BOON, JONES AND ASSOCIATES, INC.
Transportation Consultants

August 3, 1994

Mr. Don Beange	**Mr. Denis Courtemanche**	**Mr. Roger Ledoux**
Ministry of Transportation	**Policy and Coordination**	**Ministère des Transports**
of Ontario	**Transport Canada**	**du Québec**
1201 Wilson Avenue	**Place de Ville**	**700, boul. St.Cyrille Est**
Downsview, ON	**Tower C, 19th Floor**	**22^{e} étage**
M3M 1J8	**Ottawa, ON**	**Québec, QC**
	K1A 0N5	**G1R 5H1**

Gentlemen:

Please find attached cost tables for the eleven scenarios which we have analysed.

Our Draft Final Report is being transmitted today to Transurb.

Yours sincerely,

Joe Jones

Joseph Jones

Christopher J. Boon
President
Tel: (613) 546-8833
Fax: (613) 546-9594
Project Planning and Management

Technology Assessment
Transportation Policy
Life-Cycle Costing
Systems Analysis
Operations Analysis

Joseph Jones
Vice-President
Tel: (613) 389-3396
Fax: (613) 389-3864
Market Analysis

P.O. BOX 25021, R.P.O. REDDENDALE, KINGSTON, ON. K7M 8V8 CANADA

Spreadsheet	W:\207-CHAS\COSTING\20QW-1.WK3		
Today's date	27-Jul-94		
Proessing time	09:43		
Data export file	X-20QW-1.WK1		
Train speed	200 kph		
Train route	Composite (via Dorval) at 200 kph		
Demand data	QW Corridor		
Initial demand file	R105QW22/R125QW22 [as supplied by IBI]		
Train data	Final off NEW-OD.WK1		
Trip Time	COMPO. ˉE VIA DORVAL		
Capital file	C:\work\20.˙-chas\canarail\extract.wk3		
Capital name	MONTREAL - TORONTO CORRIDOR 200+, composite EX .. 2c00-		
	MONTREAL - QUEBEC 200+, composite EX .. 2c00-		
	WINDSOR - TORONTO 200+, composite EX .. 2c00-		
Cap allocation	SPLIT-2B.WK3		
Include SWO	Yes		
Include MQ	Yes		
MOT to Pearson	Yes		
Con Air Included	Yes		
via Mirabel	No		
via Dorval	Yes		
Delay Cap Input	2cd-xx-2	1 *MOT*	100% *DT*
	2cd-xx-2	1 *MQ*	100% *DT*
	2cd-xx-2	1 *SWO*	61% *DT*
		1 *SPLIT*	

01-Aug-94 **HSR STUDY COST DEVELOPMENT**

OPERATIONS/REVENUES/COSTS Composite (via Dorval) at 200 kph QW Corridor

			Year 2005	Year 2025		
	RIDERSHIP					
1 [A]	Adjusted passengers (non-duplicated)	millions	10.0	15.3		
2	Average length of haul	kms	319	327		
3	Passenger kilometres	billion	3.2	5.0		
	OPERATION STATISTICS					
4	Route length	kilometres	1,228	1,228		
5	Train trips (one-way)	thousands	21.2	30.1		
6	Trainset kms	millions	16.8	24.0		
7	Seat kms	billions	4.7	6.8	*282 per trainset*	
8	Trainsets in active fleet	units	60	79		
9	Average trainset utilization	k-km/year	280	304		
10	Average load factor		67%	74%		
11	Total energy consumption	gigaW-hrs	206	293		
12	Total employment		2,390	2,889		
	PASSENGER REVENUES					
13	Adjustusted revenues	$million	632.8	1,038.9		
14	Agency commissions	$million	(34.8)	(57.1)	*5.5% of gross revenue*	
15	Credit card discount	$million	(5.9)	(9.7)	*0.9% of gross revenue*	
16	Net Revenue	$million	592.1	972.0		
	OPERATIONS AND MAINTENANCE COSTS				***[Total employment]***	
17	Train operations	$million	32.7	42.9	260	326
18	Customer services	$million	70.5	86.0	747	927
19	Equipment maintenance	$million	34.7	48.2	542	739
20	Infrastructure maintenance	$million	60.9	76.4	649	683
21	Executive/administration	$million	24.2	25.6	219	242
22	Insurance/taxes/other	$million	26.1	29.2	0	0
23	Contingency	$million	17.9	21.1	--	--
24	**Total O&M Costs**	$million	259.1	321.2	2,390	2,889
25	**OPERATING PROFIT**		333.0	650.8		
26	**COST/REVENUE RATIOS**					
27	Net revenue : O&M costs Ratio		2.28	3.03		
28	O&M cost per trainset-km	dollars	15.40	13.36		
29	O&M cost per seat-km	cents	5.46	4.74		
30	O&M cost per passenger	dollars	25.99	21.04		
31	O&M cost per passenger-km	cents	8.14	6.44		
32	Net revenue per passenger	dollars	59.39	63.66		
33	Net revenue per passenger km	cents	18.60	19.48		
	CAPITAL COSTS					
34	Startup/admin/training/other "soft" costs	$million	256.1			
35	Construction of track	$million	6,763.6			
36	Construction of stations	$million	520.5			
37	Construction of maintenance facilities	$million	308.5			
38	Acqusition of rolling stock	$million	1,428.7			
39	**Total Initial Capital Costs**	$million	9,277.5	*over the period 1995 to 2006*		
40	**Total Ongoing Capital Costs**	$million	1,046.7	*over the period 2007 to 2025*		
41	Initial capital per route-km (excluding RS)	$million	6.39			

		2005 Que	*2005 Ont*	*2025 Que*	2025 Ont
901	Net Revenues	214.47	377.63	353.87	618.10
902	O and M Costs	99.30	159.83	121.80	199.43
903	Employment	938	1,452	1,142	1,747

01-Aug-94

HSR STUDY COST DEVELOPMENT

TOTAL CASHFLOW

Composite (via Dorval) at 200 kph QW Corridor

No.	Item	*Total Year 2005*	*Total Year 2025*	*Quebec Year 2005*	*Quebec Year 2025*
501	**[A] RIDERSHIP**	10.0	15.3	*NA*	*NA*
502	**ADJUSTED GROSS REVENUE**	632.8	1,038.9	229.2	378.2
503	Payments to Travel Agencies	34.8	57.1	12.6	20.8
504	Payments to Credit Card Companies	5.9	9.7	2.1	3.5
505	**Revenue Available to HSR Operator**	592.1	972.0	214.5	353.9
	OPERATING EMPLOYMENT				
904	Total employment	2,390	2,889	938	1,142
905	"Skilled" employment	1,480	1,726	557	658
906	"Unskilled" employment	910	1,163	381	484
907	Employment in Ontario	1,452	1,747		
908	Employment in Quebec	938	1,142	938	1,142
	OPERATING COSTS				
	Labour				
506	Bare wage bill skilled	70.7	82.5	27.3	32.1
507	Bare wage bill unskilled	25.5	32.5	10.8	13.7
508	Payroll taxes	8.1	9.7	3.2	3.8
509	Provisions for pension plan	7.2	8.6	2.9	3.4
	Purchased materials/services				
510	Electricity	14.5	20.0	3.4	4.5
511	Advertising/promotion	12.7	12.7	4.7	4.7
512	Infrastructure maintenance services	16.5	13.6	4.3	4.7
513	Infrastructure materials/supplies	1.9	18.7	0.5	5.2
514	Rolling stock materials/supplies	11.5	16.5	5.8	8.3
515	Telecommunications/computer services	13.4	20.3	4.8	7.4
516	Insurance services/franchise fees etc	11.5	14.4	3.3	4.3
517	Food/related sundries	1.7	2.6	0.7	1.0
518	**Unscheduled materials/services**	46.1	48.1	21.2	20.8
519	**Allowance for contingencies**	17.9	21.1	6.6	7.9
520	**TOTAL OPERATING COSTS**	259.1	321.2	99.3	121.8
521	**OPERATING PROFIT**	333.0	650.8	*NA*	*NA*
909	**COST REVENUE RATIO**	2.28	3.03	*NA*	*NA*
522	Operating costs (Ontario)	159.8	199.4		
523	Operating costs (Quebec)	99.3	121.8		

No.	**CAPITAL COSTS**	**Initial**	**Ongoing**	**Total**
524	Total spent in Quebec	2,203.27	103.61	2,306.89
525	Total spent in Ontario	4,196.77	103.61	4,300.38
526	Total spent in the rest of Canada	268.02	0.00	268.02
527	Total spend in the rest of the World	1,180.02	0.00	1,180.02
528	Geographical allocation pending	1,428.74	808.06	2,236.80
529	Residual unallocated to region	0.73	0.00	0.73
530	**Total Capital Costs**	9,277.55	1,015.28	10,292.83
531	Total spent on skilled labour	2,454.68	0.00	2,454.68
532	Total spent on unskilled labour	623.49	0.00	623.49
533	Total spent on material	4,667.67	1,015.28	5,682.95
534	Total spent on plant	1,531.64	0.00	1,531.64
535	Residual unallocated to spending category	0.07	0.00	0.07
536	**Total Capital Costs**	9,277.55	1,015.28	10,292.83

No.	**TOTAL CASH FLOW (excluding revenues)**	
537	Total spent in Quebec	*[This line defined only for year-by-year tables]*
538	Total spent in Ontario	*[This line defined only for year-by-year tables]*
539	Total spent in the rest of Canada	*[This line defined only for year-by-year tables]*
540	Total spend in the rest of the World	*[This line defined only for year-by-year tables]*
541	Geographical allocation pending	*[This line defined only for year-by-year tables]*
542	Residual unallocated to region	*[This line defined only for year-by-year tables]*
543	**Total**	*[This line defined only for year-by-year tables]*
910	**NET CASH FLOW**	*[This line defined only for year-by-year tables]*

0 **OPERATIONS COST BREAKDOWN Composite (via Dorval) at 200 kph QW Corridor**

		Cont Allow	Cost Estimate ($ million) 2005	Cost Estimate ($ million) 2025	Employment Estimate 2005	Employment Estimate 2025	Quebec Share 2005
	TRAIN OPERATIONS						
101	Train crew	5.0%	13.80	18.32	191	254	42%
102	Power - demand charges	2.5%	6.55	8.64	--	--	26%
103	Power - energy consumption	2.5%	7.98	11.37	--	--	21%
104	Control centre	5.0%	2.38	2.38	40	40	50%
105	Transportation administration/supervision	5.0%	1.98	2.22	29	33	49%
106	**Subtotal**		32.69	42.93	260	326	34%
	CUSTOMER SERVICES						
107	On-board service staff	10.0%	6.78	9.72	158	227	43%
108	On-board service supplies	5.0%	1.67	2.56	--	--	39%
109	On-board services ground support	10.0%	1.24	1.78	32	45	43%
110	Food/beverage for sale	0.0%	0.00	0.00	--	--	--
111	Station operations	10.0%	20.70	22.21	285	329	30%
112	ATM/Ticketing/Reservations transactions	5.0%	13.41	20.34	--	--	36%
113	Telephone/Counter Sales	5.0%	4.48	5.61	126	158	35%
114	Advertising and promotion expenses	5.0%	12.66	12.66	--	--	37%
115	Customer service administration/supervision	5.0%	9.60	11.09	146	167	49%
116	**Subtotal**		70.54	85.98	747	927	37%
	EQUIPMENT MAINTENANCE						
117	Routine maintenance - labour	5.0%	10.80	15.41	215	306	50%
118	Routine maintenance - material	5.0%	11.54	16.54	--	--	50%
119	Major maintenance [included in capital]	--	--	--	--	--	--
120	Cleaning	5.0%	7.87	10.58	255	345	42%
121	Maintenance administration/supervision	5.0%	4.51	5.66	72	89	50%
122	**Subtotal**		34.71	48.19	542	739	48%
	INFRASTRUCTURE MAINTENANCE						
123	Routine maintenance	15.0%	31.94	33.24	496	526	30%
124	Purchased services	15.0%	16.48	13.57	--	--	30%
125	Materials	10.0%	1.87	18.68	--	--	28%
126	Programmed replacement [occurs after 2025]	--	--	--	--	--	
127	Maintenance administration/supervision	5.0%	10.62	10.95	153	157	28%
128	**Subtotal**		60.91	76.45	649	683	29%
	EXECUTIVE/ADMINISTRATION						
129	Labour and related	5.0%	13.27	14.67	193	213	49%
130	Other	5.0%	10.90	10.90	--	--	50%
131	**Subtotal**		24.17	25.57	193	213	49%
	INSURANCE/TAXES/OTHER						
132	Insurance/claims	0.0%	11.50	14.38	--	--	29%
133	Property taxes	10.0%	6.75	6.65	--	--	83%
134	Franchise fees	10.0%	*nil*	nil	--	--	
135	**Subtotal**		18.25	21.03	0	0	49%
136	**CONTINGENCY**	7.4%	17.86	21.08	--	--	37%
137	**TOTAL**		259.13	321.23	2,390	2,889	38%
138	**Total: Quebec component**		99.30	121.80	938	1,142	
139	**Total: Ontario component**		159.83	199.43	1,452	1,747	
140	**[Major maintenance included in capital]**		0.00	26.23			
141	Routine equipment maintenance per trainset km	dollars	1.33	1.33			
142	Infrastructure maintenance per route km	$thousand	40.95	53.33			
143	Executive/administration as a percent of total		10.0%	8.5%			
144	Station/ticketing costs per passenger	Dollars	3.83	3.12			
145							
146							

CAPITAL COST SUMMARY

Composite (via Dorval) at 200 kph QW Corridor

		Professional Services	Contin-*gency*	Total
201	Right-of-Way	40.92	45.56	467.12
202	Earthworks/subgrade	294.14	177.40	1,654.21
203	Bridges	95.80	52.89	677.59
204	Grade separations	156.35	145.96	1,105.80
205	Other accommodations	20.98	29.40	148.39
206	Track	131.55	44.68	1,036.72
207	Power distribution system	130.18	103.11	920.71
208	Stations	67.15	37.07	474.92
209	People movers (included in stations)	0.00	0.00	0.00
210	Signals	79.83	52.56	482.77
211	Communications	44.70	29.43	270.30
212	Equipment maintenance facilities	13.14	19.71	175.88
213	Infrastructure maintenance facilities	0.00	0.00	132.66
214	Information/ticketing systems	0.00	0.00	45.61
215	Rolling stock	105.83	117.97	1,428.74
216	Commissioning	102.33	0.00	102.33
217	Administration allowance	0.00	0.00	93.17
218	Startup and training	0.00	0.00	60.74
219	**TOTAL INITIAL CAPITAL COSTS**	1,282.89	855.74	9,277.68

220	**Additional fleet requirements**	*year 2009*	5 units	117.11
221		*year 2013*	5 units	117.11
222		*year 2017*	3 units	70.27
223		*year 2021*	5 units	117.11
224		*Total*	18 units	421.60
225	**Rolling Stock Overhauls**	*total, years 2005-2025*		424.41
226	**Infrastructure Renewal**	*total, years 2005-2025*		0.00
227	**Other ongoing capital**	*total, years 2005-2025*		207.23
228	*Cross check initial capital*			*(0.00)*

RIDERSHIP BREAKDOWN — Composite (via Dorval) at 200 kph QW Corridor

			Year 2005	Year 2025		
	RIDERSHIP					
301	Ridership within the segment	*millions*	na	na		
302	Ridership between segments	*millions*	na	na		
303	Airport traffic	*millions*	na	na		
304 [A]	**Total potential passengers**	*million*	10.07	15.42		
305	Passengers not served at peak	*million*	(0.10)	(0.15)	1.0%	*of passengers*
306	Allowance for additional passengers	*million*	0.00	0.00	0.0%	*of passengers*
307	**Net passengers**	*million*	9.97	15.27		
	PASSENGER REVENUES					
308	Initial transportation revenue estimate	*$million*	693.67	1,138.81		
309	PST/GST	*$million*	(54.44)	(89.46)	7.8%	*of revenues*
310	Revenue estimate net of taxes	*$million*	639.23	1,049.35		
311	First Class premium	*$million*	0.00	0.00	0.0%	*of revenues*
312	Food/beverage sales	*$million*	0.00	0.00	0.00	*per passenger*
313	Revenues foregone at peak	*$million*	(6.39)	(10.49)	1.0%	*of revenues*
314	**Final Gross Revenue**	*$million*	632.83	1,038.85		
	PASSENGER KILOMETRES					
315	Ridership within segments	*billions*	2.86	4.50		
316	Ridership between segments	*billions*	0.35	0.55		
317	Airport traffic	*billions*	above	above		
318	Total		3.21	5.04		
319	Passenger-km foregone at peak	*billions*	(0.03)	(0.05)	1.0%	*of passenger-km*
320	Allowance for additional passenger-kms	*billions*	0.00	0.00	0.0%	*of passengers-km*
321	**Total passenger kms**	*billions*	3.18	4.99		
322	**Average Length of Haul**	*kms*	319	327		

EMPLOYMENT DATA

Composite (via Dorval) at 200 kph QW Corridor

		Average Wage	Total Year 2005	Total Year 2025	Quebec Year 2005	Quebec Year 2025
401	Train Crew	57,500	191	254	79	102
402	Dispatchers	50,600	40	40	20	20
403	Managerial/admin/professional	58,324	529	583	216	241
404	Station staff	35,939	71	82	24	28
405	Mechanical trades/skilled	39,402	243	335	116	160
406	Maintenance trades/skilled	36,349	406	432	102	107
407	**Total "skilled"**	47,796	1,480	1,726	557	658
408	OBS Staff	31,453	174	249	74	103
409	Sales Staff	29,007	126	158	45	57
410	Other customer service	29,986	16	23	7	9
411	Support staff	34,206	64	76	41	49
412	Station labour (various)	24,881	214	247	72	84
413	Equipment maintenance unskilled	30,603	17	25	9	12
414	Track maintenance unskilled	30,603	90	94	45	47
415	Cleaners	24,270	210	291	89	122
416	**Total "unskilled"**	27,984	910	1,163	381	484
417	**Total "unallocated"**		0	0	(0)	(0)
418	**Grand total employment**	40,252	2,390	2,889	938	1,142
419	**Ontario Total "skilled"**		923	1,068		
420	**Ontario Total "unskilled"**		529	679		
421	**Ontario Total "unallocated"**		0	0		
422	**Ontario Grand total employment**		1,452	1,747		
423	**Quebec Total "skilled"**		557	658		
424	**Quebec Total "unskilled"**		381	484		
425	**Quebec Total "unallocated"**		0	0		
426	**Quebec Grand total employment**		938	1,142		

TOTAL CASHFLOW

Composite (via Dorval) at 200 kph QW Corridor

		1995	1996	1997	1998	1999	2000	2001	2002
501 [A]	**RIDERSHIP**	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
502	**ADJUSTED GROSS REVENUE**	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
503	Payments to Travel Agencies	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
504	Payments to Credit Card Companies	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
505	**Revenue Available to HSR Operator**	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	OPERATING EMPLOYMENT								
904	Total employment	0	0	0	0	0	0	0	0
905	"Skilled" employment	0	0	0	0	0	0	0	0
906	"Unskilled" employment	0	0	0	0	0	0	0	0
907	Employment in Ontario	0	0	0	0	0	0	0	0
908	Employment in Quebec	0	0	0	0	0	0	0	0
	OPERATING COSTS								
	Labour								
506	Bare wage bill skilled	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
507	Bare wage bill unskilled	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
508	Payroll taxes	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
509	Provisions for pension plan	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Purchased materials/services								
510	Electricity	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
511	Advertising/promotion	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
512	Infrastructure maintenance services	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
513	Infrastructure materials/supplies	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
514	Rolling stock materials/supplies	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
515	Telecommunications/computer services	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
516	Insurance services/franchise fees etc	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
517	Food/related sundries	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
518	**Unscheduled materials/services**	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
519	**Allowance for contingencies**	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
520	**TOTAL OPERATING COSTS**	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
521	**OPERATING PROFIT**	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
909	**COST REVENUE RATIO**								
522	Operating costs (Ontario)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
523	Operating costs (Quebec)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	CAPITAL COSTS								
524	Total spent in Quebec	0.0	12.4	16.2	58.4	161.0	333.0	537.9	558.3
525	Total spent in Ontario	0.0	20.1	23.1	40.0	202.5	510.9	1,032.1	1,030.2
526	Total spent in the rest of Canada	0.0	0.0	0.0	0.2	0.5	6.5	29.1	84.2
527	Total spend in the rest of the World	0.0	1.1	2.1	5.6	38.7	151.1	347.7	341.3
528	Geographical allocation pending	0.0	26.8	26.8	71.4	71.4	178.6	178.6	178.6
529	Residual unallocated to region	0.0	0.0	0.1	(0.0)	0.0	0.1	0.2	0.2
530	**Total Capital Costs**	0.0	60.4	68.3	175.7	474.2	1,180.2	2,125.7	2,192.7
531	Total spent on skilled labour	0.0	24.2	30.1	69.5	166.7	336.6	632.4	596.5
532	Total spent on unskilled labour	0.0	1.0	1.2	2.8	21.1	82.0	195.3	181.2
533	Total spent on material	0.0	28.4	28.8	84.2	216.6	556.6	864.5	996.1
534	Total spent on plant	0.0	6.7	8.2	19.2	69.7	205.0	433.5	418.9
535	Residual unallocated to spending category	0.0	0.0	0.1	(0.0)	0.0	0.0	0.0	0.0
536	**Total Capital Costs**	0.0	60.4	68.3	175.7	474.2	1,180.2	2,125.7	2,192.7
	TOTAL CASH FLOW (excluding revenues)								
537	Total spent in Quebec	0.0	5.9	7.3	23.3	102.0	175.3	264.3	215.5
538	Total spent in Ontario	0.0	13.5	16.3	27.9	127.9	316.9	633.3	610.7
539	Total spent in the rest of Canada	0.0	0.0	0.0	0.1	0.3	6.3	16.5	43.4
540	Total spend in the rest of the World	0.0	0.7	2.0	2.9	34.9	93.9	197.6	171.3
541	Geographical allocation pending	0.0	17.1	26.8	45.7	45.7	114.2	114.2	114.2
542	Residual unallocated to region	0.0	0.0	0.1	(0.0)	(0.0)	0.1	0.2	0.2
543	**Total**	0.0	37.3	68.3	99.9	310.8	706.8	1,226.1	1,155.2
910	**NET CASH FLOW**	0.0	(37.3)	(68.3)	(99.9)	(310.8)	(706.8)	(1,226.1)	(1,155.2)

01-Aug-94

HSR STUDY COST DEVELOPMENT

TOTAL CASHFLOW — Composite (via Dorval) at 200 kph QW Corridor

		2003	2004	2005	2006	2007	2008	2009	2010
501	**[A] RIDERSHIP**	1.1	2.9	10.0	10.2	10.4	10.6	10.9	11.1
502	**ADJUSTED GROSS REVENUE**	52.3	150.0	632.8	648.7	665.0	681.6	698.7	716.3
503	Payments to Travel Agencies	2.9	8.3	34.8	35.7	36.6	37.5	38.4	39.4
504	Payments to Credit Card Companies	0.5	1.4	5.9	6.1	6.2	6.4	6.6	6.7
505	**Revenue Available to HSR Operator**	48.9	140.4	592.1	606.9	622.2	637.8	653.8	670.2
	OPERATING EMPLOYMENT								
904	Total employment	312	750	2,390	2,413	2,436	2,459	2,482	2,505
905	"Skilled" employment	228	486	1,480	1,491	1,503	1,515	1,526	1,538
906	"Unskilled" employment	84	264	910	921	933	944	956	967
907	Employment in Ontario	125	149	1,452	1,466	1,479	1,493	1,507	1,521
908	Employment in Quebec	187	601	938	947	956	966	975	985
	OPERATING COSTS								
	Labour								
506	Bare wage bill skilled	11.1	22.8	70.7	71.3	71.8	72.4	72.9	73.5
507	Bare wage bill unskilled	2.4	7.5	25.5	25.8	26.1	26.4	26.7	27.1
508	Payroll taxes	1.1	2.5	8.1	8.1	8.2	8.3	8.4	8.4
509	Provisions for pension plan	1.0	2.2	7.2	7.3	7.3	7.4	7.5	7.5
	Purchased materials/services								
510	Electricity	0.9	2.2	14.5	14.8	15.0	15.2	15.5	15.7
511	Advertising/promotion	4.2	6.2	12.7	12.7	12.7	12.7	12.7	12.7
512	Infrastructure maintenance services	2.5	6.3	16.5	16.5	16.5	15.9	15.3	14.7
513	Infrastructure materials/supplies	0.3	0.7	1.9	2.0	2.1	2.3	2.4	2.6
514	Rolling stock materials/supplies	0.9	2.7	11.5	11.7	12.0	12.2	12.4	12.6
515	Telecommunications/computer services	1.4	3.7	13.4	13.7	14.0	14.3	14.6	14.9
516	Insurance services/franchise fees etc	1.7	4.2	11.5	11.6	11.8	11.9	12.0	12.2
517	Food/related sundries	0.2	0.5	1.7	1.7	1.7	1.8	1.8	1.9
518	**Unscheduled materials/services**	10.9	27.0	46.1	46.2	46.3	46.4	46.5	46.6
519	**Allowance for contingencies**	2.8	6.6	17.9	18.0	18.1	18.1	18.2	18.2
520	**TOTAL OPERATING COSTS**	41.2	95.1	259.1	261.3	263.5	265.1	266.7	268.3
521	**OPERATING PROFIT**	7.7	45.3	333.0	345.7	358.7	372.7	387.1	401.8
909	**COST REVENUE RATIO**	1.19	1.48	2.28	2.32	2.36	2.41	2.45	2.50
522	Operating costs (Ontario)	16.5	31.4	159.8	161.1	162.4	163.3	164.2	165.2
523	Operating costs (Quebec)	24.7	63.7	99.3	100.2	101.1	101.8	102.5	103.2
	CAPITAL COSTS								
524	Total spent in Quebec	338.4	177.1	10.6	0.0	0.0	0.0	0.0	34.1
525	Total spent in Ontario	774.1	525.9	37.9	0.0	0.0	0.0	0.0	34.1
526	Total spent in the rest of Canada	90.3	57.0	0.1	0.0	0.0	0.0	0.0	0.0
527	Total spend in the rest of the World	192.4	94.9	5.1	0.0	0.0	0.0	0.0	0.0
528	Geographical allocation pending	214.3	214.3	142.9	125.0	0.0	0.0	117.1	13.1
529	Residual unallocated to region	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0
530	**Total Capital Costs**	1,609.6	1,069.2	196.6	125.0	0.0	0.0	117.1	81.3
531	Total spent on skilled labour	367.3	216.9	14.5	0.0	0.0	0.0	0.0	0.0
532	Total spent on unskilled labour	93.7	42.7	2.5	0.0	0.0	0.0	0.0	0.0
533	Total spent on material	909.3	685.5	172.7	125.0	0.0	0.0	117.1	81.3
534	Total spent on plant	239.3	124.1	6.9	0.0	0.0	0.0	0.0	0.0
535	Residual unallocated to spending category	(0.0)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
536	**Total Capital Costs**	1,609.6	1,069.2	196.6	125.0	0.0	0.0	117.1	81.3
	TOTAL CASH FLOW (excluding revenues)								
537	Total spent in Quebec	153.6	144.5	60.8	53.6	54.1	54.6	55.1	75.2
538	Total spent in Ontario	469.2	382.5	127.6	109.0	109.9	110.6	111.3	131.6
539	Total spent in the rest of Canada	40.1	34.9	0.1	0.0	0.0	0.0	0.0	0.0
540	Total spend in the rest of the World	106.3	66.4	3.2	0.0	0.0	0.0	0.0	0.0
541	Geographical allocation pending	137.0	137.0	91.3	79.9	0.0	0.0	70.3	8.4
542	Residual unallocated to region	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0
543	**Total**	906.4	765.4	282.9	242.5	164.1	165.2	236.6	215.2
910	**NET CASH FLOW**	(857.5)	(625.0)	309.1	364.4	458.1	472.6	417.2	454.9

01-Aug-94 **HSR STUDY COST DEVELOPMENT**

TOTAL CASHFLOW **Composite (via Dorval) at 200 kph QW Corridor**

		2011	2012	2013	2014	2015	2016	2017	2018
501 [A]	**RIDERSHIP**	11.3	11.6	11.8	12.1	12.3	12.6	12.9	13.2
502	**ADJUSTED GROSS REVENUE**	734.2	752.7	771.5	790.9	810.7	831.1	851.9	873.3
503	Payments to Travel Agencies	40.4	41.4	42.4	43.5	44.6	45.7	46.9	48.0
504	Payments to Credit Card Companies	6.9	7.1	7.2	7.4	7.6	7.8	8.0	8.2
505	**Revenue Available to HSR Operator**	687.0	704.2	721.9	740.0	758.6	777.6	797.1	817.1
	OPERATING EMPLOYMENT								
904	Total employment	2,529	2,553	2,577	2,602	2,627	2,652	2,677	2,702
905	"Skilled" employment	1,550	1,562	1,574	1,586	1,598	1,611	1,623	1,636
906	"Unskilled" employment	979	991	1,004	1,016	1,028	1,041	1,054	1,067
907	Employment in Ontario	1,535	1,549	1,563	1,578	1,593	1,607	1,622	1,637
908	Employment in Quebec	994	1,004	1,014	1,024	1,034	1,044	1,055	1,065
	OPERATING COSTS								
	Labour								
506	Bare wage bill skilled	74.1	74.6	75.2	75.8	76.4	77.0	77.6	78.2
507	Bare wage bill unskilled	27.4	27.7	28.1	28.4	28.8	29.1	29.5	29.9
508	Payroll taxes	8.5	8.6	8.7	8.7	8.8	8.9	9.0	9.1
509	Provisions for pension plan	7.6	7.7	7.7	7.8	7.9	8.0	8.0	8.1
	Purchased materials/services								
510	Electricity	16.0	16.3	16.5	16.8	17.1	17.3	17.6	17.9
511	Advertising/promotion	12.7	12.7	12.7	12.7	12.7	12.7	12.7	12.7
512	Infrastructure maintenance services	14.2	13.6	13.6	13.6	13.6	13.6	13.6	13.6
513	Infrastructure materials/supplies	2.7	2.9	3.1	3.3	3.7	7.5	8.3	9.2
514	Rolling stock materials/supplies	12.9	13.1	13.3	13.6	13.8	14.1	14.3	14.6
515	Telecommunications/computer services	15.2	15.5	15.8	16.2	16.5	16.9	17.2	17.6
516	Insurance services/franchise fees etc	12.3	12.4	12.6	12.7	12.9	13.0	13.1	13.3
517	Food/related sundries	1.9	1.9	2.0	2.0	2.1	2.1	2.2	2.2
518	**Unscheduled materials/services**	46.7	46.8	46.9	47.0	47.1	47.2	47.3	47.4
519	**Allowance for contingencies**	18.3	18.3	18.5	18.6	18.7	19.1	19.3	19.5
520	**TOTAL OPERATING COSTS**	270.0	271.8	274.2	276.7	279.6	286.0	289.3	292.7
521	**OPERATING PROFIT**	416.9	432.4	447.6	463.2	479.0	491.6	507.8	524.4
909	**COST REVENUE RATIO**	2.54	2.59	2.63	2.67	2.71	2.72	2.76	2.79
522	Operating costs (Ontario)	166.1	167.1	168.6	170.2	171.9	176.3	178.4	180.6
523	Operating costs (Quebec)	103.9	104.6	105.6	106.6	107.6	109.7	110.9	112.1
	CAPITAL COSTS								
524	Total spent in Quebec	0.0	0.0	0.0	0.0	35.4	0.0	0.0	0.0
525	Total spent in Ontario	0.0	0.0	0.0	0.0	35.4	0.0	0.0	0.0
526	Total spent in the rest of Canada	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
527	Total spend in the rest of the World	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
528	Geographical allocation pending	26.2	26.2	143.3	26.2	24.8	24.8	96.5	26.2
529	Residual unallocated to region	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
530	**Total Capital Costs**	26.2	26.2	143.3	26.2	95.6	24.8	96.5	26.2
531	Total spent on skilled labour	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
532	Total spent on unskilled labour	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
533	Total spent on material	26.2	26.2	143.3	26.2	95.6	24.8	96.5	26.2
534	Total spent on plant	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
535	Residual unallocated to spending category	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
536	**Total Capital Costs**	26.2	26.2	143.3	26.2	95.6	24.8	96.5	26.2
	TOTAL CASH FLOW (excluding revenues)								
537	Total spent in Quebec	56.0	56.5	57.0	57.6	78.5	59.0	59.6	60.3
538	Total spent in Ontario	112.7	113.5	114.5	115.6	137.2	120.1	121.7	123.2
539	Total spent in the rest of Canada	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
540	Total spend in the rest of the World	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
541	Geographical allocation pending	16.9	16.9	87.1	16.9	15.5	15.5	87.1	16.9
542	Residual unallocated to region	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
543	**Total**	185.6	186.8	258.7	190.1	231.1	194.6	268.4	200.4
910	**NET CASH FLOW**	501.4	517.4	463.2	549.9	527.4	583.0	528.7	616.7

TOTAL CASHFLOW — Composite (via Dorval) at 200 kph QW Corridor

		2019	2020	2021	2022	2023	2024	2025	2026
501	[A] **RIDERSHIP**	13.4	13.7	14.0	14.3	14.6	14.9	15.3	15.6
502	**ADJUSTED GROSS REVENUE**	895.2	917.7	940.8	964.4	988.6	1,013.4	1,038.9	1,064.9
503	Payments to Travel Agencies	49.2	50.5	51.7	53.0	54.4	55.7	57.1	58.6
504	Payments to Credit Card Companies	8.4	8.6	8.8	9.0	9.3	9.5	9.7	10.0
505	**Revenue Available to HSR Operator**	837.6	858.6	880.2	902.3	924.9	948.2	972.0	996.4
	OPERATING EMPLOYMENT								
904	Total employment	2,728	2,754	2,781	2,807	2,834	2,861	2,889	2,916
905	"Skilled" employment	1,648	1,661	1,674	1,687	1,700	1,713	1,726	1,739
906	"Unskilled" employment	1,080	1,093	1,107	1,121	1,134	1,148	1,163	1,177
907	Employment in Ontario	1,653	1,668	1,684	1,699	1,715	1,731	1,747	1,763
908	Employment in Quebec	1,076	1,086	1,097	1,108	1,119	1,130	1,142	1,153
	OPERATING COSTS								
	Labour								
506	Bare wage bill skilled	78.8	79.4	80.0	80.6	81.2	81.8	82.5	83.1
507	Bare wage bill unskilled	30.2	30.6	31.0	31.4	31.8	32.1	32.5	32.9
508	Payroll taxes	9.2	9.2	9.3	9.4	9.5	9.6	9.7	9.8
509	Provisions for pension plan	8.2	8.2	8.3	8.4	8.5	8.5	8.6	8.7
	Purchased materials/services								
510	Electricity	18.2	18.5	18.8	19.1	19.4	19.7	20.0	20.3
511	Advertising/promotion	12.7	12.7	12.7	12.7	12.7	12.7	12.7	12.7
512	Infrastructure maintenance services	13.6	13.6	13.6	13.6	13.6	13.6	13.6	13.6
513	Infrastructure materials/supplies	10.1	11.2	12.4	13.8	15.2	16.9	18.7	20.7
514	Rolling stock materials/supplies	14.8	15.1	15.4	15.7	16.0	16.2	16.5	16.8
515	Telecommunications/computer services	17.9	18.3	18.7	19.1	19.5	19.9	20.3	20.8
516	Insurance services/franchise fees etc	13.4	13.6	13.8	13.9	14.1	14.2	14.4	14.5
517	Food/related sundries	2.3	2.3	2.4	2.4	2.5	2.5	2.6	2.6
518	**Unscheduled materials/services**	47.5	47.6	47.7	47.8	47.9	48.0	48.1	48.2
519	**Allowance for contingencies**	19.7	19.9	20.1	20.3	20.6	20.8	21.1	21.4
520	**TOTAL OPERATING COSTS**	296.2	299.9	303.8	307.8	312.1	316.5	321.2	326.2
521	**OPERATING PROFIT**	541.4	558.7	576.4	594.5	612.9	631.6	650.8	670.2
909	**COST REVENUE RATIO**	2.83	2.86	2.90	2.93	2.96	3.00	3.03	3.05
522	Operating costs (Ontario)	182.9	185.3	187.9	190.5	193.3	196.3	199.4	202.7
523	Operating costs (Quebec)	113.3	114.6	115.9	117.3	118.7	120.2	121.8	123.4
	CAPITAL COSTS								
524	Total spent in Quebec	0.0	34.1	0.0	0.0	0.0	0.0	0.0	0.0
525	Total spent in Ontario	0.0	34.1	0.0	0.0	0.0	0.0	0.0	0.0
526	Total spent in the rest of Canada	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
527	Total spend in the rest of the World	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
528	Geographical allocation pending	26.2	37.9	141.9	11.7	13.1	26.2	26.2	37.9
529	Residual unallocated to region	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
530	**Total Capital Costs**	26.2	106.2	141.9	11.7	13.1	26.2	26.2	37.9
531	Total spent on skilled labour	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
532	Total spent on unskilled labour	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
533	Total spent on material	26.2	106.2	141.9	11.7	13.1	26.2	26.2	37.9
534	Total spent on plant	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
535	Residual unallocated to spending category	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
536	**Total Capital Costs**	26.2	106.2	141.9	11.7	13.1	26.2	26.2	37.9
	TOTAL CASH FLOW (excluding revenues)								
537	Total spent in Quebec	60.9	81.2	62.2	62.9	63.6	64.4	65.1	65.9
538	Total spent in Ontario	124.9	146.3	128.5	130.4	132.5	134.6	136.9	139.3
539	Total spent in the rest of Canada	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
540	Total spend in the rest of the World	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
541	Geographical allocation pending	16.9	23.9	85.7	7.0	8.4	16.9	16.9	23.9
542	Residual unallocated to region	0.0	0.0	0.0	(0.0)	(0.0)	0.0	(0.0)	0.0
543	**Total**	202.7	251.4	276.5	200.4	204.5	215.8	218.9	229.1
910	**NET CASH FLOW**	634.9	607.3	603.7	701.9	720.4	732.3	753.1	767.3

26-Jul-94 **HSR STUDY COST DEVELOPMENT**

CAPITAL COST SUMMARY **Composite (via Dorval) at 200 kph QW Corridor**

		1995	*1996*	*1997*	*1998*	*1999*	*2000*	*2001*	*2002*
201	Right-of-Way	0.00	1.37	1.37	12.29	115.75	196.50	120.43	19.42
202	Earthworks/subgrade	0.00	13.98	13.35	31.07	110.51	318.85	557.32	472.42
203	Bridges	0.00	4.84	4.70	13.77	65.22	139.42	252.33	153.29
204	Grade separations	0.00	7.00	6.78	12.67	44.79	139.29	418.13	361.47
205	Other accommodations	0.00	0.88	0.86	1.12	4.91	43.03	73.24	24.36
206	Track	0.00	0.00	0.80	5.97	15.08	32.08	115.89	302.18
207	Power distribution system	0.00	0.00	0.77	6.00	15.45	24.99	85.90	223.94
208	Stations	0.00	4.03	4.03	2.01	2.40	5.50	50.54	101.03
209	People movers (included in stations)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
210	Signals	0.00	0.55	4.34	9.97	14.98	52.01	122.99	126.45
211	Communications	0.00	0.30	2.31	5.53	8.28	28.18	67.43	70.39
212	Equipment maintenance facilities	0.00	0.00	0.00	0.00	0.00	14.75	44.26	50.72
213	Infrastructure maintenance facilities	0.00	0.00	0.00	0.00	0.00	0.00	13.66	37.08
214	Information/ticketing systems	0.00	0.00	0.00	0.00	0.00	0.00	2.53	17.57
215	Rolling stock	0.00	26.79	26.79	71.44	71.44	178.59	178.59	178.59
216	Commissioning	0.00	0.00	0.00	0.00	0.00	0.00	0.00	14.36
217	Administration allowance	0.00	0.66	2.24	3.81	5.39	6.97	12.88	21.78
218	Startup and training	0.00	0.00	0.00	0.00	0.00	0.00	9.54	17.69
219	**TOTAL INITIAL CAPITAL COSTS**	0.00	60.39	68.32	175.65	474.19	1,180.16	2,125.65	2,192.75
220	**Additional fleet requirements**								
221									
222									
223									
224		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
225	**Rolling Stock Overhauls**	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
226	**Infrastructure Renewal**	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
227	**Other ongoing capital**	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
228	*Cross check initial capital*								

26-Jul-94 **HSR STUDY COST DEVELOPMENT**

CAPITAL COST SUMMARY

Composite (via Dorval) at 200 kph QW Corridor

		2003	2004	2005	2006	2007	2008	2009	2010
201	Right-of-Way	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
202	Earthworks/suograde	136.72	0.00	0.00	0.00	0.00	0.00	0.00	0.00
203	Bridges	44.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00
204	Grade separations	115.68	0.00	0.00	0.00	0.00	0.00	0.00	0.00
205	Other accommodations	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
206	Track	350.37	206.52	7.84	0.00	0.00	0.00	0.00	0.00
207	Power distribution system	309.60	226.25	27.82	0.00	0.00	0.00	0.00	0.00
208	Stations	124.38	180.99	0.00	0.00	0.00	0.00	0.00	0.00
209	People mo· ›rs (included in stations)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
210	Signals	102.19	49.30	0.00	0.00	0.00	0.00	0.00	0.00
211	Communications	59.13	28.76	0.00	0.00	0.00	0.00	0.00	0.00
212	Equipment maintenance facilities	43.68	22.46	0.00	0.00	0.00	0.00	0.00	0.00
213	Infrastructure maintenance facilities	25.34	44.90	11.69	0.00	0.00	0.00	0.00	0.00
214	Information/ticketing systems	12.68	11.56	1.27	0.00	0.00	0.00	0.00	0.00
215	Rolling stock	214.31	214.31	142.87	125.01	0.00	0.00	0.00	0.00
216	Commissioning	27.47	55.38	5.13	0.00	0.00	0.00	0.00	0.00
217	Administration allowance	21.65	17.80	0.00	0.00	0.00	0.00	0.00	0.00
218	Startup and training	22.46	11.06	0.00	0.00	0.00	0.00	0.00	0.00
219	TOTAL INITIAL CAPITAL COSTS	1,609.67	1,069.28	196.61	125.01	0.00	0.00	0.00	0.00
220	**Additional fleet requirements**								
221									
222									
223									
224		0.00	0.00	0.00	0.00	0.00	0.00	117.11	0.00
225	**Rolling Stock Overhauls**	0.00	0.00	0.00	0.00	0.00	0.00	0.00	13.12
226	**Infrastructure Renewal**	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
227	**Other ongoing capital**	0.00	0.00	0.00	0.00	0.00	0.00	0.00	68.21
228	*Cross check initial capital*								

Spreadsheet	**W:\207-CHAS\COSTING\20MT-1.WK3**			
Today's date	**27-Jul-94**			
Proessing time	**09:59**			
Data export file	**X-20MT-1.WK1**			
Train speed	**200 kph**			
Train route	**Composite (via Dorval) at 200 kph**			
Demand data	**MOT Stand Alone**			
Initial demand file	**R105MT22/R125MT22 [as supplied by IBI]**			
Train data	**Final off NEW-OD.WK1**			
Trip Time	**COMPOSITE VIA DORVAL**			
Capital file	**C:\work\207-chas\canarail\extract.wk3**			
Capital name	**MONTREAL - TORONTO CORRIDOR 200+, composite EX .. 2c00-**			
	MONTREAL - QUEBEC 200+, composite EX .. 2c00-			
	WINDSOR - TORONTO 200+, composite EX .. 2c00-			
Cap allocation	**SPLIT-2B.WK3**			
Include SWO	**No**			
Include MQ	**No**			
MOT to Pearson	**Yes**			
Con Air Included	**Yes**			
via Mirabel	**No**			
via Dorval	**Yes**			
Delay Cap Input	**2cd-xx-2**	**1** *MOT*	**100%**	*DT*
	2cd-xx-2	**1** *MQ*	**100%**	*DT*
	2cd-xx-2	**1** *SWO*	**61%**	*DT*
		1 *SPLIT*		

26-Jul-94

HSR STUDY COST DEVELOPMENT

OPERATIONS/REVENUES/COSTS Composite (via Dorval) at 200 kph MOT Stand Alone

			Year 2005	Year 2025		
	RIDERSHIP					
1 [A]	Adjusted passengers (non-duplicated)	millions	5.6	8.6		
2	Average length of haul	kms	362	370		
3	Passenger kilometres	billion	2.0	3.2		
	OPERATION STATISTICS					
4	Route length	kilometres	610	610		
5	Train trips (one-way)	thousands	10.3	15.1		
6	Trainset kms	millions	10.6	15.4		
7	Seat kms	billions	3.0	4.3	*282 per trainset*	
8	Trainsets in active fleet	units	37	47		
9	Average trainset utilization	k-km/year	286	328		
10	Average load factor		67%	73%		
11	Total energy consumption	gigaW-hrs	128	187		
12	Total employment		1,413	1,732		
	PASSENGER REVENUES					
13	Adjustusted revenues	$million	390.6	647.4		
14	Agency commissions	$million	(21.5)	(35.6)	*5.5% of gross revenue*	
15	Credit card discount	$million	(3.7)	(6.1)	*0.9% of gross revenue*	
16	Net Revenue	$million	365.4	605.7		
	OPERATIONS AND MAINTENANCE COSTS				***[Total employment]***	
17	Train operations	$million	19.9	26.5	156	199
18	Customer services	$million	44.6	54.0	431	546
19	Equipment maintenance	$million	21.9	30.9	330	455
20	Infrastructure maintenance	$million	33.4	43.3	362	383
21	Executive/administration	$million	16.4	17.4	135	150
22	Insurance/taxes/other	$million	11.5	12.6	0	0
23	Contingency	$million	10.8	13.1	--	--
24	**Total O&M Costs**	$million	158.4	197.6	1,413	1,732
25	**OPERATING PROFIT**		207.1	408.0		
26	**COST/REVENUE RATIOS**					
27	Net revenue : O&M costs Ratio		2.31	3.06		
28	O&M cost per trainset-km	dollars	14.96	12.81		
29	O&M cost per seat-km	cents	5.31	4.54		
30	O&M cost per passenger	dollars	28.44	22.90		
31	O&M cost per passenger-km	cents	7.86	6.18		
32	Net revenue per passenger	dollars	65.62	70.19		
33	Net revenue per passenger km	cents	18.14	18.95		
	CAPITAL COSTS					
34	Startup/admin/training/other "soft" costs	$million	159.6			
35	Construction of track	$million	3,615.4			
36	Construction of stations	$million	443.5			
37	Construction of maintenance facilities	$million	225.8			
38	Acqusition of rolling stock	$million	866.6			
39	**Total Initial Capital Costs**	$million	5,310.9	*over the period 1995 to 2006*		
40	**Total Ongoing Capital Costs**	$million	605.7	*over the period 2007 to 2025*		
41	Initial capital per route-km (excluding RS)	$million	7.29			

		2005 Que	*2005 Ont*	*2025 Que*	2025 Ont
901	Net Revenues	122.60	242.81	203.21	402.48
902	O and M Costs	52.69	105.67	64.24	133.41
903	Employment	488	926	606	1,126

TOTAL CASHFLOW Composite (via Dorval) at 200 kph MOT Stand Alone

		Total Year 2005	Total Year 2025	Quebec Year 2005	Quebec Year 2025
501	**[A] RIDERSHIP**	5.6	8.6	NA	NA
502	**ADJUSTED GROSS REVENUE**	390.6	647.4	131.0	217.2
503	Payments to Travel Agencies	21.5	35.6	7.2	11.9
504	Payments to Credit Card Companies	3.7	6.1	1.2	2.0
505	**Revenue Available to HSR Operator**	365.4	605.7	122.6	203.2
	OPERATING EMPLOYMENT				
904	Total employment	1,413	1,732	488	606
905	"Skilled" employment	910	1,076	294	359
906	"Unskilled" employment	504	656	194	247
907	Employment in Ontario	926	1,126		
908	Employment in Quebec	488	606	488	606
	OPERATING COSTS				
	Labour				
506	Bare wage bill skilled	44.3	52.4	15.4	18.6
507	Bare wage bill unskilled	14.1	18.5	5.5	7.0
508	Payroll taxes	4.8	5.9	1.7	2.1
509	Provisions for pension plan	4.4	5.3	1.6	1.9
	Purchased materials/services				
510	Electricity	8.9	12.4	0.9	1.2
511	Advertising/promotion	7.8	7.8	2.7	2.7
512	Infrastructure maintenance services	8.5	7.0	1.1	0.9
513	Infrastructure materials/supplies	1.2	11.6	0.2	1.6
514	Rolling stock materials/supplies	7.3	10.7	3.7	5.4
515	Telecommunications/computer services	7.3	11.2	2.5	3.9
516	Insurance services/franchise fees etc	6.0	7.1	0.8	0.9
517	Food/related sundries	0.9	1.4	0.3	0.5
518	**Unscheduled materials/services**	32.0	33.3	13.1	13.7
519	**Allowance for contingencies**	10.8	13.1	3.3	3.9
520	**TOTAL OPERATING COSTS**	158.4	197.6	52.7	64.2
521	**OPERATING PROFIT**	207.1	408.0	NA	NA
909	**COST REVENUE RATIO**	2.31	3.06	NA	NA
522	Operating costs (Ontario)	105.7	133.4		
523	Operating costs (Quebec)	52.7	64.2		

		Initial	Ongoing	Total
	CAPITAL COSTS			
524	Total spent in Quebec	1,043.66	59.50	1,103.16
525	Total spent in Ontario	2,579.87	59.50	2,639.37
526	Total spent in the rest of Canada	141.63	0.00	141.63
527	Total spend in the rest of the World	678.49	0.00	678.49
528	Geographical allocation pending	866.61	463.76	1,330.37
529	Residual unallocated to region	0.67	0.00	0.67
530	**Total Capital Costs**	5,310.93	582.76	5,893.69
531	Total spent on skilled labour	1,425.31	0.00	1,425.31
532	Total spent on unskilled labour	359.50	0.00	359.50
533	Total spent on material	2,639.79	582.76	3,222.54
534	Total spent on plant	886.33	0.00	886.33
535	Residual unallocated to spending category	0.00	0.00	0.00
536	**Total Capital Costs**	5,310.93	582.76	5,893.69

	TOTAL CASH FLOW (excluding revenues)	
537	Total spent in Quebec	*[This line defined only for year-by-year tables]*
538	Total spent in Ontario	*[This line defined only for year-by-year tables]*
539	Total spent in the rest of Canada	*[This line defined only for year-by-year tables]*
540	Total spend in the rest of the World	*[This line defined only for year-by-year tables]*
541	Geographical allocation pending	*[This line defined only for year-by-year tables]*
542	Residual unallocated to region	*[This line defined only for year-by-year tables]*
543	**Total**	*[This line defined only for year-by-year tables]*
910	**NET CASH FLOW**	*[This line defined only for year-by-year tables]*

0 **OPERATIONS COST BREAKDOWN Composite (via Dorval) at 200 kph MOT Stand Alone**

		Cont Allow	*Cost Estimate ($ million)*		*Employment Estimate*		*Quebec Share*
			2005	*2025*	*2005*	*2025*	*2005*
	TRAIN OPERATIONS						
101	Train crew	5.0%	8.06	10.97	112	152	38%
102	Power - demand charges	2.5%	3.87	5.02	--	--	10%
103	Power - energy consumption	2.5%	5.07	7.39	--	--	10%
104	Control centre	5.0%	1.44	1.44	24	24	50%
105	Transportation administration/supervision	5.0%	1.47	1.67	20	23	50%
106	**Subtotal**		19.92	26.50	156	199	27%
	CUSTOMER SERVICES						
107	On-board service staff	10.0%	4.46	6.56	104	153	38%
108	On-board service supplies	5.0%	0.88	1.36	--	--	38%
109	On-board services ground support	10.0%	0.82	1.20	21	31	38%
110	Food/beverage for sale	0.0%	0.00	0.00	--	--	--
111	Station operations	10.0%	14.65	15.43	148	171	24%
112	ATM/Ticketing/Reservations transactions	5.0%	7.33	11.24	--	--	34%
113	Telephone/Counter Sales	5.0%	2.41	3.06	68	86	34%
114	Advertising and promotion expenses	5.0%	7.81	7.81	--	--	34%
115	Customer service administration/supervision	5.0%	6.20	7.29	90	106	50%
116	**Subtotal**		44.56	53.95	431	546	34%
	EQUIPMENT MAINTENANCE						
117	Routine maintenance - labour	5.0%	6.76	9.78	134	194	50%
118	Routine maintenance - material	5.0%	7.31	10.74	--	--	50%
119	Major maintenance [included in capital]	--	--	--	--	--	--
120	Cleaning	5.0%	4.29	5.83	140	191	38%
121	Maintenance administration/supervision	5.0%	3.55	4.51	56	70	50%
122	**Subtotal**		21.90	30.86	330	455	48%
	INFRASTRUCTURE MAINTENANCE						
123	Routine maintenance	15.0%	17.20	17.96	268	285	13%
124	Purchased services	15.0%	8.48	6.95	--	--	13%
125	Materials	10.0%	1.16	11.59	--	--	13%
126	Programmed replacement [occurs after 2025]	--	--	--	--	--	
127	Maintenance administration/supervision	5.0%	6.53	6.77	94	97	23%
128	**Subtotal**		33.36	43.28	362	383	15%
	EXECUTIVE/ADMINISTRATION						
129	Labour and related	5.0%	9.85	10.89	135	150	50%
130	Other	5.0%	6.50	6.50	--	--	50%
131	**Subtotal**		16.35	17.39	135	150	50%
	INSURANCE/TAXES/OTHER						
132	Insurance/claims	0.0%	6.00	7.10	--	--	13%
133	Property taxes	10.0%	5.50	5.50	--	--	84%
134	Franchise fees	10.0%	*nil*	nil	--	--	
135	**Subtotal**		11.50	12.60	0	0	47%
136	**CONTINGENCY**	7.3%	10.75	13.07	--	--	30%
137	**TOTAL**		158.36	197.64	1,413	1,732	33%
138	**Total: Quebec component**		52.69	64.24	488	606	
139	**Total: Ontario component**		105.67	133.41	926	1,126	
140	**[Major maintenance included in capital]**		0.00	15.93			
141	Routine equipment maintenance per trainset km	dollars	1.33	1.33			
142	Infrastructure maintenance per route km	$thousand	44.01	59.87			
143	Executive/administration as a percent of total		11.1%	9.4%			
144	Station/ticketing costs per passenger	Dollars	4.34	3.41			
145							
146							

