toll Schedule: Toll Per Panama Canal Net Ton	Current Toll Schedule: Toll Per Cargo Ton Carried	New Toll Schedule: Toll Per Panama Canal Net Ton	New Toll Schedule: Toll Per Cargo Ton Carried	Total Transportation Costs per Ton Carried, Via Panama Canal: With Current Toll Structure	Via Panama Canal: With New Toll Structure	Via Panama Canal: Percent Increase	Via Least Costly Alternative Route
Chemical Tankers (continued)											
Non-Diverted Transits (continued)											
C.A.E.C.-C.A.W.C.	9	207	432	2.41	1.34	3.42	1.90	21.34	21.90	2.62	41.00
C.A.E.C.-S.A.W.C.	11	186	358	2.41	1.34	3.42	1.90	31.03	31.59	1.80	40.27
C.A.E.C.-U.S.W.C.	1	10	17	2.41	1.34	3.42	1.90	51.34	51.90	1.09	90.00
Europe-C.A.W.C.	6	30	71	2.41	1.34	3.42	1.90	56.34	56.90	0.99	86.00
Europe-S.A.W.C.	6	60	103	2.41	1.34	3.42	1.90	55.90	56.46	1.00	59.35
Europe-U.S.W.C.	9	182	317	2.41	1.34	3.42	1.90	42.34	42.90	1.32	56.41
Oceania-U.S.E.C.	18	455	971	2.41	1.34	3.42	1.90	40.54	41.10	1.38	45.36
S.A.E.C.-C.A.W.C.	8	61	115	2.41	1.34	3.42	1.90	46.87	47.43	1.19	51.82
S.A.W.C.-C.A.E.C.	22	79	377	2.41	1.34	3.42	1.90	42.38	42.94	1.32	56.49
S.A.W.C.-Europe	8	92	160	2.41	1.34	3.42	1.90	51.64	52.20	1.08	54.68
S.A.W.C.-U.S.E.C.	7	47	146	2.41	1.34	3.42	1.90	38.35	38.91	1.46	53.28
U.S.E.C.-Asia	565	15,828	25,713	2.41	1.34	3.42	1.90	42.38	42.94	1.32	56.99
U.S.E.C.-C.A.W.C.	18	146	283	2.41	1.34	3.42	1.90	33.25	33.81	1.68	70.02
U.S.E.C.-Canada W.C.	5	36	62	2.41	1.34	3.42	1.90	55.76	56.32	1.00	96.33
U.S.E.C.-Oceania	17	409	699	2.41	1.34	3.42	1.90	44.76	45.32	1.25	50.35
U.S.E.C.-S.A.W.C.	45	434	834	2.41	1.34	3.42	1.90	39.65	40.21	1.41	55.15
U.S.E.C.-U.S.W.C.	50	1,635	3,099	2.41	1.35	3.42	1.91	25.70	26.26	2.19	43.31
U.S.W.C.-C.A.E.C.	2	38	95	2.41	1.34	3.42	1.90	29.34	29.90	1.90	48.00
U.S.W.C.-Europe	16	215	432	2.41	1.34	3.42	1.90	45.63	46.19	1.22	61.31
U.S.W.C.-S.A.E.C.	0	3	7	2.41	1.34	3.42	1.90	37.34	37.90	1.50	38.00
U.S.W.C.-U.S.E.C.	15	256	949	2.41	1.35	3.42	1.91	25.80	26.36	2.18	43.41
Subtotal	992	22,841	40,095	2.41	1.34	3.42	1.90	40.10	40.66	1.39	55.44
Chemical Tankers											
Diverted Transits											
S.A.E.C.-U.S.W.C.	2	84	90	2.41	1.35	3.42	1.91	30.35	30.91	1.86	30.00
Subtotal	2	84	90	2.41	1.35	3.41	1.91	30.35	30.91	1.86	30.00
Subtotal	994	22,925	40,184	2.41	1.34	3.42	1.90	40.06	40.62	1.40	55.35

(Continued)

Table C-13. Laden Transits, Tons Carried, Toll Revenue and Toll Rates, Current Toll Structure With 50 Percent Increase in Rates, 250,000 DWT Scenario, 2020, by Ship Type, Diversion Status, and Trade Route (1990 US$, except when noted)(continued)

Ship Type, Diversion Status, and Trade Route	Transits	Cargo Tonnage Carried (thousands)	Revenue (thousands) a/	Current Toll Schedule: Toll Per Panama Canal Net Ton	Current Toll Schedule: Toll Per Cargo Ton Carried	New Toll Schedule: Toll Per Panama Canal Net Ton	New Toll Schedule: Toll Per Cargo Ton Carried	Total Transportation Costs per Ton Carried, Via Panama Canal: With Current Toll Structure	Total Transportation Costs per Ton Carried, Via Panama Canal: With New Toll Structure	Total Transportation Costs per Ton Carried, Via Panama Canal: Percent Increase	Total Transportation Costs per Ton Carried: Via Least Costly Alternative Route
Full Container Ships (continued)											
Non-Diverted Transits (continued)											
Africa-U.S.W.C.	0	2	6	2.41	4.48	3.42	6.35	246.46	248.33	0.76	281.72
Asia-Canada E.C.	35	682	3,120	2.41	4.65	3.42	6.59	210.85	212.79	0.92	223.41
Asia-S.A.E.C.	2	7	65	2.41	4.48	3.42	6.35	274.32	276.19	0.68	278.74
Asia-U.S.E.C. (low inv. cost)	206	4,485	27,864	2.41	4.76	3.42	6.75	238.55	240.54	0.83	251.75
C.A.W.C.-C.A.E.C.	1	5	35	2.41	4.38	3.42	6.21	129.97	131.80	1.41	209.77
C.A.W.C.-Europe	2	22	111	2.41	4.36	3.42	6.18	153.30	155.12	1.19	206.86
C.A.W.C.-S.A.E.C.	0	4	17	2.41	4.38	3.42	6.20	163.77	165.59	1.11	170.68
C.A.W.C.-U.S.E.C.	0	3	12	2.41	4.48	3.42	6.35	157.98	159.85	1.18	250.90
Canada E.C.-Asia	32	561	2,123	2.41	4.50	3.42	6.38	230.54	232.42	0.81	235.78
Canada E.C.-U.S.W.C.	5	136	566	2.41	4.73	3.42	6.71	160.73	162.71	1.23	225.00
Canada W.C.-Europe	32	491	1,739	2.41	4.46	3.42	6.32	212.22	214.08	0.88	275.57
C.A.E.C.-Asia	8	99	512	2.41	4.41	3.42	6.25	217.31	219.15	0.85	245.58
C.A.E.C.-C.A.W.C.	1	3	17	2.41	4.51	3.42	6.40	184.21	186.10	1.02	324.09
C.A.E.C.-Oceania	0	3	11	2.41	4.48	3.42	6.35	248.46	250.33	0.75	293.66
C.A.E.C.-S.A.W.C.	6	6	88	2.41	4.64	3.42	6.57	187.15	189.08	1.03	226.38
C.A.E.C.-U.S.W.C.	1	12	54	2.41	4.38	3.42	6.21	154.50	156.33	1.18	220.28
Europe-C.A.W.C.	0	1	5	2.41	4.36	3.42	6.18	153.30	155.12	1.19	244.84
Europe-Canada W.C.	24	311	1,184	2.41	4.43	3.42	6.28	224.73	226.58	0.82	283.75
Europe-S.A.W.C.	51	731	3,524	2.41	4.36	3.42	6.18	194.28	196.10	0.94	223.86
Europe-U.S.W.C.	144	2,855	12,050	2.41	4.62	3.42	6.55	209.75	211.68	0.92	217.16
Middle East-U.S.W.C.	8	116	425	2.41	4.42	3.42	6.26	221.09	222.93	0.83	248.07
Oceania-C.A.E.C.	2	24	76	2.41	4.48	3.42	6.35	248.46	250.33	0.75	293.66
S.A.E.C.-C.A.W.C.	0	4	16	2.41	4.48	3.42	6.35	193.78	195.65	0.96	205.16

(Continued)

Table C-13. Laden Transits, Tons Carried, Toll Revenue and Toll Rates, Current Toll Structure With 50 Percent Increase in Rates, 250,000 DWT Scenario, 2020, by Ship Type, Diversion Status, and Trade Route (1990 US$, except when noted)(continued)

Ship Type, Diversion Status, and Trade Route	Transits	Cargo Tonnage Carried (thousands)	Revenue (thousands) a/	Current Toll Schedule: Toll Per Panama Canal Net Ton	Current Toll Schedule: Toll Per Cargo Ton Carried	New Toll Schedule: Toll Per Panama Canal Net Ton	New Toll Schedule: Toll Per Cargo Ton Carried	Total Transportation Costs per Ton Carried, Via Panama Canal: With Current Toll Structure	Via Panama Canal: With New Toll Structure	Via Panama Canal: Percent Increase	Via Least Costly Alternative Route
Full Container Ships (continued)											
Non-Diverted Transits (continued)											
S.A.E.C.-U.S.W.C.	1	9	31	2.41	4.48	3.42	6.35	179.84	181.71	1.04	217.10
S.A.W.C.-C.A.E.C.	0	1	5	2.41	4.50	3.42	6.38	191.66	193.54	0.98	232.72
S.A.W.C.-Europe	103	1,966	7,202	2.41	4.36	3.42	6.18	194.27	196.09	0.94	223.85
S.A.W.C.-U.S.E.C.	46	483	1,751	2.41	4.48	3.42	6.35	170.90	172.77	1.09	219.08
U.S.E.C.-Asia (low inv. cost)	243	7,139	30,956	2.41	4.74	3.42	6.71	239.88	241.85	0.82	252.86
U.S.E.C.-C.A.W.C.	6	55	241	2.41	4.48	3.42	6.35	136.10	137.97	1.37	250.90
U.S.E.C.-S.A.W.C.	57	487	2,168	2.41	4.48	3.42	6.35	170.90	172.77	1.09	219.08
U.S.E.C.-U.S.W.C.	1	26	115	2.41	4.71	3.42	6.67	144.82	146.78	1.36	220.39
U.S.W.C.-Africa	0	0	0	2.41	5.04	3.42	7.15	197.04	199.15	1.07	228.00
U.S.W.C.-Canada E.C.	0	5	24	2.41	4.51	3.42	6.39	163.61	165.49	1.15	231.49
U.S.W.C.-C.A.E.C.	7	42	223	2.41	4.46	3.42	6.32	159.01	160.87	1.17	227.84
U.S.W.C.-Europe	194	3,428	16,553	2.41	4.64	3.42	6.58	212.59	214.53	0.91	219.05
U.S.W.C.-Middle East	8	103	439	2.41	4.42	3.42	6.27	221.46	223.31	0.83	229.44
U.S.W.C.-U.S.E.C.	13	168	1,152	2.41	4.59	3.42	6.51	145.28	147.20	1.32	222.40
Subtotal	1,239	24,474	114,477	2.41	4.65	3.42	6.59	220.74	222.67	0.88	238.21
Full Container Ships											
Diverted Transits											
Canada E.C.-Oceania	12	145	474	2.41	4.43	3.42	6.28	259.72	261.57	0.71	259.79
Subtotal	12	145	474	2.41	4.43	3.42	6.28	259.72	261.57	0.71	259.79
Subtotal	1,251	24,619	114,951	2.41	4.65	3.42	6.58	220.97	222.90	0.88	238.34
General Cargo Ships											
Non-Diverted Transits											
Africa-C.A.W.C.	2	23	57	2.41	1.39	3.42	1.97	28.19	28.77	2.05	50.55

(Continued)

Table C-13. Laden Transits, Tons Carried, Toll Revenue and Toll Rates, Current Toll Structure With 50 Percent Increase in Rates, 250,000 DWT Scenario, 2020, by Ship Type, Diversion Status, and Trade Route (1990 US$, except when noted)(continued)

Ship Type, Diversion Status, and Trade Route	Transits	Cargo Tonnage Carried (thousands)	Revenue (thousands) a/	Current Toll Schedule: Toll Per Panama Canal Net Ton	Current Toll Schedule: Toll Per Cargo Ton Carried	New Toll Schedule: Toll Per Panama Canal Net Ton	New Toll Schedule: Toll Per Cargo Ton Carried	Total Transportation Costs per Ton Carried: Via Panama Canal: With Current Toll Structure	Via Panama Canal: With New Toll Structure	Via Panama Canal: Percent Increase	Via Least Costly Alternative Route
General Cargo Ships (continued)											
Non-Diverted Transits (continued)											
Africa-S.A.W.C.	2	35	59	2.41	1.39	3.42	1.97	34.14	34.72	1.70	49.55
Asia-Canada E.C.	0	2	3	2.41	1.39	3.42	1.97	38.09	38.67	1.52	41.65
Asia-C.A.E.C.	71	844	2,486	2.41	1.39	3.42	1.97	34.09	34.67	1.70	44.60
Asia-U.S.E.C.	26	339	930	2.41	1.39	3.42	1.97	34.56	35.14	1.67	47.75
C.A.W.C.-Africa	5	94	171	2.41	1.39	3.42	1.97	28.19	28.77	2.05	50.55
C.A.W.C.-C.A.E.C.	25	109	290	2.41	1.46	3.42	2.07	10.10	10.71	6.03	52.77
C.A.W.C.-Europe	21	120	470	2.41	1.41	3.42	1.99	26.48	27.06	2.22	46.59
C.A.W.C.-S.A.E.C.	8	51	172	2.41	1.41	3.42	2.00	25.50	26.09	2.30	29.62
C.A.W.C.-U.S.E.C.	10	51	121	2.41	1.45	3.42	2.06	11.45	12.06	5.29	65.61
Canada E.C.-Asia	5	12	163	2.41	1.39	3.42	1.97	38.09	38.67	1.52	41.65
Canada E.C.-C.A.W.C.	1	15	31	2.41	1.39	3.42	1.97	19.29	19.87	3.00	37.65
Canada E.C.-S.A.W.C.	6	53	206	2.41	1.39	3.42	1.97	25.19	25.77	2.30	31.75
Canada W.C.-C.A.E.C.	6	45	115	2.41	1.42	3.42	2.01	28.50	29.09	2.08	62.09
Canada W.C.-Europe	1	12	20	2.41	1.39	3.42	1.97	34.09	34.67	1.70	47.55
Canada W.C.-S.A.E.C.	6	58	130	2.41	1.41	3.42	2.00	33.28	33.87	1.77	62.32
C.A.E.C.-Asia	22	415	750	2.41	1.39	3.42	1.97	34.09	34.67	1.70	44.60
C.A.E.C.-C.A.W.C.	25	89	295	2.41	1.45	3.42	2.06	9.12	9.73	6.65	56.51
C.A.E.C.-Oceania	0	7	16	2.41	1.39	3.42	1.97	37.09	37.67	1.56	44.60
C.A.E.C.-S.A.W.C.	24	218	533	2.41	1.41	3.42	1.99	20.63	21.21	2.84	31.22
C.A.E.C.-U.S.W.C.	9	28	68	2.41	1.51	3.42	2.14	30.51	31.14	2.07	102.00
Europe-C.A.W.C.	44	300	1,157	2.41	1.40	3.42	1.98	25.47	26.05	2.29	53.48
Europe-Canada W.C.	2	9	20	2.41	1.50	3.42	2.13	71.00	71.63	0.88	119.28
Europe-S.A.W.C.	39	385	1,265	2.41	1.39	3.42	1.97	30.83	31.41	1.88	32.64

(Continued)

Table C-13. Laden Transits, Tons Carried, Toll Revenue and Toll Rates, Current Toll Structure With 50 Percent Increase in Rates, 250,000 DWT Scenario, 2020, by Ship Type, Diversion Status, and Trade Route (1990 US$, except when noted)(continued)

Ship Type, Diversion Status, and Trade Route	Transits	Cargo Tonnage Carried (thousands)	Revenue (thousands) a/	Current Toll Schedule: Toll Per Panama Canal Net Ton	Current Toll Schedule: Toll Per Cargo Ton Carried	New Toll Schedule: Toll Per Panama Canal Net Ton	New Toll Schedule: Toll Per Cargo Ton Carried	Total Transportation Costs per Ton Carried: Via Panama Canal: With Current Toll Structure	Via Panama Canal: With New Toll Structure	Via Panama Canal: Percent Increase	Via Least Costly Alternative Route
General Cargo Ships (continued)											
Non-Diverted Transits (continued)											
Europe-U.S.W.C.	2	11	33	2.41	1.44	3.42	2.05	55.78	56.39	1.08	93.53
Middle East-S.A.W.C.	4	2	35	2.41	1.50	3.42	2.13	64.45	65.08	0.97	89.22
Middle East-U.S.W.C.	2	4	54	2.41	1.39	3.42	1.97	37.09	37.67	1.56	42.65
Oceania-C.A.E.C.	0	3	16	2.41	1.39	3.42	1.97	36.09	36.67	1.60	44.60
Oceania-U.S.E.C.	1	7	22	2.41	1.43	3.42	2.03	51.18	51.78	1.17	61.38
S.A.E.C.-C.A.W.C.	7	148	250	2.41	1.39	3.42	1.97	23.19	23.77	2.50	24.80
S.A.E.C.-Canada W.C.	0	1	4	2.41	1.39	3.42	1.97	32.14	32.72	1.80	34.70
S.A.E.C.-U.S.W.C.	8	36	227	2.41	1.40	3.42	1.98	34.56	35.14	1.68	36.22
S.A.W.C.-Africa	4	81	143	2.41	1.39	3.42	1.97	31.14	31.72	1.86	47.60
S.A.W.C.-Canada E.C.	0	6	12	2.41	1.39	3.42	1.97	25.19	25.77	2.30	31.75
S.A.W.C.-C.A.E.C.	41	177	530	2.41	1.45	3.42	2.05	21.94	22.54	2.75	42.95
S.A.W.C.-Europe	98	1,601	3,400	2.41	1.39	3.42	1.97	30.14	30.72	1.92	31.75
S.A.W.C.-Middle East	2	23	54	2.41	1.39	3.42	1.97	32.14	32.72	1.80	37.70
S.A.W.C.-U.S.E.C.	27	205	643	2.41	1.40	3.42	1.99	23.26	23.85	2.52	36.08
U.S.E.C.-Asia	48	782	1,687	2.41	1.39	3.42	1.97	34.72	35.30	1.67	47.99
U.S.E.C.-C.A.W.C.	48	352	750	2.41	1.43	3.42	2.03	13.42	14.02	4.44	53.82
U.S.E.C.-Oceania	3	46	106	2.41	1.39	3.42	1.97	37.09	37.67	1.56	41.65
U.S.E.C.-S.A.W.C.	86	605	1,970	2.41	1.41	3.42	1.99	23.39	23.97	2.51	36.70
U.S.E.C.-U.S.W.C.	1	0	6	2.41	1.50	3.42	2.13	32.50	33.13	1.93	107.05
U.S.W.C.-Africa	2	25	78	2.41	1.39	3.42	1.97	34.09	34.67	1.70	42.60
U.S.W.C.-C.A.E.C.	1	0	12	2.41	1.50	3.42	2.13	29.71	30.34	2.11	96.69
U.S.W.C.-Europe	3	31	57	2.41	1.42	3.42	2.02	40.73	41.33	1.46	61.78
U.S.W.C.-S.A.E.C.	6	15	79	2.41	1.45	3.42	2.05	47.38	47.98	1.28	52.07
Subtotal	755	7,476	19,695	2.41	1.40	3.42	1.98	28.70	29.29	2.03	41.85

(Continued)

Table C-13. Laden Transits, Tons Carried, Toll Revenue and Toll Rates, Current Toll Structure With 50 Percent Increase in Rates, 250,000 DWT Scenario, 2020, by Ship Type, Diversion Status, and Trade Route (1990 US$, except when noted)(continued)

Ship Type, Diversion Status, and Trade Route	Transits	Cargo Tonnage Carried (thousands)	Revenue (thousands) a/	Current Toll Schedule: Toll Per Panama Canal Net Ton	Current Toll Schedule: Toll Per Cargo Ton Carried	New Toll Schedule: Toll Per Panama Canal Net Ton	New Toll Schedule: Toll Per Cargo Ton Carried	Total Transportation Costs per Ton Carried: Via Panama Canal: With Current Toll Structure	Via Panama Canal: With New Toll Structure	Via Panama Canal: Percent Increase	Via Least Costly Alternative Route
General Cargo Ships (continued)											
Diverted Transits (continued)											
Asia-S.A.E.C.	2	13	83	2.41	1.39	3.42	1.97	41.09	41.67	1.41	41.65
Canada E.C.-Oceania	0	4	4	2.41	1.39	3.42	1.97	43.04	43.62	1.35	42.65
Canada W.C.-Middle East	1	6	1	2.41	1.39	3.42	1.97	39.04	39.62	1.48	37.70
Subtotal	3	22	88	2.41	1.39	3.41	1.97	40.86	41.44	1.42	40.76
Subtotal	758	7,499	19,783	2.41	1.40	3.41	1.98	28.74	29.32	2.03	41.84
Liquid Gas Carriers											
Non-Diverted Transits											
C.A.W.C.-C.A.E.C.	4	18	68	2.41	7.30	3.42	10.35	49.30	52.35	6.18	170.00
C.A.E.C.-Asia	15	82	441	2.41	4.67	3.42	6.62	107.52	109.47	1.81	152.78
C.A.E.C.-C.A.W.C.	96	1,270	5,504	2.41	3.79	3.42	5.37	23.91	25.49	6.61	71.88
C.A.E.C.-S.A.W.C.	8	119	470	2.41	3.83	3.42	5.42	40.83	42.42	3.91	61.00
C.A.E.C.-U.S.W.C.	1	12	45	2.41	3.83	3.42	5.42	45.83	47.42	3.48	95.00
Europe-C.A.W.C.	2	5	25	2.41	7.30	3.42	10.35	110.30	113.35	2.76	197.00
Europe-S.A.W.C.	0	1	2	2.41	3.82	3.42	5.42	67.82	69.42	2.35	72.00
Oceania-U.S.E.C.	6	91	429	2.41	3.62	3.42	5.13	66.11	67.62	2.28	75.48
S.A.E.C.-Asia	2	27	104	2.41	3.83	3.42	5.42	78.83	80.42	2.02	94.00
S.A.E.C.-C.A.W.C.	11	31	182	2.41	7.30	3.42	10.35	99.30	102.35	3.07	112.00
U.S.E.C.-Asia	23	273	1,243	2.41	3.86	3.42	5.47	82.65	84.26	1.95	121.83
U.S.E.C.-C.A.W.C.	1	2	12	2.41	7.30	3.42	10.35	57.30	60.35	5.31	191.00
U.S.E.C.-Oceania	1	11	50	2.41	3.83	3.42	5.42	86.83	88.42	1.84	100.00
U.S.E.C.-S.A.W.C.	2	6	32	2.41	7.30	3.42	10.35	94.30	97.35	3.23	153.00
Subtotal	172	1,947	8,608	2.41	3.90	3.41	5.53	41.82	43.47	3.93	84.66

(Continued)

Table C-13. Laden Transits, Tons Carried, Toll Revenue and Toll Rates, Current Toll Structure With 50 Percent Increase in Rates, 250,000 DWT Scenario, 2020, by Ship Type, Diversion Status, and Trade Route (1990 US$, except when noted)(continued)

Ship Type, Diversion Status, and Trade Route	Transits	Cargo Tonnage Carried (thousands)	Revenue (thousands) a/	Current Toll Schedule: Toll Per Panama Canal Net Ton	Current Toll Schedule: Toll Per Cargo Ton Carried	New Toll Schedule: Toll Per Panama Canal Net Ton	New Toll Schedule: Toll Per Cargo Ton Carried	Total Transportation Costs per Ton Carried: Via Panama Canal: With Current Toll Structure	Via Panama Canal: With New Toll Structure	Via Panama Canal: Percent Increase	Via Least Costly Alternative Route
Passenger Ships (continued)											
Non-Diverted Transits (continued)											
North-Bound	153	0	3,376	2.41	0.00	3.42	0.00	0.00	0.00	0.00	0.00
South-Bound	183	0	5,841	2.41	0.00	3.42	0.00	0.00	0.00	0.00	0.00
Subtotal	336	0	9,217	2.41	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Refrigerated Ships											
Non-Diverted Transits											
Africa-C.A.W.C.	0	0	4	2.41	4.27	3.42	6.06	113.87	115.66	1.57	208.00
Africa-S.A.W.C.	9	9	250	2.41	4.15	3.42	5.89	133.93	135.67	1.29	196.56
Asia-C.A.E.C.	20	71	609	2.41	3.97	3.42	5.62	128.09	129.74	1.29	173.29
Asia-S.A.E.C.	5	3	129	2.41	4.28	3.42	6.06	168.08	169.86	1.06	171.60
Asia-U.S.E.C.	0	0	11	2.41	4.28	3.42	6.06	140.48	142.26	1.27	198.20
C.A.W.C.-Africa	1	3	25	2.41	4.28	3.42	6.06	113.88	115.66	1.57	208.00
C.A.W.C.-Canada E.C.	0	2	9	2.41	4.28	3.42	6.06	76.48	78.26	2.33	152.00
C.A.W.C.-C.A.E.C.	20	132	655	2.41	3.88	3.42	5.49	50.94	52.55	3.17	124.12
C.A.W.C.-Europe	219	987	6,785	2.41	3.94	3.42	5.58	89.55	91.19	1.83	143.20
C.A.W.C.-S.A.E.C.	1	4	23	2.41	4.28	3.42	6.06	89.28	91.06	2.00	96.80
C.A.W.C.-U.S.E.C.	1	2	23	2.41	4.28	3.42	6.06	61.68	63.46	2.89	149.80
Canada E.C.-Asia	12	63	302	2.41	4.28	3.42	6.06	155.08	156.86	1.15	169.60
Canada E.C.-C.A.W.C.	5	10	141	2.41	3.95	3.42	5.60	70.22	71.87	2.35	142.12
Canada W.C.-Europe	3	28	93	2.41	4.12	3.42	5.83	131.88	133.59	1.30	187.18
C.A.E.C.-Asia	10	32	276	2.41	4.12	3.42	5.84	135.20	136.92	1.27	182.25
C.A.E.C.-C.A.W.C.	23	5	751	2.41	3.87	3.42	5.49	50.87	52.49	3.18	124.00
C.A.E.C.-S.A.W.C.	54	42	1,766	2.41	3.87	3.42	5.49	71.87	73.49	2.25	101.00

(Continued)

Table C-13. Laden Transits, Tons Carried, Toll Revenue and Toll Rates, Current Toll Structure With 50 Percent Increase in Rates, 250,000 DWT Scenario, 2020, by Ship Type, Diversion Status, and Trade Route (1990 US$, except when noted)(continued)

Ship Type, Diversion Status, and Trade Route	Transits	Cargo Tonnage Carried (thousands)	Revenue (thousands) a/	Current Toll Schedule: Toll Per Panama Canal Net Ton	Current Toll Schedule: Toll Per Cargo Ton Carried	New Toll Schedule: Toll Per Panama Canal Net Ton	New Toll Schedule: Toll Per Cargo Ton Carried	Total Transportation Costs per Ton Carried: Via Panama Canal: With Current Toll Structure	Via Panama Canal: With New Toll Structure	Via Panama Canal: Percent Increase	Via Least Costly Alternative Route
Refrigerated Ships (continued)											
Non-Diverted Transits (continued)											
Europe-C.A.W.C.	160	13	5,194	2.41	3.89	3.42	5.51	89.41	91.03	1.81	177.49
Europe-Canada W.C.	1	1	21	2.41	4.28	3.42	6.06	136.48	138.26	1.31	189.40
Europe-S.A.W.C.	169	145	4,923	2.41	4.02	3.42	5.70	116.06	117.74	1.45	121.88
Europe-U.S.W.C.	14	10	341	2.41	4.28	3.42	6.06	126.88	128.66	1.41	178.40
Middle East-S.A.W.C.	2	3	42	2.41	4.28	3.42	6.06	129.48	131.26	1.38	153.80
Oceania-C.A.E.C.	3	18	70	2.41	4.28	3.42	6.06	147.28	149.06	1.21	182.40
Oceania-U.S.E.C.	33	116	825	2.41	4.24	3.42	6.01	148.70	150.47	1.19	169.13
S.A.E.C.-Asia	11	50	278	2.41	4.28	3.42	6.06	137.48	139.26	1.30	159.80
S.A.W.C.-Africa	14	50	377	2.41	4.15	3.42	5.88	123.33	125.06	1.40	191.96
S.A.W.C.-C.A.E.C.	21	111	634	2.41	3.99	3.42	5.66	75.06	76.73	2.22	104.68
S.A.W.C.-Europe	928	4,670	26,535	2.41	4.05	3.42	5.74	115.41	117.10	1.46	121.08
S.A.W.C.-Middle East	5	17	131	2.41	4.28	3.42	6.06	129.48	131.26	1.38	153.80
S.A.W.C.-U.S.E.C.	607	2,226	17,750	2.41	4.02	3.42	5.69	80.58	82.25	2.08	117.32
U.S.E.C.-Asia	32	114	927	2.41	4.01	3.42	5.68	134.04	135.71	1.25	189.83
U.S.E.C.-C.A.W.C.	27	66	831	2.41	3.93	3.42	5.57	56.28	57.92	2.91	139.70
U.S.E.C.-S.A.W.C.	282	434	8,393	2.41	3.99	3.42	5.66	79.55	81.22	2.09	116.03
U.S.W.C.-Europe	126	672	3,330	2.41	4.17	3.42	5.91	126.00	127.74	1.38	177.24
U.S.W.C.-S.A.E.C.	1	3	21	2.41	4.24	3.42	6.01	121.95	123.72	1.45	124.71
Subtotal	2,819	10,116	82,477	2.41	4.02	3.41	5.69	103.72	105.40	1.62	129.20
Refrigerated Ships											
Diverted Transits											
Africa-Asia	29	151	398	2.41	4.28	3.42	6.06	162.08	163.86	1.10	160.80
Subtotal	29	151	398	2.41	4.28	3.42	6.06	162.08	163.86	1.10	160.80
Subtotal	2,847	10,266	82,875	2.41	4.02	3.41	5.70	104.57	106.26	1.61	129.67

(Continued)

Table C-13. Laden Transits, Tons Carried, Toll Revenue and Toll Rates, Current Toll Structure With 50 Percent Increase in Rates, 250,000 DWT Scenario, 2020, by Ship Type, Diversion Status, and Trade Route (1990 US$, except when noted)(continued)

Ship Type, Diversion Status, and Trade Route	Transits	Cargo Tonnage Carried (thousands)	Revenue (thousands) a/	Current Toll Schedule: Toll Per Panama Canal Net Ton	Current Toll Schedule: Toll Per Cargo Ton Carried	New Toll Schedule: Toll Per Panama Canal Net Ton	New Toll Schedule: Toll Per Cargo Ton Carried	Total Transportation Costs per Ton Carried: Via Panama Canal: With Current Toll Structure	Via Panama Canal: With New Toll Structure	Via Panama Canal: Percent Increase	Via Least Costly Alternative Route
Roll-On Roll-Off (continued)											
Non-Diverted Transits (continued)											
Asia-Canada E.C.	2	8	80	2.41	9.35	3.42	13.25	278.31	282.21	1.40	298.63
Asia-C.A.E.C.	24	473	2,477	2.41	7.92	3.42	11.23	225.40	228.71	1.47	256.05
Asia-U.S.E.C.	40	766	4,004	2.41	7.95	3.42	11.27	237.11	240.43	1.40	288.42
C.A.W.C.-Europe	12	64	710	2.41	8.66	3.42	12.27	181.66	185.27	1.99	257.00
C.A.W.C.-S.A.E.C.	0	0	2	2.41	8.67	3.42	12.29	193.67	197.29	1.87	203.00
C.A.W.C.-U.S.E.C.	1	1	72	2.41	8.66	3.42	12.27	155.66	159.27	2.32	251.00
Canada E.C.-Asia	8	41	367	2.41	9.30	3.42	13.18	327.47	331.35	1.18	336.67
Canada W.C.-C.A.E.C.	0	0	7	2.41	10.19	3.42	14.45	224.84	229.10	1.89	359.54
C.A.E.C.-C.A.W.C.	0	1	18	2.41	9.72	3.42	13.77	154.90	158.95	2.62	273.04
C.A.E.C.-Oceania	2	7	147	2.41	8.66	3.42	12.27	252.66	256.27	1.43	297.00
C.A.E.C.-S.A.W.C.	46	81	1,615	2.41	10.19	3.42	14.45	217.90	222.16	1.95	266.26
Europe-C.A.W.C.	18	112	1,054	2.41	8.66	3.42	12.27	181.66	185.27	1.99	311.00
Europe-S.A.W.C.	0	0	2	2.41	8.67	3.42	12.29	240.67	244.29	1.50	275.00
Europe-U.S.W.C.	0	2	24	2.41	8.66	3.42	12.27	241.66	245.27	1.49	311.00
Oceania-C.A.E.C.	0	0	1	2.41	8.01	3.42	11.35	223.21	226.55	1.50	261.95
S.A.W.C.-C.A.E.C.	12	23	407	2.41	10.19	3.42	14.45	217.90	222.16	1.95	266.26
S.A.W.C.-Europe	1	3	59	2.41	8.66	3.42	12.27	240.66	244.27	1.50	281.00
S.A.W.C.-U.S.E.C.	6	13	214	2.41	10.19	3.42	14.45	210.96	215.22	2.02	275.20
U.S.E.C.-Asia	8	56	509	2.41	8.64	3.42	12.24	275.58	279.18	1.31	337.50
U.S.E.C.-C.A.W.C.	2	3	113	2.41	8.66	3.42	12.27	132.66	136.27	2.72	251.00
U.S.E.C.-S.A.W.C.	26	45	899	2.41	10.19	3.42	14.45	210.96	215.22	2.02	275.20
U.S.W.C.-Canada E.C.	1	2	30	2.41	10.20	3.42	14.45	245.70	249.95	1.73	375.45
U.S.W.C.-C.A.E.C.	1	23	116	2.41	7.75	3.42	10.98	153.28	156.51	2.11	223.78

(Continued)

Table C-13. Laden Transits, Tons Carried, Toll Revenue and Toll Rates, Current Toll Structure With 50 Percent Increase in Rates, 250,000 DWT Scenario, 2020, by Ship Type, Diversion Status, and Trade Route (1990 US$, except when noted)(continued)

Ship Type, Diversion Status, and Trade Route	Transits	Cargo Tonnage Carried (thousands)	Revenue (thousands) a/	Current Toll Schedule: Toll Per Panama Canal Net Ton	Current Toll Schedule: Toll Per Cargo Ton Carried	New Toll Schedule: Toll Per Panama Canal Net Ton	New Toll Schedule: Toll Per Cargo Ton Carried	Total Transportation Costs per Ton Carried: Via Panama Canal: With Current Toll Structure	Via Panama Canal: With New Toll Structure	Via Panama Canal: Percent Increase	Via Least Costly Alternative Route
Roll-On Roll-Off (continued)											
Non-Diverted Transits (continued)											
U.S.W.C.-Europe	0	0	2	2.41	7.80	3.42	11.05	203.42	206.67	1.60	256.35
U.S.W.C.-U.S.E.C.	0	5	24	2.41	7.86	3.42	11.14	151.24	154.52	2.17	244.92
Subtotal	211	1,731	12,953	2.41	8.60	3.41	12.19	228.26	231.72	1.52	279.97
Roll-On Roll-Off											
Diverted Transits											
Canada E.C.-Oceania	1	31	108	2.41	7.77	3.42	11.00	240.88	244.11	1.34	239.11
Subtotal	1	31	108	2.41	7.77	3.42	11.00	240.88	244.11	1.34	239.11
Subtotal	213	1,762	13,060	2.41	8.59	3.41	12.17	228.49	231.94	1.51	279.24
Tankers											
Non-Diverted Transits											
Africa-U.S.W.C.	0	0	0	2.41	1.27	3.42	1.80	15.27	15.80	3.48	20.00
Asia-U.S.E.C.	1	30	52	2.41	1.27	3.42	1.80	22.15	22.68	2.39	31.82
C.A.W.C.-Africa	0	0	1	2.41	1.27	3.42	1.80	37.27	37.80	1.42	80.00
C.A.W.C.-Canada E.C.	0	4	6	2.41	1.27	3.42	1.80	10.23	10.76	5.17	23.86
C.A.W.C.-C.A.E.C.	14	85	402	2.41	1.27	3.42	1.80	8.68	9.21	6.10	28.70
C.A.W.C.-Europe	3	70	134	2.41	1.27	3.42	1.80	14.19	14.72	3.73	23.86
C.A.W.C.-U.S.E.C.	7	53	186	2.41	1.27	3.42	1.80	9.70	10.23	5.45	30.45
Canada E.C.-Asia	10	393	657	2.41	1.27	3.42	1.80	20.80	21.33	2.54	22.37
Canada W.C.-U.S.E.C.	5	253	485	2.41	1.27	3.42	1.79	11.42	11.94	4.63	21.15
C.A.E.C.-Asia	6	180	365	2.41	1.27	3.42	1.79	18.65	19.17	2.83	25.59
C.A.E.C.-C.A.W.C.	93	1,762	4,510	2.41	1.27	3.42	1.80	6.05	6.58	8.74	17.83

(Continued)

Table C-13. Laden Transits, Tons Carried, Toll Revenue and Toll Rates, Current Toll Structure With 50 Percent Increase in Rates, 250,000 DWT Scenario, 2020, by Ship Type, Diversion Status, and Trade Route (1990 US$, except when noted)(continued)

Ship Type, Diversion Status, and Trade Route	Transits	Cargo Tonnage Carried (thousands)	Revenue (thousands) a/	Current Toll Schedule: Toll Per Panama Canal Net Ton	Current Toll Schedule: Toll Per Cargo Ton Carried	New Toll Schedule: Toll Per Panama Canal Net Ton	New Toll Schedule: Toll Per Cargo Ton Carried	Total Transportation Costs per Ton Carried: Via Panama Canal: With Current Toll Structure	Via Panama Canal: With New Toll Structure	Via Panama Canal: Percent Increase	Via Least Costly Alternative Route
Tankers (continued)											
Non-Diverted Transits (continued)											
C.A.E.C.-S.A.W.C.	41	879	1,835	2.41	1.27	3.42	1.80	10.87	11.40	4.87	15.66
C.A.E.C.-U.S.W.C.	17	712	1,271	2.41	1.27	3.42	1.80	9.67	10.20	5.47	18.88
Europe-C.A.W.C.	12	54	156	2.41	1.27	3.42	1.80	20.41	20.94	2.59	36.30
Europe-S.A.W.C.	2	52	93	2.41	1.27	3.42	1.80	19.11	19.64	2.77	19.97
Europe-U.S.W.C.	6	196	347	2.41	1.27	3.42	1.80	18.01	18.54	2.94	25.98
Middle East-U.S.W.C.	0	0	0	2.41	1.25	3.42	1.77	23.25	23.77	2.24	28.00
Oceania-U.S.E.C.	9	153	299	2.41	1.27	3.42	1.80	23.22	23.75	2.28	26.68
S.A.E.C.-Asia	67	14,147	22,472	2.41	1.27	3.42	1.80	11.24	11.77	4.71	14.70
S.A.E.C.-C.A.W.C.	85	4,342	9,413	2.41	1.26	3.42	1.79	8.64	9.17	6.09	9.39
S.A.W.C.-Canada E.C.	2	36	70	2.41	1.27	3.42	1.80	16.94	17.47	3.12	21.75
S.A.W.C.-C.A.E.C.	42	1,636	3,143	2.41	1.27	3.42	1.79	8.64	9.16	6.11	12.32
S.A.W.C.-Europe	12	106	194	2.41	1.27	3.42	1.80	22.77	23.30	2.32	24.13
S.A.W.C.-U.S.E.C.	47	1,758	3,174	2.41	1.27	3.42	1.80	10.31	10.84	5.13	15.73
U.S.E.C.-Asia	80	2,655	4,826	2.41	1.27	3.42	1.79	18.79	19.31	2.81	26.64
U.S.E.C.-C.A.W.C.	33	614	1,415	2.41	1.27	3.42	1.80	8.14	8.67	6.50	23.15
U.S.E.C.-Canada W.C.	1	4	52	2.41	1.27	3.42	1.80	15.19	15.72	3.48	28.84
U.S.E.C.-Oceania	6	192	351	2.41	1.27	3.42	1.80	21.59	22.12	2.45	24.75
U.S.E.C.-S.A.W.C.	8	147	287	2.41	1.27	3.42	1.80	12.12	12.65	4.37	18.87
U.S.E.C.-U.S.W.C.	30	877	1,696	2.41	1.27	3.42	1.80	12.30	12.83	4.30	25.53
U.S.W.C.-Africa	7	224	495	2.41	1.26	3.42	1.79	13.36	13.89	3.93	17.15
U.S.W.C.-Canada E.C.	1	21	37	2.41	1.27	3.42	1.80	16.19	16.72	3.27	27.84
U.S.W.C.-C.A.E.C.	8	301	615	2.41	1.26	3.42	1.79	9.64	10.17	5.47	18.60
U.S.W.C.-U.S.E.C.	8	226	482	2.41	1.27	3.42	1.79	11.51	12.03	4.59	23.92
Subtotal	664	32,162	59,521	2.41	1.27	3.42	1.79	11.38	11.91	4.64	16.37

(Continued)

Table C-13. Laden Transits, Tons Carried, Toll Revenue and Toll Rates, Current Toll Structure With 50 Percent Increase in Rates, 250,000 DWT Scenario, 2020, by Ship Type, Diversion Status, and Trade Route (1990 US$, except when noted)(continued)

Ship Type, Diversion Status, and Trade Route	Transits	Cargo Tonnage Carried (thousands)	Revenue (thousands) a/	Current Toll Schedule: Toll Per Panama Canal Net Ton	Current Toll Schedule: Toll Per Cargo Ton Carried	New Toll Schedule: Toll Per Panama Canal Net Ton	New Toll Schedule: Toll Per Cargo Ton Carried	Total Transportation Costs per Ton Carried: Via Panama Canal: With Current Toll Structure	Via Panama Canal: With New Toll Structure	Via Panama Canal: Percent Increase	Via Least Costly Alternative Route
Tankers (continued)											
Diverted Transits (continued)											
S.A.E.C.-U.S.W.C.	49	1,967	2,339	2.41	1.26	3.42	1.79	14.90	15.43	3.54	14.66
U.S.W.C.-S.A.E.C.	2	87	121	2.41	1.27	3.42	1.80	15.34	15.87	3.45	15.48
Subtotal	51	2,054	2,460	2.41	1.26	3.41	1.79	14.92	15.45	3.53	14.69
Subtotal	715	34,216	61,981	2.41	1.27	3.42	1.79	11.59	12.12	4.56	16.27
Vehicle Carriers											
Non-Diverted Transits											
Asia-C.A.E.C.	13	33	1,277	2.41	29.09	3.42	41.22	392.50	404.63	3.09	459.78
Asia-U.S.E.C.	419	1,959	46,692	2.41	29.20	3.42	41.37	413.17	425.34	2.95	479.68
C.A.W.C.-C.A.E.C.	1	1	77	2.41	28.71	3.42	40.69	257.39	269.37	4.65	407.18
C.A.E.C.-C.A.W.C.	4	1	419	2.41	29.22	3.42	41.41	263.22	275.41	4.63	385.00
C.A.E.C.-Oceania	1	0	108	2.41	29.22	3.42	41.41	409.22	421.41	2.98	448.00
Europe-Canada W.C.	5	11	744	2.41	30.90	3.42	43.78	368.26	381.14	3.50	430.05
Europe-U.S.W.C.	149	285	19,489	2.41	29.95	3.42	42.43	381.68	394.16	3.27	429.50
S.A.W.C.-C.A.E.C.	0	0	5	2.41	28.69	3.42	40.65	307.69	319.65	3.89	354.00
U.S.E.C.-Asia	25	114	3,095	2.41	29.67	3.42	42.05	392.18	404.56	3.16	474.71
U.S.E.C.-Oceania	7	18	853	2.41	29.22	3.42	41.41	408.22	420.41	2.98	423.00
Subtotal	623	2,423	72,758	2.41	29.43	3.41	41.70	407.79	420.01	3.00	472.54
Vehicle Carriers											
Diverted Transits											
Asia-S.A.E.C.	0	0	4	2.41	29.13	3.42	41.28	453.29	465.44	2.68	435.60
Canada E.C.-Asia	0	1	10	2.41	29.22	3.42	41.40	437.22	449.40	2.79	425.00
Subtotal	0	1	14	2.41	29.18	3.41	41.35	440.32	452.50	2.77	427.05
Subtotal	623	2,424	72,771	2.41	29.43	3.41	41.70	407.80	420.03	3.00	472.52

(Continued)

Table C-13. Laden Transits, Tons Carried, Toll Revenue and Toll Rates, Current Toll Structure With 50 Percent Increase in Rates, 250,000 DWT Scenario, 2020, by Ship Type, Diversion Status, and Trade Route (1990 US$, except when noted)(continued)

Ship Type, Diversion Status, and Trade Route	Transits	Cargo Tonnage Carried (thousands)	Revenue (thousands) a/	Current Toll Schedule: Toll Per Panama Canal Net Ton	Current Toll Schedule: Toll Per Cargo Ton Carried	New Toll Schedule: Toll Per Panama Canal Net Ton	New Toll Schedule: Toll Per Cargo Ton Carried	Total Transportation Costs per Ton Carried: Via Panama Canal: With Current Toll Structure	Via Panama Canal: With New Toll Structure	Via Panama Canal: Percent Increase	Via Least Costly Alternative Route
Total Non-Diverting	12,867	321,737	816,523	2.41	1.83	3.42	2.59	44.42	45.22	1.79	53.71
Total Diverting	396	14,401	21,175	2.41	1.34	3.42	1.89	20.37	20.94	2.78	20.36

Notes: These calculations do not include all transits and tons carried forecast by the WEFA Group. For some ship-type and trade-route combinations (accounting for a total of 18 transits and 179803 tons), vessel costs were not available for every DWT size interval. As a result, these transits and tons were excluded. In addition, for 1981 transits and 37003606 tons, the cost by way of the Panama Canal without a toll was higher than the least costly alternative route. As a result, these transits and tons were excluded. Percentages may not calculate exactly as shown due to rounding. A fee of $0.40 per Panama Canal net ton has also been included to account for charges such as handling and agency fees incurred when transitting the Canal. The extra fee is only used to determine diversion status by adding it to the cost per ton carried and is not included in the revenue calculations.

a/ Revenue lost from diversions is measured as the revenue generated by the maximum, nondiverting toll rate increase.

