

SENSITIVITY ANALYSIS RESULTS – BASE CASE

Variables

Base Case			
Debt Financing (Real)	8.0%		Annual to Peak Hour Design factor
Long Term Inflation	2.5%		Safety Margin
Equity Real	11.0%		Auto - Peak duration - days
Equity Tax Rate	40.0%		Auto - Peak proportion of total
Equity Pre Tax - Real	18.3%		Auto - Peak hours/day
Equity PreTax - Nominal	22.5%		Auto - Peak % of PADT
			Auto Conv. Factor
% debt financed	0.0%		Truck - Peak duration days
% equity financed	0.0%		Truck - Peak Proportion of total
Nominal Grant \$ Millions	\$1,360		Truck - Peak hours/day
Blended Cost of Capital - Real	0.0%		Truck - Peak % of PADT
Blended Cost of Capital - Nominal	0.0%		Truck - Conv. Factor
Financing during Construction	5.0%		Auto Lab - Traditional Growth
			Tourist Lab - Traditional Growth
Social Discount Rate - Nominal	10.0%		Truck Lab - Traditional Growth
Social Discount Rate - Real	7.5%		Auto Lab - Incremental Growth
Grant Discount Rate	0.0%		Auto Tourist - Incremental GR.
			Total Lab - Veh Growth
Standard PY (FTE) hours	1850		Total Lab - % trucks
			Truck Lab- Incremental Growth
Marine Atlantic Productivity			Auto Lab - Surge
Improvement factor			Truck Lab - Surge
Wages	50.0%		Auto Cabot - Traditional Growth
Fuel	10.0%		Truck Cabot - Traditional Growth
Supplies	50.0%		Auto - Diversion from Cabot
Weighted Average	43.9%		Truck - Diversion from Cabot
			Auto exCabot- Incremental Growth
Car Occupancy (in # of Adults)	2.67		Truck exCabot - Incremental Growth
			Auto exCabot - Surge
Construction Wages % of cost	30%		Truck exCabot - Surge
			Total Vehicle trips - Cabot Trad
Tolls			Cabot Rev/pass veh
Per auto	30.5		Cabot Rev/truck
Per other pass.	10		
Per tractor-trailer	161.25		

			Unit Toll % of Base Case Value			Traditional Market Growth Rate			Incremental Growth Rate			Diversion		
Results		Base Case	50.0%	150.0%	200.0%	1.0%	3.0%	5.0%	2.5%	5.0%	7.5%	0.0%	5.0%	15.0%
Operating Cash Flow	NPV	-647,922,996	-670,901,503	-624,944,489	-601,965,983	-656,004,538	-643,975,751	-625,263,591	-643,534,409	-634,655,348	-623,670,915	-676,970,747	-662,446,871	-633,399,121
	IRR	-9.53%	#DIV/0!	-6.60%	-4.84%	-13.27%	-8.49%	-5.42%	-8.56%	-6.93%	-5.37%	#DIV/0!	#DIV/0!	-7.48%
	Benefit/Cost	0.07	0.03	0.10	0.13	0.05	0.07	0.10	0.07	0.09	0.10	0.02	0.05	0.09
Direct Economic Impact	NPV	-559,155,170	-582,133,677	-536,176,664	-513,198,157	-557,989,554	-559,081,189	-561,416,181	-554,766,583	-545,887,522	-534,903,089	-537,737,132	-548,446,151	-569,864,190
	IRR	-5.28%	-6.66%	-4.11%	-3.09%	-5.27%	-5.25%	-5.30%	-4.98%	-4.33%	-3.51%	-4.06%	-4.64%	-5.98%
	Benefit/Cost	0.19	0.16	0.23	0.26	0.20	0.19	0.19	0.20	0.21	0.23	0.23	0.21	0.18
With Indirect and Induced Impacts	NPV	-333,459,458	-356,437,964	-310,480,951	-287,502,445	-332,725,835	-333,497,005	-335,276,521	-323,523,813	-296,780,053	-258,504,830	-365,516,918	-349,488,188	-317,430,728
	IRR	-1.42%	-2.53%	-0.44%	0.44%	-1.44%	-1.41%	-1.42%	-0.83%	0.63%	2.27%	-2.72%	-2.05%	-0.82%
	Benefit/Cost	0.52	0.49	0.55	0.59	0.52	0.52	0.52	0.53	0.57	0.63	0.47	0.50	0.54

			Capital Costs % of Base Case				Operating Costs % of Base Case		
Results		Original	-30%	-15%	15%	30%	50%	150%	200%
Operating Cash Flow	NPV	-647,922,996	-449,019,117	-548,471,057	-747,374,936	-846,826,875	-632,489,456	-663,356,536	-678,790,075
	IRR	-9.53%	-8.33%	-8.99%	-9.99%	-10.39%	-11.77%	-8.16%	-7.16%
	Benefit/Cost	0.07	0.09	0.08	0.06	0.05	0.07	0.06	0.06
Direct Economic Impact	NPV	-559,155,170	-360,251,291	-459,703,231	-658,607,110	-758,059,049	-543,721,631	-574,588,710	-590,022,250
	IRR	-5.28%	-4.15%	-4.77%	-5.71%	-6.08%	-5.76%	-4.84%	-4.42%
	Benefit/Cost	0.19	0.27	0.23	0.17	0.15	0.20	0.19	0.19
With Indirect and Induced Impacts	NPV	-333,459,458	-134,555,579	-234,007,518	-432,911,397	-532,363,337	-320,200,967	-346,717,949	-359,976,440
	IRR	-1.42%	1.42%	-0.28%	-2.20%	-2.85%	-0.81%	-1.99%	-2.64%
	Benefit/Cost	0.52	0.73	0.61	0.45	0.40	0.53	0.51	0.50
Financing	Total Amt. To Finance	1,707,787,952	1,195,451,566	1,451,619,759	1,963,956,145	2,220,124,338	1,707,787,952	1,707,787,952	1,707,787,952
	Grant Amount	1,395,000,000	960,000,000	1,180,000,000	1,615,000,000	1,830,000,000	1,340,000,000	1,449,000,000	n/a
	IRR on project costs	8.0%	8.0%	8.4%	8.4%	8.0%	8.1%	3.0%	n/a

			Nominal Social Discount Rate				
Results		Original	4.0%	6.0%	8.0%	10.0%	12.0%
Operating Cash Flow	NPV	-647,922,996	-984,640,405	-858,432,186	-745,872,604	-647,922,996	-563,636,529
	IRR	-9.53%	-9.53%	-9.53%	-9.53%	-9.53%	-9.53%
	Benefit/Cost	0.07	0.17	0.12	0.09	0.07	0.05
Direct Economic Impact	NPV	-559,155,170	-829,396,451	-737,273,212	-643,553,095	-559,155,170	-486,404,183
	IRR	-5.28%	-5.28%	-5.28%	-5.28%	-5.28%	-5.28%
	Benefit/Cost	0.19	0.30	0.24	0.21	0.19	0.18
With Indirect and Induced Impacts	NPV	-333,459,458	-325,029,272	-367,116,721	-359,460,061	-333,459,458	-302,354,102
	IRR	-1.42%	-1.42%	-1.42%	-1.42%	-1.42%	-1.42%
	Benefit/Cost	0.52	0.72	0.62	0.56	0.52	0.49
Financing	Total Amt. To Finance	1,707,787,952					
	Grant Amount	1,395,000,000					
	IRR on project costs	8.0%					

			Interest During Construction				Inflation Rate		
Results		Original	2.5%	7.5%	10.0%	1.0%	2.0%	4.0%	5.5%
Operating Cash Flow	NPV	-647,922,996	-647,922,996	-647,922,996	-647,922,996	-583,509,141	-625,626,986	-720,033,612	-800,318,280
	IRR	-9.53%	-9.53%	-9.53%	-9.53%	-9.53%	-9.53%	-9.53%	-9.53%
	Benefit/Cost	0.07	0.07	0.07	0.07	0.05	0.06	0.08	0.10
Direct Economic Impact	NPV	-559,155,170	-559,155,170	-559,155,170	-559,155,170	-503,512,895	-539,874,591	-621,403,245	-689,624,191
	IRR	-5.28%	-5.28%	-5.28%	-5.28%	-5.28%	-5.28%	-5.28%	-5.28%
	Benefit/Cost	0.19	0.19	0.19	0.19	0.18	0.19	0.21	0.23
With Indirect and Induced Impacts	NPV	-333,459,458	-333,459,458	-333,459,458	-333,459,458	-310,234,162	-325,864,248	-353,961,865	-366,932,552
	IRR	-1.42%	-1.42%	-1.42%	-1.42%	-1.42%	-1.42%	-1.42%	-1.42%
	Benefit/Cost	0.52	0.52	0.52	0.52	0.50	0.51	0.55	0.59
Financing	Total Amt. To Finance	1,707,787,952	1,573,548,963	1,853,946,116	2,013,109,759	1,516,869,042	1,641,790,856	1,920,913,413	2,158,595,010
	Grant Amount	1,395,000,000	1,395,000,000	1,395,000,000	1,395,000,000	1,245,000,000	1,345,000,000	1,556,000,000	1,725,000,000
	IRR on project costs	8.0%	8.1%	7.9%	7.8%	7.8%	8.2%	8.0%	8.0%