26-Jul-94	HSR STUDY COST DEVELOPMENT

CAPITAL COST SUMMARY — Composite (via Dorval) at 200 kph MOT Stand Alone

		Professional Services	*Contin-gency*	Total
201	Right-of-Way	16.41	18.28	187.40
202	Earthworks/subgrade	164.90	99.41	927.06
203	Bridges	64.22	35.46	454.25
204	Grade separations	77.21	74.31	546.11
205	Other accommodations	13.12	18.39	92.80
206	Track	69.34	23.56	546.79
207	Power distribution system	66.99	53.06	473.81
208	Stations	59.14	32.65	418.[illegible]
209	People movers (included in stations)	0.00	0.00	0.00
210	Signals	41.62	27.40	251.70
211	Communications	22.41	14.75	135.53
212	Equipment maintenance facilities	11.04	16.56	147.54
213	Infrastructure maintenance facilities	0.00	0.00	78.22
214	Information/ticketing systems	0.00	0.00	25.21
215	Rolling stock	64.19	71.56	866.61
216	Commissioning	60.73	0.00	60.73
217	Administration allowance	0.00	0.00	62.16
218	Startup and training	0.00	0.00	36.73
219	**TOTAL INITIAL CAPITAL COSTS**	731.35	485.39	5,310.93

220	**Additional fleet requirements**	*year 2009*	4 units	46.84
221		*year 2013*	5 units	70.27
222		*year 2017*	2 units	46.84
223		*year 2021*	5 units	70.27
224		*Total*	16 units	234.22
225	**Rolling Stock Overhauls**	*total, years 2005-2025*		252.49
226	**Infrastructure Renewal**	*total, years 2005-2025*		0.00
227	**Other ongoing capital**	*total, years 2005-2025*		119.00
228	*Cross check initial capital*			*0.00*

RIDERSHIP BREAKDOWN — Composite (via Dorval) at 200 kph MOT Stand Alone

			Year 2005	Year 2025		
	RIDERSHIP					
301	Ridership within the segment	*millions*	na	na		
302	Ridership between segments	*millions*	na	na		
303	Airport traffic	*millions*	na	na		
304 [A]	**Total potential passengers**	*million*	5.62	8.72		
305	Passengers not served at peak	*million*	(0.06)	(0.09)	1.0%	*of passengers*
306	Allowance for additional passengers	*million*	0.00	0.00	0.0%	*of passengers*
307	**Net passengers**	*million*	5.57	8.63		
	PASSENGER REVENUES					
308	Initial transportation revenue estimate	*$million*	427.72	708.96		
309	PST/GST	*$million*	(33.22)	(55.06)	7.8%	*of revenues*
310	Revenue estimate net of taxes	*$million*	394.50	653.90		
311	First Class premium	*$million*	0.00	0.00	0.0%	*of revenues*
312	Food/beverage sales	*$million*	0.00	0.00	0.00	*per passenger*
313	Revenues foregone at peak	*$million*	(3.94)	(6.54)	1.0%	*of revenues*
314	**Final Gross Revenue**	*$million*	390.55	647.36		
	PASSENGER KILOMETRES					
315	Ridership within segments	*billions*	1.95	3.10		
316	Ridership between segments	*billions*	0.09	0.13		
317	Airport traffic	*billions*	above	above		
318	Total		2.03	3.23		
319	Passenger-km foregone at peak	*billions*	(0.02)	(0.03)	1.0%	*of passenger-km*
320	Allowance for additional passenger-kms	*billions*	0.00	0.00	0.0%	*of passengers-km*
321	**Total passenger kms**	*billions*	2.01	3.20		
322	**Average Length of Haul**	*kms*	362	370		

EMPLOYMENT DATA

Composite (via Dorval) at 200 kph MOT Stand Alone

		Average Wage	Total Year 2005	Total Year 2025	Quebec Year 2005	Quebec Year 2025
401	Train Crew	57,500	112	152	42	55
402	Dispatchers	50,600	24	24	12	12
403	Managerial/admin/professional	58,324	367	413	158	180
404	Station staff	35,939	37	43	9	10
405	Mechanical trades/skilled	39,402	151	212	62	89
406	Maintenance trades/skilled	36,349	219	233	11	12
407	**Total "skilled"**	48,690	910	1,076	294	359
408	OBS Staff	31,453	114	168	43	61
409	Sales Staff	29,007	68	86	23	30
410	Other customer service	29,986	10	15	4	6
411	Support staff	34,206	28	33	14	16
412	Station labour (various)	24,881	111	128	27	31
413	Equipment maintenance unskilled	30,603	11	16	5	8
414	Track maintenance unskilled	30,603	49	52	25	26
415	Cleaners	24,270	113	158	53	69
416	**Total "unskilled"**	28,090	504	656	194	247
417	**Total "unallocated"**		0	0	(0)	0
418	**Grand total employment**	41,349	1,413	1,732	488	606
419	**Ontario Total "skilled"**		616	717		
420	**Ontario Total "unskilled"**		310	409		
421	**Ontario Total "unallocated"**		0	0		
422	**Ontario Grand total employment**		926	1,126		
423	**Quebec Total "skilled"**		294	359		
424	**Quebec Total "unskilled"**		194	247		
425	**Quebec Total "unallocated"**		0	0		
426	**Quebec Grand total employment**		488	606		

TOTAL CASHFLOW **Composite (via Dorval) at 200 kph MOT Stand Alone**

		1995	1996	1997	1998	1999	2000	2001	2002
501	**[A] RIDERSHIP**	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
502	**ADJUSTED GROSS REVENUE**	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
503	Payments to Travel Agencies	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
504	Payments to Credit Card Companies	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
505	**Revenue Available to HSR Operator**	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	OPERATING EMPLOYMENT								
904	Total employment	0	0	0	0	0	0	0	0
905	"Skilled" employment	0	0	0	0	0	0	0	0
906	"Unskilled" employment	0	0	0	0	0	0	0	0
907	Employment in Ontario	0	0	0	0	0	0	0	0
908	Employment in Quebec	0	0	0	0	0	0	0	0
	OPERATING COSTS								
	Labour								
506	Bare wage bill skilled	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
507	Bare wage bill unskilled	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
508	Payroll taxes	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
509	Provisions for pension plan	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Purchased materials/services								
510	Electricity	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
511	Advertising/promotion	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
512	Infrastructure maintenance services	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
513	Infrastructure materials/supplies	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
514	Rolling stock materials/supplies	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
515	Telecommunications/computer services	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
516	Insurance services/franchise fees etc	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
517	Food/related sundries	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
518	**Unscheduled materials/services**	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
519	**Allowance for contingencies**	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
520	**TOTAL OPERATING COSTS**	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
521	**OPERATING PROFIT**	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
909	**COST REVENUE RATIO**								
522	Operating costs (Ontario)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
523	Operating costs (Quebec)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	CAPITAL COSTS								
524	Total spent in Quebec	0.0	5.9	7.3	23.3	102.0	175.3	264.3	215.3
525	Total spent in Ontario	0.0	13.5	16.3	27.9	127.9	316.9	633.2	610.4
526	Total spent in the rest of Canada	0.0	0.0	0.0	0.1	0.3	6.3	16.5	43.4
527	Total spend in the rest of the World	0.0	0.7	1.2	2.9	34.9	93.9	197.6	171.3
528	Geographical allocation pending	0.0	16.2	16.2	43.3	43.3	108.3	108.3	108.3
529	Residual unallocated to region	0.0	0.0	(0.0)	(0.0)	(0.0)	0.1	0.2	0.2
530	**Total Capital Costs**	0.0	36.4	41.1	97.6	308.4	700.9	1,220.1	1,149.0
531	Total spent on skilled labour	0.0	14.5	18.0	38.3	113.9	200.7	364.5	310.1
532	Total spent on unskilled labour	0.0	0.6	0.7	1.5	19.0	50.5	110.8	90.5
533	Total spent on material	0.0	17.2	17.4	47.2	120.4	324.7	496.4	534.5
534	Total spent on plant	0.0	4.0	5.0	10.6	55.1	125.0	248.5	213.9
535	Residual unallocated to spending category	0.0	0.0	(0.0)	(0.0)	(0.0)	0.0	0.0	0.0
536	**Total Capital Costs**	0.0	36.4	41.1	97.6	308.4	700.9	1,220.1	1,149.0
	TOTAL CASH FLOW (excluding revenues)								
537	Total spent in Quebec	0.0	5.9	7.3	23.3	102.0	175.3	264.3	215.3
538	Total spent in Ontario	0.0	13.5	16.3	27.9	127.9	316.9	633.2	610.4
539	Total spent in the rest of Canada	0.0	0.0	0.0	0.1	0.3	6.3	16.5	43.4
540	Total spend in the rest of the World	0.0	0.7	2.0	2.9	34.9	93.9	197.6	171.3
541	Geographical allocation pending	0.0	16.2	25.9	43.3	43.3	108.3	108.3	108.3
542	Residual unallocated to region	0.0	0.0	0.1	(0.0)	(0.0)	0.1	0.2	0.2
543	**Total**	0.0	36.4	67.4	97.6	308.4	700.9	1,220.1	1,149.0
910	**NET CASH FLOW**	0.0	(36.4)	(67.4)	(97.6)	(308.4)	(700.9)	(1,220.1)	(1,149.0)

26-Jul-94 **HSR STUDY COST DEVELOPMENT**

TOTAL CASHFLOW **Composite (via Dorval) at 200 kph MOT Stand Alone**

		2003	2004	2005	2006	2007	2008	2009	2010
501	[A] **RIDERSHIP**	1.1	1.2	5.6	5.7	5.8	5.9	6.1	6.2
502	**ADJUSTED GROSS REVENUE**	51.5	51.9	390.6	400.5	410.8	421.3	432.1	443.1
503	Payments to Travel Agencies	2.8	2.9	21.5	22.0	22.6	23.2	23.8	24.4
504	Payments to Credit Card Companies	0.5	0.5	3.7	3.8	3.9	3.9	4.1	4.2
505	**Revenue Available to HSR Operator**	48.2	48.6	365.4	374.8	384.4	394.2	404.3	414.6
	OPERATING EMPLOYMENT								
904	Total employment	314	314	1,413	1,428	1,442	1,457	1,472	1,487
905	"Skilled" employment	228	228	910	917	925	933	941	949
906	"Unskilled" employment	86	86	504	510	517	524	531	538
907	Employment in Ontario	126	126	926	935	944	953	963	972
908	Employment in Quebec	188	188	488	493	498	504	509	515
	OPERATING COSTS								
	Labour								
506	Bare wage bill skilled	11.1	11.1	44.3	44.7	45.0	45.4	45.8	46.2
507	Bare wage bill unskilled	2.4	2.4	14.1	14.3	14.5	14.7	14.9	15.1
508	Payroll taxes	1.1	1.1	4.8	4.9	4.9	5.0	5.0	5.1
509	Provisions for pension plan	1.0	1.0	4.4	4.4	4.5	4.5	4.6	4.6
	Purchased materials/services								
510	Electricity	0.9	0.9	8.9	9.1	9.2	9.4	9.6	9.7
511	Advertising/promotion	3.9	3.9	7.8	7.8	7.8	7.8	7.8	7.8
512	Infrastructure maintenance services	2.5	2.5	8.5	8.5	8.5	8.2	7.9	7.6
513	Infrastructure materials/supplies	0.3	0.3	1.2	1.2	1.3	1.4	1.5	1.6
514	Rolling stock materials/supplies	0.9	0.9	7.3	7.4	7.6	7.7	7.9	8.0
515	Telecommunications/computer services	1.5	1.5	7.3	7.5	7.7	7.8	8.0	8.2
516	Insurance services/franchise fees etc	1.7	1.7	6.0	6.1	6.1	6.2	6.2	6.3
517	Food/related sundries	0.2	0.2	0.9	0.9	0.9	0.9	1.0	1.0
518	**Unscheduled materials/services**	11.1	19.5	32.0	32.1	32.2	32.2	32.3	32.4
519	**Allowance for contingencies**	2.8	3.4	10.8	10.8	10.9	10.9	11.0	11.0
520	**TOTAL OPERATING COSTS**	41.3	50.4	158.4	159.7	161.1	162.2	163.2	164.3
521	**OPERATING PROFIT**	6.9	(1.8)	207.1	215.0	223.3	232.0	241.0	250.3
909	**COST REVENUE RATIO**	1.17	0.96	2.31	2.35	2.39	2.43	2.48	2.52
522	Operating costs (Ontario)	16.5	20.2	105.7	106.5	107.4	108.1	108.7	109.3
523	Operating costs (Quebec)	24.8	30.2	52.7	53.2	53.7	54.1	54.5	55.0
	CAPITAL COSTS								
524	Total spent in Quebec	128.7	113.8	7.6	0.0	0.0	0.0	0.0	19.6
525	Total spent in Ontario	452.4	361.8	19.5	0.0	0.0	0.0	0.0	19.6
526	Total spent in the rest of Canada	40.1	34.9	0.1	0.0	0.0	0.0	0.0	0.0
527	Total spend in the rest of the World	106.3	66.4	3.2	0.0	0.0	0.0	0.0	0.0
528	Geographical allocation pending	130.0	130.0	86.7	75.8	0.0	0.0	46.8	8.0
529	Residual unallocated to region	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0
530	**Total Capital Costs**	857.7	706.9	117.0	75.8	0.0	0.0	46.8	47.2
531	Total spent on skilled labour	202.7	153.5	9.2	0.0	0.0	0.0	0.0	0.0
532	Total spent on unskilled labour	53.1	31.2	1.5	0.0	0.0	0.0	0.0	0.0
533	Total spent on material	469.2	434.9	102.0	75.8	0.0	0.0	46.8	47.2
534	Total spent on plant	132.7	87.3	4.3	0.0	0.0	0.0	0.0	0.0
535	Residual unallocated to spending category	(0.0)	(0.0)	0.0	0.0	0.0	0.0	0.0	0.0
536	**Total Capital Costs**	857.7	706.9	117.0	75.8	0.0	0.0	46.8	47.2
	TOTAL CASH FLOW (excluding revenues)								
537	Total spent in Quebec	153.5	144.0	60.3	53.2	53.7	54.1	54.5	74.6
538	Total spent in Ontario	468.9	381.9	125.2	106.5	107.4	108.1	108.7	129.0
539	Total spent in the rest of Canada	40.1	34.9	0.1	0.0	0.0	0.0	0.0	0.0
540	Total spend in the rest of the World	106.3	66.4	3.2	0.0	0.0	0.0	0.0	0.0
541	Geographical allocation pending	130.0	130.0	86.7	75.8	0.0	0.0	46.8	8.0
542	Residual unallocated to region	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0
543	**Total**	899.0	757.3	275.4	235.5	161.1	162.2	210.1	211.6
910	**NET CASH FLOW**	(850.8)	(708.7)	90.0	139.2	223.3	232.0	194.2	203.1

TOTAL CASHFLOW **Composite (via Dorval) at 200 kph MOT Stand Alone**

		2011	2012	2013	2014	2015	2016	2017	2018
501	[A] **RIDERSHIP**	6.4	6.5	6.6	6.8	6.9	7.1	7.2	7.4
502	**ADJUSTED GROSS REVENUE**	454.5	466.1	478.0	490.3	502.8	515.7	528.9	542.4
503	Payments to Travel Agencies	25.0	25.6	26.3	27.0	27.7	28.4	29.1	29.8
504	Payments to Credit Card Companies	4.3	4.4	4.5	4.6	4.7	4.8	5.0	5.1
505	**Revenue Available to HSR Operator**	425.2	436.1	447.3	458.7	470.5	482.5	494.8	507.5
	OPERATING EMPLOYMENT								
904	Total employment	1,502	1,517	1,533	1,548	1,564	1,580	1,596	1,613
905	"Skilled" employment	957	965	973	981	989	998	1,006	1,015
906	"Unskilled" employment	545	552	560	567	575	582	590	598
907	Employment in Ontario	982	991	1,001	1,011	1,021	1,031	1,041	1,051
908	Employment in Quebec	520	526	532	537	543	549	555	561
	OPERATING COSTS								
	Labour								
506	Bare wage bill skilled	46.6	47.0	47.4	47.8	48.2	48.6	49.0	49.4
507	Bare wage bill unskilled	15.3	15.5	15.7	15.9	16.2	16.4	16.6	16.8
508	Payroll taxes	5.1	5.2	5.2	5.3	5.3	5.4	5.4	5.5
509	Provisions for pension plan	4.6	4.7	4.7	4.8	4.8	4.9	4.9	5.0
	Purchased materials/services								
510	Electricity	9.9	10.0	10.2	10.4	10.5	10.7	10.9	11.1
511	Advertising/promotion	7.8	7.8	7.8	7.8	7.8	7.8	7.8	7.8
512	Infrastructure maintenance services	7.3	7.0	7.0	7.0	7.0	7.0	7.0	7.0
513	Infrastructure materials/supplies	1.7	1.8	1.9	2.0	2.3	4.6	5.1	5.7
514	Rolling stock materials/supplies	8.2	8.4	8.5	8.7	8.9	9.0	9.2	9.4
515	Telecommunications/computer services	8.3	8.5	8.7	8.9	9.1	9.3	9.5	9.7
516	Insurance services/franchise fees etc	6.3	6.4	6.4	6.5	6.5	6.6	6.6	6.7
517	Food/related sundries	1.0	1.0	1.0	1.1	1.1	1.1	1.1	1.2
518	**Unscheduled materials/services**	32.4	32.5	32.5	32.6	32.7	32.7	32.8	32.9
519	**Allowance for contingencies**	11.0	11.1	11.2	11.3	11.4	11.7	11.8	11.9
520	**TOTAL OPERATING COSTS**	165.5	166.7	168.2	169.8	171.5	175.6	177.6	179.8
521	**OPERATING PROFIT**	259.7	269.5	279.1	288.9	298.9	306.9	317.2	327.7
909	**COST REVENUE RATIO**	2.57	2.62	2.66	2.70	2.74	2.75	2.79	2.82
522	Operating costs (Ontario)	110.0	110.7	111.8	112.8	114.0	117.2	118.7	120.2
523	Operating costs (Quebec)	55.5	55.9	56.4	57.0	57.5	58.4	59.0	59.6
	CAPITAL COSTS								
524	Total spent in Quebec	0.0	0.0	0.0	0.0	20.3	0.0	0.0	0.0
525	Total spent in Ontario	0.0	0.0	0.0	0.0	20.3	0.0	0.0	0.0
526	Total spent in the rest of Canada	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
527	Total spend in the rest of the World	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
528	Geographical allocation pending	15.9	15.9	86.2	15.9	15.0	12.6	62.8	15.9
529	Residual unallocated to region	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
530	**Total Capital Costs**	15.9	15.9	86.2	15.9	55.5	12.6	62.8	15.9
531	Total spent on skilled labour	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
532	Total spent on unskilled labour	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
533	Total spent on material	15.9	15.9	86.2	15.9	55.5	12.6	62.8	15.9
534	Total spent on plant	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
535	Residual unallocated to spending category	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
536	**Total Capital Costs**	15.9	15.9	86.2	15.9	55.5	12.6	62.8	15.9
	TOTAL CASH FLOW (excluding revenues)								
537	Total spent in Quebec	55.5	55.9	56.4	57.0	77.8	58.4	59.0	59.6
538	Total spent in Ontario	110.0	110.7	111.8	112.8	134.3	117.2	118.7	120.2
539	Total spent in the rest of Canada	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
540	Total spend in the rest of the World	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
541	Geographical allocation pending	15.9	15.9	86.2	15.9	15.0	12.6	62.8	15.9
542	Residual unallocated to region	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
543	**Total**	181.4	182.6	254.4	185.7	227.0	188.2	240.4	195.7
910	**NET CASH FLOW**	243.8	253.5	192.9	273.0	243.4	294.3	254.4	311.8

26-Jul-94 **HSR STUDY COST DEVELOPMENT**

TOTAL CASHFLOW **Composite (via Dorval) at 200 kph MOT Stand Alone**

		2019	2020	2021	2022	2023	2024	2025	2026
501	[A] **RIDERSHIP**	7.6	7.7	7.9	8.1	8.3	8.4	8.6	8.8
502	**ADJUSTED GROSS REVENUE**	556.3	570.5	585.1	600.1	615.5	631.2	647.4	663.9
503	Payments to Travel Agencies	30.6	31.4	32.2	33.0	33.9	34.7	35.6	36.5
504	Payments to Credit Card Companies	5.2	5.3	5.5	5.6	5.8	5.9	6.1	6.2
505	**Revenue Available to HSR Operator**	520.5	533.8	547.5	561.5	575.8	590.6	605.7	621.2
	OPERATING EMPLOYMENT								
904	Total employment	1,629	1,646	1,663	1,680	1,697	1,715	1,732	1,750
905	"Skilled" employment	1,023	1,032	1,041	1,049	1,058	1,067	1,076	1,085
906	"Unskilled" employment	606	614	622	631	639	647	656	665
907	Employment in Ontario	1,062	1,072	1,083	1,094	1,104	1,115	1,126	1,137
908	Employment in Quebec	568	574	580	586	593	600	606	613
	OPERATING COSTS								
	Labour								
506	Bare wage bill skilled	49.8	50.2	50.7	51.1	51.5	51.9	52.4	52.8
507	Bare wage bill unskilled	17.0	17.3	17.5	17.7	18.0	18.2	18.5	18.7
508	Payroll taxes	5.5	5.6	5.7	5.7	5.8	5.8	5.9	5.9
509	Provisions for pension plan	5.0	5.1	5.1	5.2	5.2	5.3	5.3	5.4
	Purchased materials/services								
510	Electricity	11.2	11.4	11.6	11.8	12.0	12.2	12.4	12.6
511	Advertising/promotion	7.8	7.8	7.8	7.8	7.8	7.8	7.8	7.8
512	Infrastructure maintenance services	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0
513	Infrastructure materials/supplies	6.3	7.0	7.7	8.5	9.5	10.5	11.6	12.8
514	Rolling stock materials/supplies	9.6	9.8	9.9	10.1	10.3	10.5	10.7	10.9
515	Telecommunications/computer services	9.9	10.1	10.3	10.5	10.8	11.0	11.2	11.5
516	Insurance services/franchise fees etc	6.7	6.8	6.9	6.9	7.0	7.0	7.1	7.2
517	Food/related sundries	1.2	1.2	1.3	1.3	1.3	1.3	1.4	1.4
518	**Unscheduled materials/services**	32.9	33.0	33.1	33.1	33.2	33.3	33.3	33.4
519	**Allowance for contingencies**	12.1	12.2	12.4	12.5	12.7	12.9	13.1	13.3
520	**TOTAL OPERATING COSTS**	182.0	184.3	186.7	189.3	191.9	194.7	197.6	200.7
521	**OPERATING PROFIT**	338.5	349.5	360.7	372.2	383.9	395.9	408.0	420.4
909	**COST REVENUE RATIO**	2.86	2.90	2.93	2.97	3.00	3.03	3.06	3.09
522	Operating costs (Ontario)	121.8	123.5	125.3	127.1	129.1	131.2	133.4	135.8
523	Operating costs (Quebec)	60.2	60.8	61.5	62.1	62.8	63.5	64.2	65.0
	CAPITAL COSTS								
524	Total spent in Quebec	0.0	19.6	0.0	0.0	0.0	0.0	0.0	0.0
525	Total spent in Ontario	0.0	19.6	0.0	0.0	0.0	0.0	0.0	0.0
526	Total spent in the rest of Canada	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
527	Total spend in the rest of the World	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
528	Geographical allocation pending	15.9	23.0	85.3	4.7	8.0	15.9	15.9	23.0
529	Residual unallocated to region	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
530	**Total Capital Costs**	15.9	62.2	85.3	4.7	8.0	15.9	15.9	23.0
531	Total spent on skilled labour	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
532	Total spent on unskilled labour	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
533	Total spent on material	15.9	62.2	85.3	4.7	8.0	15.9	15.9	23.0
534	Total spent on plant	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
535	Residual unallocated to spending category	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
536	**Total Capital Costs**	15.9	62.2	85.3	4.7	8.0	15.9	15.9	23.0
	TOTAL CASH FLOW (excluding revenues)								
537	Total spent in Quebec	60.2	80.4	61.5	62.1	62.8	63.5	64.2	65.0
538	Total spent in Ontario	121.8	143.1	125.3	127.1	129.1	131.2	133.4	135.8
539	Total spent in the rest of Canada	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
540	Total spend in the rest of the World	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
541	Geographical allocation pending	15.9	23.0	85.3	4.7	8.0	15.9	15.9	23.0
542	Residual unallocated to region	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
543	**Total**	197.9	246.5	272.0	193.9	199.9	210.6	213.6	223.7
910	**NET CASH FLOW**	322.6	287.3	275.5	367.5	376.0	379.9	392.1	397.5

CAPITAL COST SUMMARY **Composite (via Dorval) at 200 kph MOT Stand Alone**

		1995	1996	1997	1998	1999	2000	2001	2002
201	Right-of-Way	0.00	0.50	0.50	2.28	42.14	81.39	51.47	9.11
202	Earthworks/subgrade	0.00	7.55	7.55	17.13	88.03	180.95	306.22	231.49
203	Bridges	0.00	3.29	3.29	10.47	59.78	108.48	168.97	72.48
204	Grade separations	0.00	3.39	3.39	6.41	32.17	74.42	207.06	158.96
205	Other accommodations	0.00	0.53	0.53	0.56	3.32	24.78	46.59	16.49
206	Track	0.00	0.00	0.80	2.61	7.64	26.14	67.87	152.51
207	Power distribution system	0.00	0.00	0.77	2.49	7.85	19.00	56.40	102.07
208	Stations	0.00	3.55	3.55	1.77	2.40	4.80	48.81	87.75
209	People movers (included in stations)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
210	Signals	0.00	0.55	1.79	4.99	11.55	34.24	56.55	59.23
211	Communications	0.00	0.30	0.97	2.69	6.22	18.44	30.45	31.89
212	Equipment maintenance facilities	0.00	0.00	0.00	0.00	0.00	14.75	44.26	44.26
213	Infrastructure maintenance facilities	0.00	0.00	0.00	0.00	0.00	0.00	7.82	23.47
214	Information/ticketing systems	0.00	0.00	0.00	0.00	0.00	0.00	2.52	12.61
215	Rolling stock	0.00	16.25	16.25	43.33	43.33	108.33	108.33	108.33
216	Commissioning	0.00	0.00	0.00	0.00	0.00	0.00	0.00	12.15
217	Administration allowance	0.00	0.49	1.66	2.83	4.00	5.17	9.89	15.79
218	Startup and training	0.00	0.00	0.00	0.00	0.00	0.00	6.94	10.40
219	**TOTAL INITIAL CAPITAL COSTS**	0.00	36.40	41.05	97.57	308.42	700.91	1,220.15	1,148.99
220	**Additional fleet requirements**								
221									
222									
223									
224		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
225	**Rolling Stock Overhauls**	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
226	**Infrastructure Renewal**	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
227	**Other ongoing capital**	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
228	*Cross check initial capital*								

26-Jul-94 **HSR STUDY COST DEVELOPMENT**

CAPITAL COST SUMMARY — Composite (via Dorval) at 200 kph MOT Stand Alone

		2003	2004	2005	2006	2007	2008	2009	2010
201	Right-of-Way	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
202	Earthworks/subgrade	88.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00
203	Bridges	27.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00
204	Grade separations	60.31	0.00	0.00	0.00	0.00	0.00	0.00	0.00
205	Other accommodations	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
206	Track	159.72	124.75	4.75	0.00	0.00	0.00	0.00	0.00
207	Power distribution system	140.65	127.19	17.39	0.00	0.00	0.00	0.00	0.00
208	Stations	95.79	169.87	0.00	0.00	0.00	0.00	0.00	0.00
209	People movers (included in stations)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
210	Signals	51.02	31.78	0.00	0.00	0.00	0.00	0.00	0.00
211	Communications	27.47	17.11	0.00	0.00	0.00	0.00	0.00	0.00
212	Equipment maintenance facilities	29.51	14.75	0.00	0.00	0.00	0.00	0.00	0.00
213	Infrastructure maintenance facilities	11.73	31.29	3.91	0.00	0.00	0.00	0.00	0.00
214	Information/ticketing systems	2.52	6.30	1.26	0.00	0.00	0.00	0.00	0.00
215	Rolling stock	129.99	129.99	86.66	75.83	0.00	0.00	0.00	0.00
216	Commissioning	9.11	36.44	3.04	0.00	0.00	0.00	0.00	0.00
217	Administration allowance	11.43	10.89	0.00	0.00	0.00	0.00	0.00	0.00
218	Startup and training	12.85	6.54	0.00	0.00	0.00	0.00	0.00	0.00
219	**TOTAL INITIAL CAPITAL COSTS**	857.71	706.91	117.01	75.83	0.00	0.00	0.00	0.00
220	**Additional fleet requirements**								
221									
222									
223									
224		0.00	0.00	0.00	0.00	0.00	0.00	46.84	0.00
225	**Rolling Stock Overhauls**	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.96
226	**Infrastructure Renewal**	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
227	**Other ongoing capital**	0.00	0.00	0.00	0.00	0.00	0.00	0.00	39.24
228	*Cross check initial capital*								

Spreadsheet	W:\207-CHAS\COSTING\20QT-1.WK3		
Today's date	27-Jul-94		
Proessing time	10:11		
Data export file	X-20QT-1.WK1		
Train speed	200 kph		
Train route	Composite (via Dorval) at 200 kph		
Demand data	QT Segment		
Initial demand file	R105QT22/R125QT22 [as supplied by IBI]		
Train data	Final off NEW-OD WK1		
Trip Time	COMPOSITE VIA DORVAL		
Capital file	C:\work\207-chas\canarail\extract.wk3		
Capital name	MONTREAL - TORONTO CORRIDOR 200+, composite EX .. 2c00-		
	MONTREAL - QUEBEC 200+, composite EX .. 2c00-		
	WINDSOR - TORONTO 200+, composite EX .. 2c00-		
Cap allocation	SPLIT-2B.WK3		
Include SWO	No		
Include MQ	Yes		
MOT to Pearson	Yes		
Con Air Included	Yes		
via Mirabel	No		
via Dorval	Yes		
Delay Cap Input	2cd-xx-2	1 *MOT*	100% *DT*
	2cd-xx-2	1 *MQ*	100% *DT*
	2cd-xx-2	1 *SWO*	61% *DT*
		1 *SPLIT*	

01-Aug-94 **HSR STUDY COST DEVELOPMENT**

OPERATIONS/REVENUES/COSTS Composite (via Dorval) at 200 kph QT Segment

			Year 2005	*Year 2025*		
	RIDERSHIP					
1 [A]	Adjusted passengers (non-duplicated)	millions	7.5	11.5		
2	Average length of haul	kms	344	351		
3	Passenger kilometres	billion	2.6	4.0		
	OPERATION STATISTICS					
4	Route length	kilometres	884	884		
5	Train trips (one-way)	thousands	15.4	22.0		
6	Trainset kms	millions	13.6	19.5		
7	Seat kms	billions	3.8	5.5	*282 per trainset*	
8	Trainsets in active fleet	units	47	63		
9	Average trainset utilization	k-km/year	289	310		
10	Average load factor		67%	73%		
11	Total energy consumption	gigaW-hrs	167	239		
12	Total employment		1,872	2,285		
	PASSENGER REVENUES					
13	Adjustusted revenues	$million	504.0	834.6		
14	Agency commissions	$million	(27.7)	(45.9)	*5.5% of gross revenue*	
15	Credit card discount	$million	(4.7)	(7.8)	*0.9% of gross revenue*	
16	Net Revenue	$million	471.5	780.9		
	OPERATIONS AND MAINTENANCE COSTS				***[Total employment]***	
17	Train operations	$million	26.0	34.3	206	260
18	Customer services	$million	56.5	68.8	578	728
19	Equipment maintenance	$million	28.0	39.2	429	593
20	Infrastructure maintenance	$million	46.4	59.2	497	524
21	Executive/administration	$million	20.1	21.4	187	209
22	Insurance/taxes/other	$million	18.7	20.9	0	0
23	Contingency	$million	14.2	17.1	--	--
24	**Total O&M Costs**	$million	206.1	257.0	1,872	2,285
25	**OPERATING PROFIT**		265.4	523.9		
26	**COST/REVENUE RATIOS**					
27	Net revenue : O&M costs Ratio		2.29	3.04		
28	O&M cost per trainset-km	dollars	15.20	13.15		
29	O&M cost per seat-km	cents	5.39	4.66		
30	O&M cost per passenger	dollars	27.66	22.34		
31	O&M cost per passenger-km	cents	8.04	6.36		
32	Net revenue per passenger	dollars	63.28	67.88		
33	Net revenue per passenger km	cents	18.39	19.32		
	CAPITAL COSTS					
34	Startup/admin/training/other "soft" costs	$million	206.6			
35	Construction of track	$million	5,004.4			
36	Construction of stations	$million	491.2			
37	Construction of maintenance facilities	$million	262.0			
38	Acqusition of rolling stock	$million	1,124.3			
39	**Total Initial Capital Costs**	$million	7,088.6 *over the period 1995 to 2006*			
40	**Total Ongoing Capital Costs**	$million	837.7 *over the period 2007 to 2025*			
41	Initial capital per route-km (excluding RS)	$million	6.75			

		2005 Que	*2005 Ont*	*2025 Que*	2025 Ont
901	Net Revenues	221.27	250.27	364.42	416.47
902	O and M Costs	97.23	108.91	118.95	138.06
903	Employment	915	957	1,110	1,175

26-Jul-94 **HSR STUDY COST DEVELOPMENT**

0

OPERATIONS COST BREAKDOWN Composite (via Dorval) at 200 kph QT Segment

		Cont Allow	*Cost Estimate ($ million)*		*Employment Estimate*		*Quebec Share*
			2005	*2025*	*2005*	*2025*	*2005*
	TRAIN OPERATIONS						
101	Train crew	5.0%	10.85	14.51	150	201	53%
102	Power - demand charges	2.5%	5.15	6.73	--	--	32%
103	Power - energy consumption	2.5%	6.42	9.23	--	--	26%
104	Control centre	5.0%	1.91	1.91	32	32	62%
105	Transportation administration/supervision	5.0%	1.70	1.94	24	27	57%
106	**Subtotal**		26.02	34.[illegible]	206	260	43%
	CUSTOMER SERVICES						
107	On-board service staff	10.0%	5.73	8.30	133	193	50%
108	On-board service supplies	5.0%	1.23	1.90	--	--	54%
109	On-board services ground support	10.0%	1.05	1.52	27	39	50%
110	Food/beverage for sale	0.0%	0.00	0.00	--	--	--
111	Station operations	10.0%	17.33	18.47	210	243	36%
112	ATM/Ticketing/Reservations transactions	5.0%	10.02	15.31	--	--	51%
113	Telephone/Counter Sales	5.0%	3.29	4.16	93	117	51%
114	Advertising and promotion expenses	5.0%	10.08	10.08	--	--	48%
115	Customer service administration/supervision	5.0%	7.76	9.09	116	135	60%
116	**Subtotal**		56.49	68.84	578	728	47%
	EQUIPMENT MAINTENANCE						
117	Routine maintenance - labour	5.0%	8.67	12.49	172	248	50%
118	Routine maintenance - material	5.0%	9.34	13.49	--	--	50%
119	Major maintenance [included in capital]	--	--	--	--	--	--
120	Cleaning	5.0%	5.97	8.17	194	266	54%
121	Maintenance administration/supervision	5.0%	3.97	5.06	63	79	50%
122	**Subtotal**		27.95	39.21	429	593	51%
	INFRASTRUCTURE MAINTENANCE						
123	Routine maintenance	15.0%	24.35	25.37	378	401	39%
124	Purchased services	15.0%	12.28	10.07	--	--	40%
125	Materials	10.0%	1.53	15.26	--	--	34%
126	Programmed replacement [occurs after 2025]	--	--	--	--	--	
127	Maintenance administration/supervision	5.0%	8.28	8.52	119	123	36%
128	**Subtotal**		46.43	59.22	497	524	39%
	EXECUTIVE/ADMINISTRATION						
129	Labour and related	5.0%	11.40	12.69	161	180	57%
130	Other	5.0%	8.70	8.70	--	--	63%
131	**Subtotal**		20.10	21.39	161	180	59%
	INSURANCE/TAXES/OTHER						
132	Insurance/claims	0.0%	8.50	10.41	--	--	39%
133	Property taxes	10.0%	6.50	6.50	--	--	86%
134	Franchise fees	10.0%	*nil*	nil	--	--	
135	**Subtotal**		15.00	16.91	0	0	59%
136	**CONTINGENCY**	7.4%	14.16	17.12	--	--	46%
137	**TOTAL**		206.15	257.01	1,872	2,285	47%
138	**Total: Quebec component**		97.23	118.95	915	1,110	
139	**Total: Ontario component**		108.91	138.06	957	1,175	
140	**[Major maintenance included in capital]**		0.00	20.61			
141	Routine equipment maintenance per trainset km	dollars	1.33	1.33			
142	Infrastructure maintenance per route km	$thousand	43.18	57.38			
143	Executive/administration as a percent of total		10.5%	8.9%			
144	Station/ticketing costs per passenger	Dollars	4.07	3.27			
145							
146							

TOTAL CASHFLOW — Composite (via Dorval) at 200 kph QT Segment

		Total Year 2005	Total Year 2025	Quebec Year 2005	Quebec Year 2025
501	**[A] RIDERSHIP**	7.5	11.5	*NA*	*NA*
502	**ADJUSTED GROSS REVENUE**	504.0	834.6	236.5	389.5
503	Payments to Travel Agencies	27.7	45.9	13.0	21.4
504	Payments to Credit Card Companies	4.7	7.8	2.2	3.7
505	**Revenue Available to HSR Operator**	471.5	780.9	221.3	364.4
	OPERATING EMPLOYMENT				
904	Total employment	1,872	2,285	915	1,110
905	"Skilled" employment	1,175	1,381	534	626
906	"Unskilled" employment	697	904	381	484
907	Employment in Ontario	957	1,175		
908	Employment in Quebec	915	1,110	915	1,110
	OPERATING COSTS				
	Labour				
506	Bare wage bill skilled	56.3	66.2	26.3	30.8
507	Bare wage bill unskilled	19.7	25.5	10.8	13.7
508	Payroll taxes	6.4	7.7	3.1	3.7
509	Provisions for pension plan	5.7	6.9	2.8	3.3
	Purchased materials/services				
510	Electricity	11.6	16.0	3.3	4.4
511	Advertising/promotion	10.1	10.1	4.8	4.8
512	Infrastructure maintenance services	12.3	10.1	4.3	4.7
513	Infrastructure materials/supplies	1.5	15.3	0.5	5.2
514	Rolling stock materials/supplies	9.3	13.5	4.7	6.7
515	Telecommunications/computer services	10.0	15.3	5.1	7.8
516	Insurance services/franchise fees etc	8.5	10.4	3.3	4.3
517	Food/related sundries	1.2	1.9	0.7	1.0
518	**Unscheduled materials/services**	39.4	41.1	21.1	20.7
519	**Allowance for contingencies**	14.2	17.1	6.5	7.7
520	**TOTAL OPERATING COSTS**	206.1	257.0	97.2	118.9
521	**OPERATING PROFIT**	265.4	523.9	*NA*	*NA*
909	**COST REVENUE RATIO**	2.29	3.04	*NA*	*NA*
522	Operating costs (Ontario)	108.9	138.1		
523	Operating costs (Quebec)	97.2	118.9		

	CAPITAL COSTS	Initial	Ongoing	Total
524	Total spent in Quebec	2,033.57	79.24	2,112.81
525	Total spent in Ontario	2,814.70	79.24	2,893.94
526	Total spent in the rest of Canada	204.05	0.00	204.05
527	Total spend in the rest of the World	911.32	0.00	911.32
528	Geographical allocation pending	1,124.26	655.82	1,780.07
529	Residual unallocated to region	0.67	0.00	0.67
530	**Total Capital Costs**	7,088.55	814.30	7,902.86
531	Total spent on skilled labour	1,887.11	0.00	1,887.11
532	Total spent on unskilled labour	473.68	0.00	473.68
533	Total spent on material	3,545.91	814.30	4,360.22
534	Total spent on plant	1,181.86	0.00	1,181.86
535	Residual unallocated to spending category	0.00	0.00	0.00
536	**Total Capital Costs**	7,088.55	814.30	7,902.86

	TOTAL CASH FLOW (excluding revenues)	
537	Total spent in Quebec	*[This line defined only for year-by-year tables]*
538	Total spent in Ontario	*[This line defined only for year-by-year tables]*
539	Total spent in the rest of Canada	*[This line defined only for year-by-year tables]*
540	Total spend in the rest of the World	*[This line defined only for year-by-year tables]*
541	Geographical allocation pending	*[This line defined only for year-by-year tables]*
542	Residual unallocated to region	*[This line defined only for year-by-year tables]*
543	**Total**	*[This line defined only for year-by-year tables]*
910	**NET CASH FLOW**	*[This line defined only for year-by-year tables]*

CAPITAL COST SUMMARY — Composite (via Dorval) at 200 kph QT Segment

		Professional Services	*Contin-gency*	Total
201	Right-of-Way	22.85	25.45	260.91
202	Earthworks/subgrade	227.53	138.62	1,290.30
203	Bridges	78.78	43.49	557.19
204	Grade separations	99.32	96.69	702.47
205	Other accommodations	14.81	20.75	104.74
206	Track	99.97	33.97	788.18
207	Power distribution system	98.93	78.36	699.69
208	Stations	64.48	35.60	456.08
209	People movers (included in stations)	0.00	0.00	0.00
210	Signals	64.72	42.61	391.38
211	Communications	34.65	22.81	209.55
212	Equipment maintenance facilities	11.99	17.98	160.46
213	Infrastructure maintenance facilities	0.00	0.00	101.56
214	Information/ticketing systems	0.00	0.00	35.16
215	Rolling stock	83.28	92.83	1,124.26
216	Commissioning	81.42	0.00	81.42
217	Administration allowance	0.00	0.00	75.27
218	Startup and training	0.00	0.00	49.95
219	**TOTAL INITIAL CAPITAL COSTS**	982.73	649.16	7,088.55
220	**Additional fleet requirements**	*year 2009*	5 units	93.69
221		*year 2013*	5 units	93.69
222		*year 2017*	3 units	70.27
223		*year 2021*	5 units	93.69
224		*Total*	18 units	351.33
225	**Rolling Stock Overhauls**	*total, years 2005-2025*		334.47
226	**Infrastructure Renewal**	*total, years 2005-2025*		0.00
227	**Other ongoing capital**	*total, years 2005-2025*		158.49
228	*Cross check initial capital*			*0.00*

RIDERSHIP BREAKDOWN — Composite (via Dorval) at 200 kph QT Segment

			Year 2005	Year 2025		
	RIDERSHIP					
301	Ridership within the segment	*millions*	na	na		
302	Ridership between segments	*millions*	na	na		
303	Airport traffic	*millions*	na	na		
304 [A]	**Total potential passengers**	*million*	7.53	11.62		
305	Passengers not served at peak	*million*	(0.08)	(0.12)	1.0%	*of passengers*
306	Allowance for additional passengers	*million*	0.00	0.00	0.0%	*of passengers*
307	**Net passengers**	*million*	7.45	11.50		
	PASSENGER REVENUES					
308	Initial transportation revenue estimate	*$million*	554.72	918.53		
309	PST/GST	*$million*	(45.64)	(75.49)	8.2%	*of revenues*
310	Revenue estimate net of taxes	*$million*	509.08	843.04		
311	First Class premium	*$million*	0.00	0.00	0.0%	*of revenues*
312	Food/beverage sales	*$million*	0.00	0.00	0.00	*per passenger*
313	Revenues foregone at peak	*$million*	(5.09)	(8.43)	1.0%	*of revenues*
314	**Final Gross Revenue**	*$million*	503.99	834.61		
	PASSENGER KILOMETRES					
315	Ridership within segments	*billions*	2.36	3.73		
316	Ridership between segments	*billions*	0.23	0.35		
317	Airport traffic	*billions*	above	above		
318	Total		2.59	4.08		
319	Passenger-km foregone at peak	*billions*	(0.03)	(0.04)	1.0%	*of passenger-km*
320	Allowance for additional passenger-kms	*billions*	0.00	0.00	0.0%	*of passengers-km*
321	**Total passenger kms**	*billions*	2.56	4.04		
322	**Average Length of Haul**	*kms*	344	351		

EMPLOYMENT DATA

Composite (via Dorval) at 200 kph QT Segment

		Average Wage	Total Year 2005	Total Year 2025	Quebec Year 2005	Quebec Year 2025
401	Train Crew	57,500	150	201	80	102
402	Dispatchers	50,600	32	32	20	20
403	Managerial/admin/professional	58,324	428	477	212	236
404	Station staff	35,939	52	61	24	28
405	Mechanical trades/skilled	39,402	204	282	97	133
406	Maintenance trades/skilled	36,349	309	328	102	107
407	**Total "skilled"**	47,952	1,175	1,381	534	626
408	OBS Staff	31,453	147	213	74	103
409	Sales Staff	29,007	93	117	47	60
410	Other customer service	29,986	13	19	7	9
411	Support staff	34,206	55	66	41	49
412	Station labour (various)	24,881	157	182	72	84
413	Equipment maintenance unskilled	30,603	14	20	7	10
414	Track maintenance unskilled	30,603	69	73	45	47
415	Cleaners	24,270	149	213	88	121
416	**Total "unskilled"**	28,200	697	904	381	484
417	**Total "unallocated"**		0	0	(0)	0
418	**Grand total employment**	40,598	1,872	2,285	915	1,110
419	**Ontario Total "skilled"**		642	754		
420	**Ontario Total "unskilled"**		316	421		
421	**Ontario Total "unallocated"**		0	0		
422	**Ontario Grand total employment**		957	1,175		
423	**Quebec Total "skilled"**		534	626		
424	**Quebec Total "unskilled"**		381	484		
425	**Quebec Total "unallocated"**		0	0		
426	**Quebec Grand total employment**		915	1,110		

01-Aug-94 **HSR STUDY COST DEVELOPMENT**

TOTAL CASHFLOW **Composite (via Dorval) at 200 kph QT Segment**

		1995	1996	1997	1998	1999	2000	2001	2002
501	**[A] RIDERSHIP**	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
502	**ADJUSTED GROSS REVENUE**	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
503	Payments to Travel Agencies	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
504	Payments to Credit Card Companies	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
505	**Revenue Available to HSR Operator**	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	OPERATING EMPLOYMENT								
904	Total employment	0	0	0	0	0	0	0	0
905	"Skilled" employment	0	0	0	0	0	0	0	0
906	"Unskilled" employment	0	0	0	0	0	0	0	0
907	Employment in Ontario	0	0	0	0	0	0	0	0
908	Employment in Quebec	0	0	0	0	0	0	0	0
	OPERATING COSTS								
	Labour								
506	Bare wage bill skilled	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
507	Bare wage bill unskilled	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
508	Payroll taxes	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
509	Provisions for pension plan	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Purchased materials/services								
510	Electricity	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
511	Advertising/promotion	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
512	Infrastructure maintenance services	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
513	Infrastructure materials/supplies	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
514	Rolling stock materials/supplies	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
515	Telecommunications/computer services	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
516	Insurance services/franchise fees etc	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
517	Food/related sundries	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
518	**Unscheduled materials/services**	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
519	**Allowance for contingencies**	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
520	**TOTAL OPERATING COSTS**	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
521	**OPERATING PROFIT**	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
909	**COST REVENUE RATIO**								
522	Operating costs (Ontario)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
523	Operating costs (Quebec)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	CAPITAL COSTS								
524	Total spent in Quebec	0.0	12.1	15.9	57.9	158.0	327.4	521.9	521.2
525	Total spent in Ontario	0.0	14.0	16.8	31.4	132.1	330.2	686.7	696.5
526	Total spent in the rest of Canada	0.0	0.0	0.0	0.2	0.4	6.4	29.0	68.2
527	Total spend in the rest of the World	0.0	0.9	2.0	5.0	37.0	132.1	272.1	254.7
528	Geographical allocation pending	0.0	21.1	21.1	56.2	56.2	140.5	140.5	140.5
529	Residual unallocated to region	0.0	0.0	(0.0)	(0.0)	(0.0)	0.1	0.2	0.2
530	**Total Capital Costs**	0.0	48.0	55.7	150.7	383.7	936.8	1,650.4	1,681.4
531	Total spent on skilled labour	0.0	19.4	25.1	62.4	139.6	273.1	484.2	448.7
532	Total spent on unskilled labour	0.0	0.8	1.0	2.5	20.0	70.8	148.0	131.5
533	Total spent on material	0.0	22.4	22.7	68.5	161.9	418.8	681.1	787.3
534	Total spent on plant	0.0	5.4	6.9	17.3	62.2	174.1	337.0	313.8
535	Residual unallocated to spending category	0.0	0.0	(0.0)	(0.0)	(0.0)	0.0	0.0	0.0
536	**Total Capital Costs**	0.0	48.0	55.7	150.7	383.7	936.8	1,650.4	1,681.4
	TOTAL CASH FLOW (excluding revenues)								
537	Total spent in Quebec	0.0	5.9	7.3	23.3	102.0	175.3	264.3	215.4
538	Total spent in Ontario	0.0	13.5	16.3	27.9	127.9	316.9	633.3	610.6
539	Total spent in the rest of Canada	0.0	0.0	0.0	0.1	0.3	6.3	16.5	43.4
540	Total spend in the rest of the World	0.0	0.7	2.0	2.9	34.9	93.9	197.6	171.3
541	Geographical allocation pending	0.0	16.7	26.3	44.5	44.5	111.3	111.3	111.3
542	Residual unallocated to region	0.0	0.0	0.1	(0.0)	(0.0)	0.1	0.2	0.2
543	**Total**	0.0	36.8	67.9	98.7	309.6	703.8	1,223.2	1,152.2
910	**NET CASH FLOW**	0.0	(36.8)	(67.9)	(98.7)	(309.6)	(703.8)	(1,223.2)	(1,152.2)

TOTAL CASHFLOW

Composite (via Dorval) at 200 kph QT Segment

		2003	2004	2005	2006	2007	2008	2009	2010
501	[A] **RIDERSHIP**	1.1	3.0	7.5	7.6	7.8	8.0	8.1	8.3
502	**ADJUSTED GROSS REVENUE**	51.6	149.3	504.0	516.9	530.1	543.6	557.5	571.7
503	Payments to Travel Agencies	2.8	8.2	27.7	28.4	29.2	29.9	30.7	31.4
504	Payments to Credit Card Companies	0.5	1.4	4.7	4.8	5.0	5.1	5.2	5.4
505	**Revenue Available to HSR Operator**	48.3	139.7	471.5	483.6	495.9	508.6	521.6	534.9
	OPERATING EMPLOYMENT								
904	Total employment	313	751	1,872	1,891	1,910	1,929	1,948	1,967
905	"Skilled" employment	228	486	1,175	1,185	1,194	1,204	1,214	1,223
906	"Unskilled" employment	85	265	697	706	715	725	734	744
907	Employment in Ontario	125	149	957	967	977	987	997	1,008
908	Employment in Quebec	188	602	915	923	932	941	950	959
	OPERATING COSTS								
	Labour								
506	Bare wage bill skilled	11.1	22.8	56.3	56.8	57.3	57.7	58.2	58.7
507	Bare wage bill unskilled	2.4	7.5	19.7	19.9	20.2	20.4	20.7	21.0
508	Payroll taxes	1.1	2.5	6.4	6.4	6.5	6.5	6.6	6.7
509	Provisions for pension plan	1.0	2.2	5.7	5.8	5.8	5.9	5.9	6.0
	Purchased materials/services								
510	Electricity	0.9	2.1	11.6	11.8	11.9	12.1	12.3	12.5
511	Advertising/promotion	4.0	6.1	10.1	10.1	10.1	10.1	10.1	10.1
512	Infrastructure maintenance services	2.5	6.3	12.3	12.3	12.3	11.8	11.4	11.0
513	Infrastructure materials/supplies	0.3	0.7	1.5	1.6	1.7	1.8	2.0	2.1
514	Rolling stock materials/supplies	0.9	2.7	9.3	9.5	9.7	9.9	10.1	10.2
515	Telecommunications/computer services	1.5	3.8	10.0	10.2	10.5	10.7	10.9	11.1
516	Insurance services/franchise fees etc	1.7	4.2	8.5	8.6	8.7	8.8	8.9	8.9
517	Food/related sundries	0.2	0.5	1.2	1.3	1.3	1.3	1.3	1.4
518	**Unscheduled materials/services**	11.0	27.1	39.4	39.5	39.6	39.6	39.7	39.8
519	**Allowance for contingencies**	2.8	6.6	14.2	14.3	14.4	14.4	14.5	14.6
520	**TOTAL OPERATING COSTS**	41.2	95.2	206.1	207.9	209.7	211.0	212.4	213.8
521	**OPERATING PROFIT**	7.1	44.5	265.4	275.7	286.2	297.6	309.2	321.2
909	**COST REVENUE RATIO**	1.17	1.47	2.29	2.33	2.36	2.41	2.46	2.50
522	Operating costs (Ontario)	16.5	31.4	108.9	109.8	110.8	111.4	112.1	112.8
523	Operating costs (Quebec)	24.7	63.8	97.2	98.1	98.9	99.6	100.3	100.9
	CAPITAL COSTS								
524	Total spent in Quebec	278.9	132.6	7.7	0.0	0.0	0.0	0.0	26.1
525	Total spent in Ontario	518.0	369.6	19.5	0.0	0.0	0.0	0.0	26.1
526	Total spent in the rest of Canada	64.9	34.9	0.1	0.0	0.0	0.0	0.0	0.0
527	Total spend in the rest of the World	134.9	69.5	3.2	0.0	0.0	0.0	0.0	0.0
528	Geographical allocation pending	168.6	168.6	112.4	98.4	0.0	0.0	93.7	10.3
529	Residual unallocated to region	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0
530	**Total Capital Costs**	1,165.4	775.3	142.8	98.4	0.0	0.0	93.7	62.5
531	Total spent on skilled labour	265.8	159.6	9.2	0.0	0.0	0.0	0.0	0.0
532	Total spent on unskilled labour	64.9	32.6	1.5	0.0	0.0	0.0	0.0	0.0
533	Total spent on material	664.6	492.3	127.8	98.4	0.0	0.0	93.7	62.5
534	Total spent on plant	170.1	90.8	4.3	0.0	0.0	0.0	0.0	0.0
535	Residual unallocated to spending category	(0.0)	(0.0)	0.0	0.0	0.0	0.0	0.0	0.0
536	**Total Capital Costs**	1,165.4	775.3	142.8	98.4	0.0	0.0	93.7	62.5
	TOTAL CASH FLOW (excluding revenues)								
537	Total spent in Quebec	153.6	144.3	61.1	54.0	54.5	54.9	55.4	75.5
538	Total spent in Ontario	469.1	382.3	126.1	107.5	108.4	109.1	109.7	130.1
539	Total spent in the rest of Canada	40.1	34.9	0.1	0.0	0.0	0.0	0.0	0.0
540	Total spend in the rest of the World	106.3	66.4	3.2	0.0	0.0	0.0	0.0	0.0
541	Geographical allocation pending	133.5	133.5	89.0	77.9	0.0	0.0	70.3	8.2
542	Residual unallocated to region	0.1	0.1	0.0	0.0	0.0	0.0	0.0	(0.0)
543	**Total**	902.7	761.5	279.5	239.4	162.9	164.0	235.4	213.8
910	**NET CASH FLOW**	(854.4)	(621.8)	192.1	244.2	333.0	344.6	286.2	321.1