Source: Nathan Associates Inc., based on forecasts of traffic and transportation costs provided by The WEFA Group.

CURRENT TOLL STRUCTURE WITH 50 PERCENT INCREASE IN RATES, STATUS QUO SCENARIO, 2060

Table C-14. Laden Transits, Tons Carried, and Toll Revenue, Current Toll Structure With 50 Percent Increase in Rates, Status Quo Scenario, 2060, by Ship Type

	Transits				Tons Carried(thousands)				Revenue(1990 US$thousands)			
Ship Type	Canal	Diverted	Total	Diverted as a Percent of Total	Canal	Diverted	Total	Diverted as a Percent of Total	Canal	Lost a/	Total	Lost as a Percent of Total
Container-Breakbulk	2,310	0	2,310	0.00	34,316	0	34,316	0.00	96,615	0	96,615	0.00
Dry Bulk Carriers	2,552	0	2,552	0.00	112,337	0	112,337	0.00	195,445	0	195,445	0.00
Chemical Tankers	1,183	0	1,183	0.00	32,247	0	32,247	0.00	55,643	0	55,643	0.00
Full Container Ships	1,171	327	1,498	21.86	22,363	5,698	28,061	20.31	103,231	23,125	126,356	18.30
General Cargo Ships	1,377	6	1,383	0.42	13,319	38	13,357	0.28	35,145	197	35,343	0.56
Liquid Gas Carriers	104	0	104	0.00	1,071	0	1,071	0.00	4,722	0	4,722	0.00
Passenger Ships	435	0	435	0.00	0	0	0	0.00	10,041	0	10,041	0.00
Refrigerated Ships	3,897	0	3,897	0.00	15,828	0	15,828	0.00	136,473	0	136,473	0.00
Roll-On Roll-Off	397	0	397	0.02	2,929	0	2,929	0.01	23,313	3	23,316	0.01
Tankers	266	0	266	0.00	6,016	0	6,016	0.00	12,394	0	12,394	0.00
Vehicle Carriers	723	1	724	0.10	2,828	3	2,831	0.10	84,408	42	84,450	0.05
Total	14,416	334	14,750	2.27	243,253	5,739	248,993	2.30	757,432	23,367	780,799	2.99

Notes: These calculations do not include all transits and tons carried forecast by the WEFA Group. For some ship-type and trade-route combinations (accounting for a total of 13 transits and 219227 tons), vessel costs were not available for every DWT size interval. As a result, these transits and tons were excluded. In addition, for 934 transits and 22985287 tons, the cost by way of the Panama Canal without a toll was higher than the least costly alternative route. As a result, these transits and tons were excluded. A fee of $0.40 per Panama Canal net ton has also been included to account for charges such as handling and agency fees incurred when transitting the Canal. The extra fee is only used to determine diversion status by adding it to cost per ton carried and is not included in the revenue calculations.

a/ Revenue lost from diversions is measured as the revenue generated by the maximum, nondiverting toll rate increase.

Source: Nathan Associates Inc., based on forecasts of traffic and transportation costs provided by the WEFA Group.

Table C-15. Ballast Transits, Tons Carried, and Toll Revenue, Current Toll Structure With 50 Percent Increase in Rates, Status Quo Scenario, 2060, by Ship Type

	Transits				Tons Carried(thousands)				Revenue(1990 US$thousands)			
Ship Type	Canal	Diverted	Total	Diverted as a Percent of Total	Canal	Diverted	Total	Diverted as a Percent of Total	Canal	Lost	Total	Lost as a Percent of Total
Container-Breakbulk	57	0	57	0.00	0	0	0	0.00	2,067	0	2,067	0.00
Dry Bulk Carriers	319	0	319	0.00	0	0	0	0.00	18,748	0	18,748	0.00
Chemical Tankers	95	0	95	0.00	0	0	0	0.00	3,953	0	3,953	0.00
Full Container Ships	4	1	5	18.30	0	0	0	0.00	354	79	433	18.30
General Cargo Ships	221	1	222	0.56	0	0	0	0.00	3,590	20	3,610	0.56
Liquid Gas Carriers	65	0	65	0.00	0	0	0	0.00	2,561	0	2,561	0.00
Passenger Ships	51	0	51	0.00	0	0	0	0.00	995	0	995	0.00
Refrigerated Ships	954	0	954	0.00	0	0	0	0.00	25,601	0	25,601	0.00
Roll-On Roll-Off	56	0	56	0.01	0	0	0	0.00	2,083	0	2,083	0.01
Tankers	125	0	125	0.00	0	0	0	0.00	4,787	0	4,787	0.00
Vehicle Carriers	440	0	440	0.05	0	0	0	0.00	38,928	19	38,947	0.05
Total	2,387	2	2,389	0.10	0	0	0	0.00	103,665	119	103,784	0.11

Note: Diversions of ballast transits are computed by diverting a proportion of ballast transits equal to lost revenue as a percent of total potential revenue for a particular laden ship type. See last column on previous table.

Source: Nathan Associates Inc., based on forecasts of traffic and transportation costs provided by the WEFA Group.

Table C-16. Laden Transits, Tons Carried, Toll Revenue and Toll Rates, Current Toll Structure With 50 Percent Increase in Rates, Status Quo Scenario, 2060, by Ship Type, Diversion Status, and Trade Route (1990 US$, except when noted)

Ship Type, Diversion Status, and Trade Route	Transits	Cargo Tonnage Carried (thousands)	Revenue (thousands) a/	Current Toll Schedule: Toll Per Panama Canal Net Ton	Current Toll Schedule: Toll Per Cargo Ton Carried	New Toll Schedule: Toll Per Panama Canal Net Ton	New Toll Schedule: Toll Per Cargo Ton Carried	Total Transportation Costs per Ton Carried: Via Panama Canal: With Current Toll Structure	Via Panama Canal: With New Toll Structure	Via Panama Canal: Percent Increase	Via Least Costly Alternative Route
Container-Breakbulk											
Non-Diverted Transits											
Africa-C.A.W.C.	6	185	285	2.41	1.85	3.42	2.63	72.26	73.04	1.07	119.11
Africa-Canada W.C.	0	5	18	2.41	1.87	3.42	2.65	92.01	92.79	0.85	106.57
Africa-U.S.W.C.	2	25	86	2.41	1.87	3.42	2.65	93.01	93.79	0.84	107.78
Asia-Canada E.C.	1	8	31	2.41	1.86	3.42	2.64	93.05	93.83	0.84	100.96
Asia-C.A.E.C.	135	1,246	5,334	2.41	1.87	3.42	2.64	97.20	97.97	0.80	113.04
Asia-S.A.E.C.	48	305	1,795	2.41	1.87	3.42	2.65	105.12	105.90	0.74	107.25
Asia-U.S.E.C.	139	1,759	5,870	2.41	1.86	3.42	2.64	99.37	100.15	0.78	123.49
C.A.W.C.-Africa	6	112	208	2.41	1.87	3.42	2.65	76.03	76.81	1.03	127.35
C.A.W.C.-C.A.E.C.	16	247	618	2.41	1.86	3.42	2.64	51.25	52.03	1.52	91.73
C.A.W.C.-Europe	41	304	1,625	2.41	1.87	3.42	2.65	65.68	66.46	1.19	95.59
C.A.W.C.-S.A.E.C.	23	10	849	2.41	1.87	3.42	2.65	72.11	72.89	1.08	77.11
C.A.W.C.-U.S.E.C.	7	40	253	2.41	1.87	3.42	2.65	57.32	58.10	1.36	95.90
Canada E.C.-C.A.W.C.	3	25	97	2.41	1.87	3.42	2.65	55.94	56.72	1.39	96.99
Canada E.C.-S.A.W.C.	1	17	39	2.41	1.85	3.42	2.63	65.70	66.48	1.18	79.70
Canada E.C.-U.S.W.C.	0	0	0	2.41	1.86	3.42	2.64	72.57	73.35	1.07	111.42
Canada W.C.-Africa	29	662	1,278	2.41	1.85	3.42	2.63	93.53	94.31	0.83	106.62
Canada W.C.-Europe	107	3,116	5,777	2.41	1.85	3.42	2.63	81.19	81.97	0.95	109.01
Canada W.C.-S.A.E.C.	22	421	816	2.41	1.87	3.42	2.65	74.11	74.89	1.05	114.56
Canada W.C.-U.S.E.C.	15	303	655	2.41	1.85	3.42	2.63	67.85	68.63	1.14	108.00
C.A.E.C.-Asia	13	270	491	2.41	1.87	3.42	2.65	96.31	97.09	0.81	111.98
C.A.E.C.-C.A.W.C.	13	49	497	2.41	1.87	3.42	2.65	52.15	52.93	1.49	94.93
C.A.E.C.-Canada W.C.	4	59	147	2.41	1.87	3.42	2.65	66.58	67.36	1.17	106.57
C.A.E.C.-Oceania	2	38	92	2.41	1.87	3.42	2.65	94.01	94.79	0.83	112.63

(Continued)

Table C-16. Laden Transits, Tons Carried, Toll Revenue and Toll Rates, Current Toll Structure With 50 Percent Increase in Rates, Status Quo Scenario, 2060, by Ship Type, Diversion Status, and Trade Route (1990 US$, except when noted)(continued)

Ship Type, Diversion Status, and Trade Route	Transits	Cargo Tonnage Carried (thousands)	Revenue (thousands) a/	Current Toll Schedule: Toll Per Panama Canal Net Ton	Current Toll Schedule: Toll Per Cargo Ton Carried	New Toll Schedule: Toll Per Panama Canal Net Ton	New Toll Schedule: Toll Per Cargo Ton Carried	Total Transportation Costs per Ton Carried, Via Panama Canal: With Current Toll Structure	Via Panama Canal: With New Toll Structure	Via Panama Canal: Percent Increase	Via Least Costly Alternative Route
Container-Breakbulk (continued)											
Non-Diverted Transits (continued)											
C.A.E.C.-S.A.W.C.	37	286	1,419	2.41	1.87	3.42	2.65	64.73	65.51	1.20	79.50
C.A.E.C.-U.S.W.C.	6	112	240	2.41	1.86	3.42	2.64	64.27	65.05	1.21	97.78
Europe-C.A.W.C.	44	271	1,688	2.41	1.87	3.42	2.65	66.79	67.57	1.17	118.42
Europe-Canada W.C.	7	217	441	2.41	1.85	3.42	2.63	83.24	84.02	0.93	107.58
Europe-S.A.W.C.	182	1,504	7,044	2.41	1.87	3.42	2.65	90.01	90.79	0.87	104.63
Europe-U.S.W.C.	36	1,115	2,107	2.41	1.85	3.42	2.63	82.41	83.19	0.94	107.84
Oceania-C.A.E.C.	10	99	364	2.41	1.87	3.42	2.65	94.77	95.55	0.82	113.61
S.A.E.C.-C.A.W.C.	16	252	632	2.41	1.87	3.42	2.65	71.65	72.43	1.09	76.57
S.A.W.C.-Canada E.C.	1	2	43	2.41	1.87	3.42	2.65	69.19	69.97	1.13	84.90
S.A.W.C.-C.A.E.C.	26	206	954	2.41	1.87	3.42	2.65	65.19	65.97	1.20	80.11
S.A.W.C.-Europe	329	5,753	12,560	2.41	1.87	3.42	2.65	89.68	90.46	0.87	106.41
S.A.W.C.-U.S.E.C.	239	2,340	8,943	2.41	1.87	3.42	2.65	62.12	62.90	1.26	81.53
U.S.E.C.-Asia	284	7,177	14,067	2.41	1.86	3.42	2.63	96.15	96.92	0.81	119.21
U.S.E.C.-C.A.W.C.	22	446	887	2.41	1.86	3.42	2.64	47.68	48.46	1.63	93.27
U.S.E.C.-S.A.W.C.	347	3,443	13,523	2.41	1.87	3.42	2.65	61.84	62.62	1.26	81.01
U.S.E.C.-U.S.W.C.	0	0	1	2.41	1.86	3.42	2.64	58.86	59.64	1.32	98.00
U.S.W.C.-Africa	22	367	1,366	2.41	1.85	3.42	2.63	85.43	86.21	0.91	102.85
U.S.W.C.-Canada E.C.	1	33	56	2.41	1.85	3.42	2.63	69.85	70.63	1.11	106.00
U.S.W.C.-C.A.E.C.	19	135	716	2.41	1.87	3.42	2.65	66.46	67.24	1.17	101.57
U.S.W.C.-Europe	51	1,343	2,679	2.41	1.86	3.42	2.63	83.60	84.37	0.93	108.54
U.S.W.C.-U.S.E.C.	0	6	24	2.41	1.85	3.42	2.63	60.33	61.11	1.28	102.02
Subtotal	2,310	34,316	96,615	2.41	1.86	3.41	2.64	83.50	84.28	0.93	105.56
Dry Bulk Carriers											
Non-Diverted Transits											
Africa-C.A.W.C.	31	1,201	1,846	2.41	1.31	3.42	1.86	15.51	16.06	3.53	27.11

(Continued)

Table C-16. Laden Transits, Tons Carried, Toll Revenue and Toll Rates, Current Toll Structure With 50 Percent Increase in Rates, Status Quo Scenario, 2060, by Ship Type, Diversion Status, and Trade Route (1990 US$, except when noted)(continued)

Ship Type, Diversion Status, and Trade Route	Transits	Cargo Tonnage Carried (thousands)	Revenue (thousands) a/	Current Toll Schedule: Toll Per Panama Canal Net Ton	Current Toll Schedule: Toll Per Cargo Ton Carried	New Toll Schedule: Toll Per Panama Canal Net Ton	New Toll Schedule: Toll Per Cargo Ton Carried	Total Transportation Costs per Ton Carried: Via Panama Canal: With Current Toll Structure	Via Panama Canal: With New Toll Structure	Via Panama Canal: Percent Increase	Via Least Costly Alternative Route
Dry Bulk Carriers (continued)											
Non-Diverted Transits (continued)											
Africa-S.A.W.C.	10	313	568	2.41	1.31	3.42	1.86	18.34	18.89	2.99	26.14
C.A.W.C.-Africa	2	52	109	2.41	1.30	3.42	1.84	15.33	15.87	3.53	27.18
C.A.W.C.-C.A.E.C.	65	2,167	4,074	2.41	1.30	3.42	1.85	7.57	8.12	7.18	16.30
C.A.W.C.-U.S.E.C.	49	1,854	3,225	2.41	1.29	3.42	1.83	7.74	8.28	6.97	18.15
Canada W.C.-C.A.E.C.	9	270	571	2.41	1.31	3.42	1.86	12.66	13.21	4.32	21.54
Canada W.C.-Europe	325	14,976	25,809	2.41	1.26	3.42	1.79	15.62	16.15	3.37	21.21
Canada W.C.-U.S.E.C.	110	3,183	6,625	2.41	1.31	3.42	1.86	13.41	13.96	4.08	23.33
C.A.E.C.-Asia	23	808	1,366	2.41	1.31	3.42	1.86	18.34	18.89	2.99	23.38
C.A.E.C.-C.A.W.C.	52	1,650	3,091	2.41	1.31	3.42	1.86	7.91	8.46	6.93	16.83
C.A.E.C.-Canada W.C.	3	105	190	2.41	1.31	3.42	1.86	12.74	13.29	4.30	21.59
C.A.E.C.-U.S.W.C.	9	286	553	2.41	1.31	3.42	1.86	11.74	12.29	4.67	20.59
Europe-C.A.W.C.	54	1,627	3,194	2.41	1.31	3.42	1.86	12.74	13.29	4.30	22.38
Europe-U.S.W.C.	155	4,679	10,359	2.41	1.29	3.42	1.83	15.94	16.48	3.37	20.80
U.S.E.C.-Asia	1,239	64,706	108,642	2.41	1.25	3.42	1.77	14.89	15.41	3.49	22.61
U.S.E.C.-C.A.W.C.	400	14,003	24,185	2.41	1.31	3.42	1.86	7.94	8.49	6.88	18.73
U.S.E.C.-U.S.W.C.	1	0	35	2.41	1.31	3.42	1.86	11.74	12.29	4.67	22.38
U.S.W.C.-Canada E.C.	6	211	361	2.41	1.30	3.42	1.84	14.00	14.54	3.88	22.50
U.S.W.C.-C.A.E.C.	1	30	58	2.41	1.31	3.42	1.86	11.66	12.21	4.69	20.54
U.S.W.C.-U.S.E.C.	9	215	585	2.41	1.29	3.42	1.82	11.95	12.48	4.49	23.13
Subtotal	2,552	112,337	195,445	2.41	1.27	3.41	1.79	13.75	14.27	3.84	21.66
Chemical Tankers											
Non-Diverted Transits											
Africa-S.A.W.C.	2	59	96	2.41	1.34	3.42	1.90	43.34	43.90	1.29	60.00

(Continued)

Table C-16. Laden Transits, Tons Carried, Toll Revenue and Toll Rates, Current Toll Structure With 50 Percent Increase in Rates, Status Quo Scenario, 2060, by Ship Type, Diversion Status, and Trade Route (1990 US$, except when noted)(continued)

Ship Type, Diversion Status, and Trade Route	Transits	Cargo Tonnage Carried (thousands)	Revenue (thousands) a/	Current Toll Schedule: Toll Per Panama Canal Net Ton	Current Toll Schedule: Toll Per Cargo Ton Carried	New Toll Schedule: Toll Per Panama Canal Net Ton	New Toll Schedule: Toll Per Cargo Ton Carried	Total Transportation Costs per Ton Carried: Via Panama Canal: With Current Toll Structure	Via Panama Canal: With New Toll Structure	Via Panama Canal: Percent Increase	Via Least Costly Alternative Route
Chemical Tankers (continued)											
Non-Diverted Transits (continued)											
Asia-C.A.E.C.	4	50	100	2.41	1.34	3.42	1.90	54.00	54.56	1.03	70.82
Asia-U.S.E.C.	39	820	1,675	2.41	1.34	3.42	1.90	43.81	44.37	1.28	59.67
C.A.W.C.-C.A.E.C.	49	306	578	2.41	1.34	3.42	1.90	39.39	39.95	1.42	83.80
C.A.W.C.-Europe	9	169	281	2.41	1.34	3.42	1.90	38.02	38.58	1.47	56.27
C.A.W.C.-U.S.E.C.	63	885	1,616	2.41	1.34	3.42	1.90	27.74	28.30	2.01	58.89
Canada W.C.-Europe	4	106	204	2.41	1.34	3.42	1.90	42.34	42.90	1.32	57.00
Canada W.C.-U.S.E.C.	39	1,042	2,206	2.41	1.34	3.42	1.90	31.94	32.50	1.75	52.60
C.A.E.C.-Asia	9	293	486	2.41	1.34	3.42	1.90	42.34	42.90	1.32	55.00
C.A.E.C.-C.A.W.C.	5	115	239	2.41	1.34	3.42	1.90	21.34	21.90	2.62	42.00
C.A.E.C.-S.A.W.C.	11	217	421	2.41	1.34	3.42	1.90	30.34	30.90	1.84	40.32
C.A.E.C.-U.S.W.C.	2	15	25	2.41	1.34	3.42	1.90	55.94	56.50	1.00	98.40
Europe-C.A.W.C.	10	51	119	2.41	1.34	3.42	1.90	60.84	61.40	0.92	93.55
Europe-U.S.W.C.	10	261	455	2.41	1.34	3.42	1.90	42.05	42.61	1.33	56.46
S.A.W.C.-C.A.E.C.	36	134	655	2.41	1.34	3.42	1.90	44.18	44.74	1.26	60.24
S.A.W.C.-Europe	12	151	267	2.41	1.34	3.42	1.90	53.51	54.07	1.04	56.81
S.A.W.C.-U.S.E.C.	12	100	313	2.41	1.34	3.42	1.90	39.07	39.63	1.43	53.98
U.S.E.C.-Asia	683	23,746	38,502	2.41	1.34	3.42	1.90	41.54	42.10	1.35	56.40
U.S.E.C.-C.A.W.C.	27	238	462	2.41	1.34	3.42	1.90	34.18	34.74	1.63	74.41
U.S.E.C.-Canada W.C.	8	61	106	2.41	1.34	3.42	1.90	60.04	60.60	0.93	104.95
U.S.E.C.-Oceania	17	545	926	2.41	1.34	3.42	1.90	43.19	43.75	1.29	48.34
U.S.E.C.-S.A.W.C.	53	560	1,080	2.41	1.34	3.42	1.90	41.25	41.81	1.35	57.19
U.S.E.C.-U.S.W.C.	48	1,814	3,408	2.41	1.34	3.42	1.90	25.49	26.05	2.19	43.29
U.S.W.C.-C.A.E.C.	1	12	30	2.41	1.34	3.42	1.90	29.34	29.90	1.90	49.00

(Continued)

Table C-16. Laden Transits, Tons Carried, Toll Revenue and Toll Rates, Current Toll Structure With 50 Percent Increase in Rates, Status Quo Scenario, 2060, by Ship Type, Diversion Status, and Trade Route (1990 US$, except when noted)(continued)

Ship Type, Diversion Status, and Trade Route	Transits	Cargo Tonnage Carried (thousands)	Revenue (thousands) a/	Current Toll Schedule: Toll Per Panama Canal Net Ton	Current Toll Schedule: Toll Per Cargo Ton Carried	New Toll Schedule: Toll Per Panama Canal Net Ton	New Toll Schedule: Toll Per Cargo Ton Carried	Total Transportation Costs per Ton Carried: Via Panama Canal: With Current Toll Structure	Via Panama Canal: With New Toll Structure	Via Panama Canal: Percent Increase	Via Least Costly Alternative Route
Chemical Tankers (continued)											
Non-Diverted Transits (continued)											
U.S.W.C.-Europe	16	266	533	2.41	1.34	3.42	1.90	45.29	45.85	1.23	61.30
U.S.W.C.-U.S.E.C.	12	233	861	2.41	1.34	3.42	1.90	25.79	26.35	2.17	43.90
Subtotal	1,183	32,247	55,643	2.41	1.34	3.41	1.90	39.87	40.43	1.40	55.95
Full Container Ships											
Non-Diverted Transits											
Africa-U.S.W.C.	0	5	17	2.41	4.49	3.42	6.36	247.81	249.68	0.76	284.11
Asia-Canada E.C.	33	739	3,425	2.41	4.70	3.42	6.66	207.29	209.25	0.95	225.70
Asia-S.A.E.C.	4	14	137	2.41	4.49	3.42	6.36	274.66	276.53	0.68	282.11
Asia-U.S.E.C. (low inv. cost)	211	4,208	26,026	2.41	4.74	3.42	6.72	241.67	243.65	0.82	245.26
C.A.W.C.-C.A.E.C.	1	9	67	2.41	4.44	3.42	6.29	130.00	131.85	1.42	207.98
C.A.W.C.-Europe	2	37	195	2.41	4.42	3.42	6.27	152.02	153.87	1.21	204.85
C.A.W.C.-S.A.E.C.	0	7	32	2.41	4.44	3.42	6.29	162.41	164.26	1.14	169.25
C.A.W.C.-U.S.E.C.	0	5	18	2.41	4.49	3.42	6.36	161.41	163.28	1.16	253.29
Canada E.C.-Asia	35	658	2,545	2.41	4.55	3.42	6.45	226.90	228.80	0.84	236.18
Canada E.C.-U.S.W.C.	8	247	1,034	2.41	4.77	3.42	6.76	154.77	156.76	1.29	229.00
Canada W.C.-Europe	31	511	1,828	2.41	4.51	3.42	6.38	210.71	212.58	0.89	276.36
C.A.E.C.-Asia	8	116	607	2.41	4.47	3.42	6.33	213.60	215.46	0.87	244.68
C.A.E.C.-C.A.W.C.	1	7	41	2.41	4.47	3.42	6.33	143.12	144.98	1.30	235.87
C.A.E.C.-Oceania	1	8	31	2.41	4.49	3.42	6.36	250.78	252.65	0.75	297.02
C.A.E.C.-S.A.W.C.	2	10	61	2.41	4.49	3.42	6.36	178.89	180.76	1.05	214.04
C.A.E.C.-U.S.W.C.	2	26	123	2.41	4.45	3.42	6.30	152.93	154.78	1.21	218.40
Europe-C.A.W.C.	0	1	9	2.41	4.42	3.42	6.27	152.02	153.87	1.21	243.00

(Continued)

Table C-16. Laden Transits, Tons Carried, Toll Revenue and Toll Rates, Current Toll Structure With 50 Percent Increase in Rates, Status Quo Scenario, 2060, by Ship Type, Diversion Status, and Trade Route (1990 US$, except when noted)(continued)

Ship Type, Diversion Status, and Trade Route	Transits	Cargo Tonnage Carried (thousands)	Revenue (thousands) a/	Current Toll Schedule: Toll Per Panama Canal Net Ton	Current Toll Schedule: Toll Per Cargo Ton Carried	New Toll Schedule: Toll Per Panama Canal Net Ton	New Toll Schedule: Toll Per Cargo Ton Carried	Total Transportation Costs per Ton Carried: Via Panama Canal: With Current Toll Structure	Via Panama Canal: With New Toll Structure	Via Panama Canal: Percent Increase	Via Least Costly Alternative Route
Full Container Ships (continued)											
Non-Diverted Transits (continued)											
Europe-Canada W.C.	25	336	1,304	2.41	4.47	3.42	6.33	223.81	225.67	0.83	284.41
Europe-S.A.W.C.	81	1,309	6,482	2.41	4.42	3.42	6.27	191.22	193.07	0.96	221.95
Middle East-U.S.W.C.	15	247	923	2.41	4.47	3.42	6.34	218.19	220.06	0.85	247.58
Oceania-C.A.E.C.	5	64	203	2.41	4.49	3.42	6.36	250.78	252.65	0.75	297.02
S.A.E.C.-C.A.W.C.	1	8	30	2.41	4.49	3.42	6.36	197.14	199.01	0.95	206.59
S.A.E.C.-U.S.W.C.	2	20	65	2.41	4.49	3.42	6.36	183.23	185.10	1.02	219.50
S.A.W.C.-C.A.E.C.	0	1	10	2.41	4.49	3.42	6.36	178.89	180.76	1.05	214.04
S.A.W.C.-Europe	144	3,081	11,587	2.41	4.42	3.42	6.27	191.21	193.06	0.96	221.95
S.A.W.C.-U.S.E.C.	99	1,047	3,806	2.41	4.49	3.42	6.36	174.32	176.19	1.07	221.50
U.S.E.C.-Asia (low inv. cost)	277	7,718	33,302	2.41	4.73	3.42	6.70	242.19	244.16	0.81	246.59
U.S.E.C.-C.A.W.C.	13	112	492	2.41	4.49	3.42	6.36	140.53	142.40	1.33	253.29
U.S.E.C.-S.A.W.C.	117	1,005	4,489	2.41	4.49	3.42	6.36	174.32	176.19	1.07	221.50
U.S.E.C.-U.S.W.C.	1	26	116	2.41	4.76	3.42	6.74	138.99	140.97	1.43	224.03
U.S.W.C.-Africa	0	0	0	2.41	4.64	3.42	6.57	193.64	195.57	1.00	233.00
U.S.W.C.-Canada E.C.	0	8	36	2.41	4.57	3.42	6.47	159.49	161.39	1.19	231.46
U.S.W.C.-C.A.E.C.	6	90	373	2.41	4.46	3.42	6.32	161.25	163.11	1.15	232.70
U.S.W.C.-Middle East	25	356	1,547	2.41	4.47	3.42	6.34	219.26	221.13	0.85	229.43
U.S.W.C.-U.S.E.C.	21	326	2,270	2.41	4.65	3.42	6.58	141.16	143.09	1.37	224.31
Subtotal	1,171	22,363	103,231	2.41	4.63	3.42	6.56	218.63	220.55	0.88	238.60
Full Container Ships											
Diverted Transits											
Europe-U.S.W.C.	164	2,963	11,215	2.41	4.60	3.42	6.52	215.04	216.96	0.89	215.66

(Continued)

Table C-16. Laden Transits, Tons Carried, Toll Revenue and Toll Rates, Current Toll Structure With 50 Percent Increase in Rates, Status Quo Scenario, 2060, by Ship Type, Diversion Status, and Trade Route (1990 US$, except when noted)(continued)

Ship Type, Diversion Status, and Trade Route	Transits	Cargo Tonnage Carried (thousands)	Revenue (thousands) a/	Current Toll Schedule: Toll Per Panama Canal Net Ton	Current Toll Schedule: Toll Per Cargo Ton Carried	New Toll Schedule: Toll Per Panama Canal Net Ton	New Toll Schedule: Toll Per Cargo Ton Carried	Total Transportation Costs per Ton Carried: Via Panama Canal: With Current Toll Structure	Via Panama Canal: With New Toll Structure	Via Panama Canal: Percent Increase	Via Least Costly Alternative Route
Full Container Ships (continued)											
Diverted Transits (continued)											
U.S.W.C.-Europe	163	2,735	11,910	2.41	4.62	3.42	6.55	216.86	218.79	0.89	217.65
Subtotal	327	5,698	23,125	2.41	4.61	3.42	6.53	215.91	217.83	0.89	216.62
Subtotal	1,498	28,061	126,356	2.41	4.62	3.42	6.55	218.08	220.00	0.88	234.14
General Cargo Ships											
Non-Diverted Transits											
Africa-C.A.W.C.	3	46	112	2.41	1.39	3.42	1.97	31.04	31.62	1.86	56.35
Africa-S.A.W.C.	3	68	115	2.41	1.39	3.42	1.97	37.94	38.52	1.53	54.35
Asia-C.A.E.C.	127	1,501	4,420	2.41	1.39	3.42	1.97	36.99	37.57	1.56	49.45
Asia-U.S.E.C.	49	632	1,731	2.41	1.39	3.42	1.96	38.14	38.71	1.51	52.33
C.A.W.C.-Africa	7	139	253	2.41	1.39	3.42	1.97	31.04	31.62	1.86	56.35
C.A.W.C.-C.A.E.C.	55	243	647	2.41	1.46	3.42	2.07	9.72	10.33	6.26	59.62
C.A.W.C.-Europe	51	291	1,146	2.41	1.41	3.42	1.99	29.65	30.23	1.98	52.03
C.A.W.C.-S.A.E.C.	15	99	337	2.41	1.41	3.42	1.99	27.71	28.29	2.12	32.29
C.A.W.C.-U.S.E.C.	16	84	197	2.41	1.45	3.42	2.06	12.26	12.87	4.94	74.92
Canada E.C.-C.A.W.C.	2	36	73	2.41	1.39	3.42	1.97	21.19	21.77	2.73	41.50
Canada W.C.-C.A.E.C.	16	120	306	2.41	1.42	3.42	2.01	31.71	32.30	1.87	70.25
Canada W.C.-Europe	1	21	34	2.41	1.39	3.42	1.97	37.94	38.52	1.53	52.40
Canada W.C.-S.A.E.C.	14	126	286	2.41	1.41	3.42	2.00	36.39	36.98	1.62	71.10
C.A.E.C.-Asia	28	538	972	2.41	1.39	3.42	1.97	36.99	37.57	1.56	49.45
C.A.E.C.-C.A.W.C.	56	209	689	2.41	1.45	3.42	2.06	8.51	9.12	7.12	63.99
C.A.E.C.-Oceania	1	13	31	2.41	1.39	3.42	1.97	40.94	41.52	1.41	49.45
C.A.E.C.-S.A.W.C.	53	492	1,199	2.41	1.41	3.42	1.99	22.58	23.16	2.60	34.74

(Continued)

Table C-16. Laden Transits, Tons Carried, Toll Revenue and Toll Rates, Current Toll Structure With 50 Percent Increase in Rates, Status Quo Scenario, 2060, by Ship Type, Diversion Status, and Trade Route (1990 US$, except when noted)(continued)

Ship Type, Diversion Status, and Trade Route	Transits	Cargo Tonnage Carried (thousands)	Revenue (thousands) a/	Current Toll Schedule: Toll Per Panama Canal Net Ton	Current Toll Schedule: Toll Per Cargo Ton Carried	New Toll Schedule: Toll Per Panama Canal Net Ton	New Toll Schedule: Toll Per Cargo Ton Carried	Total Transportation Costs per Ton Carried: Via Panama Canal: With Current Toll Structure	Via Panama Canal: With New Toll Structure	Via Panama Canal: Percent Increase	Via Least Costly Alternative Route
General Cargo Ships (continued)											
Non-Diverted Transits (continued)											
C.A.E.C.-U.S.W.C.	12	42	100	2.41	1.50	3.42	2.12	32.53	33.15	1.92	110.69
Europe-C.A.W.C.	87	598	2,307	2.41	1.40	3.42	1.98	28.49	29.07	2.05	59.50
Europe-Canada W.C.	3	11	24	2.41	1.50	3.42	2.12	80.37	80.99	0.78	136.96
Europe-S.A.W.C.	68	680	2,235	2.41	1.39	3.42	1.97	33.84	34.42	1.71	35.65
Europe-U.S.W.C.	4	18	51	2.41	1.44	3.42	2.04	62.15	62.75	0.97	107.39
Middle East-S.A.W.C.	6	3	50	2.41	1.50	3.42	2.12	73.82	74.44	0.85	102.30
Oceania-C.A.E.C.	1	7	37	2.41	1.39	3.42	1.97	39.94	40.52	1.45	49.45
Oceania-U.S.E.C.	1	6	20	2.41	1.43	3.42	2.03	57.41	58.01	1.04	69.46
S.A.E.C.-C.A.W.C.	13	261	440	2.41	1.39	3.42	1.97	25.14	25.72	2.30	26.70
S.A.W.C.-C.A.E.C.	82	361	1,078	2.41	1.45	3.42	2.05	23.90	24.50	2.52	48.57
S.A.W.C.-Europe	171	2,817	5,979	2.41	1.39	3.42	1.97	33.04	33.62	1.75	34.60
S.A.W.C.-U.S.E.C.	56	430	1,350	2.41	1.40	3.42	1.99	25.31	25.90	2.31	40.80
U.S.E.C.-Asia	74	1,214	2,617	2.41	1.39	3.42	1.96	38.38	38.95	1.51	52.66
U.S.E.C.-C.A.W.C.	103	776	1,652	2.41	1.43	3.42	2.02	14.67	15.26	4.06	60.90
U.S.E.C.-S.A.W.C.	187	1,336	4,347	2.41	1.41	3.42	1.99	25.45	26.03	2.30	41.52
U.S.E.C.-U.S.W.C.	1	0	7	2.41	1.50	3.42	2.12	35.37	35.99	1.77	122.89
U.S.W.C.-Africa	7	75	231	2.41	1.39	3.42	1.97	36.99	37.57	1.56	47.45
U.S.W.C.-C.A.E.C.	3	1	26	2.41	1.50	3.42	2.12	32.53	33.15	1.92	110.69
U.S.W.C.-Europe	3	25	46	2.41	1.42	3.42	2.01	44.83	45.42	1.32	69.85
Subtotal	1,377	13,319	35,145	2.41	1.40	3.41	1.98	30.43	31.01	1.92	46.46
General Cargo Ships											
Diverted Transits											
Asia-S.A.E.C.	4	25	162	2.41	1.39	3.42	1.97	45.89	46.47	1.26	46.45