ECONOMIC ANALYSIS WORKSHEETS – BASE CASE WITH HVDC INCOME

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Economic Methodology for Fixed Link Project																										
				Phase 1 - Planning Approval					Phase 2 - Design & Construction																	
				1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21		
		Internal Rate of Return	7.6%	0	0	0	0	0	0	0	0	0	-280,564,565	-246,002,277	35,559,365	36,673,833	37,828,106	39,023,836	40,262,753	41,546,670	42,534,366	44,257,208	45,687,913	46,482,122		
Section 3 - Socio-Economic Impact				1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21		
Construction Effects																										
	Construction Spending	Annual Civil & M&E		11,000,000	2,000,000	2,000,000	24,975,000	24,975,000	121,888,283	194,992,658	232,244,820	160,662,375	141,111,353	72,895,052												
		Direct GDP	34.0%	3,740,000	680,000	680,000	8,491,500	8,491,500	41,442,016	66,297,504	78,963,239	54,625,207	47,977,860	24,784,318												
		Indirect	63.0%	2,356,200	428,400	428,400	5,349,645	5,349,645	26,108,470	41,767,427	49,746,840	34,413,881	30,226,052	15,614,120												
		Induced	15.0%	914,430	166,260	166,260	2,076,172	2,076,172	10,132,573	16,209,740	19,306,512	13,355,863	11,730,587	6,059,766												
		Indirect plus induced GNP impact		3,270,630	594,660	594,660	7,425,817	7,425,817	36,241,043	57,977,167	69,053,352	47,769,744	41,956,638	21,673,886												
		Net Present Value	166,971,243	3,042,447	514,579	478,678	5,560,456	5,172,517	23,482,801	34,946,022	38,718,369	24,915,909	20,357,106	9,782,361												
		Annual Costs													4,555,581	4,555,581	4,555,581	4,555,581	4,555,581	4,555,581	4,775,581	4,555,581	4,555,581	4,966,206		
Operations Impacts	Operations Costs	Direct GDP	34.0%												1,548,898	1,548,898	1,548,898	1,548,898	1,548,898	1,548,898	1,623,698	1,548,898	1,548,898	1,688,510		
		Indirect	23.0%												356,246	356,246	356,246	356,246	356,246	356,246	373,450	356,246	388,357			
		Induced	15.0%												285,772	285,772	285,772	285,772	285,772	285,772	299,572	285,772	311,530			
		Indirect plus induced GNP impact													642,018	642,018	642,018	642,018	642,018	642,018	673,023	642,018	699,887			
		Net Present Value	4,350,097												269,554	250,748	233,254	216,980	201,842	187,760	183,095	162,475	151,139	153,268		
Tourism Impacts	Tourist Indicators	Induced Visitors -- trip add-on	1												54,520	56,126	57,785	59,500	61,274	63,109	65,006	66,969	69,000	71,101		
		Induced Visitors -- full trip	11												16,287	16,532	16,780	17,031	17,287	17,546	17,809	18,076	18,347	18,623		
		Incremental Room nights	2	6,500	6,728	6,963	7,207	7,459	7,720	7,990	8,270	8,559	8,859	9,169	116,840	118,986	121,180	123,422	125,714	128,057	130,454	132,904	135,411	137,976		
		Incre.Annual Expenditures Tourists	62.3%												14,569,953	14,837,609	15,111,147	15,390,735	15,676,547	15,968,765	16,267,575	16,573,173	16,885,760	17,205,547		
		Direct GDP	35.0%												5,099,484	5,193,163	5,288,902	5,386,757	5,486,792	5,589,068	5,693,651	5,800,610	5,910,016	6,021,941		
		Indirect	44.0%												2,243,773	2,284,992	2,327,117	2,370,173	2,414,188	2,459,190	2,505,207	2,552,269	2,600,407	2,649,654		
		Induced	15.0%												1,101,488	1,121,723	1,142,403	1,163,540	1,185,147	1,207,239	1,229,829	1,252,932	1,276,563	1,300,739		
		Total													8,444,745	8,599,878	8,758,421	8,920,470	9,086,127	9,255,496	9,428,686	9,605,811	9,786,987	9,972,335		
		Net Present Value	54,374,372												3,545,561	3,358,786	3,182,052	3,014,816	2,856,560	2,706,798	2,565,068	2,430,934	2,303,985	2,183,831		
		TOTAL OTHER IMPACTS		Net Present Value - Real	225,695,712	3,042,447	514,579	478,678	5,560,456	5,172,517	23,482,801	34,946,022	38,718,369	24,915,909	20,357,106	9,782,361	3,815,115	3,609,533	3,415,306	3,231,796	3,058,402	2,894,558	2,748,163	2,593,409	2,455,125	2,337,099
Social Impacts																										
	Employment	Construction & Operations																								
		NL - Skilled		0	0	0	0	0	192	229	257	201	247	182	25	25	25	25	25	25	25	25	25	25		
		NL - Unskilled		0	0	0	0	0	166	233	278	184	202	102	15	15	15	15	15	15	15	15	15	15		
		Non-res		0	0	0	0	0	0	19	29	24	4	2	0	0	0	0	0	0	0	0	0	0		
		Total NL Direct Employment		0	0	0	0	0	358	462	535	385	449	284	40	40	40	40	40	40	40	40	40	40		
		Indirect Construction Employment		0.63	0	0	0	0	226	291	337	243	283	179	25	25	25	25	25	25	25	25	25	25		
		Induced Construction Employment		0.3	0	0	0	0	175	226	262	188	220	139	20	20	20	20	20	20	20	20	20	20		
		Total Annual FTE Employment			0	0	0	0	759	979	1,134	816	951	602	85	85	85	85	85	85	85	85	85	85		
		Tourism																								
		Total Incremental Spending													14,569,953	14,837,609	15,111,147	15,390,735	15,676,547	15,968,765	16,267,575	16,573,173	16,885,760	17,205,547		
		Incremental FTE - Direct		12.8											186	190	193	197	201	204	208	212	216	220		
		Incremental FTE - Indirect		0.24																						
		Incremental FTE - Induced		0.15																						
		Total Impact		18.3											266	271	276	281	286	291	297	303	308	314		
		TOTAL RELATED EMPLOYMENT				0	0	0	759	979	1,134	816	951	602	351	356	361	366	371	376	382	387	393	399		
			Wages	Construction & Operations																						
				Direct Payroll			3,300,000	600,000	600,000	7,492,500	7,492,500	36,566,485	58,497,797	69,673,446	48,198,712	42,333,406	21,868,515	3,988,000	3,988,000	3,988,000	3,988,000	3,988,000	3,988,000	3,988,000	3,988,000	3,988,000
				Indirect Construction Employment		0.53	1,749,000	318,000	318,000	3,971,025	3,971,025	19,380,237	31,003,833	36,926,926	25,545,318	22,436,705	11,590,313	2,113,640	2,113,640	2,113,640	2,113,640	2,113,640	2,113,640	2,113,640	2,113,640	2,113,640
				Induced Construction Employment		0.3	1,514,700	275,400	275,400	3,439,058	3,439,058	16,784,017	26,850,489	31,980,112	22,123,209	19,431,033	10,037,649	1,830,492	1,830,492	1,830,492	1,830,492	1,830,492	1,830,492	1,830,492	1,830,492	1,830,492
				Sub-Total Wages			6,563,700	1,193,400	1,193,400	14,902,583	14,902,583	72,730,738	116,352,119	138,580,484	95,867,239	84,201,144	43,496,477	7,932,132	7,932,132	7,932,132	7,932,132	7,932,132	7,932,132	7,932,132	7,932,132	7,932,132
				Tourism																						
				Increment																						

Indirect Transportation																											
Marine Atlantic Impacts	Passenger Vehicles																										
		Base Projection # Vehicle trips	2.50%	260,288	266,795	273,465	280,302	287,309	294,492	301,854	309,401	317,136	325,064	333,191	341,521	350,059	358,810	367,780	376,975	386,399	396,059	405,961				416,110	
		Vehicle-trips diverted	10%	-26,029	-26,680	-27,347	-28,030	-28,731	-29,449	-30,185	-30,940	-31,714	-32,506	-33,319	-34,152	-35,006	-35,881	-36,778	-37,697	-38,640	-39,606	-40,596	-41,611				
		Net Vehicle trips		234,259	240,116	246,119	252,272	258,578	265,043	271,669	278,461	285,422	292,558	299,872	307,369	315,053	322,929	331,002	339,277	347,759	356,453	365,365	374,499				
		Passenger Vehicle Revenue \$	148	34,670,383	35,537,142	36,425,571	37,336,210	38,269,615	39,226,356	40,207,015	41,212,190	42,242,495	43,298,557	44,381,021	45,490,547	46,627,810	47,793,506	48,988,343	50,213,052	51,468,378	52,755,087	54,073,965	55,425,814				
	Freight tractor-trailer																										
		Base Projection Tractor-trailer	2/3	159,451	163,437	167,523	171,711	176,004	180,404	184,914	189,537	194,275	199,132	204,110	209,213	214,443	219,804	225,299	230,932	236,705	242,623	248,688	254,906				
		Diverted Freight tractor-trailer	1	-23,918	-24,516	-25,128	-25,757	-26,401	-27,061	-27,737	-28,430	-29,141	-29,870	-30,617	-31,382	-32,166	-32,971	-33,795	-34,640	-35,506	-36,393	-37,303	-38,236				
		Net Freight tractor-trailer		135,533	138,921	142,394	145,954	149,603	153,343	157,177	161,106	165,134	169,262	173,494	177,831	182,277	186,834	191,505	196,292	201,199	206,229	211,385	216,670				
		Net Revenue \$	257.25	34,865,854	35,737,501	36,630,938	37,546,712	38,485,380	39,447,514	40,433,702	41,444,544	42,480,658	43,542,674	44,631,241	45,747,022	46,890,698	48,062,965	49,264,540	50,496,153	51,758,557	53,052,521	54,378,834	55,738,305				
		2.5%	2.5%	2.5%	2.5%	2.5%	2.5%	2.5%	2.5%	2.5%	2.5%	2.5%	2.5%	2.5%	2.5%	2.5%	2.5%	2.5%	2.5%	2.5%	2.5%	2.5%					
Total Operating Cost		111	131,762,579	133,233,891	134,723,155	136,230,594	137,756,435	139,300,906	140,864,239	142,446,670	144,048,434	145,669,774	147,310,932	148,972,156	150,653,694	152,355,800	154,078,730	155,822,743	157,588,100	159,375,069	161,183,918	163,014,918					

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Economic Methodology for Fixed Link Project				Phase 3 - Operation																				
				22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	
		Internal Rate of Return	7.6%	48,004,352	47,713,365	51,223,451	52,925,700	54,693,388	25,711,354	58,436,951	60,419,142	62,479,424	13,283,517	66,848,772	69,165,572	71,575,952	74,084,308	69,081,434	79,413,714	82,244,779	85,193,881	88,266,732	75,336,012	
Section 3 - Socio-Economic Impact				22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	
Construction Effects	Construction Spending	Annual Civil & M&E																						
		Direct GDP	34.0%																					
		Indirect	63.0%																					
		Induced	15.0%																					
		Indirect plus induced GNP impact																						
		Net Present Value	166,971,243																					
Operations Impacts	Operations Costs	Annual Costs		4,966,206	6,026,206	4,966,206	4,966,206	4,966,206	20,788,206	4,966,206	4,966,206	4,966,206	28,844,206	4,966,206	4,966,206	4,966,206	4,966,206	8,096,206	4,966,206	4,966,206	4,966,206	4,966,206	10,828,206	
		Direct GDP	34.0%	1,688,510	2,048,910	1,688,510	1,688,510	1,688,510	7,067,990	1,688,510	1,688,510	1,688,510	9,807,030	1,688,510	1,688,510	1,688,510	1,688,510	2,752,710	1,688,510	1,688,510	1,688,510	1,688,510	3,681,590	
		Indirect	23.0%	388,357	471,249	388,357	388,357	388,357	1,625,638	388,357	388,357	388,357	2,255,617	388,357	388,357	388,357	388,357	633,123	388,357	388,357	388,357	388,357	846,766	
		Induced	15.0%	311,530	378,024	311,530	311,530	311,530	1,304,044	311,530	311,530	311,530	1,809,397	311,530	311,530	311,530	311,530	507,875	311,530	311,530	311,530	311,530	679,253	
		Indirect plus induced GNP impact		699,887	849,273	699,887	699,887	699,887	2,929,682	699,887	699,887	699,887	4,065,014	699,887	699,887	699,887	699,887	1,140,998	699,887	699,887	699,887	699,887	1,526,019	
		Net Present Value	4,350,097	142,575	160,936	123,374	114,767	106,760	415,711	92,383	85,938	79,942	431,916	69,176	64,350	59,861	55,684	84,446	48,185	44,824	41,696	38,787	78,671	
Tourism Impacts	Tourist Indicators	Induced Visitors – trip add-on	1	73,276	75,528	77,859	80,273	82,773	85,363	88,046	90,826	93,708	96,694	99,790	103,001	106,330	109,784	113,366	117,083	120,941	124,945	129,101	133,416	
		Induced Visitors – full trip	11	18,902	19,186	19,473	19,765	20,062	20,363	20,668	20,978	21,293	21,612	21,937	22,266	22,600	22,939	23,283	23,632	23,986	24,346	24,711	25,082	
		Incremental Room nights	2	140,599	143,285	146,033	148,847	151,727	154,677	157,699	160,794	163,965	167,215	170,546	173,961	177,463	181,054	184,738	188,517	192,396	196,376	200,463	204,659	
		Incr. Annual Expenditures Tourists	62.35	17,532,751	17,867,598	18,210,323	18,561,171	18,920,394	19,288,257	19,665,034	20,051,008	20,446,477	20,851,749	21,267,143	21,692,994	22,129,648	22,577,467	23,036,827	23,508,119	23,991,751	24,488,147	24,997,751	25,521,022	
		Direct GDP	35.0%	6,136,463	6,253,659	6,373,613	6,496,410	6,622,138	6,750,890	6,882,762	7,017,853	7,156,267	7,298,112	7,443,508	7,592,548	7,745,377	7,902,114	8,062,889	8,227,842	8,397,113	8,570,852	8,749,213	8,932,358	
		Indirect	44.0%	2,700,644	2,751,610	2,804,390	2,858,420	2,913,741	2,970,392	3,028,415	3,087,855	3,148,757	3,211,169	3,275,140	3,340,721	3,407,966	3,476,930	3,547,671	3,620,250	3,694,730	3,771,175	3,849,654	3,930,237	
		Induced	15.0%	1,325,476	1,350,790	1,376,700	1,403,225	1,430,382	1,458,192	1,486,677	1,515,856	1,545,754	1,576,392	1,607,796	1,639,990	1,673,001	1,706,857	1,741,584	1,777,214	1,813,776	1,851,304	1,889,830	1,929,389	
		Total		10,161,982	10,356,060	10,554,703	10,758,055	10,966,261	11,179,474	11,397,854	11,621,564	11,850,778	12,085,673	12,326,436	12,573,259	12,826,344	13,085,900	13,352,145	13,625,306	13,905,619	14,193,330	14,488,696	14,791,984	
		Net Present Value	54,374,372	2,070,104	1,962,456	1,860,557	1,764,096	1,672,779	1,586,327	1,504,479	1,426,984	1,353,608	1,284,128	1,218,335	1,156,029	1,097,021	1,041,136	988,203	938,065	890,571	845,579	802,954	762,569	
		TOTAL OTHER IMPACTS	Net Present Value - Real	225,695,712	2,212,679	2,123,392	1,983,931	1,878,863	1,779,539	2,002,039	1,596,862	1,512,922	1,433,550	1,716,045	1,287,511	1,220,379	1,156,882	1,096,820	1,072,650	986,251	935,395	887,275	841,741	841,240
Social Impacts	Employment	Construction & Operations																						
		NL - Skilled	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	
		NL - Unskilled	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	
		Non-res	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
		Total NL Direct Employment	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	
		Indirect Construction Employment	6.63	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25
	Induced Construction Employment	0.3	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	
	Total Annual FTE Employment		85	85	85	85	85	85	85	85	85	85	85	85	85	85	85	85	85	85	85	85	85	
	Tourism	Total Incremental Spending		17,532,751	17,867,598	18,210,323	18,561,171	18,920,394	19,288,257	19,665,034	20,051,008	20,446,477	20,851,749	21,267,143	21,692,994	22,129,648	22,577,467	23,036,827	23,508,119	23,991,751	24,488,147	24,997,751	25,521,022	
		Incremental FTE - Direct	12.8	224	229	233	238	242	247	252	257	262	267	272	278	283	289	295	301	307	313	320	327	
		Incremental FTE - Indirect	0.24																					
		Incremental FTE - Induced	0.15																					
		Total Impact	18.3	320	326	332	339	345	352	359	366	373	381	388	396	404	412	420	429	438	447	456	466	
		TOTAL RELATED EMPLOYMENT		405	411	417	424	430	437	444	451	458	465	473	481	489	497	505	514	523	532	541	551	
	Wages	Construction & Operations	Direct Payroll		3,988,000	3,988,000	3,988,000	3,988,000	3,988,000	3,988,000	3,988,000	3,988,000	3,988,000	3,988,000	3,988,000	3,988,000	3,988,000	3,988,000	3,988,000	3,988,000	3,988,000	3,988,000	3,988,000	3,988,000
			Indirect Construction Employment	0.53	2,113,640	2,113,640	2,113,640	2,113,640	2,113,640	2,113,640	2,113,640	2,113,640	2,113,640	2,113,640	2,113,640	2,113,640	2,113,640	2,113,640	2,113,640	2,113,640	2,113,640	2,113,640	2,113,640	2,113,640
			Induced Construction Employment	0.3	1,830,492	1,830,492	1,830,492	1,830,492	1,830,492	1,830,492	1,830,492	1,830,492	1,830,492	1,830,492	1,830,492	1,830,492	1,830,492	1,830,492	1,830,492	1,830,492	1,830,492	1,830,492	1,830,492	1,830,492
			Sub-Total Wages		7,932,132	7,932,132	7,932,132	7,932,132	7,932,132	7,932,132	7,932,132	7,932,132	7,932,132	7,932,132	7,932,132	7,932,132	7,932,132	7,932,132	7,932,132	7,932,132	7,932,132	7,932,132	7,932,132	7,932,132
			Tourism																					
			Incremental Direct Wages	23.6%	4,137,729	4,216,753	4,297,636	4,380,436	4,465,213	4,552,029	4,640,948	4,732,038	4,825,369	4,921,013	5,019,046	5,119,547	5,222,597	5,328,282	5,436,691	5,547,916	5,662,053	5,779,203	5,899,469	6,022,961
Incremental Indirect Wages		33.0%																						
Incremental Induced Wages		15.0%																						
Sub-Total Wages		36.1%	6,328,657	6,449,524	6,573,235	6,699,877	6,829,543	6,962,328	7,098,330	7,237,652	7,380,401	7,526,689	7,676,630	7,830,346	7,987,962	8,149,608	8,315,419	8,485,538	8,660,110	8,839,291	9,023,238	9,212,119		
TOTAL RELATED WAGES			14,260,789	14,381,656	14,505,367	14,632,009	14,761,675	14,894,460	15,030,462	15,169,784	15,312,533	15,458,821	15,608,762	15,762,478	15,920,094	16,081,740	16,247,551	16,417,670	16,592,242	16,771,423	16,955,370	17,144,251		
NPV Wages	411,233,763	2,905,075	2,775,299	2,556,970	2,399,343	2,251,726	2,113,471	1,983,971	1,862,661	1,749,013	1,642,533	1,542,757	1,449,256	1,361,626	1,279,490	1,202,495	1,130,312	1,062,633	999,171	939,656	883,836			
Other Impacts																								