01-Aug-94

HSR STUDY COST DEVELOPMENT

TOTAL CASHFLOW **Composite (via Dorval) at 200 kph QT Segment**

		2011	2012	2013	2014	2015	2016	2017	2018
501	**[A] RIDERSHIP**	8.5	8.7	8.9	9.1	9.3	9.5	9.7	9.9
502	**ADJUSTED GROSS REVENUE**	586.3	601.3	616.7	632.4	648.6	665.1	682.1	699.5
503	Payments to Travel Agencies	32.2	33.1	33.9	34.8	35.7	36.6	37.5	38.5
504	Payments to Credit Card Companies	5.5	5.6	5.8	5.9	6.1	6.2	6.4	6.6
505	**Revenue Available to HSR Operator**	548.6	562.6	577.0	591.7	606.8	622.3	638.2	654.5
	OPERATING EMPLOYMENT								
904	Total employment	1,987	2,007	2,027	2,047	2,068	2,088	2,109	2,130
905	"Skilled" employment	1,233	1,243	1,253	1,263	1,274	1,284	1,294	1,305
906	"Unskilled" employment	754	763	773	784	794	804	815	825
907	Employment in Ontario	1,018	1,029	1,039	1,050	1,061	1,072	1,083	1,094
908	Employment in Quebec	969	978	988	997	1,007	1,017	1,027	1,037
	OPERATING COSTS								
	Labour								
506	Bare wage bill skilled	59.1	59.6	60.1	60.6	61.1	61.6	62.1	62.6
507	Bare wage bill unskilled	21.2	21.5	21.8	22.1	22.4	22.7	23.0	23.3
508	Payroll taxes	6.7	6.8	6.9	6.9	7.0	7.1	7.1	7.2
509	Provisions for pension plan	6.0	6.1	6.1	6.2	6.3	6.3	6.4	6.4
	Purchased materials/services								
510	Electricity	12.7	12.9	13.2	13.4	13.6	13.8	14.0	14.3
511	Advertising/promotion	10.1	10.1	10.1	10.1	10.1	10.1	10.1	10.1
512	Infrastructure maintenance services	10.5	10.1	10.1	10.1	10.1	10.1	10.1	10.1
513	Infrastructure materials/supplies	2.2	2.4	2.5	2.7	3.1	6.1	6.8	7.5
514	Rolling stock materials/supplies	10.4	10.6	10.8	11.0	11.2	11.4	11.6	11.9
515	Telecommunications/computer services	11.4	11.6	11.9	12.1	12.4	12.7	12.9	13.2
516	Insurance services/franchise fees etc	9.0	9.1	9.2	9.3	9.4	9.5	9.6	9.7
517	Food/related sundries	1.4	1.4	1.5	1.5	1.5	1.6	1.6	1.6
518	**Unscheduled materials/services**	39.9	40.0	40.1	40.2	40.2	40.3	40.4	40.5
519	**Allowance for contingencies**	14.6	14.7	14.8	14.9	15.1	15.4	15.6	15.7
520	**TOTAL OPERATING COSTS**	215.2	216.6	218.7	220.7	223.0	228.3	230.9	233.7
521	**OPERATING PROFIT**	333.4	345.9	358.3	371.0	383.8	394.0	407.3	420.8
909	**COST REVENUE RATIO**	2.55	2.60	2.64	2.68	2.72	2.73	2.76	2.80
522	Operating costs (Ontario)	113.6	114.3	115.4	116.5	117.8	121.1	122.6	124.2
523	Operating costs (Quebec)	101.6	102.3	103.2	104.2	105.2	107.2	108.3	109.5
	CAPITAL COSTS								
524	Total spent in Quebec	0.0	0.0	0.0	0.0	27.1	0.0	0.0	0.0
525	Total spent in Ontario	0.0	0.0	0.0	0.0	27.1	0.0	0.0	0.0
526	Total spent in the rest of Canada	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
527	Total spend in the rest of the World	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
528	Geographical allocation pending	20.6	20.6	114.3	20.6	19.7	19.7	90.9	20.6
529	Residual unallocated to region	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
530	**Total Capital Costs**	20.6	20.6	114.3	20.6	73.8	19.7	90.9	20.6
531	Total spent on skilled labour	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
532	Total spent on unskilled labour	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
533	Total spent on material	20.6	20.6	114.3	20.6	73.8	19.7	90.9	20.6
534	Total spent on plant	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
535	Residual unallocated to spending category	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
536	**Total Capital Costs**	20.6	20.6	114.3	20.6	73.8	19.7	90.9	20.6
	TOTAL CASH FLOW (excluding revenues)								
537	Total spent in Quebec	56.4	56.9	57.4	58.0	78.8	59.4	60.0	60.7
538	Total spent in Ontario	111.1	111.9	112.9	114.0	135.6	118.5	120.0	121.6
539	Total spent in the rest of Canada	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
540	Total spend in the rest of the World	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
541	Geographical allocation pending	16.4	16.4	86.7	16.4	15.2	15.2	86.7	16.4
542	Residual unallocated to region	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
543	**Total**	183.9	185.1	257.0	188.4	229.6	193.1	266.7	198.6
910	**NET CASH FLOW**	364.7	377.4	319.9	403.3	377.2	429.2	371.5	455.9

01-Aug-94 **HSR STUDY COST DEVELOPMENT**

TOTAL CASHFLOW **Composite (via Dorval) at 200 kph QT Segment**

		2019	2020	2021	2022	2023	2024	2025	2026
501	[A] **RIDERSHIP**	10.1	10.3	10.5	10.8	11.0	11.3	11.5	11.8
502	**ADJUSTED GROSS REVENUE**	717.4	735.7	754.5	773.8	793.6	813.8	834.6	855.9
503	Payments to Travel Agencies	39.5	40.5	41.5	42.6	43.6	44.8	45.9	47.1
504	Payments to Credit Card Companies	6.7	6.9	7.1	7.3	7.4	7.6	7.8	8.0
505	**Revenue Available to HSR Operator**	671.2	688.4	705.9	724.0	742.5	761.4	780.9	800.8
	OPERATING EMPLOYMENT								
904	Total employment	2,152	2,173	2,195	2,217	2,240	2,262	2,285	2,308
905	"Skilled" employment	1,315	1,326	1,337	1,348	1,359	1,370	1,381	1,392
906	"Unskilled" employment	836	847	858	870	881	893	904	916
907	Employment in Ontario	1,105	1,116	1,128	1,139	1,151	1,163	1,175	1,187
908	Employment in Quebec	1,047	1,057	1,067	1,078	1,089	1,099	1,110	1,121
	OPERATING COSTS								
	Labour								
506	Bare wage bill skilled	63.1	63.6	64.1	64.6	65.2	65.7	66.2	66.8
507	Bare wage bill unskilled	23.6	23.9	24.2	24.5	24.8	25.2	25.5	25.8
508	Payroll taxes	7.3	7.3	7.4	7.5	7.5	7.6	7.7	7.8
509	Provisions for pension plan	6.5	6.6	6.6	6.7	6.8	6.8	6.9	6.9
	Purchased materials/services								
510	Electricity	14.5	14.7	15.0	15.2	15.5	15.7	16.0	16.2
511	Advertising/promotion	10.1	10.1	10.1	10.1	10.1	10.1	10.1	10.1
512	Infrastructure maintenance services	10.1	10.1	10.1	10.1	10.1	10.1	10.1	10.1
513	Infrastructure materials/supplies	8.3	9.2	10.2	11.2	12.4	13.8	15.3	16.9
514	Rolling stock materials/supplies	12.1	12.3	12.5	12.8	13.0	13.2	13.5	13.7
515	Telecommunications/computer services	13.5	13.8	14.1	14.4	14.7	15.0	15.3	15.6
516	Insurance services/franchise fees etc	9.8	9.9	10.0	10.1	10.2	10.3	10.4	10.5
517	Food/related sundries	1.7	1.7	1.7	1.8	1.8	1.9	1.9	1.9
518	**Unscheduled materials/services**	40.6	40.7	40.8	40.9	40.9	41.0	41.1	41.2
519	**Allowance for contingencies**	15.9	16.1	16.3	16.5	16.7	16.9	17.1	17.4
520	**TOTAL OPERATING COSTS**	236.6	239.6	242.8	246.1	249.5	253.2	257.0	261.0
521	**OPERATING PROFIT**	434.6	448.7	463.2	477.9	492.9	508.3	523.9	539.8
909	**COST REVENUE RATIO**	2.84	2.87	2.91	2.94	2.98	3.01	3.04	3.07
522	Operating costs (Ontario)	125.9	127.7	129.5	131.5	133.5	135.7	138.1	140.5
523	Operating costs (Quebec)	110.7	112.0	113.3	114.6	116.0	117.4	118.9	120.5
	CAPITAL COSTS								
524	Total spent in Quebec	0.0	26.1	0.0	0.0	0.0	0.0	0.0	0.0
525	Total spent in Ontario	0.0	26.1	0.0	0.0	0.0	0.0	0.0	0.0
526	Total spent in the rest of Canada	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
527	Total spend in the rest of the World	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
528	Geographical allocation pending	20.6	30.0	113.4	9.4	10.3	20.6	20.6	30.0
529	Residual unallocated to region	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
530	**Total Capital Costs**	20.6	82.2	113.4	9.4	10.3	20.6	20.6	30.0
531	Total spent on skilled labour	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
532	Total spent on unskilled labour	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
533	Total spent on material	20.6	82.2	113.4	9.4	10.3	20.6	20.6	30.0
534	Total spent on plant	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
535	Residual unallocated to spending category	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
536	**Total Capital Costs**	20.6	82.2	113.4	9.4	10.3	20.6	20.6	30.0
	TOTAL CASH FLOW (excluding revenues)								
537	Total spent in Quebec	61.3	81.6	62.7	63.4	64.1	64.8	65.6	66.3
538	Total spent in Ontario	123.2	144.6	126.8	128.7	130.7	132.8	135.1	137.5
539	Total spent in the rest of Canada	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
540	Total spend in the rest of the World	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
541	Geographical allocation pending	16.4	23.4	85.5	7.0	8.2	16.4	16.4	23.4
542	Residual unallocated to region	0.0	(0.0)	0.0	0.0	0.0	0.0	0.0	0.0
543	**Total**	200.9	249.6	274.9	199.0	203.0	214.0	217.0	227.2
910	**NET CASH FLOW**	470.3	438.8	431.0	524.9	539.5	547.4	563.9	573.6

26-Jul-94 **HSR STUDY COST DEVELOPMENT**

CAPITAL COST SUMMARY

Composite (via Dorval) at 200 kph QT Segment

		2003	*2004*	*2005*	*2006*	*2007*	*2008*	*2009*	*2010*
201	Right-of-Way	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
202	Earthworks/subgrade	88.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00
203	Bridges	27.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00
204	Grade separations	60.31	0.00	0.00	0.00	0.00	0.00	0.00	0.00
205	Other accommodations	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
206	Track	250.76	126.79	4.75	0.00	0.00	0.00	0.00	0.00
207	Power distribution system	225.25	146.59	17.39	0.00	0.00	0.00	0.00	0.00
208	Stations	118.11	169.87	0.00	0.00	0.00	0.00	0.00	0.00
209	People movers (included in stations)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
210	Signals	68.50	31.78	0.00	0.00	0.00	0.00	0.00	0.00
211	Communications	36.74	17.11	0.00	0.00	0.00	0.00	0.00	0.00
212	Equipment maintenance facilities	35.97	14.75	0.00	0.00	0.00	0.00	0.00	0.00
213	Infrastructure maintenance facilities	17.57	37.12	3.91	0.00	0.00	0.00	0.00	0.00
214	Information/ticketing systems	7.46	6.33	1.27	0.00	0.00	0.00	0.00	0.00
215	Rolling stock	168.64	168.64	112.43	98.37	0.00	0.00	0.00	0.00
216	Commissioning	25.36	38.74	3.06	0.00	0.00	0.00	0.00	0.00
217	Administration allowance	16.97	10.89	0.00	0.00	0.00	0.00	0.00	0.00
218	Startup and training	18.12	6.72	0.00	0.00	0.00	0.00	0.00	0.00
219	**TOTAL INITIAL CAPITAL COSTS**	1,165.37	775.33	142.80	98.37	0.00	0.00	0.00	0.00
220	**Additional fleet requirements**								
221									
222									
223									
224		0.00	0.00	0.00	0.00	0.00	0.00	93.69	0.00
225	**Rolling Stock Overhauls**	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.31
226	**Infrastructure Renewal**	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
227	**Other ongoing capital**	0.00	0.00	0.00	0.00	0.00	0.00	0.00	52.19
228	*Cross check initial capital*								

Spreadsheet	W:\207-CHAS\COSTING\25QW-1.WK3			
Today's date	03-Aug-94			
Proessing time	09:42			
Data export file	X-25QW-1.WK1			
Train speed	250 kph			
Train route	Composite (via Dorval) at 250 kph			
Demand data	QW Corridor			
Initial demand file	\250QW05/\250QW25 [as supplied by IBI]			
Train data	Final off NEW-OD.W..			
Trip Time	COMPOSITE VIA DORVAL			
Capital file	C:\work\207-chas\canarail\extract.wk3			
Capital name	MONTREAL - TORONTO CORRIDOR 250+, composite EX .. 2cX-			
	MONTREAL - QUEBEC 250+, composite EX .. 2cX-			
	WINDSOR - TORONTO 250+, composite EX .. 2cX-			
Cap allocation	SPLT-25B.WK3			
Include SWO	Yes			
Include MQ	Yes			
MOT to Pearson	Yes			
Con Air Included	Yes			
via Mirabel	No			
via Dorval	Yes			
Delay Cap Input	2cx-xx-0	1 *MOT*	100%	*DT*
	2cx-xx-0	1 *MQ*	100%	*DT*
	2cx-xx-0	1 *SWO*	61%	*DT*
		1 *SPLIT*		

OPERATIONS/REVENUES/COSTS Composite (via Dorval) at 250 kph QW Corridor

			Year 2005	*Year 2025*		
	RIDERSHIP					
1 [A]	Adjusted passengers (non-duplicated)	millions	11.5	17.8		
2	Average length of haul	kms	330	339		
3	Passenger kilometres	billion	3.8	6.0		
	OPERATION STATISTICS					
4	Route length	kilometres	1,228	1,228		
5	Train trips (one-way)	thousands	24.2	34.1		
6	Trainset kms	millions	19.3	27.3		
7	Seat kms	billions	5.4	7.7	*282 per trainset*	
8	Trainsets in active fleet	units	65	86		
9	Average trainset utilization	k-km/year	297	318		
10	Average load factor		70%	78%		
11	Total energy consumption	gigaW-hrs	320	452		
12	Total employment		2,622	3,157		
	PASSENGER REVENUES					
13	Adjustusted revenues	$million	760.8	1,230.6		
14	Agency commissions	$million	(41.8)	(67.7)	*5.5% of gross revenue*	
15	Credit card discount	$million	(7.1)	(11.5)	*0.9% of gross revenue*	
16	Net Revenue	$million	711.8	1,151.4		
	OPERATIONS AND MAINTENANCE COSTS				***[Total employment]***	
17	Train operations	$million	39.3	51.7	264	328
18	Customer services	$million	76.7	94.2	784	980
19	Equipment maintenance	$million	38.9	53.5	598	809
20	Infrastructure maintenance	$million	68.3	84.1	784	826
21	Executive/administration	$million	24.2	25.5	219	241
22	Insurance/taxes/other	$million	26.1	29.2	0	0
23	Contingency	$million	19.7	22.8	--	--
24	**Total O&M Costs**	$million	285.2	352.9	2,622	3,157
25	**OPERATING PROFIT**		426.7	798.5		
26	**COST/REVENUE RATIOS**					
27	Net revenue : O&M costs Ratio		2.50	3.26		
28	O&M cost per trainset-km	dollars	14.79	12.92		
29	O&M cost per seat-km	cents	5.25	4.58		
30	O&M cost per passenger	dollars	24.88	19.85		
31	O&M cost per passenger-km	cents	7.54	5.85		
32	Net revenue per passenger	dollars	62.10	64.75		
33	Net revenue per passenger km	cents	18.82	19.09		

	CAPITAL COSTS			
34	Startup/admin/training/other "soft" costs	$million	269.2	
35	Construction of track	$million	7,395.1	
36	Construction of stations	$million	521.3	
37	Construction of maintenance facilities	$million	309.3	
38	Acqusition of rolling stock	$million	1,545.9	
39	**Total Initial Capital Costs**	$million	10,040.6	*over the period 1995 to 2006*
40	**Total Ongoing Capital Costs**	$million	1,126.8	*over the period 2007 to 2025*
41	Initial capital per route-km (excluding RS)	$million	6.92	

		2005 Que	*2005 Ont*	*2025 Que*	2025 Ont
901	Net Revenues	257.02	454.83	415.90	735.49
902	O and M Costs	107.69	177.49	132.66	220.25
903	Employment	1,019	1,603	1,247	1,910

02-Aug-94 **HSR STUDY COST DEVELOPMENT**

TOTAL CASHFLOW — Composite (via Dorval) at 250 kph QW Corridor

		Total Year 2005	Total Year 2025	Quebec Year 2005	Quebec Year 2025
501	**[A] RIDERSHIP**	11.5	17.8	NA	NA
502	**ADJUSTED GROSS REVENUE**	760.8	1,230.6	274.7	444.5
503	Payments to Travel Agencies	41.8	67.7	15.1	24.4
504	Payments to Credit Card Companies	7.1	11.5	2.6	4.2
505	**Revenue Available to HSR Operator**	711.8	1,151.4	257.0	415.9
	OPERATING EMPLOYMENT				
904	Total employment	2,622	3,157	1,019	1,247
905	"Skilled" employment	1,643	1,903	609	717
906	"Unskilled" employment	979	1,253	410	530
907	Employment in Ontario	1,603	1,910		
908	Employment in Quebec	1,019	1,247	1,019	1,247
	OPERATING COSTS				
	Labour				
506	Bare wage bill skilled	77.0	89.2	29.2	34.4
507	Bare wage bill unskilled	27.3	35.0	11.6	15.0
508	Payroll taxes	8.8	10.5	3.4	4.2
509	Provisions for pension plan	7.8	9.3	3.1	3.7
	Purchased materials/services				
510	Electricity	20.8	28.6	4.7	6.3
511	Advertising/promotion	15.2	15.2	5.6	5.6
512	Infrastructure maintenance services	17.2	14.0	4.4	4.9
513	Infrastructure materials/supplies	1.9	18.9	0.5	5.3
514	Rolling stock materials/supplies	13.3	18.9	6.7	9.5
515	Telecommunications/computer services	15.4	23.6	5.5	8.5
516	Insurance services/franchise fees etc	11.5	14.5	3.3	4.3
517	Food/related sundries	1.9	3.0	0.8	1.2
518	**Unscheduled materials/services**	47.2	49.2	21.7	21.2
519	**Allowance for contingencies**	19.7	22.8	7.2	8.6
520	**TOTAL OPERATING COSTS**	285.2	352.9	107.7	132.7
521	**OPERATING PROFIT**	426.7	798.5	NA	NA
909	**COST REVENUE RATIO**	2.50	3.26	NA	NA
522	Operating costs (Ontario)	177.5	220.2		
523	Operating costs (Quebec)	107.7	132.7		

	CAPITAL COSTS	**Initial**	**Ongoing**	**Total**
524	Total spent in Quebec	2,405.63	104.93	2,510.56
525	Total spent in Ontario	4,546.46	104.93	4,651.39
526	Total spent in the rest of Canada	268.02	0.00	268.02
527	Total spend in the rest of the World	1,273.94	0.00	1,273.94
528	Geographical allocation pending	1,545.85	884.18	2,430.03
529	Residual unallocated to region	0.73	0.00	0.73
530	**Total Capital Costs**	10,040.64	1,094.04	11,134.68
531	Total spent on skilled labour	2,705.56	0.00	2,705.56
532	Total spent on unskilled labour	698.67	0.00	698.67
533	Total spent on material	4,982.63	1,094.04	6,076.67
534	Total spent on plant	1,653.71	0.00	1,653.71
535	Residual unallocated to spending category	0.07	0.00	0.07
536	**Total Capital Costs**	10,040.64	1,094.04	11,134.68

	TOTAL CASH FLOW (excluding revenues)	
537	Total spent in Quebec	*[This line defined only for year-by-year tables]*
538	Total spent in Ontario	*[This line defined only for year-by-year tables]*
539	Total spent in the rest of Canada	*[This line defined only for year-by-year tables]*
540	Total spend in the rest of the World	*[This line defined only for year-by-year tables]*
541	Geographical allocation pending	*[This line defined only for year-by-year tables]*
542	Residual unallocated to region	*[This line defined only for year-by-year tables]*
543	**Total**	*[This line defined only for year-by-year tables]*
910	**NET CASH FLOW**	*[This line defined only for year-by-year tables]*

0

OPERATIONS COST BREAKDOWN Composite (via Dorval) at 250 kph QW Corridor

		Cont Allow	Cost Estimate ($ million) 2005	2025	Employment Estimate 2005	2025	Quebec Share 2005
	TRAIN OPERATIONS						
101	Train crew	5.0%	14.08	18.48	195	256	41%
102	Power - demand charges	2.5%	8.38	11.05	--	--	26%
103	Power - energy consumption	2.5%	12.43	17.59	--	--	20%
104	Control centre	5.0%	2.38	2.38	40	40	50%
105	Transportation administration/supervision	5.0%	1.98	2.21	29	32	49%
106	**Subtotal**		39.25	51.70	264	328	32%
	CUSTOMER SERVICES						
107	On-board service staff	10.0%	6.98	9.93	163	231	42%
108	On-board service supplies	5.0%	1.95	3.02	--	--	39%
109	On-board services ground support	10.0%	1.28	1.82	33	46	42%
110	Food/beverage for sale	0.0%	0.00	0.00	--	--	--
111	Station operations	10.0%	21.14	22.95	298	351	30%
112	ATM/Ticketing/Reservations transactions	5.0%	15.36	23.63	--	--	36%
113	Telephone/Counter Sales	5.0%	5.15	6.53	145	184	35%
114	Advertising and promotion expenses	5.0%	15.22	15.22	--	--	37%
115	Customer service administration/supervision	5.0%	9.60	11.11	146	168	49%
116	**Subtotal**		76.67	94.21	784	980	37%
	EQUIPMENT MAINTENANCE						
117	Routine maintenance - labour	5.0%	12.49	17.40	248	346	50%
118	Routine maintenance - material	5.0%	13.34	18.92	--	--	50%
119	Major maintenance [included in capital]	--	--	--	--	--	--
120	Cleaning	5.0%	8.54	11.51	278	375	42%
121	Maintenance administration/supervision	5.0%	4.51	5.63	72	88	50%
122	**Subtotal**		38.87	53.47	598	809	48%
	INFRASTRUCTURE MAINTENANCE						
123	Routine maintenance	15.0%	38.53	40.19	631	669	30%
124	Purchased services	15.0%	17.23	14.04	--	--	30%
125	Materials	10.0%	1.89	18.92	--	--	28%
126	Programmed replacement [occurs after 2025]	--	--	--	--	--	
127	Maintenance administration/supervision	5.0%	10.62	10.95	153	157	28%
128	**Subtotal**		68.28	84.10	784	826	30%
	EXECUTIVE/ADMINISTRATION						
129	Labour and related	5.0%	13.27	14.63	193	212	49%
130	Other	5.0%	10.90	10.90	--	--	50%
131	**Subtotal**		24.17	25.53	193	212	49%
	INSURANCE/TAXES/OTHER						
132	Insurance/claims	0.0%	11.50	14.47	--	--	29%
133	Property taxes	10.0%	6.75	6.65	--	--	83%
134	Franchise fees	10.0%	*nil*	nil	--	--	
135	**Subtotal**		18.25	21.12	0	0	49%
136	**CONTINGENCY**	7.4%	19.68	22.79	--	--	37%
137	**TOTAL**		285.18	352.91	2,622	3,157	38%
138	**Total: Quebec component**		107.69	132.66	1,019	1,247	
139	**Total: Ontario component**		177.49	220.25	1,603	1,910	
140	**[Major maintenance included in capital]**		0.00	28.57			
141	Routine equipment maintenance per trainset km	dollars	1.34	1.33			
142	Infrastructure maintenance per route km	$thousand	46.95	59.57			
143	Executive/administration as a percent of total		9.1%	7.7%			
144	Station/ticketing costs per passenger	Dollars	3.60	2.96			
145							
146							

CAPITAL COST SUMMARY

Composite (via Dorval) at 250 kph QW Corridor

		Professional Services	Contin-*gency*	Total
201	Right-of-Way	40.92	45.56	467.12
202	Earthworks/subgrade	294.14	177.40	1,654.21
203	Bridges	95.80	52.89	677.59
204	Grade separations	231.17	183.86	1,635.04
205	Other accommodations	20.98	29.40	148.39
206	Track	131.55	44.68	1,036.72
207	Power distribution system	130.18	103.11	920.71
208	Stations	67.15	37.07	474.92
209	People movers (included in stations)	0.00	0.00	0.00
210	Signals	96.73	63.68	584.97
211	Communications	44.70	29.43	270.30
212	Equipment maintenance facilities	13.14	19.71	175.88
213	Infrastructure maintenance facilities	0.00	0.00	133.41
214	Information/ticketing systems	0.00	0.00	46.35
215	Rolling stock	114.51	127.64	1,545.85
216	Commissioning	106.75	0.00	106.75
217	Administration allowance	0.00	0.00	93.31
218	Startup and training	0.00	0.00	69.11
219	**TOTAL INITIAL CAPITAL COSTS**	1,387.71	914.44	10,040.64

220	**Additional fleet requirements**	*year 2009*	5 units	117.11
221		*year 2013*	5 units	117.11
222		*year 2017*	5 units	117.11
223		*year 2021*	5 units	117.11
224		*Total*	20 units	468.44
225	**Rolling Stock Overhauls**	*total, years 2005-2025*		456.03
226	**Infrastructure Renewal**	*total, years 2005-2025*		0.00
227	**Other ongoing capital**	*total, years 2005-2025*		209.86
228	*Cross check initial capital*			*(0.00)*

RIDERSHIP BREAKDOWN — Composite (via Dorval) at 250 kph QW Corridor

			Year 2005	Year 2025		
	RIDERSHIP					
301	Ridership within the segment	*millions*	na	na		
302	Ridership between segments	*millions*	na	na		
303	Airport traffic	*millions*	na	na		
304 [A]	**Total potential passengers**	*million*	11.58	17.96		
305	Passengers not served at peak	*million*	(0.12)	(0.18)	1.0%	*of passengers*
306	Allowance for additional passengers	*million*	0.00	0.00	0.0%	*of passengers*
307	**Net passengers**	*million*	11.46	17.78		
	PASSENGER REVENUES					
308	Initial transportation revenue estimate	*$million*	833.93	1,348.87		
309	PST/GST	*$million*	(65.42)	(105.83)	7.8%	*of revenues*
310	Revenue estimate net of taxes	*$million*	768.51	1,243.03		
311	First Class premium	*$million*	0.00	0.00	0.0%	*of revenues*
312	Food/beverage sales	*$million*	0.00	0.00	0.00	*per passenger*
313	Revenues foregone at peak	*$million*	(7.69)	(12.43)	1.0%	*of revenues*
314	**Final Gross Revenue**	*$million*	760.82	1,230.60		
	PASSENGER KILOMETRES					
315	Ridership within segments	*billions*	3.36	5.36		
316	Ridership between segments	*billions*	0.46	0.73		
317	Airport traffic	*billions*	above	above		
318	Total		3.82	6.09		
319	Passenger-km foregone at peak	*billions*	(0.04)	(0.06)	1.0%	*of passenger-km*
320	Allowance for additional passenger-kms	*billions*	0.00	0.00	0.0%	*of passengers-km*
321	**Total passenger kms**	*billions*	3.78	6.03		
322	**Average Length of Haul**	*kms*	330	339		

EMPLOYMENT DATA

Composite (via Dorval) at 250 kph QW Corridor

		Average Wage	Total Year 2005	Total Year 2025	Quebec Year 2005	Quebec Year 2025
401	Train Crew	57,500	195	256	80	105
402	Dispatchers	50,600	40	40	20	20
403	Managerial/admin/professional	58,324	534	588	216	241
404	Station staff	35,939	74	88	25	30
405	Mechanical trades/skilled	39,402	276	375	132	179
406	Maintenance trades/skilled	36,349	524	557	135	142
407	**Total "skilled"**	46,844	1,643	1,903	609	717
408	OBS Staff	31,453	179	255	75	107
409	Sales Staff	29,007	145	184	51	66
410	Other customer service	29,986	16	23	7	10
411	Support staff	34,206	58	70	41	49
412	Station labour (various)	24,881	223	263	75	89
413	Equipment maintenance unskilled	30,603	20	28	10	14
414	Track maintenance unskilled	30,603	107	112	53	56
415	Cleaners	24,270	230	319	97	139
416	**Total "unskilled"**	27,932	979	1,253	410	530
417	**Total "unallocated"**		0	0	(0)	0
418	**Grand total employment**	39,782	2,622	3,157	1,019	1,247
419	**Ontario Total "skilled"**		1,035	1,186		
420	**Ontario Total "unskilled"**		569	723		
421	**Ontario Total "unallocated"**		0	0		
422	**Ontario Grand total employment**		1,603	1,910		
423	**Quebec Total "skilled"**		609	717		
424	**Quebec Total "unskilled"**		410	530		
425	**Quebec Total "unallocated"**		0	0		
426	**Quebec Grand total employment**		1,019	1,247		

02-Aug-94 **HSR STUDY COST DEVELOPMENT**

TOTAL CASHFLOW — Composite (via Dorval) at 250 kph QW Corridor

		1995	1996	1997	1998	1999	2000	2001	2002
501 [A]	**RIDERSHIP**	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
502	**ADJUSTED GROSS REVENUE**	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
503	Payments to Travel Agencies	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
504	Payments to Credit Card Companies	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
505	**Revenue Available to HSR Operator**	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	OPERATING EMPLOYMENT								
904	Total employment	0	0	0	0	0	0	0	0
905	"Skilled" employment	0	0	0	0	0	0	0	0
906	"Unskilled" employment	0	0	0	0	0	0	0	0
907	Employment in Ontario	0	0	0	0	0	0	0	0
908	Employment in Quebec	0	0	0	0	0	0	0	0
	OPERATING COSTS								
	Labour								
506	Bare wage bill skilled	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
507	Bare wage bill unskilled	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
508	Payroll taxes	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
509	Provisions for pension plan	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Purchased materials/services								
510	Electricity	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
511	Advertising/promotion	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
512	Infrastructure maintenance services	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
513	Infrastructure materials/supplies	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
514	Rolling stock materials/supplies	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
515	Telecommunications/computer services	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
516	Insurance services/franchise fees etc	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
517	Food/related sundries	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
518	**Unscheduled materials/services**	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
519	**Allowance for contingencies**	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
520	**TOTAL OPERATING COSTS**	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
521	**OPERATING PROFIT**	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
909	**COST REVENUE RATIO**								
522	Operating costs (Ontario)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
523	Operating costs (Quebec)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	CAPITAL COSTS								
524	Total spent in Quebec	0.0	13.9	18.0	63.3	169.3	368.8	605.9	622.4
525	Total spent in Ontario	0.0	22.2	25.5	45.4	223.9	559.3	1,154.5	1,125.7
526	Total spent in the rest of Canada	0.0	0.0	0.0	0.2	0.5	6.5	29.1	84.2
527	Total spend in the rest of the World	0.0	1.3	2.3	6.2	42.3	164.9	382.8	370.9
528	Geographical allocation pending	0.0	29.0	29.0	77.3	77.3	193.2	193.2	193.2
529	Residual unallocated to region	0.0	0.0	0.1	(0.0)	0.0	0.1	0.2	0.2
530	**Total Capital Costs**	0.0	66.4	74.9	192.4	513.3	1,292.8	2,365.7	2,396.6
531	Total spent on skilled labour	0.0	27.0	33.2	77.3	184.1	377.1	715.2	664.0
532	Total spent on unskilled labour	0.0	1.1	1.3	3.1	24.0	93.4	224.3	205.3
533	Total spent on material	0.0	30.8	31.2	90.6	228.9	598.5	949.5	1,072.5
534	Total spent on plant	0.0	7.5	9.1	21.4	76.3	223.9	476.7	454.8
535	Residual unallocated to spending category	0.0	0.0	0.1	(0.0)	0.0	0.0	0.0	0.0
536	**Total Capital Costs**	0.0	66.4	74.9	192.4	513.3	1,292.8	2,365.7	2,396.6
	TOTAL CASH FLOW (excluding revenues)								
537	Total spent in Quebec	0.0	6.2	7.7	24.2	105.8	183.6	280.1	227.3
538	Total spent in Ontario	0.0	14.8	17.8	32.0	146.1	353.2	704.1	656.6
539	Total spent in the rest of Canada	0.0	0.0	0.0	0.1	0.3	6.3	16.5	43.4
540	Total spend in the rest of the World	0.0	0.8	2.2	3.2	38.2	101.5	213.4	181.8
541	Geographical allocation pending	0.0	17.6	29.0	46.8	46.8	117.1	117.1	117.1
542	Residual unallocated to region	0.0	0.0	0.1	(0.0)	(0.0)	0.1	0.2	0.2
543	**Total**	0.0	39.4	74.9	106.3	337.2	761.8	1,331.5	1,226.4
910	**NET CASH FLOW**	0.0	(39.4)	(74.9)	(106.3)	(337.2)	(761.8)	(1,331.5)	(1,226.4)

TOTAL CASHFLOW — Composite (via Dorval) at 250 kph QW Corridor

		2003	2004	2005	2006	2007	2008	2009	2010
501	[A] **RIDERSHIP**	1.2	3.3	11.5	11.7	12.0	12.2	12.5	12.8
502	**ADJUSTED GROSS REVENUE**	61.6	173.0	760.8	779.3	798.3	817.7	837.6	857.9
503	Payments to Travel Agencies	3.4	9.5	41.8	42.9	43.9	45.0	46.1	47.2
504	Payments to Credit Card Companies	0.6	1.6	7.1	7.3	7.5	7.7	7.9	8.0
505	**Revenue Available to HSR Operator**	57.6	161.9	711.8	729.1	746.9	765.0	783.6	802.7
	OPERATING EMPLOYMENT								
904	Total employment	330	813	2,622	2,646	2,671	2,696	2,721	2,746
905	"Skilled" employment	245	535	1,643	1,655	1,667	1,680	1,692	1,704
906	"Unskilled" employment	85	278	979	991	1,004	1,016	1,029	1,041
907	Employment in Ontario	132	157	1,603	1,617	1,632	1,646	1,660	1,675
908	Employment in Quebec	198	656	1,019	1,029	1,039	1,050	1,060	1,071
	OPERATING COSTS								
	Labour								
506	Bare wage bill skilled	11.7	24.6	77.0	77.5	78.1	78.7	79.3	79.9
507	Bare wage bill unskilled	2.4	7.9	27.3	27.7	28.0	28.4	28.7	29.1
508	Payroll taxes	1.1	2.7	8.8	8.9	9.0	9.1	9.1	9.2
509	Provisions for pension plan	1.0	2.4	7.8	7.9	8.0	8.0	8.1	8.2
	Purchased materials/services								
510	Electricity	1.1	2.7	20.8	21.1	21.5	21.8	22.2	22.5
511	Advertising/promotion	5.2	7.5	15.2	15.2	15.2	15.2	15.2	15.2
512	Infrastructure maintenance services	2.6	6.6	17.2	17.2	17.2	16.6	16.0	15.3
513	Infrastructure materials/supplies	0.3	0.7	1.9	2.0	2.1	2.3	2.4	2.6
514	Rolling stock materials/supplies	0.9	2.8	13.3	13.6	13.8	14.1	14.3	14.6
515	Telecommunications/computer services	1.6	4.1	15.4	15.7	16.0	16.4	16.7	17.1
516	Insurance services/franchise fees etc	1.7	4.2	11.5	11.6	11.8	11.9	12.0	12.2
517	Food/related sundries	0.2	0.5	1.9	2.0	2.0	2.1	2.1	2.2
518	**Unscheduled materials/services**	10.8	27.8	47.2	47.3	47.4	47.5	47.6	47.7
519	**Allowance for contingencies**	2.9	7.1	19.7	19.8	19.9	19.9	20.0	20.0
520	**TOTAL OPERATING COSTS**	43.6	101.6	285.2	287.6	290.0	291.8	293.6	295.5
521	**OPERATING PROFIT**	14.0	60.3	426.7	441.6	456.8	473.2	490.0	507.2
909	**COST REVENUE RATIO**	1.32	1.59	2.50	2.54	2.58	2.62	2.67	2.72
522	Operating costs (Ontario)	17.4	33.3	177.5	178.9	180.4	181.3	182.3	183.4
523	Operating costs (Quebec)	26.1	68.2	107.7	108.7	109.7	110.5	111.3	112.1
	CAPITAL COSTS								
524	Total spent in Quebec	352.1	181.4	10.6	0.0	0.0	0.0	0.0	34.5
525	Total spent in Ontario	817.6	534.3	38.2	0.0	0.0	0.0	0.0	34.5
526	Total spent in the rest of Canada	90.3	57.0	0.1	0.0	0.0	0.0	0.0	0.0
527	Total spend in the rest of the World	201.8	96.4	5.1	0.0	0.0	0.0	0.0	0.0
528	Geographical allocation pending	231.9	231.9	154.6	135.3	0.0	0.0	117.1	14.3
529	Residual unallocated to region	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0
530	**Total Capital Costs**	1,693.8	1,100.9	208.6	135.3	0.0	0.0	117.1	83.2
531	Total spent on skilled labour	390.9	222.1	14.7	0.0	0.0	0.0	0.0	0.0
532	Total spent on unskilled labour	100.4	43.2	2.5	0.0	0.0	0.0	0.0	0.0
533	Total spent on material	951.4	709.5	184.5	135.3	0.0	0.0	117.1	83.2
534	Total spent on plant	251.0	126.1	7.0	0.0	0.0	0.0	0.0	0.0
535	Residual unallocated to spending category	(0.0)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
536	**Total Capital Costs**	1,693.8	1,100.9	208.6	135.3	0.0	0.0	117.1	83.2
	TOTAL CASH FLOW (excluding revenues)								
537	Total spent in Quebec	162.2	148.9	65.0	57.9	58.5	59.0	59.5	79.9
538	Total spent in Ontario	491.6	388.1	140.8	122.3	123.3	124.1	124.9	145.5
539	Total spent in the rest of Canada	40.1	34.9	0.1	0.0	0.0	0.0	0.0	0.0
540	Total spend in the rest of the World	111.1	67.4	3.2	0.0	0.0	0.0	0.0	0.0
541	Geographical allocation pending	140.5	140.5	93.7	82.0	0.0	0.0	70.3	8.7
542	Residual unallocated to region	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0
543	**Total**	945.7	779.9	302.7	262.1	181.8	183.1	254.7	234.1
910	**NET CASH FLOW**	(888.1)	(618.0)	409.1	467.0	565.1	581.9	528.9	568.6

TOTAL CASHFLOW

Composite (via Dorval) at 250 kph QW Corridor

		2011	2012	2013	2014	2015	2016	2017	2018
501	**[A] RIDERSHIP**	13.1	13.4	13.7	14.0	14.3	14.6	14.9	15.2
502	**ADJUSTED GROSS REVENUE**	878.8	900.2	922.1	944.5	967.5	991.0	1,015.1	1,039.9
503	Payments to Travel Agencies	48.3	49.5	50.7	51.9	53.2	54.5	55.8	57.2
504	Payments to Credit Card Companies	8.2	8.4	8.6	8.9	9.1	9.3	9.5	9.7
505	**Revenue Available to HSR Operator**	822.2	842.2	862.7	883.7	905.2	927.2	949.8	972.9
	OPERATING EMPLOYMENT								
904	Total employment	2,771	2,797	2,823	2,849	2,876	2,903	2,930	2,957
905	"Skilled" employment	1,717	1,730	1,742	1,755	1,768	1,781	1,794	1,808
906	"Unskilled" employment	1,054	1,067	1,081	1,094	1,108	1,121	1,135	1,149
907	Employment in Ontario	1,690	1,704	1,719	1,734	1,750	1,765	1,780	1,796
908	Employment in Quebec	1,082	1,093	1,104	1,115	1,126	1,138	1,149	1,161
	OPERATING COSTS								
	Labour								
506	Bare wage bill skilled	80.4	81.0	81.6	82.2	82.8	83.5	84.1	84.7
507	Bare wage bill unskilled	29.4	29.8	30.2	30.6	30.9	31.3	31.7	32.1
508	Payroll taxes	9.3	9.4	9.5	9.5	9.6	9.7	9.8	9.9
509	Provisions for pension plan	8.2	8.3	8.4	8.5	8.5	8.6	8.7	8.8
	Purchased materials/services								
510	Electricity	22.9	23.3	23.6	24.0	24.4	24.8	25.2	25.6
511	Advertising/promotion	15.2	15.2	15.2	15.2	15.2	15.2	15.2	15.2
512	Infrastructure maintenance services	14.7	14.0	14.0	14.0	14.0	14.0	14.0	14.0
513	Infrastructure materials/supplies	2.8	2.9	3.1	3.3	3.8	7.6	8.4	9.3
514	Rolling stock materials/supplies	14.8	15.1	15.3	15.6	15.9	16.2	16.5	16.7
515	Telecommunications/computer services	17.5	17.9	18.2	18.6	19.1	19.5	19.9	20.3
516	Insurance services/franchise fees etc	12.3	12.5	12.6	12.7	12.9	13.0	13.2	13.3
517	Food/related sundries	2.2	2.3	2.3	2.4	2.4	2.5	2.5	2.6
518	**Unscheduled materials/services**	47.8	47.9	48.0	48.1	48.2	48.3	48.4	48.5
519	**Allowance for contingencies**	20.0	20.1	20.2	20.3	20.5	20.9	21.0	21.2
520	**TOTAL OPERATING COSTS**	297.4	299.3	302.0	304.8	307.9	314.7	318.3	322.0
521	**OPERATING PROFIT**	524.9	542.9	560.7	578.9	597.3	612.5	631.5	650.9
909	**COST REVENUE RATIO**	2.77	2.81	2.86	2.90	2.94	2.95	2.98	3.02
522	Operating costs (Ontario)	184.5	185.6	187.2	188.9	190.8	195.4	197.7	200.1
523	Operating costs (Quebec)	112.9	113.7	114.8	115.9	117.1	119.3	120.6	121.9
	CAPITAL COSTS								
524	Total spent in Quebec	0.0	0.0	0.0	0.0	36.0	0.0	0.0	0.0
525	Total spent in Ontario	0.0	0.0	0.0	0.0	36.0	0.0	0.0	0.0
526	Total spent in the rest of Canada	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
527	Total spend in the rest of the World	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
528	Geographical allocation pending	28.6	28.6	145.7	28.6	26.0	26.0	145.7	28.6
529	Residual unallocated to region	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
530	**Total Capital Costs**	28.6	28.6	145.7	28.6	98.0	26.0	145.7	28.6
531	Total spent on skilled labour	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
532	Total spent on unskilled labour	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
533	Total spent on material	28.6	28.6	145.7	28.6	98.0	26.0	145.7	28.6
534	Total spent on plant	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
535	Residual unallocated to spending category	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
536	**Total Capital Costs**	28.6	28.6	145.7	28.6	98.0	26.0	145.7	28.6
	TOTAL CASH FLOW (excluding revenues)								
537	Total spent in Quebec	60.6	61.2	61.8	62.4	83.7	64.0	64.7	65.4
538	Total spent in Ontario	126.6	127.4	128.6	129.9	152.0	134.7	136.4	138.2
539	Total spent in the rest of Canada	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
540	Total spend in the rest of the World	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
541	Geographical allocation pending	17.3	17.3	111.0	17.3	15.7	15.7	87.6	17.3
542	Residual unallocated to region	0.0	0.0	0.0	0.0	(0.0)	0.0	0.0	0.0
543	**Total**	204.5	205.9	301.5	209.6	251.4	214.5	288.7	220.9
910	**NET CASH FLOW**	617.7	636.3	561.2	674.0	653.8	712.8	661.1	752.0

02-Aug-94 **HSR STUDY COST DEVELOPMENT**

TOTAL CASHFLOW — Composite (via Dorval) at 250 kph QW Corridor

		2019	2020	2021	2022	2023	2024	2025	2026
501	[A] **RIDERSHIP**	15.6	15.9	16.3	16.6	17.0	17.4	17.8	18.2
502	**ADJUSTED GROSS REVENUE**	1,065.2	1,091.1	1,117.7	1,144.9	1,172.8	1,201.3	1,230.6	1,260.6
503	Payments to Travel Agencies	58.6	60.0	61.5	63.0	64.5	66.1	67.7	69.3
504	Payments to Credit Card Companies	10.0	10.2	10.5	10.7	11.0	11.3	11.5	11.8
505	**Revenue Available to HSR Operator**	996.6	1,020.9	1,045.7	1,071.2	1,097.3	1,124.0	1,151.4	1,179.4
	OPERATING EMPLOYMENT								
904	Total employment	2,985	3,013	3,041	3,069	3,098	3,127	3,157	3,186
905	"Skilled" employment	1,821	1,834	1,848	1,862	1,875	1,889	1,903	1,917
906	"Unskilled" employment	1,164	1,178	1,193	1,208	1,223	1,238	1,253	1,269
907	Employment in Ontario	1,812	1,828	1,844	1,860	1,876	1,893	1,910	1,926
908	Employment in Quebec	1,173	1,185	1,197	1,209	1,222	1,234	1,247	1,260
	OPERATING COSTS								
	Labour								
506	Bare wage bill skilled	85.3	86.0	86.6	87.2	87.9	88.5	89.2	89.9
507	Bare wage bill unskilled	32.5	32.9	33.3	33.7	34.1	34.6	35.0	35.4
508	Payroll taxes	10.0	10.1	10.2	10.2	10.3	10.4	10.5	10.6
509	Provisions for pension plan	8.8	8.9	9.0	9.1	9.2	9.2	9.3	9.4
	Purchased materials/services								
510	Electricity	26.0	26.4	26.9	27.3	27.7	28.2	28.6	29.1
511	Advertising/promotion	15.2	15.2	15.2	15.2	15.2	15.2	15.2	15.2
512	Infrastructure maintenance services	14.0	14.0	14.0	14.0	14.0	14.0	14.0	14.0
513	Infrastructure materials/supplies	10.3	11.4	12.6	13.9	15.4	17.1	18.9	20.9
514	Rolling stock materials/supplies	17.0	17.3	17.6	18.0	18.3	18.6	18.9	19.3
515	Telecommunications/computer services	20.8	21.2	21.7	22.2	22.6	23.1	23.6	24.1
516	Insurance services/franchise fees etc	13.5	13.7	13.8	14.0	14.1	14.3	14.5	14.6
517	Food/related sundries	2.7	2.7	2.8	2.8	2.9	3.0	3.0	3.1
518	**Unscheduled materials/services**	48.6	48.7	48.8	48.9	49.0	49.1	49.2	49.4
519	**Allowance for contingencies**	21.4	21.6	21.8	22.0	22.3	22.5	22.8	23.1
520	**TOTAL OPERATING COSTS**	325.9	329.9	334.1	338.5	343.1	347.9	352.9	358.2
521	**OPERATING PROFIT**	670.7	691.0	711.6	732.7	754.2	776.1	798.5	821.2
909	**COST REVENUE RATIO**	3.06	3.09	3.13	3.16	3.20	3.23	3.26	3.29
522	Operating costs (Ontario)	202.6	205.2	207.9	210.7	213.7	216.9	220.2	223.8
523	Operating costs (Quebec)	123.3	124.7	126.2	127.7	129.3	131.0	132.7	134.4
	CAPITAL COSTS								
524	Total spent in Quebec	0.0	34.5	0.0	0.0	0.0	0.0	0.0	0.0
525	Total spent in Ontario	0.0	34.5	0.0	0.0	0.0	0.0	0.0	0.0
526	Total spent in the rest of Canada	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
527	Total spend in the rest of the World	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
528	Geographical allocation pending	28.6	40.3	143.1	11.7	14.3	28.6	28.6	40.3
529	Residual unallocated to region	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
530	**Total Capital Costs**	28.6	109.2	143.1	11.7	14.3	28.6	28.6	40.3
531	Total spent on skilled labour	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
532	Total spent on unskilled labour	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
533	Total spent on material	28.6	109.2	143.1	11.7	14.3	28.6	28.6	40.3
534	Total spent on plant	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
535	Residual unallocated to spending category	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
536	**Total Capital Costs**	28.6	109.2	143.1	11.7	14.3	28.6	28.6	40.3
	TOTAL CASH FLOW (excluding revenues)								
537	Total spent in Quebec	66.2	86.7	67.7	68.4	69.2	70.0	70.9	71.7
538	Total spent in Ontario	140.0	161.7	143.9	146.1	148.3	150.6	153.1	155.7
539	Total spent in the rest of Canada	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
540	Total spend in the rest of the World	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
541	Geographical allocation pending	17.3	26.7	109.4	7.0	8.7	17.3	17.3	26.7
542	Residual unallocated to region	0.0	0.0	(0.0)	0.0	0.0	0.0	0.0	0.0
543	**Total**	223.5	275.2	321.0	221.5	226.2	238.0	241.3	254.2
910	**NET CASH FLOW**	773.1	745.7	724.7	849.7	871.1	886.0	910.1	925.3

02-Aug-94	HSR STUDY COST DEVELOPMENT

CAPITAL COST SUMMARY — Composite (via Dorval) at 250 kph QW Corridor

		1995	1996	1997	1998	1999	2000	2001	2002
201	Right-of-Way	0.00	1.37	1.37	12.29	115.75	193.50	120.43	19.42
202	Earthworks/subgrade	0.00	13.98	13.35	31.07	110.51	318.85	557.32	472.42
203	Bridges	0.00	4.84	4.70	13.77	65.22	139.42	252.33	153.29
204	Grade separations	0.00	10.67	10.24	21.42	74.87	226.30	615.90	520.16
205	Other accommodations	0.00	0.88	0.86	1.12	4.91	43.03	73.24	24.36
206	Track	0.00	0.00	0.80	5.97	15.08	32.08	115.89	302.18
207	Power distribution system	0.00	0.00	0.77	6.00	15.45	24.99	85.90	223.94
208	Stations	0.00	4.03	4.03	2.01	2.40	5.50	50.54	101.03
209	People movers (included in stations)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
210	Signals	0.00	0.67	5.26	12.08	18.14	63.03	149.10	153.25
211	Communications	0.00	0.30	2.31	5.53	8.28	28.18	67.43	70.39
212	Equipment maintenance facilities	0.00	0.00	0.00	0.00	0.00	14.75	44.26	50.72
213	Infrastructure maintenance facilities	0.00	0.00	0.00	0.00	0.00	0.00	13.74	37.28
214	Information/ticketing systems	0.00	0.00	0.00	0.00	0.00	0.00	2.58	17.87
215	Rolling stock	0.00	28.98	28.98	77.29	77.29	193.23	193.23	193.23
216	Commissioning	0.00	0.00	0.00	0.00	0.00	0.00	0.00	14.82
217	Administration allowance	0.00	0.66	2.24	3.81	5.39	6.97	12.88	21.78
218	Startup and training	0.00	0.00	0.00	0.00	0.00	0.00	10.93	20.42
219	**TOTAL INITIAL CAPITAL COSTS**	0.00	66.37	74.90	192.37	513.28	1,292.82	2,365.69	2,396.58
220	**Additional fleet requirements**								
221									
222									
223									
224		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
225	**Rolling Stock Overhauls**	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
226	**Infrastructure Renewal**	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
227	**Other ongoing capital**	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
228	*Cross check initial capital*								

02-Aug-94 **HSR STUDY COST DEVELOPMENT**

CAPITAL COST SUMMARY **Composite (via Dorval) at 250 kph QW Corridor**

		2003	2004	2005	2006	2007	2008	2009	2010
201	Right-of-Way	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
202	Earthworks/subgrade	136.72	0.00	0.00	0.00	0.00	0.00	0.00	0.00
203	Bridges	44.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00
204	Grade separations	155.49	0.00	0.00	0.00	0.00	0.00	0.00	0.00
205	Other accommodations	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
206	Track	350.37	206.52	7.84	0.00	0.00	0.00	0.00	0.00
207	Power distribution system	309.60	226.25	27.82	0.00	0.00	0.00	0.00	0.00
208	Stations	124.38	180.99	0.00	0.00	0.00	0.00	0.00	0.00
209	People movers (included in stations)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
210	Signals	123.77	59.68	0.00	0.00	0.00	0.00	0.00	0.00
211	Communications	59.13	28.76	0.00	0.00	0.00	0.00	0.00	0.00
212	Equipment maintenance facilities	43.68	22.46	0.00	0.00	0.00	0.00	0.00	0.00
213	Infrastructure maintenance facilities	25.49	45.14	11.75	0.00	0.00	0.00	0.00	0.00
214	Information/ticketing systems	12.87	11.75	1.29	0.00	0.00	0.00	0.00	0.00
215	Rolling stock	231.88	231.88	154.59	135.26	0.00	0.00	0.00	0.00
216	Commissioning	29.07	57.52	5.34	0.00	0.00	0.00	0.00	0.00
217	Administration allowance	21.72	17.86	0.00	0.00	0.00	0.00	0.00	0.00
218	Startup and training	25.64	12.11	0.00	0.00	0.00	0.00	0.00	0.00
219	**TOTAL INITIAL CAPITAL COSTS**	1,693.81	1,100.93	208.62	135.26	0.00	0.00	0.00	0.00
220	**Additional fleet requirements**								
221									
222									
223									
224		0.00	0.00	0.00	0.00	0.00	0.00	117.11	0.00
225	**Rolling Stock Overhauls**	0.00	0.00	0.00	0.00	0.00	0.00	0.00	14.29
226	**Infrastructure Renewal**	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
227	**Other ongoing capital**	0.00	0.00	0.00	0.00	0.00	0.00	0.00	68.92
228	*Cross check initial capital*								