(Continued)

Table C-16. Laden Transits, Tons Carried, Toll Revenue and Toll Rates, Current Toll Structure With 50 Percent Increase in Rates, Status Quo Scenario, 2060, by Ship Type, Diversion Status, and Trade Route (1990 US$, except when noted)(continued)

Ship Type, Diversion Status, and Trade Route	Transits	Cargo Tonnage Carried (thousands)	Revenue (thousands) a/	Current Toll Schedule: Toll Per Panama Canal Net Ton	Current Toll Schedule: Toll Per Cargo Ton Carried	New Toll Schedule: Toll Per Panama Canal Net Ton	New Toll Schedule: Toll Per Cargo Ton Carried	Total Transportation Costs per Ton Carried: Via Panama Canal: With Current Toll Structure	Via Panama Canal: With New Toll Structure	Via Panama Canal: Percent Increase	Via Least Costly Alternative Route
General Cargo Ships (continued)											
Diverted Transits (continued)											
Canada W.C.-Middle East	2	13	35	2.41	1.39	3.42	1.97	42.89	43.47	1.35	42.50
Subtotal	6	38	197	2.41	1.39	3.42	1.97	44.88	45.46	1.29	45.13
Subtotal	1,383	13,357	35,343	2.41	1.40	3.41	1.98	30.47	31.05	1.92	46.45
Liquid Gas Carriers											
Non-Diverted Transits											
C.A.W.C.-C.A.E.C.	10	43	159	2.41	7.30	3.42	10.35	57.30	60.35	5.31	201.00
C.A.E.C.-Asia	10	53	283	2.41	4.67	3.42	6.62	124.16	126.11	1.57	178.06
C.A.E.C.-C.A.W.C.	56	742	3,214	2.41	3.79	3.42	5.37	26.91	28.49	5.88	81.65
C.A.E.C.-S.A.W.C.	4	60	239	2.41	3.83	3.42	5.42	45.83	47.42	3.48	70.00
C.A.E.C.-U.S.W.C.	0	3	10	2.41	3.83	3.42	5.42	51.83	53.42	3.08	109.00
Europe-C.A.W.C.	2	7	34	2.41	7.30	3.42	10.35	129.30	132.35	2.36	234.00
Europe-S.A.W.C.	0	1	4	2.41	3.82	3.42	5.42	76.82	78.42	2.08	82.00
Oceania-U.S.E.C.	4	57	269	2.41	3.62	3.42	5.13	75.10	76.61	2.01	85.98
S.A.E.C.-Asia	2	30	118	2.41	3.83	3.42	5.42	89.83	91.42	1.78	107.00
S.A.E.C.-C.A.W.C.	12	32	187	2.41	7.30	3.42	10.35	115.30	118.35	2.64	132.00
U.S.E.C.-Asia	3	41	189	2.41	3.86	3.42	5.47	94.04	95.65	1.71	139.47
U.S.E.C.-C.A.W.C.	0	1	4	2.41	7.30	3.42	10.35	66.30	69.35	4.59	226.00
U.S.E.C.-S.A.W.C.	1	2	11	2.41	7.30	3.42	10.35	109.30	112.35	2.79	182.00
Subtotal	104	1,071	4,722	2.41	3.99	3.42	5.66	44.45	46.17	3.85	96.49
Passenger Ships											
Non-Diverted Transits											
North-Bound	197	0	3,532	2.41	0.00	3.42	0.00	0.00	0.00	0.00	0.00

(Continued)

Table C-16. Laden Transits, Tons Carried, Toll Revenue and Toll Rates, Current Toll Structure With 50 Percent Increase in Rates, Status Quo Scenario, 2060, by Ship Type, Diversion Status, and Trade Route (1990 US$, except when noted)(continued)

Ship Type, Diversion Status, and Trade Route	Transits	Cargo Tonnage Carried (thousands)	Revenue (thousands) a/	Current Toll Schedule: Toll Per Panama Canal Net Ton	Current Toll Schedule: Toll Per Cargo Ton Carried	New Toll Schedule: Toll Per Panama Canal Net Ton	New Toll Schedule: Toll Per Cargo Ton Carried	Total Transportation Costs per Ton Carried: Via Panama Canal: With Current Toll Structure	Via Panama Canal: With New Toll Structure	Via Panama Canal: Percent Increase	Via Least Costly Alternative Route
Passenger Ships (continued)											
Non-Diverted Transits (continued)											
South-Bound	238	0	6,510	2.41	0.00	3.42	0.00	0.00	0.00	0.00	0.00
Subtotal	435	0	10,041	2.41	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Refrigerated Ships											
Non-Diverted Transits											
Africa-C.A.W.C.	0	0	4	2.41	4.00	3.42	5.67	120.20	121.87	1.39	224.60
Africa-S.A.W.C.	49	21	1,518	2.41	3.94	3.42	5.59	154.50	156.15	1.06	228.37
Asia-C.A.E.C.	25	95	923	2.41	3.86	3.42	5.46	131.86	133.46	1.22	180.00
Asia-U.S.E.C.	1	0	21	2.41	4.00	3.42	5.67	149.60	151.27	1.12	213.60
C.A.W.C.-Africa	2	7	52	2.41	4.00	3.42	5.67	120.20	121.87	1.39	224.60
C.A.W.C.-Canada E.C.	1	5	16	2.41	4.00	3.42	5.67	79.20	80.87	2.11	163.40
C.A.W.C.-C.A.E.C.	39	294	1,449	2.41	3.86	3.42	5.46	52.86	54.46	3.04	132.00
C.A.W.C.-Europe	276	1,493	10,216	2.41	3.86	3.42	5.46	92.86	94.46	1.73	150.00
C.A.W.C.-S.A.E.C.	2	9	47	2.41	4.00	3.42	5.67	94.40	96.07	1.77	103.00
C.A.W.C.-U.S.E.C.	1	2	33	2.41	4.00	3.42	5.67	64.00	65.67	2.61	160.40
Canada E.C.-Asia	15	92	410	2.41	4.00	3.42	5.67	165.80	167.47	1.01	182.60
Canada E.C.-C.A.W.C.	11	31	401	2.41	3.86	3.42	5.46	71.86	73.46	2.24	149.00
Canada W.C.-Europe	4	45	138	2.41	3.86	3.42	5.46	132.86	134.46	1.21	190.00
C.A.E.C.-Asia	13	37	404	2.41	3.93	3.42	5.57	144.92	146.56	1.13	197.33
C.A.E.C.-C.A.W.C.	43	11	1,598	2.41	3.86	3.42	5.46	52.86	54.46	3.04	132.00
C.A.E.C.-S.A.W.C.	93	82	3,450	2.41	3.86	3.42	5.46	75.86	77.46	2.12	107.00
Europe-C.A.W.C.	308	26	11,373	2.41	3.86	3.42	5.46	92.86	94.46	1.73	187.00
Europe-Canada W.C.	1	1	28	2.41	4.00	3.42	5.67	145.60	147.27	1.15	204.40

(Continued)

Table C-16. Laden Transits, Tons Carried, Toll Revenue and Toll Rates, Current Toll Structure With 50 Percent Increase in Rates, Status Quo Scenario, 2060, by Ship Type, Diversion Status, and Trade Route (1990 US$, except when noted)(continued)

Ship Type, Diversion Status, and Trade Route	Transits	Cargo Tonnage Carried (thousands)	Revenue (thousands) a/	Current Toll Schedule: Toll Per Panama Canal Net Ton	Current Toll Schedule: Toll Per Cargo Ton Carried	New Toll Schedule: Toll Per Panama Canal Net Ton	New Toll Schedule: Toll Per Cargo Ton Carried	Total Transportation Costs per Ton Carried: Via Panama Canal: With Current Toll Structure	Via Panama Canal: With New Toll Structure	Via Panama Canal: Percent Increase	Via Least Costly Alternative Route
Refrigerated Ships (continued)											
Non-Diverted Transits (continued)											
Europe-S.A.W.C.	295	278	10,356	2.41	3.88	3.42	5.50	119.82	121.44	1.35	127.10
Europe-U.S.W.C.	18	16	503	2.41	4.00	3.42	5.67	135.40	137.07	1.23	192.20
Middle East-S.A.W.C.	3	6	74	2.41	4.00	3.42	5.67	138.00	139.67	1.21	165.40
Oceania-C.A.E.C.	6	50	180	2.41	4.00	3.42	5.67	157.20	158.87	1.06	196.80
Oceania-U.S.E.C.	53	207	1,531	2.41	3.98	3.42	5.65	160.43	162.10	1.04	183.47
S.A.E.C.-Asia	12	62	326	2.41	4.00	3.42	5.67	146.60	148.27	1.14	172.00
S.A.W.C.-C.A.E.C.	40	241	1,450	2.41	3.86	3.42	5.48	76.48	78.10	2.11	107.85
S.A.W.C.-Europe	1,101	6,815	37,657	2.41	3.89	3.42	5.52	119.88	121.51	1.35	127.15
S.A.W.C.-U.S.E.C.	808	3,821	28,517	2.41	3.88	3.42	5.49	82.93	84.54	1.95	122.50
U.S.E.C.-Asia	46	189	1,620	2.41	3.87	3.42	5.49	139.10	140.72	1.16	198.29
U.S.E.C.-C.A.W.C.	70	196	2,572	2.41	3.86	3.42	5.46	57.86	59.46	2.78	146.00
U.S.E.C.-S.A.W.C.	423	892	15,305	2.41	3.87	3.42	5.48	82.19	83.80	1.96	121.46
U.S.W.C.-Europe	140	804	4,302	2.41	3.95	3.42	5.60	134.45	136.10	1.23	190.92
Subtotal	3,897	15,828	136,473	2.41	3.88	3.42	5.50	105.39	107.01	1.54	134.40
Roll-On Roll-Off											
Non-Diverted Transits											
Asia-Canada E.C.	3	15	146	2.41	9.35	3.42	13.25	298.90	302.80	1.30	324.43
Asia-C.A.E.C.	32	633	3,319	2.41	7.92	3.42	11.23	236.83	240.14	1.40	268.32
Asia-U.S.E.C.	67	1,286	6,717	2.41	7.95	3.42	11.27	248.85	252.17	1.33	304.22
C.A.W.C.-Europe	33	177	1,965	2.41	8.66	3.42	12.27	198.66	202.27	1.82	280.00
C.A.W.C.-U.S.E.C.	3	1	153	2.41	8.66	3.42	12.27	170.66	174.27	2.12	273.00
Canada E.C.-Asia	17	85	763	2.41	9.30	3.42	13.18	355.27	359.15	1.09	370.17

(Continued)

Table C-16. Laden Transits, Tons Carried, Toll Revenue and Toll Rates, Current Toll Structure With 50 Percent Increase in Rates, Status Quo Scenario, 2060, by Ship Type, Diversion Status, and Trade Route (1990 US$, except when noted)(continued)

Ship Type, Diversion Status, and Trade Route	Transits	Cargo Tonnage Carried (thousands)	Revenue (thousands) a/	Current Toll Schedule: Toll Per Panama Canal Net Ton	Current Toll Schedule: Toll Per Cargo Ton Carried	New Toll Schedule: Toll Per Panama Canal Net Ton	New Toll Schedule: Toll Per Cargo Ton Carried	Total Transportation Costs per Ton Carried: Via Panama Canal: With Current Toll Structure	Via Panama Canal: With New Toll Structure	Via Panama Canal: Percent Increase	Via Least Costly Alternative Route
Roll-On Roll-Off (continued)											
Non-Diverted Transits (continued)											
Canada W.C.-C.A.E.C.	0	1	17	2.41	10.19	3.42	14.44	239.87	244.12	1.77	394.39
C.A.E.C.-C.A.W.C.	1	2	39	2.41	9.72	3.42	13.77	167.54	171.59	2.42	296.40
C.A.E.C.-Oceania	7	20	421	2.41	8.66	3.42	12.27	275.66	279.27	1.31	332.00
C.A.E.C.-S.A.W.C.	85	149	2,963	2.41	10.19	3.42	14.45	232.93	237.19	1.83	280.17
Europe-C.A.W.C.	35	221	2,079	2.41	8.66	3.42	12.27	198.66	202.27	1.82	350.00
Europe-S.A.W.C.	0	0	4	2.41	8.67	3.42	12.28	262.67	266.28	1.38	303.00
Europe-U.S.W.C.	1	3	36	2.41	8.66	3.42	12.27	262.66	266.27	1.38	350.00
Oceania-C.A.E.C.	0	0	1	2.41	7.97	3.42	11.29	234.97	238.29	1.41	273.80
S.A.W.C.-C.A.E.C.	22	44	766	2.41	10.19	3.42	14.45	232.93	237.19	1.83	280.17
S.A.W.C.-Europe	2	5	101	2.41	8.66	3.42	12.27	262.66	266.27	1.38	311.00
S.A.W.C.-U.S.E.C.	12	25	418	2.41	10.19	3.42	14.45	224.99	229.25	1.89	292.08
U.S.E.C.-Asia	14	93	847	2.41	8.64	3.42	12.24	298.20	301.80	1.21	378.28
U.S.E.C.-C.A.W.C.	4	7	243	2.41	8.66	3.42	12.27	144.66	148.27	2.50	273.00
U.S.E.C.-S.A.W.C.	57	101	1,996	2.41	10.19	3.42	14.45	224.99	229.25	1.89	292.08
U.S.W.C.-Canada E.C.	1	2	25	2.41	10.20	3.42	14.45	263.70	267.95	1.61	414.27
U.S.W.C.-C.A.E.C.	2	48	246	2.41	7.75	3.42	10.98	160.82	164.05	2.01	232.64
U.S.W.C.-Europe	0	1	3	2.41	7.77	3.42	11.01	212.68	215.92	1.52	267.50
U.S.W.C.-U.S.E.C.	0	9	45	2.41	7.86	3.42	11.14	159.45	162.73	2.06	255.79
Subtotal	397	2,929	23,313	2.41	8.68	3.42	12.30	240.41	243.90	1.45	299.63
Roll-On Roll-Off											
Diverted Transits											
C.A.W.C.-S.A.E.C.	0	0	3	2.41	8.66	3.42	12.27	211.66	215.27	1.71	211.00
Subtotal	0	0	3	2.41	8.66	3.41	12.27	211.66	215.27	1.71	211.00
Subtotal	397	2,929	23,316	2.41	8.68	3.42	12.30	240.41	243.89	1.45	299.62

(Continued)

Table C-16. Laden Transits, Tons Carried, Toll Revenue and Toll Rates, Current Toll Structure With 50 Percent Increase in Rates, Status Quo Scenario, 2060, by Ship Type, Diversion Status, and Trade Route (1990 US$, except when noted)(continued)

Ship Type, Diversion Status, and Trade Route	Transits	Cargo Tonnage Carried (thousands)	Revenue (thousands) a/	Current Toll Schedule: Toll Per Panama Canal Net Ton	Current Toll Schedule: Toll Per Cargo Ton Carried	New Toll Schedule: Toll Per Panama Canal Net Ton	New Toll Schedule: Toll Per Cargo Ton Carried	Total Transportation Costs per Ton Carried: Via Panama Canal: With Current Toll Structure	Via Panama Canal: With New Toll Structure	Via Panama Canal: Percent Increase	Via Least Costly Alternative Route
Tankers (continued)											
Non-Diverted Transits (continued)											
C.A.W.C.-Africa	0	0	2	2.41	1.27	3.42	1.80	46.27	46.80	1.14	100.00
C.A.W.C.-Canada E.C.	0	8	14	2.41	1.27	3.42	1.80	12.21	12.74	4.33	28.82
C.A.W.C.-C.A.E.C.	16	95	449	2.41	1.27	3.42	1.80	10.26	10.79	5.16	34.99
C.A.W.C.-Europe	4	94	181	2.41	1.27	3.42	1.80	17.17	17.70	3.08	28.84
C.A.W.C.-U.S.E.C.	10	80	280	2.41	1.27	3.42	1.80	11.18	11.71	4.73	37.36
Canada W.C.-U.S.E.C.	6	255	480	2.41	1.28	3.42	1.82	13.76	14.30	3.88	26.23
C.A.E.C.-C.A.W.C.	46	750	1,914	2.41	1.27	3.42	1.80	7.38	7.91	7.17	22.70
C.A.E.C.-U.S.W.C.	5	228	409	2.41	1.28	3.42	1.81	11.94	12.47	4.46	23.43
Europe-C.A.W.C.	17	81	233	2.41	1.27	3.42	1.80	24.95	25.48	2.12	44.78
Europe-U.S.W.C.	4	109	194	2.41	1.27	3.42	1.80	22.50	23.03	2.35	32.22
S.A.W.C.-Europe	19	173	316	2.41	1.27	3.42	1.80	28.01	28.54	1.89	30.35
U.S.E.C.-Asia	92	2,946	5,411	2.41	1.28	3.42	1.82	22.72	23.26	2.36	32.54
U.S.E.C.-C.A.W.C.	14	260	600	2.41	1.27	3.42	1.80	9.23	9.76	5.73	28.15
U.S.E.C.-Canada W.C.	2	7	87	2.41	1.27	3.42	1.80	18.17	18.70	2.91	35.78
U.S.E.C.-Oceania	4	129	235	2.41	1.27	3.42	1.80	26.02	26.55	2.03	30.19
U.S.E.C.-U.S.W.C.	21	601	1,169	2.41	1.27	3.42	1.80	14.06	14.59	3.78	30.95
U.S.W.C.-C.A.E.C.	3	96	201	2.41	1.30	3.42	1.84	11.94	12.48	4.53	23.13
U.S.W.C.-U.S.E.C.	4	102	220	2.41	1.29	3.42	1.82	13.38	13.91	4.01	29.10
Subtotal	266	6,016	12,394	2.41	1.28	3.41	1.81	18.03	18.57	2.96	30.23
Vehicle Carriers											
Non-Diverted Transits											
Asia-C.A.E.C.	13	34	1,317	2.41	29.09	3.42	41.22	417.18	429.31	2.91	496.39

(Continued)

Table C-16. Laden Transits, Tons Carried, Toll Revenue and Toll Rates, Current Toll Structure With 50 Percent Increase in Rates, Status Quo Scenario, 2060, by Ship Type, Diversion Status, and Trade Route (1990 US$, except when noted)(continued)

Ship Type, Diversion Status, and Trade Route	Transits	Cargo Tonnage Carried (thousands)	Revenue (thousands) a/	Current Toll Schedule: Toll Per Panama Canal Net Ton	Current Toll Schedule: Toll Per Cargo Ton Carried	New Toll Schedule: Toll Per Panama Canal Net Ton	New Toll Schedule: Toll Per Cargo Ton Carried	Total Transportation Costs per Ton Carried: Via Panama Canal: With Current Toll Structure	Via Panama Canal: With New Toll Structure	Via Panama Canal: Percent Increase	Via Least Costly Alternative Route
Vehicle Carriers (continued)											
Non-Diverted Transits (continued)											
Asia-U.S.E.C.	481	2,251	53,642	2.41	29.20	3.42	41.37	439.57	451.74	2.77	516.31
C.A.W.C.-C.A.E.C.	3	3	176	2.41	28.71	3.42	40.69	266.36	278.34	4.50	440.99
C.A.E.C.-C.A.W.C.	8	3	961	2.41	29.22	3.42	41.41	272.22	284.41	4.48	411.00
C.A.E.C.-Oceania	1	0	112	2.41	29.22	3.42	41.41	434.22	446.41	2.81	482.00
Europe-Canada W.C.	7	16	1,091	2.41	30.90	3.42	43.78	386.38	399.26	3.33	457.44
Europe-U.S.W.C.	156	299	20,440	2.41	29.95	3.42	42.43	403.00	415.48	3.10	458.96
S.A.W.C.-C.A.E.C.	0	0	12	2.41	28.70	3.42	40.66	323.70	335.66	3.70	380.00
U.S.E.C.-Asia	42	192	5,209	2.41	29.67	3.42	42.05	415.80	428.18	2.98	510.17
U.S.E.C.-Oceania	13	30	1,447	2.41	29.22	3.42	41.41	433.22	445.41	2.81	453.00
Subtotal	723	2,828	84,408	2.41	29.42	3.42	41.69	433.09	445.32	2.82	508.39
Vehicle Carriers											
Diverted Transits											
Asia-S.A.E.C.	0	0	7	2.41	29.13	3.42	41.28	484.18	496.33	2.51	468.49
Canada E.C.-Asia	1	3	35	2.41	29.22	3.42	41.41	465.22	477.41	2.62	456.00
Subtotal	1	3	42	2.41	29.20	3.41	41.38	466.92	479.10	2.61	457.12
Subtotal	724	2,831	84,450	2.41	29.42	3.42	41.69	433.13	445.35	2.82	508.34
Total Non-Diverting	14,416	243,253	757,432	2.41	2.18	3.42	3.10	60.61	61.55	1.56	76.23
Total Diverting	334	5,739	23,367	2.41	4.54	3.42	6.43	214.91	216.82	0.89	215.60

Notes: These calculations do not include all transits and tons carried forecast by the WEFA Group. For some ship-type and trade-route combinations (accounting for a total of 13 transits and 219227 tons), vessel costs were not available for every DWT size interval. As a result, these transits and tons were excluded. In addition, for 934 transits and 22985287 tons, the cost by way of the Panama Canal without a toll was higher than the least costly alternative route. As a result, these transits and tons were excluded. Percentages may not calculate exactly as shown due to rounding. A fee of $0.40 per Panama Canal net ton has also been included to account for charges such as handling and agency fees incurred when transitting the Canal. The extra fee is only used to determine divesion status by adding it to the cost per ton carried and is not included in the revenue calculations.

a/ Revenue lost from diversions is measured as the revenue generated by the maximum, nondiverting toll rate increase.

Source: Nathan Associates Inc., based on forecasts of traffic and transportation costs provided by the WEFA Group.

CURRENT TOLL STRUCTURE WITH 50 PERCENT INCREASE IN RATES, 150,000-DWT SCENARIO, 2060

Table C-17. Laden Transits, Tons Carried, and Toll Revenue, Current Toll Structure With 50 Percent Increase in Rates, 150,000 DWT Scenario, 2060, by Ship Type

	Transits				Tons Carried(thousands)				Revenue(1990 US$thousands)			
Ship Type	Canal	Diverted	Total	Diverted as a Percent of Total	Canal	Diverted	Total	Diverted as a Percent of Total	Canal	Lost a/	Total	Lost as a Percent of Total
Container-Breakbulk	2,460	4	2,465	0.17	36,908	88	36,996	0.24	102,915	226	103,141	0.22
Dry Bulk Carriers	4,676	368	5,044	7.30	259,308	14,891	274,199	5.43	429,058	26,620	455,678	5.84
Chemical Tankers	1,224	0	1,224	0.00	32,988	0	32,988	0.00	57,274	0	57,274	0.00
Full Container Ships	1,460	10	1,470	0.70	31,607	179	31,786	0.56	148,709	109	148,818	0.07
General Cargo Ships	1,458	6	1,464	0.43	13,946	45	13,991	0.32	37,649	206	37,854	0.54
Liquid Gas Carriers	104	0	104	0.00	1,071	0	1,071	0.00	4,722	0	4,722	0.00
Passenger Ships	435	0	435	0.00	0	0	0	0.00	10,041	0	10,041	0.00
Refrigerated Ships	3,937	46	3,983	1.15	15,968	292	16,260	1.80	137,700	926	138,627	0.67
Roll-On Roll-Off	397	3	400	0.70	2,929	61	2,990	2.05	23,313	188	23,501	0.80
Tankers	562	27	589	4.63	26,815	1,006	27,821	3.62	48,297	1,609	49,906	3.22
Vehicle Carriers	723	1	724	0.10	2,828	3	2,831	0.10	84,408	42	84,450	0.05
Total	17,438	466	17,904	2.60	424,368	16,566	440,934	3.76	1,084,086	29,926	1,114,012	2.69

Notes: These calculations do not include all transits and tons carried forecast by the WEFA Group. For some ship-type and trade-route combinations (accounting for a total of 27 transits and 291695 tons), vessel costs were not available for every DWT size interval. As a result, these transits and tons were excluded. In addition, for 2536 transits and 56215466 tons, the cost by way of the Panama Canal without a toll was higher than the least costly alternative route. As a result, these transits and tons were excluded. A fee of $0.40 per Panama Canal net ton has also been included to account for charges such as handling and agency fees incurred when transitting the Canal. The extra fee is only used to determine diversion status by adding it to cost per ton carried and is not included in the revenue calculations.

a/ Revenue lost from diversions is measured as the revenue generated by the maximum, nondiverting toll rate increase.

Source: Nathan Associates Inc., based on forecasts of traffic and transportation costs provided by The WEFA Group.

Table C-18. Ballast Transits, Tons Carried, and Toll Revenue, Current Toll Structure With 50 Percent Increase in Rates, 150,000 DWT Scenario, 2060, by Ship Type

	Transits				Tons Carried(thousands)				Revenue(1990 US$thousands)			
Ship Type	Canal	Diverted	Total	Diverted as a Percent of Total	Canal	Diverted	Total	Diverted as a Percent of Total	Canal	Lost	Total	Lost as a Percent of Total
Container-Breakbulk	67	0	67	0.22	0	0	0	0.00	2,438	5	2,443	0.22
Dry Bulk Carriers	322	20	342	5.84	0	0	0	0.00	15,388	954	16,343	5.84
Chemical Tankers	127	0	127	0.00	0	0	0	0.00	5,170	0	5,170	0.00
Full Container Ships	6	0	6	0.07	0	0	0	0.00	390	0	391	0.07
General Cargo Ships	273	1	274	0.54	0	0	0	0.00	4,510	24	4,535	0.54
Liquid Gas Carriers	958	0	958	0.00	0	0	0	0.00	73,020	0	73,020	0.00
Passenger Ships	51	0	51	0.00	0	0	0	0.00	995	0	995	0.00
Refrigerated Ships	1,062	7	1,069	0.67	0	0	0	0.00	28,284	191	28,475	0.67
Roll-On Roll-Off	58	0	58	0.80	0	0	0	0.00	2,553	21	2,574	0.80
Tankers	295	10	305	3.22	0	0	0	0.00	23,215	772	23,987	3.22
Vehicle Carriers	441	0	441	0.05	0	0	0	0.00	39,044	20	39,064	0.05
Total	3,659	39	3,698	1.06	0	0	0	0.00	195,009	1,988	196,997	1.01

Note: Diversions of ballast transits are computed by diverting a proportion of ballast transits equal to lost revenue as a percent of total potential revenue for a particular laden ship type. See last column on previous table.

Source: Nathan Associates Inc., based on forecasts of traffic and transportation costs provided by The WEFA Group.

Table C-19. Laden Transits, Tons Carried, Toll Revenue and Toll Rates, Current Toll Structure With 50 Percent Increase in Rates, 150,000 DWT Scenario, 2060, by Ship Type, Diversion Status, and Trade Route (1990 US$, except when noted)

Ship Type, Diversion Status, and Trade Route	Transits	Cargo Tonnage Carried (thousands)	Revenue (thousands) a/	Current Toll Schedule: Toll Per Panama Canal Net Ton	Current Toll Schedule: Toll Per Cargo Ton Carried	New Toll Schedule: Toll Per Panama Canal Net Ton	New Toll Schedule: Toll Per Cargo Ton Carried	Total Transportation Costs per Ton Carried: Via Panama Canal: With Current Toll Structure	Via Panama Canal: With New Toll Structure	Via Panama Canal: Percent Increase	Via Least Costly Alternative Route
Container-Breakbulk											
Non-Diverted Transits											
Africa-C.A.W.C.	6	185	285	2.41	1.85	3.42	2.63	72.26	73.04	1.07	119.11
Africa-Canada W.C.	0	5	18	2.41	1.87	3.42	2.65	92.01	92.79	0.85	106.57
Africa-U.S.W.C.	2	25	86	2.41	1.87	3.42	2.65	93.01	93.79	0.84	107.78
Asia-Canada E.C.	1	8	31	2.41	1.86	3.42	2.64	93.05	93.83	0.84	100.96
Asia-C.A.E.C.	135	1,246	5,334	2.41	1.87	3.42	2.64	97.20	97.97	0.80	113.04
Asia-S.A.E.C.	48	305	1,795	2.41	1.87	3.42	2.65	105.12	105.90	0.74	107.25
Asia-U.S.E.C.	139	1,759	5,870	2.41	1.86	3.42	2.64	99.37	100.15	0.78	123.49
C.A.W.C.-Africa	6	112	208	2.41	1.87	3.42	2.65	76.03	76.81	1.03	127.35
C.A.W.C.-C.A.E.C.	16	247	618	2.41	1.86	3.42	2.64	51.25	52.03	1.52	91.73
C.A.W.C.-Europe	41	304	1,625	2.41	1.87	3.42	2.65	65.68	66.46	1.19	95.59
C.A.W.C.-S.A.E.C.	23	10	849	2.41	1.87	3.42	2.65	72.11	72.89	1.08	77.11
C.A.W.C.-U.S.E.C.	7	40	253	2.41	1.87	3.42	2.65	57.32	58.10	1.36	95.90
Canada E.C.-Asia	31	815	1,617	2.41	1.85	3.42	2.63	95.14	95.92	0.81	98.29
Canada E.C.-C.A.W.C.	3	25	97	2.41	1.87	3.42	2.65	55.94	56.72	1.39	96.99
Canada E.C.-Oceania	2	25	58	2.41	1.87	3.42	2.65	107.65	108.43	0.72	108.63
Canada E.C.-S.A.W.C.	1	17	39	2.41	1.85	3.42	2.63	65.70	66.48	1.18	79.70
Canada E.C.-U.S.W.C.	0	0	0	2.41	1.86	3.42	2.64	72.57	73.35	1.07	111.42
Canada W.C.-Africa	29	662	1,278	2.41	1.85	3.42	2.63	93.53	94.31	0.83	106.62
Canada W.C.-Europe	107	3,116	5,777	2.41	1.85	3.42	2.63	81.19	81.97	0.95	109.01
Canada W.C.-S.A.E.C.	22	421	816	2.41	1.87	3.42	2.65	74.11	74.89	1.05	114.56
Canada W.C.-U.S.E.C.	15	303	655	2.41	1.85	3.42	2.63	67.85	68.63	1.14	108.00
C.A.E.C.-Asia	13	270	491	2.41	1.87	3.42	2.65	96.31	97.09	0.81	111.98
C.A.E.C.-C.A.W.C.	13	49	497	2.41	1.87	3.42	2.65	52.15	52.93	1.49	94.93

(Continued)

Table C-19. Laden Transits, Tons Carried, Toll Revenue and Toll Rates, Current Toll Structure With 50 Percent Increase in Rates, 150,000 DWT Scenario, 2060, by Ship Type, Diversion Status, and Trade Route (1990 US$, except when noted)(continued)

Ship Type, Diversion Status, and Trade Route	Transits	Cargo Tonnage Carried (thousands)	Revenue (thousands) a/	Current Toll Schedule: Toll Per Panama Canal Net Ton	Current Toll Schedule: Toll Per Cargo Ton Carried	New Toll Schedule: Toll Per Panama Canal Net Ton	New Toll Schedule: Toll Per Cargo Ton Carried	Total Transportation Costs per Ton Carried: Via Panama Canal: With Current Toll Structure	Via Panama Canal: With New Toll Structure	Via Panama Canal: Percent Increase	Via Least Costly Alternative Route
Container-Breakbulk (continued)											
Non-Diverted Transits (continued)											
C.A.E.C.-Canada W.C.	4	59	147	2.41	1.87	3.42	2.65	66.58	67.36	1.17	106.57
C.A.E.C.-Oceania	2	38	92	2.41	1.87	3.42	2.65	94.01	94.79	0.83	112.63
C.A.E.C.-S.A.W.C.	37	286	1,419	2.41	1.87	3.42	2.65	64.73	65.51	1.20	79.50
C.A.E.C.-U.S.W.C.	6	112	240	2.41	1.86	3.42	2.64	64.27	65.05	1.21	97.78
Europe-C.A.W.C.	44	271	1,688	2.41	1.87	3.42	2.65	66.79	67.57	1.17	118.42
Europe-Canada W.C.	7	217	441	2.41	1.85	3.42	2.63	83.24	84.02	0.93	107.58
Europe-S.A.W.C.	182	1,504	7,044	2.41	1.87	3.42	2.65	90.01	90.79	0.87	104.63
Europe-U.S.W.C.	36	1,115	2,107	2.41	1.85	3.42	2.63	82.41	83.19	0.94	107.84
Oceania-C.A.E.C.	10	99	364	2.41	1.87	3.42	2.65	94.77	95.55	0.82	113.61
S.A.E.C.-C.A.W.C.	16	252	632	2.41	1.87	3.42	2.65	71.65	72.43	1.09	76.57
S.A.E.C.-Canada W.C.	25	335	978	2.41	1.87	3.42	2.65	92.79	93.57	0.84	98.78
S.A.E.C.-U.S.W.C.	84	1,260	3,325	2.41	1.87	3.42	2.64	78.16	78.93	1.00	80.87
S.A.W.C.-Africa	3	52	102	2.41	1.87	3.42	2.65	82.90	83.68	0.94	120.48
S.A.W.C.-Canada E.C.	1	2	43	2.41	1.87	3.42	2.65	69.19	69.97	1.13	84.90
S.A.W.C.-C.A.E.C.	26	206	954	2.41	1.87	3.42	2.65	65.19	65.97	1.20	80.11
S.A.W.C.-Europe	329	5,753	12,560	2.41	1.87	3.42	2.65	89.68	90.46	0.87	106.41
S.A.W.C.-U.S.E.C.	239	2,340	8,943	2.41	1.87	3.42	2.65	62.12	62.90	1.26	81.53
U.S.E.C.-Asia	284	7,177	14,067	2.41	1.86	3.42	2.63	96.15	96.92	0.81	119.21
U.S.E.C.-C.A.W.C.	22	446	887	2.41	1.86	3.42	2.64	47.68	48.46	1.63	93.27
U.S.E.C.-S.A.W.C.	347	3,443	13,523	2.41	1.87	3.42	2.65	61.84	62.62	1.26	81.01
U.S.E.C.-U.S.W.C.	0	0	1	2.41	1.86	3.42	2.64	58.86	59.64	1.32	98.00
U.S.W.C.-Africa	22	367	1,366	2.41	1.85	3.42	2.63	85.43	86.21	0.91	102.85
U.S.W.C.-Canada E.C.	1	33	56	2.41	1.85	3.42	2.63	69.85	70.63	1.11	106.00

(Continued)

Table C-19. Laden Transits, Tons Carried, Toll Revenue and Toll Rates, Current Toll Structure With 50 Percent Increase in Rates, 150,000 DWT Scenario, 2060, by Ship Type, Diversion Status, and Trade Route (1990 US$, except when noted)(continued)

Ship Type, Diversion Status, and Trade Route	Transits	Cargo Tonnage Carried (thousands)	Revenue (thousands) a/	Current Toll Schedule: Toll Per Panama Canal Net Ton	Current Toll Schedule: Toll Per Cargo Ton Carried	New Toll Schedule: Toll Per Panama Canal Net Ton	New Toll Schedule: Toll Per Cargo Ton Carried	Total Transportation Costs per Ton Carried: Via Panama Canal: With Current Toll Structure	Via Panama Canal: With New Toll Structure	Via Panama Canal: Percent Increase	Via Least Costly Alternative Route
Container-Breakbulk (continued)											
Non-Diverted Transits (continued)											
U.S.W.C.-C.A.E.C.	19	135	716	2.41	1.87	3.42	2.65	66.46	67.24	1.17	101.57
U.S.W.C.-Europe	51	1,343	2,679	2.41	1.86	3.42	2.63	83.60	84.37	0.93	108.54
U.S.W.C.-S.A.E.C.	6	104	220	2.41	1.87	3.42	2.65	79.98	80.76	0.97	82.98
U.S.W.C.-U.S.E.C.	0	6	24	2.41	1.85	3.42	2.63	60.33	61.11	1.28	102.02
Subtotal	2,460	36,908	102,915	2.41	1.86	3.41	2.64	83.67	84.44	0.93	104.46
Container-Breakbulk											
Diverted Transits											
Oceania-Canada E.C.	4	88	226	2.41	1.85	3.42	2.63	97.85	98.63	0.79	98.00
Subtotal	4	88	226	2.41	1.85	3.41	2.63	97.85	98.63	0.79	98.00
Subtotal	2,465	36,996	103,141	2.41	1.86	3.41	2.64	83.70	84.48	0.93	104.44
Dry Bulk Carriers											
Non-Diverted Transits											
Africa-C.A.W.C.	29	1,201	1,832	2.41	1.30	3.42	1.85	15.34	15.89	3.54	27.11
Africa-Canada W.C.	156	7,645	11,241	2.41	1.28	3.42	1.81	17.82	18.35	2.99	19.99
Africa-S.A.W.C.	9	313	564	2.41	1.30	3.42	1.85	18.13	18.68	3.00	26.14
Africa-U.S.W.C.	10	297	733	2.41	1.27	3.42	1.80	16.17	16.70	3.28	19.94
Asia-Canada E.C.	15	695	1,275	2.41	1.25	3.42	1.78	17.55	18.08	2.98	18.43
Asia-C.A.E.C.	29	527	1,895	2.41	1.30	3.42	1.84	18.85	19.39	2.87	24.40
Asia-U.S.E.C.	386	12,134	28,740	2.41	1.27	3.42	1.80	16.62	17.15	3.19	23.16
C.A.W.C.-Africa	2	52	108	2.41	1.29	3.42	1.83	15.32	15.86	3.51	27.18
C.A.W.C.-C.A.E.C.	63	2,167	4,051	2.41	1.30	3.42	1.84	7.57	8.11	7.14	16.30

(Continued)

Table C-19. Laden Transits, Tons Carried, Toll Revenue and Toll Rates, Current Toll Structure With 50 Percent Increase in Rates, 150,000 DWT Scenario, 2060, by Ship Type, Diversion Status, and Trade Route (1990 US$, except when noted)(continued)

Ship Type, Diversion Status, and Trade Route	Transits	Cargo Tonnage Carried (thousands)	Revenue (thousands) a/	Current Toll Schedule: Toll Per Panama Canal Net Ton	Current Toll Schedule: Toll Per Cargo Ton Carried	New Toll Schedule: Toll Per Panama Canal Net Ton	New Toll Schedule: Toll Per Cargo Ton Carried	Total Transportation Costs per Ton Carried: Via Panama Canal: With Current Toll Structure	Via Panama Canal: With New Toll Structure	Via Panama Canal: Percent Increase	Via Least Costly Alternative Route
Dry Bulk Carriers (continued)											
Non-Diverted Transits (continued)											
C.A.W.C.-Europe	19	626	1,306	2.41	1.28	3.42	1.82	12.19	12.73	4.39	18.57
C.A.W.C.-U.S.E.C.	47	1,854	3,206	2.41	1.29	3.42	1.82	7.69	8.22	6.98	18.15
Canada E.C.-Asia	120	6,018	10,306	2.41	1.19	3.42	1.69	19.24	19.74	2.58	20.41
Canada E.C.-Oceania	7	132	446	2.41	1.29	3.42	1.83	21.09	21.63	2.55	21.80
Canada E.C.-S.A.W.C.	12	426	832	2.41	1.29	3.42	1.83	12.85	13.39	4.18	15.56
Canada W.C.-Africa	175	7,689	12,903	2.41	1.28	3.42	1.82	17.49	18.03	3.06	19.57
Canada W.C.-C.A.E.C.	9	270	568	2.41	1.30	3.42	1.85	12.59	13.14	4.32	21.54
Canada W.C.-Europe	304	15,944	26,701	2.41	1.22	3.42	1.73	16.30	16.81	3.13	21.21
Canada W.C.-U.S.E.C.	105	3,183	6,588	2.41	1.30	3.42	1.85	13.34	13.89	4.07	23.33
C.A.E.C.-Asia	22	808	1,355	2.41	1.30	3.42	1.85	18.13	18.68	3.00	23.38
C.A.E.C.-C.A.W.C.	49	1,650	3,067	2.41	1.30	3.42	1.85	7.82	8.37	6.95	16.83
C.A.E.C.-Canada W.C.	3	105	188	2.41	1.30	3.42	1.85	12.61	13.16	4.31	21.59
C.A.E.C.-Oceania	1	22	52	2.41	1.30	3.42	1.85	19.89	20.44	2.73	22.59
C.A.E.C.-S.A.W.C.	24	734	1,484	2.41	1.30	3.42	1.85	10.61	11.16	5.12	14.07
C.A.E.C.-U.S.W.C.	9	286	548	2.41	1.30	3.42	1.85	11.61	12.16	4.68	20.59
Europe-C.A.W.C.	51	1,627	3,170	2.41	1.30	3.42	1.85	12.61	13.16	4.31	22.38
Europe-Canada W.C.	12	408	868	2.41	1.28	3.42	1.81	16.56	17.09	3.22	22.07
Europe-U.S.W.C.	142	4,679	10,190	2.41	1.28	3.42	1.81	15.66	16.19	3.40	20.80
Middle East-S.A.W.C.	2	104	173	2.41	1.25	3.42	1.76	14.08	14.59	3.69	15.83
Oceania-Canada E.C.	23	859	1,453	2.41	1.30	3.42	1.85	20.84	21.39	2.61	21.54
Oceania-C.A.E.C.	14	469	897	2.41	1.30	3.42	1.85	19.09	19.64	2.85	22.54
Oceania-U.S.E.C.	36	2,218	3,700	2.41	1.23	3.42	1.74	15.65	16.16	3.27	17.42
S.A.E.C.-Asia	60	2,563	4,333	2.41	1.28	3.42	1.81	16.77	17.30	3.17	18.82