ECONOMIC ANALYSIS WORKSHEETS – UPGRADED FERRY

Economic Methodology for Fixed Link Project				Phase 1 - Planning Approval			Phase 2 - Design & Construction																						
				1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	
Section 1 - Transportation Economics																													
Traffic	Travellers (one-way trips)	Tourist Visitors - ferryLink	3.50%	13,000	13,459	13,926	14,413	14,918	15,440	15,980	16,540	17,119	17,718	18,338	18,980	19,644	20,331	21,043	21,780	22,542	23,331	24,147	24,993	25,867	26,773	27,710	28,679	29,683	
		Traditional Tourist Vehicles		4,869	5,039	5,216	5,398	5,587	5,783	5,985	6,193	6,411	6,636	6,868	7,108	7,357	7,615	7,881	8,157	8,443	8,738	9,044	9,360	9,688	10,027	10,378	10,741	11,117	
		Induced Visitors - Fixed Link	0.50%																										
		Induced Demand Vehicles - Tourists	2.67																										
		Tourist Vehicles - ferryLink	2.67	4,869	5,039	5,216	5,398	5,587	5,783	5,985	6,193	6,411	6,636	6,868	7,108	7,357	7,615	7,881	8,157	8,443	8,738	9,044	9,360	9,688	10,027	10,378	10,741	11,117	
	Passenger Veh.	Local and Business Traffic Base	1.5%	16,288	16,647	17,012	17,385	17,766	18,154	18,550	18,954	19,366	19,786	20,215	20,651	21,093	21,542	21,998	22,461	22,930	23,405	23,886	24,373	24,866	25,365	25,869	26,378	26,892	27,411
		Induced Demand - Local	15.0%																										
	Cabot	Diverted Passenger Vehicles				0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		Induced Demand Veh %	0.00%	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Total	Total Passenger Vehicles		21,157	21,686	22,228	22,784	23,353	23,937	24,536	25,149	25,778	26,422	27,083	27,760	28,453	29,162	29,887	30,628	31,385	32,158	32,947	33,752	34,573	35,410	36,263	37,132	38,017	38,918
Total Induced Vehicle Trips			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Base Freight	Total Visitors	2.67	56,489	57,901	59,349	60,833	62,353	63,912	65,510	67,148	68,827	70,547	72,311	74,123	75,974	77,864	79,794	81,764	83,774	85,824	87,914	89,044	90,214	91,424	92,674	93,964	95,294	96,664	
	Cabot/Oceanex Tractor-trailer	2.50%	142,402	145,962	149,611	153,351	157,185	161,115	165,143	169,271	173,503	177,841	182,287	186,844	191,513	196,303	201,210	206,241	211,397	216,681	222,099	227,651	233,342	239,176	245,153	251,284	257,566	263,999	
	Apollo Tractor-trailer		2,883	2,957	3,031	3,107	3,185	3,264	3,346	3,429	3,515	3,603	3,693	3,785	3,880	3,977	4,076	4,178	4,283	4,390	4,500	4,612	4,727	4,846	4,967	5,091	5,218	5,348	
	Diverted Cabot/Oceanex Tractor-Trailer	2%																											
	Induced Cabot/Oceanex Tractor-Trailer	0.0%	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Design Peak Trip Vol	Total Tractor-trailer		2,883	2,957	3,031	3,107	3,185	3,264	3,346	3,429	3,515	3,603	3,693	3,785	3,880	3,977	4,076	4,178	4,283	4,390	4,500	4,612	4,727	4,846	4,967	5,091	5,218	5,348	
	Autos		66	68	69	71	73	75	77	79	81	83	85	87	89	91	93	95	97	99	101	103	105	107	109	111	113	115	117
	Trucks		1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
	PCUs	3	69	71	73	75	77	79	81	83	85	87	89	91	93	95	97	99	101	103	105	107	109	111	113	115	117	119	
	Dominant Direction (ratio)	50.00%	35	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	
Revenues Total	Total Rev		1,463,822	1,500,418	1,537,928	1,576,376	1,615,786	1,656,180	1,697,585	1,740,025	1,783,523	1,828,113	1,873,816	1,920,651	1,968,648	2,017,827	2,068,219	2,119,845	2,172,727	2,226,886	2,282,344	2,339,122	2,397,250	2,456,750	2,517,652	2,579,987	2,643,787	2,709,083	
	Passenger Tolls		353,321	362,134	371,208	380,489	390,001	399,751	409,745	419,988	430,488	441,250	452,281	463,591	475,180	487,058	499,225	511,682	524,429	537,467	550,806	564,456	578,427	592,730	607,376	622,376	637,731	653,453	
	Vehicle Tolls		645,288	661,429	677,935	694,904	712,377	730,384	748,936	767,944	786,220	805,876	825,823	846,072	866,625	887,483	908,647	929,118	950,000	971,293	992,999	1,015,120	1,037,658	1,060,616	1,084,000	1,107,812	1,132,065	1,156,771	
	Freight Tolls		465,213	476,843	488,764	500,984	513,508	526,346	539,504	552,992	566,817	580,987	595,512	610,401	625,659	641,296	657,322	673,749	690,577	707,807	725,440	743,477	761,919	780,777	800,052	819,756	839,899	860,492	
	Other																												
Expenses Total	Passenger Tolls	Incremental																											
	Vehicle Tolls	Incremental																											
	Freight Tolls	Incremental																											
	Other																												
	Total	Incremental	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Total Capital Investments (Outflow)	Pre-operation		0																										
	Operations Phase		0																										
	Infrastructure		0																										
	Civil Works		0																										
	Mt & E		0																										
TOTAL CAPEX	Systems		0																										
	Rolling Stock		0																										
	Sub total		0																										
	Other (Design, Proj, Mgt)		0																										
	Total		0																										
Present Values at Social Discount Rate	Present Value Total Revenue new service		23,872,886																										
	Present Value Capital Investment		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	Net Present Value		-163,600,789																										
Benefit Cost Ratio and IRR																													
	Benefit /Cost Ratio		0.13																										
Indirect Transportation																													
Marine Atlantic Impacts	Passenger Vehicles	Base Projection # Vehicle trips	2.50%	154,972	158,846	162,817	166,889	171,060	175,337	179,720	184,213	188,818	193,539	198,377	203,337	208,420	213,631	218,971	224,446	230,057	235,808	241,703	247,746	253,940	260,288	266,793	273,465	280,302	
		Vehicle-trips diverted	1%																										
		Net Vehicle trips																											
		Passenger Vehicle Revenue \$	148	22,935,856	23,509,252	24,096,984	24,699,408	25,316,804	25,949,816	26,598,561	27,263,523	27,945,113	28,643,741	29,359,833	30,093,892	30,837,715	31,591,158	32,354,066	33,126,279	33,907,648	34,698,122	35,497,652	36,306,190	37,123,694	37,950,116	38,785,408	39,629,620	40,482,712	41,344,734
		Freight tractor-trailer																											

Economic Methodology for Fixed Link Project				Phase 1 - Planning Approval																									Phase 2 - Design & Construction																								
				1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25																									
Economic Impacts	Diversions Freight	Passenger Vehicles #		21,157	21,686	22,228	22,784	23,353	23,937	24,536	25,149	25,778	26,422	27,083																																							
		Tractor-trailer																																																			
		Drop trailer																																																			
		Truck																																																			
	Operating Cost	Revenue \$																																																			
		Wages																																																			
		Fuel																																																			
	Subsidy Impact	Reference Annual Subsidy \$ millions	5.5																																																		
	Net Change	Sub total		-5,500,000	-5,500,000	-5,500,000	-5,500,000	-5,500,000	-5,500,000	-5,500,000	-5,500,000	-5,500,000	-5,500,000	-5,500,000	-5,500,000	-5,500,000	-5,500,000	-5,500,000	-5,500,000	-5,500,000	-5,500,000	-5,500,000	-5,500,000	-5,500,000	-5,500,000	-5,500,000	-5,500,000																										
	Capital Plan - Base	Surplus(deficit)												75																																							
	Capital Plan - Divert		3											150																																							
	Capital NPV/DASe		40,545,996	0	0	0	0	0	0	0	0	0	0	36,389,545	0	0	0	0	0	0	0	0	0	0	0	0	0	0																									
	Capital NPV New		81,091,992	0	0	0	0	0	0	0	0	0	0	72,779,089	0	0	0	0	0	0	0	0	0	0	0	0	0	0																									
	Operating Costs Status Quo		5,500,000	6,963,822	7,900,418	7,037,928	7,076,376	7,115,786	7,156,180	7,197,585	7,240,025	7,283,525	7,328,113	7,373,816	9,060,131	9,140,318	9,222,445	9,306,561	9,392,718	9,480,968	9,571,365	9,663,965	9,758,825	9,856,003	9,955,560	10,057,556	10,162,057	10,269,126																									
	Operating Costs New Service		50.0%	10,445,733	10,500,627	10,556,892	10,614,564	10,673,679	10,734,271	10,796,377	10,860,037	10,923,288	10,992,170	14,747,632	18,120,262	18,280,636	18,444,890	18,613,122	18,785,436	18,961,036	19,142,731	19,327,931	19,517,650	19,712,006	19,911,119	20,115,113	20,324,113	20,538,252																									
	NPV Base (2004)		53,190,841	6,477,974	6,857,690	5,665,255	5,298,794	4,956,562	4,636,930	4,338,380	4,059,498	3,798,966	3,555,356	3,328,122	3,803,933	3,569,861	3,330,638	3,145,301	2,952,948	2,772,738	2,603,883	2,445,651	2,297,356	2,158,156	2,028,054	1,903,890	1,791,342	1,681,922																									
	NPV Divert		106,381,683																																																		
	NPV	Capital	-40,545,996																																																		
	Net Present Value	Ferry upgrade net cost	-53,190,841																																																		
Economic Net Present Value				-79,231,149																																																	
Benefit /Cost Ratio				0.58																																																	
Other Economic Impacts															290,870	298,044	305,396	312,930	320,652	328,564	336,673	344,984	353,500	362,228	371,172	380,338	389,731	399,358																									
Construction Impacts	Construction Impacts	Indirect plus induced GDP – NPV	0																																																		
		Operations Impacts	582,906																																																		
	Tourism Impacts	Total GDP Impact – NPV	1,406,988																																																		
		NPV	1,989,894																																																		
	Fixed Link Economic NPV	Socio-economic Rate of Return	#NUM!																																																		
Benefit Cost Ratio				0.59																																																	
SECTION 2 - Financial Analysis																																																					
Financing during Construction	Financing during Construction	Project Cost, Constant 2004\$	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0																									
		Normal Value	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0																									
		Cumm. Const. Cost	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0																									
		Comprised of:	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0																									
		Interest during Construction (IBC)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0																									
Financing Base Case	Debt Financing	Project Cost																																																			
		Pre operations cost	0																																																		
		Interest during Construction	0																																																		
		Total Amount to Finance	0																																																		
		Annual Debt Amortization (CRF)	0																																																		
Subsidized Financing	Sensitivity Case	Net Cash Flow													0	0	0	0	0	0	0	0	0	0	0	0	0	0																									
		Internal Rate of Return	#NUM!																																																		
		Project Spending	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0																									
		Grant Award	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0																									
		Cost less Grant	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0																														