Spreadsheet	W:\207-CHAS\COSTING\30QW-1.WK3				
Today's date	27-Jul-94				
Proessing time	08:18				
Data export file	X-30QW-1.WK1				
Train speed	300 kph				
Train route	Composite (via Mirabel) at 300 kph				
Demand data	QW Corridor				
Initial demand file	R105QW33/R125QW33 [as supplied by IBI]				
Train data	Final off NEW-OD.WK1				
Trip Time	COMPOSITE VIA MIRABEL				
Capital file	C:\work\207-chas\canarail\extract.wk3				
Capital name	MONTREAL - TORONTO CORRIDOR 300+, composite route EX .. 3c00-				
	MONTREAL - QUEBEC 300+, composite route EX .. 3c00-				
	WINDSOR - TORONTO 300+, composite route EX .. 3c00-				
Cap allocation	SPLIT-3B.WK3				
Include SWO	Yes				
Include MQ	Yes				
MOT to Pearson	Yes				
Con Air Included	Yes				
via Mirabel	Yes				
via Dorval	No				
Delay Cap Input	3cm-xx-2	1	*MOT*	100%	*DT*
	3cm-xx-2	1	*MQ*	100%	*DT*
	3cm-xx-2	1	*SWO*	61%	*DT*
		1	*SPLIT*		

01-Aug-94 **HSR STUDY COST DEVELOPMENT**

OPERATIONS/REVENUES/COSTS Composite (via Mirabel) at 300 kph QW Corridor

			Year 2005	*Year 2025*		
	RIDERSHIP					
1 [A]	Adjusted passengers (non-duplicated)	millions	11.8	18.5		
2	Average length of haul	kms	340	345		
3	Passenger kilometres	billion	4.0	6.4		
	OPERATION STATISTICS					
4	Route length	kilometres	1,234	1,234		
5	Train trips (one-way)	thousands	20.1	29.5		
6	Trainset kms	millions	16.5	23.9		
7	Seat kms	billions	5.9	8.5	*358 per trainset*	
8	Trainsets in active fleet	units	50	66		
9	Average trainset utilization	k-km/year	331	361		
10	Average load factor		67%	75%		
11	Total energy consumption	gigaW-hrs	403	579		
12	Total employment		2,714	3,320		
	PASSENGER REVENUES					
13	Adjustusted revenues	$million	808.9	1,368.1		
14	Agency commissions	$million	(44.5)	(75.2)	*5.5% of gross revenue*	
15	Credit card discount	$million	(7.6)	(12.8)	*0.9% of gross revenue*	
16	Net Revenue	$million	756.9	1,280.0		
	OPERATIONS AND MAINTENANCE COSTS				***[Total employment]***	
17	Train operations	$million	43.3	58.0	229	287
18	Customer services	$million	78.5	97.3	794	1,006
19	Equipment maintenance	$million	45.4	63.7	711	981
20	Infrastructure maintenance	$million	72.4	89.6	787	832
21	Executive/administration	$million	24.2	25.6	219	243
22	Insurance/taxes/other	$million	26.1	29.4	0	0
23	Contingency	$million	20.8	23.8	--	--
24	**Total O&M Costs**	$million	302.8	379.4	2,714	3,320
25	**OPERATING PROFIT**		454.0	900.6		
26	**COST/REVENUE RATIOS**					
27	Net revenue : O&M costs Ratio		2.50	3.37		
28	O&M cost per trainset-km	dollars	18.30	15.91		
29	O&M cost per seat-km	cents	5.11	4.44		
30	O&M cost per passenger	dollars	25.76	20.46		
31	O&M cost per passenger-km	cents	7.58	5.93		
32	Net revenue per passenger	dollars	64.39	69.03		
33	Net revenue per passenger km	cents	18.96	20.00		
	CAPITAL COSTS					
34	Startup/admin/training/other "soft" costs	$million	266.4			
35	Construction of track	$million	7,691.5			
36	Construction of stations	$million	435.3			
37	Construction of maintenance facilities	$million	330.6			
38	Acqusition of rolling stock	$million	1,530.0			
39	**Total Initial Capital Costs**	$million	10,253.9	*over the period 1995 to 2006*		
40	**Total Ongoing Capital Costs**	$million	1,161.3	*over the period 2007 to 2025*		
41	Initial capital per route-km (excluding RS)	$million	7.07			

		2005 Que	*2005 Ont*	*2025 Que*	2025 Ont
901	Net Revenues	273.02	483.83	462.99	817.02
902	O and M Costs	122.27	180.57	152.01	227.43
903	Employment	1,121	1,593	1,366	1,954
			0.00		-1E-15

01-Aug-94

HSR STUDY COST DEVELOPMENT

TOTAL CASHFLOW

Composite (via Mirabel) at 300 kph QW Corridor

No.	Item	Total Year 2005	Total Year 2025	Quebec Year 2005	Quebec Year 2025
501 [A]	**RIDERSHIP**	11.8	18.5	*NA*	*NA*
502	**ADJUSTED GROSS REVENUE**	808.9	1,368.1	291.8	494.8
503	Payments to Travel Agencies	44.5	75.2	16.0	27.2
504	Payments to Credit Card Companies	7.6	12.8	2.7	4.6
505	**Revenue Available to HSR Operator**	756.9	1,280.0	273.0	463.0
	OPERATING EMPLOYMENT				
904	Total employment	2,714	3,320	1,121	1,366
905	"Skilled" employment	1,661	1,951	680	803
906	"Unskilled" employment	1,053	1,368	441	562
907	Employment in Ontario	1,593	1,954		
908	Employment in Quebec	1,121	1,366	1,121	1,366
	OPERATING COSTS				
	Labour				
506	Bare wage bill skilled	76.9	90.3	31.9	37.5
507	Bare wage bill unskilled	29.3	38.0	12.4	15.8
508	Payroll taxes	9.0	11.0	3.8	4.5
509	Provisions for pension plan	8.0	9.6	3.3	4.0
	Purchased materials/services				
510	Electricity	27.4	37.9	7.8	10.7
511	Advertising/promotion	16.2	16.2	5.9	5.9
512	Infrastructure maintenance services	20.9	16.2	6.7	7.0
513	Infrastructure materials/supplies	2.2	22.0	0.8	8.0
514	Rolling stock materials/supplies	15.4	22.2	7.7	11.1
515	Telecommunications/computer services	15.7	24.6	5.7	8.8
516	Insurance services/franchise fees etc	11.5	14.6	4.2	5.4
517	Food/related sundries	2.0	3.2	0.8	1.2
518	**Unscheduled materials/services**	47.6	49.8	23.0	22.0
519	**Allowance for contingencies**	20.8	23.8	8.3	9.9
520	**TOTAL OPERATING COSTS**	302.8	379.4	122.3	152.0
521	**OPERATING PROFIT**	454.0	900.6	*NA*	*NA*
909	**COST REVENUE RATIO**	2.50	3.37	*NA*	*NA*
522	Operating costs (Ontario)	180.6	227.4		
523	Operating costs (Quebec)	122.3	152.0		

No.	CAPITAL COSTS	Initial	Ongoing	Total
524	Total spent in Quebec	2,467.65	105.33	2,572.98
525	Total spent in Ontario	4,646.09	105.33	4,751.42
526	Total spent in the rest of Canada	275.90	0.00	275.90
527	Total spend in the rest of the World	1,333.46	0.00	1,333.46
528	Geographical allocation pending	1,530.00	918.80	2,448.80
529	Residual unallocated to region	0.77	(0.00)	0.77
530	**Total Capital Costs**	10,253.87	1,129.47	11,383.34
531	Total spent on skilled labour	2,782.87	0.00	2,782.87
532	Total spent on unskilled labour	724.93	0.00	724.93
533	Total spent on material	5,016.43	1,129.47	6,145.90
534	Total spent on plant	1,729.63	0.00	1,729.63
535	Residual unallocated to spending category	0.01	0.00	0.01
536	**Total Capital Costs**	10,253.87	1,129.47	11,383.34

No.	TOTAL CASH FLOW (excluding revenues)	
537	Total spent in Quebec	*[This line defined only for year-by-year tables]*
538	Total spent in Ontario	*[This line defined only for year-by-year tables]*
539	Total spent in the rest of Canada	*[This line defined only for year-by-year tables]*
540	Total spend in the rest of the World	*[This line defined only for year-by-year tables]*
541	Geographical allocation pending	*[This line defined only for year-by-year tables]*
542	Residual unallocated to region	*[This line defined only for year-by-year tables]*
543	**Total**	*[This line defined only for year-by-year tables]*
910	**NET CASH FLOW**	*[This line defined only for year-by-year tables]*

0 **OPERATIONS COST BREAKDOWN Composite (via Mirabel) at 300 kph QW Corridor**

		Cont Allow	*Cost Estimate ($ million)*		*Employment Estimate*		*Quebec Share*
			2005	***2025***	***2005***	***2025***	*2005*
	TRAIN OPERATIONS						
101	Train crew	5.0%	11.58	15.50	161	215	41%
102	Power - demand charges	2.5%	11.96	15.71	--	--	30%
103	Power - energy consumption	2.5%	15.45	22.22	--	--	28%
104	Control centre	5.0%	2.38	2.38	40	40	50%
105	Transportation administration/supervision	5.0%	1.98	2.23	29	33	49%
106	**Subtotal**		43.35	58.04	229	287	34%
	CUSTOMER SERVICES						
107	On-board service staff	10.0%	7.13	10.28	166	240	43%
108	On-board service supplies	5.0%	2.02	3.18	--	--	39%
109	On-board services ground support	10.0%	1.31	1.89	33	48	43%
110	Food/beverage for sale	0.0%	0.00	0.00	--	--	--
111	Station operations	10.0%	21.22	23.16	300	357	30%
112	ATM/Ticketing/Reservations transactions	5.0%	15.72	24.57	--	--	36%
113	Telephone/Counter Sales	5.0%	5.28	6.81	149	192	35%
114	Advertising and promotion expenses	5.0%	16.18	16.18	--	--	37%
115	Customer service administration/supervision	5.0%	9.60	11.19	146	169	49%
116	**Subtotal**		78.46	97.27	794	1,006	37%
	EQUIPMENT MAINTENANCE						
117	Routine maintenance - labour	5.0%	15.19	21.69	302	431	50%
118	Routine maintenance - material	5.0%	15.38	22.24	--	--	50%
119	Major maintenance [included in capital]	--	--	--	--	--	--
120	Cleaning	5.0%	10.35	14.12	337	461	42%
121	Maintenance administration/supervision	5.0%	4.51	5.70	72	89	50%
122	**Subtotal**		45.43	63.75	711	981	48%
	INFRASTRUCTURE MAINTENANCE						
123	Routine maintenance	15.0%	38.72	40.48	634	675	37%
124	Purchased services	15.0%	20.87	16.21	--	--	37%
125	Materials	10.0%	2.20	21.99	--	--	36%
126	Programmed replacement [occurs after 2025]	--	--	--	--	--	
127	Maintenance administration/supervision	5.0%	10.62	10.97	153	158	35%
128	**Subtotal**		72.42	89.65	787	832	37%
	EXECUTIVE/ADMINISTRATION						
129	Labour and related	5.0%	13.27	14.73	193	214	49%
130	Other	5.0%	10.90	10.90	--	--	50%
131	**Subtotal**		24.17	25.63	193	214	49%
	INSURANCE/TAXES/OTHER						
132	Insurance/claims	0.0%	11.50	14.61	--	--	37%
133	Property taxes	10.0%	6.75	6.65	--	--	83%
134	Franchise fees	10.0%	*nil*	nil	--	--	
135	**Subtotal**		18.25	21.26	0	0	54%
136	**CONTINGENCY**	7.4%	20.76	23.85	--	--	40%
137	**TOTAL**		302.83	379.45	2,714	3,320	40%
138	**Total: Quebec component**		122.27	152.01	1,121	1,366	
139	**Total: Ontario component**		180.57	227.43	1,593	1,954	
140	**[Major maintenance included in capital]**		0.00	17.81			
141	Routine equipment maintenance per trainset km	dollars	1.85	1.84			
142	Infrastructure maintenance per route km	$thousand	50.06	63.75			
143	Executive/administration as a percent of total		8.6%	7.2%			
144	Station/ticketing costs per passenger	Dollars	3.56	2.91			
145							
146							

CAPITAL COST SUMMARY

Composite (via Mirabel) at 300 kph QW Corridor

		Professional Services	Contin-gency	Total
201	Right-of-Way	42.80	47.67	488.65
202	Earthworks/subgrade	334.41	203.04	1,891.05
203	Bridges	100.90	55.70	713.66
204	Grade separations	227.98	180.59	1,612.48
205	Other accommodations	22.69	31.80	160.47
206	Track	134.58	45.76	1,062.11
207	Power distribution system	127.52	101.01	901.94
208	Stations	54.92	30.32	388.44
209	People movers (i. luded in stations)	0.00	0.00	0.00
210	Signals	97.51	64.19	589.65
211	Communications	44.90	29.56	271.53
212	Equipment maintenance facilities	14.84	22.26	197.13
213	Infrastructure maintenance facilities	0.00	0.00	133.47
214	Information/ticketing systems	0.00	0.00	46.90
215	Rolling stock	113.33	126.33	1,530.00
216	Commissioning	105.63	0.00	105.63
217	Administration allowance	0.00	0.00	93.16
218	Startup and training	0.00	0.00	67.67
219	**TOTAL INITIAL CAPITAL COSTS**	1,422.02	938.22	10,253.95
220	**Additional fleet requirements**	*year 2009*	4 units	120.00
221		*year 2013*	4 units	120.00
222		*year 2017*	4 units	120.00
223		*year 2021*	3 units	90.00
224		*Total*	15 units	450.00
225	**Rolling Stock Overhauls**	*total, years 2005-2025*		509.34
226	**Infrastructure Renewal**	*total, years 2005-2025*		0.00
227	**Other ongoing capital**	*total, years 2005-2025*		210.67
228	*Cross check initial capital*			*(0.00)*

RIDERSHIP BREAKDOWN — Composite (via Mirabel) at 300 kph QW Corridor

			Year 2005	Year 2025		
	RIDERSHIP					
301	Ridership within the segment	*millions*	na	na		
302	Ridership between segments	*millions*	r.a	na		
303	Airport traffic	*millions*	na	na		
304 [A]	**Total potential passengers**	*million*	11.87	18.73		
305	Passengers not served at peak	*million*	(0.12)	(0.19)	1.0%	*of passengers*
306	Allowance for additional passengers	*million*	0.00	0.00	0.0%	*of passengers*
307	**Net passengers**	*million*	11.75	18.54		
	PASSENGER REVENUES					
308	Initial transportation revenue estimate	*$million*	8[illegible].65	1,499.58		
309	PST/GST	*$million*	(69.55)	(117.68)	7.8%	*of revenues*
310	Revenue estimate net of taxes	*$million*	817.10	1,381.90		
311	First Class premium	*$million*	0.00	0.00	0.0%	*of revenues*
312	Food/beverage sales	*$million*	0.00	0.00	0.00	*per passenger*
313	Revenues foregone at peak	*$million*	(8.17)	(13.82)	1.0%	*of revenues*
314	**Final Gross Revenue**	*$million*	808.93	1,368.08		
	PASSENGER KILOMETRES					
315	Ridership within segments	*billions*	3.54	5.69		
316	Ridership between segments	*billions*	0.49	0.78		
317	Airport traffic	*billions*	above	above		
318	Total		4.03	6.47		
319	Passenger-km foregone at peak	*billions*	(0.04)	(0.06)	1.0%	*of passenger-km*
320	Allowance for additional passenger-kms	*billions*	0.00	0.00	0.0%	*of passengers-km*
321	**Total passenger kms**	*billions*	3.99	6.40		
322	**Average Length of Haul**	*kms*	340	345		

EMPLOYMENT DATA

Composite (via Mirabel) at 300 kph QW Corridor

		Average Wage	Total Year 2005	Total Year 2025	Quebec Year 2005	Quebec Year 2025
401	Train Crew	57,500	161	215	66	85
402	Dispatchers	50,600	40	40	20	20
403	Managerial/admin/professional	58,324	529	586	227	254
404	Station staff	35,939	75	89	25	30
405	Mechanical trades/skilled	39,402	331	460	158	220
406	Maintenance trades/skilled	36,349	527	562	184	195
407	**Total "skilled"**	46,317	1,661	1,951	680	803
408	OBS Staff	31,453	183	264	78	108
409	Sales Staff	29,007	149	192	52	68
410	Other customer service	29,986	17	24	7	10
411	Support staff	34,206	64	76	41	50
412	Station labour (various)	24,881	225	268	76	90
413	Equipment maintenance unskilled	30,603	24	35	12	17
414	Track maintenance unskilled	30,603	108	113	53	56
415	Cleaners	24,270	284	397	122	164
416	**Total "unskilled"**	27,803	1,053	1,368	441	562
417	**Total "unallocated"**		0	0	0	(0)
418	**Grand total employment**	39,133	2,714	3,320	1,121	1,366
419	**Ontario Total "skilled"**		981	1,148		
420	**Ontario Total "unskilled"**		612	806		
421	**Ontario Total "unallocated"**		0	0		
422	**Ontario Grand total employment**		1,593	1,954		
423	**Quebec Total "skilled"**		680	803		
424	**Quebec Total "unskilled"**		441	562		
425	**Quebec Total "unallocated"**		0	0		
426	**Quebec Grand total employment**		1,121	1,366		

01-Aug-94 **HSR STUDY COST DEVELOPMENT**

TOTAL CASHFLOW **Composite (via Mirabel) at 300 kph QW Corridor**

		1995	1996	1997	1998	1999	2000	2001	2002
501 [A]	**RIDERSHIP**	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
502	**ADJUSTED GROSS REVENUE**	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
503	Payments to Travel Agencies	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
504	Payments to Credit Card Companies	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
505	**Revenue Available to HSR Operator**	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	OPERATING EMPLOYMENT								
904	Total employment	0	0	0	0	0	0	0	0
905	"Skilled" employment	0	0	0	0	0	0	0	0
906	"Unskilled" employment	0	0	0	0	0	0	0	0
907	Employment in Ontario	0	0	0	0	0	0	0	0
908	Employment in Quebec	0	0	0	0	0	0	0	0
	OPERATING COSTS								
	Labour								
506	Bare wage bill skilled	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
507	Bare wage bill unskilled	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
508	Payroll taxes	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
509	Provisions for pension plan	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Purchased materials/services								
510	Electricity	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
511	Advertising/promotion	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
512	Infrastructure maintenance services	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
513	Infrastructure materials/supplies	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
514	Rolling stock materials/supplies	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
515	Telecommunications/computer services	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
516	Insurance services/franchise fees etc	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
517	Food/related sundries	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
518	**Unscheduled materials/services**	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
519	**Allowance for contingencies**	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
520	**TOTAL OPERATING COSTS**	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
521	**OPERATING PROFIT**	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
909	**COST REVENUE RATIO**								
522	Operating costs (Ontario)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
523	Operating costs (Quebec)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	CAPITAL COSTS								
524	Total spent in Quebec	0.0	14.4	19.3	79.3	210.1	400.0	615.5	590.7
525	Total spent in Ontario	0.0	22.4	25.3	36.2	183.1	525.7	1,208.2	1,231.1
526	Total spent in the rest of Canada	0.0	0.0	0.0	0.2	0.6	7.9	32.0	87.3
527	Total spend in the rest of the World	0.0	1.3	2.5	6.2	43.9	169.5	405.8	393.5
528	Geographical allocation pending	0.0	28.7	28.7	76.5	76.5	191.3	191.3	191.3
529	Residual unallocated to region	0.0	(0.0)	(0.0)	0.0	0.0	0.1	0.2	0.2
530	**Total Capital Costs**	0.0	66.8	75.8	198.4	514.2	1,294.4	2,453.0	2,494.0
531	Total spent on skilled labour	0.0	27.5	34.1	76.4	183.0	382.3	746.8	694.9
532	Total spent on unskilled labour	0.0	1.1	1.3	3.1	24.1	94.0	234.4	216.4
533	Total spent on material	0.0	30.6	30.9	97.8	228.5	587.2	966.2	1,100.5
534	Total spent on plant	0.0	7.6	9.4	21.1	78.5	231.0	505.6	482.2
535	Residual unallocated to spending category	0.0	(0.0)	(0.0)	0.0	0.0	0.0	0.0	0.0
536	**Total Capital Costs**	0.0	66.8	75.8	198.4	514.2	1,294.4	2,453.0	2,494.0
	TOTAL CASH FLOW (excluding revenues)								
537	Total spent in Quebec	0.0	7.1	9.3	42.7	151.9	225.9	305.8	217.6
538	Total spent in Ontario	0.0	14.6	17.1	22.7	97.3	300.1	737.2	753.5
539	Total spent in the rest of Canada	0.0	0.0	0.0	0.1	0.3	7.7	20.3	47.7
540	Total spend in the rest of the World	0.0	0.8	2.2	3.3	39.9	107.3	236.4	205.4
541	Geographical allocation pending	0.0	18.0	28.7	48.0	48.0	120.0	120.0	120.0
542	Residual unallocated to region	0.0	(0.0)	(0.0)	(0.0)	0.0	0.1	0.2	0.2
543	**Total**	0.0	40.5	75.8	116.8	337.3	761.0	1,419.9	1,344.4
910	**NET CASH FLOW**	0.0	(40.5)	(75.8)	(116.8)	(337.3)	(761.0)	(1,419.9)	(1,344.4)

01-Aug-94 **HSR STUDY COST DEVELOPMENT**

TOTAL CASHFLOW **Composite (via Mirabel) at 300 kph QW Corridor**

		2003	2004	2005	2006	2007	2008	2009	2010
501 [A]	**RIDERSHIP**	1.1	3.2	11.8	12.0	12.3	12.6	12.9	13.2
502	**ADJUSTED GROSS REVENUE**	49.6	166.7	808.9	830.5	852.6	875.3	898.5	922.5
503	Payments to Travel Agencies	2.7	9.2	44.5	45.7	46.9	48.1	49.4	50.7
504	Payments to Credit Card Companies	0.5	1.6	7.6	7.8	8.0	8.2	8.4	8.6
505	**Revenue Available to HSR Operator**	46.4	156.0	756.9	777.0	797.7	818.9	840.7	863.1
	OPERATING EMPLOYMENT								
904	Total employment	359	850	2,714	2,741	2,769	2,797	2,825	2,853
905	"Skilled" employment	263	551	1,661	1,674	1,688	1,701	1,715	1,729
906	"Unskilled" employment	96	299	1,053	1,067	1,081	1,095	1,110	1,124
907	Employment in Ontario	72	102	1,593	1,609	1,626	1,642	1,659	1,676
908	Employment in Quebec	287	748	1,121	1,132	1,143	1,155	1,166	1,177
	OPERATING COSTS								
	Labour								
506	Bare wage bill skilled	12.4	25.1	76.9	77.5	78.2	78.8	79.4	80.1
507	Bare wage bill unskilled	2.7	8.4	29.3	29.7	30.1	30.4	30.8	31.3
508	Payroll taxes	1.2	2.8	9.0	9.1	9.2	9.3	9.4	9.5
509	Provisions for pension plan	1.1	2.5	8.0	8.0	8.1	8.2	8.3	8.4
	Purchased materials/services								
510	Electricity	1.9	3.8	27.4	27.9	28.3	28.8	29.2	29.7
511	Advertising/promotion	5.5	7.9	16.2	16.2	16.2	16.2	16.2	16.2
512	Infrastructure maintenance services	3.4	7.9	20.9	20.9	20.9	19.9	19.0	18.1
513	Infrastructure materials/supplies	0.4	0.8	2.2	2.3	2.5	2.7	2.8	3.0
514	Rolling stock materials/supplies	1.3	3.6	15.4	15.7	16.0	16.3	16.6	16.9
515	Telecommunications/computer services	1.4	4.0	15.7	16.1	16.4	16.8	17.2	17.6
516	Insurance services/franchise fees etc	1.9	4.4	11.5	11.6	11.8	11.9	12.1	12.2
517	Food/related sundries	0.2	0.5	2.0	2.1	2.1	2.2	2.2	2.3
518	**Unscheduled materials/services**	10.9	28.2	47.6	47.7	47.8	47.9	48.0	48.1
519	**Allowance for contingencies**	3.2	7.4	20.8	20.9	21.0	20.9	20.9	20.9
520	**TOTAL OPERATING COSTS**	47.5	107.3	302.8	305.6	308.3	310.1	311.9	313.8
521	**OPERATING PROFIT**	(1.0)	48.7	454.0	471.4	489.3	508.8	528.8	549.3
909	**COST REVENUE RATIO**	0.98	1.45	2.50	2.54	2.59	2.64	2.70	2.75
522	Operating costs (Ontario)	9.5	24.0	180.6	182.2	183.8	184.8	185.8	186.9
523	Operating costs (Quebec)	38.0	83.3	122.3	123.4	124.6	125.3	126.1	126.9
	CAPITAL COSTS								
524	Total spent in Quebec	345.8	182.0	10.5	0.0	0.0	0.0	0.0	34.5
525	Total spent in Ontario	849.0	527.2	37.8	0.0	0.0	0.0	0.0	34.5
526	Total spent in the rest of Canada	89.7	58.0	0.1	0.0	0.0	0.0	0.0	0.0
527	Total spend in the rest of the World	210.7	95.2	5.0	0.0	0.0	0.0	0.0	0.0
528	Geographical allocation pending	229.5	229.5	153.0	133.9	0.0	0.0	120.0	8.9
529	Residual unallocated to region	0.2	0.1	(0.0)	0.0	0.0	0.0	0.0	0.0
530	**Total Capital Costs**	1,724.9	1,092.0	206.4	133.9	0.0	0.0	120.0	78.0
531	Total spent on skilled labour	403.8	219.5	14.5	0.0	0.0	0.0	0.0	0.0
532	Total spent on unskilled labour	105.4	42.6	2.4	0.0	0.0	0.0	0.0	0.0
533	Total spent on material	953.4	704.9	182.5	133.9	0.0	0.0	120.0	78.0
534	Total spent on plant	262.3	124.9	6.9	0.0	0.0	0.0	0.0	0.0
535	Residual unallocated to spending category	0.0	0.0	(0.0)	0.0	0.0	0.0	0.0	0.0
536	**Total Capital Costs**	1,724.9	1,092.0	206.4	133.9	0.0	0.0	120.0	78.0
	TOTAL CASH FLOW (excluding revenues)								
537	Total spent in Quebec	181.7	164.7	77.4	70.6	71.3	71.9	72.4	92.9
538	Total spent in Ontario	513.9	367.9	139.2	121.3	122.5	123.3	124.1	144.9
539	Total spent in the rest of Canada	40.3	35.0	0.1	0.0	0.0	0.0	0.0	0.0
540	Total spend in the rest of the World	120.8	65.7	3.0	0.0	0.0	0.0	0.0	0.0
541	Geographical allocation pending	144.0	144.0	96.0	84.0	0.0	0.0	90.0	5.7
542	Residual unallocated to region	0.2	0.1	(0.0)	0.0	0.0	0.0	0.0	0.0
543	**Total**	1,000.8	777.3	315.7	275.9	193.8	195.1	286.5	243.4
910	**NET CASH FLOW**	(954.4)	(621.3)	441.1	501.1	603.9	623.8	554.2	619.7

TOTAL CASHFLOW **Composite (via Mirabel) at 300 kph QW Corridor**

		2011	2012	2013	2014	2015	2016	2017	2018
501 [A]	**RIDERSHIP**	13.5	13.8	14.1	14.4	14.8	15.1	15.5	15.8
502	**ADJUSTED GROSS REVENUE**	947.0	972.2	998.1	1,024.7	1,052.0	1,080.0	1,108.7	1,138.2
503	Payments to Travel Agencies	52.1	53.5	54.9	56.4	57.9	59.4	61.0	62.6
504	Payments to Credit Card Companies	8.9	9.1	9.4	9.6	9.9	10.1	10.4	10.7
505	**Revenue Available to HSR Operator**	886.1	909.6	933.9	958.7	984.2	1,010.4	1,037.3	1,065.0
	OPERATING EMPLOYMENT								
904	Total employment	2,882	2,911	2,941	2,970	3,001	3,031	3,062	3,093
905	"Skilled" employment	1,743	1,757	1,771	1,786	1,800	1,815	1,829	1,844
906	"Unskilled" employment	1,139	1,154	1,169	1,185	1,200	1,216	1,232	1,248
907	Employment in Ontario	1,693	1,711	1,728	1,746	1,764	1,782	1,800	1,819
908	Employment in Quebec	1,189	1,201	1,213	1,225	1,237	1,249	1,261	1,274
	OPERATING COSTS								
	Labour								
506	Bare wage bill skilled	80.7	81.4	82.0	82.7	83.3	84.0	84.7	85.4
507	Bare wage bill unskilled	31.7	32.1	32.5	32.9	33.4	33.8	34.2	34.7
508	Payroll taxes	9.6	9.7	9.8	9.9	9.9	10.0	10.1	10.2
509	Provisions for pension plan	8.4	8.5	8.6	8.7	8.8	8.8	8.9	9.0
	Purchased materials/services								
510	Electricity	30.2	30.7	31.2	31.7	32.2	32.8	33.3	33.9
511	Advertising/promotion	16.2	16.2	16.2	16.2	16.2	16.2	16.2	16.2
512	Infrastructure maintenance services	17.1	16.2	16.2	16.2	16.2	16.2	16.2	16.2
513	Infrastructure materials/supplies	3.2	3.4	3.6	3.9	4.4	8.8	9.7	10.8
514	Rolling stock materials/supplies	17.2	17.5	17.8	18.2	18.5	18.8	19.2	19.5
515	Telecommunications/computer services	18.0	18.4	18.8	19.2	19.7	20.1	20.6	21.0
516	Insurance services/franchise fees etc	12.4	12.5	12.7	12.8	13.0	13.1	13.3	13.4
517	Food/related sundries	2.3	2.4	2.4	2.5	2.5	2.6	2.6	2.7
518	**Unscheduled materials/services**	48.2	48.3	48.5	48.6	48.7	48.8	48.9	49.0
519	**Allowance for contingencies**	20.9	20.9	21.1	21.2	21.3	21.8	22.0	22.2
520	**TOTAL OPERATING COSTS**	315.7	317.7	320.8	324.0	327.6	335.4	339.5	343.8
521	**OPERATING PROFIT**	570.3	591.9	613.0	634.7	656.7	675.0	697.8	721.2
909	**COST REVENUE RATIO**	2.81	2.86	2.91	2.96	3.00	3.01	3.06	3.10
522	Operating costs (Ontario)	188.0	189.1	191.0	192.9	195.1	200.0	202.5	205.1
523	Operating costs (Quebec)	127.7	128.6	129.8	131.1	132.5	135.4	137.0	138.7
	CAPITAL COSTS								
524	Total spent in Quebec	0.0	0.0	0.0	0.0	36.3	0.0	0.0	0.0
525	Total spent in Ontario	0.0	0.0	0.0	0.0	36.3	0.0	0.0	0.0
526	Total spent in the rest of Canada	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
527	Total spend in the rest of the World	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
528	Geographical allocation pending	17.8	17.8	137.8	17.8	16.5	34.3	173.4	53.4
529	Residual unallocated to region	0.0	0.0	0.0	0.0	(0.0)	0.0	0.0	0.0
530	**Total Capital Costs**	17.8	17.8	137.8	17.8	89.0	34.3	173.4	53.4
531	Total spent on skilled labour	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
532	Total spent on unskilled labour	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
533	Total spent on material	17.8	17.8	137.8	17.8	89.0	34.3	173.4	53.4
534	Total spent on plant	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
535	Residual unallocated to spending category	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
536	**Total Capital Costs**	17.8	17.8	137.8	17.8	89.0	34.3	173.4	53.4
	TOTAL CASH FLOW (excluding revenues)								
537	Total spent in Quebec	73.5	74.1	74.8	75.6	97.3	78.0	78.9	79.9
538	Total spent in Ontario	125.8	126.8	128.1	129.5	151.9	134.5	136.3	138.2
539	Total spent in the rest of Canada	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
540	Total spend in the rest of the World	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
541	Geographical allocation pending	11.4	11.4	71.4	11.4	9.5	22.7	124.1	34.1
542	Residual unallocated to region	0.0	0.0	0.0	0.0	0.0	(0.0)	0.0	0.0
543	**Total**	210.7	212.2	274.3	216.5	258.6	235.2	339.3	252.2
910	**NET CASH FLOW**	675.3	697.4	659.5	742.2	725.6	775.2	698.0	812.8

01-Aug-94 **HSR STUDY COST DEVELOPMENT**

TOTAL CASHFLOW **Composite (via Mirabel) at 300 kph QW Corridor**

		2019	2020	2021	2022	2023	2024	2025	2026
501 [A]	**RIDERSHIP**	16.2	16.5	16.9	17.3	17.7	18.1	18.5	19.0
502	**ADJUSTED GROSS REVENUE**	1,168.5	1,199.6	1,231.6	1,264.4	1,298.0	1,332.6	1,368.1	1,404.5
503	Payments to Travel Agencies	64.3	66.0	67.7	69.5	71.4	73.3	75.2	77.2
504	Payments to Credit Card Companies	11.0	11.2	11.5	11.9	12.2	12.5	12.8	13.2
505	**Revenue Available to HSR Operator**	1,093.3	1,122.4	1,152.3	1,183.0	1,214.5	1,246.8	1,280.0	1,314.1
	OPERATING EMPLOYMENT								
904	Total employment	3,124	3,156	3,188	3,220	3,253	3,286	3,320	3,354
905	"Skilled" employment	1,859	1,874	1,889	1,905	1,920	1,936	1,951	1,967
906	"Unskilled" employment	1,265	1,282	1,298	1,316	1,333	1,351	1,368	1,386
907	Employment in Ontario	1,838	1,856	1,876	1,895	1,914	1,934	1,954	1,974
908	Employment in Quebec	1,287	1,299	1,312	1,325	1,339	1,352	1,366	1,380
	OPERATING COSTS								
	Labour								
506	Bare wage bill skilled	86.0	86.7	87.4	88.1	88.8	89.6	90.3	91.0
507	Bare wage bill unskilled	35.1	35.6	36.1	36.5	37.0	37.5	38.0	38.5
508	Payroll taxes	10.3	10.4	10.5	10.6	10.7	10.8	11.0	11.1
509	Provisions for pension plan	9.1	9.2	9.3	9.4	9.4	9.5	9.6	9.7
	Purchased materials/services								
510	Electricity	34.4	35.0	35.5	36.1	36.7	37.3	37.9	38.6
511	Advertising/promotion	16.2	16.2	16.2	16.2	16.2	16.2	16.2	16.2
512	Infrastructure maintenance services	16.2	16.2	16.2	16.2	16.2	16.2	16.2	16.2
513	Infrastructure materials/supplies	11.9	13.2	14.6	16.2	17.9	19.9	22.0	24.3
514	Rolling stock materials/supplies	19.9	20.3	20.7	21.0	21.4	21.8	22.2	22.7
515	Telecommunications/computer services	21.5	22.0	22.5	23.0	23.5	24.0	24.6	25.1
516	Insurance services/franchise fees etc	13.6	13.8	13.9	14.1	14.3	14.4	14.6	14.8
517	Food/related sundries	2.8	2.8	2.9	3.0	3.0	3.1	3.2	3.3
518	**Unscheduled materials/services**	49.1	49.2	49.4	49.5	49.6	49.7	49.8	49.9
519	**Allowance for contingencies**	22.4	22.6	22.8	23.0	23.3	23.6	23.8	24.2
520	**TOTAL OPERATING COSTS**	348.2	352.9	357.7	362.8	368.1	373.6	379.4	385.6
521	**OPERATING PROFIT**	745.1	769.5	794.6	820.2	846.4	873.2	900.6	928.5
909	**COST REVENUE RATIO**	3.14	3.18	3.22	3.26	3.30	3.34	3.37	3.41
522	Operating costs (Ontario)	207.9	210.8	213.8	216.9	220.3	223.8	227.4	231.3
523	Operating costs (Quebec)	140.3	142.1	143.9	145.8	147.8	149.9	152.0	154.3
	CAPITAL COSTS								
524	Total spent in Quebec	0.0	34.5	0.0	0.0	0.0	0.0	0.0	0.0
525	Total spent in Ontario	0.0	34.5	0.0	0.0	0.0	0.0	0.0	0.0
526	Total spent in the rest of Canada	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
527	Total spend in the rest of the World	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
528	Geographical allocation pending	53.4	61.0	139.4	22.7	8.9	17.8	17.8	40.5
529	Residual unallocated to region	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
530	**Total Capital Costs**	53.4	130.1	139.4	22.7	8.9	17.8	17.8	40.5
531	Total spent on skilled labour	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
532	Total spent on unskilled labour	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
533	Total spent on material	53.4	130.1	139.4	22.7	8.9	17.8	17.8	40.5
534	Total spent on plant	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
535	Residual unallocated to spending category	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
536	**Total Capital Costs**	53.4	130.1	139.4	22.7	8.9	17.8	17.8	40.5
	TOTAL CASH FLOW (excluding revenues)								
537	Total spent in Quebec	80.9	101.8	82.9	84.0	85.1	86.3	87.5	88.8
538	Total spent in Ontario	140.1	162.1	144.3	146.6	149.0	151.4	154.1	156.8
539	Total spent in the rest of Canada	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
540	Total spend in the rest of the World	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
541	Geographical allocation pending	34.1	37.9	88.4	17.0	5.7	11.4	11.4	22.7
542	Residual unallocated to region	0.0	(0.0)	0.0	0.0	(0.0)	0.0	0.0	0.0
543	**Total**	255.1	301.8	315.7	247.6	239.8	249.1	252.9	268.3
910	**NET CASH FLOW**	838.2	820.6	836.6	935.3	974.7	997.7	1,027.1	1,045.8

25-Jul-94 **HSR STUDY COST DEVELOPMENT**

CAPITAL COST SUMMARY **Composite (via Mirabel) at 300 kph QW Corridor**

		1995	1996	1997	1998	1999	2000	2001	2002
201	Right-of-Way	0.00	1.46	1.46	21.42	127.44	198.93	118.60	19.33
202	Earthworks/subgrade	0.00	15.79	15.19	35.15	138.46	368.48	634.96	523.80
203	Bridges	0.00	4.47	4.34	7.78	27.37	86.77	270.18	235.92
204	Grade separations	0.00	10.47	10.05	20.64	71.36	219.08	607.76	517.37
205	Other accommodations	0.00	0.96	0.95	1.36	9.08	46.42	76.07	25.63
206	Track	0.00	0.00	0.97	6.27	15.51	36.58	125.94	311.85
207	Power distribution system	0.00	0.00	0.93	6.01	15.19	27.35	92.85	219.81
208	Stations	0.00	3.30	3.30	1.65	1.05	2.64	25.62	54.59
209	People movers (included in stations)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
210	Signals	0.00	0.69	5.37	12.21	18.45	64.38	151.10	154.59
211	Communications	0.00	0.31	2.36	5.57	8.40	28.72	68.15	70.78
212	Equipment maintenance facilities	0.00	0.00	0.00	0.00	0.00	16.88	50.64	57.10
213	Infrastructure maintenance facilities	0.00	0.00	0.00	0.00	0.00	0.00	13.72	37.30
214	Information/ticketing systems	0.00	0.00	0.00	0.00	0.00	0.00	2.62	18.10
215	Rolling stock	0.00	28.69	28.69	76.50	76.50	191.25	191.25	191.25
216	Commissioning	0.00	0.00	0.00	0.00	0.00	0.00	0.00	14.80
217	Administration allowance	0.00	0.66	2.24	3.81	5.39	6.97	12.88	21.78
218	Startup and training	0.00	0.00	0.00	0.00	0.00	0.00	10.64	20.06
219	TOTAL INITIAL CAPITAL COSTS	0.00	66.79	75.84	198.37	514.20	1,294.43	2,452.98	2,494.03
220	**Additional fleet requirements**								
221									
222									
223									
224		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
225	**Rolling Stock Overhauls**	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
226	**Infrastructure Renewal**	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
227	**Other ongoing capital**	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
228	*Cross check initial capital*								

CAPITAL COST SUMMARY **Composite (via Mirabel) at 300 kph QW Corridor**

		2003	2004	2005	2006	2007	2008	2009	2010
201	Right-of-Way	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
202	Earthworks/subgrade	159.23	0.00	0.00	0.00	0.00	0.00	0.00	0.00
203	Bridges	76.83	0.00	0.00	0.00	0.00	0.00	0.00	0.00
204	Grade separations	155.75	0.00	0.00	0.00	0.00	0.00	0.00	0.00
205	Other accommodations	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
206	Track	347.84	209.27	7.88	0.00	0.00	0.00	0.00	0.00
207	Power distribution system	294.56	218.15	27.10	0.00	0.00	0.00	0.00	0.00
208	Stations	117.97	178.35	0.00	0.00	0.00	0.00	0.00	0.00
209	People movers (included in stations)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
210	Signals	123.36	59.51	0.00	0.00	0.00	0.00	0.00	0.00
211	Communications	58.71	28.55	0.00	0.00	0.00	0.00	0.00	0.00
212	Equipment maintenance facilities	47.93	24.59	0.00	0.00	0.00	0.00	0.00	0.00
213	Infrastructure maintenance facilities	25.50	45.18	11.77	0.00	0.00	0.00	0.00	0.00
214	Information/ticketing systems	12.97	11.90	1.31	0.00	0.00	0.00	0.00	0.00
215	Rolling stock	229.50	229.50	153.00	133.87	0.00	0.00	0.00	0.00
216	Commissioning	28.01	57.49	5.34	0.00	0.00	0.00	0.00	0.00
217	Administration allowance	21.65	17.79	0.00	0.00	0.00	0.00	0.00	0.00
218	Startup and training	25.18	11.79	0.00	0.00	0.00	0.00	0.00	0.00
219	**TOTAL INITIAL CAPITAL COSTS**	1,724.98	1,092.05	206.39	133.87	0.00	0.00	0.00	0.00
220	**Additional fleet requirements**								
221									
222									
223									
224		0.00	0.00	0.00	0.00	0.00	0.00	120.00	0.00
225	**Rolling Stock Overhauls**	0.00	0.00	0.00	0.00	0.00	0.00	0.00	8.90
226	**Infrastructure Renewal**	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
227	**Other ongoing capital**	0.00	0.00	0.00	0.00	0.00	0.00	0.00	69.08
228	*Cross check initial capital*								

Spreadsheet	W:\207-CHAS\COSTING\30MT-1.WK3			
Today's date	27-Jul-94			
Proessing time	08:16			
Data export file	X-30MT-1.WK1			
Train speed	300 kph			
Train route	Composite (via Mirabel) at 300 kph			
Demand data	MOT Stand Alone			
Initial demand file	R105MT33/R125MT33 [as supplied by IBI]			
Train data	Final off NEW-OD.WK1			
Trip Time	COMPOSITE VIA MIRABEL			
Capital file	C:\work\207-chas\canarail\extract.wk3			
Capital name	MONTREAL - TORONTO CORRIDOR 300+, composite route EX .. 3c00-			
	MONTREAL - QUEBEC 300+, composite route EX .. 3c00-			
	WINDSOR - TORONTO 300+, composite route EX .. 3c00-			
Cap allocation	SPLIT-3B.WK3			
Include SWO	No			
Include MQ	No			
MOT to Pearson	Yes			
Con Air Included	Yes			
via Mirabel	Yes			
via Dorval	No			
Delay Cap Input	3cm-xx-2	1 *MOT*	100% *DT*	
	3cm-xx-2	1 *MQ*	100% *DT*	
	3cm-xx-2	1 *SWO*	61% *DT*	
		1 *SPLIT*		

25-Jul-94

HSR STUDY COST DEVELOPMENT

OPERATIONS/REVENUES/COSTS Composite (via Mirabel) at 300 kph MOT Stand Alone

			Year 2005	Year 2025		
	RIDERSHIP					
1 [A]	Adjusted passengers (non-duplicated)	millions	6.6	10.6		
2	Average length of haul	kms	390	396		
3	Passenger kilometres	billion	2.6	4.2		
	OPERATION STATISTICS					
4	Route length	kilometres	629	629		
5	Train trips (one-way)	thousands	9.6	14.8		
6	Trainset kms	millions	10.6	15.6		
7	Seat kms	billions	3.8	5.6	*358 per trainset*	
8	Trainsets in active fleet	units	32	41		
9	Average trainset utilization	k-km/year	331	382		
10	Average load factor		68%	75%		
11	Total energy consumption	gigaW-hrs	254	375		
12	Total employment		1,615	2,005		
	PASSENGER REVENUES					
13	Adjustusted revenues	$million	502.5	858.4		
14	Agency commissions	$million	(27.6)	(47.2)	*5.5% of gross revenue*	
15	Credit card discount	$million	(4.7)	(8.0)	*0.9% of gross revenue*	
16	Net Revenue	$million	470.2	803.2		
	OPERATIONS AND MAINTENANCE COSTS				*[Total employment]*	
17	Train operations	$million	26.8	36.3	140	179
18	Customer services	$million	49.4	60.9	460	596
19	Equipment maintenance	$million	29.1	41.3	443	614
20	Infrastructure maintenance	$million	40.0	50.9	438	466
21	Executive/administration	$million	16.4	17.4	135	151
22	Insurance/taxes/other	$million	11.5	12.7	0	0
23	Contingency	$million	12.5	15.3	–	–
24	**Total O&M Costs**	$million	185.6	234.8	1,615	2,005
25	**OPERATING PROFIT**		284.6	568.3		
26	**COST/REVENUE RATIOS**					
27	Net revenue : O&M costs Ratio		2.53	3.42		
28	O&M cost per trainset-km	dollars	17.49	15.01		
29	O&M cost per seat-km	cents	4.89	4.19		
30	O&M cost per passenger	dollars	28.18	22.23		
31	O&M cost per passenger-km	cents	7.23	5.62		
32	Net revenue per passenger	dollars	71.40	76.04		
33	Net revenue per passenger km	cents	18.33	19.21		
	CAPITAL COSTS					
34	Startup/admin/training/other "soft" costs	$million	167.3			
35	Construction of track	$million	4,215.5			
36	Construction of stations	$million	357.8			
37	Construction of maintenance facilities	$million	247.5			
38	Acqusition of rolling stock	$million	960.0			
39	**Total Initial Capital Costs**	$million	5,948.1	*over the period 1995 to 2006*		
40	**Total Ongoing Capital Costs**	$million	711.2	*over the period 2007 to 2025*		
41	Initial capital per route-km (excluding RS)	$million	7.93			

		2005 Que	2005 Ont	2025 Que	2025 Ont
901	Net Revenues	157.75	312.43	269.47	533.70
902	O and M Costs	69.12	116.43	86.05	148.80
903	Employment	618	998	762	1,243

25-Jul-94	HSR STUDY COST DEVELOPMENT

TOTAL CASHFLOW

Composite (via Mirabel) at 300 kph MOT Stand Alone

		Total Year 2005	Total Year 2025	Quebec Year 2005	Quebec Year 2025
501	**[A] RIDERSHIP**	6.6	10.6	NA	NA
502	**ADJUSTED GROSS REVENUE**	502.5	858.4	168.6	288.0
503	Payments to Travel Agencies	27.6	47.2	9.3	15.8
504	Payments to Credit Card Companies	4.7	8.0	1.6	2.7
505	**Revenue Available to HSR Operator**	470.2	803.2	157.8	269.5
	OPERATING EMPLOYMENT				
904	Total employment	1,615	2,005	618	762
905	"Skilled" employment	1,022	1,219	38[illegible]	466
906	"Unskilled" employment	593	786	232	297
907	Employment in Ontario	998	1,243		
908	Employment in Quebec	618	762	618	762
	OPERATING COSTS				
	Labour				
506	Bare wage bill skilled	48.2	57.4	18.9	22.7
507	Bare wage bill unskilled	16.5	21.9	6.5	8.3
508	Payroll taxes	5.4	6.7	2.1	2.6
509	Provisions for pension plan	4.9	6.0	1.9	2.3
	Purchased materials/services				
510	Electricity	17.0	23.7	3.6	4.9
511	Advertising/promotion	10.1	10.1	3.5	3.5
512	Infrastructure maintenance services	11.1	8.6	3.2	2.5
513	Infrastructure materials/supplies	1.3	13.5	0.4	3.9
514	Rolling stock materials/supplies	9.9	14.7	4.9	7.3
515	Telecommunications/computer services	8.7	13.7	3.0	4.7
516	Insurance services/franchise fees etc	6.0	7.2	1.7	2.1
517	Food/related sundries	1.1	1.7	0.4	0.6
518	**Unscheduled materials/services**	32.9	34.4	14.5	15.1
519	**Allowance for contingencies**	12.5	15.3	4.5	5.5
520	**TOTAL OPERATING COSTS**	185.6	234.8	69.1	86.1
521	**OPERATING PROFIT**	284.6	568.3	NA	NA
909	**COST REVENUE RATIO**	2.53	3.42	NA	NA
522	Operating costs (Ontario)	116.4	148.8		
523	Operating costs (Quebec)	69.1	86.1		

	CAPITAL COSTS	Initial	Ongoing	Total
524	Total spent in Quebec	1,230.46	60.55	1,291.02
525	Total spent in Ontario	2,821.77	60.55	2,882.33
526	Total spent in the rest of Canada	151.36	0.00	151.36
527	Total spend in the rest of the World	783.79	0.00	783.79
528	Geographical allocation pending	960.00	561.70	1,521.70
529	Residual unallocated to region	0.76	0.00	0.76
530	**Total Capital Costs**	5,948.15	682.81	6,630.95
531	Total spent on skilled labour	1,625.91	0.00	1,625.91
532	Total spent on unskilled labour	421.14	0.00	421.14
533	Total spent on material	2,880.86	682.81	3,563.66
534	Total spent on plant	1,020.25	0.00	1,020.25
535	Residual unallocated to spending category	(0.00)	0.00	(0.00)
536	**Total Capital Costs**	5,948.15	682.81	6,630.95

	TOTAL CASH FLOW (excluding revenues)	
537	Total spent in Quebec	*[This line defined only for year-by-year tables]*
538	Total spent in Ontario	*[This line defined only for year-by-year tables]*
539	Total spent in the rest of Canada	*[This line defined only for year-by-year tables]*
540	Total spend in the rest of the World	*[This line defined only for year-by-year tables]*
541	Geographical allocation pending	*[This line defined only for year-by-year tables]*
542	Residual unallocated to region	*[This line defined only for year-by-year tables]*
543	**Total**	*[This line defined only for year-by-year tables]*
910	**NET CASH FLOW**	*[This line defined only for year-by-year tables]*

25-Jul-94 **HSR STUDY COST DEVELOPMENT**

0 OPERATIONS COST BREAKDOWN Composite (via Mirabel) at 300 kph MOT Stand Alone

		Cont Allow	Cost Estimate ($ million) 2005	Cost Estimate ($ million) 2025	Employment Estimate 2005	Employment Estimate 2025	Quebec Share 2005
	TRAIN OPERATIONS						
101	Train crew	5.0%	6.89	9.48	96	131	38%
102	Power - demand charges	2.5%	7.13	9.20	–	–	21%
103	Power - energy consumption	2.5%	9.86	14.54	–	–	21%
104	Control centre	5.0%	1.44	1.44	24	24	50%
105	Transportation administration/supervision	5.0%	1.47	1.68	20	23	50%
106	**Subtotal**		26.79	36.35	140	179	29%
	CUSTOMER SERVICES						
107	On-board service staff	10.0%	4.78	7.09	111	165	38%
108	On-board service supplies	5.0%	1.06	1.70	–	–	38%
109	On-board services ground support	10.0%	0.88	1.30	22	33	38%
110	Food/beverage for sale	0.0%	0.00	0.00	–	–	–
111	Station operations	10.0%	14.91	15.93	156	185	24%
112	ATM/Ticketing/Reservations transactions	5.0%	8.65	13.72	–	–	34%
113	Telephone/Counter Sales	5.0%	2.86	3.75	81	106	34%
114	Advertising and promotion expenses	5.0%	10.05	10.05	–	–	34%
115	Customer service administration/supervision	5.0%	6.20	7.37	90	107	50%
116	**Subtotal**		49.38	60.90	460	596	34%
	EQUIPMENT MAINTENANCE						
117	Routine maintenance - labour	5.0%	9.72	13.95	193	277	50%
118	Routine maintenance - material	5.0%	9.87	14.67	–	–	50%
119	Major maintenance [included in capital]	–	–	–	–	–	–
120	Cleaning	5.0%	5.93	8.13	194	266	38%
121	Maintenance administration/supervision	5.0%	3.55	4.55	56	70	50%
122	**Subtotal**		29.06	41.29	443	614	48%
	INFRASTRUCTURE MAINTENANCE						
123	Routine maintenance	15.0%	21.00	22.06	344	368	29%
124	Purchased services	15.0%	11.08	8.56	–	–	29%
125	Materials	10.0%	1.35	13.50	–	–	29%
126	Programmed replacement [occurs after 2025]	–	–	–	–	–	
127	Maintenance administration/supervision	5.0%	6.53	6.78	94	98	34%
128	**Subtotal**		39.96	50.91	438	466	30%
	EXECUTIVE/ADMINISTRATION						
129	Labour and related	5.0%	9.85	10.94	135	151	50%
130	Other	5.0%	6.50	6.50	–	–	50%
131	**Subtotal**		16.35	17.44	135	151	50%
	INSURANCE/TAXES/OTHER						
132	Insurance/claims	0.0%	6.00	7.21	–	–	29%
133	Property taxes	10.0%	5.50	5.50	–	–	84%
134	Franchise fees	10.0%	*nil*	nil	–	–	
135	**Subtotal**		11.50	12.71	0	0	55%
136	**CONTINGENCY**	7.2%	12.51	15.25	–	–	36%
137	**TOTAL**		185.55	234.85	1,615	2,005	37%
138	**Total: Quebec component**		69.12	86.05	618	762	
139	**Total: Ontario component**		116.43	148.80	998	1,243	
140	**[Major maintenance included in capital]**		0.00	11.36			
141	Routine equipment maintenance per trainset km	dollars	1.85	1.83			
142	Infrastructure maintenance per route km	$thousand	53.12	70.10			
143	Executive/administration as a percent of total		9.4%	7.9%			
144	Station/ticketing costs per passenger	Dollars	3.97	3.13			
145							
146							