(Continued)

Table C-19. Laden Transits, Tons Carried, Toll Revenue and Toll Rates, Current Toll Structure With 50 Percent Increase in Rates, 150,000 DWT Scenario, 2060, by Ship Type, Diversion Status, and Trade Route (1990 US$, except when noted)(continued)

Ship Type, Diversion Status, and Trade Route	Transits	Cargo Tonnage Carried (thousands)	Revenue (thousands) a/	Current Toll Schedule: Toll Per Panama Canal Net Ton	Current Toll Schedule: Toll Per Cargo Ton Carried	New Toll Schedule: Toll Per Panama Canal Net Ton	New Toll Schedule: Toll Per Cargo Ton Carried	Total Transportation Costs per Ton Carried: Via Panama Canal: With Current Toll Structure	Via Panama Canal: With New Toll Structure	Via Panama Canal: Percent Increase	Via Least Costly Alternative Route
Dry Bulk Carriers (continued)											
Non-Diverted Transits (continued)											
S.A.E.C.-Canada W.C.	3	97	201	2.41	1.30	3.42	1.85	17.13	17.68	3.17	17.83
S.A.W.C.-Africa	5	296	426	2.41	1.25	3.42	1.78	14.34	14.87	3.64	21.40
S.A.W.C.-Canada E.C.	1	24	38	2.41	1.30	3.42	1.85	13.34	13.89	4.07	16.04
S.A.W.C.-C.A.E.C.	12	277	727	2.41	1.30	3.42	1.85	10.59	11.14	5.13	14.04
S.A.W.C.-U.S.E.C.	91	3,585	5,783	2.41	1.30	3.42	1.84	11.28	11.82	4.80	15.48
U.S.E.C.-Asia	1,753	139,874	212,146	2.41	1.10	3.42	1.56	17.76	18.22	2.58	22.61
U.S.E.C.-C.A.W.C.	375	14,003	24,123	2.41	1.30	3.42	1.84	7.80	8.34	6.94	18.73
U.S.E.C.-Oceania	23	909	1,535	2.41	1.29	3.42	1.83	19.26	19.80	2.79	20.97
U.S.E.C.-S.A.W.C.	82	2,944	5,293	2.41	1.30	3.42	1.84	11.45	11.99	4.72	15.60
U.S.E.C.-U.S.W.C.	1	0	35	2.41	1.30	3.42	1.85	11.61	12.16	4.68	22.38
U.S.W.C.-Africa	198	9,018	16,328	2.41	1.26	3.42	1.78	15.70	16.22	3.33	19.37
U.S.W.C.-Canada E.C.	5	211	359	2.41	1.29	3.42	1.83	13.93	14.47	3.87	22.50
U.S.W.C.-C.A.E.C.	1	30	57	2.41	1.30	3.42	1.85	11.59	12.14	4.69	20.54
U.S.W.C.-Europe	168	9,505	15,848	2.41	1.24	3.42	1.75	14.02	14.53	3.68	18.82
U.S.W.C.-U.S.E.C.	8	215	582	2.41	1.28	3.42	1.81	11.92	12.45	4.48	23.13
Venezuela-Asia	5	615	803	2.41	0.99	3.42	1.40	19.49	19.90	2.11	23.70
Subtotal	4,676	259,308	429,058	2.41	1.18	3.42	1.67	16.30	16.79	3.01	21.41
Dry Bulk Carriers											
Diverted Transits											
Asia-S.A.E.C.	5	172	202	2.41	1.30	3.42	1.85	21.84	22.39	2.49	21.54
C.A.W.C.-S.A.E.C.	16	268	1,070	2.41	1.30	3.42	1.85	11.59	12.14	4.69	12.04
Canada W.C.-S.A.E.C.	31	1,820	3,401	2.41	1.13	3.42	1.60	11.79	12.26	4.00	12.24

(Continued)

Table C-19. Laden Transits, Tons Carried, Toll Revenue and Toll Rates, Current Toll Structure With 50 Percent Increase in Rates, 150,000 DWT Scenario, 2060, by Ship Type, Diversion Status, and Trade Route (1990 US$, except when noted)(continued)

Ship Type, Diversion Status, and Trade Route	Transits	Cargo Tonnage Carried (thousands)	Revenue (thousands) a/	Current Toll Schedule: Toll Per Panama Canal Net Ton	Current Toll Schedule: Toll Per Cargo Ton Carried	New Toll Schedule: Toll Per Panama Canal Net Ton	New Toll Schedule: Toll Per Cargo Ton Carried	Total Transportation Costs per Ton Carried: Via Panama Canal: With Current Toll Structure	Via Panama Canal: With New Toll Structure	Via Panama Canal: Percent Increase	Via Least Costly Alternative Route
Dry Bulk Carriers (continued)											
Diverted Transits (continued)											
Columbia-Asia	3	352	290	2.41	9.87	3.42	13.99	27.57	31.69	14.93	25.50
Europe-S.A.W.C.	16	514	781	2.41	1.30	3.42	1.85	16.13	16.68	3.37	16.07
S.A.E.C.-C.A.W.C.	12	441	777	2.41	1.30	3.42	1.85	11.61	12.16	4.68	12.07
S.A.E.C.-U.S.W.C.	34	1,722	2,129	2.41	1.23	3.42	1.75	13.30	13.82	3.87	13.07
S.A.W.C.-Europe	238	9,167	17,460	2.41	1.29	3.42	1.83	15.52	16.06	3.47	16.02
U.S.W.C.-S.A.E.C.	13	436	510	2.41	1.30	3.42	1.85	16.09	16.64	3.38	15.79
Subtotal	368	14,891	26,620	2.41	1.28	3.42	1.82	15.02	15.63	4.08	15.31
Subtotal	5,044	274,199	455,678	2.41	1.18	3.42	1.68	16.23	16.72	3.06	21.08
Chemical Tankers											
Non-Diverted Transits											
Africa-S.A.W.C.	2	59	96	2.41	1.34	3.42	1.90	43.34	43.90	1.29	60.00
Asia-C.A.E.C.	4	50	100	2.41	1.34	3.42	1.90	54.00	54.56	1.03	70.82
Asia-S.A.E.C.	4	23	194	2.41	1.34	3.42	1.90	50.34	50.90	1.11	52.00
Asia-U.S.E.C.	39	820	1,675	2.41	1.34	3.42	1.90	43.81	44.37	1.28	59.67
C.A.W.C.-C.A.E.C.	49	306	578	2.41	1.34	3.42	1.90	39.39	39.95	1.42	83.80
C.A.W.C.-Europe	9	169	281	2.41	1.34	3.42	1.90	38.02	38.58	1.47	56.27
C.A.W.C.-U.S.E.C.	63	885	1,616	2.41	1.34	3.42	1.90	27.74	28.30	2.01	58.89
Canada W.C.-Europe	4	106	204	2.41	1.34	3.42	1.90	42.34	42.90	1.32	57.00
Canada W.C.-U.S.E.C.	39	1,042	2,206	2.41	1.34	3.42	1.90	31.94	32.50	1.75	52.60
C.A.E.C.-Asia	9	293	486	2.41	1.34	3.42	1.90	42.34	42.90	1.32	55.00
C.A.E.C.-C.A.W.C.	5	115	239	2.41	1.34	3.42	1.90	21.34	21.90	2.62	42.00
C.A.E.C.-S.A.W.C.	11	217	421	2.41	1.34	3.42	1.90	30.34	30.90	1.84	40.32

(Continued)

Table C-19. Laden Transits, Tons Carried, Toll Revenue and Toll Rates, Current Toll Structure With 50 Percent Increase in Rates, 150,000 DWT Scenario, 2060, by Ship Type, Diversion Status, and Trade Route (1990 US$, except when noted)(continued)

Ship Type, Diversion Status, and Trade Route	Transits	Cargo Tonnage Carried (thousands)	Revenue (thousands) a/	Current Toll Schedule: Toll Per Panama Canal Net Ton	Current Toll Schedule: Toll Per Cargo Ton Carried	New Toll Schedule: Toll Per Panama Canal Net Ton	New Toll Schedule: Toll Per Cargo Ton Carried	Total Transportation Costs per Ton Carried: Via Panama Canal: With Current Toll Structure	Via Panama Canal: With New Toll Structure	Via Panama Canal: Percent Increase	Via Least Costly Alternative Route
Chemical Tankers (continued)											
Non-Diverted Transits (continued)											
C.A.E.C.-U.S.W.C.	2	15	25	2.41	1.34	3.42	1.90	55.94	56.50	1.00	98.40
Europe-C.A.W.C.	10	51	119	2.41	1.34	3.42	1.90	60.84	61.40	0.92	93.55
Europe-S.A.W.C.	9	98	167	2.41	1.34	3.42	1.90	58.65	59.21	0.95	62.50
Europe-U.S.W.C.	10	261	455	2.41	1.34	3.42	1.90	42.05	42.61	1.33	56.46
Oceania-U.S.E.C.	17	494	1,032	2.41	1.34	3.42	1.90	40.63	41.19	1.37	45.24
S.A.E.C.-C.A.W.C.	10	79	151	2.41	1.34	3.42	1.90	50.34	50.90	1.11	54.86
S.A.E.C.-U.S.W.C.	1	43	76	2.41	1.34	3.42	1.90	30.34	30.90	1.84	31.00
S.A.W.C.-C.A.E.C.	36	134	655	2.41	1.34	3.42	1.90	44.18	44.74	1.26	60.24
S.A.W.C.-Europe	12	151	267	2.41	1.34	3.42	1.90	53.51	54.07	1.04	56.81
S.A.W.C.-U.S.E.C.	12	100	313	2.41	1.34	3.42	1.90	39.07	39.63	1.43	53.98
U.S.E.C.-Asia	683	23,746	38,502	2.41	1.34	3.42	1.90	41.54	42.10	1.35	56.40
U.S.E.C.-C.A.W.C.	27	238	462	2.41	1.34	3.42	1.90	34.18	34.74	1.63	74.41
U.S.E.C.-Canada W.C.	8	61	106	2.41	1.34	3.42	1.90	60.04	60.60	0.93	104.95
U.S.E.C.-Oceania	17	545	926	2.41	1.34	3.42	1.90	43.19	43.75	1.29	48.34
U.S.E.C.-S.A.W.C.	53	560	1,080	2.41	1.34	3.42	1.90	41.25	41.81	1.35	57.19
U.S.E.C.-U.S.W.C.	48	1,814	3,408	2.41	1.34	3.42	1.90	25.49	26.05	2.19	43.29
U.S.W.C.-C.A.E.C.	1	12	30	2.41	1.34	3.42	1.90	29.34	29.90	1.90	49.00
U.S.W.C.-Europe	16	266	533	2.41	1.34	3.42	1.90	45.29	45.85	1.23	61.30
U.S.W.C.-S.A.E.C.	0	6	11	2.41	1.34	3.42	1.90	38.34	38.90	1.46	39.00
U.S.W.C.-U.S.E.C.	12	233	861	2.41	1.34	3.42	1.90	25.79	26.35	2.17	43.90
Subtotal	1,224	32,988	57,274	2.41	1.34	3.42	1.90	39.96	40.51	1.40	55.77
Full Container Ships											
Non-Diverted Transits											
Africa-U.S.W.C.	0	5	17	2.41	4.49	3.42	6.36	247.81	249.68	0.76	284.11

(Continued)

Table C-19. Laden Transits, Tons Carried, Toll Revenue and Toll Rates, Current Toll Structure With 50 Percent Increase in Rates, 150,000 DWT Scenario, 2060, by Ship Type, Diversion Status, and Trade Route (1990 US$, except when noted)(continued)

Ship Type, Diversion Status, and Trade Route	Transits	Cargo Tonnage Carried (thousands)	Revenue (thousands) a/	Current Toll Schedule: Toll Per Panama Canal Net Ton	Current Toll Schedule: Toll Per Cargo Ton Carried	New Toll Schedule: Toll Per Panama Canal Net Ton	New Toll Schedule: Toll Per Cargo Ton Carried	Total Transportation Costs per Ton Carried: Via Panama Canal: With Current Toll Structure	Via Panama Canal: With New Toll Structure	Via Panama Canal: Percent Increase	Via Least Costly Alternative Route
Full Container Ships (continued)											
Non-Diverted Transits (continued)											
Asia-Canada E.C.	33	739	3,425	2.41	4.70	3.42	6.66	207.29	209.25	0.95	225.70
Asia-S.A.E.C.	4	14	137	2.41	4.49	3.42	6.36	274.66	276.53	0.68	282.11
Asia-U.S.E.C. (low inv. cost)	186	5,208	32,743	2.41	4.92	3.42	6.97	231.70	233.75	0.88	245.26
C.A.W.C.-C.A.E.C.	1	9	67	2.41	4.44	3.42	6.29	130.00	131.85	1.42	207.98
C.A.W.C.-Europe	2	37	195	2.41	4.42	3.42	6.27	152.02	153.87	1.21	204.85
C.A.W.C.-S.A.E.C.	0	7	32	2.41	4.44	3.42	6.29	162.41	164.26	1.14	169.25
C.A.W.C.-U.S.E.C.	0	5	18	2.41	4.49	3.42	6.36	161.41	163.28	1.16	253.29
Canada E.C.-Asia	35	658	2,545	2.41	4.55	3.42	6.45	226.90	228.80	0.84	236.18
Canada E.C.-Oceania	23	286	1,168	2.41	4.47	3.42	6.34	257.67	259.54	0.72	260.84
Canada E.C.-U.S.W.C.	8	247	1,034	2.41	4.77	3.42	6.76	154.77	156.76	1.29	229.00
Canada W.C.-Europe	31	511	1,828	2.41	4.51	3.42	6.38	210.71	212.58	0.89	276.36
C.A.E.C.-Asia	8	116	607	2.41	4.47	3.42	6.33	213.60	215.46	0.87	244.68
C.A.E.C.-C.A.W.C.	1	7	41	2.41	4.47	3.42	6.33	143.12	144.98	1.30	235.87
C.A.E.C.-Oceania	1	8	31	2.41	4.49	3.42	6.36	250.78	252.65	0.75	297.02
C.A.E.C.-S.A.W.C.	2	10	61	2.41	4.49	3.42	6.36	178.89	180.76	1.05	214.04
C.A.E.C.-U.S.W.C.	2	26	123	2.41	4.45	3.42	6.30	152.93	154.78	1.21	218.40
Europe-C.A.W.C.	0	1	9	2.41	4.42	3.42	6.27	152.02	153.87	1.21	243.00
Europe-Canada W.C.	25	336	1,304	2.41	4.47	3.42	6.33	223.81	225.67	0.83	284.41
Europe-S.A.W.C.	81	1,309	6,482	2.41	4.42	3.42	6.27	191.22	193.07	0.96	221.95
Europe-U.S.W.C.	140	3,123	13,355	2.41	4.67	3.42	6.61	205.80	207.74	0.95	215.66
Middle East-U.S.W.C.	15	247	923	2.41	4.47	3.42	6.34	218.19	220.06	0.85	247.58
Oceania-C.A.E.C.	5	64	203	2.41	4.49	3.42	6.36	250.78	252.65	0.75	297.02
S.A.E.C.-C.A.W.C.	1	8	30	2.41	4.49	3.42	6.36	197.14	199.01	0.95	206.59

(Continued)

Table C-19. Laden Transits, Tons Carried, Toll Revenue and Toll Rates, Current Toll Structure With 50 Percent Increase in Rates, 150,000 DWT Scenario, 2060, by Ship Type, Diversion Status, and Trade Route (1990 US$, except when noted)(continued)

Ship Type, Diversion Status, and Trade Route	Transits	Cargo Tonnage Carried (thousands)	Revenue (thousands) a/	Current Toll Schedule: Toll Per Panama Canal Net Ton	Current Toll Schedule: Toll Per Cargo Ton Carried	New Toll Schedule: Toll Per Panama Canal Net Ton	New Toll Schedule: Toll Per Cargo Ton Carried	Total Transportation Costs per Ton Carried: Via Panama Canal: With Current Toll Structure	Via Panama Canal: With New Toll Structure	Via Panama Canal: Percent Increase	Via Least Costly Alternative Route
Full Container Ships (continued)											
Non-Diverted Transits (continued)											
S.A.E.C.-U.S.W.C.	2	20	65	2.41	4.49	3.42	6.36	183.23	185.10	1.02	219.50
S.A.W.C.-C.A.E.C.	0	1	10	2.41	4.49	3.42	6.36	178.89	180.76	1.05	214.04
S.A.W.C.-Europe	144	3,081	11,587	2.41	4.42	3.42	6.27	191.21	193.06	0.96	221.95
S.A.W.C.-U.S.E.C.	99	1,047	3,806	2.41	4.49	3.42	6.36	174.32	176.19	1.07	221.50
U.S.E.C.-Asia (low inv. cost)	234	8,718	38,402	2.41	4.88	3.42	6.92	233.14	235.18	0.87	246.59
U.S.E.C.-C.A.W.C.	13	112	492	2.41	4.49	3.42	6.36	140.53	142.40	1.33	253.29
U.S.E.C.-S.A.W.C.	117	1,005	4,489	2.41	4.49	3.42	6.36	174.32	176.19	1.07	221.50
U.S.E.C.-U.S.W.C.	1	26	116	2.41	4.76	3.42	6.74	138.99	140.97	1.43	224.03
U.S.W.C.-Africa	0	0	0	2.41	4.64	3.42	6.57	193.64	195.57	1.00	233.00
U.S.W.C.-Canada E.C.	0	8	36	2.41	4.57	3.42	6.47	159.49	161.39	1.19	231.46
U.S.W.C.-C.A.E.C.	6	90	373	2.41	4.46	3.42	6.32	161.25	163.11	1.15	232.70
U.S.W.C.-Europe	196	3,835	19,137	2.41	4.68	3.42	6.64	208.75	210.71	0.94	217.65
U.S.W.C.-Middle East	25	356	1,547	2.41	4.47	3.42	6.34	219.26	221.13	0.85	229.43
U.S.W.C.-U.S.E.C.	21	326	2,270	2.41	4.65	3.42	6.58	141.16	143.09	1.37	224.31
Subtotal	1,460	31,607	148,709	2.41	4.72	3.42	6.69	213.85	215.81	0.92	234.46
Full Container Ships											
Diverted Transits											
Oceania-Canada E.C.	10	177	108	2.41	4.47	3.42	6.33	251.62	253.48	0.74	248.23
Oceania-S.A.E.C.	0	2	1	2.41	4.49	3.42	6.36	241.87	243.74	0.77	238.38
Subtotal	10	179	109	2.41	4.47	3.42	6.33	251.49	253.35	0.74	248.10
Subtotal	1,470	31,786	148,818	2.41	4.72	3.42	6.69	214.06	216.02	0.92	234.53
General Cargo Ships											
Non-Diverted Transits											
Africa-C.A.W.C.	3	46	112	2.41	1.39	3.42	1.97	31.04	31.62	1.86	56.35

(Continued)

Table C-19. Laden Transits, Tons Carried, Toll Revenue and Toll Rates, Current Toll Structure With 50 Percent Increase in Rates, 150,000 DWT Scenario, 2060, by Ship Type, Diversion Status, and Trade Route (1990 US$, except when noted)(continued)

Ship Type, Diversion Status, and Trade Route	Transits	Cargo Tonnage Carried (thousands)	Revenue (thousands) a/	Current Toll Schedule: Toll Per Panama Canal Net Ton	Current Toll Schedule: Toll Per Cargo Ton Carried	New Toll Schedule: Toll Per Panama Canal Net Ton	New Toll Schedule: Toll Per Cargo Ton Carried	Total Transportation Costs per Ton Carried: Via Panama Canal: With Current Toll Structure	Via Panama Canal: With New Toll Structure	Via Panama Canal: Percent Increase	Via Least Costly Alternative Route
General Cargo Ships (continued)											
Non-Diverted Transits (continued)											
Africa-S.A.W.C.	3	68	115	2.41	1.39	3.42	1.97	37.94	38.52	1.53	54.35
Asia-Canada E.C.	0	3	6	2.41	1.39	3.42	1.97	41.94	42.52	1.38	46.45
Asia-C.A.E.C.	127	1,501	4,420	2.41	1.39	3.42	1.97	36.99	37.57	1.56	49.45
Asia-U.S.E.C.	49	632	1,731	2.41	1.39	3.42	1.96	38.14	38.71	1.51	52.33
C.A.W.C.-Africa	7	139	253	2.41	1.39	3.42	1.97	31.04	31.62	1.86	56.35
C.A.W.C.-C.A.E.C.	55	243	647	2.41	1.46	3.42	2.07	9.72	10.33	6.26	59.62
C.A.W.C.-Europe	51	291	1,146	2.41	1.41	3.42	1.99	29.65	30.23	1.98	52.03
C.A.W.C.-S.A.E.C.	15	99	337	2.41	1.41	3.42	1.99	27.71	28.29	2.12	32.29
C.A.W.C.-U.S.E.C.	16	84	197	2.41	1.45	3.42	2.06	12.26	12.87	4.94	74.92
Canada E.C.-Asia	10	25	355	2.41	1.39	3.42	1.97	41.94	42.52	1.38	46.45
Canada E.C.-C.A.W.C.	2	36	73	2.41	1.39	3.42	1.97	21.19	21.77	2.73	41.50
Canada E.C.-S.A.W.C.	16	148	570	2.41	1.39	3.42	1.97	28.09	28.67	2.06	35.55
Canada W.C.-C.A.E.C.	16	120	306	2.41	1.42	3.42	2.01	31.71	32.30	1.87	70.25
Canada W.C.-Europe	1	21	34	2.41	1.39	3.42	1.97	37.94	38.52	1.53	52.40
Canada W.C.-S.A.E.C.	14	126	286	2.41	1.41	3.42	2.00	36.39	36.98	1.62	71.10
C.A.E.C.-Asia	28	538	972	2.41	1.39	3.42	1.97	36.99	37.57	1.56	49.45
C.A.E.C.-C.A.W.C.	56	209	689	2.41	1.45	3.42	2.06	8.51	9.12	7.12	63.99
C.A.E.C.-Oceania	1	13	31	2.41	1.39	3.42	1.97	40.94	41.52	1.41	49.45
C.A.E.C.-S.A.W.C.	53	492	1,199	2.41	1.41	3.42	1.99	22.58	23.16	2.60	34.74
C.A.E.C.-U.S.W.C.	12	42	100	2.41	1.50	3.42	2.12	32.53	33.15	1.92	110.69
Europe-C.A.W.C.	87	598	2,307	2.41	1.40	3.42	1.98	28.49	29.07	2.05	59.50
Europe-Canada W.C.	3	11	24	2.41	1.50	3.42	2.12	80.37	80.99	0.78	136.96
Europe-S.A.W.C.	73	734	2,412	2.41	1.39	3.42	1.97	33.84	34.42	1.71	35.65

(Continued)

Table C-19. Laden Transits, Tons Carried, Toll Revenue and Toll Rates, Current Toll Structure With 50 Percent Increase in Rates, 150,000 DWT Scenario, 2060, by Ship Type, Diversion Status, and Trade Route (1990 US$, except when noted)(continued)

Ship Type, Diversion Status, and Trade Route	Transits	Cargo Tonnage Carried (thousands)	Revenue (thousands) a/	Current Toll Schedule: Toll Per Panama Canal Net Ton	Current Toll Schedule: Toll Per Cargo Ton Carried	New Toll Schedule: Toll Per Panama Canal Net Ton	New Toll Schedule: Toll Per Cargo Ton Carried	Total Transportation Costs per Ton Carried: Via Panama Canal: With Current Toll Structure	Via Panama Canal: With New Toll Structure	Via Panama Canal: Percent Increase	Via Least Costly Alternative Route
General Cargo Ships (continued)											
Non-Diverted Transits (continued)											
Europe-U.S.W.C.	4	18	51	2.41	1.44	3.42	2.04	62.15	62.75	0.97	107.39
Middle East-S.A.W.C.	6	3	50	2.41	1.50	3.42	2.12	73.82	74.44	0.85	102.30
Middle East-U.S.W.C.	7	19	236	2.41	1.39	3.42	1.97	40.94	41.52	1.41	47.45
Oceania-C.A.E.C.	1	7	37	2.41	1.39	3.42	1.97	39.94	40.52	1.45	49.45
Oceania-U.S.E.C.	2	9	31	2.41	1.43	3.42	2.03	57.41	58.01	1.04	69.46
S.A.E.C.-C.A.W.C.	13	261	440	2.41	1.39	3.42	1.97	25.14	25.72	2.30	26.70
S.A.E.C.-Canada W.C.	0	2	9	2.41	1.39	3.42	1.97	35.04	35.62	1.65	38.55
S.A.E.C.-U.S.W.C.	17	77	485	2.41	1.40	3.42	1.98	38.23	38.81	1.52	40.19
S.A.W.C.-Africa	8	149	262	2.41	1.39	3.42	1.97	34.04	34.62	1.70	53.35
S.A.W.C.-Canada E.C.	1	14	29	2.41	1.39	3.42	1.97	28.09	28.67	2.06	35.55
S.A.W.C.-C.A.E.C.	82	361	1,078	2.41	1.45	3.42	2.05	23.90	24.50	2.52	48.57
S.A.W.C.-Europe	171	2,817	5,979	2.41	1.39	3.42	1.97	33.04	33.62	1.75	34.60
S.A.W.C.-Middle East	2	25	59	2.41	1.39	3.42	1.97	35.99	36.57	1.61	42.50
S.A.W.C.-U.S.E.C.	56	430	1,350	2.41	1.40	3.42	1.99	25.31	25.90	2.31	40.80
U.S.E.C.-Asia	74	1,214	2,617	2.41	1.39	3.42	1.96	38.38	38.95	1.51	52.66
U.S.E.C.-C.A.W.C.	103	776	1,652	2.41	1.43	3.42	2.02	14.67	15.26	4.06	60.90
U.S.E.C.-Oceania	6	89	202	2.41	1.39	3.42	1.97	40.94	41.52	1.41	46.45
U.S.E.C.-S.A.W.C.	187	1,336	4,347	2.41	1.41	3.42	1.99	25.45	26.03	2.30	41.52
U.S.E.C.-U.S.W.C.	1	0	7	2.41	1.50	3.42	2.12	35.37	35.99	1.77	122.89
U.S.W.C.-Africa	7	75	231	2.41	1.39	3.42	1.97	36.99	37.57	1.56	47.45
U.S.W.C.-C.A.E.C.	3	1	26	2.41	1.50	3.42	2.12	32.53	33.15	1.92	110.69
U.S.W.C.-Europe	3	25	46	2.41	1.42	3.42	2.01	44.83	45.42	1.32	69.85
U.S.W.C.-S.A.E.C.	8	19	102	2.41	1.45	3.42	2.05	53.26	53.86	1.13	59.12
Subtotal	1,458	13,946	37,649	2.41	1.40	3.41	1.98	30.65	31.23	1.90	46.34

(Continued)

Table C-19. Laden Transits, Tons Carried, Toll Revenue and Toll Rates, Current Toll Structure With 50 Percent Increase in Rates, 150,000 DWT Scenario, 2060, by Ship Type, Diversion Status, and Trade Route (1990 US$, except when noted)(continued)

Ship Type, Diversion Status, and Trade Route	Transits	Cargo Tonnage Carried (thousands)	Revenue (thousands) a/	Current Toll Schedule: Toll Per Panama Canal Net Ton	Current Toll Schedule: Toll Per Cargo Ton Carried	New Toll Schedule: Toll Per Panama Canal Net Ton	New Toll Schedule: Toll Per Cargo Ton Carried	Total Transportation Costs per Ton Carried: Via Panama Canal: With Current Toll Structure	Via Panama Canal: With New Toll Structure	Via Panama Canal: Percent Increase	Via Least Costly Alternative Route
General Cargo Ships (continued)											
Diverted Transits (continued)											
Asia-S.A.E.C.	4	25	162	2.41	1.39	3.42	1.97	45.89	46.47	1.26	46.45
Canada E.C.-Oceania	0	7	9	2.41	1.39	3.42	1.97	47.84	48.42	1.21	47.45
Canada W.C.-Middle East	2	13	35	2.41	1.39	3.42	1.97	42.89	43.47	1.35	42.50
Subtotal	6	45	206	2.41	1.39	3.42	1.97	45.34	45.92	1.28	45.49
Subtotal	1,464	13,991	37,854	2.41	1.40	3.41	1.98	30.69	31.28	1.90	46.34
Liquid Gas Carriers											
Non-Diverted Transits											
C.A.W.C.-C.A.E.C.	10	43	159	2.41	7.30	3.42	10.35	57.30	60.35	5.31	201.00
C.A.E.C.-Asia	10	53	283	2.41	4.67	3.42	6.62	124.16	126.11	1.57	178.06
C.A.E.C.-C.A.W.C.	56	742	3,214	2.41	3.79	3.42	5.37	26.91	28.49	5.88	81.65
C.A.E.C.-S.A.W.C.	4	60	239	2.41	3.83	3.42	5.42	45.83	47.42	3.48	70.00
C.A.E.C.-U.S.W.C.	0	3	10	2.41	3.83	3.42	5.42	51.83	53.42	3.08	109.00
Europe-C.A.W.C.	2	7	34	2.41	7.30	3.42	10.35	129.30	132.35	2.36	234.00
Europe-S.A.W.C.	0	1	4	2.41	3.82	3.42	5.42	76.82	78.42	2.08	82.00
Oceania-U.S.E.C.	4	57	269	2.41	3.62	3.42	5.13	75.10	76.61	2.01	85.98
S.A.E.C.-Asia	2	30	118	2.41	3.83	3.42	5.42	89.83	91.42	1.78	107.00
S.A.E.C.-C.A.W.C.	12	32	187	2.41	7.30	3.42	10.35	115.30	118.35	2.64	132.00
U.S.E.C.-Asia	3	41	189	2.41	3.86	3.42	5.47	94.04	95.65	1.71	139.47
U.S.E.C.-C.A.W.C.	0	1	4	2.41	7.30	3.42	10.35	66.30	69.35	4.59	226.00
U.S.E.C.-S.A.W.C.	1	2	11	2.41	7.30	3.42	10.35	109.30	112.35	2.79	182.00
Subtotal	104	1,071	4,722	2.41	3.99	3.42	5.66	44.45	46.17	3.85	96.49
Passenger Ships											
Non-Diverted Transits											
North-Bound	197	0	3,532	2.41	0.00	3.42	0.00	0.00	0.00	0.00	0.00

(Continued)

Table C-19. Laden Transits, Tons Carried, Toll Revenue and Toll Rates, Current Toll Structure With 50 Percent Increase in Rates, 150,000 DWT Scenario, 2060, by Ship Type, Diversion Status, and Trade Route (1990 US$, except when noted)(continued)

Ship Type, Diversion Status, and Trade Route	Transits	Cargo Tonnage Carried (thousands)	Revenue (thousands) a/	Current Toll Schedule: Toll Per Panama Canal Net Ton	Current Toll Schedule: Toll Per Cargo Ton Carried	New Toll Schedule: Toll Per Panama Canal Net Ton	New Toll Schedule: Toll Per Cargo Ton Carried	Total Transportation Costs per Ton Carried: Via Panama Canal: With Current Toll Structure	Via Panama Canal: With New Toll Structure	Via Panama Canal: Percent Increase	Via Least Costly Alternative Route
Passenger Ships (continued)											
Non-Diverted Transits (continued)											
South-Bound	238	0	6,510	2.41	0.00	3.42	0.00	0.00	0.00	0.00	0.00
Subtotal	435	0	10,041	2.41	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Refrigerated Ships											
Non-Diverted Transits											
Africa-C.A.W.C.	0	0	4	2.41	4.00	3.42	5.67	120.20	121.87	1.39	224.60
Africa-S.A.W.C.	49	21	1,518	2.41	3.94	3.42	5.59	154.50	156.15	1.06	228.37
Asia-C.A.E.C.	25	95	923	2.41	3.86	3.42	5.46	131.86	133.46	1.22	180.00
Asia-S.A.E.C.	7	5	195	2.41	4.00	3.42	5.67	180.00	181.67	0.93	184.20
Asia-U.S.E.C.	1	0	21	2.41	4.00	3.42	5.67	149.60	151.27	1.12	213.60
C.A.W.C.-Africa	2	7	52	2.41	4.00	3.42	5.67	120.20	121.87	1.39	224.60
C.A.W.C.-Canada E.C.	1	5	16	2.41	4.00	3.42	5.67	79.20	80.87	2.11	163.40
C.A.W.C.-C.A.E.C.	39	294	1,449	2.41	3.86	3.42	5.46	52.86	54.46	3.04	132.00
C.A.W.C.-Europe	276	1,493	10,216	2.41	3.86	3.42	5.46	92.86	94.46	1.73	150.00
C.A.W.C.-S.A.E.C.	2	9	47	2.41	4.00	3.42	5.67	94.40	96.07	1.77	103.00
C.A.W.C.-U.S.E.C.	1	2	33	2.41	4.00	3.42	5.67	64.00	65.67	2.61	160.40
Canada E.C.-Asia	15	92	410	2.41	4.00	3.42	5.67	165.80	167.47	1.01	182.60
Canada E.C.-C.A.W.C.	11	31	401	2.41	3.86	3.42	5.46	71.86	73.46	2.24	149.00
Canada W.C.-Europe	4	45	138	2.41	3.86	3.42	5.46	132.86	134.46	1.21	190.00
C.A.E.C.-Asia	13	37	404	2.41	3.93	3.42	5.57	144.92	146.56	1.13	197.33
C.A.E.C.-C.A.W.C.	43	11	1,598	2.41	3.86	3.42	5.46	52.86	54.46	3.04	132.00
C.A.E.C.-S.A.W.C.	93	82	3,450	2.41	3.86	3.42	5.46	75.86	77.46	2.12	107.00
Europe-C.A.W.C.	308	26	11,373	2.41	3.86	3.42	5.46	92.86	94.46	1.73	187.00

(Continued)

Table C-19. Laden Transits, Tons Carried, Toll Revenue and Toll Rates, Current Toll Structure With 50 Percent Increase in Rates, 150,000 DWT Scenario, 2060, by Ship Type, Diversion Status, and Trade Route (1990 US$, except when noted)(continued)

Ship Type, Diversion Status, and Trade Route	Transits	Cargo Tonnage Carried (thousands)	Revenue (thousands) a/	Current Toll Schedule: Toll Per Panama Canal Net Ton	Current Toll Schedule: Toll Per Cargo Ton Carried	New Toll Schedule: Toll Per Panama Canal Net Ton	New Toll Schedule: Toll Per Cargo Ton Carried	Total Transportation Costs per Ton Carried: Via Panama Canal: With Current Toll Structure	Via Panama Canal: With New Toll Structure	Via Panama Canal: Percent Increase	Via Least Costly Alternative Route
Refrigerated Ships (continued)											
Non-Diverted Transits (continued)											
Europe-Canada W.C.	1	1	28	2.41	4.00	3.42	5.67	145.60	147.27	1.15	204.40
Europe-S.A.W.C.	295	278	10,356	2.41	3.88	3.42	5.50	119.82	121.44	1.35	127.10
Europe-U.S.W.C.	18	16	503	2.41	4.00	3.42	5.67	135.40	137.07	1.23	192.20
Middle East-S.A.W.C.	3	6	74	2.41	4.00	3.42	5.67	138.00	139.67	1.21	165.40
Oceania-C.A.E.C.	6	50	180	2.41	4.00	3.42	5.67	157.20	158.87	1.06	196.80
Oceania-U.S.E.C.	53	207	1,531	2.41	3.98	3.42	5.65	160.43	162.10	1.04	183.47
S.A.E.C.-Asia	12	62	326	2.41	4.00	3.42	5.67	146.60	148.27	1.14	172.00
S.A.W.C.-Africa	27	111	843	2.41	3.94	3.42	5.59	130.08	131.73	1.26	205.85
S.A.W.C.-C.A.E.C.	40	241	1,450	2.41	3.86	3.42	5.48	76.48	78.10	2.11	107.85
S.A.W.C.-Europe	1,101	6,815	37,657	2.41	3.89	3.42	5.52	119.88	121.51	1.35	127.15
S.A.W.C.-Middle East	5	18	135	2.41	4.00	3.42	5.67	138.00	139.67	1.21	165.40
S.A.W.C.-U.S.E.C.	808	3,821	28,517	2.41	3.88	3.42	5.49	82.93	84.54	1.95	122.50
U.S.E.C.-Asia	46	189	1,620	2.41	3.87	3.42	5.49	139.10	140.72	1.16	198.29
U.S.E.C.-C.A.W.C.	70	196	2,572	2.41	3.86	3.42	5.46	57.86	59.46	2.78	146.00
U.S.E.C.-S.A.W.C.	423	892	15,305	2.41	3.87	3.42	5.48	82.19	83.80	1.96	121.46
U.S.W.C.-Europe	140	804	4,302	2.41	3.95	3.42	5.60	134.45	136.10	1.23	190.92
U.S.W.C.-S.A.E.C.	2	6	54	2.41	3.98	3.42	5.64	131.22	132.88	1.27	135.82
Subtotal	3,937	15,968	137,700	2.41	3.88	3.42	5.50	105.63	107.26	1.53	134.95
Refrigerated Ships											
Diverted Transits											
Africa-Asia	46	292	926	2.41	4.00	3.42	5.67	173.40	175.07	0.96	173.00
Subtotal	46	292	926	2.41	4.00	3.42	5.67	173.40	175.07	0.96	173.00
Subtotal	3,983	16,260	138,627	2.41	3.88	3.42	5.50	106.85	108.47	1.52	135.63

(Continued)

Table C-19. Laden Transits, Tons Carried, Toll Revenue and Toll Rates, Current Toll Structure With 50 Percent Increase in Rates, 150,000 DWT Scenario, 2060, by Ship Type, Diversion Status, and Trade Route (1990 US$, except when noted)(continued)

Ship Type, Diversion Status, and Trade Route	Transits	Cargo Tonnage Carried (thousands)	Revenue (thousands) a/	Current Toll Schedule: Toll Per Panama Canal Net Ton	Current Toll Schedule: Toll Per Cargo Ton Carried	New Toll Schedule: Toll Per Panama Canal Net Ton	New Toll Schedule: Toll Per Cargo Ton Carried	Total Transportation Costs per Ton Carried: Via Panama Canal: With Current Toll Structure	Via Panama Canal: With New Toll Structure	Via Panama Canal: Percent Increase	Via Least Costly Alternative Route
Roll-On Roll-Off (continued)											
Non-Diverted Transits (continued)											
Asia-Canada E.C.	3	15	146	2.41	9.35	3.42	13.25	298.90	302.80	1.30	324.43
Asia-C.A.E.C.	32	633	3,319	2.41	7.92	3.42	11.23	236.83	240.14	1.40	268.32
Asia-U.S.E.C.	67	1,286	6,717	2.41	7.95	3.42	11.27	248.85	252.17	1.33	304.22
C.A.W.C.-Europe	33	177	1,965	2.41	8.66	3.42	12.27	198.66	202.27	1.82	280.00
C.A.W.C.-U.S.E.C.	3	1	153	2.41	8.66	3.42	12.27	170.66	174.27	2.12	273.00
Canada E.C.-Asia	17	85	763	2.41	9.30	3.42	13.18	355.27	359.15	1.09	370.17
Canada W.C.-C.A.E.C.	0	1	17	2.41	10.19	3.42	14.44	239.87	244.12	1.77	394.39
C.A.E.C.-C.A.W.C.	1	2	39	2.41	9.72	3.42	13.77	167.54	171.59	2.42	296.40
C.A.E.C.-Oceania	7	20	421	2.41	8.66	3.42	12.27	275.66	279.27	1.31	332.00
C.A.E.C.-S.A.W.C.	85	149	2,963	2.41	10.19	3.42	14.45	232.93	237.19	1.83	280.17
Europe-C.A.W.C.	35	221	2,079	2.41	8.66	3.42	12.27	198.66	202.27	1.82	350.00
Europe-S.A.W.C.	0	0	4	2.41	8.67	3.42	12.28	262.67	266.28	1.38	303.00
Europe-U.S.W.C.	1	3	36	2.41	8.66	3.42	12.27	262.66	266.27	1.38	350.00
Oceania-C.A.E.C.	0	0	1	2.41	7.97	3.42	11.29	234.97	238.29	1.41	273.80
S.A.W.C.-C.A.E.C.	22	44	766	2.41	10.19	3.42	14.45	232.93	237.19	1.83	280.17
S.A.W.C.-Europe	2	5	101	2.41	8.66	3.42	12.27	262.66	266.27	1.38	311.00
S.A.W.C.-U.S.E.C.	12	25	418	2.41	10.19	3.42	14.45	224.99	229.25	1.89	292.08
U.S.E.C.-Asia	14	93	847	2.41	8.64	3.42	12.24	298.20	301.80	1.21	378.28
U.S.E.C.-C.A.W.C.	4	7	243	2.41	8.66	3.42	12.27	144.66	148.27	2.50	273.00
U.S.E.C.-S.A.W.C.	57	101	1,996	2.41	10.19	3.42	14.45	224.99	229.25	1.89	292.08
U.S.W.C.-Canada E.C.	1	2	25	2.41	10.20	3.42	14.45	263.70	267.95	1.61	414.27
U.S.W.C.-C.A.E.C.	2	48	246	2.41	7.75	3.42	10.98	160.82	164.05	2.01	232.64
U.S.W.C.-Europe	0	1	3	2.41	7.77	3.42	11.01	212.68	215.92	1.52	267.50