Economic Methodology for Fixed Link Project																														
				Phase 1 - Planning Approval			Phase 2 - Design & Construction																							
				1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25		
		Net Present Value	1,406,988												86,469	82,409	78,540	74,853	71,339	67,991	64,800	61,759	58,861	56,099	53,467	50,959	48,569	46,290		
TOTAL OTHER IMPACTS															122,123	116,405	110,954	105,760	100,809	96,090	91,592	87,305	83,219	79,324	75,612	72,073	68,701	65,486		
Social Impacts	Employment	Construction & Operations																												
		NI - Skilled														25	25	25	25	25	25	25	25	25	25	25	25	25	25	
		NI - Unskilled														15	15	15	15	15	15	15	15	15	15	15	15	15	15	
		Non-ers														0	0	0	0	0	0	0	0	0	0	0	0	0	0	
		Total NI Direct Employment														40	40	40	40	40	40	40	40	40	40	40	40	40	40	
		Indirect Construction Employment	0.63													25	25	25	25	25	25	25	25	25	25	25	25	25	25	
		Induced Construction Employment	0.3													20	20	20	20	20	20	20	20	20	20	20	20	20	20	
		Total Annual FTE Employment														85	85	85	85	85	85	85	85	85	85	85	85	85	85	
		Tourism																												
		Total Incremental Spending														355,330	364,045	372,975	382,126	391,503	401,112	410,959	421,049	431,388	441,984	452,841	463,967	475,367	487,051	
		Incremental FTE - Direct	12.8													5	5	5	5	5	5	5	5	5	6	6	6	6	6	6
		Incremental FTE - Indirect	0.24																											
		Incremental FTE - Induced	0.15																											
		Total Impact	18.3													6	7	7	7	7	7	7	8	8	8	8	8	8	9	9
		TOTAL RELATED EMPLOYMENT														91	91	92	92	92	92	92	92	92	93	93	93	93	93	94
		Wages	Construction & Operations																											
	Direct Payroll															0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Indirect Construction Employment		0.53													0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Induced Construction Employment		0.3													0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Sub-Total Wages															0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Tourism																													
	Incremental Direct Wages		23.6%													83,838	85,915	88,022	90,182	92,393	94,663	96,986	99,368	101,808	104,308	106,870	109,496	112,187	114,944	
	Incremental Indirect Wages		33.0%																											
	Incremental Induced Wages		15.0%													128,261	131,406	134,630	137,933	141,318	144,786	148,341	151,983	155,715	159,539	163,458	167,474	171,590	175,807	
	Sub-Total Wages		36.1%													128,261	131,406	134,630	137,933	141,318	144,786	148,341	151,983	155,715	159,539	163,458	167,474	171,590	175,807	179,851
	TOTAL RELATED WAGES			0	0	0	0	0	0	0	0	0	0	0	0	128,261	131,406	134,630	137,933	141,318	144,786	148,341	151,983	155,715	159,539	163,458	167,474	171,590	175,807	179,851
	NPV Wages		876,241	0	0	0	0	0	0	0	0	0	0	0	0	53,851	51,322	48,913	46,617	44,428	42,343	40,356	38,462	36,667	34,937	33,298	31,736	30,247	28,819	
	Other Impacts																													

Economic Methodology for Fixed Link Project				Phase 3 - Operation																
				26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	
Section 1 - Transportation Economics																				
Traffic	Travellers (one-way trips)	Tourist Visitors - ferrylink	3.50%	30,722	31,797	32,910	34,062	35,254	36,488	37,765	39,087	40,455	41,871	43,337	44,853	46,423	48,048	49,730	51,470	
		Traditional Tourist Vehicles		11,506	11,909	12,326	12,757	13,204	13,666	14,144	14,639	15,152	15,682	16,231	16,799	17,387	17,996	18,625	19,277	
		Induced Visitors - fixed Link	0.50%	332	337	342	348	353	358	363	369	374	380	386	392	397	403	409	416	
		Induced Demand Vehicles - Tourists	2.67	124	126	128	130	132	134	136	138	140	142	144	147	149	151	153	156	
		Tourist Vehicles - ferrylink	2.67	11,631	12,016	12,454	12,888	13,316	13,800	14,280	14,778	15,292	15,824	16,375	16,946	17,536	18,147	18,779	19,433	
		Passenger Veh.																		
	Laborer	Local and Business Traffic Base	1.5%	25,273	25,652	26,037	26,427	26,824	27,226	27,635	28,049	28,470	28,897	29,330	29,770	30,217	30,670	31,130	31,597	
		Induced Demand - Local	15.0%	3,791	3,848	3,906	3,964	4,024	4,084	4,145	4,207	4,270	4,335	4,400	4,466	4,533	4,601	4,670	4,740	
	Cabot	Diverted Passenger Vehicles		2,873	2,945	3,019	3,094	3,171	3,251	3,332	3,415	3,501	3,588	3,678	3,770	3,864	3,961	4,060	4,161	
		Induced Demand Veh %	0.00%	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Total	Total Passenger Vehicles		43,568	44,480	45,413	46,373	47,355	48,361	49,392	50,449	51,533	52,644	53,783	54,951	56,149	57,378	58,638	59,931		
	Total Induced Vehicle Trips		2,998	3,071	3,147	3,224	3,303	3,385	3,468	3,553	3,641	3,730	3,822	3,916	4,013	4,112	4,213	4,317		
	Total Visitors	2.67	116,326	118,762	121,359	123,816	126,437	129,124	131,877	134,699	137,593	140,559	143,601	146,720	149,918	153,199	156,564	160,015		
Base Freight	Cabot/Oceanex Tractor-trailer	2.50%	264,005	270,605	277,371	284,305	291,413	298,698	306,165	313,819	321,665	329,707	337,949	346,398	355,058	363,934	373,033	382,358		
	Apollo Tractor-trailer		5,349	5,482	5,619	5,760	5,904	6,052	6,203	6,358	6,517	6,680	6,847	7,018	7,193	7,373	7,558	7,747		
	Diverted Cabot/Oceanex Tractor-Trailer	2%	5,280	5,412	5,547	5,686	5,828	5,974	6,123	6,276	6,433	6,594	6,759	6,928	7,101	7,279	7,461	7,647		
	Induced Cabot/Oceanex Tractor-Trailer	0.0%	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	Total Cabot/Oceanex Tractor-Trailer		10,629	10,895	11,167	11,446	11,732	12,026	12,326	12,634	12,950	13,274	13,606	13,946	14,293	14,652	15,018	15,394		
Design (Peak Trip Vol)	Autos		136	139	142	145	148	151	154	158	161	165	168	172	175	179	183	187		
	Trucks		4	4	4	4	4	4	4	4	5	5	5	5	5	5	5	5		
	PCUs	3	147	151	154	157	160	164	167	171	175	179	183	187	191	195	199	204		
	Dominant Direction (ratio)	50.00%	74	75	77	79	80	82	84	86	87	89	91	93	95	97	100	102		
Revenues Total	Total Rev		4,878,831	4,991,241	5,106,426	5,224,460	5,345,416	5,469,372	5,596,406	5,726,599	5,860,035	5,996,799	6,136,980	6,280,666	6,427,953	6,578,933	6,733,707	6,892,373		
	Passenger Tolls		727,885	742,822	758,433	774,431	790,825	807,627	824,849	842,502	860,600	879,154	898,178	917,686	937,692	958,210	979,235	1,000,843		
	Vehicle Tolls		1,328,823	1,356,650	1,385,163	1,414,389	1,444,321	1,475,027	1,506,466	1,538,702	1,571,754	1,605,640	1,640,383	1,676,014	1,712,551	1,750,024	1,788,460	1,827,886		
	Freight Tolls		1,713,896	1,756,744	1,800,662	1,845,679	1,891,821	1,939,116	1,987,594	2,037,284	2,088,216	2,140,421	2,193,932	2,248,780	2,305,000	2,362,625	2,421,690	2,482,233		
	Passenger Tolls	Incremental	50,060	51,290	52,552	53,844	55,165	56,526	57,916	59,341	60,802	62,299	63,832	65,404	67,014	68,665	70,356	72,090		
Expenses Total	Vehicle Tolls	Incremental	207,050	211,032	215,096	219,243	223,476	227,795	232,203	236,703	241,295	245,982	250,766	255,649	260,634	265,722	270,916	276,217		
	Freight Tolls	Incremental	851,417	872,703	894,520	916,883	939,805	963,300	987,383	1,012,068	1,037,369	1,063,303	1,089,886	1,117,133	1,145,062	1,173,688	1,203,030	1,233,106		
	Total	Incremental	1,108,527	1,135,026	1,162,168	1,189,971	1,218,449	1,247,621	1,277,503	1,308,112	1,339,466	1,371,584	1,404,484	1,438,186	1,472,710	1,508,075	1,544,302	1,581,413		
Total Capital Investments (Outflow)	Pre-operation	0																		
	Operations Phase Infrastructure	0																		
	Civil Works	0																		
	M & E	0																		
	Systems	0																		
	Rolling Stock	0																		
	Sub total	0																		
Other (Design, Perm. Mgt)	0																			
TOTAL CAPEX	\$ 2004	0																		
Present Values at Social Discount Rate	Present Value Total Revenue new service	23,872,886	744,210	708,239	674,031	641,499	610,559	581,132	553,144	526,523	501,202	477,115	454,203	432,407	411,672	391,943	373,178	355,323		
	Present Value Capital Investment	0																		
	Net Present Value	-163,600,789																		
Benefit Cost Ratio and IRR																				
	Benefit /Cost Ratio	0.13																		
Indirect Transportation																				
Marine Atlantic Impacts	Passenger Vehicles	Base Projection # Vehicle trips	2.50%	287,309	294,492	301,854	309,401	317,136	325,064	333,191	341,521	350,039	358,810	367,780	376,975	386,399	396,059	405,961	416,118	
		Vehicle-trips diverted	1%	-2,873	-2,945	-3,019	-3,094	-3,171	-3,251	-3,332	-3,415	-3,501	-3,588	-3,678	-3,770	-3,864	-3,961	-4,060	-4,161	
		Net Vehicle trips		284,436	291,547	298,836	306,307	313,964	321,814	329,859	338,103	346,538	355,225	364,103	373,205	382,535	392,099	401,901	411,949	
		Passenger Vehicle Revenue \$	148	42,096,377	43,148,991	44,227,716	45,333,409	46,466,744	47,628,413	48,819,123	50,039,601	51,290,591	52,572,856	53,887,177	55,234,337	56,615,216	58,030,596	59,481,361	60,968,295	
		Freight tractor-trailer																		
	Base Projection Tractor-trailer	2%	176,004	180,404	184,914	189,537	194,273	199,132	204,110	209,213	214,443	219,804	225,299	230,932	236,705	242,623	248,688	254,906		
	Diverted Freight tractor-trailer	1	-5,280	-5,412	-5,547	-5,686	-5,828	-5,974	-6,123	-6,276	-6,433	-6,594	-6,759	-6,928	-7,101	-7,279	-7,461	-7,647		
	Net Freight tractor-trailer		170,723	174,992	179,366	183,850	188,447	193,158	197,987	202,937	208,010	213,210	218,540	224,004	229,604	235,344	241,228	247,248		
	Net Revenue \$	237.23	43,918,610	45,016,573	46,141,989	47,295,539	48,477,927	49,689,876	50,932,122	52,205,426	53,510,561	54,848,325	56,219,533	57,625,022	59,065,647	60,542,288	62,055,846	63,607,242		
	Change in Pass. Car Equivalent Veh. (PCU)		2.5%	2.5%	2.5%	2.5%	2.5%	2.5%	2.5%	2.5%	2.5%	2.5%	2.5%	2.5%	2.5%	2.5%	2.5%	2.5%		
	Total Operating Cost		111	143,082,341	146,716,373	149,370,381	150,044,615	151,739,326	153,454,769	155,191,201	156,948,885	158,728,084	160,529,086	162,353,103	164,197,469	166,065,441	167,956,302	169,870,377	171,807,834	
		Wages	64.3	86,779,483	87,864,226	88,962,529	90,074,161	91,200,493	92,340,499	93,494,735	94,663,440	95,846,733	97,044,817	98,257,877	99,486,100	100,729,677	101,988,798	103,263,631	104,554,433	
		Fuel	16.9	17,949,734	17,994,598	18,039,584	18,084,683	18,129,895	18,175,220	18,220,658	18,266,209	18,311,875	18,357,655	18,403,549	18,449,558	18,495,682	18,541,921	18,588,276	18,634,746	
		Purchased Goods & Ser	29.9	40,353,124	40,857,549	41,368,268	41,885,371	42,408,938	42,939,050	43,475,788	44,019,236	44,569,476	45,126,594	45,690,677	46,261,810	46,840,083	47,425,584	48,018,404	48,618,634	
		reference subsidy Sum	43.8																	
	Incremental gain (loss)		-1,783,525	-1,828,114	-1,873,816	-1,920,662	-1,968,678	-2,017,895	-2,068,343	-2,120,051	-2,173,083	-2,227,379	-2,283,063	-2,340,140	-2,398,643	-2,458,610	-2,520,075	-2,583,077		
	Operating Surplus(deficit)		-59,067,154	-58,550,907	-58,000,676	-57,413,667	-56,794,655	-56,136,480	-55,439,936	-54,703,858	-53,926,931	-53,107,883	-52,245,392	-51,338,090	-50,384,578	-49,383,418	-48,333,120	-47,232,197		
	Capital Plan - Base	\$ Millions																		
	Capital Plan - Divert	\$ Millions																		
	Total Cash - Base			-57,293,629	-56,722,693	-56,126,860	-55,495,006	-54,825,976	-54,118,583	-53,371,613	-52,583,707	-51,753,879	-50,890,506	-49,993,329	-49,062,950	-48,097,050	-47,093,935	-46,052,808	-44,983,129	
Total Cash - Divert			-59,067,154	-58,550,907	-58,000,676	-57,413,667	-56,794,6													