25-Jul-94

HSR STUDY COST DEVELOPMENT

CAPITAL COST SUMMARY

Composite (via Mirabel) at 300 kph MOT Stand Alone

		Professional Services	Contin-*gency*	Total
201	Right-of-Way	16.19	18.03	184.80
202	Earthworks/subgrade	199.45	122.96	1,142.14
203	Bridges	69.57	38.41	492.04
204	Grade separations	109.05	86.38	771.26
205	Other accommodations	14.89	20.86	105.28
206	Track	73.52	25.01	580.77
207	Power distribution system	68.67	54.40	485.71
208	Stations	46.91	25.90	331.81
209	People movers (included in stations)	0.00	0.00	0.00
210	Signals	51.94	34.20	314.11
211	Communications	23.05	15.17	139.36
212	Equipment maintenance facilities	12.74	19.11	168.79
213	Infrastructure maintenance facilities	0.00	0.00	78.72
214	Information/ticketing systems	0.00	0.00	26.03
215	Rolling stock	71.11	79.27	960.00
216	Commissioning	63.81	0.00	63.81
217	Administration allowance	0.00	0.00	62.16
218	Startup and training	0.00	0.00	41.36
219	**TOTAL INITIAL CAPITAL COSTS**	820.88	539.68	5,948.15

220	**Additional fleet requirements**	*year 2009*	3 units	60.00
221		*year 2013*	5 units	90.00
222		*year 2017*	2 units	60.00
223		*year 2021*	3 units	60.00
224		*Total*	13 units	270.00
225	**Rolling Stock Overhauls**	*total, years 2005-2025*		320.11
226	**Infrastructure Renewal**	*total, years 2005-2025*		0.00
227	**Other ongoing capital**	*total, years 2005-2025*		121.11
228	*Cross check initial capital*			*0.00*

RIDERSHIP BREAKDOWN — Composite (via Mirabel) at 300 kph MOT Stand Alone

			Year 2005	Year 2025		
	RIDERSHIP					
301	Ridership within the segment	*millions*	na	na		
302	Ridership between segments	*millions*	na	na		
303	Airport traffic	*millions*	na	na		
304 [A]	**Total potential passengers**	*million*	6.65	10.67		
305	Passengers not served at peak	*million*	(0.07)	(0.11)	1.0%	*of passengers*
306	Allowance for additional passengers	*million*	0.00	0.00	0.0%	*of passengers*
307	**Net passengers**	*million*	6.59	10.56		
	PASSENGER REVENUES					
308	Initial transportation revenue estimate	*$million*	550.35	940.12		
309	PST/GST	*$million*	(42.74)	(73.01)	7.8%	*of revenues*
310	Revenue estimate net of taxes	*$million*	507.61	867.11		
311	First Class premium	*$million*	0.00	0.00	0.0%	*of revenues*
312	Food/beverage sales	*$million*	0.00	0.00	0.00	*per passenger*
313	Revenues foregone at peak	*$million*	(5.08)	(8.67)	1.0%	*of revenues*
314	**Final Gross Revenue**	*$million*	502.54	858.44		
	PASSENGER KILOMETRES					
315	Ridership within segments	*billions*	2.50	4.07		
316	Ridership between segments	*billions*	0.10	0.15		
317	Airport traffic	*billions*	above	above		
318	Total		2.59	4.22		
319	Passenger-km foregone at peak	*billions*	(0.03)	(0.04)	1.0%	*of passenger-km*
320	Allowance for additional passenger-kms	*billions*	0.00	0.00	0.0%	*of passengers-km*
321	**Total passenger kms**	*billions*	2.56	4.18		
322	**Average Length of Haul**	*kms*	390	396		

EMPLOYMENT DATA

Composite (via Mirabel) at 300 kph MOT Stand Alone

		Average Wage	Total Year 2005	Total Year 2025	Quebec Year 2005	Quebec Year 2025
401	Train Crew	57,500	96	131	36	47
402	Dispatchers	50,600	24	24	12	12
403	Managerial/admin/professional	58,324	367	415	169	192
404	Station staff	35,939	39	46	9	11
405	Mechanical trades/skilled	39,402	211	297	89	128
406	Maintenance trades/skilled	36,349	285	305	70	75
407	**Total "skilled"**	47,175	1,022	1,219	386	466
408	OBS Staff	31,453	123	182	47	66
409	Sales Staff	29,007	81	106	28	36
410	Other customer service	29,986	11	17	4	6
411	Support staff	34,206	28	33	14	16
412	Station labour (various)	24,881	117	139	28	34
413	Equipment maintenance unskilled	30,603	15	22	8	11
414	Track maintenance unskilled	30,603	59	63	30	32
415	Cleaners	24,270	160	225	74	96
416	**Total "unskilled"**	27,881	593	786	232	297
417	**Total "unallocated"**		0	0	0	0
418	**Grand total employment**	40,088	1,615	2,005	618	762
419	**Ontario Total "skilled"**		636	753		
420	**Ontario Total "unskilled"**		361	489		
421	**Ontario Total "unallocated"**		0	0		
422	**Ontario Grand total employment**		998	1,243		
423	**Quebec Total "skilled"**		386	466		
424	**Quebec Total "unskilled"**		232	297		
425	**Quebec Total "unallocated"**		0	0		
426	**Quebec Grand total employment**		618	762		

25-Jul-94

HSR STUDY COST DEVELOPMENT

TOTAL CASHFLOW

Composite (via Mirabel) at 300 kph MOT Stand Alone

		1995	1996	1997	1998	1999	2000	2001	2002
501	**[A] RIDERSHIP**	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
502	**ADJUSTED GROSS REVENUE**	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
503	Payments to Travel Agencies	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
504	Payments to Credit Card Companies	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
505	**Revenue Available to HSR Operator**	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	OPERATING EMPLOYMENT								
904	Total employment	0	0	0	0	0	0	0	0
905	"Skilled" employment	0	0	0	0	0	0	0	0
906	"Unskilled" employment	0	0	0	0	0	0	0	0
907	Employment in Ontario	0	0	0	0	0	0	0	0
908	Employment in Quebec	0	0	0	0	0	0	0	0
	OPERATING COSTS								
	Labour								
506	Bare wage bill skilled	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
507	Bare wage bill unskilled	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
508	Payroll taxes	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
509	Provisions for pension plan	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Purchased materials/services								
510	Electricity	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
511	Advertising/promotion	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
512	Infrastructure maintenance services	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
513	Infrastructure materials/supplies	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
514	Rolling stock materials/supplies	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
515	Telecommunications/computer services	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
516	Insurance services/franchise fees etc	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
517	Food/related sundries	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
518	**Unscheduled materials/services**	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
519	**Allowance for contingencies**	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
520	**TOTAL OPERATING COSTS**	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
521	**OPERATING PROFIT**	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
909	**COST REVENUE RATIO**								
522	Operating costs (Ontario)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
523	Operating costs (Quebec)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	CAPITAL COSTS								
524	Total spent in Quebec	0.0	7.1	9.3	42.7	151.9	225.9	305.8	217.6
525	Total spent in Ontario	0.0	14.6	17.1	22.7	97.3	300.1	737.2	753.3
526	Total spent in the rest of Canada	0.0	0.0	0.0	0.1	0.3	7.7	20.3	47.7
527	Total spend in the rest of the World	0.0	0.8	1.3	3.3	39.9	107.3	236.4	205.4
528	Geographical allocation pending	0.0	18.0	18.0	48.0	48.0	120.0	120.0	120.0
529	Residual unallocated to region	0.0	(0.0)	(0.0)	(0.0)	0.0	0.1	0.2	0.2
530	**Total Capital Costs**	0.0	40.5	45.8	116.8	337.3	761.0	1,419.8	1,344.2
531	Total spent on skilled labour	0.0	16.2	20.2	42.4	124.5	227.0	433.7	368.8
532	Total spent on unskilled labour	0.0	0.7	0.8	1.7	21.8	58.0	134.0	110.4
533	Total spent on material	0.0	19.1	19.3	61.1	128.8	332.8	555.4	610.0
534	Total spent on plant	0.0	4.5	5.6	11.7	62.3	143.2	296.6	255.0
535	Residual unallocated to spending category	0.0	(0.0)	(0.0)	(0.0)	0.0	0.0	(0.0)	(0.0)
536	**Total Capital Costs**	0.0	40.5	45.8	116.8	337.3	761.0	1,419.8	1,344.2
	TOTAL CASH FLOW (excluding revenues)								
537	Total spent in Quebec	0.0	7.1	9.3	42.7	151.9	225.9	305.8	217.6
538	Total spent in Ontario	0.0	14.6	17.1	22.7	97.3	300.1	737.2	753.3
539	Total spent in the rest of Canada	0.0	0.0	0.0	0.1	0.3	7.7	20.3	47.7
540	Total spend in the rest of the World	0.0	0.8	2.2	3.3	39.9	107.3	236.4	205.4
541	Geographical allocation pending	0.0	18.0	28.1	48.0	48.0	120.0	120.0	120.0
542	Residual unallocated to region	0.0	(0.0)	(0.0)	(0.0)	0.0	0.1	0.2	0.2
543	**Total**	0.0	40.5	75.3	116.8	337.3	761.0	1,419.8	1,344.2
910	**NET CASH FLOW**	0.0	(40.5)	(75.3)	(116.8)	(337.3)	(761.0)	(1,419.8)	(1,344.2)

TOTAL CASHFLOW **Composite (via Mirabel) at 300 kph MOT Stand Alone**

		2003	2004	2005	2006	2007	2008	2009	2010
501	[A] RIDERSHIP	1.1	1.2	6.6	6.7	6.9	7.1	7.2	7.4
502	ADJUSTED GROSS REVENUE	49.2	49.6	502.5	516.2	530.2	544.6	559.3	574.5
503	Payments to Travel Agencies	2.7	2.7	27.6	28.4	29.2	30.0	30.8	31.6
504	Payments to Credit Card Companies	0.5	0.5	4.7	4.8	5.0	5.1	5.2	5.4
505	**Revenue Available to HSR Operator**	46.0	46.4	470.2	482.9	496.0	509.5	523.3	537.5
	OPERATING EMPLOYMENT								
904	Total employment	362	362	1,615	1,633	1,650	1,668	1,686	1,705
905	"Skilled" employment	263	263	1,022	1,031	1,040	1,049	1,059	1,068
906	"Unskilled" employment	99	99	593	602	610	619	628	637
907	Employment in Ontario	72	72	998	1,009	1,020	1,031	1,042	1,054
908	Employment in Quebec	290	290	618	624	631	637	644	651
	OPERATING COSTS								
	Labour								
506	Bare wage bill skilled	12.4	12.4	48.2	48.6	49.1	49.5	49.9	50.4
507	Bare wage bill unskilled	2.8	2.8	16.5	16.8	17.0	17.3	17.5	17.8
508	Payroll taxes	1.2	1.2	5.4	5.5	5.6	5.6	5.7	5.7
509	Provisions for pension plan	1.1	1.1	4.9	4.9	5.0	5.0	5.1	5.1
	Purchased materials/services								
510	Electricity	1.8	1.8	17.0	17.3	17.6	17.9	18.2	18.5
511	Advertising/promotion	5.0	5.0	10.1	10.1	10.1	10.1	10.1	10.1
512	Infrastructure maintenance services	3.4	3.4	11.1	11.1	11.1	10.6	10.1	9.6
513	Infrastructure materials/supplies	0.4	0.4	1.3	1.4	1.5	1.6	1.7	1.8
514	Rolling stock materials/supplies	1.3	1.3	9.9	10.1	10.3	10.5	10.7	10.9
515	Telecommunications/computer services	1.5	1.5	8.7	8.9	9.1	9.3	9.5	9.7
516	Insurance services/franchise fees etc	1.9	1.9	6.0	6.1	6.1	6.2	6.2	6.3
517	Food/related sundries	0.2	0.2	1.1	1.1	1.1	1.1	1.2	1.2
518	**Unscheduled materials/services**	11.1	19.6	32.9	33.0	33.1	33.2	33.2	33.3
519	**Allowance for contingencies**	3.2	3.8	12.5	12.6	12.7	12.7	12.7	12.8
520	TOTAL OPERATING COSTS	47.3	56.4	185.6	187.3	189.1	190.3	191.6	192.9
521	OPERATING PROFIT	(1.3)	(10.0)	284.6	295.6	306.9	319.2	331.7	344.6
909	COST REVENUE RATIO	0.97	0.82	2.53	2.58	2.62	2.68	2.73	2.79
522	Operating costs (Ontario)	9.5	11.3	116.4	117.5	118.6	119.4	120.1	120.9
523	Operating costs (Quebec)	37.9	45.1	69.1	69.8	70.4	71.0	71.5	72.0
	CAPITAL COSTS								
524	Total spent in Quebec	143.6	119.0	7.5	0.0	0.0	0.0	0.0	19.9
525	Total spent in Ontario	504.2	356.3	19.1	0.0	0.0	0.0	0.0	19.9
526	Total spent in the rest of Canada	40.3	35.0	0.1	0.0	0.0	0.0	0.0	0.0
527	Total spend in the rest of the World	120.8	65.7	3.0	0.0	0.0	0.0	0.0	0.0
528	Geographical allocation pending	144.0	144.0	96.0	84.0	0.0	0.0	60.0	5.7
529	Residual unallocated to region	0.2	0.1	(0.0)	0.0	0.0	0.0	0.0	0.0
530	**Total Capital Costs**	953.0	720.0	125.7	84.0	0.0	0.0	60.0	45.5
531	Total spent on skilled labour	230.5	153.6	9.0	0.0	0.0	0.0	0.0	0.0
532	Total spent on unskilled labour	61.7	30.7	1.5	0.0	0.0	0.0	0.0	0.0
533	Total spent on material	510.2	449.1	111.0	84.0	0.0	0.0	60.0	45.5
534	Total spent on plant	150.6	86.7	4.2	0.0	0.0	0.0	0.0	0.0
535	Residual unallocated to spending category	0.0	(0.0)	(0.0)	0.0	0.0	0.0	0.0	0.0
536	**Total Capital Costs**	953.0	720.0	125.7	84.0	0.0	0.0	60.0	45.5
	TOTAL CASH FLOW (excluding revenues)								
537	Total spent in Quebec	181.5	164.1	76.6	69.8	70.4	71.0	71.5	91.9
538	Total spent in Ontario	513.6	367.6	135.5	117.5	118.6	119.4	120.1	140.8
539	Total spent in the rest of Canada	40.3	35.0	0.1	0.0	0.0	0.0	0.0	0.0
540	Total spend in the rest of the World	120.8	65.7	3.0	0.0	0.0	0.0	0.0	0.0
541	Geographical allocation pending	144.0	144.0	96.0	84.0	0.0	0.0	60.0	5.7
542	Residual unallocated to region	0.2	0.1	(0.0)	0.0	0.0	0.0	0.0	0.0
543	**Total**	1,000.4	776.4	311.2	271.3	189.1	190.3	251.6	238.4
910	NET CASH FLOW	(954.3)	(730.0)	159.0	211.6	306.9	319.2	271.7	299.1

TOTAL CASHFLOW **Composite (via Mirabel) at 300 kph MOT Stand Alone**

		2011	2012	2013	2014	2015	2016	2017	2018
501	[A] RIDERSHIP	7.6	7.8	8.0	8.1	8.3	8.5	8.7	9.0
502	ADJUSTED GROSS REVENUE	590.1	606.1	622.6	639.5	656.8	674.6	692.9	711.7
503	Payments to Travel Agencies	32.5	33.3	34.2	35.2	36.1	37.1	38.1	39.1
504	Payments to Credit Card Companies	5.5	5.7	5.8	6.0	6.2	6.3	6.5	6.7
505	**Revenue Available to HSR Operator**	552.1	567.1	582.5	598.3	614.5	631.2	648.3	665.9
	OPERATING EMPLOYMENT								
904	Total employment	1,723	1,742	1,761	1,780	1,799	1,819	1,838	1,858
905	"Skilled" employment	1,07[illegible]	1,087	1,097	1,106	1,116	1,126	1,136	1,146
906	"Unskilled" employment	64[illegible]	655	664	673	683	693	702	712
907	Employment in Ontario	1,066	1,077	1,089	1,101	1,113	1,126	1,138	1,151
908	Employment in Quebec	658	664	671	679	686	693	700	708
	OPERATING COSTS								
	Labour								
506	Bare wage bill skilled	50.8	51.3	51.7	52.2	52.6	53.1	53.6	54.0
507	Bare wage bill unskilled	18.0	18.3	18.5	18.8	19.0	19.3	19.6	19.9
508	Payroll taxes	5.8	5.9	5.9	6.0	6.0	6.1	6.2	6.2
509	Provisions for pension plan	5.2	5.2	5.3	5.3	5.4	5.4	5.5	5.5
	Purchased materials/services								
510	Electricity	18.8	19.1	19.4	19.7	20.1	20.4	20.8	21.1
511	Advertising/promotion	10.1	10.1	10.1	10.1	10.1	10.1	10.1	10.1
512	Infrastructure maintenance services	9.1	8.6	8.6	8.6	8.6	8.6	8.6	8.6
513	Infrastructure materials/supplies	2.0	2.1	2.2	2.4	2.7	5.4	6.0	6.6
514	Rolling stock materials/supplies	11.1	11.3	11.6	11.8	12.0	12.3	12.5	12.8
515	Telecommunications/computer services	9.9	10.2	10.4	10.6	10.9	11.1	11.4	11.7
516	Insurance services/franchise fees etc	6.3	6.4	6.5	6.5	6.6	6.6	6.7	6.8
517	Food/related sundries	1.2	1.3	1.3	1.3	1.3	1.4	1.4	1.4
518	**Unscheduled materials/services**	33.4	33.5	33.5	33.6	33.7	33.8	33.8	33.9
519	**Allowance for contingencies**	12.8	12.8	12.9	13.0	13.2	13.5	13.7	13.9
520	TOTAL OPERATING COSTS	194.3	195.7	197.7	199.7	202.0	206.9	209.5	212.2
521	OPERATING PROFIT	357.8	371.4	384.8	398.6	412.5	424.3	438.8	453.7
909	COST REVENUE RATIO	2.84	2.90	2.95	3.00	3.04	3.05	3.09	3.14
522	Operating costs (Ontario)	121.7	122.6	123.9	125.2	126.7	130.0	131.8	133.6
523	Operating costs (Quebec)	72.5	73.1	73.8	74.5	75.3	76.9	77.8	78.7
	CAPITAL COSTS								
524	Total spent in Quebec	0.0	0.0	0.0	0.0	20.8	0.0	0.0	0.0
525	Total spent in Ontario	0.0	0.0	0.0	0.0	20.8	0.0	0.0	0.0
526	Total spent in the rest of Canada	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
527	Total spend in the rest of the World	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
528	Geographical allocation pending	11.4	11.4	101.4	11.4	9.5	20.8	94.1	34.1
529	Residual unallocated to region	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
530	**Total Capital Costs**	11.4	11.4	101.4	11.4	51.0	20.8	94.1	34.1
531	Total spent on skilled labour	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
532	Total spent on unskilled labour	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
533	Total spent on material	11.4	11.4	101.4	11.4	51.0	20.8	94.1	34.1
534	Total spent on plant	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
535	Residual unallocated to spending category	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
536	**Total Capital Costs**	11.4	11.4	101.4	11.4	51.0	20.8	94.1	34.1
	TOTAL CASH FLOW **(excluding revenues)**								
537	Total spent in Quebec	72.5	73.1	73.8	74.5	96.1	76.9	77.8	78.7
538	Total spent in Ontario	121.7	122.6	123.9	125.2	147.4	130.0	131.8	133.6
539	Total spent in the rest of Canada	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
540	Total spend in the rest of the World	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
541	Geographical allocation pending	11.4	11.4	101.4	11.4	9.5	20.8	94.1	34.1
542	Residual unallocated to region	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
543	**Total**	205.6	207.0	299.0	211.1	253.0	227.7	303.6	246.3
910	NET CASH FLOW	346.5	360.1	283.4	387.2	361.5	403.5	344.7	419.6

25-Jul-94 **HSR STUDY COST DEVELOPMENT**

TOTAL CASHFLOW — **Composite (via Mirabel) at 300 kph MOT Stand Alone**

		2019	2020	2021	2022	2023	2024	2025	2026
501	**[A] RIDERSHIP**	9.2	9.4	9.6	9.8	10.1	10.3	10.6	10.8
502	**ADJUSTED GROSS REVENUE**	731.0	750.9	771.3	792.2	813.7	835.8	858.4	881.7
503	Payments to Travel Agencies	40.2	41.3	42.4	43.6	44.8	46.0	47.2	48.5
504	Payments to Credit Card Companies	6.9	7.0	7.2	7.4	7.6	7.8	8.0	8.3
505	**Revenue Available to HSR Operator**	684.0	702.5	721.6	741.2	761.3	782.0	803.2	825.0
	OPERATING EMPLOYMENT								
904	Total employment	1,879	1,899	1,920	1,941	1,962	1,983	2,005	2,027
905	"Skilled" employment	1,156	1,166	1,177	1,187	1,198	1,208	1,219	1,230
906	"Unskilled" employment	722	733	743	754	764	775	786	797
907	Employment in Ontario	1,163	1,176	1,189	1,202	1,216	1,229	1,243	1,256
908	Employment in Quebec	715	723	731	738	746	754	762	770
	OPERATING COSTS								
	Labour								
506	Bare wage bill skilled	54.5	55.0	55.5	55.9	56.4	56.9	57.4	57.9
507	Bare wage bill unskilled	20.2	20.4	20.7	21.0	21.3	21.6	21.9	22.2
508	Payroll taxes	6.3	6.4	6.4	6.5	6.6	6.6	6.7	6.8
509	Provisions for pension plan	5.6	5.7	5.7	5.8	5.8	5.9	6.0	6.0
	Purchased materials/services								
510	Electricity	21.5	21.8	22.2	22.6	23.0	23.3	23.7	24.1
511	Advertising/promotion	10.1	10.1	10.1	10.1	10.1	10.1	10.1	10.1
512	Infrastructure maintenance services	8.6	8.6	8.6	8.6	8.6	8.6	8.6	8.6
513	Infrastructure materials/supplies	7.3	8.1	9.0	9.9	11.0	12.2	13.5	14.9
514	Rolling stock materials/supplies	13.0	13.3	13.5	13.8	14.1	14.4	14.7	15.0
515	Telecommunications/computer services	11.9	12.2	12.5	12.8	13.1	13.4	13.7	14.0
516	Insurance services/franchise fees etc	6.8	6.9	6.9	7.0	7.1	7.1	7.2	7.3
517	Food/related sundries	1.5	1.5	1.5	1.6	1.6	1.7	1.7	1.7
518	**Unscheduled materials/services**	34.0	34.1	34.1	34.2	34.3	34.4	34.4	34.5
519	**Allowance for contingencies**	14.0	14.2	14.4	14.6	14.8	15.0	15.3	15.5
520	**TOTAL OPERATING COSTS**	215.1	218.0	221.1	224.3	227.6	231.2	234.8	238.7
521	**OPERATING PROFIT**	468.9	484.5	500.5	516.9	533.7	550.8	568.3	586.2
909	**COST REVENUE RATIO**	3.18	3.22	3.26	3.30	3.34	3.38	3.42	3.46
522	Operating costs (Ontario)	135.4	137.4	139.5	141.6	143.9	146.3	148.8	151.5
523	Operating costs (Quebec)	79.6	80.6	81.6	82.7	83.7	84.9	86.1	87.3
	CAPITAL COSTS								
524	Total spent in Quebec	0.0	19.9	0.0	0.0	0.0	0.0	0.0	0.0
525	Total spent in Ontario	0.0	19.9	0.0	0.0	0.0	0.0	0.0	0.0
526	Total spent in the rest of Canada	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
527	Total spend in the rest of the World	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
528	Geographical allocation pending	34.1	39.8	88.4	11.4	5.7	11.4	11.4	28.4
529	Residual unallocated to region	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
530	**Total Capital Costs**	34.1	79.6	88.4	11.4	5.7	11.4	11.4	28.4
531	Total spent on skilled labour	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
532	Total spent on unskilled labour	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
533	Total spent on material	34.1	79.6	88.4	11.4	5.7	11.4	11.4	28.4
534	Total spent on plant	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
535	Residual unallocated to spending category	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
536	**Total Capital Costs**	34.1	79.6	88.4	11.4	5.7	11.4	11.4	28.4
	TOTAL CASH FLOW (excluding revenues)								
537	Total spent in Quebec	79.6	100.5	81.6	82.7	83.7	84.9	86.1	87.3
538	Total spent in Ontario	135.4	157.3	139.5	141.6	143.9	146.3	148.8	151.5
539	Total spent in the rest of Canada	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
540	Total spend in the rest of the World	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
541	Geographical allocation pending	34.1	39.8	88.4	11.4	5.7	11.4	11.4	28.4
542	Residual unallocated to region	0.0	0.0	0.0	0.0	(0.0)	0.0	0.0	0.0
543	**Total**	249.2	297.6	309.5	235.6	233.3	242.5	246.2	267.1
910	**NET CASH FLOW**	434.8	405.0	412.1	505.5	528.0	539.4	557.0	557.8

25-Jul-94

HSR STUDY COST DEVELOPMENT

CAPITAL COST SUMMARY **Composite (via Mirabel) at 300 kph MOT Stand Alone**

		1995	1996	1997	1998	1999	2000	2001	2002
201	Right-of-Way	0.00	0.55	0.55	12.43	50.14	72.16	41.60	7.36
202	Earthworks/subgrade	0.00	9.20	9.20	21.42	115.40	230.49	377.24	274.65
203	Bridges	0.00	2.96	2.96	4.70	22.07	57.29	187.25	155.73
204	Grade separations	0.00	4.88	4.88	10.04	51.79	114.07	291.80	212.99
205	Other accommodations	0.00	0.62	0.62	0.85	7.51	28.87	49.34	17.47
206	Track	0.00	0.00	0.97	3.16	8.32	30.66	80.87	167.17
207	Power distribution system	0.00	0.00	0.93	3.02	8.26	21.64	66.93	110.40
208	Stations	0.00	2.81	2.81	1.41	1.05	2.10	24.04	43.77
209	People movers (included in stations)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
210	Signals	0.00	0.69	2.24	6.23	14.41	42.73	70.58	73.91
211	Communications	0.00	0.31	0.99	2.76	6.39	18.96	31.31	32.79
212	Equipment maintenance facilities	0.00	0.00	0.00	0.00	0.00	16.88	50.64	50.64
213	Infrastructure maintenance facilities	0.00	0.00	0.00	0.00	0.00	0.00	7.87	23.62
214	Information/ticketing systems	0.00	0.00	0.00	0.00	0.00	0.00	2.60	13.01
215	Rolling stock	0.00	18.00	18.00	48.00	48.00	120.00	120.00	120.00
216	Commissioning	0.00	0.00	0.00	0.00	0.00	0.00	0.00	12.76
217	Administration allowance	0.00	0.49	1.66	2.83	4.00	5.17	9.89	15.79
218	Startup and training	0.00	0.00	0.00	0.00	0.00	0.00	7.83	12.09
219	**TOTAL INITIAL CAPITAL COSTS**	0.00	40.51	45.82	116.85	337.32	761.03	1,419.79	1,344.17
220	**Additional fleet requirements**								
221									
222									
223									
224		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
225	**Rolling Stock Overhauls**	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
226	**Infrastructure Renewal**	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
227	**Other ongoing capital**	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
228	*Cross check initial capital*								

CAPITAL COST SUMMARY **Composite (via Mirabel) at 300 kph MOT Stand Alone**

		2003	2004	2005	2006	2007	2008	2009	2010
201	Right-of-Way	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
202	Earthworks/subgrade	104.55	0.00	0.00	0.00	0.00	0.00	0.00	0.00
203	Bridges	59.08	0.00	0.00	0.00	0.00	0.00	0.00	0.00
204	Grade separations	80.81	0.00	0.00	0.00	0.00	0.00	0.00	0.00
205	Other accommodations	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
206	Track	160.25	124.68	4.69	0.00	0.00	0.00	0.00	0.00
207	Power distribution system	137.08	120.91	16.53	0.00	0.00	0.00	0.00	0.00
208	Stations	91.52	162.30	0.00	0.00	0.00	0.00	0.00	0.00
209	People movers (included in stations)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
210	Signals	63.67	39.66	0.00	0.00	0.00	0.00	0.00	0.00
211	Communications	28.25	17.60	0.00	0.00	0.00	0.00	0.00	0.00
212	Equipment maintenance facilities	33.76	16.88	0.00	0.00	0.00	0.00	0.00	0.00
213	Infrastructure maintenance facilities	11.81	31.49	3.94	0.00	0.00	0.00	0.00	0.00
214	Information/ticketing systems	2.60	6.51	1.30	0.00	0.00	0.00	0.00	0.00
215	Rolling stock	144.00	144.00	96.00	84.00	0.00	0.00	0.00	0.00
216	Commissioning	9.57	38.29	3.19	0.00	0.00	0.00	0.00	0.00
217	Administration allowance	11.43	10.89	0.00	0.00	0.00	0.00	0.00	0.00
218	Startup and training	14.65	6.80	0.00	0.00	0.00	0.00	0.00	0.00
219	**TOTAL INITIAL CAPITAL COSTS**	953.02	719.99	125.65	84.00	0.00	0.00	0.00	0.00
220	**Additional fleet requirements**								
221									
222									
223									
224		0.00	0.00	0.00	0.00	0.00	0.00	60.00	0.00
225	**Rolling Stock Overhauls**	0.00	0.00	0.00	0.00	0.00	0.00	0.00	5.68
226	**Infrastructure Renewal**	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
227	**Other ongoing capital**	0.00	0.00	0.00	0.00	0.00	0.00	0.00	39.78
228	*Cross check initial capital*								

Spreadsheet	W:\207-CHAS\COSTING\30QT-1.WK3				
Today's date	27-Jul-94				
Proessing time	08:30				
Data export file	X-30QT-1.WK1				
Train speed	300 kph				
Train route	Composite (via Mirabel) at 300 kph				
Demand data	QT Segment				
Initial demand file	R105QT33/R125QT33 [as supplied by IBI]				
Train data	Final off NEW-OD.WK1				
Trip Time	COMPOSITE VIA MIRABEL				
Capital file	C:\work\207-chas\canarail\extract.wk3				
Capital name	MONTREAL - TORONTO CORRIDOR 300+, composite route EX .. 3c00-				
	MONTREAL - QUEBEC 300+, composite route EX .. 3c00-				
	WINDSOR - TORONTO 300+, composite route EX .. 3c00-				
Cap allocation	SPLIT-3B.WK3				
Include SWO	No				
Include MQ	Yes				
MOT to Pearson	Yes				
Con Air Included	Yes				
via Mirabel	Yes				
via Dorval	No				
Delay Cap Input	3cm-xx-2	1	*MOT*	100%	*DT*
	3cm-xx-2	1	*MQ*	100%	*DT*
	3cm-xx-2	1	*SWO*	61%	*DT*
		1	*SPLIT*		

01-Aug-94 **HSR STUDY COST DEVELOPMENT**

OPERATIONS/REVENUES/COSTS Composite (via Mirabel) at 300 kph QT Segment

			Year 2005	Year 2025		
	RIDERSHIP					
1 [A]	Adjusted passengers (non-duplicated)	millions	8.8	13.9		
2	Average length of haul	kms	369	375		
3	Passenger kilometres	billion	3.2	5.2		
	OPERATION STATISTICS					
4	Route length	kilometres	885	885		
5	Train trips (one-way)	thousands	14.5	21.4		
6	Trainset kms	millions	13.4	19.5		
7	Seat kms	billions	4.8	7.0	*358 per trainset*	
8	Trainsets in active fleet	units	40	52		
9	Average trainset utilization	k-km/year	336	375		
10	Average load factor		67%	75%		
11	Total energy consumption	gigaW-hrs	325	471		
12	Total employment		2,128	2,615		
	PASSENGER REVENUES					
13	Adjustusted revenues	$million	647.7	1,102.0		
14	Agency commissions	$million	(35.6)	(60.6)	*5.5% of gross revenue*	
15	Credit card discount	$million	(6.1)	(10.3)	*0.9% of gross revenue*	
16	Net Revenue	$million	606.0	1,031.0		
	OPERATIONS AND MAINTENANCE COSTS				***[Total employment]***	
17	Train operations	$million	34.5	46.4	183	230
18	Customer services	$million	62.7	77.6	616	789
19	Equipment maintenance	$million	36.8	51.7	570	782
20	Infrastructure maintenance	$million	55.0	68.9	600	635
21	Executive/administration	$million	20.1	21.4	187	209
22	Insurance/taxes/other	$million	18.7	21.0	0	0
23	Contingency	$million	16.4	19.8	--	--
24	**Total O&M Costs**	$million	240.5	302.8	2,128	2,615
25	**OPERATING PROFIT**		365.5	728.3		
26	**COST/REVENUE RATIOS**					
27	Net revenue : O&M costs Ratio		2.52	3.41		
28	O&M cost per trainset-km	dollars	17.90	15.51		
29	O&M cost per seat-km	cents	5.00	4.33		
30	O&M cost per passenger	dollars	27.43	21.74		
31	O&M cost per passenger-km	cents	7.43	5.80		
32	Net revenue per passenger	dollars	69.14	74.04		
33	Net revenue per passenger km	cents	18.73	19.75		
	CAPITAL COSTS					
34	Startup/admin/training/other "soft" costs	$million	215.1			
35	Construction of track	$million	5,679.4			
36	Construction of stations	$million	397.5			
37	Construction of maintenance facilities	$million	283.8			
38	Acqusition of rolling stock	$million	1,230.0			
39	**Total Initial Capital Costs**	$million	7,805.8	*over the period 1995 to 2006*		
40	**Total Ongoing Capital Costs**	$million	888.8	*over the period 2007 to 2025*		
41	Initial capital per route-km (excluding RS)	$million	7.43			

		2005 Que	*2005 Ont*	*2025 Que*	2025 Ont
901	Net Revenues	279.94	326.05	474.40	556.63
902	O and M Costs	119.40	121.06	147.86	154.91
903	Employment	1,092	1,037	1,321	1,294

01-Aug-94 **HSR STUDY COST DEVELOPMENT**

TOTAL CASHFLOW — Composite (via Mirabel) at 300 kph QT Segment

		Total Year 2005	*Total Year 2025*	*Quebec Year 2005*	*Quebec Year 2025*
501	[A] **RIDERSHIP**	8.8	13.9	*NA*	*NA*
502	**ADJUSTED GROSS REVENUE**	647.7	1,102.0	299.2	507.0
503	Payments to Travel Agencies	35.6	60.6	16.5	27.9
504	Payments to Credit Card Companies	6.1	10.3	2.8	4.8
505	**Revenue Available to HSR Operator**	606.0	1,031.0	279.9	474.4
	OPERATING EMPLOYMENT				
904	Total employment	2,128	2,615	1,092	1,321
905	"Skilled" employment	1,318	1,556	650	760
906	"Unskilled" employment	810	1,060	442	561
907	Employment in Ontario	1,037	1,294		
908	Employment in Quebec	1,092	1,321	1,092	1,321
	OPERATING COSTS				
	Labour				
506	Bare wage bill skilled	61.3	72.3	30.6	35.7
507	Bare wage bill unskilled	22.7	29.6	12.4	15.8
508	Payroll taxes	7.1	8.7	3.6	4.4
509	Provisions for pension plan	6.3	7.6	3.2	3.9
	Purchased materials/services				
510	Electricity	21.7	30.2	7.7	10.5
511	Advertising/promotion	13.0	13.0	6.1	6.1
512	Infrastructure maintenance services	15.6	12.0	6.7	7.0
513	Infrastructure materials/supplies	1.8	17.6	0.8	8.0
514	Rolling stock materials/supplies	12.5	18.3	6.2	9.1
515	Telecommunications/computer services	11.7	18.5	5.9	9.2
516	Insurance services/franchise fees etc	8.5	10.5	4.2	5.4
517	Food/related sundries	1.5	2.3	0.8	1.2
518	**Unscheduled materials/services**	40.5	42.4	22.9	21.8
519	**Allowance for contingencies**	16.4	19.8	8.2	9.7
520	**TOTAL OPERATING COSTS**	240.5	302.8	119.4	147.9
521	**OPERATING PROFIT**	365.5	728.3	*NA*	*NA*
909	**COST REVENUE RATIO**	2.52	3.41	*NA*	*NA*
522	Operating costs (Ontario)	121.1	154.9		
523	Operating costs (Quebec)	119.4	147.9		

	CAPITAL COSTS	**Initial**	**Ongoing**	**Total**
524	Total spent in Quebec	2,288.94	80.49	2,369.43
525	Total spent in Ontario	3,051.35	80.49	3,131.85
526	Total spent in the rest of Canada	209.37	0.00	209.37
527	Total spend in the rest of the World	1,025.43	0.00	1,025.43
528	Geographical allocation pending	1,230.00	699.36	1,929.36
529	Residual unallocated to region	0.76	0.00	0.76
530	**Total Capital Costs**	7,805.85	860.35	8,666.19
531	Total spent on skilled labour	2,124.04	0.00	2,124.04
532	Total spent on unskilled labour	547.52	0.00	547.52
533	Total spent on material	3,806.61	860.35	4,666.95
534	Total spent on plant	1,327.68	0.00	1,327.68
535	Residual unallocated to spending category	0.00	0.00	0.00
536	**Total Capital Costs**	7,805.85	860.35	8,666.19

	TOTAL CASH FLOW (excluding revenues)	
537	Total spent in Quebec	*[This line defined only for year-by-year tables]*
538	Total spent in Ontario	*[This line defined only for year-by-year tables]*
539	Total spent in the rest of Canada	*[This line defined only for year-by-year tables]*
540	Total spend in the rest of the World	*[This line defined only for year-by-year tables]*
541	Geographical allocation pending	*[This line defined only for year-by-year tables]*
542	Residual unallocated to region	*[This line defined only for year-by-year tables]*
543	**Total**	*[This line defined only for year-by-year tables]*
910	**NET CASH FLOW**	*[This line defined only for year-by-year tables]*

0

OPERATIONS COST BREAKDOWN Composite (via Mirabel) at 300 kph QT Segment

		Cont Allow	Cost Estimate ($ million) 2005	Cost Estimate ($ million) 2025	Employment Estimate 2005	Employment Estimate 2025	Quebec Share 2005
	TRAIN OPERATIONS						
101	Train crew	5.0%	9.16	12.34	127	171	52%
102	Power - demand charges	2.5%	9.43	12.26	--	--	37%
103	Power - energy consumption	2.5%	12.32	17.90	--	--	35%
104	Control centre	5.0%	1.91	1.91	32	32	62%
105	Transportation administration/supervision	5.0%	1.70	1.94	24	27	57%
106	**Subtotal**		34.52	46.36	183	230	42%
	CUSTOMER SERVICES						
107	On-board service staff	10.0%	6.07	8.85	142	206	50%
108	On-board service supplies	5.0%	1.47	2.34	--	--	54%
109	On-board services ground support	10.0%	1.11	1.62	28	41	50%
110	Food/beverage for sale	0.0%	0.00	0.00	--	--	--
111	Station operations	10.0%	17.70	19.15	221	263	36%
112	ATM/Ticketing/Reservations transactions	5.0%	11.74	18.45	--	--	50%
113	Telephone/Counter Sales	5.0%	3.88	5.04	109	142	50%
114	Advertising and promotion expenses	5.0%	12.95	12.95	--	--	47%
115	Customer service administration/supervision	5.0%	7.76	9.17	116	136	60%
116	**Subtotal**		62.69	77.57	616	789	47%
	EQUIPMENT MAINTENANCE						
117	Routine maintenance - labour	5.0%	12.31	17.51	245	348	50%
118	Routine maintenance - material	5.0%	12.50	18.27	--	--	50%
119	Major maintenance [included in capital]	--	--	--	--	--	--
120	Cleaning	5.0%	8.03	10.86	262	355	54%
121	Maintenance administration/supervision	5.0%	3.97	5.08	63	79	50%
122	**Subtotal**		36.81	51.71	570	782	51%
	INFRASTRUCTURE MAINTENANCE						
123	Routine maintenance	15.0%	29.35	30.73	481	512	49%
124	Purchased services	15.0%	15.57	12.03	--	--	49%
125	Materials	10.0%	1.76	17.56	--	--	45%
126	Programmed replacement [occurs after 2025]	--	--	--	--	--	
127	Maintenance administration/supervision	5.0%	8.28	8.54	119	123	45%
128	**Subtotal**		54.96	68.85	600	635	49%
	EXECUTIVE/ADMINISTRATION						
129	Labour and related	5.0%	11.40	12.71	161	180	57%
130	Other	5.0%	8.70	8.70	--	--	63%
131	**Subtotal**		20.10	21.41	161	180	59%
	INSURANCE/TAXES/OTHER						
132	Insurance/claims	0.0%	8.50	10.54	--	--	50%
133	Property taxes	10.0%	6.50	6.50	--	--	86%
134	Franchise fees	10.0%	*nil*	nil	--	--	
135	**Subtotal**		15.00	17.04	0	0	66%
136	**CONTINGENCY**	7.3%	16.38	19.83	--	--	50%
137	**TOTAL**		240.46	302.77	2,128	2,615	50%
138	**Total: Quebec component**		119.40	147.86	1,092	1,321	
139	**Total: Ontario component**		121.06	154.91	1,037	1,294	
140	**[Major maintenance included in capital]**		0.00	14.40			
141	Routine equipment maintenance per trainset km	dollars	1.85	1.83			
142	Infrastructure maintenance per route km	$thousand	52.75	68.17			
143	Executive/administration as a percent of total		9.0%	7.6%			
144	Station/ticketing costs per passenger	Dollars	3.76	3.03			
145							
146							

CAPITAL COST SUMMARY — Composite (via Mirabel) at 300 kph QT Segment

		Professional Services	Contin-gency	Total
201	Right-of-Way	21.84	24.32	249.33
202	Earthworks/subgrade	258.96	159.43	1,481.27
203	Bridges	82.62	45.61	584.37
204	Grade separations	150.80	119.45	1,066.58
205	Other accommodations	16.29	22.83	115.20
206	Track	101.83	34.64	804.22
207	Power distribution system	95.85	75.92	677.94
208	Stations	51.08	28.20	361.28
209	People movers (included in stations)	0.00	0.00	0.00
210	Signals	80.39	52.92	486.14
211	Communications	35.45	23.34	214.37
212	Equipment maintenance facilities	13.69	20.53	181.71
213	Infrastructure maintenance facilities	0.00	0.00	102.13
214	Information/ticketing systems	0.00	0.00	36.17
215	Rolling stock	91.11	101.56	1,230.00
216	Commissioning	84.18	0.00	84.18
217	Administration allowance	0.00	0.00	75.26
218	Startup and training	0.00	0.00	55.70
219	**TOTAL INITIAL CAPITAL COSTS**	1,084.10	708.75	7,805.85

220	**Additional fleet requirements**	*year 2009*	3 units	60.00
221		*year 2013*	5 units	120.00
222		*year 2017*	3 units	90.00
223		*year 2021*	3 units	60.00
224		*Total*	14 units	330.00
225	**Rolling Stock Overhauls**	*total, years 2005-2025*		406.49
226	**Infrastructure Renewal**	*total, years 2005-2025*		0.00
227	**Other ongoing capital**	*total, years 2005-2025*		160.99
228	*Cross check initial capital*			*0.00*

RIDERSHIP BREAKDOWN — Composite (via Mirabel) at 300 kph QT Segment

			Year 2005	Year 2025		
	RIDERSHIP					
301	Ridership within the segment	*millions*	na	na		
302	Ridership between segments	*millions*	na	na		
303	Airport traffic	*millions*	na	na		
304 [A]	**Total potential passengers**	*million*	8.85	14.07		
305	Passengers not served at peak	*million*	(0.09)	(0.14)	1.0%	*of passengers*
306	Allowance for additional passengers	*million*	0.00	0.00	0.0%	*of passengers*
307	**Net passengers**	*million*	8.77	13.93		
	PASSENGER REVENUES					
308	Initial transportation revenue estimate	*$million*	712.69	1,212.47		
309	PST/GST	*$million*	(58.46)	(99.38)	8.2%	*of revenues*
310	Revenue estimate net of taxes	*$million*	654.23	1,113.09		
311	First Class premium	*$million*	0.00	0.00	0.0%	*of revenues*
312	Food/beverage sales	*$million*	0.00	0.00	0.00	*per passenger*
313	Revenues foregone at peak	*$million*	(6.54)	(11.13)	1.0%	*of revenues*
314	**Final Gross Revenue**	*$million*	647.69	1,101.96		
	PASSENGER KILOMETRES					
315	Ridership within segments	*billions*	2.95	4.77		
316	Ridership between segments	*billions*	0.31	0.50		
317	Airport traffic	*billions*	above	above		
318	Total		3.27	5.27		
319	Passenger-km foregone at peak	*billions*	(0.03)	(0.05)	1.0%	*of passenger-km*
320	Allowance for additional passenger-kms	*billions*	0.00	0.00	0.0%	*of passengers-km*
321	**Total passenger kms**	*billions*	3.23	5.22		
322	**Average Length of Haul**	*kms*	369	375		

EMPLOYMENT DATA **Composite (via Mirabel) at 300 kph QT Segment**

		Average Wage	Total Year 2005	Total Year 2025	Quebec Year 2005	Quebec Year 2025
401	Train Crew	57,500	127	171	67	85
402	Dispatchers	50,600	32	32	20	20
403	Managerial/admin/professional	58,324	428	479	223	248
404	Station staff	35,939	55	66	25	30
405	Mechanical trades/skilled	39,402	278	383	132	181
406	Maintenance trades/skilled	36,349	399	425	184	195
407	**Total "skilled"**	46,489	1,318	1,556	650	760
408	OBS Staff	31,453	156	227	78	108
409	Sales Staff	29,007	109	142	55	71
410	Other customer service	29,986	14	21	7	10
411	Support staff	34,206	55	66	41	49
412	Station labour (various)	24,881	165	197	76	90
413	Equipment maintenance unskilled	30,603	20	28	10	14
414	Track maintenance unskilled	30,603	82	87	53	56
415	Cleaners	24,270	209	292	123	163
416	**Total "unskilled"**	27,984	810	1,060	442	561
417	**Total "unallocated"**		0	0	(0)	0
418	**Grand total employment**	39,444	2,128	2,615	1,092	1,321
419	**Ontario Total "skilled"**		668	796		
420	**Ontario Total "unskilled"**		368	498		
421	**Ontario Total "unallocated"**		0	0		
422	**Ontario Grand total employment**		1,037	1,294		
423	**Quebec Total "skilled"**		650	760		
424	**Quebec Total "unskilled"**		442	561		
425	**Quebec Total "unallocated"**		0	0		
426	**Quebec Grand total employment**		1,092	1,321		

01-Aug-94 **HSR STUDY COST DEVELOPMENT**

TOTAL CASHFLOW — Composite (via Mirabel) at 300 kph QT Segment

		1995	1996	1997	1998	1999	2000	2001	2002
501	**[A] RIDERSHIP**	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
502	**ADJUSTED GROSS REVENUE**	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
503	Payments to Travel Agencies	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
504	Payments to Credit Card Companies	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
505	**Revenue Available to HSR Operator**	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	OPERATING EMPLOYMENT								
904	Total employment	0	0	0	0	0	0	0	0
905	"Skilled" employment	0	0	0	0	0	0	0	0
906	"Unskilled" employment	0	0	0	0	0	0	0	0
907	Employment in Ontario	0	0	0	0	0	0	0	0
908	Employment in Quebec	0	0	0	0	0	0	0	0
	OPERATING COSTS								
	Labour								
506	Bare wage bill skilled	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
507	Bare wage bill unskilled	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
508	Payroll taxes	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
509	Provisions for pension plan	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Purchased materials/services								
510	Electricity	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
511	Advertising/promotion	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
512	Infrastructure maintenance services	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
513	Infrastructure materials/supplies	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
514	Rolling stock materials/supplies	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
515	Telecommunications/computer services	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
516	Insurance services/franchise fees etc	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
517	Food/related sundries	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
518	**Unscheduled materials/services**	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
519	**Allowance for contingencies**	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
520	**TOTAL OPERATING COSTS**	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
521	**OPERATING PROFIT**	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
909	**COST REVENUE RATIO**								
522	Operating costs (Ontario)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
523	Operating costs (Quebec)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	CAPITAL COSTS								
524	Total spent in Quebec	0.0	13.9	18.9	78.7	206.9	393.7	597.8	551.4
525	Total spent in Ontario	0.0	15.1	17.7	26.2	101.4	314.6	793.0	836.8
526	Total spent in the rest of Canada	0.0	0.0	0.0	0.2	0.5	7.8	31.8	70.7
527	Total spend in the rest of the World	0.0	1.0	2.2	5.5	41.9	147.8	316.4	292.5
528	Geographical allocation pending	0.0	23.1	23.1	61.5	61.5	153.8	153.8	153.8
529	Residual unallocated to region	0.0	(0.0)	0.0	(0.0)	0.0	0.1	0.2	0.2
530	**Total Capital Costs**	0.0	53.1	62.0	172.1	412.2	1,017.8	1,893.0	1,905.4
531	Total spent on skilled labour	0.0	21.7	28.2	68.3	151.8	308.2	568.8	519.7
532	Total spent on unskilled labour	0.0	0.9	1.1	2.7	22.9	81.0	177.0	156.5
533	Total spent on material	0.0	24.5	24.9	82.2	167.7	433.3	755.5	869.8
534	Total spent on plant	0.0	6.0	7.8	18.9	69.8	195.4	391.6	359.5
535	Residual unallocated to spending category	0.0	(0.0)	0.0	(0.0)	0.0	0.0	0.0	(0.0)
536	**Total Capital Costs**	0.0	53.1	62.0	172.1	412.2	1,017.8	1,893.0	1,905.4
	TOTAL CASH FLOW (excluding revenues)								
537	Total spent in Quebec	0.0	7.1	9.3	42.7	151.9	225.9	305.8	217.6
538	Total spent in Ontario	0.0	14.6	17.1	22.7	97.3	300.1	737.2	753.4
539	Total spent in the rest of Canada	0.0	0.0	0.0	0.1	0.3	7.7	20.3	47.7
540	Total spend in the rest of the World	0.0	0.8	2.2	3.3	39.9	107.3	236.4	205.4
541	Geographical allocation pending	0.0	18.0	28.7	48.0	48.0	120.0	120.0	120.0
542	Residual unallocated to region	0.0	(0.0)	(0.0)	(0.0)	0.0	0.1	0.2	0.2
543	**Total**	0.0	40.5	75.8	116.8	337.3	761.0	1,419.9	1,344.3
910	**NET CASH FLOW**	0.0	(40.5)	(75.8)	(116.8)	(337.3)	(761.0)	(1,419.9)	(1,344.3)

01-Aug-94

HSR STUDY COST DEVELOPMENT

TOTAL CASHFLOW — Composite (via Mirabel) at 300 kph QT Segment

		2003	2004	2005	2006	2007	2008	2009	2010
501	[A] **RIDERSHIP**	1.1	3.3	8.8	9.0	9.2	9.4	9.6	9.8
502	**ADJUSTED GROSS REVENUE**	49.2	166.3	647.7	665.1	683.0	701.4	720.3	739.7
503	Payments to Travel Agencies	2.7	9.1	35.6	36.6	37.6	38.6	39.6	40.7
504	Payments to Credit Card Companies	0.5	1.6	6.1	6.2	6.4	6.6	6.8	6.9
505	**Revenue Available to HSR Operator**	46.1	155.6	606.0	622.3	639.1	656.3	673.9	692.1
	OPERATING EMPLOYMENT								
904	Total employment	360	852	2,128	2,150	2,172	2,195	2,217	2,240
905	"Skilled" employment	263	551	1,318	1,329	1,340	1,351	1,362	1,374
906	"Unskilled" employment	98	301	810	821	832	844	855	866
907	Employment in Ontario	72	102	1,037	1,048	1,060	1,072	1,084	1,096
908	Employment in Quebec	288	750	1,092	1,102	1,112	1,123	1,134	1,144
	OPERATING COSTS								
	Labour								
506	Bare wage bill skilled	12.4	25.1	61.3	61.8	62.3	62.8	63.3	63.9
507	Bare wage bill unskilled	2.7	8.5	22.7	23.0	23.3	23.6	23.9	24.2
508	Payroll taxes	1.2	2.8	7.1	7.2	7.3	7.3	7.4	7.5
509	Provisions for pension plan	1.1	2.5	6.3	6.4	6.4	6.5	6.5	6.6
	Purchased materials/services								
510	Electricity	1.9	3.7	21.7	22.1	22.5	22.8	23.2	23.6
511	Advertising/promotion	5.2	7.7	13.0	13.0	13.0	13.0	13.0	13.0
512	Infrastructure maintenance services	3.4	7.9	15.6	15.6	15.6	14.9	14.2	13.4
513	Infrastructure materials/supplies	0.4	0.8	1.8	1.9	2.0	2.1	2.3	2.4
514	Rolling stock materials/supplies	1.3	3.6	12.5	12.7	13.0	13.2	13.5	13.7
515	Telecommunications/computer services	1.5	4.1	11.7	12.0	12.3	12.6	12.9	13.1
516	Insurance services/franchise fees etc	1.9	4.4	8.5	8.6	8.7	8.8	8.9	9.0
517	Food/related sundries	0.2	0.5	1.5	1.5	1.5	1.6	1.6	1.7
518	**Unscheduled materials/services**	11.0	28.3	40.5	40.5	40.6	40.7	40.8	40.9
519	**Allowance for contingencies**	3.2	7.4	16.4	16.5	16.6	16.7	16.8	16.8
520	**TOTAL OPERATING COSTS**	47.4	107.3	240.5	242.7	245.0	246.4	248.0	249.6
521	**OPERATING PROFIT**	(1.3)	48.4	365.5	379.6	394.1	409.8	426.0	442.5
909	**COST REVENUE RATIO**	0.97	1.45	2.52	2.56	2.61	2.66	2.72	2.77
522	Operating costs (Ontario)	9.5	24.0	121.1	122.2	123.4	124.1	125.0	125.8
523	Operating costs (Quebec)	37.9	83.3	119.4	120.5	121.6	122.3	123.0	123.8
	CAPITAL COSTS								
524	Total spent in Quebec	283.8	136.3	7.5	0.0	0.0	0.0	0.0	26.4
525	Total spent in Ontario	564.6	362.8	19.1	0.0	0.0	0.0	0.0	26.4
526	Total spent in the rest of Canada	63.3	35.0	0.1	0.0	0.0	0.0	0.0	0.0
527	Total spend in the rest of the World	146.7	68.3	3.0	0.0	0.0	0.0	0.0	0.0
528	Geographical allocation pending	184.5	184.5	123.0	107.6	0.0	0.0	60.0	7.2
529	Residual unallocated to region	0.2	0.1	(0.0)	0.0	0.0	0.0	0.0	0.0
530	**Total Capital Costs**	1,243.0	787.0	152.7	107.6	0.0	0.0	60.0	60.0
531	Total spent on skilled labour	289.5	158.9	9.0	0.0	0.0	0.0	0.0	0.0
532	Total spent on unskilled labour	72.2	31.8	1.5	0.0	0.0	0.0	0.0	0.0
533	Total spent on material	696.4	506.5	138.0	107.6	0.0	0.0	60.0	60.0
534	Total spent on plant	184.9	89.7	4.2	0.0	0.0	0.0	0.0	0.0
535	Residual unallocated to spending category	0.0	(0.0)	(0.0)	0.0	0.0	0.0	0.0	0.0
536	**Total Capital Costs**	1,243.0	787.0	152.7	107.6	0.0	0.0	60.0	60.0
	TOTAL CASH FLOW (excluding revenues)								
537	Total spent in Quebec	181.6	164.6	77.7	70.9	71.6	72.1	72.7	93.1
538	Total spent in Ontario	513.8	367.8	137.2	119.3	120.4	121.2	122.0	142.7
539	Total spent in the rest of Canada	40.3	35.0	0.1	0.0	0.0	0.0	0.0	0.0
540	Total spend in the rest of the World	120.8	65.7	3.0	0.0	0.0	0.0	0.0	0.0
541	Geographical allocation pending	144.0	144.0	96.0	84.0	0.0	0.0	60.0	5.7
542	Residual unallocated to region	0.2	0.1	(0.0)	0.0	0.0	0.0	0.0	(0.0)
543	**Total**	1,000.6	777.1	314.1	274.2	192.0	193.3	254.7	241.5
910	**NET CASH FLOW**	(954.5)	(621.5)	291.9	348.1	447.0	463.0	419.3	450.6