(Continued)

Table C-19. Laden Transits, Tons Carried, Toll Revenue and Toll Rates, Current Toll Structure With 50 Percent Increase in Rates, 150,000 DWT Scenario, 2060, by Ship Type, Diversion Status, and Trade Route (1990 US$, except when noted)(continued)

Ship Type, Diversion Status, and Trade Route	Transits	Cargo Tonnage Carried (thousands)	Revenue (thousands) a/	Current Toll Schedule: Toll Per Panama Canal Net Ton	Current Toll Schedule: Toll Per Cargo Ton Carried	New Toll Schedule: Toll Per Panama Canal Net Ton	New Toll Schedule: Toll Per Cargo Ton Carried	Total Transportation Costs per Ton Carried: Via Panama Canal: With Current Toll Structure	Via Panama Canal: With New Toll Structure	Via Panama Canal: Percent Increase	Via Least Costly Alternative Route
Roll-On Roll-Off (continued)											
Non-Diverted Transits (continued)											
U.S.W.C.-U.S.E.C.	0	9	45	2.41	7.86	3.42	11.14	159.45	162.73	2.06	255.79
Subtotal	397	2,929	23,313	2.41	8.68	3.42	12.30	240.41	243.90	1.45	299.63
Roll-On Roll-Off											
Diverted Transits											
C.A.W.C.-S.A.E.C.	0	0	3	2.41	8.66	3.42	12.27	211.66	215.27	1.71	211.00
Canada E.C.-Oceania	3	61	184	2.41	7.77	3.42	11.00	251.49	254.72	1.29	249.02
Subtotal	3	61	188	2.41	7.78	3.42	11.02	251.24	254.48	1.29	248.78
Subtotal	400	2,990	23,501	2.41	8.67	3.42	12.28	240.63	244.12	1.45	298.58
Tankers											
Non-Diverted Transits											
Africa-U.S.W.C.	0	0	0	2.41	1.27	3.42	1.80	18.27	18.80	2.91	24.00
Asia-U.S.E.C.	3	77	134	2.41	1.27	3.42	1.80	27.11	27.64	1.95	38.76
C.A.W.C.-Africa	0	0	2	2.41	1.27	3.42	1.80	46.27	46.80	1.14	100.00
C.A.W.C.-Canada E.C.	0	8	14	2.41	1.27	3.42	1.80	12.21	12.74	4.33	28.82
C.A.W.C.-C.A.E.C.	16	95	449	2.41	1.27	3.42	1.80	10.26	10.79	5.16	34.99
C.A.W.C.-Europe	4	94	181	2.41	1.27	3.42	1.80	17.17	17.70	3.08	28.84
C.A.W.C.-U.S.E.C.	10	80	280	2.41	1.27	3.42	1.80	11.18	11.71	4.73	37.36
Canada E.C.-Asia	18	707	1,184	2.41	1.27	3.42	1.80	25.06	25.59	2.11	27.21
Canada W.C.-U.S.E.C.	6	255	480	2.41	1.28	3.42	1.82	13.76	14.30	3.88	26.23
C.A.E.C.-Asia	5	141	292	2.41	1.29	3.42	1.83	22.38	22.92	2.41	31.40
C.A.E.C.-C.A.W.C.	45	750	1,912	2.41	1.27	3.42	1.80	7.38	7.91	7.17	22.70

(Continued)

Table C-19. Laden Transits, Tons Carried, Toll Revenue and Toll Rates, Current Toll Structure With 50 Percent Increase in Rates, 150,000 DWT Scenario, 2060, by Ship Type, Diversion Status, and Trade Route (1990 US$, except when noted)(continued)

Ship Type, Diversion Status, and Trade Route	Transits	Cargo Tonnage Carried (thousands)	Revenue (thousands) a/	Current Toll Schedule: Toll Per Panama Canal Net Ton	Current Toll Schedule: Toll Per Cargo Ton Carried	New Toll Schedule: Toll Per Panama Canal Net Ton	New Toll Schedule: Toll Per Cargo Ton Carried	Total Transportation Costs per Ton Carried: Via Panama Canal: With Current Toll Structure	Via Panama Canal: With New Toll Structure	Via Panama Canal: Percent Increase	Via Least Costly Alternative Route
Tankers (continued)											
Non-Diverted Transits (continued)											
C.A.E.C.-S.A.W.C.	46	887	1,847	2.41	1.27	3.42	1.80	13.34	13.87	3.97	20.04
C.A.E.C.-U.S.W.C.	5	228	406	2.41	1.27	3.42	1.80	11.93	12.46	4.43	23.43
Europe-C.A.W.C.	17	81	233	2.41	1.27	3.42	1.80	24.95	25.48	2.12	44.78
Europe-S.A.W.C.	4	82	146	2.41	1.27	3.42	1.80	23.34	23.87	2.27	25.18
Europe-U.S.W.C.	4	109	194	2.41	1.27	3.42	1.80	22.50	23.03	2.35	32.22
Oceania-U.S.E.C.	9	162	317	2.41	1.27	3.42	1.80	28.05	28.58	1.89	32.60
S.A.E.C.-Asia	100	14,050	22,302	2.41	1.27	3.42	1.80	15.32	15.85	3.45	16.31
S.A.E.C.-C.A.W.C.	68	3,130	6,786	2.41	1.26	3.42	1.79	10.89	11.42	4.84	11.68
S.A.W.C.-Canada E.C.	1	14	27	2.41	1.27	3.42	1.80	20.47	21.00	2.58	27.25
S.A.W.C.-C.A.E.C.	15	557	1,032	2.41	1.27	3.42	1.80	10.99	11.52	4.81	15.42
S.A.W.C.-Europe	19	173	316	2.41	1.27	3.42	1.80	28.01	28.54	1.89	30.35
S.A.W.C.-U.S.E.C.	17	607	1,096	2.41	1.27	3.42	1.80	11.71	12.24	4.52	18.51
U.S.E.C.-Asia	90	2,946	5,336	2.41	1.27	3.42	1.79	22.71	23.23	2.33	32.54
U.S.E.C.-C.A.W.C.	14	260	600	2.41	1.27	3.42	1.80	9.23	9.76	5.73	28.15
U.S.E.C.-Canada W.C.	2	7	87	2.41	1.27	3.42	1.80	18.17	18.70	2.91	35.78
U.S.E.C.-Oceania	4	129	235	2.41	1.27	3.42	1.80	26.02	26.55	2.03	30.19
U.S.E.C.-S.A.W.C.	3	49	96	2.41	1.27	3.42	1.80	13.63	14.16	3.88	21.94
U.S.E.C.-U.S.W.C.	21	601	1,164	2.41	1.27	3.42	1.80	14.06	14.59	3.76	30.95
U.S.W.C.-Africa	10	334	738	2.41	1.26	3.42	1.79	16.39	16.92	3.21	20.19
U.S.W.C.-C.A.E.C.	3	96	197	2.41	1.26	3.42	1.79	11.90	12.43	4.43	23.13
U.S.W.C.-U.S.E.C.	4	102	216	2.41	1.27	3.42	1.79	13.36	13.88	3.95	29.10
Subtotal	562	26,815	48,297	2.41	1.27	3.41	1.80	15.61	16.14	3.39	19.67
Tankers											
Diverted Transits											
Middle East-U.S.W.C.	0	0	0	2.41	1.25	3.42	1.77	1.63	2.15	31.96	0.48

(Continued)

Table C-19. Laden Transits, Tons Carried, Toll Revenue and Toll Rates, Current Toll Structure With 50 Percent Increase in Rates, 150,000 DWT Scenario, 2060, by Ship Type, Diversion Status, and Trade Route (1990 US$, except when noted)(continued)

Ship Type, Diversion Status, and Trade Route	Transits	Cargo Tonnage Carried (thousands)	Revenue (thousands) a/	Current Toll Schedule: Toll Per Panama Canal Net Ton	Current Toll Schedule: Toll Per Cargo Ton Carried	New Toll Schedule: Toll Per Panama Canal Net Ton	New Toll Schedule: Toll Per Cargo Ton Carried	Total Transportation Costs per Ton Carried: Via Panama Canal: With Current Toll Structure	Via Panama Canal: With New Toll Structure	Via Panama Canal: Percent Increase	Via Least Costly Alternative Route
Tankers (continued)											
Diverted Transits (continued)											
S.A.E.C.-U.S.W.C.	27	978	1,569	2.41	1.27	3.42	1.80	18.67	19.20	2.83	18.82
U.S.W.C.-S.A.E.C.	1	29	40	2.41	1.27	3.42	1.80	18.76	19.29	2.82	18.90
Subtotal	27	1,006	1,609	2.41	1.27	3.42	1.80	18.67	19.20	2.83	18.82
Subtotal	589	27,821	49,906	2.41	1.27	3.41	1.80	15.72	16.25	3.36	19.64
Vehicle Carriers											
Non-Diverted Transits											
Asia-C.A.E.C.	13	34	1,317	2.41	29.09	3.42	41.22	417.18	429.31	2.91	496.39
Asia-U.S.E.C.	481	2,251	53,642	2.41	29.20	3.42	41.37	439.57	451.74	2.77	516.31
C.A.W.C.-C.A.E.C.	3	3	176	2.41	28.71	3.42	40.69	266.36	278.34	4.50	440.99
C.A.E.C.-C.A.W.C.	8	3	961	2.41	29.22	3.42	41.41	272.22	284.41	4.48	411.00
C.A.E.C.-Oceania	1	0	112	2.41	29.22	3.42	41.41	434.22	446.41	2.81	482.00
Europe-Canada W.C.	7	16	1,091	2.41	30.90	3.42	43.78	386.38	399.26	3.33	457.44
Europe-U.S.W.C.	156	299	20,440	2.41	29.95	3.42	42.43	403.00	415.48	3.10	458.96
S.A.W.C.-C.A.E.C.	0	0	12	2.41	28.70	3.42	40.66	323.70	335.66	3.70	380.00
U.S.E.C.-Asia	42	192	5,209	2.41	29.67	3.42	42.05	415.80	428.18	2.98	510.17
U.S.E.C.-Oceania	13	30	1,447	2.41	29.22	3.42	41.41	433.22	445.41	2.81	453.00
Subtotal	723	2,828	84,408	2.41	29.42	3.42	41.69	433.09	445.32	2.82	508.39
Vehicle Carriers											
Diverted Transits											
Asia-S.A.E.C.	0	0	7	2.41	29.13	3.42	41.28	484.18	496.33	2.51	468.49
Canada E.C.-Asia	1	3	35	2.41	29.22	3.42	41.41	465.22	477.41	2.62	456.00
Subtotal	1	3	42	2.41	29.20	3.41	41.38	466.92	479.10	2.61	457.12
Subtotal	724	2,831	84,450	2.41	29.42	3.42	41.69	433.13	445.35	2.82	508.34

(Continued)

Table C-19. Laden Transits, Tons Carried, Toll Revenue and Toll Rates, Current Toll Structure With 50 Percent Increase in Rates, 150,000 DWT Scenario, 2060, by Ship Type, Diversion Status, and Trade Route (1990 US$, except when noted)(continued)

Ship Type, Diversion Status, and Trade Route	Transits	Cargo Tonnage Carried (thousands)	Revenue (thousands) a/	Current Toll Schedule: Toll Per Panama Canal Net Ton	Current Toll Schedule: Toll Per Cargo Ton Carried	New Toll Schedule: Toll Per Panama Canal Net Ton	New Toll Schedule: Toll Per Cargo Ton Carried	Total Transportation Costs per Ton Carried: Via Panama Canal: With Current Toll Structure	Via Panama Canal: With New Toll Structure	Via Panama Canal: Percent Increase	Via Least Costly Alternative Route
Total Non-Diverting	17,438	424,368	1,084,086	2.41	1.80	3.42	2.55	46.89	47.67	1.66	57.51
Total Diverting	466	16,566	29,926	2.41	1.36	3.42	1.93	22.07	22.72	2.96	22.28

Notes: These calculations do not include all transits and tons carried forecast by the WEFA Group. For some ship-type and trade-route combinations (accounting for a total of 27 transits and 291695 tons), vessel costs were not available for every DWT size interval. As a result, these transits and tons were excluded. In addition, for 2536 transits and 56215466 tons, the cost by way of the Panama Canal without a toll was higher than the least costly alternative route. As a result, these transits and tons were excluded. Percentages may not calculate exactly as shown due to rounding. A fee of $0.40 per Panama Canal net ton has also been included to account for charges such as handling and agency fees incurred when transitting the Canal. The extra fee is only used to determine divesion status by adding it to the cost per ton carried and is not included in the revenue calculations.

a/ Revenue lost from diversions is measured as the revenue generated by the maximum, nondiverting toll rate increase.

Source: Nathan Associates Inc., based on forecasts of traffic and transportation costs provided by The WEFA Group.

CURRENT TOLL STRUCTURE WITH 50 PERCENT INCREASE IN RATES, 200,000-DWT SCENARIO, 2060

Table C-20. Laden Transits, Tons Carried, and Toll Revenue, Current Toll Structure With 50 Percent Increase in Rates, 200,000 DWT Scenario, 2060, by Ship Type

	Transits				Tons Carried(thousands)				Revenue(1990 US$thousands)			
Ship Type	Canal	Diverted	Total	Diverted as a Percent of Total	Canal	Diverted	Total	Diverted as a Percent of Total	Canal	Lost a/	Total	Lost as a Percent of Total
Container-Breakbulk	2,460	4	2,465	0.17	36,908	88	36,996	0.24	102,915	226	103,141	0.22
Dry Bulk Carriers	4,592	393	4,986	7.89	263,612	21,353	284,965	7.49	456,646	26,406	483,053	5.47
Chemical Tankers	1,224	0	1,224	0.00	32,988	0	32,988	0.00	57,274	0	57,274	0.00
Full Container Ships	1,460	10	1,470	0.70	31,607	179	31,786	0.56	148,709	109	148,818	0.07
General Cargo Ships	1,458	6	1,464	0.43	13,946	45	13,991	0.32	37,649	206	37,854	0.54
Liquid Gas Carriers	104	0	104	0.00	1,071	0	1,071	0.00	4,722	0	4,722	0.00
Passenger Ships	435	0	435	0.00	0	0	0	0.00	10,041	0	10,041	0.00
Refrigerated Ships	3,937	46	3,983	1.15	15,968	292	16,260	1.80	137,700	926	138,627	0.67
Roll-On Roll-Off	397	3	400	0.70	2,929	61	2,990	2.05	23,313	188	23,501	0.80
Tankers	539	27	567	4.82	26,815	1,006	27,821	3.62	48,291	1,609	49,900	3.23
Vehicle Carriers	723	1	724	0.10	2,828	3	2,831	0.10	84,408	42	84,450	0.05
Total	17,331	491	17,822	2.75	428,672	23,028	451,699	5.10	1,111,668	29,712	1,141,380	2.60

Notes: These calculations do not include all transits and tons carried forecast by the WEFA Group. For some ship-type and trade-route combinations (accounting for a total of 27 transits and 291695 tons), vessel costs were not available for every DWT size interval. As a result, these transits and tons were excluded. In addition, for 2480 transits and 49528628 tons, the cost by way of the Panama Canal without a toll was higher than the least costly alternative route. As a result, these transits and tons were excluded. A fee of $0.40 per Panama Canal net ton has also been included to account for charges such as handling and agency fees incurred when transitting the Canal. The extra fee is only used to determine diversion status by adding it to cost per ton carried and is not included in the revenue calculations.

a/ Revenue lost from diversions is measured as the revenue generated by the maximum, nondiverting toll rate increase.

Source: Nathan Associates Inc., based on forecasts of traffic and transportation costs provided by The WEFA Group.

Table C-21. Ballast Transits, Tons Carried, and Toll Revenue, Current Toll Structure With 50 Percent Increase in Rates, 200,000 DWT Scenario, 2060, by Ship Type

	Transits				Tons Carried(thousands)				Revenue(1990 US$thousands)			
Ship Type	Canal	Diverted	Total	Diverted as a Percent of Total	Canal	Diverted	Total	Diverted as a Percent of Total	Canal	Lost	Total	Lost as a Percent of Total
Container-Breakbulk	67	0	67	0.22	0	0	0	0.00	2,438	5	2,443	0.22
Dry Bulk Carriers	388	22	410	5.47	0	0	0	0.00	26,943	1,559	28,502	5.47
Chemical Tankers	127	0	127	0.00	0	0	0	0.00	5,170	0	5,170	0.00
Full Container Ships	6	0	6	0.07	0	0	0	0.00	390	0	391	0.07
General Cargo Ships	273	1	274	0.54	0	0	0	0.00	4,510	24	4,535	0.54
Liquid Gas Carriers	958	0	958	0.00	0	0	0	0.00	73,020	0	73,020	0.00
Passenger Ships	51	0	51	0.00	0	0	0	0.00	995	0	995	0.00
Refrigerated Ships	1,062	7	1,069	0.67	0	0	0	0.00	28,284	191	28,475	0.67
Roll-On Roll-Off	58	0	58	0.80	0	0	0	0.00	2,553	21	2,574	0.80
Tankers	280	9	289	3.23	0	0	0	0.00	23,299	778	24,077	3.23
Vehicle Carriers	441	0	441	0.05	0	0	0	0.00	39,044	20	39,064	0.05
Total	3,709	41	3,750	1.10	0	0	0	0.00	206,648	2,598	209,246	1.24

Note: Diversions of ballast transits are computed by diverting a proportion of ballast transits equal to lost revenue as a percent of total potential revenue for a particular laden ship type. See last column on previous table.

Source: Nathan Associates Inc., based on forecasts of traffic and transportation costs provided by The WEFA Group.

Table C-22. Laden Transits, Tons Carried, Toll Revenue and Toll Rates, Current Toll Structure With 50 Percent Increase in Rates, 200,000 DWT Scenario, 2060, by Ship Type, Diversion Status, and Trade Route (1990 US$, except when noted)

Ship Type, Diversion Status, and Trade Route	Transits	Cargo Tonnage Carried (thousands)	Revenue (thousands) a/	Current Toll Schedule: Toll Per Panama Canal Net Ton	Current Toll Schedule: Toll Per Cargo Ton Carried	New Toll Schedule: Toll Per Panama Canal Net Ton	New Toll Schedule: Toll Per Cargo Ton Carried	Total Transportation Costs per Ton Carried: Via Panama Canal: With Current Toll Structure	Via Panama Canal: With New Toll Structure	Via Panama Canal: Percent Increase	Via Least Costly Alternative Route
Container-Breakbulk											
Non-Diverted Transits											
Africa-C.A.W.C.	6	185	285	2.41	1.85	3.42	2.63	72.26	73.04	1.07	119.11
Africa-Canada W.C.	0	5	18	2.41	1.87	3.42	2.65	92.01	92.79	0.85	106.57
Africa-U.S.W.C.	2	25	86	2.41	1.87	3.42	2.65	93.01	93.79	0.84	107.78
Asia-Canada E.C.	1	8	31	2.41	1.86	3.42	2.64	93.05	93.83	0.84	100.96
Asia-C.A.E.C.	135	1,246	5,334	2.41	1.87	3.42	2.64	97.20	97.97	0.80	113.04
Asia-S.A.E.C.	48	305	1,795	2.41	1.87	3.42	2.65	105.12	105.90	0.74	107.25
Asia-U.S.E.C.	139	1,759	5,870	2.41	1.86	3.42	2.64	99.37	100.15	0.78	123.49
C.A.W.C.-Africa	6	112	208	2.41	1.87	3.42	2.65	76.03	76.81	1.03	127.35
C.A.W.C.-C.A.E.C.	16	247	618	2.41	1.86	3.42	2.64	51.25	52.03	1.52	91.73
C.A.W.C.-Europe	41	304	1,625	2.41	1.87	3.42	2.65	65.68	66.46	1.19	95.59
C.A.W.C.-S.A.E.C.	23	10	849	2.41	1.87	3.42	2.65	72.11	72.89	1.08	77.11
C.A.W.C.-U.S.E.C.	7	40	253	2.41	1.87	3.42	2.65	57.32	58.10	1.36	95.90
Canada E.C.-Asia	31	815	1,617	2.41	1.85	3.42	2.63	95.14	95.92	0.81	98.29
Canada E.C.-C.A.W.C.	3	25	97	2.41	1.87	3.42	2.65	55.94	56.72	1.39	96.99
Canada E.C.-Oceania	2	25	58	2.41	1.87	3.42	2.65	107.65	108.43	0.72	108.63
Canada E.C.-S.A.W.C.	1	17	39	2.41	1.85	3.42	2.63	65.70	66.48	1.18	79.70
Canada E.C.-U.S.W.C.	0	0	0	2.41	1.86	3.42	2.64	72.57	73.35	1.07	111.42
Canada W.C.-Africa	29	662	1,278	2.41	1.85	3.42	2.63	93.53	94.31	0.83	106.62
Canada W.C.-Europe	107	3,116	5,777	2.41	1.85	3.42	2.63	81.19	81.97	0.95	109.01
Canada W.C.-S.A.E.C.	22	421	816	2.41	1.87	3.42	2.65	74.11	74.89	1.05	114.56
Canada W.C.-U.S.E.C.	15	303	655	2.41	1.85	3.42	2.63	67.85	68.63	1.14	108.00
C.A.E.C.-Asia	13	270	491	2.41	1.87	3.42	2.65	96.31	97.09	0.81	111.98
C.A.E.C.-C.A.W.C.	13	49	497	2.41	1.87	3.42	2.65	52.15	52.93	1.49	94.93

(Continued)

Table C-22. Laden Transits, Tons Carried, Toll Revenue and Toll Rates, Current Toll Structure With 50 Percent Increase in Rates, 200,000 DWT Scenario, 2060, by Ship Type, Diversion Status, and Trade Route (1990 US$, except when noted)(continued)

Ship Type, Diversion Status, and Trade Route	Transits	Cargo Tonnage Carried (thousands)	Revenue (thousands) a/	Current Toll Schedule: Toll Per Panama Canal Net Ton	Current Toll Schedule: Toll Per Cargo Ton Carried	New Toll Schedule: Toll Per Panama Canal Net Ton	New Toll Schedule: Toll Per Cargo Ton Carried	Total Transportation Costs per Ton Carried: Via Panama Canal: With Current Toll Structure	Via Panama Canal: With New Toll Structure	Via Panama Canal: Percent Increase	Via Least Costly Alternative Route
Container-Breakbulk (continued)											
Non-Diverted Transits (continued)											
C.A.E.C.-Canada W.C.	4	59	147	2.41	1.87	3.42	2.65	66.58	67.36	1.17	106.57
C.A.E.C.-Oceania	2	38	92	2.41	1.87	3.42	2.65	94.01	94.79	0.83	112.63
C.A.E.C.-S.A.W.C.	37	286	1,419	2.41	1.87	3.42	2.65	64.73	65.51	1.20	79.50
C.A.E.C.-U.S.W.C.	6	112	240	2.41	1.86	3.42	2.64	64.27	65.05	1.21	97.78
Europe-C.A.W.C.	44	271	1,688	2.41	1.87	3.42	2.65	66.79	67.57	1.17	118.42
Europe-Canada W.C.	7	217	441	2.41	1.85	3.42	2.63	83.24	84.02	0.93	107.58
Europe-S.A.W.C.	182	1,504	7,044	2.41	1.87	3.42	2.65	90.01	90.79	0.87	104.63
Europe-U.S.W.C.	36	1,115	2,107	2.41	1.85	3.42	2.63	82.41	83.19	0.94	107.84
Oceania-C.A.E.C.	10	99	364	2.41	1.87	3.42	2.65	94.77	95.55	0.82	113.61
S.A.E.C.-C.A.W.C.	16	252	632	2.41	1.87	3.42	2.65	71.65	72.43	1.09	76.57
S.A.E.C.-Canada W.C.	25	335	978	2.41	1.87	3.42	2.65	92.79	93.57	0.84	98.78
S.A.E.C.-U.S.W.C.	84	1,260	3,325	2.41	1.87	3.42	2.64	78.16	78.93	1.00	80.87
S.A.W.C.-Africa	3	52	102	2.41	1.87	3.42	2.65	82.90	83.68	0.94	120.48
S.A.W.C.-Canada E.C.	1	2	43	2.41	1.87	3.42	2.65	69.19	69.97	1.13	84.90
S.A.W.C.-C.A.E.C.	26	206	954	2.41	1.87	3.42	2.65	65.19	65.97	1.20	80.11
S.A.W.C.-Europe	329	5,753	12,560	2.41	1.87	3.42	2.65	89.68	90.46	0.87	106.41
S.A.W.C.-U.S.E.C.	239	2,340	8,943	2.41	1.87	3.42	2.65	62.12	62.90	1.26	81.53
U.S.E.C.-Asia	284	7,177	14,067	2.41	1.86	3.42	2.63	96.15	96.92	0.81	119.21
U.S.E.C.-C.A.W.C.	22	446	887	2.41	1.86	3.42	2.64	47.68	48.46	1.63	93.27
U.S.E.C.-S.A.W.C.	347	3,443	13,523	2.41	1.87	3.42	2.65	61.84	62.62	1.26	81.01
U.S.E.C.-U.S.W.C.	0	0	1	2.41	1.86	3.42	2.64	58.86	59.64	1.32	98.00
U.S.W.C.-Africa	22	367	1,366	2.41	1.85	3.42	2.63	85.43	86.21	0.91	102.85
U.S.W.C.-Canada E.C.	1	33	56	2.41	1.85	3.42	2.63	69.85	70.63	1.11	106.00

(Continued)

Table C-22. Laden Transits, Tons Carried, Toll Revenue and Toll Rates, Current Toll Structure With 50 Percent Increase in Rates, 200,000 DWT Scenario, 2060, by Ship Type, Diversion Status, and Trade Route (1990 US$, except when noted)(continued)

Ship Type, Diversion Status, and Trade Route	Transits	Cargo Tonnage Carried (thousands)	Revenue (thousands) a/	Current Toll Schedule: Toll Per Panama Canal Net Ton	Current Toll Schedule: Toll Per Cargo Ton Carried	New Toll Schedule: Toll Per Panama Canal Net Ton	New Toll Schedule: Toll Per Cargo Ton Carried	Total Transportation Costs per Ton Carried, Via Panama Canal: With Current Toll Structure	Total Transportation Costs per Ton Carried, Via Panama Canal: With New Toll Structure	Total Transportation Costs per Ton Carried, Via Panama Canal: Percent Increase	Total Transportation Costs per Ton Carried: Via Least Costly Alternative Route
Container-Breakbulk (continued)											
Non-Diverted Transits (continued)											
U.S.W.C.-C.A.E.C.	19	135	716	2.41	1.87	3.42	2.65	66.46	67.24	1.17	101.57
U.S.W.C.-Europe	51	1,343	2,679	2.41	1.86	3.42	2.63	83.60	84.37	0.93	108.54
U.S.W.C.-S.A.E.C.	6	104	220	2.41	1.87	3.42	2.65	79.98	80.76	0.97	82.98
U.S.W.C.-U.S.E.C.	0	6	24	2.41	1.85	3.42	2.63	60.33	61.11	1.28	102.02
Subtotal	2,460	36,908	102,915	2.41	1.86	3.41	2.64	83.67	84.44	0.93	104.46
Container-Breakbulk											
Diverted Transits											
Oceania-Canada E.C.	4	88	226	2.41	1.85	3.42	2.63	97.85	98.63	0.79	98.00
Subtotal	4	88	226	2.41	1.85	3.41	2.63	97.85	98.63	0.79	98.00
Subtotal	2,465	36,996	103,141	2.41	1.86	3.41	2.64	83.70	84.48	0.93	104.44
Dry Bulk Carriers											
Non-Diverted Transits											
Africa-C.A.W.C.	29	1,201	1,832	2.41	1.30	3.42	1.85	15.34	15.89	3.54	27.11
Africa-Canada W.C.	156	7,645	11,241	2.41	1.28	3.42	1.81	17.82	18.35	2.99	19.99
Africa-S.A.W.C.	9	313	564	2.41	1.30	3.42	1.85	18.13	18.68	3.00	26.14
Africa-U.S.W.C.	10	297	733	2.41	1.27	3.42	1.80	16.17	16.70	3.28	19.94
Asia-Canada E.C.	15	695	1,275	2.41	1.25	3.42	1.78	17.55	18.08	2.98	18.43
Asia-C.A.E.C.	29	527	1,895	2.41	1.30	3.42	1.84	18.85	19.39	2.87	24.40
Asia-U.S.E.C.	386	12,134	28,740	2.41	1.27	3.42	1.80	16.62	17.15	3.19	23.16
C.A.W.C.-Africa	2	52	108	2.41	1.29	3.42	1.83	15.32	15.86	3.51	27.18
C.A.W.C.-C.A.E.C.	63	2,167	4,051	2.41	1.30	3.42	1.84	7.57	8.11	7.14	16.30

(Continued)

Table C-22. Laden Transits, Tons Carried, Toll Revenue and Toll Rates, Current Toll Structure With 50 Percent Increase in Rates, 200,000 DWT Scenario, 2060, by Ship Type, Diversion Status, and Trade Route (1990 US$, except when noted)(continued)

Ship Type, Diversion Status, and Trade Route	Transits	Cargo Tonnage Carried (thousands)	Revenue (thousands) a/	Current Toll Schedule: Toll Per Panama Canal Net Ton	Current Toll Schedule: Toll Per Cargo Ton Carried	New Toll Schedule: Toll Per Panama Canal Net Ton	New Toll Schedule: Toll Per Cargo Ton Carried	Total Transportation Costs per Ton Carried: Via Panama Canal: With Current Toll Structure	Via Panama Canal: With New Toll Structure	Via Panama Canal: Percent Increase	Via Least Costly Alternative Route
Dry Bulk Carriers (continued)											
Non-Diverted Transits (continued)											
C.A.W.C.-Europe	19	626	1,306	2.41	1.28	3.42	1.82	12.19	12.73	4.39	18.57
C.A.W.C.-U.S.E.C.	47	1,854	3,206	2.41	1.29	3.42	1.82	7.69	8.22	6.98	18.15
Canada E.C.-Asia	129	7,535	13,432	2.41	1.22	3.42	1.74	18.78	19.30	2.72	20.41
Canada E.C.-Oceania	7	132	446	2.41	1.29	3.42	1.83	21.09	21.63	2.55	21.80
Canada E.C.-S.A.W.C.	12	426	832	2.41	1.29	3.42	1.83	12.85	13.39	4.18	15.56
Canada W.C.-Africa	175	7,689	12,903	2.41	1.28	3.42	1.82	17.49	18.03	3.06	19.57
Canada W.C.-C.A.E.C.	9	270	568	2.41	1.30	3.42	1.85	12.59	13.14	4.32	21.54
Canada W.C.-Europe	301	15,944	27,161	2.41	1.24	3.42	1.76	16.14	16.66	3.22	21.21
Canada W.C.-S.A.E.C.	29	1,820	3,275	2.41	1.22	3.42	1.72	11.69	12.19	4.34	12.24
Canada W.C.-U.S.E.C.	105	3,183	6,588	2.41	1.30	3.42	1.85	13.34	13.89	4.07	23.33
C.A.E.C.-Asia	22	808	1,355	2.41	1.30	3.42	1.85	18.13	18.68	3.00	23.38
C.A.E.C.-C.A.W.C.	49	1,650	3,067	2.41	1.30	3.42	1.85	7.82	8.37	6.95	16.83
C.A.E.C.-Canada W.C.	3	105	188	2.41	1.30	3.42	1.85	12.61	13.16	4.31	21.59
C.A.E.C.-Oceania	1	22	52	2.41	1.30	3.42	1.85	19.89	20.44	2.73	22.59
C.A.E.C.-S.A.W.C.	24	734	1,484	2.41	1.30	3.42	1.85	10.61	11.16	5.12	14.07
C.A.E.C.-U.S.W.C.	9	286	548	2.41	1.30	3.42	1.85	11.61	12.16	4.68	20.59
Columbia-Asia	2	352	544	2.41	1.17	3.42	1.65	17.07	17.55	2.85	25.50
Europe-C.A.W.C.	51	1,627	3,170	2.41	1.30	3.42	1.85	12.61	13.16	4.31	22.38
Europe-Canada W.C.	12	408	868	2.41	1.28	3.42	1.81	16.56	17.09	3.22	22.07
Europe-U.S.W.C.	142	4,679	10,190	2.41	1.28	3.42	1.81	15.66	16.19	3.40	20.80
Middle East-S.A.W.C.	2	104	173	2.41	1.25	3.42	1.76	14.08	14.59	3.69	15.83
Oceania-Canada E.C.	23	859	1,453	2.41	1.30	3.42	1.85	20.84	21.39	2.61	21.54
Oceania-C.A.E.C.	14	469	897	2.41	1.30	3.42	1.85	19.09	19.64	2.85	22.54

(Continued)

Table C-22. Laden Transits, Tons Carried, Toll Revenue and Toll Rates, Current Toll Structure With 50 Percent Increase in Rates, 200,000 DWT Scenario, 2060, by Ship Type, Diversion Status, and Trade Route (1990 US$, except when noted)(continued)

Ship Type, Diversion Status, and Trade Route	Transits	Cargo Tonnage Carried (thousands)	Revenue (thousands) a/	Current Toll Schedule: Toll Per Panama Canal Net Ton	Current Toll Schedule: Toll Per Cargo Ton Carried	New Toll Schedule: Toll Per Panama Canal Net Ton	New Toll Schedule: Toll Per Cargo Ton Carried	Total Transportation Costs per Ton Carried: Via Panama Canal: With Current Toll Structure	Via Panama Canal: With New Toll Structure	Via Panama Canal: Percent Increase	Via Least Costly Alternative Route
Dry Bulk Carriers (continued)											
Non-Diverted Transits (continued)											
Oceania-U.S.E.C.	36	2,218	3,700	2.41	1.23	3.42	1.74	15.65	16.16	3.27	17.42
S.A.E.C.-Asia	60	2,563	4,333	2.41	1.28	3.42	1.81	16.77	17.30	3.17	18.82
S.A.E.C.-Canada W.C.	3	97	201	2.41	1.30	3.42	1.85	17.13	17.68	3.17	17.83
S.A.W.C.-Africa	5	296	426	2.41	1.25	3.42	1.78	14.34	14.87	3.64	21.40
S.A.W.C.-Canada E.C.	1	24	38	2.41	1.30	3.42	1.85	13.34	13.89	4.07	16.04
S.A.W.C.-C.A.E.C.	12	277	727	2.41	1.30	3.42	1.85	10.59	11.14	5.13	14.04
S.A.W.C.-U.S.E.C.	90	3,585	5,712	2.41	1.30	3.42	1.84	11.28	11.82	4.81	15.48
U.S.E.C.-Asia	1,629	139,874	231,304	2.41	1.20	3.42	1.69	16.99	17.48	2.94	22.61
U.S.E.C.-C.A.W.C.	375	14,003	24,123	2.41	1.30	3.42	1.84	7.80	8.34	6.94	18.73
U.S.E.C.-Oceania	23	909	1,535	2.41	1.29	3.42	1.83	19.26	19.80	2.79	20.97
U.S.E.C.-S.A.W.C.	82	2,944	5,293	2.41	1.30	3.42	1.84	11.45	11.99	4.72	15.60
U.S.E.C.-U.S.W.C.	1	0	35	2.41	1.30	3.42	1.85	11.61	12.16	4.68	22.38
U.S.W.C.-Africa	198	9,018	16,328	2.41	1.26	3.42	1.78	15.70	16.22	3.33	19.37
U.S.W.C.-Canada E.C.	5	211	359	2.41	1.29	3.42	1.83	13.93	14.47	3.87	22.50
U.S.W.C.-C.A.E.C.	1	30	57	2.41	1.30	3.42	1.85	11.59	12.14	4.69	20.54
U.S.W.C.-Europe	168	9,505	15,848	2.41	1.24	3.42	1.75	14.02	14.53	3.68	18.82
U.S.W.C.-U.S.E.C.	8	215	582	2.41	1.28	3.42	1.81	11.92	12.45	4.48	23.13
Venezuela-Asia	8	1,231	1,899	2.41	1.17	3.42	1.65	17.07	17.55	2.85	23.70
Subtotal	4,592	263,612	456,646	2.41	1.23	3.42	1.74	15.85	16.36	3.24	21.35
Dry Bulk Carriers											
Diverted Transits											
Asia-S.A.E.C.	5	172	202	2.41	1.30	3.42	1.85	21.84	22.39	2.49	21.54

(Continued)

Table C-22. Laden Transits, Tons Carried, Toll Revenue and Toll Rates, Current Toll Structure With 50 Percent Increase in Rates, 200,000 DWT Scenario, 2060, by Ship Type, Diversion Status, and Trade Route (1990 US$, except when noted)(continued)

Ship Type, Diversion Status, and Trade Route	Transits	Cargo Tonnage Carried (thousands)	Revenue (thousands) a/	Current Toll Schedule: Toll Per Panama Canal Net Ton	Current Toll Schedule: Toll Per Cargo Ton Carried	New Toll Schedule: Toll Per Panama Canal Net Ton	New Toll Schedule: Toll Per Cargo Ton Carried	Total Transportation Costs per Ton Carried: Via Panama Canal: With Current Toll Structure	Via Panama Canal: With New Toll Structure	Via Panama Canal: Percent Increase	Via Least Costly Alternative Route
Dry Bulk Carriers (continued)											
Diverted Transits (continued)											
Brazil-Asia	45	6,687	3,885	2.41	1.17	3.42	1.65	18.97	19.45	2.57	18.35
C.A.W.C.-S.A.E.C.	16	268	1,070	2.41	1.30	3.42	1.85	11.59	12.14	4.69	12.04
Europe-S.A.W.C.	16	514	781	2.41	1.30	3.42	1.85	16.13	16.68	3.37	16.07
S.A.E.C.-C.A.W.C.	12	441	777	2.41	1.30	3.42	1.85	11.61	12.16	4.68	12.07
S.A.E.C.-U.S.W.C.	34	1,722	2,129	2.41	1.23	3.42	1.75	13.30	13.82	3.87	13.07
S.A.W.C.-Europe	251	11,113	17,052	2.41	1.27	3.42	1.80	15.85	16.38	3.34	16.02
U.S.W.C.-S.A.E.C.	13	436	510	2.41	1.30	3.42	1.85	16.09	16.64	3.38	15.79
Subtotal	393	21,353	26,406	2.41	1.24	3.42	1.76	16.54	17.06	3.12	16.42
Subtotal	4,986	284,965	483,053	2.41	1.23	3.42	1.74	15.90	16.41	3.23	20.98
Chemical Tankers											
Non-Diverted Transits											
Africa-S.A.W.C.	2	59	96	2.41	1.34	3.42	1.90	43.34	43.90	1.29	60.00
Asia-C.A.E.C.	4	50	100	2.41	1.34	3.42	1.90	54.00	54.56	1.03	70.82
Asia-S.A.E.C.	4	23	194	2.41	1.34	3.42	1.90	50.34	50.90	1.11	52.00
Asia-U.S.E.C.	39	820	1,675	2.41	1.34	3.42	1.90	43.81	44.37	1.28	59.67
C.A.W.C.-C.A.E.C.	49	306	578	2.41	1.34	3.42	1.90	39.39	39.95	1.42	83.80
C.A.W.C.-Europe	9	169	281	2.41	1.34	3.42	1.90	38.02	38.58	1.47	56.27
C.A.W.C.-U.S.E.C.	63	885	1,616	2.41	1.34	3.42	1.90	27.74	28.30	2.01	58.89
Canada W.C.-Europe	4	106	204	2.41	1.34	3.42	1.90	42.34	42.90	1.32	57.00
Canada W.C.-U.S.E.C.	39	1,042	2,206	2.41	1.34	3.42	1.90	31.94	32.50	1.75	52.60
C.A.E.C.-Asia	9	293	486	2.41	1.34	3.42	1.90	42.34	42.90	1.32	55.00
C.A.E.C.-C.A.W.C.	5	115	239	2.41	1.34	3.42	1.90	21.34	21.90	2.62	42.00