Economic Methodology for Fixed Link Project				Phase 3 - Operation																	
				26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41		
Economic Impacts	Diversion Freight	Passenger Vehicles #																			
		Tractor-trailer																			
		Drop-trailer																			
		Truck																			
	Operating Cost	Revenue \$																			
		Wages																			
		Fuel																			
		Subsidy impact	Reference Annual Subsidy \$ millions	5.5																	
	Subsidy impact	Sub total																			
		Surplus(deficit)		-5,500,000.0	-5,500,000.0	-5,500,000.0	-5,500,000.0	-5,500,000.0	-5,500,000.0	-5,500,000.0	-5,500,000.0	-5,500,000.0	-5,500,000.0	-5,500,000.0	-5,500,000.0	-5,500,000.0	-5,500,000.0	-5,500,000.0	-5,500,000.0		
		Net Change																			
		Capital Plan - Base																73			
	Capital Plan - Divert	Capital Plan - Divert	3															150			
		Capital NPV/IASe	40,545,996	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4,155,451	0		
		Capital NPV New	81,091,992	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8,312,903	0		
		Operating Costs Status Quo	5,500,000	10,378,831	10,491,241	10,606,426	10,724,460	10,845,416	10,969,372	11,096,406	11,226,599	11,360,033	11,496,799	11,636,990	11,780,666	11,927,933	12,078,933	12,233,707	12,392,373		
PV Base (2004)	Operating Costs New Service	50,076	20,737,662	20,982,482	21,212,852	21,448,919	21,690,832	21,938,743	22,192,811	22,453,198	22,720,070	22,993,599	23,273,929	23,561,333	23,855,903	24,157,667	24,467,414	24,784,749			
	PV Base (2004)	53,190,841	1,583,173	1,488,670	1,400,013	1,316,831	1,238,775	1,165,519	1,096,760	1,032,212	971,610	914,704	861,263	811,067	763,914	719,612	677,984	638,863			
	PV Divert	106,381,683	3,166,346	2,977,339	2,800,026	2,633,661	2,477,549	2,331,038	2,193,519	2,064,424	1,943,220	1,829,409	1,722,523	1,622,134	1,527,827	1,439,224	1,355,968	1,277,723			
	NPV	-40,545,996																			
Net Present Value	Ferry upgrade net cost	-53,190,841																			
	Economic Net Present Value	-79,231,149																			
	Benefit / Cost Ratio	0.58																			
Other Economic Impacts																					
Other Economic Impacts	Construction Impacts	Indirect plus induced GDP – NPV	12,707,894	409,224	419,334	429,696	440,314	451,196	462,349	473,778	485,491	497,493	509,797	522,405	535,326	548,567	562,138	576,046	590,299		
		Operations Impacts	Indirect plus induced GDP – NPV	582,906																	
		Tourism Impacts	Total GDP Impact – NPV	1,406,988																	
		Total Spillo-off Benefits	NPV	1,989,894																	
	Fixed Link Economic NPV	Socio-economic Rate of Return	#NUM!																		
		Benefit Cost Ratio	0.59																		
	SECTION 2 - Financial Analysis																				
	Financing during Construction	Project Cost, Constant 2004\$	Project Cost, Constant 2004\$	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
			Nominal Value	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
			Cumm. Const. Cost	Comprised of:	0																
			Interest during Construction (IDC)	0																	
		Project Costs	Project Costs	0																	
Total Amount to Finance		Annual Debt Amortization (CRF)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
		Net Cash Flow	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
Internal Rate of Return		Internal Rate of Return	#NUM!																		
Subsidized Financing Sensitivity Case	Project Spending	Project Spending	0																		
		Grant Award	0																		
		Cost less Grant	0																		
		Total Amount to Finance	0																		
	Comprised of:	Interest during Construction (IDC)	0																		
		Project Costs	0																		
	Internal Rate of Return	Internal Rate of Return	#NUM!	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
Section 3 - Socio-Economic Impact				26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41		
Construction Effects	Construction Spending	Annual Civil & M&E																			
		Direct GDP	34.0%																		
		Indirect	63.0%																		
		Induced	15.0%																		
	Indirect plus induced GNP impact	Indirect plus induced GNP impact																			
		Net Present Value	0																		
	Operations Costs	Annual Costs		851,417	872,703	894,520	916,893	939,805	963,300	987,383	1,012,068	1,037,369	1,063,303	1,089,886	1,117,133	1,145,062	1,173,688	1,203,030	1,233,106		
		Direct GDP	34.0%	289,482	296,719	304,137	311,740	319,534	327,522	335,710	344,103	352,706	361,523	370,561	379,825	389,321	399,054	409,030	419,246		
		Indirect	23.0%	66,581	68,245	69,923	71,700	73,493	75,330	77,213	79,144	81,122	83,150	85,239	87,380	89,544	91,782	94,077	96,429		
		Induced	15.0%	53,409	54,745	56,113	57,516	58,954	60,428	61,939	63,487	65,074	66,701	68,369	70,078	71,830	73,625	75,466	77,353		
	Indirect plus induced GNP impact	Indirect plus induced GNP impact		119,990	122,990	126,065	129,216	132,447	135,758	139,152	142,631	146,196	149,851	153,598	157,438	161,374	165,408	169,543	173,782		
		Net Present Value	582,906	18,303	17,452	16,640	15,866	15,128	14,425	13,754	13,114	12,504	11,922	11,368	10,839	10,333	9,854	9,396	8,959		
Tourist Indicators	Induced Visitors – trip add-on	11	8,004	8,200	8,402	8,609	8,820	9,037	9,260	9,488	9,721	9,960	10,206	10,457	10,714	10,978	11,249	11,526			
	Induced Visitors – full trip	11	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
	Incremental Room nights	21	4,002	4,100	4,201	4,304	4,410	4,519	4,630	4,744	4,861	4,980	5,103	5,228	5,357	5,489	5,624	5,763			
	Base Annual Expenditures Tourists	62.33	499,023	511,291	523,863	536,746	549,948	563,476	577,340	591,547	606,106	621,025	636,313	651,981	668,036	684,489	701,350	718,628			
Direct GDP	Direct GDP	35.0%	174,638	178,952	183,352	187,861	192,482	197,217	202,069	207,041	212,137	217,359	222,710	228,193	233,813	239,571	245,472	251,520			
	Indirect	44.0%	76,849	78,739	80,679	82,659	84,692	86,773	88,910	91,108	93,340	95,618	97,992	100,403	102,878	105,411	108,008	110,669			
	Induced	13.0%	37,726	38,654	39,604	40,578	41,576	42,599	43,647	44,721	45,822	46,949	48,101	49,280	50,484	51,741	53,022	54,328			
	Total		289,213	296,344	303,631	311,098	318,750	326,591	334,626	342,861	351,299	359,946	368,807	377,888	387,194	396,730	406,502	416,517			

Economic Methodology for Fixed Link Project				Phase 3 - Operation																	
				26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41		
		Net Present Value	1,406,988	44,119	42,050	40,078	38,199	36,408	34,701	33,074	31,524	30,046	28,638	27,296	26,017	24,797	23,626	22,528	21,473		
TOTAL OTHER IMPACTS																					
Net Present Value - Real				1,989,894	62,422	59,502	56,718	54,063	51,536	49,126	46,828	44,638	42,550	40,560	38,664	36,856	35,132	33,490	31,924	30,432	
Social Impacts	Employment	Construction & Operations																			
		NL - Skilled		23	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23	
		NL - Unskilled		13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	
		Non-rea		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
		Total NL Direct Employment		40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40
		Indirect Construction Employment		0.63	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23
		Induced Construction Employment		0.3	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20
		Total Annual FTE Employment			83	83	83	83	83	83	83	83	83	83	83	83	83	83	83	83	83
		Tourism																			
		Total Incremental Spending			499,023	511,291	523,863	536,746	549,948	563,476	577,340	591,547	606,106	621,025	636,313	651,981	668,036	684,489	701,350	718,628	
		Incremental FTE - Direct		12.8	6	7	7	7	7	7	7	8	8	8	8	8	9	9	9	9	9
		Incremental FTE - Indirect		0.24																	
		Incremental FTE - Induced		0.15																	
		Total Impact		18.3	9	9	10	10	10	10	10	11	11	11	11	12	12	12	12	13	13
		TOTAL RELATED EMPLOYMENT			94	94	94	95	95	95	95	95	96	96	96	96	97	97	97	98	98
	Wages	Construction & Operations																			
		Direct Payroll			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		Indirect Construction Employment		0.53	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		Induced Construction Employment		0.3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		Sub-Total Wages			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		Tourism																			
		Incremental Direct Wages		23.6%	117,769	120,663	123,632	126,672	129,788	132,980	136,252	139,603	143,041	146,562	150,170	153,867	157,657	161,539	165,519	169,596	
		Incremental Indirect Wages		33.0%																	
		Incremental Induced Wages		15.0%																	
		Sub-Total Wages		36.1%	180,128	184,557	189,095	193,745	198,510	203,394	208,398	213,526	218,781	224,166	229,683	235,340	241,136	247,075	253,161	259,398	
		TOTAL RELATED WAGES			180,128	184,557	189,095	193,745	198,510	203,394	208,398	213,526	218,781	224,166	229,683	235,340	241,136	247,075	253,161	259,398	
		NPV Wages		876,241	27,477	26,188	24,960	23,789	22,674	21,611	20,598	19,631	18,712	17,835	16,999	16,203	15,443	14,720	14,030	13,373	
	Other Impacts																				