01-Aug-94 **HSR STUDY COST DEVELOPMENT**

TOTAL CASHFLOW **Composite (via Mirabel) at 300 kph QT Segment**

		2011	2012	2013	2014	2015	2016	2017	2018
501 [A]	**RIDERSHIP**	10.1	10.3	10.5	10.8	11.0	11.3	11.6	11.8
502	**ADJUSTED GROSS REVENUE**	759.6	780.1	801.1	822.7	844.8	867.6	890.9	914.9
503	Payments to Travel Agencies	41.8	42.9	44.1	45.2	46.5	47.7	49.0	50.3
504	Payments to Credit Card Companies	7.1	7.3	7.5	7.7	7.9	8.1	8.4	8.6
505	**Revenue Available to HSR Operator**	710.7	729.9	749.5	769.7	790.4	811.7	833.6	856.0
	OPERATING EMPLOYMENT								
904	Total employment	2,263	2,287	2,310	2,334	2,358	2,383	2,408	432
905	"Skilled" employment	1,385	1,397	1,408	1,420	1,432	1,444	1,456	1,468
906	"Unskilled" employment	878	890	902	914	927	939	952	965
907	Employment in Ontario	1,108	1,120	1,133	1,146	1,158	1,171	1,184	1,198
908	Employment in Quebec	1,155	1,166	1,177	1,189	1,200	1,212	1,223	1,235
	OPERATING COSTS								
	Labour								
506	Bare wage bill skilled	64.4	64.9	65.5	66.0	66.5	67.1	67.7	68.2
507	Bare wage bill unskilled	24.6	24.9	25.2	25.6	25.9	26.3	26.6	27.0
508	Payroll taxes	7.6	7.6	7.7	7.8	7.9	7.9	8.0	8.1
509	Provisions for pension plan	6.7	6.7	6.8	6.9	6.9	7.0	7.1	7.1
	Purchased materials/services								
510	Electricity	24.0	24.4	24.8	25.2	25.6	26.0	26.5	26.9
511	Advertising/promotion	13.0	13.0	13.0	13.0	13.0	13.0	13.0	13.0
512	Infrastructure maintenance services	12.7	12.0	12.0	12.0	12.0	12.0	12.0	12.0
513	Infrastructure materials/supplies	2.6	2.7	2.9	3.1	3.5	7.0	7.8	8.6
514	Rolling stock materials/supplies	14.0	14.3	14.5	14.8	15.1	15.4	15.7	16.0
515	Telecommunications/computer services	13.4	13.8	14.1	14.4	14.7	15.1	15.4	15.8
516	Insurance services/franchise fees etc	9.1	9.2	9.3	9.4	9.5	9.6	9.7	9.8
517	Food/related sundries	1.7	1.7	1.8	1.8	1.9	1.9	1.9	2.0
518	**Unscheduled materials/services**	41.0	41.1	41.2	41.3	41.4	41.5	41.6	41.7
519	**Allowance for contingencies**	16.9	16.9	17.1	17.2	17.4	17.8	18.0	18.2
520	**TOTAL OPERATING COSTS**	251.2	252.9	255.4	258.0	260.9	267.2	270.5	274.0
521	**OPERATING PROFIT**	459.5	477.0	494.1	511.7	529.5	544.5	563.0	582.0
909	**COST REVENUE RATIO**	2.83	2.89	2.93	2.98	3.03	3.04	3.08	3.12
522	Operating costs (Ontario)	126.7	127.6	128.9	130.3	131.9	135.3	137.1	139.0
523	Operating costs (Quebec)	124.5	125.3	126.5	127.7	129.0	131.9	133.4	135.0
	CAPITAL COSTS								
524	Total spent in Quebec	0.0	0.0	0.0	0.0	27.7	0.0	0.0	0.0
525	Total spent in Ontario	0.0	0.0	0.0	0.0	27.7	0.0	0.0	0.0
526	Total spent in the rest of Canada	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
527	Total spend in the rest of the World	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
528	Geographical allocation pending	14.4	14.4	134.4	14.4	12.9	25.4	133.2	43.2
529	Residual unallocated to region	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
530	**Total Capital Costs**	14.4	14.4	134.4	14.4	68.2	25.4	133.2	43.2
531	Total spent on skilled labour	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
532	Total spent on unskilled labour	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
533	Total spent on material	14.4	14.4	134.4	14.4	68.2	25.4	133.2	43.2
534	Total spent on plant	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
535	Residual unallocated to spending category	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
536	**Total Capital Costs**	14.4	14.4	134.4	14.4	68.2	25.4	133.2	43.2
	TOTAL CASH FLOW (excluding revenues)								
537	Total spent in Quebec	73.8	74.3	75.1	75.8	97.5	78.2	79.1	80.1
538	Total spent in Ontario	123.6	124.5	125.8	127.2	149.5	132.1	133.8	135.6
539	Total spent in the rest of Canada	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
540	Total spend in the rest of the World	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
541	Geographical allocation pending	11.4	11.4	101.4	11.4	9.5	20.8	94.1	34.1
542	Residual unallocated to region	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
543	**Total**	208.8	210.2	302.3	214.4	256.4	231.1	307.1	249.8
910	**NET CASH FLOW**	502.0	519.7	447.3	555.3	534.0	580.6	526.5	606.2

TOTAL CASHFLOW **Composite (via Mirabel) at 300 kph QT Segment**

		2019	2020	2021	2022	2023	2024	2025	2026
501 [A]	**RIDERSHIP**	12.1	12.4	12.7	13.0	13.3	13.6	13.9	14.3
502	**ADJUSTED GROSS REVENUE**	939.6	964.9	990.8	1,017.5	1,044.9	1,073.1	1,102.0	1,131.6
503	Payments to Travel Agencies	51.7	53.1	54.5	56.0	57.5	59.0	60.6	62.2
504	Payments to Credit Card Companies	8.8	9.0	9.3	9.5	9.8	10.1	10.3	10.6
505	**Revenue Available to HSR Operator**	879.1	902.7	927.1	952.0	977.7	1,004.0	1,031.0	1,058.8
	OPERATING EMPLOYMENT								
904	Total employment	2,458	2,483	2,509	2,535	2,562	2,588	2,615	2,643
905	"Skilled" employment	1,480	1,492	1,505	1,517	1,530	1,543	1,556	1,569
906	"Unskilled" employment	978	991	1,004	1,018	1,032	1,045	1,060	1,074
907	Employment in Ontario	1,211	1,224	1,238	1,252	1,266	1,280	1,294	1,309
908	Employment in Quebec	1,247	1,259	1,271	1,283	1,296	1,308	1,321	1,334
	OPERATING COSTS								
	Labour								
506	Bare wage bill skilled	68.8	69.4	69.9	70.5	71.1	71.7	72.3	72.9
507	Bare wage bill unskilled	27.4	27.7	28.1	28.5	28.9	29.2	29.6	30.0
508	Payroll taxes	8.2	8.3	8.3	8.4	8.5	8.6	8.7	8.8
509	Provisions for pension plan	7.2	7.3	7.4	7.4	7.5	7.6	7.6	7.7
	Purchased materials/services								
510	Electricity	27.3	27.8	28.2	28.7	29.2	29.7	30.2	30.7
511	Advertising/promotion	13.0	13.0	13.0	13.0	13.0	13.0	13.0	13.0
512	Infrastructure maintenance services	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0
513	Infrastructure materials/supplies	9.5	10.6	11.7	12.9	14.3	15.9	17.6	19.4
514	Rolling stock materials/supplies	16.3	16.6	16.9	17.3	17.6	17.9	18.3	18.6
515	Telecommunications/computer services	16.1	16.5	16.9	17.2	17.6	18.0	18.5	18.9
516	Insurance services/franchise fees etc	9.9	10.0	10.1	10.2	10.3	10.4	10.5	10.7
517	Food/related sundries	2.0	2.1	2.1	2.2	2.2	2.3	2.3	2.4
518	**Unscheduled materials/services**	41.8	41.9	42.0	42.1	42.2	42.3	42.4	42.5
519	**Allowance for contingencies**	18.4	18.6	18.8	19.0	19.3	19.6	19.8	20.1
520	**TOTAL OPERATING COSTS**	277.6	281.3	285.2	289.3	293.6	298.1	302.8	307.7
521	**OPERATING PROFIT**	601.5	621.4	641.8	662.7	684.1	705.9	728.3	751.1
909	**COST REVENUE RATIO**	3.17	3.21	3.25	3.29	3.33	3.37	3.41	3.44
522	Operating costs (Ontario)	141.0	143.0	145.2	147.4	149.8	152.3	154.9	157.7
523	Operating costs (Quebec)	136.6	138.3	140.1	141.9	143.8	145.8	147.9	150.0
	CAPITAL COSTS								
524	Total spent in Quebec	0.0	26.4	0.0	0.0	0.0	0.0	0.0	0.0
525	Total spent in Ontario	0.0	26.4	0.0	0.0	0.0	0.0	0.0	0.0
526	Total spent in the rest of Canada	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
527	Total spend in the rest of the World	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
528	Geographical allocation pending	43.2	50.8	98.6	11.4	7.2	14.4	14.4	37.1
529	Residual unallocated to region	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
530	**Total Capital Costs**	43.2	103.6	98.6	11.4	7.2	14.4	14.4	37.1
531	Total spent on skilled labour	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
532	Total spent on unskilled labour	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
533	Total spent on material	43.2	103.6	98.6	11.4	7.2	14.4	14.4	37.1
534	Total spent on plant	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
535	Residual unallocated to spending category	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
536	**Total Capital Costs**	43.2	103.6	98.6	11.4	7.2	14.4	14.4	37.1
	TOTAL CASH FLOW (excluding revenues)								
537	Total spent in Quebec	81.1	102.0	83.1	84.2	85.3	86.4	87.6	88.9
538	Total spent in Ontario	137.6	159.5	141.6	143.8	146.1	148.6	151.1	153.8
539	Total spent in the rest of Canada	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
540	Total spend in the rest of the World	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
541	Geographical allocation pending	34.1	39.8	88.4	11.4	5.7	11.4	11.4	28.4
542	Residual unallocated to region	0.0	0.0	0.0	0.0	0.0	(0.0)	0.0	0.0
543	**Total**	252.7	301.2	313.2	239.4	237.1	246.4	250.1	271.1
910	**NET CASH FLOW**	626.4	601.6	613.9	712.7	740.6	757.6	780.9	787.7

26-Jul-94 **HSR STUDY COST DEVELOPMENT**

CAPITAL COST SUMMARY **Composite (via Mirabel) at 300 kph QT Segment**

		1995	1996	1997	1998	1999	2000	2001	2002
201	Right-of-Way	0.00	0.83	0.83	20.58	75.39	93.33	51.00	7.36
202	Earthworks/subgrade	0.00	12.77	12.18	32.13	127.89	314.68	496.82	380.26
203	Bridges	0.00	3.74	3.61	7.05	24.81	76.28	220.65	189.14
204	Grade separations	0.00	7.38	6.97	17.56	60.56	174.81	398.66	319.84
205	Other accommodations	0.00	0.70	0.69	1.11	7.80	34.40	53.03	17.47
206	Track	0.00	0.00	0.97	6.27	12.57	32.65	120.70	255.30
207	Power distribution system	0.00	0.00	0.93	6.01	12.34	23.55	87.79	184.31
208	Stations	0.00	3.06	3.06	1.53	1.05	2.64	25.12	53.59
209	People movers (included in stations)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
210	Signals	0.00	0.69	5.37	10.49	16.40	61.64	136.26	130.42
211	Communications	0.00	0.31	2.36	4.62	7.26	27.20	59.95	57.43
212	Equipment maintenance facilities	0.00	0.00	0.00	0.00	0.00	16.88	50.64	57.10
213	Infrastructure maintenance facilities	0.00	0.00	0.00	0.00	0.00	0.00	13.72	29.47
214	Information/ticketing systems	0.00	0.00	0.00	0.00	0.00	0.00	2.61	18.09
215	Rolling stock	0.00	23.06	23.06	61.50	61.50	153.75	153.75	153.75
216	Commissioning	0.00	0.00	0.00	0.00	0.00	0.00	0.00	14.80
217	Administration allowance	0.00	0.57	1.92	3.28	4.63	5.98	11.68	19.35
218	Startup and training	0.00	0.00	0.00	0.00	0.00	0.00	10.61	17.74
219	**TOTAL INITIAL CAPITAL COSTS**	0.00	53.12	61.95	172.13	412.19	1,017.78	1,892.99	1,905.41
220	**Additional fleet requirements**								
221									
222									
223									
224		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
225	**Rolling Stock Overhauls**	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
226	**Infrastructure Renewal**	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
227	**Other ongoing capital**	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
228	*Cross check initial capital*								

	26-Jul-94	HSR STUDY COST DEVELOPMENT							

CAPITAL COST SUMMARY

Composite (via Mirabel) at 300 kph QT Segment

		2003	*2004*	*2005*	*2006*	*2007*	*2008*	*2009*	*2010*
201	Right-of-Way	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
202	Earthworks/subgrade	104.55	0.00	0.00	0.00	0.00	0.00	0.00	0.00
203	Bridges	59.08	0.00	0.00	0.00	0.00	0.00	0.00	0.00
204	Grade separations	80.81	0.00	0.00	0.00	0.00	0.00	0.00	0.00
205	Other accommodations	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
206	Track	244.54	126.54	4.69	0.00	0.00	0.00	0.00	0.00
207	Power distribution system	209.08	137.41	[illegible].53	0.00	0.00	0.00	0.00	0.00
208	Stations	108.92	162.30	[illegible].00	0.00	0.00	0.00	0.00	0.00
209	People movers (included in stations)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
210	Signals	85.20	39.66	0.00	0.00	0.00	0.00	0.00	0.00
211	Communications	37.64	17.60	0.00	0.00	0.00	0.00	0.00	0.00
212	Equipment maintenance facilities	40.22	16.88	0.00	0.00	0.00	0.00	0.00	0.00
213	Infrastructure maintenance facilities	17.66	37.34	3.94	0.00	0.00	0.00	0.00	0.00
214	Information/ticketing systems	7.63	6.54	1.31	0.00	0.00	0.00	0.00	0.00
215	Rolling stock	184.50	184.50	123.00	107.62	0.00	0.00	0.00	0.00
216	Commissioning	25.87	40.33	3.19	0.00	0.00	0.00	0.00	0.00
217	Administration allowance	16.97	10.88	0.00	0.00	0.00	0.00	0.00	0.00
218	Startup and training	20.37	6.97	0.00	0.00	0.00	0.00	0.00	0.00
219	**TOTAL INITIAL CAPITAL COSTS**	1,243.03	786.95	152.66	107.62	0.00	0.00	0.00	0.00
220	**Additional fleet requirements**								
221									
222									
223									
224		0.00	0.00	0.00	0.00	0.00	0.00	60.00	0.00
225	**Rolling Stock Overhauls**	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.20
226	**Infrastructure Renewal**	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
227	**Other ongoing capital**	0.00	0.00	0.00	0.00	0.00	0.00	0.00	52.82
228	*Cross check initial capital*								

Spreadsheet	**W:\207-CHAS\COSTING\35QW-1.WK3**			
Today's date	**27-Jul-94**			
Proessing time	**14:53**			
Data export file	**X-35QW-1.WK1**			
Train speed	**350 kph**			
Train route	**Composite (via Mirabel) at 350 kph**			
Demand data	**QW Corridor**			
Initial demand file	**\350QW05\350QW25 [as supplied by IBI]**			
Train data	**Final off NEW-OD.WK1**			
Trip Time	**COMPOSITE VIA MIRABEL**			
Capital file	**C:\work\207-chas\canarail\extract.wk3**			
Capital name	**MONTREAL - TORONTO CORRIDOR 300+, composite route EX .. 3c00-**			
	MONTREAL - QUEBEC 300+, composite route EX .. 3c00-			
	WINDSOR - TORONTO 300+, composite route EX .. 3c00-			
Cap allocation	**SPLIT-3B.WK3**			
Include SWO	**Yes**			
Include MQ	**Yes**			
MOT to Pearson	**Yes**			
Con Air Included	**Yes**			
via Mirabel	**Yes**			
via Dorval	**No**			
Delay Cap Input	**3cm-xx-2**	**1** *MOT*	**100%**	*DT*
	3cm-xx-2	**1** *MQ*	**100%**	*DT*
	3cm-xx-2	**1** *SWO*	**61%**	*DT*
		1 *SPLIT*		

OPERATIONS/REVENUES/COSTS Composite (via Mirabel) at 350 kph QW Corridor

			Year 2005	*Year 2025*		
	RIDERSHIP					
1 [A]	Adjusted passengers (non-duplicated)	millions	12.5	19.9		
2	Average length of haul	kms	344	350		
3	Passenger kilometres	billion	4.3	7.0		
	OPERATION STATISTICS					
4	Route length	kilometres	1,234	1,234		
5	Train trips (one-way)	thousands	21.4	31.5		
6	Trainset kms	millions	17.5	25.4		
7	Seat kms	billions	6.3	9.1	*358 per trainset*	
8	Trainsets in active fleet	units	50	66		
9	Average trainset utilization	k-km/year	350	385		
10	Average load factor		69%	76%		
11	Total energy consumption	gigaW-hrs	541	783		
12	Total employment		2,749	3,375		
	PASSENGER REVENUES					
13	Adjustusted revenues	$million	881.2	1,453.4		
14	Agency commissions	$million	(48.5)	(79.9)	*5.5% of gross revenue*	
15	Credit card discount	$million	(8.3)	(13.6)	*0.9% of gross revenue*	
16	Net Revenue	$million	824.5	1,359.8		
	OPERATIONS AND MAINTENANCE COSTS				***[Total employment]***	
17	Train operations	$million	52.4	70.9	228	287
18	Customer services	$million	81.5	101.7	809	1,033
19	Equipment maintenance	$million	48.2	67.7	732	1,008
20	Infrastructure maintenance	$million	75.1	91.7	787	833
21	Executive/administration	$million	24.2	25.7	219	244
22	Insurance/taxes/other	$million	26.1	29.5	0	0
23	Contingency	$million	21.7	24.8	–	–
24	**Total O&M Costs**	$million	321.4	403.8	2,749	3,375
25	**OPERATING PROFIT**		503.2	956.0		
26	**COST/REVENUE RATIOS**					
27	Net revenue : O&M costs Ratio		2.57	3.37		
28	O&M cost per trainset-km	dollars	18.35	15.89		
29	O&M cost per seat-km	cents	5.13	4.44		
30	O&M cost per passenger	dollars	25.69	20.29		
31	O&M cost per passenger-km	cents	7.48	5.80		
32	Net revenue per passenger	dollars	65.91	68.33		
33	Net revenue per passenger km	cents	19.19	19.53		
	CAPITAL COSTS					
34	Startup/admin/training/other "soft" costs	$million	268.1			
35	Construction of track	$million	7,691.5			
36	Construction of stations	$million	435.7			
37	Construction of maintenance facilities	$million	330.6			
38	Acqusition of rolling stock	$million	1,581.0			
39	**Total Initial Capital Costs**	$million	10,307.0	*over the period 1995 to 2006*		
40	**Total Ongoing Capital Costs**	$million	1,176.8	*over the period 2007 to 2025*		
41	Initial capital per route-km (excluding RS)	$million	7.07			

		2005 Que	*2005 Ont*	*2025 Que*	2025 Ont
901	Net Revenues	297.55	526.96	489.25	870.56
902	O and M Costs	128.80	192.55	160.50	243.34
903	Employment	1,136	1,612	1,388	1,987

TOTAL CASHFLOW — Composite (via Mirabel) at 350 kph QW Corridor

		Total Year 2005	Total Year 2025	Quebec Year 2005	Quebec Year 2025
501	[A] **RIDERSHIP**	12.5	19.9	*NA*	*NA*
502	**ADJUSTED GROSS REVENUE**	881.2	1,453.4	318.0	522.9
503	Payments to Travel Agencies	48.5	79.9	17.5	28.8
504	Payments to Credit Card Companies	8.3	13.6	3.0	4.9
505	**Revenue Available to HSR Operator**	824.5	1,359.8	297.6	489.2
	OPERATING EMPLOYMENT				
904	Total employment	2,749	3,375	1,136	1,388
905	"Skilled" employment	1,677	1,974	688	814
906	"Unskilled" employment	1,072	1,401	448	574
907	Employment in Ontario	1,612	1,987		
908	Employment in Quebec	1,136	1,388	1,136	1,388
	OPERATING COSTS				
	Labour				
506	Bare wage bill skilled	77.5	91.2	32.2	37.9
507	Bare wage bill unskilled	29.8	38.9	12.6	16.1
508	Payroll taxes	9.1	11.1	3.8	4.6
509	Provisions for pension plan	8.0	9.8	3.4	4.1
	Purchased materials/services				
510	Electricity	36.5	50.8	10.5	14.4
511	Advertising/promotion	17.6	17.6	6.5	6.5
512	Infrastructure maintenance services	23.6	18.2	7.5	7.9
513	Infrastructure materials/supplies	2.2	22.0	0.8	8.0
514	Rolling stock materials/supplies	17.2	25.1	8.6	12.5
515	Telecommunications/computer services	16.7	26.4	6.0	9.5
516	Insurance services/franchise fees etc	11.5	14.7	4.2	5.5
517	Food/related sundries	2.2	3.4	0.8	1.3
518	**Unscheduled materials/services**	47.7	50.0	23.2	22.0
519	**Allowance for contingencies**	21.7	24.8	8.7	10.3
520	**TOTAL OPERATING COSTS**	321.4	403.8	128.8	160.5
521	**OPERATING PROFIT**	503.2	956.0	*NA*	*NA*
909	**COST REVENUE RATIO**	2.57	3.37	*NA*	*NA*
522	Operating costs (Ontario)	192.6	243.3		
523	Operating costs (Quebec)	128.8	160.5		

	CAPITAL COSTS	**Initial**	**Ongoing**	**Total**
524	Total spent in Quebec	2,468.54	105.60	2,574.14
525	Total spent in Ontario	4,647.29	105.60	4,752.88
526	Total spent in the rest of Canada	275.90	0.00	275.90
527	Total spend in the rest of the World	1,333.46	0.00	1,333.46
528	Geographical allocation pending	1,581.00	933.80	2,514.80
529	Residual unallocated to region	0.77	0.00	0.77
530	**Total Capital Costs**	10,306.96	1,144.99	11,451.95
531	Total spent on skilled labour	2,784.24	0.00	2,784.24
532	Total spent on unskilled labour	724.93	0.00	724.93
533	Total spent on material	5,067.81	1,144.99	6,212.80
534	Total spent on plant	1,729.97	0.00	1,729.97
535	Residual unallocated to spending category	0.01	0.00	0.01
536	**Total Capital Costs**	10,306.96	1,144.99	11,451.95

	TOTAL CASH FLOW (excluding revenues)	
537	Total spent in Quebec	*[This line defined only for year-by-year tables]*
538	Total spent in Ontario	*[This line defined only for year-by-year tables]*
539	Total spent in the rest of Canada	*[This line defined only for year-by-year tables]*
540	Total spend in the rest of the World	*[This line defined only for year-by-year tables]*
541	Geographical allocation pending	*[This line defined only for year-by-year tables]*
542	Residual unallocated to region	*[This line defined only for year-by-year tables]*
543	**Total**	*[This line defined only for year-by-year tables]*
910	**NET CASH FLOW**	*[This line defined only for year-by-year tables]*

0

OPERATIONS COST BREAKDOWN Composite (via Mirabel) at 350 kph QW Corridor

		Cont Allow	*Cost Estimate ($ million)*		*Employment Estimate*		*Quebec Share*
			2005	**2025**	**2005**	**2025**	*2005*
	TRAIN OPERATIONS						
101	Train crew	5.0%	11.49	15.50	159	215	41%
102	Power - demand charges	2.5%	15.75	20.70	--	--	30%
103	Power - energy consumption	2.5%	20.75	30.09	--	--	28%
104	Control centre	5.0%	2.38	2.38	40	40	50%
105	Transportation administration/supervision	5.0%	1.98	2.24	29	33	49%
106	**Subtotal**		52.3[illegible]	70.91	228	287	33%
	CUSTOMER SERVICES						
107	On-board service staff	10.0%	7.09	10.32	165	241	43%
108	On-board service supplies	5.0%	2.15	3.42	--	--	39%
109	On-board services ground support	10.0%	1.30	1.89	33	48	43%
110	Food/beverage for sale	0.0%	0.00	0.00	--	--	--
111	Station operations	10.0%	21.43	23.55	306	368	30%
112	ATM/Ticketing/Reservations transactions	5.0%	16.73	26.37	--	--	36%
113	Telephone/Counter Sales	5.0%	5.62	7.31	158	206	35%
114	Advertising and promotion expenses	5.0%	17.62	17.62	--	--	37%
115	Customer service administration/supervision	5.0%	9.60	11.25	146	169	49%
116	**Subtotal**		81.54	101.74	809	1,033	37%
	EQUIPMENT MAINTENANCE						
117	Routine maintenance - labour	5.0%	16.01	22.59	318	449	50%
118	Routine maintenance - material	5.0%	17.21	25.05	--	--	50%
119	Major maintenance [included in capital]	--	--	--	--	--	--
120	Cleaning	5.0%	10.51	14.36	342	469	42%
121	Maintenance administration/supervision	5.0%	4.51	5.74	72	90	50%
122	**Subtotal**		48.22	67.74	732	1,008	48%
	INFRASTRUCTURE MAINTENANCE						
123	Routine maintenance	15.0%	38.72	40.50	634	675	37%
124	Purchased services	15.0%	23.58	18.22	--	--	37%
125	Materials	10.0%	2.20	21.99	--	--	36%
126	Programmed replacement [occurs after 2025]	--	--	--	--	--	
127	Maintenance administration/supervision	5.0%	10.62	10.97	153	158	35%
128	**Subtotal**		75.13	91.68	787	833	37%
	EXECUTIVE/ADMINISTRATION						
129	Labour and related	5.0%	13.27	14.76	193	214	49%
130	Other	5.0%	10.90	10.90	--	--	50%
131	**Subtotal**		24.17	25.66	193	214	49%
	INSURANCE/TAXES/OTHER						
132	Insurance/claims	0.0%	11.50	14.67	--	--	37%
133	Property taxes	10.0%	6.75	6.65	--	--	83%
134	Franchise fees	10.0%	*nil*	nil	--	--	
135	**Subtotal**		18.25	21.32	0	0	54%
136	**CONTINGENCY**	7.2%	21.69	24.77	--	--	40%
137	**TOTAL**		321.35	403.83	2,749	3,375	40%
138	**Total: Quebec component**		128.80	160.50	1,136	1,388	
139	**Total: Ontario component**		192.55	243.34	1,612	1,987	
140	**[Major maintenance included in capital]**		0.00	17.81			
141	Routine equipment maintenance per trainset km	dollars	1.90	1.87			
142	Infrastructure maintenance per route km	$thousand	52.26	65.39			
143	Executive/administration as a percent of total		8.1%	6.8%			
144	Station/ticketing costs per passenger	Dollars	3.46	2.85			
145							
146							

CAPITAL COST SUMMARY — Composite (via Mirabel) at 350 kph QW Corridor

		Professional Services	Contin-gency	Total
201	Right-of-Way	42.80	47.67	488.65
202	Earthworks/subgrade	334.41	203.04	1,891.05
203	Bridges	100.90	55.70	713.66
204	Grade separations	227.98	180.59	1,612.48
205	Other accommodations	22.69	31.80	160.47
206	Track	134.58	45.76	1,062.11
207	Power distribution system	127.52	101.01	901.94
208	Stations	54.52	30.32	388.44
209	People movers (included in stations)	0.00	0.00	0.00
210	Signals	97.51	64.19	589.65
211	Communications	44.90	29.56	271.53
212	Equipment maintenance facilities	14.84	22.26	197.13
213	Infrastructure maintenance facilities	0.00	0.00	133.47
214	Information/ticketing systems	0.00	0.00	47.28
215	Rolling stock	117.11	130.54	1,581.00
216	Commissioning	106.66	0.00	106.66
217	Administration allowance	0.00	0.00	93.23
218	Startup and training	0.00	0.00	68.28
219	**TOTAL INITIAL CAPITAL COSTS**	1,426.82	942.43	10,307.04
220	**Additional fleet requirements**	*year 2009*	4 units	124.00
221		*year 2013*	4 units	124.00
222		*year 2017*	4 units	124.00
223		*year 2021*	3 units	93.00
224		*Total*	15 units	465.00
225	**Rolling Stock Overhauls**	*total, years 2005-2025*		509.34
226	**Infrastructure Renewal**	*total, years 2005-2025*		0.00
227	**Other ongoing capital**	*total, years 2005-2025*		211.19
228	*Cross check initial capital*			*(0.00)*

RIDERSHIP BREAKDOWN **Composite (via Mirabel) at 350 kph QW Corridor**

			Year 2005	Year 2025		
	RIDERSHIP					
301	Ridership within the segment	*millions*	na	na		
302	Ridership between segments	*millions*	na	na		
303	Airport traffic	*millions*	na	na		
304 [A]	**Total potential passengers**	*million*	12.64	20.10		
305	Passengers not served at peak	*million*	(0.13)	(0.20)	1.0%	*of passengers*
306	Allowance for additional passengers	*million*	0.00	0.00	0.0%	*of passengers*
307	**Net passengers**	*million*	12.51	19.90		
	PASSENGER REVENUES					
308	Initial transportation revenue estimate	*$million*	965.92	1,592.96		
309	PST/GST	*$million*	(75.78)	(124.91)	7.8%	*of revenues*
310	Revenue estimate net of taxes	*$million*	890.15	1,468.05		
311	First Class premium	*$million*	0.00	0.00	0.0%	*of revenues*
312	Food/beverage sales	*$million*	0.00	0.00	0.00	*per passenger*
313	Revenues foregone at peak	*$million*	(8.90)	(14.68)	1.0%	*of revenues*
314	**Final Gross Revenue**	*$million*	881.25	1,453.37		
	PASSENGER KILOMETRES					
315	Ridership within segments	*billions*	3.81	6.19		
316	Ridership between segments	*billions*	0.53	0.84		
317	Airport traffic	*billions*	above	above		
318	Total		4.34	7.03		
319	Passenger-km foregone at peak	*billions*	(0.04)	(0.07)	1.0%	*of passenger-km*
320	Allowance for additional passenger-kms	*billions*	0.00	0.00	0.0%	*of passengers-km*
321	**Total passenger kms**	*billions*	4.30	6.96		
322	**Average Length of Haul**	*kms*	344	350		

EMPLOYMENT DATA

Composite (via Mirabel) at 350 kph QW Corridor

		Average Wage	Total Year 2005	Total Year 2025	Quebec Year 2005	Quebec Year 2025
401	Train Crew	57,500	159	215	66	85
402	Dispatchers	50,600	40	40	20	20
403	Managerial/admin/professional	58,324	529	587	227	255
404	Station staff	35,939	77	92	26	31
405	Mechanical trades/skilled	39,402	346	478	166	228
406	Maintenance trades/skilled	36,349	527	562	184	195
407	**Total "skilled"**	46,235	1,677	1,974	688	814
408	OBS Staff	31,453	182	265	77	108
409	Sales Staff	29,007	158	206	56	73
410	Other customer service	29,986	17	24	7	10
411	Support staff	34,206	64	77	41	50
412	Station labour (various)	24,881	230	276	77	93
413	Equipment maintenance unskilled	30,603	25	36	13	18
414	Track maintenance unskilled	30,603	108	113	53	56
415	Cleaners	24,270	289	404	124	166
416	**Total "unskilled"**	27,784	1,072	1,401	448	574
417	**Total "unallocated"**		0	0	0	0
418	**Grand total employment**	39,038	2,749	3,375	1,136	1,388
419	**Ontario Total "skilled"**		989	1,160		
420	**Ontario Total "unskilled"**		624	827		
421	**Ontario Total "unallocated"**		0	0		
422	**Ontario Grand total employment**		1,612	1,987		
423	**Quebec Total "skilled"**		688	814		
424	**Quebec Total "unskilled"**		448	574		
425	**Quebec Total "unallocated"**		0	0		
426	**Quebec Grand total employment**		1,136	1,388		

TOTAL CASHFLOW — Composite (via Mirabel) at 350 kph QW Corridor

No.	Item	1995	1996	1997	1998	1999	2000	2001	2002
501 [A]	**RIDERSHIP**	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
502	**ADJUSTED GROSS REVENUE**	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
503	Payments to Travel Agencies	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
504	Payments to Credit Card Companies	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
505	**Revenue Available to HSR Operator**	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	OPERATING EMPLOYMENT								
904	Total employment	0	0	0	0	0	0	0	0
905	"Skilled" employment	0	0	0	0	0	0	0	0
906	"Unskilled" employment	0	0	0	0	0	0	0	0
907	Employment in Ontario	0	0	0	0	0	0	0	0
908	Employment in Quebec	0	0	0	0	0	0	0	0
	OPERATING COSTS								
	Labour								
506	Bare wage bill skilled	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
507	Bare wage bill unskilled	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
508	Payroll taxes	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
509	Provisions for pension plan	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Purchased materials/services								
510	Electricity	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
511	Advertising/promotion	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
512	Infrastructure maintenance services	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
513	Infrastructure materials/supplies	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
514	Rolling stock materials/supplies	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
515	Telecommunications/computer services	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
516	Insurance services/franchise fees etc	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
517	Food/related sundries	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
518	**Unscheduled materials/services**	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
519	**Allowance for contingencies**	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
520	**TOTAL OPERATING COSTS**	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
521	**OPERATING PROFIT**	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
909	**COST REVENUE RATIO**								
522	Operating costs (Ontario)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
523	Operating costs (Quebec)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	CAPITAL COSTS								
524	Total spent in Quebec	0.0	14.4	19.3	79.3	210.1	400.0	615.6	590.9
525	Total spent in Ontario	0.0	22.4	25.3	36.2	183.1	525.7	1,208.3	1,231.3
526	Total spent in the rest of Canada	0.0	0.0	0.0	0.2	0.6	7.9	32.0	87.3
527	Total spend in the rest of the World	0.0	1.3	2.5	6.2	43.9	169.5	405.8	393.5
528	Geographical allocation pending	0.0	29.6	29.6	79.1	79.1	197.6	197.6	197.6
529	Residual unallocated to region	0.0	(0.0)	(0.0)	0.0	0.0	0.1	0.2	0.2
530	**Total Capital Costs**	0.0	67.7	76.8	200.9	516.7	1,300.8	2,459.5	2,500.8
531	Total spent on skilled labour	0.0	27.5	34.1	76.4	183.0	382.3	746.9	695.1
532	Total spent on unskilled labour	0.0	1.1	1.3	3.1	24.1	94.0	234.4	216.4
533	Total spent on material	0.0	31.5	31.9	100.3	231.1	593.5	972.6	1,107.1
534	Total spent on plant	0.0	7.6	9.4	21.1	78.5	231.0	505.7	482.3
535	Residual unallocated to spending category	0.0	(0.0)	(0.0)	0.0	0.0	0.0	0.0	0.0
536	**Total Capital Costs**	0.0	67.7	76.8	200.9	516.7	1,300.8	2,459.5	2,500.8
	TOTAL CASH FLOW (excluding revenues)								
537	Total spent in Quebec	0.0	7.1	9.3	42.7	151.9	225.9	305.9	217.8
538	Total spent in Ontario	0.0	14.6	17.1	22.7	97.3	300.1	737.3	753.7
539	Total spent in the rest of Canada	0.0	0.0	0.0	0.1	0.3	7.7	20.3	47.7
540	Total spend in the rest of the World	0.0	0.8	2.2	3.3	39.9	107.3	236.4	205.4
541	Geographical allocation pending	0.0	18.6	29.6	49.6	49.6	124.0	124.0	124.0
542	Residual unallocated to region	0.0	(0.0)	(0.0)	(0.0)	0.0	0.1	0.2	0.2
543	**Total**	0.0	41.1	76.8	118.4	338.9	765.0	1,424.1	1,348.8
910	**NET CASH FLOW**	0.0	(41.1)	(76.8)	(118.4)	(338.9)	(765.0)	(1,424.1)	(1,348.8)

TOTAL CASHFLOW

Composite (via Mirabel) at 350 kph QW Corridor

		2003	2004	2005	2006	2007	2008	2009	2010
501	**[A] RIDERSHIP**	1.2	3.4	12.5	12.8	13.1	13.4	13.7	14.0
502	**ADJUSTED GROSS REVENUE**	52.6	178.1	881.2	903.5	926.4	949.9	973.9	998.6
503	Payments to Travel Agencies	2.9	9.8	48.5	49.7	51.0	52.2	53.6	54.9
504	Payments to Credit Card Companies	0.5	1.7	8.3	8.5	8.7	8.9	9.1	9.4
505	**Revenue Available to HSR Operator**	49.2	166.7	824.5	845.4	866.8	888.7	911.2	934.3
	OPERATING EMPLOYMENT								
904	Total employment	357	852	2,749	2,7[illegible]7	2,805	2,834	2,863	2,892
905	"Skilled" employment	262	552	1,677	1,690	1,704	1,718	1,732	1,746
906	"Unskilled" employment	95	300	1,072	1,087	1,101	1,116	1,131	1,146
907	Employment in Ontario	71	102	1,612	1,629	1,646	1,664	1,681	1,699
908	Employment in Quebec	286	750	1,136	1,148	1,159	1,170	1,182	1,194
	OPERATING COSTS								
	Labour								
506	Bare wage bill skilled	12.3	25.1	77.5	78.1	78.8	79.4	80.1	80.7
507	Bare wage bill unskilled	2.6	8.4	29.8	30.2	30.6	31.0	31.4	31.8
508	Payroll taxes	1.2	2.8	9.1	9.2	9.3	9.4	9.5	9.6
509	Provisions for pension plan	1.1	2.5	8.0	8.1	8.2	8.3	8.4	8.4
	Purchased materials/services								
510	Electricity	2.4	4.8	36.5	37.1	37.7	38.4	39.0	39.6
511	Advertising/promotion	6.0	8.7	17.6	17.6	17.6	17.6	17.6	17.6
512	Infrastructure maintenance services	3.9	9.0	23.6	23.6	23.6	22.5	21.4	20.4
513	Infrastructure materials/supplies	0.4	0.8	2.2	2.3	2.5	2.7	2.8	3.0
514	Rolling stock materials/supplies	1.4	3.9	17.2	17.5	17.9	18.2	18.5	18.9
515	Telecommunications/computer services	1.5	4.2	16.7	17.1	17.5	17.9	18.3	18.7
516	Insurance services/franchise fees etc	1.9	4.4	11.5	11.6	11.8	11.9	12.1	12.2
517	Food/related sundries	0.2	0.5	2.2	2.2	2.3	2.3	2.4	2.4
518	**Unscheduled materials/services**	10.8	28.8	47.7	47.8	47.9	48.0	48.1	48.2
519	**Allowance for contingencies**	3.2	7.6	21.7	21.8	21.9	21.9	21.8	21.8
520	**TOTAL OPERATING COSTS**	49.0	111.4	321.4	324.4	327.4	329.3	331.2	333.2
521	**OPERATING PROFIT**	0.2	55.2	503.2	521.0	539.4	559.4	580.0	601.0
909	**COST REVENUE RATIO**	1.00	1.50	2.57	2.61	2.65	2.70	2.75	2.80
522	Operating costs (Ontario)	9.8	24.9	192.6	194.3	196.1	197.2	198.3	199.5
523	Operating costs (Quebec)	39.2	86.5	128.8	130.0	131.3	132.1	132.9	133.8
	CAPITAL COSTS								
524	Total spent in Quebec	346.1	182.3	10.5	0.0	0.0	0.0	0.0	34.6
525	Total spent in Ontario	849.3	527.8	37.8	0.0	0.0	0.0	0.0	34.6
526	Total spent in the rest of Canada	89.7	58.0	0.1	0.0	0.0	0.0	0.0	0.0
527	Total spend in the rest of the World	210.7	95.2	5.0	0.0	0.0	0.0	0.0	0.0
528	Geographical allocation pending	237.2	237.2	158.1	138.3	0.0	0.0	124.0	8.9
529	Residual unallocated to region	0.2	0.1	(0.0)	0.0	0.0	0.0	0.0	0.0
530	**Total Capital Costs**	1,733.2	1,100.5	211.6	138.3	0.0	0.0	124.0	78.1
531	Total spent on skilled labour	404.2	220.1	14.6	0.0	0.0	0.0	0.0	0.0
532	Total spent on unskilled labour	105.4	42.6	2.4	0.0	0.0	0.0	0.0	0.0
533	Total spent on material	961.2	712.7	187.6	138.3	0.0	0.0	124.0	78.1
534	Total spent on plant	262.4	125.1	6.9	0.0	0.0	0.0	0.0	0.0
535	Residual unallocated to spending category	0.0	0.0	(0.0)	0.0	0.0	0.0	0.0	0.0
536	**Total Capital Costs**	1,733.2	1,100.5	211.6	138.3	0.0	0.0	124.0	78.1
	TOTAL CASH FLOW (excluding revenues)								
537	Total spent in Quebec	183.1	166.2	81.2	74.5	75.2	75.8	76.4	96.9
538	Total spent in Ontario	514.4	368.6	148.2	130.4	131.7	132.6	133.6	154.5
539	Total spent in the rest of Canada	40.3	35.0	0.1	0.0	0.0	0.0	0.0	0.0
540	Total spend in the rest of the World	120.8	65.7	3.0	0.0	0.0	0.0	0.0	0.0
541	Geographical allocation pending	148.8	148.8	99.2	86.8	0.0	0.0	93.0	5.7
542	Residual unallocated to region	0.2	0.1	(0.0)	0.0	0.0	0.0	0.0	0.0
543	**Total**	1,007.4	784.2	331.7	291.7	207.0	208.5	303.0	257.1
910	**NET CASH FLOW**	(958.3)	(617.6)	492.8	553.7	659.8	680.2	608.2	677.2

TOTAL CASHFLOW **Composite (via Mirabel) at 350 kph QW Corridor**

		2011	2012	2013	2014	2015	2016	2017	2018
501	[A] **RIDERSHIP**	14.4	14.7	15.1	15.4	15.8	16.1	16.5	16.9
502	**ADJUSTED GROSS REVENUE**	1,023.9	1,049.8	1,076.4	1,103.6	1,131.6	1,160.2	1,189.6	1,219.8
503	Payments to Travel Agencies	56.3	57.7	59.2	60.7	62.2	63.8	65.4	67.1
504	Payments to Credit Card Companies	9.6	9.8	10.1	10.3	10.6	10.9	11.2	11.4
505	**Revenue Available to HSR Operator**	957.9	982.2	1,007.1	1,032.6	1,058.7	1,085.6	1,113.1	1,141.3
	OPERATING EMPLOYMENT								
904	Total employment	2,922	2,952	2,983	3,013	3,044	3,076	3,108	3,140
905	"Skilled" employment	1,760	1,775	1,789	1,804	1,819	1,834	1,849	1,864
906	"Unskilled" employment	1,162	1,177	1,193	1,209	1,226	1,242	1,259	1,276
907	Employment in Ontario	1,717	1,735	1,753	1,771	1,790	1,809	1,828	1,847
908	Employment in Quebec	1,206	1,218	1,230	1,242	1,255	1,267	1,280	1,293
	OPERATING COSTS								
	Labour								
506	Bare wage bill skilled	81.4	82.0	82.7	83.4	84.1	84.7	85.4	86.1
507	Bare wage bill unskilled	32.3	32.7	33.1	33.6	34.0	34.5	35.0	35.4
508	Payroll taxes	9.7	9.8	9.9	10.0	10.1	10.2	10.3	10.4
509	Provisions for pension plan	8.5	8.6	8.7	8.8	8.9	8.9	9.0	9.1
	Purchased materials/services								
510	Electricity	40.3	41.0	41.7	42.4	43.1	43.8	44.5	45.2
511	Advertising/promotion	17.6	17.6	17.6	17.6	17.6	17.6	17.6	17.6
512	Infrastructure maintenance services	19.3	18.2	18.2	18.2	18.2	18.2	18.2	18.2
513	Infrastructure materials/supplies	3.2	3.4	3.6	3.9	4.4	8.8	9.7	10.8
514	Rolling stock materials/supplies	19.3	19.6	20.0	20.4	20.8	21.1	21.5	22.0
515	Telecommunications/computer services	19.2	19.6	20.1	20.5	21.0	21.5	22.0	22.5
516	Insurance services/franchise fees etc	12.4	12.5	12.7	12.8	13.0	13.1	13.3	13.5
517	Food/related sundries	2.5	2.5	2.6	2.7	2.7	2.8	2.8	2.9
518	**Unscheduled materials/services**	48.4	48.5	48.6	48.7	48.8	48.9	49.0	49.2
519	**Allowance for contingencies**	21.8	21.8	21.9	22.0	22.2	22.7	22.8	23.0
520	**TOTAL OPERATING COSTS**	335.3	337.4	340.9	344.4	348.3	356.5	360.9	365.5
521	**OPERATING PROFIT**	622.6	644.7	666.2	688.2	710.5	729.1	752.1	775.7
909	**COST REVENUE RATIO**	2.86	2.91	2.95	3.00	3.04	3.05	3.08	3.12
522	Operating costs (Ontario)	200.7	201.9	204.0	206.1	208.5	213.6	216.4	219.2
523	Operating costs (Quebec)	134.6	135.5	136.9	138.3	139.8	142.8	144.5	146.3
	CAPITAL COSTS								
524	Total spent in Quebec	0.0	0.0	0.0	0.0	36.4	0.0	0.0	0.0
525	Total spent in Ontario	0.0	0.0	0.0	0.0	36.4	0.0	0.0	0.0
526	Total spent in the rest of Canada	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
527	Total spend in the rest of the World	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
528	Geographical allocation pending	17.8	17.8	141.8	17.8	16.5	34.3	177.4	53.4
529	Residual unallocated to region	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
530	**Total Capital Costs**	17.8	17.8	141.8	17.8	89.4	34.3	177.4	53.4
531	Total spent on skilled labour	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
532	Total spent on unskilled labour	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
533	Total spent on material	17.8	17.8	141.8	17.8	89.4	34.3	177.4	53.4
534	Total spent on plant	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
535	Residual unallocated to spending category	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
536	**Total Capital Costs**	17.8	17.8	141.8	17.8	89.4	34.3	177.4	53.4
	TOTAL CASH FLOW (excluding revenues)								
537	Total spent in Quebec	77.6	78.2	79.1	79.9	101.8	82.5	83.5	84.5
538	Total spent in Ontario	135.6	136.6	138.1	139.7	162.4	145.1	147.1	149.2
539	Total spent in the rest of Canada	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
540	Total spend in the rest of the World	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
541	Geographical allocation pending	11.4	11.4	73.4	11.4	9.5	22.7	127.1	34.1
542	Residual unallocated to region	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
543	**Total**	224.5	226.2	290.6	231.0	273.7	250.3	357.7	267.8
910	**NET CASH FLOW**	733.4	756.0	716.5	801.6	785.0	835.2	755.4	873.4

TOTAL CASHFLOW — Composite (via Mirabel) at 350 kph QW Corridor

		2019	2020	2021	2022	2023	2024	2025	2026
501	[A] **RIDERSHIP**	17.3	17.7	18.1	18.6	19.0	19.4	19.9	20.4
502	**ADJUSTED GROSS REVENUE**	1,250.7	1,282.4	1,314.9	1,348.2	1,382.4	1,417.4	1,453.4	1,490.2
503	Payments to Travel Agencies	68.8	70.5	72.3	74.2	76.0	78.0	79.9	82.0
504	Payments to Credit Card Companies	11.7	12.0	12.3	12.6	13.0	13.3	13.6	14.0
505	**Revenue Available to HSR Operator**	1,170.2	1,199.8	1,230.2	1,261.4	1,293.4	1,326.2	1,359.8	1,394.3
	OPERATING EMPLOYMENT								
904	Total employment	3,172	3,205	3,238	3,272	3,306	3,340	3,375	3,410
905	"Skilled" employment	1,879	1,895	1,910	1,926	1,942	1,958	1,974	1,990
906	"Unskilled" employment	1,293	1,310	1,328	1,346	1,364	1,383	1,401	1,420
907	Employment in Ontario	1,866	1,886	1,906	1,926	1,946	1,967	1,987	2,008
908	Employment in Quebec	1,306	1,319	1,332	1,346	1,360	1,374	1,388	1,402
	OPERATING COSTS								
	Labour								
506	Bare wage bill skilled	86.8	87.5	88.3	89.0	89.7	90.4	91.2	91.9
507	Bare wage bill unskilled	35.9	36.4	36.9	37.4	37.9	38.4	38.9	39.4
508	Payroll taxes	10.5	10.6	10.7	10.8	10.9	11.0	11.1	11.2
509	Provisions for pension plan	9.2	9.3	9.4	9.5	9.6	9.7	9.8	9.9
	Purchased materials/services								
510	Electricity	46.0	46.8	47.5	48.3	49.1	50.0	50.8	51.6
511	Advertising/promotion	17.6	17.6	17.6	17.6	17.6	17.6	17.6	17.6
512	Infrastructure maintenance services	18.2	18.2	18.2	18.2	18.2	18.2	18.2	18.2
513	Infrastructure materials/supplies	11.9	13.2	14.6	16.2	17.9	19.9	22.0	24.3
514	Rolling stock materials/supplies	22.4	22.8	23.2	23.7	24.1	24.6	25.1	25.5
515	Telecommunications/computer services	23.0	23.5	24.1	24.6	25.2	25.8	26.4	27.0
516	Insurance services/franchise fees etc	13.6	13.8	14.0	14.1	14.3	14.5	14.7	14.8
517	Food/related sundries	3.0	3.0	3.1	3.2	3.3	3.3	3.4	3.5
518	**Unscheduled materials/services**	49.3	49.4	49.5	49.6	49.7	49.9	50.0	50.1
519	**Allowance for contingencies**	23.2	23.5	23.7	23.9	24.2	24.5	24.8	25.1
520	**TOTAL OPERATING COSTS**	370.3	375.3	380.5	386.0	391.6	397.6	403.8	410.4
521	**OPERATING PROFIT**	799.8	824.5	849.7	875.5	901.8	928.6	956.0	983.9
909	**COST REVENUE RATIO**	3.16	3.20	3.23	3.27	3.30	3.34	3.37	3.40
522	Operating costs (Ontario)	222.2	225.4	228.6	232.0	235.6	239.4	243.3	247.5
523	Operating costs (Quebec)	148.1	150.0	151.9	153.9	156.0	158.2	160.5	162.9
	CAPITAL COSTS								
524	Total spent in Quebec	0.0	34.6	0.0	0.0	0.0	0.0	0.0	0.0
525	Total spent in Ontario	0.0	34.6	0.0	0.0	0.0	0.0	0.0	0.0
526	Total spent in the rest of Canada	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
527	Total spend in the rest of the World	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
528	Geographical allocation pending	53.4	61.0	142.4	22.7	8.9	17.8	17.8	40.5
529	Residual unallocated to region	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
530	**Total Capital Costs**	53.4	130.1	142.4	22.7	8.9	17.8	17.8	40.5
531	Total spent on skilled labour	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
532	Total spent on unskilled labour	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
533	Total spent on material	53.4	130.1	142.4	22.7	8.9	17.8	17.8	40.5
534	Total spent on plant	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
535	Residual unallocated to spending category	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
536	**Total Capital Costs**	53.4	130.1	142.4	22.7	8.9	17.8	17.8	40.5
	TOTAL CASH FLOW (excluding revenues)								
537	Total spent in Quebec	85.6	106.6	87.8	88.9	90.2	91.4	92.7	94.1
538	Total spent in Ontario	151.4	173.6	156.0	158.5	161.1	163.8	166.7	169.7
539	Total spent in the rest of Canada	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
540	Total spend in the rest of the World	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
541	Geographical allocation pending	34.1	37.9	90.4	17.0	5.7	11.4	11.4	22.7
542	Residual unallocated to region	0.0	(0.0)	0.0	0.0	0.0	0.0	0.0	0.0
543	**Total**	271.0	318.1	334.2	264.5	257.0	266.6	270.8	286.5
910	**NET CASH FLOW**	899.1	881.8	896.0	996.9	1,036.4	1,059.6	1,089.0	1,107.8