(Continued)

Table C-22. Laden Transits, Tons Carried, Toll Revenue and Toll Rates, Current Toll Structure With 50 Percent Increase in Rates, 200,000 DWT Scenario, 2060, by Ship Type, Diversion Status, and Trade Route (1990 US$, except when noted)(continued)

Ship Type, Diversion Status, and Trade Route	Transits	Cargo Tonnage Carried (thousands)	Revenue (thousands) a/	Current Toll Schedule: Toll Per Panama Canal Net Ton	Current Toll Schedule: Toll Per Cargo Ton Carried	New Toll Schedule: Toll Per Panama Canal Net Ton	New Toll Schedule: Toll Per Cargo Ton Carried	Total Transportation Costs per Ton Carried: Via Panama Canal: With Current Toll Structure	Via Panama Canal: With New Toll Structure	Via Panama Canal: Percent Increase	Via Least Costly Alternative Route
Chemical Tankers (continued)											
Non-Diverted Transits (continued)											
C.A.E.C.-S.A.W.C.	11	217	421	2.41	1.34	3.42	1.90	30.34	30.90	1.84	40.32
C.A.E.C.-U.S.W.C.	2	15	25	2.41	1.34	3.42	1.90	55.94	56.50	1.00	98.40
Europe-C.A.W.C.	10	51	119	2.41	1.34	3.42	1.90	60.84	61.40	0.92	93.55
Europe-S.A.W.C.	9	98	167	2.41	1.34	3.42	1.90	58.65	59.21	0.95	62.50
Europe-U.S.W.C.	10	261	455	2.41	1.34	3.42	1.90	42.05	42.61	1.33	56.46
Oceania-U.S.E.C.	17	494	1,032	2.41	1.34	3.42	1.90	40.63	41.19	1.37	45.24
S.A.E.C.-C.A.W.C.	10	79	151	2.41	1.34	3.42	1.90	50.34	50.90	1.11	54.86
S.A.E.C.-U.S.W.C.	1	43	76	2.41	1.34	3.42	1.90	30.34	30.90	1.84	31.00
S.A.W.C.-C.A.E.C.	36	134	655	2.41	1.34	3.42	1.90	44.18	44.74	1.26	60.24
S.A.W.C.-Europe	12	151	267	2.41	1.34	3.42	1.90	53.51	54.07	1.04	56.81
S.A.W.C.-U.S.E.C.	12	100	313	2.41	1.34	3.42	1.90	39.07	39.63	1.43	53.98
U.S.E.C.-Asia	683	23,746	38,502	2.41	1.34	3.42	1.90	41.54	42.10	1.35	56.40
U.S.E.C.-C.A.W.C.	27	238	462	2.41	1.34	3.42	1.90	34.18	34.74	1.63	74.41
U.S.E.C.-Canada W.C.	8	61	106	2.41	1.34	3.42	1.90	60.04	60.60	0.93	104.95
U.S.E.C.-Oceania	17	545	926	2.41	1.34	3.42	1.90	43.19	43.75	1.29	48.34
U.S.E.C.-S.A.W.C.	53	560	1,080	2.41	1.34	3.42	1.90	41.25	41.81	1.35	57.19
U.S.E.C.-U.S.W.C.	48	1,814	3,408	2.41	1.34	3.42	1.90	25.49	26.05	2.19	43.29
U.S.W.C.-C.A.E.C.	1	12	30	2.41	1.34	3.42	1.90	29.34	29.90	1.90	49.00
U.S.W.C.-Europe	16	266	533	2.41	1.34	3.42	1.90	45.29	45.85	1.23	61.30
U.S.W.C.-S.A.E.C.	0	6	11	2.41	1.34	3.42	1.90	38.34	38.90	1.46	39.00
U.S.W.C.-U.S.E.C.	12	233	861	2.41	1.34	3.42	1.90	25.79	26.35	2.17	43.90
Subtotal	1,224	32,988	57,274	2.41	1.34	3.42	1.90	39.96	40.51	1.40	55.77
Full Container Ships											
Non-Diverted Transits											
Africa-U.S.W.C.	0	5	17	2.41	4.49	3.42	6.36	247.81	249.68	0.76	284.11

(Continued)

Table C-22. Laden Transits, Tons Carried, Toll Revenue and Toll Rates, Current Toll Structure With 50 Percent Increase in Rates, 200,000 DWT Scenario, 2060, by Ship Type, Diversion Status, and Trade Route (1990 US$, except when noted)(continued)

Ship Type, Diversion Status, and Trade Route	Transits	Cargo Tonnage Carried (thousands)	Revenue (thousands) a/	Current Toll Schedule: Toll Per Panama Canal Net Ton	Current Toll Schedule: Toll Per Cargo Ton Carried	New Toll Schedule: Toll Per Panama Canal Net Ton	New Toll Schedule: Toll Per Cargo Ton Carried	Total Transportation Costs per Ton Carried: Via Panama Canal: With Current Toll Structure	Via Panama Canal: With New Toll Structure	Via Panama Canal: Percent Increase	Via Least Costly Alternative Route
Full Container Ships (continued)											
Non-Diverted Transits (continued)											
Asia-Canada E.C.	33	739	3,425	2.41	4.70	3.42	6.66	207.29	209.25	0.95	225.70
Asia-S.A.E.C.	4	14	137	2.41	4.49	3.42	6.36	274.66	276.53	0.68	282.11
Asia-U.S.E.C. (low inv. cost)	186	5,208	32,743	2.41	4.92	3.42	6.97	231.70	233.75	0.88	245.26
C.A.W.C.-C.A.E.C.	1	9	67	2.41	4.44	3.42	6.29	130.00	131.85	1.42	207.98
C.A.W.C.-Europe	2	37	195	2.41	4.42	3.42	6.27	152.02	153.87	1.21	204.85
C.A.W.C.-S.A.E.C.	0	7	32	2.41	4.44	3.42	6.29	162.41	164.26	1.14	169.25
C.A.W.C.-U.S.E.C.	0	5	18	2.41	4.49	3.42	6.36	161.41	163.28	1.16	253.29
Canada E.C.-Asia	35	658	2,545	2.41	4.55	3.42	6.45	226.90	228.80	0.84	236.18
Canada E.C.-Oceania	23	286	1,168	2.41	4.47	3.42	6.34	257.67	259.54	0.72	260.84
Canada E.C.-U.S.W.C.	8	247	1,034	2.41	4.77	3.42	6.76	154.77	156.76	1.29	229.00
Canada W.C.-Europe	31	511	1,828	2.41	4.51	3.42	6.38	210.71	212.58	0.89	276.36
C.A.E.C.-Asia	8	116	607	2.41	4.47	3.42	6.33	213.60	215.46	0.87	244.68
C.A.E.C.-C.A.W.C.	1	7	41	2.41	4.47	3.42	6.33	143.12	144.98	1.30	235.87
C.A.E.C.-Oceania	1	8	31	2.41	4.49	3.42	6.36	250.78	252.65	0.75	297.02
C.A.E.C.-S.A.W.C.	2	10	61	2.41	4.49	3.42	6.36	178.89	180.76	1.05	214.04
C.A.E.C.-U.S.W.C.	2	26	123	2.41	4.45	3.42	6.30	152.93	154.78	1.21	218.40
Europe-C.A.W.C.	0	1	9	2.41	4.42	3.42	6.27	152.02	153.87	1.21	243.00
Europe-Canada W.C.	25	336	1,304	2.41	4.47	3.42	6.33	223.81	225.67	0.83	284.41
Europe-S.A.W.C.	81	1,309	6,482	2.41	4.42	3.42	6.27	191.22	193.07	0.96	221.95
Europe-U.S.W.C.	140	3,123	13,355	2.41	4.67	3.42	6.61	205.80	207.74	0.95	215.66
Middle East-U.S.W.C.	15	247	923	2.41	4.47	3.42	6.34	218.19	220.06	0.85	247.58
Oceania-C.A.E.C.	5	64	203	2.41	4.49	3.42	6.36	250.78	252.65	0.75	297.02
S.A.E.C.-C.A.W.C.	1	8	30	2.41	4.49	3.42	6.36	197.14	199.01	0.95	206.59

(Continued)

Table C-22. Laden Transits, Tons Carried, Toll Revenue and Toll Rates, Current Toll Structure With 50 Percent Increase in Rates, 200,000 DWT Scenario, 2060, by Ship Type, Diversion Status, and Trade Route (1990 US$, except when noted)(continued)

Ship Type, Diversion Status, and Trade Route	Transits	Cargo Tonnage Carried (thousands)	Revenue (thousands) a/	Current Toll Schedule: Toll Per Panama Canal Net Ton	Current Toll Schedule: Toll Per Cargo Ton Carried	New Toll Schedule: Toll Per Panama Canal Net Ton	New Toll Schedule: Toll Per Cargo Ton Carried	Total Transportation Costs per Ton Carried: Via Panama Canal: With Current Toll Structure	Via Panama Canal: With New Toll Structure	Via Panama Canal: Percent Increase	Via Least Costly Alternative Route
Full Container Ships (continued)											
Non-Diverted Transits (continued)											
S.A.E.C.-U.S.W.C.	2	20	65	2.41	4.49	3.42	6.36	183.23	185.10	1.02	219.50
S.A.W.C.-C.A.E.C.	0	1	10	2.41	4.49	3.42	6.36	178.89	180.76	1.05	214.04
S.A.W.C.-Europe	144	3,081	11,587	2.41	4.42	3.42	6.27	191.21	193.06	0.96	221.95
S.A.W.C.-U.S.E.C.	99	1,047	3,806	2.41	4.49	3.42	6.36	174.32	176.19	1.07	221.50
U.S.E.C.-Asia (low inv. cost)	234	8,718	38,402	2.41	4.88	3.42	6.92	233.14	235.18	0.87	246.59
U.S.E.C.-C.A.W.C.	13	112	492	2.41	4.49	3.42	6.36	140.53	142.40	1.33	253.29
U.S.E.C.-S.A.W.C.	117	1,005	4,489	2.41	4.49	3.42	6.36	174.32	176.19	1.07	221.50
U.S.E.C.-U.S.W.C.	1	26	116	2.41	4.76	3.42	6.74	138.99	140.97	1.43	224.03
U.S.W.C.-Africa	0	0	0	2.41	4.64	3.42	6.57	193.64	195.57	1.00	233.00
U.S.W.C.-Canada E.C.	0	8	36	2.41	4.57	3.42	6.47	159.49	161.39	1.19	231.46
U.S.W.C.-C.A.E.C.	6	90	373	2.41	4.46	3.42	6.32	161.25	163.11	1.15	232.70
U.S.W.C.-Europe	196	3,835	19,137	2.41	4.68	3.42	6.64	208.75	210.71	0.94	217.65
U.S.W.C.-Middle East	25	356	1,547	2.41	4.47	3.42	6.34	219.26	221.13	0.85	229.43
U.S.W.C.-U.S.E.C.	21	326	2,270	2.41	4.65	3.42	6.58	141.16	143.09	1.37	224.31
Subtotal	1,460	31,607	148,709	2.41	4.72	3.42	6.69	213.85	215.81	0.92	234.46
Full Container Ships											
Diverted Transits											
Oceania-Canada E.C.	10	177	108	2.41	4.47	3.42	6.33	251.62	253.48	0.74	248.23
Oceania-S.A.E.C.	0	2	1	2.41	4.49	3.42	6.36	241.87	243.74	0.77	238.38
Subtotal	10	179	109	2.41	4.47	3.42	6.33	251.49	253.35	0.74	248.10
Subtotal	1,470	31,786	148,818	2.41	4.72	3.42	6.69	214.06	216.02	0.92	234.53
General Cargo Ships											
Non-Diverted Transits											
Africa-C.A.W.C.	3	46	112	2.41	1.39	3.42	1.97	31.04	31.62	1.86	56.35

(Continued)

Table C-22. Laden Transits, Tons Carried, Toll Revenue and Toll Rates, Current Toll Structure With 50 Percent Increase in Rates, 200,000 DWT Scenario, 2060, by Ship Type, Diversion Status, and Trade Route (1990 US$, except when noted)(continued)

Ship Type, Diversion Status, and Trade Route	Transits	Cargo Tonnage Carried (thousands)	Revenue (thousands) a/	Current Toll Schedule: Toll Per Panama Canal Net Ton	Current Toll Schedule: Toll Per Cargo Ton Carried	New Toll Schedule: Toll Per Panama Canal Net Ton	New Toll Schedule: Toll Per Cargo Ton Carried	Total Transportation Costs per Ton Carried: Via Panama Canal: With Current Toll Structure	Via Panama Canal: With New Toll Structure	Via Panama Canal: Percent Increase	Via Least Costly Alternative Route
General Cargo Ships (continued)											
Non-Diverted Transits (continued)											
Africa-S.A.W.C.	3	68	115	2.41	1.39	3.42	1.97	37.94	38.52	1.53	54.35
Asia-Canada E.C.	0	3	6	2.41	1.39	3.42	1.97	41.94	42.52	1.38	46.45
Asia-C.A.E.C.	127	1,501	4,420	2.41	1.39	3.42	1.97	36.99	37.57	1.56	49.45
Asia-U.S.E.C.	49	632	1,731	2.41	1.39	3.42	1.96	38.14	38.71	1.51	52.33
C.A.W.C.-Africa	7	139	253	2.41	1.39	3.42	1.97	31.04	31.62	1.86	56.35
C.A.W.C.-C.A.E.C.	55	243	647	2.41	1.46	3.42	2.07	9.72	10.33	6.26	59.62
C.A.W.C.-Europe	51	291	1,146	2.41	1.41	3.42	1.99	29.65	30.23	1.98	52.03
C.A.W.C.-S.A.E.C.	15	99	337	2.41	1.41	3.42	1.99	27.71	28.29	2.12	32.29
C.A.W.C.-U.S.E.C.	16	84	197	2.41	1.45	3.42	2.06	12.26	12.87	4.94	74.92
Canada E.C.-Asia	10	25	355	2.41	1.39	3.42	1.97	41.94	42.52	1.38	46.45
Canada E.C.-C.A.W.C.	2	36	73	2.41	1.39	3.42	1.97	21.19	21.77	2.73	41.50
Canada E.C.-S.A.W.C.	16	148	570	2.41	1.39	3.42	1.97	28.09	28.67	2.06	35.55
Canada W.C.-C.A.E.C.	16	120	306	2.41	1.42	3.42	2.01	31.71	32.30	1.87	70.25
Canada W.C.-Europe	1	21	34	2.41	1.39	3.42	1.97	37.94	38.52	1.53	52.40
Canada W.C.-S.A.E.C.	14	126	286	2.41	1.41	3.42	2.00	36.39	36.98	1.62	71.10
C.A.E.C.-Asia	28	538	972	2.41	1.39	3.42	1.97	36.99	37.57	1.56	49.45
C.A.E.C.-C.A.W.C.	56	209	689	2.41	1.45	3.42	2.06	8.51	9.12	7.12	63.99
C.A.E.C.-Oceania	1	13	31	2.41	1.39	3.42	1.97	40.94	41.52	1.41	49.45
C.A.E.C.-S.A.W.C.	53	492	1,199	2.41	1.41	3.42	1.99	22.58	23.16	2.60	34.74
C.A.E.C.-U.S.W.C.	12	42	100	2.41	1.50	3.42	2.12	32.53	33.15	1.92	110.69
Europe-C.A.W.C.	87	598	2,307	2.41	1.40	3.42	1.98	28.49	29.07	2.05	59.50
Europe-Canada W.C.	3	11	24	2.41	1.50	3.42	2.12	80.37	80.99	0.78	136.96
Europe-S.A.W.C.	73	734	2,412	2.41	1.39	3.42	1.97	33.84	34.42	1.71	35.65

(Continued)

Table C-22. Laden Transits, Tons Carried, Toll Revenue and Toll Rates, Current Toll Structure With 50 Percent Increase in Rates, 200,000 DWT Scenario, 2060, by Ship Type, Diversion Status, and Trade Route (1990 US$, except when noted)(continued)

Ship Type, Diversion Status, and Trade Route	Transits	Cargo Tonnage Carried (thousands)	Revenue (thousands) a/	Current Toll Schedule: Toll Per Panama Canal Net Ton	Current Toll Schedule: Toll Per Cargo Ton Carried	New Toll Schedule: Toll Per Panama Canal Net Ton	New Toll Schedule: Toll Per Cargo Ton Carried	Total Transportation Costs per Ton Carried: Via Panama Canal: With Current Toll Structure	Via Panama Canal: With New Toll Structure	Via Panama Canal: Percent Increase	Via Least Costly Alternative Route
General Cargo Ships (continued)											
Non-Diverted Transits (continued)											
Europe-U.S.W.C.	4	18	51	2.41	1.44	3.42	2.04	62.15	62.75	0.97	107.39
Middle East-S.A.W.C.	6	3	50	2.41	1.50	3.42	2.12	73.82	74.44	0.85	102.30
Middle East-U.S.W.C.	7	19	236	2.41	1.39	3.42	1.97	40.94	41.52	1.41	47.45
Oceania-C.A.E.C.	1	7	37	2.41	1.39	3.42	1.97	39.94	40.52	1.45	49.45
Oceania-U.S.E.C.	2	9	31	2.41	1.43	3.42	2.03	57.41	58.01	1.04	69.46
S.A.E.C.-C.A.W.C.	13	261	440	2.41	1.39	3.42	1.97	25.14	25.72	2.30	26.70
S.A.E.C.-Canada W.C.	0	2	9	2.41	1.39	3.42	1.97	35.04	35.62	1.65	38.55
S.A.E.C.-U.S.W.C.	17	77	485	2.41	1.40	3.42	1.98	38.23	38.81	1.52	40.19
S.A.W.C.-Africa	8	149	262	2.41	1.39	3.42	1.97	34.04	34.62	1.70	53.35
S.A.W.C.-Canada E.C.	1	14	29	2.41	1.39	3.42	1.97	28.09	28.67	2.06	35.55
S.A.W.C.-C.A.E.C.	82	361	1,078	2.41	1.45	3.42	2.05	23.90	24.50	2.52	48.57
S.A.W.C.-Europe	171	2,817	5,979	2.41	1.39	3.42	1.97	33.04	33.62	1.75	34.60
S.A.W.C.-Middle East	2	25	59	2.41	1.39	3.42	1.97	35.99	36.57	1.61	42.50
S.A.W.C.-U.S.E.C.	56	430	1,350	2.41	1.40	3.42	1.99	25.31	25.90	2.31	40.80
U.S.E.C.-Asia	74	1,214	2,617	2.41	1.39	3.42	1.96	38.38	38.95	1.51	52.66
U.S.E.C.-C.A.W.C.	103	776	1,652	2.41	1.43	3.42	2.02	14.67	15.26	4.06	60.90
U.S.E.C.-Oceania	6	89	202	2.41	1.39	3.42	1.97	40.94	41.52	1.41	46.45
U.S.E.C.-S.A.W.C.	187	1,336	4,347	2.41	1.41	3.42	1.99	25.45	26.03	2.30	41.52
U.S.E.C.-U.S.W.C.	1	0	7	2.41	1.50	3.42	2.12	35.37	35.99	1.77	122.89
U.S.W.C.-Africa	7	75	231	2.41	1.39	3.42	1.97	36.99	37.57	1.56	47.45
U.S.W.C.-C.A.E.C.	3	1	26	2.41	1.50	3.42	2.12	32.53	33.15	1.92	110.69
U.S.W.C.-Europe	3	25	46	2.41	1.42	3.42	2.01	44.83	45.42	1.32	69.85
U.S.W.C.-S.A.E.C.	8	19	102	2.41	1.45	3.42	2.05	53.26	53.86	1.13	59.12
Subtotal	1,458	13,946	37,649	2.41	1.40	3.41	1.98	30.65	31.23	1.90	46.34

(Continued)

Table C-22. Laden Transits, Tons Carried, Toll Revenue and Toll Rates, Current Toll Structure With 50 Percent Increase in Rates, 200,000 DWT Scenario, 2060, by Ship Type, Diversion Status, and Trade Route (1990 US$, except when noted)(continued)

Ship Type, Diversion Status, and Trade Route	Transits	Cargo Tonnage Carried (thousands)	Revenue (thousands) a/	Current Toll Schedule: Toll Per Panama Canal Net Ton	Current Toll Schedule: Toll Per Cargo Ton Carried	New Toll Schedule: Toll Per Panama Canal Net Ton	New Toll Schedule: Toll Per Cargo Ton Carried	Total Transportation Costs per Ton Carried: Via Panama Canal: With Current Toll Structure	Via Panama Canal: With New Toll Structure	Via Panama Canal: Percent Increase	Via Least Costly Alternative Route
General Cargo Ships (continued)											
Diverted Transits (continued)											
Asia-S.A.E.C.	4	25	162	2.41	1.39	3.42	1.97	45.89	46.47	1.26	46.45
Canada E.C.-Oceania	0	7	9	2.41	1.39	3.42	1.97	47.84	48.42	1.21	47.45
Canada W.C.-Middle East	2	13	35	2.41	1.39	3.42	1.97	42.89	43.47	1.35	42.50
Subtotal	6	45	206	2.41	1.39	3.42	1.97	45.34	45.92	1.28	45.49
Subtotal	1,464	13,991	37,854	2.41	1.40	3.41	1.98	30.69	31.28	1.90	46.34
Liquid Gas Carriers											
Non-Diverted Transits											
C.A.W.C.-C.A.E.C.	10	43	159	2.41	7.30	3.42	10.35	57.30	60.35	5.31	201.00
C.A.E.C.-Asia	10	53	283	2.41	4.67	3.42	6.62	124.16	126.11	1.57	178.06
C.A.E.C.-C.A.W.C.	56	742	3,214	2.41	3.79	3.42	5.37	26.91	28.49	5.88	81.65
C.A.E.C.-S.A.W.C.	4	60	239	2.41	3.83	3.42	5.42	45.83	47.42	3.48	70.00
C.A.E.C.-U.S.W.C.	0	3	10	2.41	3.83	3.42	5.42	51.83	53.42	3.08	109.00
Europe-C.A.W.C.	2	7	34	2.41	7.30	3.42	10.35	129.30	132.35	2.36	234.00
Europe-S.A.W.C.	0	1	4	2.41	3.82	3.42	5.42	76.82	78.42	2.08	82.00
Oceania-U.S.E.C.	4	.57	269	2.41	3.62	3.42	5.13	75.10	76.61	2.01	85.98
S.A.E.C.-Asia	2	30	118	2.41	3.83	3.42	5.42	89.83	91.42	1.78	107.00
S.A.E.C.-C.A.W.C.	12	32	187	2.41	7.30	3.42	10.35	115.30	118.35	2.64	132.00
U.S.E.C.-Asia	3	41	189	2.41	3.86	3.42	5.47	94.04	95.65	1.71	139.47
U.S.E.C.-C.A.W.C.	0	1	4	2.41	7.30	3.42	10.35	66.30	69.35	4.59	226.00
U.S.E.C.-S.A.W.C.	1	2	11	2.41	7.30	3.42	10.35	109.30	112.35	2.79	182.00
Subtotal	104	1,071	4,722	2.41	3.99	3.42	5.66	44.45	46.17	3.85	96.49
Passenger Ships											
Non-Diverted Transits											
North-Bound	197	0	3,532	2.41	0.00	3.42	0.00	0.00	0.00	0.00	0.00

(Continued)

Table C-22. Laden Transits, Tons Carried, Toll Revenue and Toll Rates, Current Toll Structure With 50 Percent Increase in Rates, 200,000 DWT Scenario, 2060, by Ship Type, Diversion Status, and Trade Route (1990 US$, except when noted)(continued)

Ship Type, Diversion Status, and Trade Route	Transits	Cargo Tonnage Carried (thousands)	Revenue (thousands) a/	Current Toll Schedule: Toll Per Panama Canal Net Ton	Current Toll Schedule: Toll Per Cargo Ton Carried	New Toll Schedule: Toll Per Panama Canal Net Ton	New Toll Schedule: Toll Per Cargo Ton Carried	Total Transportation Costs per Ton Carried, Via Panama Canal: With Current Toll Structure	Total Transportation Costs per Ton Carried, Via Panama Canal: With New Toll Structure	Total Transportation Costs per Ton Carried, Via Panama Canal: Percent Increase	Total Transportation Costs per Ton Carried: Via Least Costly Alternative Route
Passenger Ships (continued)											
Non-Diverted Transits (continued)											
South-Bound	238	0	6,510	2.41	0.00	3.42	0.00	0.00	0.00	0.00	0.00
Subtotal	435	0	10,041	2.41	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Refrigerated Ships											
Non-Diverted Transits											
Africa-C.A.W.C.	0	0	4	2.41	4.00	3.42	5.67	120.20	121.87	1.39	224.60
Africa-S.A.W.C.	49	21	1,518	2.41	3.94	3.42	5.59	154.50	156.15	1.06	228.37
Asia-C.A.E.C.	25	95	923	2.41	3.86	3.42	5.46	131.86	133.46	1.22	180.00
Asia-S.A.E.C.	7	5	195	2.41	4.00	3.42	5.67	180.00	181.67	0.93	184.20
Asia-U.S.E.C.	1	0	21	2.41	4.00	3.42	5.67	149.60	151.27	1.12	213.60
C.A.W.C.-Africa	2	7	52	2.41	4.00	3.42	5.67	120.20	121.87	1.39	224.60
C.A.W.C.-Canada E.C.	1	5	16	2.41	4.00	3.42	5.67	79.20	80.87	2.11	163.40
C.A.W.C.-C.A.E.C.	39	294	1,449	2.41	3.86	3.42	5.46	52.86	54.46	3.04	132.00
C.A.W.C.-Europe	276	1,493	10,216	2.41	3.86	3.42	5.46	92.86	94.46	1.73	150.00
C.A.W.C.-S.A.E.C.	2	9	47	2.41	4.00	3.42	5.67	94.40	96.07	1.77	103.00
C.A.W.C.-U.S.E.C.	1	2	33	2.41	4.00	3.42	5.67	64.00	65.67	2.61	160.40
Canada E.C.-Asia	15	92	410	2.41	4.00	3.42	5.67	165.80	167.47	1.01	182.60
Canada E.C.-C.A.W.C.	11	31	401	2.41	3.86	3.42	5.46	71.86	73.46	2.24	149.00
Canada W.C.-Europe	4	45	138	2.41	3.86	3.42	5.46	132.86	134.46	1.21	190.00
C.A.E.C.-Asia	13	37	404	2.41	3.93	3.42	5.57	144.92	146.56	1.13	197.33
C.A.E.C.-C.A.W.C.	43	11	1,598	2.41	3.86	3.42	5.46	52.86	54.46	3.04	132.00
C.A.E.C.-S.A.W.C.	93	82	3,450	2.41	3.86	3.42	5.46	75.86	77.46	2.12	107.00
Europe-C.A.W.C.	308	26	11,373	2.41	3.86	3.42	5.46	92.86	94.46	1.73	187.00

(Continued)

Table C-22. Laden Transits, Tons Carried, Toll Revenue and Toll Rates, Current Toll Structure With 50 Percent Increase in Rates, 200,000 DWT Scenario, 2060, by Ship Type, Diversion Status, and Trade Route (1990 US$, except when noted)(continued)

Ship Type, Diversion Status, and Trade Route	Transits	Cargo Tonnage Carried (thousands)	Revenue (thousands) a/	Current Toll Schedule: Toll Per Panama Canal Net Ton	Current Toll Schedule: Toll Per Cargo Ton Carried	New Toll Schedule: Toll Per Panama Canal Net Ton	New Toll Schedule: Toll Per Cargo Ton Carried	Total Transportation Costs per Ton Carried: Via Panama Canal: With Current Toll Structure	Via Panama Canal: With New Toll Structure	Via Panama Canal: Percent Increase	Via Least Costly Alternative Route
Refrigerated Ships (continued)											
Non-Diverted Transits (continued)											
Europe-Canada W.C.	1	1	28	2.41	4.00	3.42	5.67	145.60	147.27	1.15	204.40
Europe-S.A.W.C.	295	278	10,356	2.41	3.88	3.42	5.50	119.82	121.44	1.35	127.10
Europe-U.S.W.C.	18	16	503	2.41	4.00	3.42	5.67	135.40	137.07	1.23	192.20
Middle East-S.A.W.C.	3	6	74	2.41	4.00	3.42	5.67	138.00	139.67	1.21	165.40
Oceania-C.A.E.C.	6	50	180	2.41	4.00	3.42	5.67	157.20	158.87	1.06	196.80
Oceania-U.S.E.C.	53	207	1,531	2.41	3.98	3.42	5.65	160.43	162.10	1.04	183.47
S.A.E.C.-Asia	12	62	326	2.41	4.00	3.42	5.67	146.60	148.27	1.14	172.00
S.A.W.C.-Africa	27	111	843	2.41	3.94	3.42	5.59	130.08	131.73	1.26	205.85
S.A.W.C.-C.A.E.C.	40	241	1,450	2.41	3.86	3.42	5.48	76.48	78.10	2.11	107.85
S.A.W.C.-Europe	1,101	6,815	37,657	2.41	3.89	3.42	5.52	119.88	121.51	1.35	127.15
S.A.W.C.-Middle East	5	18	135	2.41	4.00	3.42	5.67	138.00	139.67	1.21	165.40
S.A.W.C.-U.S.E.C.	808	3,821	28,517	2.41	3.88	3.42	5.49	82.93	84.54	1.95	122.50
U.S.E.C.-Asia	46	189	1,620	2.41	3.87	3.42	5.49	139.10	140.72	1.16	198.29
U.S.E.C.-C.A.W.C.	70	196	2,572	2.41	3.86	3.42	5.46	57.86	59.46	2.78	146.00
U.S.E.C.-S.A.W.C.	423	892	15,305	2.41	3.87	3.42	5.48	82.19	83.80	1.96	121.46
U.S.W.C.-Europe	140	804	4,302	2.41	3.95	3.42	5.60	134.45	136.10	1.23	190.92
U.S.W.C.-S.A.E.C.	2	6	54	2.41	3.98	3.42	5.64	131.22	132.88	1.27	135.82
Subtotal	3,937	15,968	137,700	2.41	3.88	3.42	5.50	105.63	107.26	1.53	134.95
Refrigerated Ships											
Diverted Transits											
Africa-Asia	46	292	926	2.41	4.00	3.42	5.67	173.40	175.07	0.96	173.00
Subtotal	46	292	926	2.41	4.00	3.42	5.67	173.40	175.07	0.96	173.00
Subtotal	3,983	16,260	138,627	2.41	3.88	3.42	5.50	106.85	108.47	1.52	135.63

(Continued)

Table C-22. Laden Transits, Tons Carried, Toll Revenue and Toll Rates, Current Toll Structure With 50 Percent Increase in Rates, 200,000 DWT Scenario, 2060, by Ship Type, Diversion Status, and Trade Route (1990 US$, except when noted)(continued)

Ship Type, Diversion Status, and Trade Route	Transits	Cargo Tonnage Carried (thousands)	Revenue (thousands) a/	Current Toll Schedule: Toll Per Panama Canal Net Ton	Current Toll Schedule: Toll Per Cargo Ton Carried	New Toll Schedule: Toll Per Panama Canal Net Ton	New Toll Schedule: Toll Per Cargo Ton Carried	Total Transportation Costs per Ton Carried: Via Panama Canal: With Current Toll Structure	Via Panama Canal: With New Toll Structure	Via Panama Canal: Percent Increase	Via Least Costly Alternative Route
Roll-On Roll-Off (continued)											
Non-Diverted Transits (continued)											
Asia-Canada E.C.	3	15	146	2.41	9.35	3.42	13.25	298.90	302.80	1.30	324.43
Asia-C.A.E.C.	32	633	3,319	2.41	7.92	3.42	11.23	236.83	240.14	1.40	268.32
Asia-U.S.E.C.	67	1,286	6,717	2.41	7.95	3.42	11.27	248.85	252.17	1.33	304.22
C.A.W.C.-Europe	33	177	1,965	2.41	8.66	3.42	12.27	198.66	202.27	1.82	280.00
C.A.W.C.-U.S.E.C.	3	1	153	2.41	8.66	3.42	12.27	170.66	174.27	2.12	273.00
Canada E.C.-Asia	17	85	763	2.41	9.30	3.42	13.18	355.27	359.15	1.09	370.17
Canada W.C.-C.A.E.C.	0	1	17	2.41	10.19	3.42	14.44	239.87	244.12	1.77	394.39
C.A.E.C.-C.A.W.C.	1	2	39	2.41	9.72	3.42	13.77	167.54	171.59	2.42	296.40
C.A.E.C.-Oceania	7	20	421	2.41	8.66	3.42	12.27	275.66	279.27	1.31	332.00
C.A.E.C.-S.A.W.C.	85	149	2,963	2.41	10.19	3.42	14.45	232.93	237.19	1.83	280.17
Europe-C.A.W.C.	35	221	2,079	2.41	8.66	3.42	12.27	198.66	202.27	1.82	350.00
Europe-S.A.W.C.	0	0	4	2.41	8.67	3.42	12.28	262.67	266.28	1.38	303.00
Europe-U.S.W.C.	1	3	36	2.41	8.66	3.42	12.27	262.66	266.27	1.38	350.00
Oceania-C.A.E.C.	0	0	1	2.41	7.97	3.42	11.29	234.97	238.29	1.41	273.80
S.A.W.C.-C.A.E.C.	22	44	766	2.41	10.19	3.42	14.45	232.93	237.19	1.83	280.17
S.A.W.C.-Europe	2	5	101	2.41	8.66	3.42	12.27	262.66	266.27	1.38	311.00
S.A.W.C.-U.S.E.C.	12	25	418	2.41	10.19	3.42	14.45	224.99	229.25	1.89	292.08
U.S.E.C.-Asia	14	93	847	2.41	8.64	3.42	12.24	298.20	301.80	1.21	378.28
U.S.E.C.-C.A.W.C.	4	7	243	2.41	8.66	3.42	12.27	144.66	148.27	2.50	273.00
U.S.E.C.-S.A.W.C.	57	101	1,996	2.41	10.19	3.42	14.45	224.99	229.25	1.89	292.08
U.S.W.C.-Canada E.C.	1	2	25	2.41	10.20	3.42	14.45	263.70	267.95	1.61	414.27
U.S.W.C.-C.A.E.C.	2	48	246	2.41	7.75	3.42	10.98	160.82	164.05	2.01	232.64
U.S.W.C.-Europe	0	1	3	2.41	7.77	3.42	11.01	212.68	215.92	1.52	267.50

(Continued)

Table C-22. Laden Transits, Tons Carried, Toll Revenue and Toll Rates, Current Toll Structure With 50 Percent Increase in Rates, 200,000 DWT Scenario, 2060, by Ship Type, Diversion Status, and Trade Route (1990 US$, except when noted)(continued)

Ship Type, Diversion Status, and Trade Route	Transits	Cargo Tonnage Carried (thousands)	Revenue (thousands) a/	Current Toll Schedule: Toll Per Panama Canal Net Ton	Current Toll Schedule: Toll Per Cargo Ton Carried	New Toll Schedule: Toll Per Panama Canal Net Ton	New Toll Schedule: Toll Per Cargo Ton Carried	Total Transportation Costs per Ton Carried: Via Panama Canal: With Current Toll Structure	Via Panama Canal: With New Toll Structure	Via Panama Canal: Percent Increase	Via Least Costly Alternative Route
Roll-On Roll-Off (continued)											
Non-Diverted Transits (continued)											
U.S.W.C.-U.S.E.C.	0	9	45	2.41	7.86	3.42	11.14	159.45	162.73	2.06	255.79
Subtotal	397	2,929	23,313	2.41	8.68	3.42	12.30	240.41	243.90	1.45	299.63
Roll-On Roll-Off											
Diverted Transits											
C.A.W.C.-S.A.E.C.	0	0	3	2.41	8.66	3.42	12.27	211.66	215.27	1.71	211.00
Canada E.C.-Oceania	3	61	184	2.41	7.77	3.42	11.00	251.49	254.72	1.29	249.02
Subtotal	3	61	188	2.41	7.78	3.42	11.02	251.24	254.48	1.29	248.78
Subtotal	400	2,990	23,501	2.41	8.67	3.42	12.28	240.63	244.12	1.45	298.58
Tankers											
Non-Diverted Transits											
Africa-U.S.W.C.	0	0	0	2.41	1.27	3.42	1.80	18.27	18.80	2.91	24.00
Asia-U.S.E.C.	3	77	134	2.41	1.27	3.42	1.80	27.11	27.64	1.95	38.76
C.A.W.C.-Africa	0	0	2	2.41	1.27	3.42	1.80	46.27	46.80	1.14	100.00
C.A.W.C.-Canada E.C.	0	8	14	2.41	1.27	3.42	1.80	12.21	12.74	4.33	28.82
C.A.W.C.-C.A.E.C.	16	95	449	2.41	1.27	3.42	1.80	10.26	10.79	5.16	34.99
C.A.W.C.-Europe	4	94	181	2.41	1.27	3.42	1.80	17.17	17.70	3.08	28.84
C.A.W.C.-U.S.E.C.	10	80	280	2.41	1.27	3.42	1.80	11.18	11.71	4.73	37.36
Canada E.C.-Asia	18	707	1,184	2.41	1.27	3.42	1.80	25.06	25.59	2.11	27.21
Canada W.C.-U.S.E.C.	6	255	480	2.41	1.28	3.42	1.82	13.76	14.30	3.88	26.23
C.A.E.C.-Asia	5	141	286	2.41	1.27	3.42	1.79	22.36	22.88	2.36	31.40
C.A.E.C.-C.A.W.C.	45	750	1,912	2.41	1.27	3.42	1.80	7.38	7.91	7.17	22.70

(Continued)

Table C-22. Laden Transits, Tons Carried, Toll Revenue and Toll Rates, Current Toll Structure With 50 Percent Increase in Rates, 200,000 DWT Scenario, 2060, by Ship Type, Diversion Status, and Trade Route (1990 US$, except when noted)(continued)

Ship Type, Diversion Status, and Trade Route	Transits	Cargo Tonnage Carried (thousands)	Revenue (thousands) a/	Current Toll Schedule: Toll Per Panama Canal Net Ton	Current Toll Schedule: Toll Per Cargo Ton Carried	New Toll Schedule: Toll Per Panama Canal Net Ton	New Toll Schedule: Toll Per Cargo Ton Carried	Total Transportation Costs per Ton Carried: Via Panama Canal: With Current Toll Structure	Via Panama Canal: With New Toll Structure	Via Panama Canal: Percent Increase	Via Least Costly Alternative Route
Tankers (continued)											
Non-Diverted Transits (continued)											
C.A.E.C.-S.A.W.C.	46	887	1,847	2.41	1.27	3.42	1.80	13.34	13.87	3.97	20.04
C.A.E.C.-U.S.W.C.	5	228	406	2.41	1.27	3.42	1.80	11.93	12.46	4.43	23.43
Europe-C.A.W.C.	17	81	233	2.41	1.27	3.42	1.80	24.95	25.48	2.12	44.78
Europe-S.A.W.C.	4	82	146	2.41	1.27	3.42	1.80	23.34	23.87	2.27	25.18
Europe-U.S.W.C.	4	109	194	2.41	1.27	3.42	1.80	22.50	23.03	2.35	32.22
Oceania-U.S.E.C.	9	162	317	2.41	1.27	3.42	1.80	28.05	28.58	1.89	32.60
S.A.E.C.-Asia	77	14,050	22,302	2.41	1.27	3.42	1.80	14.13	14.66	3.74	16.31
S.A.E.C.-C.A.W.C.	68	3,130	6,786	2.41	1.26	3.42	1.79	10.89	11.42	4.84	11.68
S.A.W.C.-Canada E.C.	1	14	27	2.41	1.27	3.42	1.80	20.47	21.00	2.58	27.25
S.A.W.C.-C.A.E.C.	15	557	1,032	2.41	1.27	3.42	1.80	10.99	11.52	4.81	15.42
S.A.W.C.-Europe	19	173	316	2.41	1.27	3.42	1.80	28.01	28.54	1.89	30.35
S.A.W.C.-U.S.E.C.	17	607	1,096	2.41	1.27	3.42	1.80	11.71	12.24	4.52	18.51
U.S.E.C.-Asia	90	2,946	5,336	2.41	1.27	3.42	1.79	22.71	23.23	2.33	32.54
U.S.E.C.-C.A.W.C.	14	260	600	2.41	1.27	3.42	1.80	9.23	9.76	5.73	28.15
U.S.E.C.-Canada W.C.	2	7	87	2.41	1.27	3.42	1.80	18.17	18.70	2.91	35.78
U.S.E.C.-Oceania	4	129	235	2.41	1.27	3.42	1.80	26.02	26.55	2.03	30.19
U.S.E.C.-S.A.W.C.	3	49	96	2.41	1.27	3.42	1.80	13.63	14.16	3.88	21.94
U.S.E.C.-U.S.W.C.	21	601	1,164	2.41	1.27	3.42	1.80	14.06	14.59	3.76	30.95
U.S.W.C.-Africa	10	334	738	2.41	1.26	3.42	1.79	16.39	16.92	3.21	20.19
U.S.W.C.-C.A.E.C.	3	96	197	2.41	1.26	3.42	1.79	11.90	12.43	4.43	23.13
U.S.W.C.-U.S.E.C.	4	102	216	2.41	1.27	3.42	1.79	13.36	13.88	3.95	29.10
Subtotal	539	26,815	48,291	2.41	1.27	3.41	1.80	14.99	15.52	3.53	19.67
Tankers											
Diverted Transits											
Middle East-U.S.W.C.	0	0	0	2.41	1.25	3.42	1.77	1.63	2.15	31.96	0.48