ECONOMIC ANALYSIS WORKSHEETS – BASE CASE

Economic Methodology for Fixed Link Project																								
				Phase 1 - Planning Approval			Phase 2 - Design & Construction																	
				1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21
Section 1 - Transportation Economics																								
Traffic	Travellers (one-way trips)	Tourist Visitors - ferry/link	3.50%	13,000	13,455	13,926	14,413	14,918	15,440	15,980	16,540	17,119	17,718	18,338	18,980	19,644	20,331	21,043	21,780	22,542	23,331	24,147	24,993	25,867
		Traditional Tourist Vehicles		4,869	5,039	5,216	5,398	5,587	5,783	5,985	6,195	6,411	6,636	6,868	7,108	7,357	7,615	7,881	8,157	8,443	8,738	9,044	9,360	9,688
		Induced Visitors - fixed Link	1.25%												229	477	746	1,035	1,347	1,684	2,045	2,434	2,852	3,299
		Induced Demand Vehicles - Tourists	2.67												86	179	279	388	505	631	766	912	1,068	1,236
		Tourist Vehicles - ferry/link	2.67	4,869	5,039	5,216	5,398	5,587	5,783	5,985	6,195	6,411	6,636	6,868	7,194	7,536	7,894	8,269	8,662	9,073	9,504	9,956	10,429	10,924
	Passenger Veh. Labrador	Local and Business Traffic Base	1.5%	16,769	17,139	17,518	17,903	18,297	18,698	19,108	19,526	19,952	20,387	20,830	27,079	27,485	27,898	28,316	28,741	29,172	29,610	30,054	30,505	30,962
		one-time surge	30.0%																					
	Cabot	Diverted Passenger Vehicles													20,334	20,842	21,363	21,897	22,445	23,006	23,581	24,170	24,775	25,394
		Induced Demand Veh %	1.50%												6,100	6,192	6,284	6,379	6,474	6,572	6,670	6,770	6,872	6,975
		One time effect	30.0%																					
	Total	Total Passenger Vehicles													60,793	62,234	63,718	65,249	66,826	68,453	70,131	71,861	73,647	75,490
		Total Induced Vehicle Trips		0	0	0	0	0	0	0	0	0	0	0	6,186	6,370	6,564	6,766	6,979	7,202	7,436	7,682	7,940	8,211
	Base Freight	Total Visitors	2.67												162,318	166,164	170,128	174,214	178,426	182,769	187,249	191,870	196,638	201,559
		Cabot/Oceanex Tractor-trailer	2.50%	142,402	145,962	149,611	153,351	157,185	161,115	165,143	169,271	173,503	177,841	182,287	186,844	191,515	196,303	201,210	206,241	211,397	216,681	222,099	227,651	233,342
		Apollo Tractor-trailer		2,404	2,464	2,526	2,589	2,654	2,720	2,788	2,858	2,929	3,003	3,078	3,155	3,233	3,314	3,397	3,482	3,569	3,658	3,750	3,843	3,940
		Diverted Cabot/Oceanex Tractor-Trailer	10%												18,684	19,151	19,630	20,121	20,624	21,140	21,668	22,210	22,765	23,334
		Induced Cabot/Oceanex Tractor-Trailer	1.0%												1,868	1,915	1,963	2,012	2,062	2,114	2,167	2,221	2,277	2,333
		Total Tractor-trailer													23,707	24,300	24,908	25,530	26,168	26,823	27,493	28,181	28,885	29,607
		Autos													38	39	40	41	42	43	44	45	46	47
		Trucks													8	9	9	9	9	9	10	10	10	10
		PCUs	2.5												59	60	62	63	65	67	68	70	72	73
		Dominant Direction (ratio)	50.00%												29	30	31	32	32	33	34	35	36	37
Revenues Total															6,692,243	6,855,814	7,023,848	7,196,483	7,373,863	7,556,135	7,743,454	7,935,979	8,133,874	8,337,312
	Passenger Tolls	Vehicle Tolls													1,015,245	1,039,305	1,064,098	1,089,653	1,115,998	1,143,164	1,171,183	1,200,087	1,229,911	1,260,690
		Freight Tolls													1,854,190	1,898,132	1,943,413	1,990,085	2,038,200	2,087,815	2,138,986	2,191,775	2,246,244	2,302,458
															3,822,808	3,918,378	4,016,337	4,116,746	4,219,664	4,325,156	4,433,285	4,544,117	4,657,720	4,774,163
	Other																							
Expenses Total															4,555,581	4,555,581	4,555,581	4,555,581	4,555,581	4,555,581	4,775,581	4,555,581	4,555,581	4,966,206
	Operations	Wages													3,374,000	3,374,000	3,374,000	3,374,000	3,374,000	3,374,000	3,374,000	3,374,000	3,374,000	3,374,000
		Energy													481,581	481,581	481,581	481,581	481,581	481,581	481,581	481,581	481,581	892,206
	Annual Maintenance	Wages													614,000	614,000	614,000	614,000	614,000	614,000	614,000	614,000	614,000	614,000
		Purchased Serv & Supp													86,000	86,000	86,000	86,000	86,000	86,000	86,000	86,000	86,000	86,000
	Periodic Maintenance	Purchased Serv & Supp																			220,000			
Gross Operating (Surplus/Deficit)															2,136,662	2,300,233	2,468,267	2,640,902	2,818,282	3,000,554	2,967,873	3,380,398	3,578,293	3,371,106
OperatingCostFact				100%																				
Total Capital Investments (Outflow)																								
	Pre-operation	Revenues	1,184,466,303	11,000,000	2,000,000	2,000,000	24,975,000	24,975,000	143,684,647	216,789,022	254,041,183	182,458,739	188,557,044	133,985,609										
		Costs	0												0	0	0	0	0	0	0	0	0	0
	Infrastructure	Civil Works	971,740,540	11,000,000	2,000,000	2,000,000	24,975,000	24,975,000	121,888,283	194,992,658	232,244,820	160,662,375	130,483,853	66,518,552										
		M & E	17,004,000	0	0	0	0	0	0	0	0	0	10,627,500	6,376,500										
		Systems	29,672,471	0	0	0	0	0	0	0	0	0	19,781,648	9,890,824										
		Rolling Stock	37,367,772	0	0	0	0	0	0	0	0	0	37,367,772											
	Sub total		1,055,784,783																					
	Other (Design, Proj. Mgt)		128,681,520	0	0	0	0	0	21,796,364	21,796,364	21,796,364	21,796,364	27,664,044	13,832,022										
TOTAL CAPEX																								
CapCostFactor				100%																				
Present Values at Social Discount Rate	Present Value Income Operation Phase		45,957,013												2,809,766	2,677,620	2,551,859	2,432,167	2,318,247	2,209,814	2,106,601	2,008,351	1,914,821	1,825,779
	Present Value Costs Operating Phase		-30,867,079												1,912,679	1,779,237	1,655,104	1,539,632	1,432,215	1,332,293	1,299,194	1,152,877	1,072,444	1,087,544
	Present Value Capital Investment		-663,012,930																					

Economic Methodology for Fixed Link Project																								
				Phase 1 - Planning Approval			Phase 2 - Design & Construction																	
				1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21
	Total Operating Cost		111	111,100,000	112,319,750	113,554,324	114,803,907	116,068,686	117,348,848	118,644,585	119,956,092	121,283,563	122,660,789	124,090,068	117,989,026	119,293,109	120,612,457	121,947,867	123,299,540	124,667,677	126,052,482	127,454,164	128,872,932	130,308,999
		Wages	64.3	64,300,000	65,103,750	65,917,547	66,741,516	67,575,785	68,420,482	69,275,739	70,141,685	71,018,456	71,928,380	72,873,002	68,839,843	69,700,341	70,571,595	71,453,740	72,346,912	73,251,248	74,166,889	75,093,975	76,032,649	76,983,058
		Fuel	16.9	16,900,000	16,942,250	16,984,606	17,027,067	17,069,635	17,112,309	17,155,090	17,197,977	17,240,972	17,285,152	17,330,553	17,138,721	17,181,568	17,224,522	17,267,583	17,310,752	17,354,029	17,397,414	17,440,907	17,484,510	17,528,221
	Purchased Goods & Ser	29.9	29,900,000	30,273,750	30,652,172	31,035,324	31,423,266	31,816,056	32,213,757	32,616,429	33,024,134	33,447,256	33,886,513	32,011,062	32,411,200	32,816,340	33,226,545	33,641,876	34,062,400	34,488,180	34,919,282	35,355,773	35,797,720	
	Subsidy impact	-- reference subsidy \$mm	43.8																					
		Incremental gain (loss)																						
	Net Revenue	Operating Surplus(deficit)		-63,742,201	-63,778,006	-63,799,037	-63,804,738	-63,794,537	-63,767,845	-63,724,057	-63,662,551	-63,582,684	-63,517,387	-63,468,081	-63,668,028	-62,309,988	-63,540,829	-63,449,448	-63,338,661	-63,207,775	-63,056,083	-62,882,855	-62,687,341	-62,468,767
	Capital Plan - Base	\$ Millions					75						100											
	Capital Plan - Divert	\$ Millions					75						100				150		150					300
	Total Cash - Base			-63,742,201	-63,778,006	-63,799,037	-138,804,738	-63,794,537	-63,767,845	-163,724,057	-63,662,551	-63,582,684	-63,517,387	-63,468,081	-211,952,532	-53,726,221	-204,749,811	-54,446,086	-204,711,326	-54,364,758	-53,991,990	-53,592,160	-53,164,378	-52,707,731
	Total Cash - Divert			-63,742,201	-63,778,006	-63,799,037	-138,804,738	-63,794,537	-63,767,845	-163,724,057	-63,662,551	-63,582,684	-63,517,387	-63,468,081	-63,668,028	-62,309,988	-63,540,829	-63,449,448	-63,338,661	-63,207,775	-63,056,083	-62,882,855	-62,687,341	-62,468,767
	PV Base (2004)		-1,044,206,082	-59,295,071	-55,189,189	-51,355,709	-103,937,061	-44,436,635	-41,319,110	-98,685,478	-35,695,734	-33,163,677	-30,818,251	-28,645,886	-88,989,146	-20,983,419	-74,388,364	-18,400,927	-64,358,579	-15,899,137	-14,688,484	-13,562,522	-12,515,594	-11,542,412
	PV Divert		-1,015,598,330	-59,295,071	-55,189,189	-51,355,709	-103,937,061	-44,436,635	-41,319,110	-98,685,478	-35,695,734	-33,163,677	-30,818,251	-28,645,886	-26,731,285	-24,335,912	-23,085,239	-21,443,758	-19,912,851	-18,485,305	-17,154,365	-15,913,710	-85,381,369	-13,679,971
	Net Present Value	Benefit attributable to fixed link	28,607,753																					
Apollo Impacts	Base																							
		Total Vehicles #	2.50%	24042	24643	25259	25891	26538	27201	27881	28578	29293	30025	30776										
		Trucks # (est.)	10.00%	2,404	2,464	2,526	2,589	2,654	2,720	2,788	2,858	2,929	3,003	3,078										
		Passenger Vehicles #		21,638	22,179	22,733	23,302	23,884	24,481	25,093	25,721	26,364	27,023	27,698										
	Subsidy impact	Reference Annual Subsidy \$ millions	5.5																					
		Sub total																						
	Net Change	Surplus(deficit)		-5,500,000	-5,500,000	-5,500,000	-5,500,000	-5,500,000	-5,500,000	-5,500,000	-5,500,000	-5,500,000	-5,500,000	-5,500,000	-5,500,000.0	-5,500,000.0	-5,500,000.0	-5,500,000.0	-5,500,000.0	-5,500,000.0	-5,500,000.0	-5,500,000.0	-5,500,000.0	
	Capital Plan - Base												75											
	Capital Plan - Divert												20											
	Total Cash - Base			-5,500,000	-5,500,000	-5,500,000	-5,500,000	-5,500,000	-5,500,000	-5,500,000	-5,500,000	-5,500,000	-80,500,000	-5,500,000	-5,500,000	-5,500,000	-5,500,000	-5,500,000	-5,500,000	-5,500,000	-5,500,000	-5,500,000	-5,500,000	
	Total Cash - Divert			-5,500,000	-5,500,000	-5,500,000	-5,500,000	-5,500,000	-5,500,000	-5,500,000	-5,500,000	-5,500,000	-25,500,000	-5,500,000	0	0	0	0	0	0	0	0	0	0
	PV Base (2004)		-110,098,784	-5,116,279	-4,759,329	-4,427,283	-4,118,403	-3,831,072	-3,563,788	-3,315,152	-3,083,862	-2,868,709	-39,058,111	-2,482,388	-2,309,198	-2,148,091	-1,998,224	-1,858,813	-1,729,128	-1,608,492	-1,496,271	-1,391,880	-1,294,772	-1,204,439
	PV Divert		-49,938,711	-5,116,279	-4,759,329	-4,427,283	-4,118,403	-3,831,072	-3,563,788	-3,315,152	-3,083,862	-2,868,709	-12,372,445	-2,482,388	0	0	0	0	0	0	0	0	0	0
	Net Present Value	Benefit attributable to fixed link	60,160,073																					
Transportation Net Present Value - ERR and Benefit to Cost Ratio	Fix Link Cash Flows			-11,000,000	-2,000,000	-2,000,000	-24,975,000	-24,975,000	-143,684,647	-216,789,022	-254,041,183	-182,458,739	-188,557,044	-133,985,669	2,136,662	2,300,233	2,468,267	2,640,902	2,818,282	3,000,554	2,967,873	3,380,398	3,578,293	3,371,106
	Marine Atlantic Economic Benefit			0	0	0	0	0	0	0	0	0	0	0	148,284,503	-8,583,767	141,208,982	-9,003,362	141,372,666	-8,843,017	-9,064,093	-9,290,695	-309,522,963	-9,761,037
	Apollo Economic Benefit			0	0	0	0	0	0	0	0	0	0	55,000,000	0	5,500,000	5,500,000	5,500,000	5,500,000	5,500,000	5,500,000	5,500,000	5,500,000	5,500,000
	Total Economic Cash Flow		-878,841,338	-11,000,000	-2,000,000	-2,000,000	-24,975,000	-24,975,000	-143,684,647	-216,789,022	-254,041,183	-182,458,739	-133,557,044	-133,985,669	155,921,166	-783,534	149,177,249	-862,460	149,690,947	-342,464	-596,220	-410,298	-300,444,669	-889,931
	Present Value		-559,155,170	-10,232,558	-1,730,665	-1,609,921	-18,701,293	-17,396,552	-93,102,122	-130,670,645	-142,441,459	-95,167,463	-64,801,067	-60,473,519	65,464,145	-306,018	54,198,104	-291,482	47,060,887	-100,154	-162,201	-103,834	-70,728,625	-194,885
	Economic Net Present Value		-559,155,170																					
	Economic Rate of Return (ERR)		-5.28%																					