26-Jul-94 **HSR STUDY COST DEVELOPMENT**

CAPITAL COST SUMMARY **Composite (via Mirabel) at 350 kph QW Corridor**

		1995	1996	1997	1998	1999	2000	2001	2002
201	Right-of-Way	0.00	1.46	1.46	21.42	127.44	198.93	118.60	19.33
202	Earthworks/subgrade	0.00	15.79	15.19	35.15	138.46	368.48	634.96	523.80
203	Bridges	0.00	4.47	4.34	7.78	27.37	86.77	270.18	235.92
204	Grade separations	0.00	10.47	10.05	20.64	71.36	219.08	607.76	517.37
205	Other accommodations	0.00	0.96	0.95	1.36	9.08	46.42	76.07	25.63
206	Track	0.00	0.00	0.97	6.27	15.51	36.58	125.94	311.85
207	Power distribution system	0.00	0.00	0.93	6.01	15.19	27.35	92.85	219.81
208	Stations	0.00	3.30	3.30	1.65	1.05	2.64	25.62	54.59
209	People movers (included in stations)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
210	Signals	0.00	0.69	5.37	12.21	18.45	64.38	151.10	154.59
211	Communications	0.00	0.31	2.36	5.57	8.40	28.72	68.15	70.78
212	Equipment maintenance facilities	0.00	0.00	0.00	0.00	0.00	16.88	50.64	57.10
213	Infrastructure maintenance facilities	0.00	0.00	0.00	0.00	0.00	0.00	13.72	37.30
214	Information/ticketing systems	0.00	0.00	0.00	0.00	0.00	0.00	2.64	18.26
215	Rolling stock	0.00	29.64	29.64	79.05	79.05	197.63	197.63	197.63
216	Commissioning	0.00	0.00	0.00	0.00	0.00	0.00	0.00	14.95
217	Administration allowance	0.00	0.66	2.24	3.81	5.39	6.97	12.88	21.78
218	Startup and training	0.00	0.00	0.00	0.00	0.00	0.00	10.76	20.18
219	TOTAL INITIAL CAPITAL COSTS	0.00	67.75	76.80	200.92	516.75	1,300.81	2,459.50	2,500.84
220	**Additional fleet requirements**								
221									
222									
223									
224		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
225	**Rolling Stock Overhauls**	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
226	**Infrastructure Renewal**	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
227	**Other ongoing capital**	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
228	*Cross check initial capital*								

26-Jul-94 **HSR STUDY COST DEVELOPMENT**

CAPITAL COST SUMMARY **Composite (via Mirabel) at 350 kph QW Corridor**

		2003	2004	2005	2006	2007	2008	2009	2010
201	Right-of-Way	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
202	Earthworks/subgrade	159.23	0.00	0.00	0.00	0.00	0.00	0.00	0.00
203	Bridges	76.83	0.00	0.00	0.00	0.00	0.00	0.00	0.00
204	Grade separations	155.75	0.00	0.00	0.00	0.00	0.00	0.00	0.00
205	Other accommodations	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
206	Track	347.84	209.27	7.88	0.00	0.00	0.00	0.00	0.00
207	Power distribution system	294.56	218.15	27.10	0.00	0.00	0.00	0.00	0.00
208	Stations	117.97	178.35	0.00	0.00	0.00	0.00	0.00	0.00
209	People movers (included in stations)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
210	Signals	123.36	59.51	0.00	0.00	0.00	0.00	0.00	0.00
211	Communications	58.71	28.55	0.00	0.00	0.00	0.00	0.00	0.00
212	Equipment maintenance facilities	47.93	24.59	0.00	0.00	0.00	0.00	0.00	0.00
213	Infrastructure maintenance facilities	25.50	45.18	11.77	0.00	0.00	0.00	0.00	0.00
214	Information/ticketing systems	13.06	11.99	1.32	0.00	0.00	0.00	0.00	0.00
215	Rolling stock	237.15	237.15	158.10	138.34	0.00	0.00	0.00	0.00
216	Commissioning	28.27	58.05	5.39	0.00	0.00	0.00	0.00	0.00
217	Administration allowance	21.68	17.82	0.00	0.00	0.00	0.00	0.00	0.00
218	Startup and training	25.37	11.97	0.00	0.00	0.00	0.00	0.00	0.00
219	**TOTAL INITIAL CAPITAL COSTS**	1,733.21	1,100.58	211.56	138.34	0.00	0.00	0.00	0.00
220	**Additional fleet requirements**								
221									
222									
223									
224		0.00	0.00	0.00	0.00	0.00	0.00	124.00	0.00
225	**Rolling Stock Overhauls**	0.00	0.00	0.00	0.00	0.00	0.00	0.00	8.90
226	**Infrastructure Renewal**	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
227	**Other ongoing capital**	0.00	0.00	0.00	0.00	0.00	0.00	0.00	69.16
228	*Cross check initial capital*								

Spreadsheet	**W:\207-CHAS\COSTING\30QWD1.WK3**		
Today's date	**27-Jul-94**		
Proessing time	**11:53**		
Data export file	**X-30QWD1.WK1**		
Train speed	**300 kph**		
Train route	**Composite (via Dorval) at 300 kph**		
Demand data	**QW Corridor**		
Initial demand file	**R105QW32/R125QW32 [as supplied by IBI]**		
Train data	**Final off NEW-OD.WK1**		
Trip Time	**COMPOSITE VIA DORVAL**		
Capital file	**C:\work\207-chas\canarail\extract.wk3**		
Capital name	**MONTREAL - TORONTO CORRIDOR 300+ on 200, with people movers EX .. 3200-**		
	MONTREAL - QUEBEC 300+ on 200 EX .. 3200-		
	WINDSOR - TORONTO 300+, composite route EX .. 3200-		
Cap allocation	**SPLT-3DR.WK3**		
Include SWO	**Yes**		
Include MQ	**Yes**		
MOT to Pearson	**Yes**		
Con Air Included	**Yes**		
via Mirabel	**No**		
via Dorval	**Yes**		
Delay Cap Input	**3cd-xx-2**	**1** *MOT*	**100%** *DT*
	3cd-xx-2	**1** *MQ*	**100%** *DT*
	3cd-xx-2	**1** *SWO*	**61%** *DT*
		1 *SPLIT*	

01-Aug-94 **HSR STUDY COST DEVELOPMENT**

OPERATIONS/REVENUES/COSTS Composite (via Dorval) at 300 kph QW Corridor

			Year 2005	Year 2025		
	RIDERSHIP					
1 [A]	Adjusted passengers (non-duplicated)	millions	12.3	19.7		
2	Average length of haul	kms	336	342		
3	Passenger kilometres	billion	4.2	6.7		
	OPERATION STATISTICS					
4	Route length	kilometres	1,228	1,228		
5	Train trips (one-way)	thousands	20.8	31.3		
6	Trainset kms	millions	16.7	24.4		
7	Seat kms	billions	6.0	8.7	*358 per trainset*	
8	Trainsets in active fleet	units	50	68		
9	Average trainset utilization	k-km/year	333	359		
10	Average load factor		70%	77%		
11	Total energy consumption	gigaW-hrs	406	592		
12	Total employment		2,730	3,397		
	PASSENGER REVENUES					
13	Adjustusted revenues	$million	860.8	1,456.1		
14	Agency commissions	$million	(47.3)	(80.1)	*5.5% of gross revenue*	
15	Credit card discount	$million	(8.1)	(13.7)	*0.9% of gross revenue*	
16	Net Revenue	$million	805.4	1,362.4		
	OPERATIONS AND MAINTENANCE COSTS				***[Total employment]***	
17	Train operations	$million	44.1	59.8	233	299
18	Customer services	$million	81.0	101.4	812	1,042
19	Equipment maintenance	$million	45.5	65.3	708	1,008
20	Infrastructure maintenance	$million	72.2	90.3	784	832
21	Executive/administration	$million	24.2	25.8	219	246
22	Insurance/taxes/other	$million	26.1	29.5	0	0
23	Contingency	$million	20.9	24.3	--	--
24	**Total O&M Costs**	$million	306.2	388.4	2,730	3,397
25	**OPERATING PROFIT**		499.2	974.0		
26	**COST/REVENUE RATIOS**					
27	Net revenue : O&M costs Ratio		2.63	3.51		
28	O&M cost per trainset-km	dollars	18.37	15.92		
29	O&M cost per seat-km	cents	5.13	4.45		
30	O&M cost per passenger	dollars	24.81	19.75		
31	O&M cost per passenger-km	cents	7.38	5.77		
32	Net revenue per passenger	dollars	65.28	69.27		
33	Net revenue per passenger km	cents	19.40	20.23		
	CAPITAL COSTS					
34	Startup/admin/training/other "soft" costs	$million	268.3			
35	Construction of track	$million	7,751.0			
36	Construction of stations	$million	521.7			
37	Construction of maintenance facilities	$million	326.8			
38	Acqusition of rolling stock	$million	1,530.0			
39	**Total Initial Capital Costs**	$million	10,397.9	*over the period 1995 to 2006*		
40	**Total Ongoing Capital Costs**	$million	1,227.5	*over the period 2007 to 2025*		
41	Initial capital per route-km (excluding RS)	$million	7.22			

		2005 Que	*2005 Ont*	*2025 Que*	2025 Ont
901	Net Revenues	290.18	515.23	488.73	873.65
902	O and M Costs	114.50	188.78	143.64	240.71
903	Employment	1,063	1,667	1,328	2,069

TOTAL CASHFLOW — Composite (via Dorval) at 300 kph QW Corridor

		Total Year 2005	Total Year 2025	Quebec Year 2005	Quebec Year 2025
501	[A] **RIDERSHIP**	12.3	19.7	*NA*	*NA*
502	**ADJUSTED GROSS REVENUE**	860.8	1,456.1	310.1	522.4
503	Payments to Travel Agencies	47.3	80.1	17.1	28.7
504	Payments to Credit Card Companies	8.1	13.7	2.9	4.9
505	**Revenue Available to HSR Operator**	805.4	1,362.4	290.2	488.7
	OPERATING EMPLOYMENT				
904	Total employment	2,730	3,397	1,063	1,328
905	"Skilled" employment	1,663	1,981	621	752
906	"Unskilled" employment	1,067	1,417	442	576
907	Employment in Ontario	1,667	2,069		
908	Employment in Quebec	1,063	1,328	1,063	1,328
	OPERATING COSTS				
	Labour				
506	Bare wage bill skilled	77.1	91.7	29.5	35.5
507	Bare wage bill unskilled	29.7	39.4	12.5	16.2
508	Payroll taxes	9.1	11.2	3.5	4.4
509	Provisions for pension plan	8.0	9.8	3.1	3.9
	Purchased materials/services				
510	Electricity	27.9	38.9	6.2	8.6
511	Advertising/promotion	17.2	17.2	6.3	6.3
512	Infrastructure maintenance services	20.8	16.1	5.2	5.9
513	Infrastructure materials/supplies	2.3	22.8	0.6	6.2
514	Rolling stock materials/supplies	15.5	22.7	7.8	11.4
515	Telecommunications/computer services	16.5	26.1	5.9	9.3
516	Insurance services/franchise fees etc	11.5	14.7	3.3	4.3
517	Food/related sundries	2.1	3.4	0.8	1.3
518	**Unscheduled materials/services**	47.6	50.0	22.1	21.1
519	**Allowance for contingencies**	20.9	24.3	7.6	9.2
520	**TOTAL OPERATING COSTS**	306.2	388.4	114.5	143.6
521	**OPERATING PROFIT**	499.2	974.0	*NA*	*NA*
909	**COST REVENUE RATIO**	2.63	3.51	*NA*	*NA*
522	Operating costs (Ontario)	188.8	240.7		
523	Operating costs (Quebec)	114.5	143.6		

	CAPITAL COSTS	**Initial**	**Ongoing**	**Total**
524	Total spent in Quebec	2,251.36	105.30	2,356.66
525	Total spent in Ontario	4,991.66	105.30	5,096.96
526	Total spent in the rest of Canada	272.99	0.00	272.99
527	Total spend in the rest of the World	1,351.10	0.00	1,351.10
528	Geographical allocation pending	1,530.00	979.75	2,509.75
529	Residual unallocated to region	0.74	0.00	0.74
530	**Total Capital Costs**	10,397.85	1,190.35	11,588.20
531	Total spent on skilled labour	2,844.98	0.00	2,844.98
532	Total spent on unskilled labour	738.94	0.00	738.94
533	Total spent on material	5,059.33	1,190.35	6,249.68
534	Total spent on plant	1,754.61	0.00	1,754.61
535	Residual unallocated to spending category	0.00	0.00	0.00
536	**Total Capital Costs**	10,397.85	1,190.35	11,588.20

	TOTAL CASH FLOW (excluding revenues)	
537	Total spent in Quebec	*[This line defined only for year-by-year tables]*
538	Total spent in Ontario	*[This line defined only for year-by-year tables]*
539	Total spent in the rest of Canada	*[This line defined only for year-by-year tables]*
540	Total spend in the rest of the World	*[This line defined only for year-by-year tables]*
541	Geographical allocation pending	*[This line defined only for year-by-year tables]*
542	Residual unallocated to region	*[This line defined only for year-by-year tables]*
543	**Total**	*[This line defined only for year-by-year tables]*
910	**NET CASH FLOW**	*[This line defined only for year-by-year tables]*

01-Aug-94 **HSR STUDY COST DEVELOPMENT**

0

OPERATIONS COST BREAKDOWN Composite (via Dorval) at 300 kph QW Corridor

		Cont Allow	*Cost Estimate ($ million)* 2005	2025	*Employment Estimate* 2005	2025	*Quebec Share* 2005
	TRAIN OPERATIONS						
101	Train crew	5.0%	11.87	16.33	165	226	41%
102	Power - demand charges	2.5%	12.11	15.87	--	--	25%
103	Power - energy consumption	2.5%	15.76	23.02	--	--	20%
104	Control centre	5.0%	2.38	2.38	40	40	50%
105	Transportation administration/supervision	5.0%	1.98	2.25	29	33	49%
106	**Subtotal**		44.11	59.84	233	299	30%
	CUSTOMER SERVICES						
107	On-board service staff	10.0%	7.31	10.79	170	251	42%
108	On-board service supplies	5.0%	2.11	3.37	--	--	39%
109	On-board services ground support	10.0%	1.34	1.98	34	50	42%
110	Food/beverage for sale	0.0%	0.00	0.00	--	--	--
111	Station operations	10.0%	21.39	23.49	305	367	30%
112	ATM/Ticketing/Reservations transactions	5.0%	16.51	26.07	--	--	36%
113	Telephone/Counter Sales	5.0%	5.54	7.23	156	204	35%
114	Advertising and promotion expenses	5.0%	17.22	17.22	--	--	37%
115	Customer service administration/supervision	5.0%	9.60	11.29	146	170	49%
116	**Subtotal**		81.03	101.43	812	1,042	37%
	EQUIPMENT MAINTENANCE						
117	Routine maintenance - labour	5.0%	15.14	22.24	301	442	50%
118	Routine maintenance - material	5.0%	15.55	22.73	--	--	50%
119	Major maintenance [included in capital]	--	--	--	--	--	--
120	Cleaning	5.0%	10.30	14.60	335	476	41%
121	Maintenance administration/supervision	5.0%	4.51	5.74	72	90	50%
122	**Subtotal**		45.50	65.31	708	1,008	48%
	INFRASTRUCTURE MAINTENANCE						
123	Routine maintenance	15.0%	38.53	40.40	631	674	30%
124	Purchased services	15.0%	20.78	16.13	--	--	30%
125	Materials	10.0%	2.28	22.84	--	--	27%
126	Programmed replacement [occurs after 2025]	--	--	--	--	--	
127	Maintenance administration/supervision	5.0%	10.62	10.98	153	158	28%
128	**Subtotal**		72.22	90.35	784	832	30%
	EXECUTIVE/ADMINISTRATION						
129	Labour and related	5.0%	13.27	14.88	193	216	49%
130	Other	5.0%	10.90	10.90	--	--	50%
131	**Subtotal**		24.17	25.78	193	216	49%
	INSURANCE/TAXES/OTHER						
132	Insurance/claims	0.0%	11.50	14.68	--	--	29%
133	Property taxes	10.0%	6.75	6.65	--	--	83%
134	Franchise fees	10.0%	*nil*	nil	--	--	
135	**Subtotal**		18.25	21.33	0	0	49%
136	**CONTINGENCY**	7.3%	20.90	24.33	--	--	36%
137	**TOTAL**		306.17	388.37	2,730	3,397	37%
138	**Total: Quebec component**		114.50	143.64	1,063	1,328	
139	**Total: Ontario component**		191.67	244.73	1,667	2,069	
140	**[Major maintenance included in capital]**		0.00	17.43			
141	Routine equipment maintenance per trainset km	dollars	1.84	1.84			
142	Infrastructure maintenance per route km	$thousand	50.16	64.63			
143	Executive/administration as a percent of total		8.5%	7.1%			
144	Station/ticketing costs per passenger	Dollars	3.49	2.86			

145

146

CAPITAL COST SUMMARY — Composite (via Dorval) at 300 kph QW Corridor

		Professional Services	Contin-*gency*	Total
201	Right-of-Way	40.62	45.23	463.71
202	Earthworks/subgrade	327.49	196.28	1,832.33
203	Bridges	119.61	66.04	846.00
204	Grade separations	231.17	183.86	1,635.04
205	Other accommodations	22.53	31.57	159.33
206	Track	133.40	45.34	1,052.36
207	Power distribution system	128.23	101.57	906.96
208	Stations	67.15	37.07	474.92
209	People movers (included in stations)	0.00	0.00	0.00
210	Signals	96.73	63.68	584.97
211	Communications	44.70	29.43	270.30
212	Equipment maintenance facilities	14.54	21.81	193.38
213	Infrastructure maintenance facilities	0.00	0.00	133.41
214	Information/ticketing systems	0.00	0.00	46.79
215	Rolling stock	113.33	126.33	1,530.00
216	Commissioning	107.05	0.00	107.05
217	Administration allowance	0.00	0.00	93.30
218	Startup and training	0.00	0.00	68.09
219	**TOTAL INITIAL CAPITAL COSTS**	1,446.55	948.21	10,397.94

220	**Additional fleet requirements**	*year 2009*	4 units	120.00
221		*year 2013*	5 units	150.00
222		*year 2017*	3 units	90.00
223		*year 2021*	5 units	150.00
224		*Total*	17 units	510.00
225	**Rolling Stock Overhauls**	*total, years 2005-2025*		515.59
226	**Infrastructure Renewal**	*total, years 2005-2025*		0.00
227	**Other ongoing capital**	*total, years 2005-2025*		210.60
228	*Cross check initial capital*			*(0.00)*

RIDERSHIP BREAKDOWN — Composite (via Dorval) at 300 kph QW Corridor

			Year 2005	Year 2025		
	RIDERSHIP					
301	Ridership within the segment	*millions*	na	na		
302	Ridership between segments	*millions*	na	na		
303	Airport traffic	*millions*	na	na		
304 [A]	**Total potential passengers**	*million*	12.46	19.87		
305	Passengers not served at peak	*million*	(0.12)	(0.20)	1.0%	*of passengers*
306	Allowance for additional passengers	*million*	0.00	0.00	0.0%	*of passengers*
307	**Net passengers**	*million*	12.34	19.67		
	PASSENGER REVENUES					
308	Initial transportation revenue estimate	*$million*	943.51	1,595.92		
309	PST/GST	*$million*	(74.00)	(125.08)	7.8%	*of revenues*
310	Revenue estimate net of taxes	*$million*	869.52	1,470.83		
311	First Class premium	*$million*	0.00	0.00	0.0%	*of revenues*
312	Food/beverage sales	*$million*	0.00	0.00	0.00	*per passenger*
313	Revenues foregone at peak	*$million*	(8.70)	(14.71)	1.0%	*of revenues*
314	**Final Gross Revenue**	*$million*	860.82	1,456.13		
	PASSENGER KILOMETRES					
315	Ridership within segments	*billions*	3.68	5.98		
316	Ridership between segments	*billions*	0.52	0.82		
317	Airport traffic	*billions*	above	above		
318	Total		4.19	6.80		
319	Passenger-km foregone at peak	*billions*	(0.04)	(0.07)	1.0%	*of passenger-km*
320	Allowance for additional passenger-kms	*billions*	0.00	0.00	0.0%	*of passengers-km*
321	**Total passenger kms**	*billions*	4.15	6.73		
322	**Average Length of Haul**	*kms*	336	342		

EMPLOYMENT DATA — Composite (via Dorval) at 300 kph QW Corridor

		Average Wage	*Total Year 2005*	*Total Year 2025*	*Quebec Year 2005*	*Quebec Year 2025*
401	Train Crew	57,500	165	226	67	88
402	Dispatchers	50,600	40	40	20	20
403	Managerial/admin/professional	58,324	529	590	216	245
404	Station staff	35,939	76	92	26	31
405	Mechanical trades/skilled	39,402	330	472	158	225
406	Maintenance trades/skilled	36,349	524	561	135	144
407	**Total "skilled"**	46,356	1,663	1,981	621	752
408	OBS Staff	31,453	187	277	78	110
409	Sales Staff	29,007	156	204	55	72
410	Other customer service	29,986	17	25	7	10
411	Support staff	34,206	64	77	41	50
412	Station labour (various)	24,881	229	275	77	93
413	Equipment maintenance unskilled	30,603	24	35	12	18
414	Track maintenance unskilled	30,603	107	113	53	57
415	Cleaners	24,270	283	411	119	167
416	**Total "unskilled"**	27,820	1,067	1,417	442	576
417	**Total "unallocated"**		0	0	(0)	(0)
418	**Grand total employment**	39,109	2,730	3,397	1,063	1,328
419	**Ontario Total "skilled"**		1,042	1,229		
420	**Ontario Total "unskilled"**		625	840		
421	**Ontario Total "unallocated"**		0	0		
422	**Ontario Grand total employment**		1,667	2,069		
423	**Quebec Total "skilled"**		621	752		
424	**Quebec Total "unskilled"**		442	576		
425	**Quebec Total "unallocated"**		0	0		
426	**Quebec Grand total employment**		1,063	1,328		

01-Aug-94 **HSR STUDY COST DEVELOPMENT**

TOTAL CASHFLOW **Composite (via Dorval) at 300 kph QW Corridor**

		1995	1996	1997	1998	1999	2000	2001	2002
501	[A] **RIDERSHIP**	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
502	**ADJUSTED GROSS REVENUE**	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
503	Payments to Travel Agencies	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
504	Payments to Credit Card Companies	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
505	**Revenue Available to HSR Operator**	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	OPERATING EMPLOYMENT								
904	Total employment	0	0	0	0	0	0	0	0
905	"Skilled" employment	0	0	0	0	0	0	0	0
906	"Unskilled" employment	0	0	0	0	0	0	0	0
907	Employment in Ontario	0	0	0	0	0	0	0	0
908	Employment in Quebec	0	0	0	0	0	0	0	0
	OPERATING COSTS								
	Labour								
506	Bare wage bill skilled	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
507	Bare wage bill unskilled	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
508	Payroll taxes	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
509	Provisions for pension plan	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Purchased materials/services								
510	Electricity	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
511	Advertising/promotion	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
512	Infrastructure maintenance services	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
513	Infrastructure materials/supplies	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
514	Rolling stock materials/supplies	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
515	Telecommunications/computer services	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
516	Insurance services/franchise fees etc	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
517	Food/related sundries	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
518	**Unscheduled materials/services**	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
519	**Allowance for contingencies**	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
520	**TOTAL OPERATING COSTS**	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
521	**OPERATING PROFIT**	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
909	**COST REVENUE RATIO**								
522	Operating costs (Ontario)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
523	Operating costs (Quebec)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	CAPITAL COSTS								
524	Total spent in Quebec	0.0	12.7	16.7	57.2	136.6	318.3	553.5	618.9
525	Total spent in Ontario	0.0	25.8	29.2	54.4	266.2	645.2	1,316.8	1,232.5
526	Total spent in the rest of Canada	0.0	0.0	0.0	0.2	0.6	6.9	30.1	85.9
527	Total spend in the rest of the World	0.0	1.3	2.5	6.3	43.4	173.2	412.2	400.9
528	Geographical allocation pending	0.0	28.7	28.7	76.5	76.5	191.3	191.3	191.3
529	Residual unallocated to region	0.0	(0.0)	(0.0)	0.0	0.0	0.1	0.2	0.2
530	**Total Capital Costs**	0.0	68.5	77.1	194.7	523.3	1,334.9	2,504.0	2,529.6
531	Total spent on skilled labour	0.0	28.7	35.0	79.6	191.5	397.6	765.1	708.6
532	Total spent on unskilled labour	0.0	1.2	1.4	3.2	24.8	97.7	239.7	220.7
533	Total spent on material	0.0	30.6	31.0	89.8	228.0	603.4	985.3	1,108.9
534	Total spent on plant	0.0	8.0	9.7	22.0	79.0	236.2	513.9	491.4
535	Residual unallocated to spending category	0.0	(0.0)	(0.0)	0.0	0.0	(0.0)	0.0	0.0
536	**Total Capital Costs**	0.0	68.5	77.1	194.7	523.3	1,334.9	2,504.0	2,529.6
	TOTAL CASH FLOW (excluding revenues)								
537	Total spent in Quebec	0.0	4.9	6.3	18.0	73.3	131.9	226.6	225.8
538	Total spent in Ontario	0.0	17.9	20.9	40.5	179.9	418.8	842.9	747.9
539	Total spent in the rest of Canada	0.0	0.0	0.0	0.1	0.3	6.7	17.5	44.6
540	Total spend in the rest of the World	0.0	0.8	2.2	3.3	39.2	107.5	236.8	206.0
541	Geographical allocation pending	0.0	18.0	28.7	48.0	48.0	120.0	120.0	120.0
542	Residual unallocated to region	0.0	(0.0)	(0.0)	(0.0)	0.0	0.1	0.2	0.2
543	**Total**	0.0	41.7	77.1	109.9	340.7	785.0	1,444.1	1,344.5
910	**NET CASH FLOW**	0.0	(41.7)	(77.1)	(109.9)	(340.7)	(785.0)	(1,444.1)	(1,344.5)

01-Aug-94 **HSR STUDY COST DEVELOPMENT**

TOTAL CASHFLOW — Composite (via Dorval) at 300 kph QW Corridor

		2003	2004	2005	2006	2007	2008	2009	2010
501 [A]	**RIDERSHIP**	1.3	3.4	12.3	12.6	12.9	13.2	13.5	13.9
502	**ADJUSTED GROSS REVENUE**	64.1	186.2	860.8	883.7	907.2	931.4	956.2	981.6
503	Payments to Travel Agencies	3.5	10.2	47.3	48.6	49.9	51.2	52.6	54.0
504	Payments to Credit Card Companies	0.6	1.7	8.1	8.3	8.5	8.7	9.0	9.2
505	**Revenue Available to HSR Operator**	60.0	174.2	805.4	826.8	848.8	871.4	894.6	918.4
	OPERATING EMPLOYMENT								
904	Total employment	346	845	2,730	2,760	2,790	2,821	2,851	2,883
905	"Skilled" employment	252	546	1,663	1,677	1,692	1,707	1,722	1,737
906	"Unskilled" employment	94	299	1,067	1,083	1,098	1,114	1,130	1,146
907	Employment in Ontario	138	169	1,667	1,685	1,703	1,722	1,740	1,759
908	Employment in Quebec	208	676	1,063	1,075	1,087	1,099	1,111	1,123
	OPERATING COSTS								
	Labour								
506	Bare wage bill skilled	11.9	24.8	77.1	77.7	78.4	79.1	79.8	80.5
507	Bare wage bill unskilled	2.6	8.4	29.7	30.1	30.5	31.0	31.4	31.9
508	Payroll taxes	1.2	2.8	9.1	9.2	9.3	9.4	9.5	9.6
509	Provisions for pension plan	1.0	2.4	8.0	8.1	8.2	8.3	8.3	8.4
	Purchased materials/services								
510	Electricity	1.7	4.0	27.9	28.3	28.8	29.3	29.8	30.3
511	Advertising/promotion	5.9	8.5	17.2	17.2	17.2	17.2	17.2	17.2
512	Infrastructure maintenance services	3.1	7.9	20.8	20.8	20.8	19.8	18.9	18.0
513	Infrastructure materials/supplies	0.4	0.8	2.3	2.4	2.6	2.8	2.9	3.1
514	Rolling stock materials/supplies	1.2	3.5	15.5	15.8	16.1	16.5	16.8	17.1
515	Telecommunications/computer services	1.6	4.2	16.5	16.9	17.3	17.7	18.1	18.5
516	Insurance services/franchise fees etc	1.7	4.2	11.5	11.6	11.8	11.9	12.1	12.2
517	Food/related sundries	0.2	0.5	2.1	2.2	2.2	2.3	2.3	2.4
518	**Unscheduled materials/services**	10.8	28.2	47.6	47.7	47.8	47.9	48.1	48.2
519	**Allowance for contingencies**	3.1	7.5	20.9	21.0	21.1	21.1	21.1	21.2
520	**TOTAL OPERATING COSTS**	46.5	107.9	306.2	309.1	312.1	314.0	316.0	318.1
521	**OPERATING PROFIT**	13.4	66.3	499.2	517.8	536.8	557.4	578.6	600.3
909	**COST REVENUE RATIO**	1.29	1.61	2.63	2.68	2.72	2.78	2.83	2.89
522	Operating costs (Ontario)	18.6	22.4	188.8	190.5	192.3	193.4	194.5	195.6
523	Operating costs (Quebec)	27.9	72.5	114.5	115.7	116.8	117.7	118.6	119.4
	CAPITAL COSTS								
524	Total spent in Quebec	345.4	181.4	10.5	0.0	0.0	0.0	0.0	34.5
525	Total spent in Ontario	852.4	531.3	37.9	0.0	0.0	0.0	0.0	34.5
526	Total spent in the rest of Canada	91.3	58.0	0.1	0.0	0.0	0.0	0.0	0.0
527	Total spend in the rest of the World	210.6	95.7	5.0	0.0	0.0	0.0	0.0	0.0
528	Geographical allocation pending	229.5	229.5	153.0	133.9	0.0	0.0	120.0	8.7
529	Residual unallocated to region	0.1	0.1	(0.0)	0.0	0.0	0.0	0.0	0.0
530	**Total Capital Costs**	1,729.4	1,095.9	206.5	133.9	0.0	0.0	120.0	77.7
531	Total spent on skilled labour	403.5	220.8	14.6	0.0	0.0	0.0	0.0	0.0
532	Total spent on unskilled labour	105.0	42.8	2.4	0.0	0.0	0.0	0.0	0.0
533	Total spent on material	959.0	706.9	182.6	133.9	0.0	0.0	120.0	77.7
534	Total spent on plant	262.0	125.5	6.9	0.0	0.0	0.0	0.0	0.0
535	Residual unallocated to spending category	(0.0)	0.0	(0.0)	0.0	0.0	0.0	0.0	0.0
536	**Total Capital Costs**	1,729.4	1,095.9	206.5	133.9	0.0	0.0	120.0	77.7
	TOTAL CASH FLOW (excluding revenues)								
537	Total spent in Quebec	162.5	150.2	68.2	61.2	61.9	62.5	63.1	83.5
538	Total spent in Ontario	519.1	380.8	150.7	132.8	134.2	135.1	136.0	156.8
539	Total spent in the rest of Canada	40.2	34.9	0.1	0.0	0.0	0.0	0.0	0.0
540	Total spend in the rest of the World	118.3	65.5	3.1	0.0	0.0	0.0	0.0	0.0
541	Geographical allocation pending	144.0	144.0	96.0	84.0	0.0	0.0	60.0	5.5
542	Residual unallocated to region	0.1	0.1	(0.0)	0.0	0.0	0.0	(0.0)	0.0
543	**Total**	984.3	775.6	317.9	278.1	196.1	197.5	259.0	245.8
910	**NET CASH FLOW**	(924.3)	(601.4)	487.5	548.8	652.8	673.9	635.6	672.7

01-Aug-94 **HSR STUDY COST DEVELOPMENT**

TOTAL CASHFLOW — Composite (via Dorval) at 300 kph QW Corridor

		2011	2012	2013	2014	2015	2016	2017	2018
501 [A]	**RIDERSHIP**	14.2	14.5	14.9	15.2	15.6	15.9	16.3	16.7
502	**ADJUSTED GROSS REVENUE**	1,007.8	1,034.6	1,062.1	1,090.4	1,119.5	1,149.3	1,179.9	1,211.3
503	Payments to Travel Agencies	55.4	56.9	58.4	60.0	61.6	63.2	64.9	66.6
504	Payments to Credit Card Companies	9.4	9.7	10.0	10.2	10.5	10.8	11.1	11.4
505	**Revenue Available to HSR Operator**	942.9	968.0	993.8	1,020.2	1,047.4	1,075.3	1,103.9	1,133.3
	OPERATING EMPLOYMENT								
904	Total employment	2,914	2,946	2,978	3,011	3,044	3,078	3,111	3,146
905	"Skilled" employment	1,752	1,768	1,783	1,799	1,815	1,830	1,847	1,863
906	"Unskilled" employment	1,162	1,178	1,195	1,212	1,230	1,247	1,265	1,283
907	Employment in Ontario	1,778	1,798	1,817	1,837	1,857	1,877	1,897	1,918
908	Employment in Quebec	1,136	1,148	1,161	1,174	1,187	1,201	1,214	1,228
	OPERATING COSTS								
	Labour								
506	Bare wage bill skilled	81.2	81.9	82.6	83.3	84.1	84.8	85.5	86.3
507	Bare wage bill unskilled	32.3	32.8	33.2	33.7	34.2	34.7	35.2	35.7
508	Payroll taxes	9.7	9.8	9.9	10.0	10.1	10.2	10.3	10.4
509	Provisions for pension plan	8.5	8.6	8.7	8.8	8.9	9.0	9.1	9.1
	Purchased materials/services								
510	Electricity	30.8	31.3	31.8	32.4	32.9	33.5	34.0	34.6
511	Advertising/promotion	17.2	17.2	17.2	17.2	17.2	17.2	17.2	17.2
512	Infrastructure maintenance services	17.1	16.1	16.1	16.1	16.1	16.1	16.1	16.1
513	Infrastructure materials/supplies	3.3	3.6	3.8	4.0	4.6	9.1	10.1	11.2
514	Rolling stock materials/supplies	17.4	17.8	18.1	18.4	18.8	19.2	19.5	19.9
515	Telecommunications/computer services	18.9	19.4	19.8	20.3	20.7	21.2	21.7	22.2
516	Insurance services/franchise fees etc	12.4	12.5	12.7	12.8	13.0	13.1	13.3	13.5
517	Food/related sundries	2.4	2.5	2.5	2.6	2.7	2.7	2.8	2.9
518	**Unscheduled materials/services**	48.3	48.4	48.5	48.7	48.8	48.9	49.0	49.2
519	**Allowance for contingencies**	21.2	21.2	21.3	21.5	21.6	22.1	22.3	22.5
520	**TOTAL OPERATING COSTS**	320.3	322.5	325.9	329.3	333.1	341.4	345.7	350.3
521	**OPERATING PROFIT**	622.6	645.5	667.9	691.0	714.3	733.9	758.2	783.0
909	**COST REVENUE RATIO**	2.94	3.00	3.05	3.10	3.14	3.15	3.19	3.24
522	Operating costs (Ontario)	196.9	198.1	200.1	202.2	204.6	210.2	213.0	215.9
523	Operating costs (Quebec)	120.3	121.3	122.5	123.8	125.2	127.8	129.3	130.9
	CAPITAL COSTS								
524	Total spent in Quebec	0.0	0.0	0.0	0.0	36.3	0.0	0.0	0.0
525	Total spent in Ontario	0.0	0.0	0.0	0.0	36.3	0.0	0.0	0.0
526	Total spent in the rest of Canada	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
527	Total spend in the rest of the World	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
528	Geographical allocation pending	17.4	17.4	167.4	17.4	18.2	33.7	142.3	52.3
529	Residual unallocated to region	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
530	**Total Capital Costs**	17.4	17.4	167.4	17.4	90.8	33.7	142.3	52.3
531	Total spent on skilled labour	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
532	Total spent on unskilled labour	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
533	Total spent on material	17.4	17.4	167.4	17.4	90.8	33.7	142.3	52.3
534	Total spent on plant	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
535	Residual unallocated to spending category	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
536	**Total Capital Costs**	17.4	17.4	167.4	17.4	90.8	33.7	142.3	52.3
	TOTAL CASH FLOW (excluding revenues)								
537	Total spent in Quebec	64.3	64.9	65.6	66.3	87.9	68.1	68.9	69.7
538	Total spent in Ontario	137.9	138.9	140.5	142.1	164.7	148.0	150.1	152.3
539	Total spent in the rest of Canada	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
540	Total spend in the rest of the World	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
541	Geographical allocation pending	11.0	11.0	101.0	11.0	11.2	20.3	123.0	33.0
542	Residual unallocated to region	0.0	0.0	0.0	0.0	(0.0)	0.0	(0.0)	0.0
543	**Total**	213.2	214.8	307.0	219.3	263.7	236.4	342.0	255.0
910	**NET CASH FLOW**	729.7	753.2	686.7	800.9	783.7	838.9	761.9	878.3

TOTAL CASHFLOW Composite (via Dorval) at 300 kph QW Corridor

		2019	2020	2021	2022	2023	2024	2025	2026
501	[A] **RIDERSHIP**	17.1	17.5	17.9	18.3	18.8	19.2	19.7	20.1
502	**ADJUSTED GROSS REVENUE**	1,243.6	1,276.7	1,310.7	1,345.6	1,381.5	1,418.3	1,456.1	1,494.9
503	Payments to Travel Agencies	68.4	70.2	72.1	74.0	76.0	78.0	80.1	82.2
504	Payments to Credit Card Companies	11.7	12.0	12.3	12.6	13.0	13.3	13.7	14.0
505	**Revenue Available to HSR Operator**	1,163.5	1,194.5	1,226.3	1,259.0	1,292.6	1,327.0	1,362.4	1,398.7
	OPERATING EMPLOYMENT								
904	Total employment	3,180	3,216	3,251	3,287	3,323	3,360	3,397	3,435
905	"Skilled" employment	1,879	1,896	1,912	1,929	1,946	1,963	1,981	1,998
906	"Unskilled" employment	1,301	1,320	1,339	1,358	1,377	1,397	1,417	1,437
907	Employment in Ontario	1,939	1,960	1,981	2,003	2,025	2,047	2,069	2,092
908	Employment in Quebec	1,242	1,256	1,270	1,284	1,299	1,313	1,328	1,344
	OPERATING COSTS								
	Labour								
506	Bare wage bill skilled	87.0	87.8	88.6	89.3	90.1	90.9	91.7	92.5
507	Bare wage bill unskilled	36.2	36.7	37.2	37.7	38.3	38.8	39.4	39.9
508	Payroll taxes	10.5	10.6	10.7	10.8	11.0	11.1	11.2	11.3
509	Provisions for pension plan	9.2	9.3	9.4	9.5	9.6	9.7	9.8	9.9
	Purchased materials/services								
510	Electricity	35.2	35.8	36.4	37.0	37.6	38.2	38.9	39.5
511	Advertising/promotion	17.2	17.2	17.2	17.2	17.2	17.2	17.2	17.2
512	Infrastructure maintenance services	16.1	16.1	16.1	16.1	16.1	16.1	16.1	16.1
513	Infrastructure materials/supplies	12.4	13.7	15.2	16.8	18.6	20.6	22.8	25.3
514	Rolling stock materials/supplies	20.3	20.7	21.1	21.5	21.9	22.3	22.7	23.2
515	Telecommunications/computer services	22.7	23.3	23.8	24.3	24.9	25.5	26.1	26.7
516	Insurance services/franchise fees etc	13.6	13.8	14.0	14.2	14.3	14.5	14.7	14.9
517	Food/related sundries	2.9	3.0	3.1	3.1	3.2	3.3	3.4	3.5
518	**Unscheduled materials/services**	49.3	49.4	49.5	49.7	49.8	49.9	50.0	50.2
519	**Allowance for contingencies**	22.7	22.9	23.2	23.4	23.7	24.0	24.3	24.7
520	**TOTAL OPERATING COSTS**	355.1	360.0	365.2	370.6	376.2	382.1	388.4	394.9
521	**OPERATING PROFIT**	808.5	834.5	861.2	888.5	916.4	944.9	974.0	1,003.8
909	**COST REVENUE RATIO**	3.28	3.32	3.36	3.40	3.44	3.47	3.51	3.54
522	Operating costs (Ontario)	219.0	222.1	225.5	229.0	232.7	236.6	240.7	245.1
523	Operating costs (Quebec)	132.6	134.3	136.0	137.8	139.7	141.6	143.6	145.7
	CAPITAL COSTS								
524	Total spent in Quebec	0.0	34.5	0.0	0.0	0.0	0.0	0.0	0.0
525	Total spent in Ontario	0.0	34.5	0.0	0.0	0.0	0.0	0.0	0.0
526	Total spent in the rest of Canada	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
527	Total spend in the rest of the World	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
528	Geographical allocation pending	52.3	61.7	204.6	22.7	8.7	17.4	17.4	45.8
529	Residual unallocated to region	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
530	**Total Capital Costs**	52.3	130.8	204.6	22.7	8.7	17.4	17.4	45.8
531	Total spent on skilled labour	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
532	Total spent on unskilled labour	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
533	Total spent on material	52.3	130.8	204.6	22.7	8.7	17.4	17.4	45.8
534	Total spent on plant	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
535	Residual unallocated to spending category	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
536	**Total Capital Costs**	52.3	130.8	204.6	22.7	8.7	17.4	17.4	45.8
	TOTAL CASH FLOW (excluding revenues)								
537	Total spent in Quebec	70.6	91.3	72.3	73.2	74.1	75.0	76.0	77.0
538	Total spent in Ontario	154.6	176.8	159.5	162.1	164.9	167.8	170.9	174.2
539	Total spent in the rest of Canada	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
540	Total spend in the rest of the World	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
541	Geographical allocation pending	33.0	38.6	123.5	11.4	5.5	11.0	11.0	28.0
542	Residual unallocated to region	0.0	0.0	0.0	0.0	0.0	0.0	0.0	(0.0)
543	**Total**	258.1	306.7	355.3	246.7	244.5	253.9	257.9	279.2
910	**NET CASH FLOW**	905.4	887.8	871.0	1,012.3	1,048.1	1,073.2	1,104.5	1,119.5

CAPITAL COST SUMMARY

Composite (via Dorval) at 300 kph QW Corridor

		1995	1996	1997	1998	1999	2000	2001	2002
201	Right-of-Way	0.00	1.35	1.35	12.08	114.74	195.17	119.68	19.33
202	Earthworks/subgrade	0.00	15.41	14.75	33.27	116.40	344.50	617.14	532.84
203	Bridges	0.00	5.78	5.64	14.60	68.41	152.25	316.97	214.39
204	Grade separations	0.00	10.67	10.24	21.42	74.87	226.30	615.90	520.16
205	Other accommodations	0.00	0.95	0.93	1.30	7.40	46.34	76.78	25.63
206	Track	0.00	0.00	0.85	6.09	15.31	33.41	119.26	307.30
207	Power distribution system	0.00	0.00	0.79	5.97	15.24	25.20	86.65	221.24
208	Stations	0.00	4.03	4.03	2.01	2.64	5.82	54.42	105.66
209	People movers (included in stations)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
210	Signals	0.00	0.67	5.26	12.08	18.14	63.03	149.10	153.25
211	Communications	0.00	0.30	2.31	5.53	8.28	28.18	67.43	70.39
212	Equipment maintenance facilities	0.00	0.00	0.00	0.00	0.00	16.50	49.51	55.97
213	Infrastructure maintenance facilities	0.00	0.00	0.00	0.00	0.00	0.00	13.74	37.28
214	Information/ticketing systems	0.00	0.00	0.00	0.00	0.00	0.00	2.60	18.04
215	Rolling stock	0.00	28.69	28.69	76.50	76.50	191.25	191.25	191.25
216	Commissioning	0.00	0.00	0.00	0.00	0.00	0.00	0.00	14.96
217	Administration allowance	0.00	0.66	2.24	3.81	5.39	6.97	12.88	21.78
218	Startup and training	0.00	0.00	0.00	0.00	0.00	0.00	10.73	20.14
219	**TOTAL INITIAL CAPITAL COSTS**	0.00	68.51	77.08	194.67	523.31	1,334.92	2,504.03	2,529.61
220	**Additional fleet requirements**								
221									
222									
223									
224		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
225	**Rolling Stock Overhauls**	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
226	**Infrastructure Renewal**	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
227	**Other ongoing capital**	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
228	*Cross check initial capital*								

26-Jul-94 **HSR STUDY COST DEVELOPMENT**

CAPITAL COST SUMMARY **Composite (via Dorval) at 300 kph QW Corridor**

		2003	*2004*	*2005*	*2006*	*2007*	*2008*	*2009*	*2010*
201	Right-of-Way	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
202	Earthworks/subgrade	158.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
203	Bridges	67.98	0.00	0.00	0.00	0.00	0.00	0.00	0.00
204	Grade separations	155.49	0.00	0.00	0.00	0.00	0.00	0.00	0.00
205	Other accommodations	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
206	Track	353.00	209.28	7.87	0.00	0.00	0.00	0.00	0.00
207	Power distribution system	303.19	221.44	27.24	0.00	0.00	0.00	0.00	0.00
208	Stations	117.97	178.35	0.00	0.00	0.00	0.00	0.00	0.00
209	People movers (included in stations)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
210	Signals	123.77	59.68	0.00	0.00	0.00	0.00	0.00	0.00
211	Communications	59.13	28.76	0.00	0.00	0.00	0.00	0.00	0.00
212	Equipment maintenance facilities	47.18	24.21	0.00	0.00	0.00	0.00	0.00	0.00
213	Infrastructure maintenance facilities	25.49	45.14	11.75	0.00	0.00	0.00	0.00	0.00
214	Information/ticketing systems	12.98	11.86	1.30	0.00	0.00	0.00	0.00	0.00
215	Rolling stock	229.50	229.50	153.00	133.87	0.00	0.00	0.00	0.00
216	Commissioning	28.74	57.97	5.38	0.00	0.00	0.00	0.00	0.00
217	Administration allowance	21.72	17.86	0.00	0.00	0.00	0.00	0.00	0.00
218	Startup and training	25.31	11.91	0.00	0.00	0.00	0.00	0.00	0.00
219	**TOTAL INITIAL CAPITAL COSTS**	1,729.44	1,095.96	206.54	133.87	0.00	0.00	0.00	0.00
220	**Additional fleet requirements**								
221									
222									
223									
224		0.00	0.00	0.00	0.00	0.00	0.00	120.00	0.00
225	**Rolling Stock Overhauls**	0.00	0.00	0.00	0.00	0.00	0.00	0.00	8.71
226	**Infrastructure Renewal**	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
227	**Other ongoing capital**	0.00	0.00	0.00	0.00	0.00	0.00	0.00	69.01
228	*Cross check initial capital*								

Spreadsheet	**W:\207-CHAS\COSTING\30MTD1.WK3**		
Today's date	**27-Jul-94**		
Proessing time	**12:14**		
Data export file	**X-30MTD1.WK1**		
Train speed	**300 kph**		
Train route	**Composite (via Dorval) at 300 kph**		
Demand data	**MOT Stand Alone**		
Initial demand file	**R105MT32/in milli [as supplied by IBI]**		
Train data	**Final off NEW-OD.WK1**		
Trip Time	**COMPOSITE VIA DORVAL**		
Capital file	**C:\work\207-chas\canarail\extract.wk3**		
Capital name	**MONTREAL - TORONTO CORRIDOR 300+ on 200, with people movers EX .. 3200-**		
	MONTREAL - QUEBEC 300+ on 200 EX .. 3200-		
	WINDSOR - TORONTO 300+, composite route EX .. 3200-		
Cap allocation	**SPLT-3DR.WK3**		
Include SWO	**No**		
Include MQ	**No**		
MOT to Pearson	**Yes**		
Con Air Included	**Yes**		
via Mirabel	**No**		
via Dorval	**Yes**		
Delay Cap Input	**3cd-xx-2**	**1** *MOT*	**100%** *DT*
	3cd-xx-2	**1** *MQ*	**100%** *DT*
	3cd-xx-2	**1** *SWO*	**61%** *DT*
		1 *SPLIT*	

26-Jul-94

HSR STUDY COST DEVELOPMENT

OPERATIONS/REVENUES/COSTS Composite (via Dorval) at 300 kph MOT Stand Alone

			Year 2005	*Year 2025*		
	RIDERSHIP					
1 [A]	Adjusted passengers (non-duplicated)	millions	7.1	11.5		
2	Average length of haul	kms	379	385		
3	Passenger kilometres	billion	2.7	4.4		
	OPERATION STATISTICS					
4	Route length	kilometres	610	610		
5	Train trips (one-way)	thousands	10.3	15.6		
6	Tra[illegible]et kms	millions	10.8	15.8		
7	Seat [illegible]ns	billions	3.9	5.7	*358 per trainset*	
8	Trainsets in active fleet	units	31	41		
9	Average trainset utilization	k-km/year	348	386		
10	Average load factor		70%	78%		
11	Total energy consumption	gigaW-hrs	258	379		
12	Total employment		1,620	2,039		
	PASSENGER REVENUES					
13	Adjustusted revenues	$million	545.6	942.7		
14	Agency commissions	$million	(30.0)	(51.8)	*5.5% of gross revenue*	
15	Credit card discount	$million	(5.1)	(8.8)	*0.9% of gross revenue*	
16	Net Revenue	$million	510.5	882.0		
	OPERATIONS AND MAINTENANCE COSTS				***[Total employment]***	
17	Train operations	$million	27.6	37.5	144	186
18	Customer services	$million	51.6	64.2	475	623
19	Equipment maintenance	$million	29.0	41.7	434	619
20	Infrastructure maintenance	$million	39.3	50.7	432	459
21	Executive/administration	$million	16.4	17.5	135	152
22	Insurance/taxes/other	$million	11.5	12.7	0	0
23	Contingency	$million	12.6	15.5	--	--
24	**Total O&M Costs**	$million	187.8	239.8	1,620	2,039
25	**OPERATING PROFIT**		322.7	642.2		
26	**COST/REVENUE RATIOS**					
27	Net revenue : O&M costs Ratio		2.72	3.68		
28	O&M cost per trainset-km	dollars	17.43	15.16		
29	O&M cost per seat-km	cents	4.87	4.24		
30	O&M cost per passenger	dollars	26.48	20.81		
31	O&M cost per passenger-km	cents	7.00	5.41		
32	Net revenue per passenger	dollars	71.98	76.53		
33	Net revenue per passenger km	cents	19.01	19.89		
	CAPITAL COSTS					
34	Startup/admin/training/other "soft" costs	$million	167.4			
35	Construction of track	$million	4,162.7			
36	Construction of stations	$million	444.1			
37	Construction of maintenance facilities	$million	243.6			
38	Acqusition of rolling stock	$million	930.0			
39	**Total Initial Capital Costs**	$million	5,947.8 *over the period 1995 to 2006*			
40	**Total Ongoing Capital Costs**	$million	730.7 *over the period 2007 to 2025*			
41	Initial capital per route-km (excluding RS)	$million	8.23			

		2005 Que	*2005 Ont*	*2025 Que*	2025 Ont
901	Net Revenues	171.28	339.22	295.91	586.06
902	O and M Costs	59.83	128.02	74.42	165.41
903	Employment	547	1,073	692	1,346

26-Jul-94 **HSR STUDY COST DEVELOPMENT**

TOTAL CASHFLOW

Composite (via Dorval) at 300 kph MOT Stand Alone

		Total Year 2005	*Total Year 2025*	*Quebec Year 2005*	*Quebec Year 2025*
501	**[A] RIDERSHIP**	7.1	11.5	*NA*	*NA*
502	**ADJUSTED GROSS REVENUE**	545.6	942.7	183.1	316.3
503	Payments to Travel Agencies	30.0	51.8	10.1	17.4
504	Payments to Credit Card Companies	5.1	8.8	1.7	3.0
505	**Revenue Available to HSR Operator**	510.5	882.0	171.3	295.9
	OPERATING EMPLOYMENT				
904	Total employment	1,620	2,039	547	692
905	"Skilled" employment	1,019	1,226	319	398
906	"Unskilled" employment	601	813	228	294
907	Employment in Ontario	1,073	1,346		
908	Employment in Quebec	547	692	547	692
	OPERATING COSTS				
	Labour				
506	Bare wage bill skilled	48.2	57.9	16.3	20.0
507	Bare wage bill unskilled	16.8	22.7	6.4	8.3
508	Payroll taxes	5.5	6.8	1.9	2.3
509	Provisions for pension plan	4.9	6.0	1.7	2.1
	Purchased materials/services				
510	Electricity	17.5	24.3	1.7	2.3
511	Advertising/promotion	10.9	10.9	3.8	3.8
512	Infrastructure maintenance services	10.7	8.3	1.4	1.1
513	Infrastructure materials/supplies	1.4	14.0	0.2	1.9
514	Rolling stock materials/supplies	10.1	14.8	5.1	7.4
515	Telecommunications/computer services	9.3	15.0	3.2	5.1
516	Insurance services/franchise fees etc	6.0	7.2	0.8	1.0
517	Food/related sundries	1.1	1.8	0.4	0.6
518	**Unscheduled materials/services**	32.9	34.5	13.4	14.1
519	**Allowance for contingencies**	12.6	15.5	3.7	4.5
520	TOTAL OPERATING COSTS	187.8	239.8	59.8	74.4
521	**OPERATING PROFIT**	322.7	642.2	*NA*	*NA*
909	**COST REVENUE RATIO**	2.72	3.68	*NA*	*NA*
522	Operating costs (Ontario)	128.0	165.4		
523	Operating costs (Quebec)	59.8	74.4		