(Continued)

Table C-22. Laden Transits, Tons Carried, Toll Revenue and Toll Rates, Current Toll Structure With 50 Percent Increase in Rates, 200,000 DWT Scenario, 2060, by Ship Type, Diversion Status, and Trade Route (1990 US$, except when noted)(continued)

Ship Type, Diversion Status, and Trade Route	Transits	Cargo Tonnage Carried (thousands)	Revenue (thousands) a/	Current Toll Schedule: Toll Per Panama Canal Net Ton	Current Toll Schedule: Toll Per Cargo Ton Carried	New Toll Schedule: Toll Per Panama Canal Net Ton	New Toll Schedule: Toll Per Cargo Ton Carried	Total Transportation Costs per Ton Carried, Via Panama Canal: With Current Toll Structure	Via Panama Canal: With New Toll Structure	Via Panama Canal: Percent Increase	Via Least Costly Alternative Route
Tankers (continued)											
Diverted Transits (continued)											
S.A.E.C.-U.S.W.C.	27	978	1,569	2.41	1.27	3.42	1.80	18.67	19.20	2.83	18.82
U.S.W.C.-S.A.E.C.	1	29	40	2.41	1.27	3.42	1.80	18.76	19.29	2.82	18.90
Subtotal	27	1,006	1,609	2.41	1.27	3.42	1.80	18.67	19.20	2.83	18.82
Subtotal	567	27,821	49,900	2.41	1.27	3.41	1.80	15.12	15.65	3.50	19.64
Vehicle Carriers											
Non-Diverted Transits											
Asia-C.A.E.C.	13	34	1,317	2.41	29.09	3.42	41.22	417.18	429.31	2.91	496.39
Asia-U.S.E.C.	481	2,251	53,642	2.41	29.20	3.42	41.37	439.57	451.74	2.77	516.31
C.A.W.C.-C.A.E.C.	3	3	176	2.41	28.71	3.42	40.69	266.36	278.34	4.50	440.99
C.A.E.C.-C.A.W.C.	8	3	961	2.41	29.22	3.42	41.41	272.22	284.41	4.48	411.00
C.A.E.C.-Oceania	1	0	112	2.41	29.22	3.42	41.41	434.22	446.41	2.81	482.00
Europe-Canada W.C.	7	16	1,091	2.41	30.90	3.42	43.78	386.38	399.26	3.33	457.44
Europe-U.S.W.C.	156	299	20,440	2.41	29.95	3.42	42.43	403.00	415.48	3.10	458.96
S.A.W.C.-C.A.E.C.	0	0	12	2.41	28.70	3.42	40.66	323.70	335.66	3.70	380.00
U.S.E.C.-Asia	42	192	5,209	2.41	29.67	3.42	42.05	415.80	428.18	2.98	510.17
U.S.E.C.-Oceania	13	30	1,447	2.41	29.22	3.42	41.41	433.22	445.41	2.81	453.00
Subtotal	723	2,828	84,408	2.41	29.42	3.42	41.69	433.09	445.32	2.82	508.39
Vehicle Carriers											
Diverted Transits											
Asia-S.A.E.C.	0	0	7	2.41	29.13	3.42	41.28	484.18	496.33	2.51	468.49
Canada E.C.-Asia	1	3	35	2.41	29.22	3.42	41.41	465.22	477.41	2.62	456.00
Subtotal	1	3	42	2.41	29.20	3.41	41.38	466.92	479.10	2.61	457.12
Subtotal	724	2,831	84,450	2.41	29.42	3.42	41.69	433.13	445.35	2.82	508.34

(Continued)

Table C-22. Laden Transits, Tons Carried, Toll Revenue and Toll Rates, Current Toll Structure With 50 Percent Increase in Rates, 200,000 DWT Scenario, 2060, by Ship Type, Diversion Status, and Trade Route (1990 US$, except when noted)(continued)

Ship Type, Diversion Status, and Trade Route	Transits	Cargo Tonnage Carried (thousands)	Revenue (thousands) a/	Current Toll Schedule: Toll Per Panama Canal Net Ton	Current Toll Schedule: Toll Per Cargo Ton Carried	New Toll Schedule: Toll Per Panama Canal Net Ton	New Toll Schedule: Toll Per Cargo Ton Carried	Total Transportation Costs per Ton Carried: Via Panama Canal: With Current Toll Structure	Via Panama Canal: With New Toll Structure	Via Panama Canal: Percent Increase	Via Least Costly Alternative Route
Total Non-Diverting	17,331	428,672	1,111,668	2.41	1.83	3.42	2.59	46.27	47.06	1.71	57.11
Total Diverting	491	23,028	29,712	2.41	1.30	3.42	1.84	21.50	22.05	2.57	21.36

Notes: These calculations do not include all transits and tons carried forecast by the WEFA Group. For some ship-type and trade-route combinations (accounting for a total of 27 transits and 291695 tons), vessel costs were not available for every DWT size interval. As a result, these transits and tons were excluded. In addition, for 2480 transits and 49528628 tons, the cost by way of the Panama Canal without a toll was higher than the least costly alternative route. As a result, these transits and tons were excluded. Percentages may not calculate exactly as shown due to rounding. A fee of $0.40 per Panama Canal net ton has also been included to account for charges such as handling and agency fees incurred when transitting the Canal. The extra fee is only used to determine diversion status by adding it to the cost per ton carried and is not included in the revenue calculations.

a/ Revenue lost from diversions is measured as the revenue generated by the maximum, nondiverting toll rate increase.

Source: Nathan Associates Inc., based on forecasts of traffic and transportation costs provided by The WEFA Group.

CURRENT TOLL STRUCTURE WITH 50 PERCENT INCREASE IN RATES, 200,000-DWT SCENARIO, 2060

Table C-23. Laden Transits, Tons Carried, and Toll Revenue, Current Toll Structure With 50 Percent Increase in Rates, 250,000 DWT Scenario, 2060, by Ship Type

	Transits				Tons Carried(thousands)				Revenue(1990 US$thousands)			
Ship Type	Canal	Diverted	Total	Diverted as a Percent of Total	Canal	Diverted	Total	Diverted as a Percent of Total	Canal	Lost a/	Total	Lost as a Percent of Total
Container-Breakbulk	2,460	4	2,465	0.17	36,908	88	36,996	0.24	102,915	226	103,141	0.22
Dry Bulk Carriers	4,698	359	5,057	7.09	282,153	16,612	298,765	5.56	485,174	27,338	512,512	5.33
Chemical Tankers	1,224	0	1,224	0.00	32,988	0	32,988	0.00	57,274	0	57,274	0.00
Full Container Ships	1,460	10	1,470	0.70	31,607	179	31,786	0.56	148,709	109	148,818	0.07
General Cargo Ships	1,458	6	1,464	0.43	13,946	45	13,991	0.32	37,649	206	37,854	0.54
Liquid Gas Carriers	104	0	104	0.00	1,071	0	1,071	0.00	4,722	0	4,722	0.00
Passenger Ships	435	0	435	0.00	0	0	0	0.00	10,041	0	10,041	0.00
Refrigerated Ships	3,937	46	3,983	1.15	15,968	292	16,260	1.80	137,700	926	138,627	0.67
Roll-On Roll-Off	397	3	400	0.70	2,929	61	2,990	2.05	23,313	188	23,501	0.80
Tankers	526	27	553	4.94	26,815	1,006	27,821	3.62	48,291	1,609	49,900	3.23
Vehicle Carriers	723	1	724	0.10	2,828	3	2,831	0.10	84,408	42	84,450	0.05
Total	17,423	456	17,879	2.55	447,212	18,287	465,499	3.93	1,140,196	30,644	1,170,840	2.62

Notes: These calculations do not include all transits and tons carried forecast by the WEFA Group. For some ship-type and trade-route combinations (accounting for a total of 27 transits and 291695 tons), vessel costs were not available for every DWT size interval. As a result, these transits and tons were excluded. In addition, for 2480 transits and 49528628 tons, the cost by way of the Panama Canal without a toll was higher than the least costly alternative route. As a result, these transits and tons were excluded. A fee of $0.40 per Panama Canal net ton has also been included to account for charges such as handling and agency fees incurred when transitting the Canal. The extra fee is only used to determine diversion status by adding it to cost per ton carried and is not included in the revenue calculations.

a/ Revenue lost from diversions is measured as the revenue generated by the maximum, nondiverting toll rate increase.

Source: Nathan Associates Inc., based on forecasts of traffic and transportation costs provided by The WEFA Group.

Table C-24. Ballast Transits, Tons Carried, and Toll Revenue, Current Toll Structure With 50 Percent Increase in Rates, 250,000 DWT Scenario, 2060, by Ship Type

	Transits				Tons Carried(thousands)				Revenue(1990 US$thousands)			
Ship Type	Canal	Diverted	Total	Diverted as a Percent of Total	Canal	Diverted	Total	Diverted as a Percent of Total	Canal	Lost	Total	Lost as a Percent of Total
Container-Breakbulk	67	0	67	0.22	0	0	0	0.00	2,438	5	2,443	0.22
Dry Bulk Carriers	324	18	342	5.33	0	0	0	0.00	15,472	871	16,343	5.33
Chemical Tankers	127	0	127	0.00	0	0	0	0.00	5,170	0	5,170	0.00
Full Container Ships	6	0	6	0.07	0	0	0	0.00	390	0	391	0.07
General Cargo Ships	273	1	274	0.54	0	0	0	0.00	4,510	24	4,535	0.54
Liquid Gas Carriers	958	0	958	0.00	0	0	0	0.00	73,020	0	73,020	0.00
Passenger Ships	51	0	51	0.00	0	0	0	0.00	995	0	995	0.00
Refrigerated Ships	1,062	7	1,069	0.67	0	0	0	0.00	28,284	191	28,475	0.67
Roll-On Roll-Off	58	0	58	0.80	0	0	0	0.00	2,553	21	2,574	0.80
Tankers	270	9	279	3.23	0	0	0	0.00	23,282	777	24,059	3.23
Vehicle Carriers	441	0	441	0.05	0	0	0	0.00	39,044	20	39,064	0.05
Total	3,635	37	3,672	1.00	0	0	0	0.00	195,160	1,909	197,069	0.97

Note: Diversions of ballast transits are computed by diverting a proportion of ballast transits equal to lost revenue as a percent of total potential revenue for a particular laden ship type. See last column on previous table.

Source: Nathan Associates Inc., based on forecasts of traffic and transportation costs provided by The WEFA Group.

Table C-25. Laden Transits, Tons Carried, Toll Revenue and Toll Rates, Current Toll Structure With 50 Percent Increase in Rates, 250,000 DWT Scenario, 2060, by Ship Type, Diversion Status, and Trade Route (1990 US$, except when noted)

Ship Type, Diversion Status, and Trade Route	Transits	Cargo Tonnage Carried (thousands)	Revenue (thousands) a/	Current Toll Schedule: Toll Per Panama Canal Net Ton	Current Toll Schedule: Toll Per Cargo Ton Carried	New Toll Schedule: Toll Per Panama Canal Net Ton	New Toll Schedule: Toll Per Cargo Ton Carried	Total Transportation Costs per Ton Carried: Via Panama Canal: With Current Toll Structure	Total Transportation Costs per Ton Carried: Via Panama Canal: With New Toll Structure	Total Transportation Costs per Ton Carried: Via Panama Canal: Percent Increase	Total Transportation Costs per Ton Carried: Via Least Costly Alternative Route
Container-Breakbulk											
Non-Diverted Transits											
Africa-C.A.W.C.	6	185	285	2.41	1.85	3.42	2.63	72.26	73.04	1.07	119.11
Africa-Canada W.C.	0	5	18	2.41	1.87	3.42	2.65	92.01	92.79	0.85	106.57
Africa-U.S.W.C.	2	25	86	2.41	1.87	3.42	2.65	93.01	93.79	0.84	107.78
Asia-Canada E.C.	1	8	31	2.41	1.86	3.42	2.64	93.05	93.83	0.84	100.96
Asia-C.A.E.C.	135	1,246	5,334	2.41	1.87	3.42	2.64	97.20	97.97	0.80	113.04
Asia-S.A.E.C.	48	305	1,795	2.41	1.87	3.42	2.65	105.12	105.90	0.74	107.25
Asia-U.S.E.C.	139	1,759	5,870	2.41	1.86	3.42	2.64	99.37	100.15	0.78	123.49
C.A.W.C.-Africa	6	112	208	2.41	1.87	3.42	2.65	76.03	76.81	1.03	127.35
C.A.W.C.-C.A.E.C.	16	247	618	2.41	1.86	3.42	2.64	51.25	52.03	1.52	91.73
C.A.W.C.-Europe	41	304	1,625	2.41	1.87	3.42	2.65	65.68	66.46	1.19	95.59
C.A.W.C.-S.A.E.C.	23	10	849	2.41	1.87	3.42	2.65	72.11	72.89	1.08	77.11
C.A.W.C.-U.S.E.C.	7	40	253	2.41	1.87	3.42	2.65	57.32	58.10	1.36	95.90
Canada E.C.-Asia	31	815	1,617	2.41	1.85	3.42	2.63	95.14	95.92	0.81	98.29
Canada E.C.-C.A.W.C.	3	25	97	2.41	1.87	3.42	2.65	55.94	56.72	1.39	96.99
Canada E.C.-Oceania	2	25	58	2.41	1.87	3.42	2.65	107.65	108.43	0.72	108.63
Canada E.C.-S.A.W.C.	1	17	39	2.41	1.85	3.42	2.63	65.70	66.48	1.18	79.70
Canada E.C.-U.S.W.C.	0	0	0	2.41	1.86	3.42	2.64	72.57	73.35	1.07	111.42
Canada W.C.-Africa	29	662	1,278	2.41	1.85	3.42	2.63	93.53	94.31	0.83	106.62
Canada W.C.-Europe	107	3,116	5,777	2.41	1.85	3.42	2.63	81.19	81.97	0.95	109.01
Canada W.C.-S.A.E.C.	22	421	816	2.41	1.87	3.42	2.65	74.11	74.89	1.05	114.56
Canada W.C.-U.S.E.C.	15	303	655	2.41	1.85	3.42	2.63	67.85	68.63	1.14	108.00
C.A.E.C.-Asia	13	270	491	2.41	1.87	3.42	2.65	96.31	97.09	0.81	111.98
C.A.E.C.-C.A.W.C.	13	49	497	2.41	1.87	3.42	2.65	52.15	52.93	1.49	94.93

(Continued)

Table C-25. Laden Transits, Tons Carried, Toll Revenue and Toll Rates, Current Toll Structure With 50 Percent Increase in Rates, 250,000 DWT Scenario, 2060, by Ship Type, Diversion Status, and Trade Route (1990 US$, except when noted)(continued)

Ship Type, Diversion Status, and Trade Route	Transits	Cargo Tonnage Carried (thousands)	Revenue (thousands) a/	Current Toll Schedule: Toll Per Panama Canal Net Ton	Current Toll Schedule: Toll Per Cargo Ton Carried	New Toll Schedule: Toll Per Panama Canal Net Ton	New Toll Schedule: Toll Per Cargo Ton Carried	Total Transportation Costs per Ton Carried: Via Panama Canal: With Current Toll Structure	Via Panama Canal: With New Toll Structure	Via Panama Canal: Percent Increase	Via Least Costly Alternative Route
Container-Breakbulk (continued)											
Non-Diverted Transits (continued)											
C.A.E.C.-Canada W.C.	4	59	147	2.41	1.87	3.42	2.65	66.58	67.36	1.17	106.57
C.A.E.C.-Oceania	2	38	92	2.41	1.87	3.42	2.65	94.01	94.79	0.83	112.63
C.A.E.C.-S.A.W.C.	37	286	1,419	2.41	1.87	3.42	2.65	64.73	65.51	1.20	79.50
C.A.E.C.-U.S.W.C.	6	112	240	2.41	1.86	3.42	2.64	64.27	65.05	1.21	97.78
Europe-C.A.W.C.	44	271	1,688	2.41	1.87	3.42	2.65	66.79	67.57	1.17	118.42
Europe-Canada W.C.	7	217	441	2.41	1.85	3.42	2.63	83.24	84.02	0.93	107.58
Europe-S.A.W.C.	182	1,504	7,044	2.41	1.87	3.42	2.65	90.01	90.79	0.87	104.63
Europe-U.S.W.C.	36	1,115	2,107	2.41	1.85	3.42	2.63	82.41	83.19	0.94	107.84
Oceania-C.A.E.C.	10	99	364	2.41	1.87	3.42	2.65	94.77	95.55	0.82	113.61
S.A.E.C.-C.A.W.C.	16	252	632	2.41	1.87	3.42	2.65	71.65	72.43	1.09	76.57
S.A.E.C.-Canada W.C.	25	335	978	2.41	1.87	3.42	2.65	92.79	93.57	0.84	98.78
S.A.E.C.-U.S.W.C.	84	1,260	3,325	2.41	1.87	3.42	2.64	78.16	78.93	1.00	80.87
S.A.W.C.-Africa	3	52	102	2.41	1.87	3.42	2.65	82.90	83.68	0.94	120.48
S.A.W.C.-Canada E.C.	1	2	43	2.41	1.87	3.42	2.65	69.19	69.97	1.13	84.90
S.A.W.C.-C.A.E.C.	26	206	954	2.41	1.87	3.42	2.65	65.19	65.97	1.20	80.11
S.A.W.C.-Europe	329	5,753	12,560	2.41	1.87	3.42	2.65	89.68	90.46	0.87	106.41
S.A.W.C.-U.S.E.C.	239	2,340	8,943	2.41	1.87	3.42	2.65	62.12	62.90	1.26	81.53
U.S.E.C.-Asia	284	7,177	14,067	2.41	1.86	3.42	2.63	96.15	96.92	0.81	119.21
U.S.E.C.-C.A.W.C.	22	446	887	2.41	1.86	3.42	2.64	47.68	48.46	1.63	93.27
U.S.E.C.-S.A.W.C.	347	3,443	13,523	2.41	1.87	3.42	2.65	61.84	62.62	1.26	81.01
U.S.E.C.-U.S.W.C.	0	0	1	2.41	1.86	3.42	2.64	58.86	59.64	1.32	98.00
U.S.W.C.-Africa	22	367	1,366	2.41	1.85	3.42	2.63	85.43	86.21	0.91	102.85
U.S.W.C.-Canada E.C.	1	33	56	2.41	1.85	3.42	2.63	69.85	70.63	1.11	106.00

(Continued)

Table C-25. Laden Transits, Tons Carried, Toll Revenue and Toll Rates, Current Toll Structure With 50 Percent Increase in Rates, 250,000 DWT Scenario, 2060, by Ship Type, Diversion Status, and Trade Route (1990 US$, except when noted)(continued)

Ship Type, Diversion Status, and Trade Route	Transits	Cargo Tonnage Carried (thousands)	Revenue (thousands) a/	Current Toll Schedule: Toll Per Panama Canal Net Ton	Current Toll Schedule: Toll Per Cargo Ton Carried	New Toll Schedule: Toll Per Panama Canal Net Ton	New Toll Schedule: Toll Per Cargo Ton Carried	Total Transportation Costs per Ton Carried: Via Panama Canal: With Current Toll Structure	Via Panama Canal: With New Toll Structure	Via Panama Canal: Percent Increase	Via Least Costly Alternative Route
Container-Breakbulk (continued)											
Non-Diverted Transits (continued)											
U.S.W.C.-C.A.E.C.	19	135	716	2.41	1.87	3.42	2.65	66.46	67.24	1.17	101.57
U.S.W.C.-Europe	51	1,343	2,679	2.41	1.86	3.42	2.63	83.60	84.37	0.93	108.54
U.S.W.C.-S.A.E.C.	6	104	220	2.41	1.87	3.42	2.65	79.98	80.76	0.97	82.98
U.S.W.C.-U.S.E.C.	0	6	24	2.41	1.85	3.42	2.63	60.33	61.11	1.28	102.02
Subtotal	2,460	36,908	102,915	2.41	1.86	3.41	2.64	83.67	84.44	0.93	104.46
Container-Breakbulk											
Diverted Transits											
Oceania-Canada E.C.	4	88	226	2.41	1.85	3.42	2.63	97.85	98.63	0.79	98.00
Subtotal	4	88	226	2.41	1.85	3.41	2.63	97.85	98.63	0.79	98.00
Subtotal	2,465	36,996	103,141	2.41	1.86	3.41	2.64	83.70	84.48	0.93	104.44
Dry Bulk Carriers											
Non-Diverted Transits											
Africa-C.A.W.C.	29	1,201	1,832	2.41	1.30	3.42	1.85	15.34	15.89	3.54	27.11
Africa-Canada W.C.	156	7,645	11,241	2.41	1.28	3.42	1.81	17.82	18.35	2.99	19.99
Africa-S.A.W.C.	9	313	564	2.41	1.30	3.42	1.85	18.13	18.68	3.00	26.14
Africa-U.S.W.C.	10	297	733	2.41	1.27	3.42	1.80	16.17	16.70	3.28	19.94
Asia-Canada E.C.	15	695	1,275	2.41	1.25	3.42	1.78	17.55	18.08	2.98	18.43
Asia-C.A.E.C.	29	527	1,895	2.41	1.30	3.42	1.84	18.85	19.39	2.87	24.40
Asia-U.S.E.C.	386	12,134	28,740	2.41	1.27	3.42	1.80	16.62	17.15	3.19	23.16
Brazil-Asia	108	18,541	28,484	2.41	1.16	3.42	1.65	17.30	17.79	2.80	18.35
C.A.W.C.-Africa	2	52	108	2.41	1.29	3.42	1.83	15.32	15.86	3.51	27.18

(Continued)

Table C-25. Laden Transits, Tons Carried, Toll Revenue and Toll Rates, Current Toll Structure With 50 Percent Increase in Rates, 250,000 DWT Scenario, 2060, by Ship Type, Diversion Status, and Trade Route (1990 US$, except when noted)(continued)

Ship Type, Diversion Status, and Trade Route	Transits	Cargo Tonnage Carried (thousands)	Revenue (thousands) a/	Current Toll Schedule: Toll Per Panama Canal Net Ton	Current Toll Schedule: Toll Per Cargo Ton Carried	New Toll Schedule: Toll Per Panama Canal Net Ton	New Toll Schedule: Toll Per Cargo Ton Carried	Total Transportation Costs per Ton Carried: Via Panama Canal: With Current Toll Structure	Via Panama Canal: With New Toll Structure	Via Panama Canal: Percent Increase	Via Least Costly Alternative Route
Dry Bulk Carriers (continued)											
Non-Diverted Transits (continued)											
C.A.W.C.-C.A.E.C.	63	2,167	4,051	2.41	1.30	3.42	1.84	7.57	8.11	7.14	16.30
C.A.W.C.-Europe	19	626	1,306	2.41	1.28	3.42	1.82	12.19	12.73	4.39	18.57
C.A.W.C.-U.S.E.C.	47	1,854	3,206	2.41	1.29	3.42	1.82	7.69	8.22	6.98	18.15
Canada E.C.-Asia	126	7,535	13,413	2.41	1.22	3.42	1.73	18.27	18.78	2.79	20.41
Canada E.C.-Oceania	7	132	446	2.41	1.29	3.42	1.83	21.09	21.63	2.55	21.80
Canada E.C.-S.A.W.C.	12	426	832	2.41	1.29	3.42	1.83	12.85	13.39	4.18	15.56
Canada W.C.-Africa	175	7,689	12,903	2.41	1.28	3.42	1.82	17.49	18.03	3.06	19.57
Canada W.C.-C.A.E.C.	9	270	568	2.41	1.30	3.42	1.85	12.59	13.14	4.32	21.54
Canada W.C.-Europe	301	15,944	27,161	2.41	1.24	3.42	1.76	16.14	16.66	3.22	21.21
Canada W.C.-S.A.E.C.	29	1,820	3,275	2.41	1.22	3.42	1.72	11.69	12.19	4.34	12.24
Canada W.C.-U.S.E.C.	105	3,183	6,588	2.41	1.30	3.42	1.85	13.34	13.89	4.07	23.33
C.A.E.C.-Asia	22	808	1,355	2.41	1.30	3.42	1.85	18.13	18.68	3.00	23.38
C.A.E.C.-C.A.W.C.	49	1,650	3,067	2.41	1.30	3.42	1.85	7.82	8.37	6.95	16.83
C.A.E.C.-Canada W.C.	3	105	188	2.41	1.30	3.42	1.85	12.61	13.16	4.31	21.59
C.A.E.C.-Oceania	1	22	52	2.41	1.30	3.42	1.85	19.89	20.44	2.73	22.59
C.A.E.C.-S.A.W.C.	24	734	1,484	2.41	1.30	3.42	1.85	10.61	11.16	5.12	14.07
C.A.E.C.-U.S.W.C.	9	286	548	2.41	1.30	3.42	1.85	11.61	12.16	4.68	20.59
Columbia-Asia	2	352	543	2.41	1.17	3.42	1.65	17.07	17.55	2.85	25.50
Europe-C.A.W.C.	51	1,627	3,170	2.41	1.30	3.42	1.85	12.61	13.16	4.31	22.38
Europe-Canada W.C.	12	408	868	2.41	1.28	3.42	1.81	16.56	17.09	3.22	22.07
Europe-U.S.W.C.	142	4,679	10,190	2.41	1.28	3.42	1.81	15.66	16.19	3.40	20.80
Middle East-S.A.W.C.	2	104	173	2.41	1.25	3.42	1.76	14.08	14.59	3.69	15.83
Oceania-Canada E.C.	23	859	1,453	2.41	1.30	3.42	1.85	20.84	21.39	2.61	21.54

(Continued)

Table C-25. Laden Transits, Tons Carried, Toll Revenue and Toll Rates, Current Toll Structure With 50 Percent Increase in Rates, 250,000 DWT Scenario, 2060, by Ship Type, Diversion Status, and Trade Route (1990 US$, except when noted)(continued)

Ship Type, Diversion Status, and Trade Route	Transits	Cargo Tonnage Carried (thousands)	Revenue (thousands) a/	Current Toll Schedule: Toll Per Panama Canal Net Ton	Current Toll Schedule: Toll Per Cargo Ton Carried	New Toll Schedule: Toll Per Panama Canal Net Ton	New Toll Schedule: Toll Per Cargo Ton Carried	Total Transportation Costs per Ton Carried: Via Panama Canal: With Current Toll Structure	Via Panama Canal: With New Toll Structure	Via Panama Canal: Percent Increase	Via Least Costly Alternative Route
Dry Bulk Carriers (continued)											
Non-Diverted Transits (continued)											
Oceania-C.A.E.C.	14	469	897	2.41	1.30	3.42	1.85	19.09	19.64	2.85	22.54
Oceania-U.S.E.C.	36	2,218	3,700	2.41	1.23	3.42	1.74	15.65	16.16	3.27	17.42
S.A.E.C.-Asia	60	2,563	4,333	2.41	1.28	3.42	1.81	16.77	17.30	3.17	18.93
S.A.E.C.-Canada W.C.	3	97	201	2.41	1.30	3.42	1.85	17.13	17.68	3.17	17.83
S.A.W.C.-Africa	5	296	426	2.41	1.25	3.42	1.78	14.34	14.87	3.64	21.40
S.A.W.C.-Canada E.C.	1	24	38	2.41	1.30	3.42	1.85	13.34	13.89	4.07	16.04
S.A.W.C.-C.A.E.C.	12	277	727	2.41	1.30	3.42	1.85	10.59	11.14	5.13	14.04
S.A.W.C.-U.S.E.C.	91	3,585	5,783	2.41	1.30	3.42	1.84	11.28	11.82	4.80	15.48
U.S.E.C.-Asia	1,629	139,874	231,304	2.41	1.20	3.42	1.69	16.99	17.48	2.94	22.61
U.S.E.C.-C.A.W.C.	375	14,003	24,123	2.41	1.30	3.42	1.84	7.80	8.34	6.94	18.73
U.S.E.C.-Oceania	23	909	1,535	2.41	1.29	3.42	1.83	19.26	19.80	2.79	20.97
U.S.E.C.-S.A.W.C.	82	2,944	5,293	2.41	1.30	3.42	1.84	11.45	11.99	4.72	15.60
U.S.E.C.-U.S.W.C.	1	0	35	2.41	1.30	3.42	1.85	11.61	12.16	4.68	22.38
U.S.W.C.-Africa	198	9,018	16,328	2.41	1.26	3.42	1.78	15.70	16.22	3.33	19.37
U.S.W.C.-Canada E.C.	5	211	359	2.41	1.29	3.42	1.83	13.93	14.47	3.87	22.50
U.S.W.C.-C.A.E.C.	1	30	57	2.41	1.30	3.42	1.85	11.59	12.14	4.69	20.54
U.S.W.C.-Europe	168	9,505	15,848	2.41	1.24	3.42	1.75	14.02	14.53	3.68	18.82
U.S.W.C.-U.S.E.C.	8	215	582	2.41	1.28	3.42	1.81	11.92	12.45	4.48	23.13
Venezuela-Asia	7	1,230	1,892	2.41	1.16	3.42	1.65	15.96	16.45	3.04	23.70
Subtotal	4,698	282,153	485,174	2.41	1.23	3.42	1.74	15.92	16.43	3.21	21.15
Dry Bulk Carriers											
Diverted Transits											
Asia-S.A.E.C.	5	172	202	2.41	1.30	3.42	1.85	21.84	22.39	2.49	21.54

(Continued)

Table C-25. Laden Transits, Tons Carried, Toll Revenue and Toll Rates, Current Toll Structure With 50 Percent Increase in Rates, 250,000 DWT Scenario, 2060, by Ship Type, Diversion Status, and Trade Route (1990 US$, except when noted)(continued)

Ship Type, Diversion Status, and Trade Route	Transits	Cargo Tonnage Carried (thousands)	Revenue (thousands) a/	Current Toll Schedule: Toll Per Panama Canal Net Ton	Current Toll Schedule: Toll Per Cargo Ton Carried	New Toll Schedule: Toll Per Panama Canal Net Ton	New Toll Schedule: Toll Per Cargo Ton Carried	Total Transportation Costs per Ton Carried: Via Panama Canal: With Current Toll Structure	Via Panama Canal: With New Toll Structure	Via Panama Canal: Percent Increase	Via Least Costly Alternative Route
Dry Bulk Carriers (continued)											
Diverted Transits (continued)											
C.A.W.C.-S.A.E.C.	16	268	1,070	2.41	1.30	3.42	1.85	11.59	12.14	4.69	12.04
Europe-S.A.W.C.	16	514	781	2.41	1.30	3.42	1.85	16.13	16.68	3.37	16.07
S.A.E.C.-C.A.W.C.	12	441	777	2.41	1.30	3.42	1.85	11.61	12.16	4.68	12.07
S.A.E.C.-U.S.W.C.	34	1,722	2,129	2.41	1.23	3.42	1.75	13.30	13.82	3.87	13.07
S.A.W.C.-Europe	262	13,060	21,869	2.41	1.25	3.42	1.78	15.70	16.23	3.33	16.02
U.S.W.C.-S.A.E.C.	13	436	510	2.41	1.30	3.42	1.85	16.09	16.64	3.38	15.79
Subtotal	359	16,612	27,338	2.41	1.26	3.42	1.78	15.37	15.89	3.41	15.60
Subtotal	5,057	298,765	512,512	2.41	1.23	3.42	1.74	15.89	16.40	3.22	20.84
Chemical Tankers											
Non-Diverted Transits											
Africa-S.A.W.C.	2	59	96	2.41	1.34	3.42	1.90	43.34	43.90	1.29	60.00
Asia-C.A.E.C.	4	50	100	2.41	1.34	3.42	1.90	54.00	54.56	1.03	70.82
Asia-S.A.E.C.	4	23	194	2.41	1.34	3.42	1.90	50.34	50.90	1.11	52.00
Asia-U.S.E.C.	39	820	1,675	2.41	1.34	3.42	1.90	43.81	44.37	1.28	59.67
C.A.W.C.-C.A.E.C.	49	306	578	2.41	1.34	3.42	1.90	39.39	39.95	1.42	83.80
C.A.W.C.-Europe	9	169	281	2.41	1.34	3.42	1.90	38.02	38.58	1.47	56.27
C.A.W.C.-U.S.E.C.	63	885	1,616	2.41	1.34	3.42	1.90	27.74	28.30	2.01	58.89
Canada W.C.-Europe	4	106	204	2.41	1.34	3.42	1.90	42.34	42.90	1.32	57.00
Canada W.C.-U.S.E.C.	39	1,042	2,206	2.41	1.34	3.42	1.90	31.94	32.50	1.75	52.60
C.A.E.C.-Asia	9	293	486	2.41	1.34	3.42	1.90	42.34	42.90	1.32	55.00
C.A.E.C.-C.A.W.C.	5	115	239	2.41	1.34	3.42	1.90	21.34	21.90	2.62	42.00
C.A.E.C.-S.A.W.C.	11	217	421	2.41	1.34	3.42	1.90	30.34	30.90	1.84	40.32

(Continued)

Table C-25. Laden Transits, Tons Carried, Toll Revenue and Toll Rates, Current Toll Structure With 50 Percent Increase in Rates, 250,000 DWT Scenario, 2060, by Ship Type, Diversion Status, and Trade Route (1990 US$, except when noted)(continued)

Ship Type, Diversion Status, and Trade Route	Transits	Cargo Tonnage Carried (thousands)	Revenue (thousands) a/	Current Toll Schedule: Toll Per Panama Canal Net Ton	Current Toll Schedule: Toll Per Cargo Ton Carried	New Toll Schedule: Toll Per Panama Canal Net Ton	New Toll Schedule: Toll Per Cargo Ton Carried	Total Transportation Costs per Ton Carried: Via Panama Canal: With Current Toll Structure	Via Panama Canal: With New Toll Structure	Via Panama Canal: Percent Increase	Via Least Costly Alternative Route
Chemical Tankers (continued)											
Non-Diverted Transits (continued)											
C.A.E.C.-U.S.W.C.	2	15	25	2.41	1.34	3.42	1.90	55.94	56.50	1.00	98.40
Europe-C.A.W.C.	10	51	119	2.41	1.34	3.42	1.90	60.84	61.40	0.92	93.55
Europe-S.A.W.C.	9	98	167	2.41	1.34	3.42	1.90	58.65	59.21	0.95	62.50
Europe-U.S.W.C.	10	261	455	2.41	1.34	3.42	1.90	42.05	42.61	1.33	56.46
Oceania-U.S.E.C.	17	494	1,032	2.41	1.34	3.42	1.90	40.63	41.19	1.37	45.24
S.A.E.C.-C.A.W.C.	10	79	151	2.41	1.34	3.42	1.90	50.34	50.90	1.11	54.86
S.A.E.C.-U.S.W.C.	1	43	76	2.41	1.34	3.42	1.90	30.34	30.90	1.84	31.00
S.A.W.C.-C.A.E.C.	36	134	655	2.41	1.34	3.42	1.90	44.18	44.74	1.26	60.24
S.A.W.C.-Europe	12	151	267	2.41	1.34	3.42	1.90	53.51	54.07	1.04	56.81
S.A.W.C.-U.S.E.C.	12	100	313	2.41	1.34	3.42	1.90	39.07	39.63	1.43	53.98
U.S.E.C.-Asia	683	23,746	38,502	2.41	1.34	3.42	1.90	41.54	42.10	1.35	56.40
U.S.E.C.-C.A.W.C.	27	238	462	2.41	1.34	3.42	1.90	34.18	34.74	1.63	74.41
U.S.E.C.-Canada W.C.	8	61	106	2.41	1.34	3.42	1.90	60.04	60.60	0.93	104.95
U.S.E.C.-Oceania	17	545	926	2.41	1.34	3.42	1.90	43.19	43.75	1.29	48.34
U.S.E.C.-S.A.W.C.	53	560	1,080	2.41	1.34	3.42	1.90	41.25	41.81	1.35	57.19
U.S.E.C.-U.S.W.C.	48	1,814	3,408	2.41	1.34	3.42	1.90	25.49	26.05	2.19	43.29
U.S.W.C.-C.A.E.C.	1	12	30	2.41	1.34	3.42	1.90	29.34	29.90	1.90	49.00
U.S.W.C.-Europe	16	266	533	2.41	1.34	3.42	1.90	45.29	45.85	1.23	61.30
U.S.W.C.-S.A.E.C.	0	6	11	2.41	1.34	3.42	1.90	38.34	38.90	1.46	39.00
U.S.W.C.-U.S.E.C.	12	233	861	2.41	1.34	3.42	1.90	25.79	26.35	2.17	43.90
Subtotal	1,224	32,988	57,274	2.41	1.34	3.42	1.90	39.96	40.51	1.40	55.77
Full Container Ships											
Non-Diverted Transits											
Africa-U.S.W.C.	0	5	17	2.41	4.49	3.42	6.36	247.81	249.68	0.76	284.11

(Continued)

Table C-25. Laden Transits, Tons Carried, Toll Revenue and Toll Rates, Current Toll Structure With 50 Percent Increase in Rates, 250,000 DWT Scenario, 2060, by Ship Type, Diversion Status, and Trade Route (1990 US$, except when noted)(continued)

Ship Type, Diversion Status, and Trade Route	Transits	Cargo Tonnage Carried (thousands)	Revenue (thousands) a/	Current Toll Schedule: Toll Per Panama Canal Net Ton	Current Toll Schedule: Toll Per Cargo Ton Carried	New Toll Schedule: Toll Per Panama Canal Net Ton	New Toll Schedule: Toll Per Cargo Ton Carried	Total Transportation Costs per Ton Carried: Via Panama Canal: With Current Toll Structure	Via Panama Canal: With New Toll Structure	Via Panama Canal: Percent Increase	Via Least Costly Alternative Route
Full Container Ships (continued)											
Non-Diverted Transits (continued)											
Asia-Canada E.C.	33	739	3,425	2.41	4.70	3.42	6.66	207.29	209.25	0.95	225.70
Asia-S.A.E.C.	4	14	137	2.41	4.49	3.42	6.36	274.66	276.53	0.68	282.11
Asia-U.S.E.C. (low inv. cost)	186	5,208	32,743	2.41	4.92	3.42	6.97	231.70	233.75	0.88	245.26
C.A.W.C.-C.A.E.C.	1	9	67	2.41	4.44	3.42	6.29	130.00	131.85	1.42	207.98
C.A.W.C.-Europe	2	37	195	2.41	4.42	3.42	6.27	152.02	153.87	1.21	204.85
C.A.W.C.-S.A.E.C.	0	7	32	2.41	4.44	3.42	6.29	162.41	164.26	1.14	169.25
C.A.W.C.-U.S.E.C.	0	5	18	2.41	4.49	3.42	6.36	161.41	163.28	1.16	253.29
Canada E.C.-Asia	35	658	2,545	2.41	4.55	3.42	6.45	226.90	228.80	0.84	236.18
Canada E.C.-Oceania	23	286	1,168	2.41	4.47	3.42	6.34	257.67	259.54	0.72	260.84
Canada E.C.-U.S.W.C.	8	247	1,034	2.41	4.77	3.42	6.76	154.77	156.76	1.29	229.00
Canada W.C.-Europe	31	511	1,828	2.41	4.51	3.42	6.38	210.71	212.58	0.89	276.36
C.A.E.C.-Asia	8	116	607	2.41	4.47	3.42	6.33	213.60	215.46	0.87	244.68
C.A.E.C.-C.A.W.C.	1	7	41	2.41	4.47	3.42	6.33	143.12	144.98	1.30	235.87
C.A.E.C.-Oceania	1	8	31	2.41	4.49	3.42	6.36	250.78	252.65	0.75	297.02
C.A.E.C.-S.A.W.C.	2	10	61	2.41	4.49	3.42	6.36	178.89	180.76	1.05	214.04
C.A.E.C.-U.S.W.C.	2	26	123	2.41	4.45	3.42	6.30	152.93	154.78	1.21	218.40
Europe-C.A.W.C.	0	1	9	2.41	4.42	3.42	6.27	152.02	153.87	1.21	243.00
Europe-Canada W.C.	25	336	1,304	2.41	4.47	3.42	6.33	223.81	225.67	0.83	284.41
Europe-S.A.W.C.	81	1,309	6,482	2.41	4.42	3.42	6.27	191.22	193.07	0.96	221.95
Europe-U.S.W.C.	140	3,123	13,355	2.41	4.67	3.42	6.61	205.80	207.74	0.95	215.66
Middle East-U.S.W.C.	15	247	923	2.41	4.47	3.42	6.34	218.19	220.06	0.85	247.58
Oceania-C.A.E.C.	5	64	203	2.41	4.49	3.42	6.36	250.78	252.65	0.75	297.02
S.A.E.C.-C.A.W.C.	1	8	30	2.41	4.49	3.42	6.36	197.14	199.01	0.95	206.59