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Economic Methodology for Fixed Link Project				Phase 3 - Operation																					
				22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41		
Section 1 - Transportation Economics																									
Traffic	Travellers (one-way trips)	Tourist Visitors - ferry/link	3.50%	26,773	27,710	28,679	29,683	30,722	31,797	32,910	34,062	35,254	36,488	37,765	39,087	40,455	41,871	43,337	44,853	46,423	48,048	49,730	51,470		
		Traditional Tourist Vehicles		10,027	10,378	10,741	11,117	11,506	11,909	12,326	12,757	13,204	13,666	14,144	14,639	15,152	15,682	16,231	16,799	17,387	17,996	18,625	19,277		
		Induced Visitors - fixed Link	1.25%	3,780	4,294	4,844	5,433	6,062	6,734	7,451	8,216	9,032	9,902	10,828	11,815	12,865	13,981	15,169	16,431	17,772	19,197	20,709	22,315		
		Induced Demand Vehicles - Tourists	2.67	1,416	1,608	1,814	2,035	2,270	2,522	2,791	3,077	3,383	3,709	4,056	4,425	4,818	5,236	5,681	6,154	6,656	7,190	7,756	8,358		
		Tourist Vehicles - ferry/link	2.67	11,443	11,986	12,556	13,152	13,777	14,431	15,117	15,835	16,587	17,375	18,200	19,064	19,970	20,919	21,912	22,953	24,043	25,185	26,382	27,635		
	Passenger Veh. Labrador	Local and Business Traffic Base	1.5%	31,427	31,898	32,376	32,862	33,355	33,855	34,363	34,879	35,402	35,933	36,472	37,019	37,574	38,138	38,710	39,290	39,880	40,478	41,085	41,701		
		one-time surge	30.0%																						
	Cabot	Diverted Passenger Vehicles		26,029	26,680	27,347	28,030	28,731	29,449	30,185	30,940	31,714	32,506	33,319	34,152	35,006	35,881	36,778	37,697	38,640	39,606	40,596	41,611		
		Induced Demand Veh %	1.50%	7,079	7,186	7,293	7,403	7,514	7,627	7,741	7,857	7,975	8,095	8,216	8,339	8,464	8,591	8,720	8,851	8,984	9,118	9,255	9,394		
		One time effect	30.0%																						
	Total	Total Passenger Vehicles		77,393	79,357	81,386	83,482	85,647	87,884	90,197	92,588	95,060	97,617	100,262	103,000	105,832	108,765	111,801	114,946	118,203	121,578	125,074	128,699		
		Total Induced Vehicle Trips		8,495	8,794	9,108	9,437	9,784	10,149	10,532	10,934	11,358	11,803	12,272	12,764	13,283	13,828	14,401	15,005	15,640	16,308	17,011	17,752		
	Base Freight	Total Visitors	2.67	206,639	211,884	217,301	222,896	228,677	234,651	240,825	247,209	253,810	260,637	267,700	275,009	282,573	290,403	298,510	306,905	315,602	324,612	333,949	343,626		
		Cabot/Oceanex Tractor-trailer	2.50%	239,176	245,155	251,284	257,566	264,005	270,605	277,371	284,305	291,413	298,698	306,165	313,819	321,665	329,707	337,949	346,398	355,058	363,934	373,033	382,358		
		Apollo Tractor-trailer		4,038	4,139	4,242	4,349	4,457	4,569	4,683	4,800	4,920	5,043	5,169	5,298	5,431	5,567	5,706	5,848	5,995	6,144	6,298	6,455		
		Diverted Cabot/Oceanex Tractor-Trailer	10%	23,918	24,516	25,128	25,757	26,401	27,061	27,737	28,430	29,141	29,870	30,617	31,382	32,166	32,971	33,795	34,640	35,506	36,393	37,303	38,236		
		Induced Cabot/Oceanex Tractor-Trailer	1.0%	2,392	2,452	2,513	2,576	2,640	2,706	2,774	2,843	2,914	2,987	3,062	3,138	3,217	3,297	3,379	3,464	3,551	3,639	3,730	3,824		
	Design Peak Hour Vol	Total Tractor-trailer		30,347	31,106	31,884	32,681	33,498	34,335	35,194	36,074	36,975	37,900	38,847	39,818	40,814	41,834	42,880	43,952	45,051	46,177	47,332	48,515		
		Autos		48	50	51	52	54	55	56	58	59	61	63	64	66	68	70	72	74	76	78	80		
		Trucks		11	11	11	12	12	12	13	13	13	14	14	14	15	15	16	16	16	17	17			
		PCUs	2.5	75	77	79	81	83	85	88	90	92	95	97	100	102	105	108	111	114	117	120	123		
		Dominant Direction (ratio)	50.00%	38	39	40	41	42	43	44	45	46	47	49	50	51	53	54	55	57	58	60	62		
Revenues Total				8,546,468	8,761,526	8,982,677	9,210,118	9,444,054	9,684,696	9,932,264	10,186,987	10,449,102	10,718,854	10,996,498	11,282,298	11,576,530	11,879,478	12,191,438	12,512,717	12,843,636	13,184,524	13,535,728	13,897,604		
	Passenger Tolls		1,292,463	1,325,269	1,359,149	1,394,144	1,430,301	1,467,665	1,506,285	1,546,212	1,587,500	1,630,204	1,674,381	1,720,093	1,767,403	1,816,376	1,867,083	1,919,596	1,973,990	2,030,345	2,088,742	2,149,269			
	Vehicle Tolls		2,360,487	2,420,402	2,482,277	2,546,191	2,612,226	2,680,465	2,751,000	2,823,921	2,899,327	2,977,318	3,058,001	3,141,487	3,227,891	3,317,334	3,409,943	3,505,849	3,605,192	3,708,115	3,814,769	3,925,312			
	Freight Tolls		4,893,517	5,015,855	5,141,251	5,269,783	5,401,527	5,536,565	5,674,980	5,816,854	5,962,275	6,111,332	6,264,116	6,420,718	6,581,236	6,745,767	6,914,412	7,087,272	7,264,454	7,446,065	7,632,217	7,823,022			
	Other																								
Expenses Total				4,966,206	6,026,206	4,966,206	4,966,206	4,966,206	20,788,206	4,966,206	4,966,206	4,966,206	28,844,206	4,966,206	4,966,206	4,966,206	4,966,206	8,096,206	4,966,206	4,966,206	4,966,206	4,966,206	10,828,206		
	Operations	Wages		3,374,000	3,374,000	3,374,000	3,374,000	3,374,000	3,374,000	3,374,000	3,374,000	3,374,000	3,374,000	3,374,000	3,374,000	3,374,000	3,374,000	3,374,000	3,374,000	3,374,000	3,374,000	3,374,000			
		Energy		892,206	892,206	892,206	892,206	892,206	892,206	892,206	892,206	892,206	892,206	892,206	892,206	892,206	892,206	892,206	892,206	892,206	892,206	892,206			
	Annual Maintenance	Wages		614,000	614,000	614,000	614,000	614,000	614,000	614,000	614,000	614,000	614,000	614,000	614,000	614,000	614,000	614,000	614,000	614,000	614,000	614,000			
		Purchased Serv & Supp		86,000	86,000	86,000	86,000	86,000	86,000	86,000	86,000	86,000	86,000	86,000	86,000	86,000	86,000	86,000	86,000	86,000	86,000	86,000			
	Periodic Maintenance	Purchased Serv & Supp			1,060,000				15,822,000				23,878,000				3,130,000					5,862,000			
Gross Operating (Surplus/Deficit)				3,580,262	2,735,320	4,016,471	4,243,912	4,477,848	-11,103,510	4,966,058	5,220,781	5,482,896	-18,125,352	6,030,292	6,316,092	6,610,324	6,913,272	4,095,232	7,546,511	7,877,430	8,218,318	8,569,522	3,069,398		
OperatingCostFact				100%																					
Total Capital Investments (Outflow)																									
	Pre-operation	Revenues	1,184,466,303																						
		Costs	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
	Infrastructure																								
		Civil Works	971,740,540																						
		M & E	17,004,000																						
		Systems	29,672,471																						
	Rolling Stock	37,367,772																							
	Sub total		1,055,784,783																						
	Other (Design, Proj. Mgt)		128,681,520																						