(Continued)

Table C-25. Laden Transits, Tons Carried, Toll Revenue and Toll Rates, Current Toll Structure With 50 Percent Increase in Rates, 250,000 DWT Scenario, 2060, by Ship Type, Diversion Status, and Trade Route (1990 US$, except when noted)(continued)

Ship Type, Diversion Status, and Trade Route	Transits	Cargo Tonnage Carried (thousands)	Revenue (thousands) a/	Current Toll Schedule: Toll Per Panama Canal Net Ton	Current Toll Schedule: Toll Per Cargo Ton Carried	New Toll Schedule: Toll Per Panama Canal Net Ton	New Toll Schedule: Toll Per Cargo Ton Carried	Total Transportation Costs per Ton Carried: Via Panama Canal: With Current Toll Structure	Via Panama Canal: With New Toll Structure	Via Panama Canal: Percent Increase	Via Least Costly Alternative Route
Full Container Ships (continued)											
Non-Diverted Transits (continued)											
S.A.E.C.-U.S.W.C.	2	20	65	2.41	4.49	3.42	6.36	183.23	185.10	1.02	219.50
S.A.W.C.-C.A.E.C.	0	1	10	2.41	4.49	3.42	6.36	178.89	180.76	1.05	214.04
S.A.W.C.-Europe	144	3,081	11,587	2.41	4.42	3.42	6.27	191.21	193.06	0.96	221.95
S.A.W.C.-U.S.E.C.	99	1,047	3,806	2.41	4.49	3.42	6.36	174.32	176.19	1.07	221.50
U.S.E.C.-Asia (low inv. cost)	234	8,718	38,402	2.41	4.88	3.42	6.92	233.14	235.18	0.87	246.59
U.S.E.C.-C.A.W.C.	13	112	492	2.41	4.49	3.42	6.36	140.53	142.40	1.33	253.29
U.S.E.C.-S.A.W.C.	117	1,005	4,489	2.41	4.49	3.42	6.36	174.32	176.19	1.07	221.50
U.S.E.C.-U.S.W.C.	1	26	116	2.41	4.76	3.42	6.74	138.99	140.97	1.43	224.03
U.S.W.C.-Africa	0	0	0	2.41	4.64	3.42	6.57	193.64	195.57	1.00	233.00
U.S.W.C.-Canada E.C.	0	8	36	2.41	4.57	3.42	6.47	159.49	161.39	1.19	231.46
U.S.W.C.-C.A.E.C.	6	90	373	2.41	4.46	3.42	6.32	161.25	163.11	1.15	232.70
U.S.W.C.-Europe	196	3,835	19,137	2.41	4.68	3.42	6.64	208.75	210.71	0.94	217.65
U.S.W.C.-Middle East	25	356	1,547	2.41	4.47	3.42	6.34	219.26	221.13	0.85	229.43
U.S.W.C.-U.S.E.C.	21	326	2,270	2.41	4.65	3.42	6.58	141.16	143.09	1.37	224.31
Subtotal	1,460	31,607	148,709	2.41	4.72	3.42	6.69	213.85	215.81	0.92	234.46
Full Container Ships											
Diverted Transits											
Oceania-Canada E.C.	10	177	108	2.41	4.47	3.42	6.33	251.62	253.48	0.74	248.23
Oceania-S.A.E.C.	0	2	1	2.41	4.49	3.42	6.36	241.87	243.74	0.77	238.38
Subtotal	10	179	109	2.41	4.47	3.42	6.33	251.49	253.35	0.74	248.10
Subtotal	1,470	31,786	148,818	2.41	4.72	3.42	6.69	214.06	216.02	0.92	234.53
General Cargo Ships											
Non-Diverted Transits											
Africa-C.A.W.C.	3	46	112	2.41	1.39	3.42	1.97	31.04	31.62	1.86	56.35

(Continued)

Table C-25. Laden Transits, Tons Carried, Toll Revenue and Toll Rates, Current Toll Structure With 50 Percent Increase in Rates, 250,000 DWT Scenario, 2060, by Ship Type, Diversion Status, and Trade Route (1990 US$, except when noted)(continued)

Ship Type, Diversion Status, and Trade Route	Transits	Cargo Tonnage Carried (thousands)	Revenue (thousands) a/	Current Toll Schedule: Toll Per Panama Canal Net Ton	Current Toll Schedule: Toll Per Cargo Ton Carried	New Toll Schedule: Toll Per Panama Canal Net Ton	New Toll Schedule: Toll Per Cargo Ton Carried	Total Transportation Costs per Ton Carried: Via Panama Canal: With Current Toll Structure	Via Panama Canal: With New Toll Structure	Via Panama Canal: Percent Increase	Via Least Costly Alternative Route
General Cargo Ships (continued)											
Non-Diverted Transits (continued)											
Africa-S.A.W.C.	3	68	115	2.41	1.39	3.42	1.97	37.94	38.52	1.53	54.35
Asia-Canada E.C.	0	3	6	2.41	1.39	3.42	1.97	41.94	42.52	1.38	46.45
Asia-C.A.E.C.	127	1,501	4,420	2.41	1.39	3.42	1.97	36.99	37.57	1.56	49.45
Asia-U.S.E.C.	49	632	1,731	2.41	1.39	3.42	1.96	38.14	38.71	1.51	52.33
C.A.W.C.-Africa	7	139	253	2.41	1.39	3.42	1.97	31.04	31.62	1.86	56.35
C.A.W.C.-C.A.E.C.	55	243	647	2.41	1.46	3.42	2.07	9.72	10.33	6.26	59.62
C.A.W.C.-Europe	51	291	1,146	2.41	1.41	3.42	1.99	29.65	30.23	1.98	52.03
C.A.W.C.-S.A.E.C.	15	99	337	2.41	1.41	3.42	1.99	27.71	28.29	2.12	32.29
C.A.W.C.-U.S.E.C.	16	84	197	2.41	1.45	3.42	2.06	12.26	12.87	4.94	74.92
Canada E.C.-Asia	10	25	355	2.41	1.39	3.42	1.97	41.94	42.52	1.38	46.45
Canada E.C.-C.A.W.C.	2	36	73	2.41	1.39	3.42	1.97	21.19	21.77	2.73	41.50
Canada E.C.-S.A.W.C.	16	148	570	2.41	1.39	3.42	1.97	28.09	28.67	2.06	35.55
Canada W.C.-C.A.E.C.	16	120	306	2.41	1.42	3.42	2.01	31.71	32.30	1.87	70.25
Canada W.C.-Europe	1	21	34	2.41	1.39	3.42	1.97	37.94	38.52	1.53	52.40
Canada W.C.-S.A.E.C.	14	126	286	2.41	1.41	3.42	2.00	36.39	36.98	1.62	71.10
C.A.E.C.-Asia	28	538	972	2.41	1.39	3.42	1.97	36.99	37.57	1.56	49.45
C.A.E.C.-C.A.W.C.	56	209	689	2.41	1.45	3.42	2.06	8.51	9.12	7.12	63.99
C.A.E.C.-Oceania	1	13	31	2.41	1.39	3.42	1.97	40.94	41.52	1.41	49.45
C.A.E.C.-S.A.W.C.	53	492	1,199	2.41	1.41	3.42	1.99	22.58	23.16	2.60	34.74
C.A.E.C.-U.S.W.C.	12	42	100	2.41	1.50	3.42	2.12	32.53	33.15	1.92	110.69
Europe-C.A.W.C.	87	598	2,307	2.41	1.40	3.42	1.98	28.49	29.07	2.05	59.50
Europe-Canada W.C.	3	11	24	2.41	1.50	3.42	2.12	80.37	80.99	0.78	136.96
Europe-S.A.W.C.	73	734	2,412	2.41	1.39	3.42	1.97	33.84	34.42	1.71	35.65

(Continued)

Table C-25. Laden Transits, Tons Carried, Toll Revenue and Toll Rates, Current Toll Structure With 50 Percent Increase in Rates, 250,000 DWT Scenario, 2060, by Ship Type, Diversion Status, and Trade Route (1990 US$, except when noted)(continued)

Ship Type, Diversion Status, and Trade Route	Transits	Cargo Tonnage Carried (thousands)	Revenue (thousands) a/	Current Toll Schedule: Toll Per Panama Canal Net Ton	Current Toll Schedule: Toll Per Cargo Ton Carried	New Toll Schedule: Toll Per Panama Canal Net Ton	New Toll Schedule: Toll Per Cargo Ton Carried	Total Transportation Costs per Ton Carried: Via Panama Canal: With Current Toll Structure	Via Panama Canal: With New Toll Structure	Via Panama Canal: Percent Increase	Via Least Costly Alternative Route
General Cargo Ships (continued)											
Non-Diverted Transits (continued)											
Europe-U.S.W.C.	4	18	51	2.41	1.44	3.42	2.04	62.15	62.75	0.97	107.39
Middle East-S.A.W.C.	6	3	50	2.41	1.50	3.42	2.12	73.82	74.44	0.85	102.30
Middle East-U.S.W.C.	7	19	236	2.41	1.39	3.42	1.97	40.94	41.52	1.41	47.45
Oceania-C.A.E.C.	1	7	37	2.41	1.39	3.42	1.97	39.94	40.52	1.45	49.45
Oceania-U.S.E.C.	2	9	31	2.41	1.43	3.42	2.03	57.41	58.01	1.04	69.46
S.A.E.C.-C.A.W.C.	13	261	440	2.41	1.39	3.42	1.97	25.14	25.72	2.30	26.70
S.A.E.C.-Canada W.C.	0	2	9	2.41	1.39	3.42	1.97	35.04	35.62	1.65	38.55
S.A.E.C.-U.S.W.C.	17	77	485	2.41	1.40	3.42	1.98	38.23	38.81	1.52	40.19
S.A.W.C.-Africa	8	149	262	2.41	1.39	3.42	1.97	34.04	34.62	1.70	53.35
S.A.W.C.-Canada E.C.	1	14	29	2.41	1.39	3.42	1.97	28.09	28.67	2.06	35.55
S.A.W.C.-C.A.E.C.	82	361	1,078	2.41	1.45	3.42	2.05	23.90	24.50	2.52	48.57
S.A.W.C.-Europe	171	2,817	5,979	2.41	1.39	3.42	1.97	33.04	33.62	1.75	34.60
S.A.W.C.-Middle East	2	25	59	2.41	1.39	3.42	1.97	35.99	36.57	1.61	42.50
S.A.W.C.-U.S.E.C.	56	430	1,350	2.41	1.40	3.42	1.99	25.31	25.90	2.31	40.80
U.S.E.C.-Asia	74	1,214	2,617	2.41	1.39	3.42	1.96	38.38	38.95	1.51	52.66
U.S.E.C.-C.A.W.C.	103	776	1,652	2.41	1.43	3.42	2.02	14.67	15.26	4.06	60.90
U.S.E.C.-Oceania	6	89	202	2.41	1.39	3.42	1.97	40.94	41.52	1.41	46.45
U.S.E.C.-S.A.W.C.	187	1,336	4,347	2.41	1.41	3.42	1.99	25.45	26.03	2.30	41.52
U.S.E.C.-U.S.W.C.	1	0	7	2.41	1.50	3.42	2.12	35.37	35.99	1.77	122.89
U.S.W.C.-Africa	7	75	231	2.41	1.39	3.42	1.97	36.99	37.57	1.56	47.45
U.S.W.C.-C.A.E.C.	3	1	26	2.41	1.50	3.42	2.12	32.53	33.15	1.92	110.69
U.S.W.C.-Europe	3	25	46	2.41	1.42	3.42	2.01	44.83	45.42	1.32	69.85
U.S.W.C.-S.A.E.C.	8	19	102	2.41	1.45	3.42	2.05	53.26	53.86	1.13	59.12
Subtotal	1,458	13,946	37,649	2.41	1.40	3.41	1.98	30.65	31.23	1.90	46.34

(Continued)

Table C-25. Laden Transits, Tons Carried, Toll Revenue and Toll Rates, Current Toll Structure With 50 Percent Increase in Rates, 250,000 DWT Scenario, 2060, by Ship Type, Diversion Status, and Trade Route (1990 US$, except when noted)(continued)

Ship Type, Diversion Status, and Trade Route	Transits	Cargo Tonnage Carried (thousands)	Revenue (thousands) a/	Current Toll Schedule: Toll Per Panama Canal Net Ton	Current Toll Schedule: Toll Per Cargo Ton Carried	New Toll Schedule: Toll Per Panama Canal Net Ton	New Toll Schedule: Toll Per Cargo Ton Carried	Total Transportation Costs per Ton Carried: Via Panama Canal: With Current Toll Structure	Via Panama Canal: With New Toll Structure	Via Panama Canal: Percent Increase	Via Least Costly Alternative Route
General Cargo Ships (continued)											
Diverted Transits (continued)											
Asia-S.A.E.C.	4	25	162	2.41	1.39	3.42	1.97	45.89	46.47	1.26	46.45
Canada E.C.-Oceania	0	7	9	2.41	1.39	3.42	1.97	47.84	48.42	1.21	47.45
Canada W.C.-Middle East	2	13	35	2.41	1.39	3.42	1.97	42.89	43.47	1.35	42.50
Subtotal	6	45	206	2.41	1.39	3.42	1.97	45.34	45.92	1.28	45.49
Subtotal	1,464	13,991	37,854	2.41	1.40	3.41	1.98	30.69	31.28	1.90	46.34
Liquid Gas Carriers											
Non-Diverted Transits											
C.A.W.C.-C.A.E.C.	10	43	159	2.41	7.30	3.42	10.35	57.30	60.35	5.31	201.00
C.A.E.C.-Asia	10	53	283	2.41	4.67	3.42	6.62	124.16	126.11	1.57	178.06
C.A.E.C.-C.A.W.C.	56	742	3,214	2.41	3.79	3.42	5.37	26.91	28.49	5.88	81.65
C.A.E.C.-S.A.W.C.	4	60	239	2.41	3.83	3.42	5.42	45.83	47.42	3.48	70.00
C.A.E.C.-U.S.W.C.	0	3	10	2.41	3.83	3.42	5.42	51.83	53.42	3.08	109.00
Europe-C.A.W.C.	2	7	34	2.41	7.30	3.42	10.35	129.30	132.35	2.36	234.00
Europe-S.A.W.C.	0	1	4	2.41	3.82	3.42	5.42	76.82	78.42	2.08	82.00
Oceania-U.S.E.C.	4	57	269	2.41	3.62	3.42	5.13	75.10	76.61	2.01	85.98
S.A.E.C.-Asia	2	30	118	2.41	3.83	3.42	5.42	89.83	91.42	1.78	107.00
S.A.E.C.-C.A.W.C.	12	32	187	2.41	7.30	3.42	10.35	115.30	118.35	2.64	132.00
U.S.E.C.-Asia	3	41	189	2.41	3.86	3.42	5.47	94.04	95.65	1.71	139.47
U.S.E.C.-C.A.W.C.	0	1	4	2.41	7.30	3.42	10.35	66.30	69.35	4.59	226.00
U.S.E.C.-S.A.W.C.	1	2	11	2.41	7.30	3.42	10.35	109.30	112.35	2.79	182.00
Subtotal	104	1,071	4,722	2.41	3.99	3.42	5.66	44.45	46.17	3.85	96.49
Passenger Ships											
Non-Diverted Transits											
North-Bound	197	0	3,532	2.41	0.00	3.42	0.00	0.00	0.00	0.00	0.00

(Continued)

Table C-25. Laden Transits, Tons Carried, Toll Revenue and Toll Rates, Current Toll Structure With 50 Percent Increase in Rates, 250,000 DWT Scenario, 2060, by Ship Type, Diversion Status, and Trade Route (1990 US$, except when noted)(continued)

Ship Type, Diversion Status, and Trade Route	Transits	Cargo Tonnage Carried (thousands)	Revenue (thousands) a/	Current Toll Schedule: Toll Per Panama Canal Net Ton	Current Toll Schedule: Toll Per Cargo Ton Carried	New Toll Schedule: Toll Per Panama Canal Net Ton	New Toll Schedule: Toll Per Cargo Ton Carried	Total Transportation Costs per Ton Carried: Via Panama Canal: With Current Toll Structure	Via Panama Canal: With New Toll Structure	Via Panama Canal: Percent Increase	Via Least Costly Alternative Route
Passenger Ships (continued)											
Non-Diverted Transits (continued)											
South-Bound	238	0	6,510	2.41	0.00	3.42	0.00	0.00	0.00	0.00	0.00
Subtotal	435	0	10,041	2.41	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Refrigerated Ships											
Non-Diverted Transits											
Africa-C.A.W.C.	0	0	4	2.41	4.00	3.42	5.67	120.20	121.87	1.39	224.60
Africa-S.A.W.C.	49	21	1,518	2.41	3.94	3.42	5.59	154.50	156.15	1.06	228.37
Asia-C.A.E.C.	25	95	923	2.41	3.86	3.42	5.46	131.86	133.46	1.22	180.00
Asia-S.A.E.C.	7	5	195	2.41	4.00	3.42	5.67	180.00	181.67	0.93	184.20
Asia-U.S.E.C.	1	0	21	2.41	4.00	3.42	5.67	149.60	151.27	1.12	213.60
C.A.W.C.-Africa	2	7	52	2.41	4.00	3.42	5.67	120.20	121.87	1.39	224.60
C.A.W.C.-Canada E.C.	1	5	16	2.41	4.00	3.42	5.67	79.20	80.87	2.11	163.40
C.A.W.C.-C.A.E.C.	39	294	1,449	2.41	3.86	3.42	5.46	52.86	54.46	3.04	132.00
C.A.W.C.-Europe	276	1,493	10,216	2.41	3.86	3.42	5.46	92.86	94.46	1.73	150.00
C.A.W.C.-S.A.E.C.	2	9	47	2.41	4.00	3.42	5.67	94.40	96.07	1.77	103.00
C.A.W.C.-U.S.E.C.	1	2	33	2.41	4.00	3.42	5.67	64.00	65.67	2.61	160.40
Canada E.C.-Asia	15	92	410	2.41	4.00	3.42	5.67	165.80	167.47	1.01	182.60
Canada E.C.-C.A.W.C.	11	31	401	2.41	3.86	3.42	5.46	71.86	73.46	2.24	149.00
Canada W.C.-Europe	4	45	138	2.41	3.86	3.42	5.46	132.86	134.46	1.21	190.00
C.A.E.C.-Asia	13	37	404	2.41	3.93	3.42	5.57	144.92	146.56	1.13	197.33
C.A.E.C.-C.A.W.C.	43	11	1,598	2.41	3.86	3.42	5.46	52.86	54.46	3.04	132.00
C.A.E.C.-S.A.W.C.	93	82	3,450	2.41	3.86	3.42	5.46	75.86	77.46	2.12	107.00
Europe-C.A.W.C.	308	26	11,373	2.41	3.86	3.42	5.46	92.86	94.46	1.73	187.00

(Continued)

Table C-25. Laden Transits, Tons Carried, Toll Revenue and Toll Rates, Current Toll Structure With 50 Percent Increase in Rates, 250,000 DWT Scenario, 2060, by Ship Type, Diversion Status, and Trade Route (1990 US$, except when noted)(continued)

Ship Type, Diversion Status, and Trade Route	Transits	Cargo Tonnage Carried (thousands)	Revenue (thousands) a/	Current Toll Schedule: Toll Per Panama Canal Net Ton	Current Toll Schedule: Toll Per Cargo Ton Carried	New Toll Schedule: Toll Per Panama Canal Net Ton	New Toll Schedule: Toll Per Cargo Ton Carried	Total Transportation Costs per Ton Carried: Via Panama Canal: With Current Toll Structure	Via Panama Canal: With New Toll Structure	Via Panama Canal: Percent Increase	Via Least Costly Alternative Route
Refrigerated Ships (continued)											
Non-Diverted Transits (continued)											
Europe-Canada W.C.	1	1	28	2.41	4.00	3.42	5.67	145.60	147.27	1.15	204.40
Europe-S.A.W.C.	295	278	10,356	2.41	3.88	3.42	5.50	119.82	121.44	1.35	127.10
Europe-U.S.W.C.	18	16	503	2.41	4.00	3.42	5.67	135.40	137.07	1.23	192.20
Middle East-S.A.W.C.	3	6	74	2.41	4.00	3.42	5.67	138.00	139.67	1.21	165.40
Oceania-C.A.E.C.	6	50	180	2.41	4.00	3.42	5.67	157.20	158.87	1.06	196.80
Oceania-U.S.E.C.	53	207	1,531	2.41	3.98	3.42	5.65	160.43	162.10	1.04	183.47
S.A.E.C.-Asia	12	62	326	2.41	4.00	3.42	5.67	146.60	148.27	1.14	172.00
S.A.W.C.-Africa	27	111	843	2.41	3.94	3.42	5.59	130.08	131.73	1.26	205.85
S.A.W.C.-C.A.E.C.	40	241	1,450	2.41	3.86	3.42	5.48	76.48	78.10	2.11	107.85
S.A.W.C.-Europe	1,101	6,815	37,657	2.41	3.89	3.42	5.52	119.88	121.51	1.35	127.15
S.A.W.C.-Middle East	5	18	135	2.41	4.00	3.42	5.67	138.00	139.67	1.21	165.40
S.A.W.C.-U.S.E.C.	808	3,821	28,517	2.41	3.88	3.42	5.49	82.93	84.54	1.95	122.50
U.S.E.C.-Asia	46	189	1,620	2.41	3.87	3.42	5.49	139.10	140.72	1.16	198.29
U.S.E.C.-C.A.W.C.	70	196	2,572	2.41	3.86	3.42	5.46	57.86	59.46	2.78	146.00
U.S.E.C.-S.A.W.C.	423	892	15,305	2.41	3.87	3.42	5.48	82.19	83.80	1.96	121.46
U.S.W.C.-Europe	140	804	4,302	2.41	3.95	3.42	5.60	134.45	136.10	1.23	190.92
U.S.W.C.-S.A.E.C.	2	6	54	2.41	3.98	3.42	5.64	131.22	132.88	1.27	135.82
Subtotal	3,937	15,968	137,700	2.41	3.88	3.42	5.50	105.63	107.26	1.53	134.95
Refrigerated Ships											
Diverted Transits											
Africa-Asia	46	292	926	2.41	4.00	3.42	5.67	173.40	175.07	0.96	173.00
Subtotal	46	292	926	2.41	4.00	3.42	5.67	173.40	175.07	0.96	173.00
Subtotal	3,983	16,260	138,627	2.41	3.88	3.42	5.50	106.85	108.47	1.52	135.63

(Continued)

Table C-25. Laden Transits, Tons Carried, Toll Revenue and Toll Rates, Current Toll Structure With 50 Percent Increase in Rates, 250,000 DWT Scenario, 2060, by Ship Type, Diversion Status, and Trade Route (1990 US$, except when noted)(continued)

Ship Type, Diversion Status, and Trade Route	Transits	Cargo Tonnage Carried (thousands)	Revenue (thousands) a/	Current Toll Schedule: Toll Per Panama Canal Net Ton	Current Toll Schedule: Toll Per Cargo Ton Carried	New Toll Schedule: Toll Per Panama Canal Net Ton	New Toll Schedule: Toll Per Cargo Ton Carried	Total Transportation Costs per Ton Carried, Via Panama Canal: With Current Toll Structure	Total Transportation Costs per Ton Carried, Via Panama Canal: With New Toll Structure	Total Transportation Costs per Ton Carried, Via Panama Canal: Percent Increase	Total Transportation Costs per Ton Carried: Via Least Costly Alternative Route
Roll-On Roll-Off (continued)											
Non-Diverted Transits (continued)											
Asia-Canada E.C.	3	15	146	2.41	9.35	3.42	13.25	298.90	302.80	1.30	324.43
Asia-C.A.E.C.	32	633	3,319	2.41	7.92	3.42	11.23	236.83	240.14	1.40	268.32
Asia-U.S.E.C.	67	1,286	6,717	2.41	7.95	3.42	11.27	248.85	252.17	1.33	304.22
C.A.W.C.-Europe	33	177	1,965	2.41	8.66	3.42	12.27	198.66	202.27	1.82	280.00
C.A.W.C.-U.S.E.C.	3	1	153	2.41	8.66	3.42	12.27	170.66	174.27	2.12	273.00
Canada E.C.-Asia	17	85	763	2.41	9.30	3.42	13.18	355.27	359.15	1.09	370.17
Canada W.C.-C.A.E.C.	0	1	17	2.41	10.19	3.42	14.44	239.87	244.12	1.77	394.39
C.A.E.C.-C.A.W.C.	1	2	39	2.41	9.72	3.42	13.77	167.54	171.59	2.42	296.40
C.A.E.C.-Oceania	7	20	421	2.41	8.66	3.42	12.27	275.66	279.27	1.31	332.00
C.A.E.C.-S.A.W.C.	85	149	2,963	2.41	10.19	3.42	14.45	232.93	237.19	1.83	280.17
Europe-C.A.W.C.	35	221	2,079	2.41	8.66	3.42	12.27	198.66	202.27	1.82	350.00
Europe-S.A.W.C.	0	0	4	2.41	8.67	3.42	12.28	262.67	266.28	1.38	303.00
Europe-U.S.W.C.	1	3	36	2.41	8.66	3.42	12.27	262.66	266.27	1.38	350.00
Oceania-C.A.E.C.	0	0	1	2.41	7.97	3.42	11.29	234.97	238.29	1.41	273.80
S.A.W.C.-C.A.E.C.	22	44	766	2.41	10.19	3.42	14.45	232.93	237.19	1.83	280.17
S.A.W.C.-Europe	2	5	101	2.41	8.66	3.42	12.27	262.66	266.27	1.38	311.00
S.A.W.C.-U.S.E.C.	12	25	418	2.41	10.19	3.42	14.45	224.99	229.25	1.89	292.08
U.S.E.C.-Asia	14	93	847	2.41	8.64	3.42	12.24	298.20	301.80	1.21	378.28
U.S.E.C.-C.A.W.C.	4	7	243	2.41	8.66	3.42	12.27	144.66	148.27	2.50	273.00
U.S.E.C.-S.A.W.C.	57	101	1,996	2.41	10.19	3.42	14.45	224.99	229.25	1.89	292.08
U.S.W.C.-Canada E.C.	1	2	25	2.41	10.20	3.42	14.45	263.70	267.95	1.61	414.27
U.S.W.C.-C.A.E.C.	2	48	246	2.41	7.75	3.42	10.98	160.82	164.05	2.01	232.64
U.S.W.C.-Europe	0	1	3	2.41	7.77	3.42	11.01	212.68	215.92	1.52	267.50

(Continued)

Table C-25. Laden Transits, Tons Carried, Toll Revenue and Toll Rates, Current Toll Structure With 50 Percent Increase in Rates, 250,000 DWT Scenario, 2060, by Ship Type, Diversion Status, and Trade Route (1990 US$, except when noted)(continued)

Ship Type, Diversion Status, and Trade Route	Transits	Cargo Tonnage Carried (thousands)	Revenue (thousands) a/	Current Toll Schedule: Toll Per Panama Canal Net Ton	Current Toll Schedule: Toll Per Cargo Ton Carried	New Toll Schedule: Toll Per Panama Canal Net Ton	New Toll Schedule: Toll Per Cargo Ton Carried	Total Transportation Costs per Ton Carried: Via Panama Canal: With Current Toll Structure	Via Panama Canal: With New Toll Structure	Via Panama Canal: Percent Increase	Via Least Costly Alternative Route
Roll-On Roll-Off (continued)											
Non-Diverted Transits (continued)											
U.S.W.C.-U.S.E.C.	0	9	45	2.41	7.86	3.42	11.14	159.45	162.73	2.06	255.79
Subtotal	397	2,929	23,313	2.41	8.68	3.42	12.30	240.41	243.90	1.45	299.63
Roll-On Roll-Off											
Diverted Transits											
C.A.W.C.-S.A.E.C.	0	0	3	2.41	8.66	3.42	12.27	211.66	215.27	1.71	211.00
Canada E.C.-Oceania	3	61	184	2.41	7.77	3.42	11.00	251.49	254.72	1.29	249.02
Subtotal	3	61	188	2.41	7.78	3.42	11.02	251.24	254.48	1.29	248.78
Subtotal	400	2,990	23,501	2.41	8.67	3.42	12.28	240.63	244.12	1.45	298.58
Tankers											
Non-Diverted Transits											
Africa-U.S.W.C.	0	0	0	2.41	1.27	3.42	1.80	18.27	18.80	2.91	24.00
Asia-U.S.E.C.	3	77	134	2.41	1.27	3.42	1.80	27.11	27.64	1.95	38.76
C.A.W.C.-Africa	0	0	2	2.41	1.27	3.42	1.80	46.27	46.80	1.14	100.00
C.A.W.C.-Canada E.C.	0	8	14	2.41	1.27	3.42	1.80	12.21	12.74	4.33	28.82
C.A.W.C.-C.A.E.C.	16	95	449	2.41	1.27	3.42	1.80	10.26	10.79	5.16	34.99
C.A.W.C.-Europe	4	94	181	2.41	1.27	3.42	1.80	17.17	17.70	3.08	28.84
C.A.W.C.-U.S.E.C.	10	80	280	2.41	1.27	3.42	1.80	11.18	11.71	4.73	37.36
Canada E.C.-Asia	18	707	1,184	2.41	1.27	3.42	1.80	25.06	25.59	2.11	27.21
Canada W.C.-U.S.E.C.	6	255	480	2.41	1.28	3.42	1.82	13.76	14.30	3.88	26.23
C.A.E.C.-Asia	5	141	286	2.41	1.27	3.42	1.79	22.36	22.88	2.36	31.40
C.A.E.C.-C.A.W.C.	45	750	1,912	2.41	1.27	3.42	1.80	7.38	7.91	7.17	22.70

(Continued)

Table C-25. Laden Transits, Tons Carried, Toll Revenue and Toll Rates, Current Toll Structure With 50 Percent Increase in Rates, 250,000 DWT Scenario, 2060, by Ship Type, Diversion Status, and Trade Route (1990 US$, except when noted)(continued)

Ship Type, Diversion Status, and Trade Route	Transits	Cargo Tonnage Carried (thousands)	Revenue (thousands) a/	Current Toll Schedule: Toll Per Panama Canal Net Ton	Current Toll Schedule: Toll Per Cargo Ton Carried	New Toll Schedule: Toll Per Panama Canal Net Ton	New Toll Schedule: Toll Per Cargo Ton Carried	Total Transportation Costs per Ton Carried: Via Panama Canal: With Current Toll Structure	Via Panama Canal: With New Toll Structure	Via Panama Canal: Percent Increase	Via Least Costly Alternative Route
Tankers (continued)											
Non-Diverted Transits (continued)											
C.A.E.C.-S.A.W.C.	46	887	1,847	2.41	1.27	3.42	1.80	13.34	13.87	3.97	20.04
C.A.E.C.-U.S.W.C.	5	228	406	2.41	1.27	3.42	1.80	11.93	12.46	4.43	23.43
Europe-C.A.W.C.	17	81	233	2.41	1.27	3.42	1.80	24.95	25.48	2.12	44.78
Europe-S.A.W.C.	4	82	146	2.41	1.27	3.42	1.80	23.34	23.87	2.27	25.18
Europe-U.S.W.C.	4	109	194	2.41	1.27	3.42	1.80	22.50	23.03	2.35	32.22
Oceania-U.S.E.C.	9	162	317	2.41	1.27	3.42	1.80	28.05	28.58	1.89	32.60
S.A.E.C.-Asia	64	14,050	22,302	2.41	1.27	3.42	1.80	12.29	12.82	4.30	16.31
S.A.E.C.-C.A.W.C.	68	3,130	6,786	2.41	1.26	3.42	1.79	10.89	11.42	4.84	11.68
S.A.W.C.-Canada E.C.	1	14	27	2.41	1.27	3.42	1.80	20.47	21.00	2.58	27.25
S.A.W.C.-C.A.E.C.	15	557	1,032	2.41	1.27	3.42	1.80	10.99	11.52	4.81	15.42
S.A.W.C.-Europe	19	173	316	2.41	1.27	3.42	1.80	28.01	28.54	1.89	30.35
S.A.W.C.-U.S.E.C.	17	607	1,096	2.41	1.27	3.42	1.80	11.71	12.24	4.52	18.51
U.S.E.C.-Asia	90	2,946	5,336	2.41	1.27	3.42	1.79	22.71	23.23	2.33	32.54
U.S.E.C.-C.A.W.C.	14	260	600	2.41	1.27	3.42	1.80	9.23	9.76	5.73	28.15
U.S.E.C.-Canada W.C.	2	7	87	2.41	1.27	3.42	1.80	18.17	18.70	2.91	35.78
U.S.E.C.-Oceania	4	129	235	2.41	1.27	3.42	1.80	26.02	26.55	2.03	30.19
U.S.E.C.-S.A.W.C.	3	49	96	2.41	1.27	3.42	1.80	13.63	14.16	3.88	21.94
U.S.E.C.-U.S.W.C.	21	601	1,164	2.41	1.27	3.42	1.80	14.06	14.59	3.76	30.95
U.S.W.C.-Africa	10	334	738	2.41	1.26	3.42	1.79	16.39	16.92	3.21	20.19
U.S.W.C.-C.A.E.C.	3	96	197	2.41	1.26	3.42	1.79	11.90	12.43	4.43	23.13
U.S.W.C.-U.S.E.C.	4	102	216	2.41	1.27	3.42	1.79	13.36	13.88	3.95	29.10
Subtotal	526	26,815	48,291	2.41	1.27	3.41	1.80	14.03	14.55	3.77	19.67
Tankers											
Diverted Transits											
Middle East-U.S.W.C.	0	0	0	2.41	1.25	3.42	1.77	1.63	2.15	31.96	0.48

(Continued)

Table C-25. Laden Transits, Tons Carried, Toll Revenue and Toll Rates, Current Toll Structure With 50 Percent Increase in Rates, 250,000 DWT Scenario, 2060, by Ship Type, Diversion Status, and Trade Route (1990 US$, except when noted)(continued)

Ship Type, Diversion Status, and Trade Route	Transits	Cargo Tonnage Carried (thousands)	Revenue (thousands) a/	Current Toll Schedule: Toll Per Panama Canal Net Ton	Current Toll Schedule: Toll Per Cargo Ton Carried	New Toll Schedule: Toll Per Panama Canal Net Ton	New Toll Schedule: Toll Per Cargo Ton Carried	Total Transportation Costs per Ton Carried: Via Panama Canal: With Current Toll Structure	Via Panama Canal: With New Toll Structure	Via Panama Canal: Percent Increase	Via Least Costly Alternative Route
Tankers (continued)											
Diverted Transits (continued)											
S.A.E.C.-U.S.W.C.	27	978	1,569	2.41	1.27	3.42	1.80	18.67	19.20	2.83	18.82
U.S.W.C.-S.A.E.C.	1	29	40	2.41	1.27	3.42	1.80	18.76	19.29	2.82	18.90
Subtotal	27	1,006	1,609	2.41	1.27	3.42	1.80	18.67	19.20	2.83	18.82
Subtotal	553	27,821	49,900	2.41	1.27	3.41	1.80	14.19	14.72	3.72	19.64
Vehicle Carriers											
Non-Diverted Transits											
Asia-C.A.E.C.	13	34	1,317	2.41	29.09	3.42	41.22	417.18	429.31	2.91	496.39
Asia-U.S.E.C.	481	2,251	53,642	2.41	29.20	3.42	41.37	439.57	451.74	2.77	516.31
C.A.W.C.-C.A.E.C.	3	3	176	2.41	28.71	3.42	40.69	266.36	278.34	4.50	440.99
C.A.E.C.-C.A.W.C.	8	3	961	2.41	29.22	3.42	41.41	272.22	284.41	4.48	411.00
C.A.E.C.-Oceania	1	0	112	2.41	29.22	3.42	41.41	434.22	446.41	2.81	482.00
Europe-Canada W.C.	7	16	1,091	2.41	30.90	3.42	43.78	386.38	399.26	3.33	457.44
Europe-U.S.W.C.	156	299	20,440	2.41	29.95	3.42	42.43	403.00	415.48	3.10	458.96
S.A.W.C.-C.A.E.C.	0	0	12	2.41	28.70	3.42	40.66	323.70	335.66	3.70	380.00
U.S.E.C.-Asia	42	192	5,209	2.41	29.67	3.42	42.05	415.80	428.18	2.98	510.17
U.S.E.C.-Oceania	13	30	1,447	2.41	29.22	3.42	41.41	433.22	445.41	2.81	453.00
Subtotal	723	2,828	84,408	2.41	29.42	3.42	41.69	433.09	445.32	2.82	508.39
Vehicle Carriers											
Diverted Transits											
Asia-S.A.E.C.	0	0	7	2.41	29.13	3.42	41.28	484.18	496.33	2.51	468.49
Canada E.C.-Asia	1	3	35	2.41	29.22	3.42	41.41	465.22	477.41	2.62	456.00
Subtotal	1	3	42	2.41	29.20	3.41	41.38	466.92	479.10	2.61	457.12
Subtotal	724	2,831	84,450	2.41	29.42	3.42	41.69	433.13	445.35	2.82	508.34

(Continued)

Table C-25. Laden Transits, Tons Carried, Toll Revenue and Toll Rates, Current Toll Structure With 50 Percent Increase in Rates, 250,000 DWT Scenario, 2060, by Ship Type, Diversion Status, and Trade Route (1990 US$, except when noted)(continued)

Ship Type, Diversion Status, and Trade Route	Transits	Cargo Tonnage Carried (thousands)	Revenue (thousands) a/	Current Toll Schedule: Toll Per Panama Canal Net Ton	Current Toll Schedule: Toll Per Cargo Ton Carried	New Toll Schedule: Toll Per Panama Canal Net Ton	New Toll Schedule: Toll Per Cargo Ton Carried	Total Transportation Costs per Ton Carried: Via Panama Canal: With Current Toll Structure	Via Panama Canal: With New Toll Structure	Via Panama Canal: Percent Increase	Via Least Costly Alternative Route
Total Non-Diverting	17,423	447,212	1,140,196	2.41	1.80	3.42	2.56	45.00	45.78	1.73	55.50
Total Diverting	456	18,287	30,644	2.41	1.33	3.42	1.88	21.72	22.29	2.62	21.89

Notes: These calculations do not include all transits and tons carried forecast by the WEFA Group. For some ship-type and trade-route combinations (accounting for a total of 27 transits and 291695 tons), vessel costs were not available for every DWT size interval. As a result, these transits and tons were excluded. In addition, for 2480 transits and 49528628 tons, the cost by way of the Panama Canal without a toll was higher than the least costly alternative route. As a result, these transits and tons were excluded. Percentages may not calculate exactly as shown due to rounding. A fee of $0.40 per Panama Canal net ton has also been included to account for charges such as handling and agency fees incurred when transitting the Canal. The extra fee is only used to determine divesion status by adding it to the cost per ton carried and is not included in the revenue calculations.

a/ Revenue lost from diversions is measured as the revenue generated by the maximum, nondiverting toll rate increase.

Source: Nathan Associates Inc., based on forecasts of traffic and transportation costs provided by The WEFA Group.