Economic Methodology for Fixed Link Project				Phase 3 - Operation																					
				22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41		
	Total Operating Cost		111	131,762,579	133,233,891	134,723,155	136,230,594	137,756,435	139,300,906	140,864,239	142,446,670	144,048,434	145,669,774	147,310,932	148,972,156	150,653,694	152,355,800	154,078,730	155,822,743	157,588,100	159,375,069	161,183,918	163,014,918		
		Wages	64.3	77,945,346	78,919,663	79,906,158	80,904,985	81,916,298	82,940,251	83,977,004	85,026,717	86,089,551	87,165,670	88,255,241	89,358,432	90,475,412	91,606,355	92,751,434	93,910,827	95,084,713	96,273,271	97,476,687	98,695,146		
		Fuel	16.9	17,572,041	17,615,971	17,660,011	17,704,161	17,748,422	17,792,793	17,837,275	17,881,868	17,926,573	17,971,389	18,016,318	18,061,358	18,106,512	18,151,778	18,197,158	18,242,650	18,288,257	18,333,978	18,379,813	18,425,762		
	Purchased Goods & Ser	29.9	36,245,192	36,698,257	37,156,985	37,621,447	38,091,715	38,567,862	39,049,960	39,538,085	40,032,311	40,532,715	41,039,373	41,552,366	42,071,770	42,597,667	43,130,138	43,669,265	44,215,131	44,767,820	45,327,418	45,894,010			
	Subsidy impact	-- reference subsidy \$mm	43.8																						
	Incremental gain (loss)			-10,005,063	-10,255,189	-10,511,569	-10,774,358	-11,043,717	-11,319,810	-11,602,805	-11,892,875	-12,190,197	-12,494,952	-12,807,326	-13,127,509	-13,455,697	-13,792,089	-14,136,892	-14,490,314	-14,852,572	-15,223,886	-15,604,483	-15,994,595		
	Net Revenue	Operating Surplus(deficit)		-62,226,342	-61,959,248	-61,666,646	-61,347,672	-61,001,440	-60,627,036	-60,223,523	-59,789,935	-59,325,282	-58,828,542	-58,298,670	-57,734,587	-57,135,186	-56,499,329	-55,825,847	-55,113,538	-54,361,165	-53,567,461	-52,731,119	-51,850,800		
	Capital Plan - Base	\$ Millions																							
	Capital Plan - Divert	\$ Millions		150												75			100				150		
	Total Cash - Base			-52,221,279	-51,704,059	-51,155,077	-50,573,314	-49,957,723	-49,307,226	-48,620,718	-47,897,060	-47,135,084	-46,333,590	-45,491,344	-44,607,078	-43,679,489	-42,707,240	-41,688,956	-40,623,224	-39,508,594	-38,343,575	-37,126,636	-35,856,205		
Total Cash - Divert			-212,226,342	-61,959,248	-61,666,646	-61,347,672	-61,001,440	-60,627,036	-60,223,523	-59,789,935	-59,325,282	-58,828,542	-58,298,670	-57,734,587	-57,135,186	-56,499,329	-55,825,847	-55,113,538	-54,361,165	-53,567,461	-52,731,119	-51,850,800			
PV Base (2004)		-1,044,206,082	-10,638,032	-9,797,831	-9,917,489	-8,292,965	-7,620,484	-6,996,519	-6,417,773	-5,881,165	-5,383,818	-4,923,042	-4,496,327	-4,101,328	-3,740,510	-3,397,858	-3,085,434	-2,801,527	-2,530,288	-2,284,349	-2,057,534	-1,851,423			
PV Divert		-1,015,598,330	-43,232,771	-11,741,172	-10,870,441	-10,059,734	-9,305,078	-8,602,760	-7,949,305	-7,341,463	-6,776,195	-6,250,657	-5,762,193	-5,308,316	-4,886,702	-4,495,180	-4,131,717	-3,794,417	-3,481,506	-3,191,324	-2,928,776	-2,673,058			
Net Present Value	Benefit attributable to fixed link	28,607,753																							
Apollo Impacts	Base																								
		Total Vehicles #	2.50%																						
		Trucks # (est.)	10.00%																						
	Passenger Vehicles #																								
	Subsidy impact	Reference Annual Subsidy \$ millions	5.5																						
	Sub total																								
	Net Change	Surplus(deficit)		-5,500,000.0	-5,500,000.0	-5,500,000.0	-5,500,000.0	-5,500,000.0	-5,500,000.0	-5,500,000.0	-5,500,000.0	-5,500,000.0	-5,500,000.0	-5,500,000.0	-5,500,000.0	-5,500,000.0	-5,500,000.0	-5,500,000.0	-5,500,000.0	-5,500,000.0	-5,500,000.0	-5,500,000.0			
	Capital Plan - Base																					75			
	Capital Plan - Divert																								
	Total Cash - Base		-5,500,000	-5,500,000	-5,500,000	-5,500,000	-5,500,000	-5,500,000	-5,500,000	-5,500,000	-5,500,000	-5,500,000	-5,500,000	-5,500,000	-5,500,000	-5,500,000	-5,500,000	-5,500,000	-5,500,000	-5,500,000	-5,500,000	-80,500,000	-5,500,000		
Total Cash - Divert		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
PV Base (2004)		-110,098,784	-1,120,409	-1,042,241	-969,526	-901,885	-838,963	-780,430	-725,982	-675,332	-628,216	-584,387	-543,616	-505,689	-470,408	-437,589	-407,060	-378,660	-352,242	-327,667	-304,258	-283,541			
PV Divert		-49,938,711	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
Net Present Value	Benefit attributable to fixed link	60,160,973																							
Transportation Net Present Value - ERR and Benefit to Cost Ratio	Fix Link Cash Flows			3,580,262	2,735,320	4,016,471	4,243,912	4,477,848	-11,103,510	4,966,058	5,220,781	5,482,896	-18,125,352	6,030,292	6,316,092	6,610,324	6,913,272	4,095,232	7,546,511	7,877,430	8,218,318	8,569,522	3,069,398		
	Marine Atlantic Economic Benefit		-160,005,063	-10,255,189	-10,511,569	-10,774,358	-11,043,717	-11,319,810	-11,602,805	-11,892,875	-12,190,197	-12,494,952	-12,807,326	-13,127,509	-13,455,697	-13,792,089	-14,136,892	-14,490,314	-14,852,572	-15,223,886	-15,604,483	134,005,405			
	Apollo Economic Benefit		5,500,000	5,500,000	5,500,000	5,500,000	5,500,000	5,500,000	5,500,000	5,500,000	5,500,000	5,500,000	5,500,000	5,500,000	5,500,000	5,500,000	5,500,000	5,500,000	5,500,000	5,500,000	5,500,000	80,500,000	5,500,000		
	Total Economic Cash Flow		-878,841,338	-150,924,801	-2,019,869	-995,098	-1,030,446	-1,065,870	-16,923,320	-1,136,747	-1,172,094	-1,207,301	-25,120,304	-1,277,034	-1,311,417	73,654,627	-1,378,818	-4,541,660	98,556,197	-1,475,142	-1,505,568	-1,534,961	142,574,803		
	Present Value		-559,155,170	-30,744,993	-382,762	-175,413	-168,972	-162,586	-2,401,359	-150,647	-143,919	-137,899	-2,669,086	-126,221	-120,576	6,299,589	-109,701	-336,132	6,785,327	-94,474	-89,695	-85,067	7,350,142		
	Economic Net Present Value		-559,155,170																						
	Economic Rate of Return (ERR)		-5.28%																						
	Benefit /Cost Ratio		0.19																						
	Other Economic Impacts																								
		Construction Impacts	Indirect plus induced GDP -- NPV	-211,649,822	-140,062,931	9,185,464	10,259,493	10,427,496	10,600,279	-2,814,165	10,960,994	11,149,358	11,343,364	-8,969,617	11,749,289	11,961,730	87,180,859	12,406,970	9,951,483	112,881,391	13,130,364	13,387,650	13,653,622	158,892,806	
Operations Impacts		Indirect plus induced GDP -- NPV	166,971,243																						
Tourism Impacts		Total GDP Impact -- NPV	54,374,372																						
Total Spin-off Benefits		NPV	225,695,712																						
Fixed Link Economic NPV			-333,459,458																						
		Socio-economic Rate of Return		-1.4%																					
		Benefit Cost Ratio		0.52																					
SECTION 2 - Financial Analysis																									
Financing during Construction																									

Economic Methodology for Fixed Link Project				Phase 3 - Operation																					
				22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	4		
	Project Costs			55,239,081																					
	Internal Rate of Return			8.0%	6,163,676	4,826,775	7,264,696	7,867,976	8,509,221	-21,627,418	9,914,710	10,683,846	11,500,745	-38,969,629	13,289,298	14,267,111	15,305,029	16,406,612	9,961,796	18,816,084	20,132,208	21,528,497	23,009,713	8,447,567	
Section 3 - Socio-Economic Impact				22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	4		
Construction Effects	Construction Spending	Annual Civil & M&E																							
		Direct GDP	34.0%																						
		Indirect	63.0%																						
		Induced	15.0%																						
		Indirect plus induced GNP impact																							
		Net Present Value	166,971,243																						
Operations Impacts	Operations Costs	Annual Costs		4,966,206	6,026,206	4,966,206	4,966,206	4,966,206	20,788,206	4,966,206	4,966,206	4,966,206	28,844,206	4,966,206	4,966,206	4,966,206	4,966,206	8,096,206	4,966,206	4,966,206	4,966,206	4,966,206	4,966,206	10,828,206	
		Direct GDP	34.0%	1,688,510	2,048,910	1,688,510	1,688,510	1,688,510	7,067,990	1,688,510	1,688,510	1,688,510	9,807,030	1,688,510	1,688,510	1,688,510	1,688,510	2,752,710	1,688,510	1,688,510	1,688,510	1,688,510	1,688,510	3,681,590	
		Indirect	23.0%	388,357	471,249	388,357	388,357	388,357	1,625,638	388,357	388,357	388,357	2,255,617	388,357	388,357	388,357	388,357	633,123	388,357	388,357	388,357	388,357	388,357	846,766	
		Induced	15.0%	311,530	378,024	311,530	311,530	311,530	1,304,044	311,530	311,530	311,530	1,809,397	311,530	311,530	311,530	311,530	507,875	311,530	311,530	311,530	311,530	311,530	679,253	
		Indirect plus induced GNP impact		699,887	849,273	699,887	699,887	699,887	2,929,682	699,887	699,887	699,887	4,065,014	699,887	699,887	699,887	699,887	1,140,998	699,887	699,887	699,887	699,887	699,887	1,526,019	
		Net Present Value	4,350,097	142,575	160,936	123,374	114,767	106,760	415,711	92,383	85,938	79,942	431,916	69,176	64,350	59,861	55,684	84,446	48,185	44,824	41,696	38,787	78,671		
Tourism Impacts	Tourist Indicators	Induced Visitors -- trip add-on	1	73,276	75,528	77,859	80,273	82,773	85,363	88,046	90,826	93,708	96,694	99,790	103,001	106,330	109,784	113,366	117,083	120,941	124,945	129,101	133,416		
		Induced Visitors -- full trip	11	18,902	19,186	19,473	19,765	20,062	20,363	20,668	20,978	21,293	21,612	21,937	22,266	22,600	22,939	23,283	23,632	23,986	24,346	24,711	25,082		
		Incremental Room nights	2	140,599	143,285	146,033	148,847	151,727	154,677	157,699	160,794	163,965	167,215	170,546	173,961	177,463	181,054	184,738	188,517	192,396	196,376	200,463	204,659		
		Incre Annual Expenditures Tourists	62.35	17,532,751	17,867,598	18,210,323	18,561,171	18,920,394	19,288,257	19,665,034	20,051,008	20,446,477	20,851,749	21,267,143	21,692,994	22,129,648	22,577,467	23,036,827	23,508,119	23,991,751	24,488,147	24,997,751	25,521,022		
		Direct GDP	35.0%	6,136,463	6,253,659	6,373,613	6,496,410	6,622,138	6,750,890	6,882,762	7,017,853	7,156,267	7,298,112	7,443,500	7,592,548	7,745,377	7,902,114	8,062,889	8,227,842	8,397,113	8,570,852	8,749,213	8,932,358		
		Indirect	44.0%	2,700,044	2,751,610	2,804,390	2,858,420	2,913,741	2,970,392	3,028,415	3,087,855	3,148,757	3,211,169	3,275,140	3,340,721	3,407,966	3,476,930	3,547,671	3,620,250	3,694,730	3,771,175	3,849,654	3,930,237		
		Induced	15.0%	1,325,476	1,350,790	1,376,700	1,403,225	1,430,382	1,458,192	1,486,677	1,515,856	1,545,754	1,576,392	1,607,796	1,639,990	1,673,001	1,706,857	1,741,584	1,777,214	1,813,776	1,851,304	1,889,830	1,929,389		
		Total		10,161,982	10,356,060	10,554,703	10,758,055	10,966,261	11,179,474	11,397,854	11,621,564	11,850,778	12,085,673	12,326,436	12,573,259	12,826,344	13,085,900	13,352,145	13,625,306	13,905,619	14,193,330	14,488,696	14,791,984		
		Net Present Value	54,374,372	2,070,104	1,962,456	1,860,557	1,764,096	1,672,779	1,586,327	1,504,479	1,426,984	1,353,608	1,284,128	1,218,335	1,156,029	1,097,021	1,041,136	988,203	938,065	890,571	845,579	802,954	762,569		
		TOTAL OTHER IMPACTS			225,695,712	2,212,679	2,123,392	1,983,931	1,878,863	1,779,539	2,002,039	1,596,862	1,512,922	1,433,550	1,716,045	1,287,511	1,220,379	1,156,882	1,096,820	1,072,650	986,251	935,395	887,275	841,741	841,240
		Social Impacts	Employment	Construction & Operations																					
				NL - Skilled	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	
NL - Unskilled	15			15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15			
Non-res	0			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
Total NL Direct Employment	40			40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40		
Indirect Construction Employment	0.63			25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25		
Induced Construction Employment	0.3			20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20		
Total Annual FTE Employment	85			85	85	85	85	85	85	85	85	85	85	85	85	85	85	85	85	85	85	85	85		
Tourism																									
Total Incremental Spending	17,532,751			17,867,598	18,210,323	18,561,171	18,920,394	19,288,257	19,665,034	20,051,008	20,446,477	20,851,749	21,267,143	21,692,994	22,129,648	22,577,467	23,036,827	23,508,119	23,991,751	24,488,147	24,997,751	25,521,022			
Incremental FTE - Direct	12.8			224	229	233	238	242	247	252	257	262	267	272	278	283	289	295	301	307	313	320	327		
Incremental FTE - Indirect	0.24																								
Incremental FTE - Induced	0.15																								
Total Impact	18.3	320	326	332	339	345	352	359	366	373	381	388	396	404	412	420	429	438	447	456	466				
TOTAL RELATED EMPLOYMENT			405	411	417	424	430	437	444	451	458	465	473	481	489	497	505	514	523	532	541	551			
Wages	Construction & Operations	Construction & Operations																							
		Direct Payroll	3,988,000	3,988,000	3,988,000	3,988,000	3,988,000	3,988,000	3,988,000	3,988,000	3,988,000	3,988,000	3,988,000	3,988,000	3,988,000	3,988,000	3,988,000	3,988,000	3,988,000	3,988,000	3,988,000	3,988,000	3,988,000		
		Indirect Construction Employment	0.53	2,113,640	2,113,640	2,113,640	2,113,640	2,113,640	2,113,640	2,113,640	2,113,640	2,113,640	2,113,640	2,113,640	2,113,640	2,113,640	2,113,640	2,113,640	2,113,640	2,113,640	2,113,640	2,113,640	2,113,640		
		Induced Construction Employment	0.3	1,830,492	1,830,492	1,830,492	1,830,492	1,830,492	1,830,492	1,830,492	1,830,492	1,830,492	1,830,492	1,830,492	1,830,492	1,830,492	1,830,492	1,830,492	1,830,492	1,830,492	1,830,492	1,830,492	1,830,492		
		Sub-Total Wages	7,932,132	7,932,132	7,932,132	7,932,132	7,932,132	7,932,132	7,932,132	7,932,132	7,932,132	7,932,132	7,932,132	7,932,132	7,932,132	7,932,132	7,932,132	7,932,132	7,932,132	7,932,132	7,932,132	7,932,132	7,932,132		
		Tourism																							
		Incremental Direct Wages	23.6%	4,137,729	4,216,753	4,297,636	4,380,436	4,465,213	4,552,029	4,640,948	4,732,038	4,825,369	4,921,013	5,019,046	5,119,547	5,222,597	5,328,282	5,436,691	5,547,916	5,662,053					