	CAPITAL COSTS	**Initial**	**Ongoing**	**Total**
524	Total spent in Quebec	945.02	60.40	1,005.42
525	Total spent in Ontario	3,145.86	60.40	3,206.26
526	Total spent in the rest of Canada	144.41	0.00	144.41
527	Total spend in the rest of the World	781.80	0.00	781.80
528	Geographical allocation pending	930.00	582.23	1,512.23
529	Residual unallocated to region	0.75	0.00	0.75
530	**Total Capital Costs**	5,947.83	703.02	6,650.85
531	Total spent on skilled labour	1,652.55	0.00	1,652.55
532	Total spent on unskilled labour	425.72	0.00	425.72
533	Total spent on material	2,848.86	703.02	3,551.89
534	Total spent on plant	1,020.70	0.00	1,020.70
535	Residual unallocated to spending category	0.00	0.00	0.00
536	**Total Capital Costs**	5,947.83	703.02	6,650.85

	TOTAL CASH FLOW (excluding revenues)	
537	Total spent in Quebec	*[This line defined only for year-by-year tables]*
538	Total spent in Ontario	*[This line defined only for year-by-year tables]*
539	Total spent in the rest of Canada	*[This line defined only for year-by-year tables]*
540	Total spend in the rest of the World	*[This line defined only for year-by-year tables]*
541	Geographical allocation pending	*[This line defined only for year-by-year tables]*
542	Residual unallocated to region	*[This line defined only for year-by-year tables]*
543	**Total**	*[This line defined only for year-by-year tables]*
910	**NET CASH FLOW**	*[This line defined only for year-by-year tables]*

0 **OPERATIONS COST BREAKDOWN Composite (via Dorval) at 300 kph MOT Stand Alone**

		Cont Allow	Cost Estimate ($ million) 2005	2025	Employment Estimate 2005	2025	Quebec Share 2005
	TRAIN OPERATIONS						
101	Train crew	5.0%	7.18	9.98	100	138	36%
102	Power - demand charges	2.5%	7.28	9.35	–	–	9%
103	Power - energy consumption	2.5%	10.22	15.00	–	–	9%
104	Control centre	5.0%	1.44	1.44	24	24	50%
105	Transportation administration/supervision	5.0%	1.47	1.69	20	23	50%
106	**Subtotal**		27.59	37.47	144	186	21%
	CUSTOMER SERVICES						
107	On-board service staff	10.0%	4.98	7.43	116	173	36%
108	On-board service supplies	5.0%	1.14	1.85	–	–	36%
109	On-board services ground support	10.0%	0.91	1.36	23	35	36%
110	Food/beverage for sale	0.0%	0.00	0.00	–	–	–
111	Station operations	10.0%	15.04	16.18	159	193	24%
112	ATM/Ticketing/Reservations transactions	5.0%	9.31	14.97	–	–	34%
113	Telephone/Counter Sales	5.0%	3.08	4.10	87	115	34%
114	Advertising and promotion expenses	5.0%	10.91	10.91	–	–	34%
115	Customer service administration/supervision	5.0%	6.20	7.41	90	107	50%
116	**Subtotal**		51.57	64.21	475	623	34%
	EQUIPMENT MAINTENANCE						
117	Routine maintenance - labour	5.0%	9.58	14.05	191	279	50%
118	Routine maintenance - material	5.0%	10.12	14.85	–	–	50%
119	Major maintenance [included in capital]	–	–	–	–	–	–
120	Cleaning	5.0%	5.74	8.23	187	269	36%
121	Maintenance administration/supervision	5.0%	3.55	4.53	56	70	50%
122	**Subtotal**		28.98	41.66	434	619	47%
	INFRASTRUCTURE MAINTENANCE						
123	Routine maintenance	15.0%	20.63	21.65	338	361	13%
124	Purchased services	15.0%	10.73	8.29	–	–	13%
125	Materials	10.0%	1.40	14.02	–	–	13%
126	Programmed replacement [occurs after 2025]	–	–	–	–	–	
127	Maintenance administration/supervision	5.0%	6.53	6.78	94	98	23%
128	**Subtotal**		39.29	50.75	432	459	15%
	EXECUTIVE/ADMINISTRATION						
129	Labour and related	5.0%	9.85	11.02	135	152	50%
130	Other	5.0%	6.50	6.50	–	–	50%
131	**Subtotal**		16.35	17.52	135	152	50%
	INSURANCE/TAXES/OTHER						
132	Insurance/claims	0.0%	6.00	7.25	–	–	13%
133	Property taxes	10.0%	5.50	5.50	–	–	84%
134	Franchise fees	10.0%	*nil*	nil	–	–	
135	**Subtotal**		11.50	12.75	0	0	47%
136	**CONTINGENCY**	7.2%	12.55	15.47	–	–	29%
137	**TOTAL**		187.85	239.82	1,620	2,039	32%
138	**Total: Quebec component**		59.83	74.42	547	692	
139	**Total: Ontario component**		128.02	165.41	1,073	1,346	
140	**[Major maintenance included in capital]**		0.00	10.61			
141	Routine equipment maintenance per trainset km	dollars	1.83	1.83			
142	Infrastructure maintenance per route km	$thousand	53.73	72.10			
143	Executive/administration as a percent of total		9.3%	7.8%			
144	Station/ticketing costs per passenger	Dollars	3.83	3.03			
145							
146							

CAPITAL COST SUMMARY

Composite (via Dorval) at 300 kph MOT Stand Alone

		Professional Services	Contin-*gency*	Total
201	Right-of-Way	13.35	14.87	152.46
202	Earthworks/subgrade	186.02	111.95	1,044.32
203	Bridges	87.57	48.35	619.39
204	Grade separations	110.88	88.57	784.20
205	Other accommodations	14.46	20.26	102.24
206	Track	70.38	23.93	555.56
207	Power distribution system	65.64	51.99	464.24
208	Stations	59.14	32.65	418.29
209	People movers (included in stations)	0.00	0.00	0.00
210	Signals	50.39	33.18	304.73
211	Communications	22.41	14.75	135.53
212	Equipment maintenance facilities	12.44	18.66	165.04
213	Infrastructure maintenance facilities	0.00	0.00	78.59
214	Information/ticketing systems	0.00	0.00	25.85
215	Rolling stock	68.89	76.79	930.00
216	Commissioning	63.60	0.00	63.60
217	Administration allowance	0.00	0.00	62.29
218	Startup and training	0.00	0.00	41.50
219	**TOTAL INITIAL CAPITAL COSTS**	825.17	535.94	5,947.83

220	**Additional fleet requirements**	*year 2009*	4 units	60.00
221		*year 2013*	5 units	90.00
222		*year 2017*	2 units	60.00
223		*year 2021*	5 units	90.00
224		*Total*	16 units	300.00
225	**Rolling Stock Overhauls**	*total, years 2005-2025*		309.88
226	**Infrastructure Renewal**	*total, years 2005-2025*		0.00
227	**Other ongoing capital**	*total, years 2005-2025*		120.79
228	*Cross check initial capital*			*0.00*

RIDERSHIP BREAKDOWN

Composite (via Dorval) at 300 kph MOT Stand Alone

			Year 2005	Year 2025		
	RIDERSHIP					
301	Ridership within the segment	*millions*	na	na		
302	Ridership between segments	*millions*	na	na		
303	Airport traffic	*millions*	na	na		
304 [A]	**Total potential passengers**	*million*	7.16	11.64		
305	Passengers not served at peak	*million*	(0.07)	(0.12)	1.0%	*of passengers*
306	Allowance for additional passengers	*million*	0.00	0.00	0.0%	*of passengers*
307	**Net passengers**	*million*	7.09	11.53		
	PASSENGER REVENUES					
308	Initial transportation revenue estimate	*$million*	597.55	1,032.35		
309	PST/GST	*$million*	(46.41)	(80.17)	7.8%	*of revenues*
310	Revenue estimate net of taxes	*$million*	551.14	952.18		
311	First Class premium	*$million*	0.00	0.00	0.0%	*of revenues*
312	Food/beverage sales	*$million*	0.00	0.00	0.00	*per passenger*
313	Revenues foregone at peak	*$million*	(5.51)	(9.52)	1.0%	*of revenues*
314	**Final Gross Revenue**	*$million*	545.63	942.66		
	PASSENGER KILOMETRES					
315	Ridership within segments	*billions*	2.61	4.32		
316	Ridership between segments	*billions*	0.10	0.16		
317	Airport traffic	*billions*	above	above		
318	Total		2.71	4.48		
319	Passenger-km foregone at peak	*billions*	(0.03)	(0.04)	1.0%	*of passenger-km*
320	Allowance for additional passenger-kms	*billions*	0.00	0.00	0.0%	*of passengers-km*
321	**Total passenger kms**	*billions*	2.69	4.43		
322	**Average Length of Haul**	*kms*	379	385		

EMPLOYMENT DATA

Composite (via Dorval) at 300 kph MOT Stand Alone

		Average Wage	Total Year 2005	Total Year 2025	Quebec Year 2005	Quebec Year 2025
401	Train Crew	57,500	100	138	36	47
402	Dispatchers	50,600	24	24	12	12
403	Managerial/admin/professional	58,324	367	417	158	182
404	Station staff	35,939	40	48	10	12
405	Mechanical trades/skilled	39,402	208	299	88	128
406	Maintenance trades/skilled	36,349	280	300	16	17
407	**Total "skilled"**	47,284	1,019	1,226	319	398
408	OBS Staff	31,453	128	191	46	64
409	Sales Staff	29,007	87	115	30	40
410	Other customer service	29,986	12	17	4	6
411	Support staff	34,206	28	33	14	17
412	Station labour (various)	24,881	120	144	29	35
413	Equipment maintenance unskilled	30,603	15	22	8	11
414	Track maintenance unskilled	30,603	58	62	29	31
415	Cleaners	24,270	155	228	68	91
416	**Total "unskilled"**	27,938	601	813	228	294
417	**Total "unallocated"**		0	0	0	(0)
418	**Grand total employment**	40,104	1,620	2,039	547	692
419	**Ontario Total "skilled"**		699	828		
420	**Ontario Total "unskilled"**		374	519		
421	**Ontario Total "unallocated"**		0	0		
422	**Ontario Grand total employment**		1,073	1,346		
423	**Quebec Total "skilled"**		319	398		
424	**Quebec Total "unskilled"**		228	294		
425	**Quebec Total "unallocated"**		0	0		
426	**Quebec Grand total employment**		547	692		

26-Jul-94 **HSR STUDY COST DEVELOPMENT**

TOTAL CASHFLOW **Composite (via Dorval) at 300 kph MOT Stand Alone**

		1995	1996	1997	1998	1999	2000	2001	2002
501	**[A] RIDERSHIP**	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
502	**ADJUSTED GROSS REVENUE**	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
503	Payments to Travel Agencies	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
504	Payments to Credit Card Companies	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
505	**Revenue Available to HSR Operator**	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	OPERATING EMPLOYMENT								
904	Total employment	0	0	0	0	0	0	0	0
905	"Skilled" employment	0	0	0	0	0	0	0	0
906	"Unskilled" employment	0	0	0	0	0	0	0	0
907	Employment in Ontario	0	0	0	0	0	0	0	0
908	Employment in Quebec	0	0	0	0	0	0	0	0
	OPERATING COSTS								
	Labour								
506	Bare wage bill skilled	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
507	Bare wage bill unskilled	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
508	Payroll taxes	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
509	Provisions for pension plan	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Purchased materials/services								
510	Electricity	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
511	Advertising/promotion	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
512	Infrastructure maintenance services	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
513	Infrastructure materials/supplies	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
514	Rolling stock materials/supplies	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
515	Telecommunications/computer services	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
516	Insurance services/franchise fees etc	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
517	Food/related sundries	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
518	**Unscheduled materials/services**	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
519	**Allowance for contingencies**	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
520	**TOTAL OPERATING COSTS**	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
521	**OPERATING PROFIT**	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
909	**COST REVENUE RATIO**								
522	Operating costs (Ontario)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
523	Operating costs (Quebec)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	CAPITAL COSTS								
524	Total spent in Quebec	0.0	4.9	6.3	18.0	73.3	131.9	226.5	225.7
525	Total spent in Ontario	0.0	17.9	20.9	40.5	179.9	418.8	842.8	747.7
526	Total spent in the rest of Canada	0.0	0.0	0.0	0.1	0.3	6.7	17.5	44.6
527	Total spend in the rest of the World	0.0	0.8	1.3	3.3	39.2	107.5	236.8	206.0
528	Geographical allocation pending	0.0	17.4	17.4	46.5	46.5	116.3	116.3	116.3
529	Residual unallocated to region	0.0	(0.0)	(0.0)	(0.0)	0.0	0.1	0.2	0.2
530	**Total Capital Costs**	0.0	41.1	46.1	108.4	339.2	781.3	1,440.1	1,340.4
531	Total spent on skilled labour	0.0	17.1	20.8	43.8	130.7	236.4	443.4	372.2
532	Total spent on unskilled labour	0.0	0.7	0.8	1.7	22.3	59.9	136.3	111.5
533	Total spent on material	0.0	18.6	18.8	50.8	123.9	341.0	562.7	600.6
534	Total spent on plant	0.0	4.7	5.7	12.1	62.2	143.9	297.6	256.1
535	Residual unallocated to spending category	0.0	(0.0)	(0.0)	(0.0)	0.0	(0.0)	0.0	0.0
536	**Total Capital Costs**	0.0	41.1	46.1	108.4	339.2	781.3	1,440.1	1,340.4
	TOTAL CASH FLOW (excluding revenues)								
537	Total spent in Quebec	0.0	4.9	6.3	18.0	73.3	131.9	226.5	225.7
538	Total spent in Ontario	0.0	17.9	20.9	40.5	179.9	418.8	842.8	747.7
539	Total spent in the rest of Canada	0.0	0.0	0.0	0.1	0.3	6.7	17.5	44.6
540	Total spend in the rest of the World	0.0	0.8	2.2	3.3	39.2	107.5	236.8	206.0
541	Geographical allocation pending	0.0	17.4	28.1	46.5	46.5	116.3	116.3	116.3
542	Residual unallocated to region	0.0	(0.0)	(0.0)	(0.0)	0.0	0.1	0.2	0.2
543	**Total**	0.0	41.1	76.5	108.4	339.2	781.3	1,440.1	1,340.4
910	**NET CASH FLOW**	0.0	(41.1)	(76.5)	(108.4)	(339.2)	(781.3)	(1,440.1)	(1,340.4)

TOTAL CASHFLOW Composite (via Dorval) at 300 kph MOT Stand Alone

		2003	2004	2005	2006	2007	2008	2009	2010
501 [A]	**RIDERSHIP**	1.3	1.3	7.1	7.3	7.4	7.6	7.8	8.0
502	**ADJUSTED GROSS REVENUE**	63.3	63.5	545.6	560.8	576.3	592.3	608.7	625.5
503	Payments to Travel Agencies	3.5	3.5	30.0	30.8	31.7	32.6	33.5	34.4
504	Payments to Credit Card Companies	0.6	0.6	5.1	5.3	5.4	5.6	5.7	5.9
505	**Revenue Available to HSR Operator**	59.3	59.4	510.5	524.7	539.2	554.1	569.5	585.3
	OPERATING EMPLOYMENT								
904	Total employment	348	348	1,620	1,639	1,657	1,676	1,696	1,715
905	"Skilled" employment	252	252	1,019	1,028	1,038	1,047	1,057	1,067
906	"Unskilled" employment	97	97	601	610	620	629	639	648
907	Employment in Ontario	139	139	1,073	1,085	1,098	1,110	1,123	1,136
908	Employment in Quebec	209	209	547	553	560	566	573	580
	OPERATING COSTS								
	Labour								
506	Bare wage bill skilled	11.9	11.9	48.2	48.6	49.1	49.5	50.0	50.4
507	Bare wage bill unskilled	2.7	2.7	16.8	17.1	17.3	17.6	17.8	18.1
508	Payroll taxes	1.2	1.2	5.5	5.5	5.6	5.6	5.7	5.8
509	Provisions for pension plan	1.0	1.0	4.9	4.9	5.0	5.0	5.1	5.1
	Purchased materials/services								
510	Electricity	1.7	1.7	17.5	17.8	18.1	18.4	18.7	19.0
511	Advertising/promotion	5.5	5.5	10.9	10.9	10.9	10.9	10.9	10.9
512	Infrastructure maintenance services	3.1	3.1	10.7	10.7	10.7	10.2	9.8	9.3
513	Infrastructure materials/supplies	0.4	0.4	1.4	1.5	1.6	1.7	1.8	1.9
514	Rolling stock materials/supplies	1.2	1.2	10.1	10.3	10.5	10.7	10.9	11.1
515	Telecommunications/computer services	1.7	1.7	9.3	9.5	9.8	10.0	10.2	10.5
516	Insurance services/franchise fees etc	1.7	1.7	6.0	6.1	6.1	6.2	6.2	6.3
517	Food/related sundries	0.2	0.2	1.1	1.2	1.2	1.2	1.3	1.3
518	**Unscheduled materials/services**	11.0	19.4	32.9	33.0	33.0	33.1	33.2	33.3
519	**Allowance for contingencies**	3.1	3.7	12.6	12.7	12.8	12.8	12.8	12.9
520	**TOTAL OPERATING COSTS**	46.5	55.5	187.8	189.7	191.6	192.9	194.3	195.7
521	**OPERATING PROFIT**	12.8	3.9	322.7	335.0	347.6	361.2	375.2	389.5
909	**COST REVENUE RATIO**	1.28	1.07	2.72	2.77	2.81	2.87	2.93	2.99
522	Operating costs (Ontario)	18.6	22.2	128.0	129.2	130.5	131.3	132.2	133.0
523	Operating costs (Quebec)	27.9	33.3	59.8	60.4	61.1	61.6	62.2	62.7
	CAPITAL COSTS								
524	Total spent in Quebec	134.4	116.3	7.5	0.0	0.0	0.0	0.0	19.8
525	Total spent in Ontario	500.3	358.0	19.1	0.0	0.0	0.0	0.0	19.8
526	Total spent in the rest of Canada	40.2	34.9	0.1	0.0	0.0	0.0	0.0	0.0
527	Total spend in the rest of the World	118.3	65.5	3.1	0.0	0.0	0.0	0.0	0.0
528	Geographical allocation pending	139.5	139.5	93.0	81.4	0.0	0.0	60.0	5.3
529	Residual unallocated to region	0.1	0.1	(0.0)	0.0	0.0	0.0	0.0	0.0
530	**Total Capital Costs**	932.8	714.3	122.8	81.4	0.0	0.0	60.0	45.0
531	Total spent on skilled labour	225.8	153.4	9.1	0.0	0.0	0.0	0.0	0.0
532	Total spent on unskilled labour	60.3	30.6	1.5	0.0	0.0	0.0	0.0	0.0
533	Total spent on material	499.2	443.8	108.0	81.4	0.0	0.0	60.0	45.0
534	Total spent on plant	147.6	86.5	4.2	0.0	0.0	0.0	0.0	0.0
535	Residual unallocated to spending category	0.0	(0.0)	(0.0)	0.0	0.0	0.0	0.0	0.0
536	**Total Capital Costs**	932.8	714.3	122.8	81.4	0.0	0.0	60.0	45.0
	TOTAL CASH FLOW (excluding revenues)								
537	Total spent in Quebec	162.3	149.6	67.4	60.4	61.1	61.6	62.2	82.5
538	Total spent in Ontario	518.8	380.2	147.1	129.2	130.5	131.3	132.2	152.8
539	Total spent in the rest of Canada	40.2	34.9	0.1	0.0	0.0	0.0	0.0	0.0
540	Total spend in the rest of the World	118.3	65.5	3.1	0.0	0.0	0.0	0.0	0.0
541	Geographical allocation pending	139.5	139.5	93.0	81.4	0.0	0.0	60.0	5.3
542	Residual unallocated to region	0.1	0.1	(0.0)	0.0	0.0	(0.0)	0.0	0.0
543	**Total**	979.3	769.8	310.6	271.1	191.6	192.9	254.3	240.7
910	**NET CASH FLOW**	(920.0)	(710.4)	199.9	253.6	347.6	361.2	315.2	344.6

26-Jul-94 **HSR STUDY COST DEVELOPMENT**

TOTAL CASHFLOW — Composite (via Dorval) at 300 kph MOT Stand Alone

		2011	2012	2013	2014	2015	2016	2017	2018
501	[A] **RIDERSHIP**	8.2	8.4	8.6	8.8	9.0	9.3	9.5	9.7
502	**ADJUSTED GROSS REVENUE**	642.9	660.7	679.0	697.8	717.2	737.1	757.5	778.5
503	Payments to Travel Agencies	35.4	36.3	37.3	38.4	39.4	40.5	41.7	42.8
504	Payments to Credit Card Companies	6.0	6.2	6.4	6.5	6.7	6.9	7.1	7.3
505	**Revenue Available to HSR Operator**	601.5	618.2	635.3	652.9	671.0	689.6	708.7	728.4
	OPERATING EMPLOYMENT								
904	Total employment	1,735	1,755	1,775	1,796	1,817	1,838	1,859	1,880
905	"Skilled" employment	1,077	1,087	1,097	1,107	1,117	1,128	1,138	1,149
906	"Unskilled" employment	658	668	678	689	699	710	721	732
907	Employment in Ontario	1,149	1,162	1,175	1,188	1,202	1,216	1,230	1,244
908	Employment in Quebec	586	593	600	607	615	622	629	637
	OPERATING COSTS								
	Labour								
506	Bare wage bill skilled	50.9	51.4	51.8	52.3	52.8	53.3	53.8	54.3
507	Bare wage bill unskilled	18.4	18.7	18.9	19.2	19.5	19.8	20.1	20.4
508	Payroll taxes	5.8	5.9	6.0	6.0	6.1	6.2	6.2	6.3
509	Provisions for pension plan	5.2	5.3	5.3	5.4	5.4	5.5	5.5	5.6
	Purchased materials/services								
510	Electricity	19.3	19.6	20.0	20.3	20.6	21.0	21.3	21.7
511	Advertising/promotion	10.9	10.9	10.9	10.9	10.9	10.9	10.9	10.9
512	Infrastructure maintenance services	8.8	8.3	8.3	8.3	8.3	8.3	8.3	8.3
513	Infrastructure materials/supplies	2.0	2.2	2.3	2.5	2.8	5.6	6.2	6.9
514	Rolling stock materials/supplies	11.3	11.6	11.8	12.0	12.3	12.5	12.7	13.0
515	Telecommunications/computer services	10.7	11.0	11.3	11.5	11.8	12.1	12.4	12.7
516	Insurance services/franchise fees etc	6.4	6.4	6.5	6.5	6.6	6.7	6.7	6.8
517	Food/related sundries	1.3	1.3	1.4	1.4	1.4	1.5	1.5	1.6
518	**Unscheduled materials/services**	33.3	33.4	33.5	33.6	33.7	33.7	33.8	33.9
519	**Allowance for contingencies**	12.9	12.9	13.0	13.2	13.3	13.7	13.8	14.0
520	**TOTAL OPERATING COSTS**	197.2	198.7	200.8	203.0	205.3	210.5	213.2	216.1
521	**OPERATING PROFIT**	404.3	419.5	434.5	450.0	465.7	479.1	495.5	512.3
909	**COST REVENUE RATIO**	3.05	3.11	3.16	3.22	3.27	3.28	3.32	3.37
522	Operating costs (Ontario)	133.9	134.8	136.3	137.8	139.5	143.5	145.5	147.6
523	Operating costs (Quebec)	63.3	63.9	64.5	65.2	65.9	67.0	67.7	68.5
	CAPITAL COSTS								
524	Total spent in Quebec	0.0	0.0	0.0	0.0	20.7	0.0	0.0	0.0
525	Total spent in Ontario	0.0	0.0	0.0	0.0	20.7	0.0	0.0	0.0
526	Total spent in the rest of Canada	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
527	Total spend in the rest of the World	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
528	Geographical allocation pending	10.6	10.6	100.6	10.6	11.0	19.7	91.8	31.8
529	Residual unallocated to region	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
530	**Total Capital Costs**	10.6	10.6	100.6	10.6	52.5	19.7	91.8	31.8
531	Total spent on skilled labour	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
532	Total spent on unskilled labour	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
533	Total spent on material	10.6	10.6	100.6	10.6	52.5	19.7	91.8	31.8
534	Total spent on plant	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
535	Residual unallocated to spending category	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
536	**Total Capital Costs**	10.6	10.6	100.6	10.6	52.5	19.7	91.8	31.8
	TOTAL CASH FLOW (excluding revenues)								
537	Total spent in Quebec	63.3	63.9	64.5	65.2	86.6	67.0	67.7	68.5
538	Total spent in Ontario	133.9	134.8	136.3	137.8	160.2	143.5	145.5	147.6
539	Total spent in the rest of Canada	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
540	Total spend in the rest of the World	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
541	Geographical allocation pending	10.6	10.6	100.6	10.6	11.0	19.7	91.8	31.8
542	Residual unallocated to region	(0.0)	0.0	0.0	0.0	0.0	(0.0)	0.0	0.0
543	**Total**	207.8	209.3	301.4	213.6	257.8	230.2	305.0	247.9
910	**NET CASH FLOW**	393.7	408.9	333.9	439.3	413.2	459.4	403.7	480.5

TOTAL CASHFLOW

Composite (via Dorval) at 300 kph MOT Stand Alone

		2019	2020	2021	2022	2023	2024	2025	2026
501	[A] **RIDERSHIP**	10.0	10.2	10.5	10.7	11.0	11.2	11.5	11.8
502	**ADJUSTED GROSS REVENUE**	800.1	822.2	845.0	868.4	892.5	917.2	942.7	968.8
503	Payments to Travel Agencies	44.0	45.2	46.5	47.8	49.1	50.4	51.8	53.3
504	Payments to Credit Card Companies	7.5	7.7	7.9	8.1	8.4	8.6	8.8	9.1
505	**Revenue Available to HSR Operator**	748.5	769.3	790.6	812.5	835.0	858.2	882.0	906.4
	OPERATING EMPLOYMENT								
904	Total employment	1,9[illegible]	1,924	1,946	1,969	1,992	2,015	2,039	2,062
905	"Skilled" employment	1,159	1,170	1,181	1,192	1,203	1,214	1,226	1,237
906	"Unskilled" employment	743	754	765	777	789	801	813	825
907	Employment in Ontario	1,258	1,272	1,287	1,301	1,316	1,331	1,346	1,362
908	Employment in Quebec	644	652	660	668	676	684	692	700
	OPERATING COSTS								
	Labour								
506	Bare wage bill skilled	54.8	55.3	55.8	56.3	56.8	57.3	57.9	58.4
507	Bare wage bill unskilled	20.7	21.1	21.4	21.7	22.0	22.4	22.7	23.0
508	Payroll taxes	6.4	6.4	6.5	6.6	6.7	6.7	6.8	6.9
509	Provisions for pension plan	5.7	5.7	5.8	5.9	5.9	6.0	6.0	6.1
	Purchased materials/services								
510	Electricity	22.1	22.4	22.8	23.2	23.6	24.0	24.3	24.8
511	Advertising/promotion	10.9	10.9	10.9	10.9	10.9	10.9	10.9	10.9
512	Infrastructure maintenance services	8.3	8.3	8.3	8.3	8.3	8.3	8.3	8.3
513	Infrastructure materials/supplies	7.6	8.4	9.3	10.3	11.4	12.7	14.0	15.5
514	Rolling stock materials/supplies	13.2	13.5	13.8	14.0	14.3	14.6	14.8	15.1
515	Telecommunications/computer services	13.0	13.3	13.6	13.9	14.3	14.6	15.0	15.3
516	Insurance services/franchise fees etc	6.8	6.9	7.0	7.0	7.1	7.2	7.2	7.3
517	Food/related sundries	1.6	1.6	1.7	1.7	1.8	1.8	1.8	1.9
518	**Unscheduled materials/services**	34.0	34.1	34.1	34.2	34.3	34.4	34.5	34.5
519	**Allowance for contingencies**	14.2	14.4	14.6	14.8	15.0	15.2	15.5	15.7
520	**TOTAL OPERATING COSTS**	219.0	222.1	225.4	228.7	232.3	235.9	239.8	243.9
521	**OPERATING PROFIT**	529.5	547.2	565.3	583.8	602.8	622.2	642.2	662.5
909	**COST REVENUE RATIO**	3.42	3.46	3.51	3.55	3.60	3.64	3.68	3.72
522	Operating costs (Ontario)	149.8	152.1	154.5	157.0	159.6	162.4	165.4	168.5
523	Operating costs (Quebec)	69.3	70.1	70.9	71.7	72.6	73.5	74.4	75.4
	CAPITAL COSTS								
524	Total spent in Quebec	0.0	19.8	0.0	0.0	0.0	0.0	0.0	0.0
525	Total spent in Ontario	0.0	19.8	0.0	0.0	0.0	0.0	0.0	0.0
526	Total spent in the rest of Canada	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
527	Total spend in the rest of the World	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
528	Geographical allocation pending	31.8	37.5	123.0	11.4	5.3	10.6	10.6	27.7
529	Residual unallocated to region	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
530	**Total Capital Costs**	31.8	77.2	123.0	11.4	5.3	10.6	10.6	27.7
531	Total spent on skilled labour	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
532	Total spent on unskilled labour	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
533	Total spent on material	31.8	77.2	123.0	11.4	5.3	10.6	10.6	27.7
534	Total spent on plant	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
535	Residual unallocated to spending category	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
536	**Total Capital Costs**	31.8	77.2	123.0	11.4	5.3	10.6	10.6	27.7
	TOTAL CASH FLOW (excluding revenues)								
537	Total spent in Quebec	69.3	89.9	70.9	71.7	72.6	73.5	74.4	75.4
538	Total spent in Ontario	149.8	171.9	154.5	157.0	159.6	162.4	165.4	168.5
539	Total spent in the rest of Canada	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
540	Total spend in the rest of the World	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
541	Geographical allocation pending	31.8	37.5	123.0	11.4	5.3	10.6	10.6	27.7
542	Residual unallocated to region	0.0	(0.0)	0.0	0.0	0.0	0.0	0.0	(0.0)
543	**Total**	250.9	299.3	348.3	240.1	237.6	246.6	250.4	271.6
910	**NET CASH FLOW**	497.7	470.0	442.3	572.4	597.5	611.6	631.5	634.9

CAPITAL COST SUMMARY

Composite (via Dorval) at 300 kph MOT Stand Alone

		1995	1996	1997	1998	1999	2000	2001	2002
201	Right-of-Way	0.00	0.41	0.41	2.16	34.54	65.98	41.60	7.36
202	Earthworks/subgrade	0.00	8.43	8.43	18.37	91.98	196.80	345.54	271.44
203	Bridges	0.00	4.22	4.22	11.39	62.96	121.75	232.23	132.39
204	Grade separations	0.00	4.99	4.99	10.58	55.01	119.31	296.47	212.30
205	Other accommodations	0.00	0.59	0.59	0.74	5.77	27.73	49.34	17.47
206	Track	0.00	0.00	0.85	2.76	7.82	27.36	71.42	156.53
207	Power distribution system	0.00	0.00	0.79	2.57	7.75	19.23	57.85	101.65
208	Stations	0.00	3.55	3.55	1.77	2.64	5.27	52.84	94.85
209	People movers (included in stations)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
210	Signals	0.00	0.67	2.17	6.04	13.98	41.46	68.47	71.71
211	Communications	0.00	0.30	0.97	2.69	6.22	18.44	30.45	31.89
212	Equipment maintenance facilities	0.00	0.00	0.00	0.00	0.00	16.50	49.51	49.51
213	Infrastructure maintenance facilities	0.00	0.00	0.00	0.00	0.00	0.00	7.86	23.58
214	Information/ticketing systems	0.00	0.00	0.00	0.00	0.00	0.00	2.58	12.92
215	Rolling stock	0.00	17.44	17.44	46.50	46.50	116.25	116.25	116.25
216	Commissioning	0.00	0.00	0.00	0.00	0.00	0.00	0.00	12.72
217	Administration allowance	0.00	0.49	1.66	2.83	4.00	5.17	9.89	15.79
218	Startup and training	0.00	0.00	0.00	0.00	0.00	0.00	7.84	12.04
219	**TOTAL INITIAL CAPITAL COSTS**	0.00	41.09	46.08	108.40	339.16	781.26	1,440.14	1,340.41
220	**Additional fleet requirements**								
221									
222									
223									
224		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
225	**Rolling Stock Overhauls**	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
226	**Infrastructure Renewal**	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
227	**Other ongoing capital**	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
228	*Cross check initial capital*								

26-Jul-94 **HSR STUDY COST DEVELOPMENT**

CAPITAL COST SUMMARY — Composite (via Dorval) at 300 kph MOT Stand Alone

		2003	2004	2005	2006	2007	2008	2009	2010
201	Right-of-Way	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
202	Earthworks/subgrade	103.32	0.00	0.00	0.00	0.00	0.00	0.00	0.00
203	Bridges	50.23	0.00	0.00	0.00	0.00	0.00	0.00	0.00
204	Grade separations	80.55	0.00	0.00	0.00	0.00	0.00	0.00	0.00
205	Other accommodations	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
206	Track	159.58	124.56	4.68	0.00	0.00	0.00	0.00	0.00
207	Power distribution system	135.79	121.93	16.67	0.00	0.00	0.00	0.00	0.00
208	Stations	91.52	162.30	0.00	0.00	0.00	0.00	0.00	0.00
209	People movers (included in stations)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
210	Signals	61.77	38.47	0.00	0.00	0.00	0.00	0.00	0.00
211	Communications	27.47	17.11	0.00	0.00	0.00	0.00	0.00	0.00
212	Equipment maintenance facilities	33.01	16.50	0.00	0.00	0.00	0.00	0.00	0.00
213	Infrastructure maintenance facilities	11.79	31.44	3.93	0.00	0.00	0.00	0.00	0.00
214	Information/ticketing systems	2.58	6.46	1.29	0.00	0.00	0.00	0.00	0.00
215	Rolling stock	139.50	139.50	93.00	81.37	0.00	0.00	0.00	0.00
216	Commissioning	9.54	38.16	3.18	0.00	0.00	0.00	0.00	0.00
217	Administration allowance	11.49	10.96	0.00	0.00	0.00	0.00	0.00	0.00
218	Startup and training	14.67	6.95	0.00	0.00	0.00	0.00	0.00	0.00
219	**TOTAL INITIAL CAPITAL COSTS**	932.80	714.35	122.76	81.37	0.00	0.00	0.00	0.00
220	**Additional fleet requirements**								
221									
222									
223									
224		0.00	0.00	0.00	0.00	0.00	0.00	60.00	0.00
225	**Rolling Stock Overhauls**	0.00	0.00	0.00	0.00	0.00	0.00	0.00	5.30
226	**Infrastructure Renewal**	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
227	**Other ongoing capital**	0.00	0.00	0.00	0.00	0.00	0.00	0.00	39.65
228	*Cross check initial capital*								

HSR STUDY COST DEVELOPMENT

Spreadsheet	**W:\207-CHAS\COSTING\30MT-DR.WK3**		
Today's date	**27-Jul-94**		
Proessing time	**14:16**		
Data export file	**X-30MT-D.WK1**		
Train speed	**300 kph**		
Train route	**Reduced (via Dorval) at 300 kph**		
Demand data	**MOT Stand Alone**		
Initial demand file	**R105MT32/in milll [as supplied by IBI]**		
Train data	**Final off NEW-OD.WK1**		
Trip Time	**COMPOSITE VIA DORVAL**		
Capital file	**C:\work\207-chas\canarail\extract.wk3**		
Capital name	**MONTREAL - TORONTO CORRIDOR 300+ on 200, no people movers EX .. 3201-**		
	MONTREAL - QUEBEC 300+ on 200 EX .. 3200-		
	WINDSOR - TORONTO 300+, composite route EX .. 3200-		
Cap allocation	**SPLT-3DX.WK3**		
Include SWO	**No**		
Include MQ	**No**		
MOT to Pearson	**No**		
Con Air Included	**No**		
via Mirabel	**No**		
via Dorval	**Yes**		
Delay Cap Input	**3cd-xx-3**	**1** *MOT*	**100%** *DT*
	3cd-xx-2	**1** *MQ*	**100%** *DT*
	3cd-xx-2	**1** *SWO*	**61%** *DT*
		1 *SPLIT*	

26-Jul-94 **HSR STUDY COST DEVELOPMENT**

OPERATIONS/REVENUES/COSTS Reduced (via Dorval) at 300 kph MOT Stand Alone

			Year 2005	Year 2025		
	RIDERSHIP					
1 [A]	Adjusted passengers (non-duplicated)	millions	6.6	10.6		
2	Average length of haul	kms	378	385		
3	Passenger kilometres	billion	2.5	4.1		
	OPERATION STATISTICS					
4	Route length	kilometres	586	586		
5	Train trips (one-way)	thousands	9.6	14.4		
6	Trainset kms	millions	9.9	14.3		
7	Seat kms	billions	3.5	5.1	*358 per trainset*	
8	Trainsets in active fleet	units	28	37		
9	Average trainset utilization	k-km/year	353	387		
10	Average load factor		70%	80%		
11	Total energy consumption	gigaW-hrs	237	343		
12	Total employment		1,519	1,889		
	PASSENGER REVENUES					
13	Adjustusted revenues	$million	503.8	868.6		
14	Agency commissions	$million	(27.7)	(47.8)	*5.5% of gross revenue*	
15	Credit card discount	$million	(4.7)	(8.1)	*0.9% of gross revenue*	
16	Net Revenue	$million	471.4	812.7		
	OPERATIONS AND MAINTENANCE COSTS				*[Total employment]*	
17	Train operations	$million	26.2	35.2	136	173
18	Customer services	$million	48.3	59.8	435	566
19	Equipment maintenance	$million	27.0	38.2	407	568
20	Infrastructure maintenance	$million	36.9	45.5	407	431
21	Executive/administration	$million	16.4	17.5	135	151
22	Insurance/taxes/other	$million	11.5	12.7	0	0
23	Contingency	$million	11.9	14.3	--	--
24	**Total O&M Costs**	$million	178.2	223.1	1,519	1,889
25	**OPERATING PROFIT**		293.2	589.6		
26	**COST/REVENUE RATIOS**					
27	Net revenue : O&M costs Ratio		2.65	3.64		
28	O&M cost per trainset-km	dollars	18.03	15.57		
29	O&M cost per seat-km	cents	5.04	4.35		
30	O&M cost per passenger	dollars	27.10	20.98		
31	O&M cost per passenger-km	cents	7.17	5.45		
32	Net revenue per passenger	dollars	71.70	76.42		
33	Net revenue per passenger km	cents	18.97	19.87		
	CAPITAL COSTS					
34	Startup/admin/training/other "soft" costs	$million	152.4			
35	Construction of track	$million	3,859.2			
36	Construction of stations	$million	108.9			
37	Construction of maintenance facilities	$million	235.7			
38	Acqusition of rolling stock	$million	840.0			
39	**Total Initial Capital Costs**	$million	5,196.1	*over the period 1995 to 2006*		
40	**Total Ongoing Capital Costs**	$million	665.7	*over the period 2007 to 2025*		
41	Initial capital per route-km (excluding RS)	$million	7.44			

No.	Item	*2005 Que*	*2005 Ont*	*2025 Que*	2025 Ont
901	Net Revenues	158.16	313.25	272.67	540.03
902	O and M Costs	58.05	120.13	70.93	152.16
903	Employment	526	993	655	1,235

TOTAL CASHFLOW

Reduced (via Dorval) at 300 kph MOT Stand Alone

		Total Year 2005	*Total Year 2025*	*Quebec Year 2005*	*Quebec Year 2025*
501	**[A] RIDERSHIP**	6.6	10.6	*NA*	*NA*
502	**ADJUSTED GROSS REVENUE**	503.8	868.6	169.0	291.4
503	Payments to Travel Agencies	27.7	47.8	9.3	16.0
504	Payments to Credit Card Companies	4.7	8.1	1.6	2.7
505	**Revenue Available to HSR Operator**	471.4	812.7	158.2	272.7
	OPERATING EMPLOYMENT				
904	Total employment	1,519	1,889	526	655
905	"Skilled" employment	968	1,152	310	380
906	"Unskilled" employment	552	737	217	275
907	Employment in Ontario	993	1,235		
908	Employment in Quebec	526	655	526	655
	OPERATING COSTS				
	Labour				
506	Bare wage bill skilled	45.9	54.6	15.8	19.2
507	Bare wage bill unskilled	15.4	20.6	6.1	7.7
508	Payroll taxes	5.1	6.3	1.8	2.2
509	Provisions for pension plan	4.6	5.6	1.6	2.0
	Purchased materials/services				
510	Electricity	16.7	22.9	1.6	2.2
511	Advertising/promotion	10.1	10.1	3.5	3.5
512	Infrastructure maintenance services	10.3	8.0	1.4	1.1
513	Infrastructure materials/supplies	1.1	10.8	0.2	1.5
514	Rolling stock materials/supplies	9.3	13.5	4.6	6.7
515	Telecommunications/computer services	8.6	13.8	3.0	4.7
516	Insurance services/franchise fees etc	6.0	7.2	0.8	1.0
517	Food/related sundries	1.1	1.7	0.4	0.6
518	**Unscheduled materials/services**	32.2	33.6	13.6	14.2
519	**Allowance for contingencies**	11.9	14.3	3.6	4.3
520	**TOTAL OPERATING COSTS**	178.2	223.1	58.1	70.9
521	**OPERATING PROFIT**	293.2	589.6	*NA*	*NA*
909	**COST REVENUE RATIO**	2.65	3.64	*NA*	*NA*
522	Operating costs (Ontario)	120.1	152.2		
523	Operating costs (Quebec)	58.1	70.9		

	CAPITAL COSTS	**Initial**	**Ongoing**	**Total**
524	Total spent in Quebec	830.20	55.59	885.78
525	Total spent in Ontario	2,713.09	55.59	2,768.67
526	Total spent in the rest of Canada	136.59	0.00	136.59
527	Total spend in the rest of the World	675.51	0.00	675.51
528	Geographical allocation pending	840.00	527.60	1,367.60
529	Residual unallocated to region	0.74	0.00	0.74
530	**Total Capital Costs**	5,196.13	638.78	5,834.91
531	Total spent on skilled labour	1,424.37	0.00	1,424.37
532	Total spent on unskilled labour	363.77	0.00	363.77
533	Total spent on material	2,529.00	638.78	3,167.78
534	Total spent on plant	878.99	0.00	878.99
535	Residual unallocated to spending category	(0.00)	0.00	(0.00)
536	**Total Capital Costs**	5,196.13	638.78	5,834.91

	TOTAL CASH FLOW (excluding revenues)	
537	Total spent in Quebec	*[This line defined only for year-by-year tables]*
538	Total spent in Ontario	*[This line defined only for year-by-year tables]*
539	Total spent in the rest of Canada	*[This line defined only for year-by-year tables]*
540	Total spend in the rest of the World	*[This line defined only for year-by-year tables]*
541	Geographical allocation pending	*[This line defined only for year-by-year tables]*
542	Residual unallocated to region	*[This line defined only for year-by-year tables]*
543	**Total**	*[This line defined only for year-by-year tables]*
910	**NET CASH FLOW**	*[This line defined only for year-by-year tables]*

0

OPERATIONS COST BREAKDOWN Reduced (via Dorval) at 300 kph MOT Stand Alone

		Cont Allow	Cost Estimate ($ million) 2005	2025	Employment Estimate 2005	2025	Quebec Share 2005
	TRAIN OPERATIONS						
101	Train crew	5.0%	6.62	9.10	92	126	37%
102	Power - demand charges	2.5%	7.28	9.35	–	–	10%
103	Power - energy consumption	2.5%	9.37	13.59	–	–	10%
104	Control centre	5.0%	1.44	1.44	24	24	50%
105	Transportation administration/supervision	5.0%	1.47	1.68	20	23	50%
106	**Subtotal**		26.18	35.16	136	173	21%
	CUSTOMER SERVICES						
107	On-board service staff	10.0%	4.61	6.81	107	159	37%
108	On-board service supplies	5.0%	1.05	1.71	–	–	37%
109	On-board services ground support	10.0%	0.84	1.25	21	32	37%
110	Food/beverage for sale	0.0%	0.00	0.00	–	–	–
111	Station operations	10.0%	14.05	14.97	136	162	28%
112	ATM/Ticketing/Reservations transactions	5.0%	8.63	13.80	–	–	34%
113	Telephone/Counter Sales	5.0%	2.85	3.77	80	106	34%
114	Advertising and promotion expenses	5.0%	10.08	10.08	–	–	34%
115	Customer service administration/supervision	5.0%	6.20	7.38	90	107	50%
116	**Subtotal**		48.31	59.75	435	566	35%
	EQUIPMENT MAINTENANCE						
117	Routine maintenance - labour	5.0%	8.82	12.71	175	253	50%
118	Routine maintenance - material	5.0%	9.26	13.45	–	–	50%
119	Major maintenance [included in capital]	–	–	–	–	–	–
120	Cleaning	5.0%	5.37	7.52	175	246	37%
121	Maintenance administration/supervision	5.0%	3.55	4.49	56	69	50%
122	**Subtotal**		27.00	38.17	407	568	47%
	INFRASTRUCTURE MAINTENANCE						
123	Routine maintenance	15.0%	19.63	20.57	322	343	14%
124	Purchased services	15.0%	10.31	7.97	–	–	14%
125	Materials	10.0%	1.08	10.82	–	–	14%
126	Programmed replacement [occurs after 2025]	–	–	–	–	–	
127	Maintenance administration/supervision	5.0%	5.91	6.13	85	88	23%
128	**Subtotal**		36.93	45.49	407	431	15%
	EXECUTIVE/ADMINISTRATION						
129	Labour and related	5.0%	9.85	10.96	135	151	50%
130	Other	5.0%	6.50	6.50	–	–	50%
131	**Subtotal**		16.35	17.46	135	151	50%
	INSURANCE/TAXES/OTHER						
132	Insurance/claims	0.0%	6.00	7.24	–	–	14%
133	Property taxes	10.0%	5.50	5.50	–	–	84%
134	Franchise fees	10.0%	nil	nil	–	–	
135	**Subtotal**		11.50	12.74	0	0	47%
136	**CONTINGENCY**	7.2%	11.90	14.32	–	–	30%
137	**TOTAL**		178.18	223.09	1,519	1,889	33%
138	**Total: Quebec component**		58.05	70.93	526	655	
139	**Total: Ontario component**		120.13	152.16	993	1,235	
140	**[Major maintenance included in capital]**		0.00	9.85			
141	Routine equipment maintenance per trainset km	dollars	1.83	1.83			
142	Infrastructure maintenance per route km	$thousand	52.96	67.18			
143	Executive/administration as a percent of total		9.8%	8.4%			
144	Station/ticketing costs per passenger	Dollars	3.84	3.03			
145							
146							

26-Jul-94 **HSR STUDY COST DEVELOPMENT**

CAPITAL COST SUMMARY

Reduced (via Dorval) at 300 kph MOT Stand Alone

		Professional Services	Contin-*gency*	Total
201	Right-of-Way	10.19	11.34	116.29
202	Earthworks/subgrade	168.12	103.08	958.44
203	Bridges	85.66	47.29	605.87
204	Grade separations	106.48	85.08	753.07
205	Other accommodations	4.29	6.02	30.36
206	Track	66.62	22.65	525.76
207	Power distribution system	63.03	49.93	445.81
208	Stations	11.77	6.50	83.27
209	People movers (included in stations)	0.00	0.00	0.00
210	Signals	48.50	31.93	293.28
211	Communications	21.55	14.18	130.30
212	Equipment maintenance facilities	12.44	18.66	165.04
213	Infrastructure maintenance facilities	0.00	0.00	70.66
214	Information/ticketing systems	0.00	0.00	25.63
215	Rolling stock	62.22	69.36	840.00
216	Commissioning	52.20	0.00	52.20
217	Administration allowance	0.00	0.00	61.25
218	Startup and training	0.00	0.00	38.91
219	**TOTAL INITIAL CAPITAL COSTS**	713.06	466.02	5,196.13

220	**Additional fleet requirements**	*year 2009*	4 units	60.00
221		*year 2013*	5 units	90.00
222		*year 2017*	2 units	60.00
223		*year 2021*	4 units	60.00
224		*Total*	15 units	270.00
225	**Rolling Stock Overhauls**	*total, years 2005-2025*		284.50
226	**Infrastructure Renewal**	*total, years 2005-2025*		0.00
227	**Other ongoing capital**	*total, years 2005-2025*		111.17
228	*Cross check initial capital*			*0.00*

RIDERSHIP BREAKDOWN **Reduced (via Dorval) at 300 kph MOT Stand Alone**

			Year 2005	Year 2025		
	RIDERSHIP					
301	Ridership within the segment	*millions*	na	na		
302	Ridership between segments	*millions*	na	na		
303	Airport traffic	*millions*	na	na		
304 [A]	**Total potential passengers**	*million*	6.64	10.74		
305	Passengers not served at peak	*million*	(0.07)	(0.11)	1.0%	*of passengers*
306	Allowance for additional passengers	*million*	0.00	0.00	0.0%	*of passengers*
307	**Net passengers**	*million*	6.57	10.64		
	PASSENGER REVENUES					
308	Initial transportation revenue estimate	*$million*	551.78	951.26		
309	PST/GST	*$million*	(42.85)	(73.88)	7.8%	*of revenues*
310	Revenue estimate net of taxes	*$million*	508.93	877.38		
311	First Class premium	*$million*	0.00	0.00	0.0%	*of revenues*
312	Food/beverage sales	*$million*	0.00	0.00	0.00	*per passenger*
313	Revenues foregone at peak	*$million*	(5.09)	(8.77)	1.0%	*of revenues*
314	**Final Gross Revenue**	*$million*	503.84	868.61		
	PASSENGER KILOMETRES					
315	Ridership within segments	*billions*	2.41	3.97		
316	Ridership between segments	*billions*	0.10	0.16		
317	Airport traffic	*billions*	above	above		
318	Total		2.51	4.13		
319	Passenger-km foregone at peak	*billions*	(0.03)	(0.04)	1.0%	*of passenger-km*
320	Allowance for additional passenger-kms	*billions*	0.00	0.00	0.0%	*of passengers-km*
321	**Total passenger kms**	*billions*	2.49	4.09		
322	**Average Length of Haul**	*kms*	378	385		

EMPLOYMENT DATA **Reduced (via Dorval) at 300 kph MOT Stand Alone**

		Average Wage	Total Year 2005	Total Year 2025	Quebec Year 2005	Quebec Year 2025
401	Train Crew	57,500	92	126	34	43
402	Dispatchers	50,600	24	24	12	12
403	Managerial/admin/professional	58,324	359	406	157	179
404	Station staff	35,347	34	41	9	11
405	Mechanical trades/skilled	39,402	193	272	81	116
406	Maintenance trades/skilled	36,349	266	284	17	18
407	**Total "skilled"**	47,437	968	1,152	310	380
408	OBS Staff	31,453	118	175	44	59
409	Sales Staff	29,007	80	106	28	37
410	Other customer service	29,986	11	16	4	5
411	Support staff	34,206	27	32	14	16
412	Station labour (various)	24,471	102	122	28	34
413	Equipment maintenance unskilled	30,603	14	20	7	10
414	Track maintenance unskilled	30,603	56	59	28	30
415	Cleaners	24,270	144	207	65	84
416	**Total "unskilled"**	27,931	552	737	217	275
417	**Total "unallocated"**		0	0	0	0
418	**Grand total employment**	40,355	1,519	1,889	526	655
419	**Ontario Total "skilled"**		658	773		
420	**Ontario Total "unskilled"**		335	462		
421	**Ontario Total "unallocated"**		0	0		
422	**Ontario Grand total employment**		993	1,235		
423	**Quebec Total "skilled"**		310	380		
424	**Quebec Total "unskilled"**		217	275		
425	**Quebec Total "unallocated"**		0	0		
426	**Quebec Grand total employment**		526	655		

26-Jul-94 **HSR STUDY COST DEVELOPMENT**

TOTAL CASHFLOW **Reduced (via Dorval) at 300 kph MOT Stand Alone**

		1995	1996	1997	1998	1999	2000	2001	2002
501	**[A] RIDERSHIP**	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
502	**ADJUSTED GROSS REVENUE**	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
503	Payments to Travel Agencies	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
504	Payments to Credit Card Companies	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
505	**Revenue Available to HSR Operator**	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	OPERATING EMPLOYMENT								
904	Total employment	0	0	0	0	0	0	0	0
905	"Skilled" employment	0	0	0	0	0	0	0	0
906	"Unskilled" employment	0	0	0	0	0	0	0	0
907	Employment in Ontario	0	0	0	0	0	0	0	0
908	Employment in Quebec	0	0	0	0	0	0	0	0
	OPERATING COSTS								
	Labour								
506	Bare wage bill skilled	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
507	Bare wage bill unskilled	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
508	Payroll taxes	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
509	Provisions for pension plan	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Purchased materials/services								
510	Electricity	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
511	Advertising/promotion	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
512	Infrastructure maintenance services	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
513	Infrastructure materials/supplies	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
514	Rolling stock materials/supplies	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
515	Telecommunications/computer services	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
516	Insurance services/franchise fees etc	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
517	Food/related sundries	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
518	**Unscheduled materials/services**	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
519	**Allowance for contingencies**	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
520	**TOTAL OPERATING COSTS**	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
521	**OPERATING PROFIT**	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
909	**COST REVENUE RATIO**								
522	Operating costs (Ontario)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
523	Operating costs (Quebec)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	CAPITAL COSTS								
524	Total spent in Quebec	0.0	3.9	5.3	17.2	70.7	126.7	195.7	171.2
525	Total spent in Ontario	0.0	14.7	17.6	38.0	166.2	375.2	764.5	684.3
526	Total spent in the rest of Canada	0.0	0.0	0.0	0.1	0.3	6.7	17.5	42.6
527	Total spend in the rest of the World	0.0	0.7	1.2	3.1	38.8	99.6	210.2	179.6
528	Geographical allocation pending	0.0	15.8	15.8	42.0	42.0	105.0	105.0	105.0
529	Residual unallocated to region	0.0	(0.0)	(0.0)	(0.0)	(0.0)	0.1	0.2	0.2
530	**Total Capital Costs**	0.0	35.0	39.9	100.4	318.0	713.2	1,293.1	1,182.9
531	Total spent on skilled labour	0.0	13.9	17.5	41.3	123.7	216.9	396.5	321.0
532	Total spent on unskilled labour	0.0	0.6	0.7	1.6	22.0	55.0	120.2	96.4
533	Total spent on material	0.0	16.7	16.9	46.1	112.0	309.2	512.9	543.6
534	Total spent on plant	0.0	3.9	4.8	11.4	60.2	132.1	263.5	221.9
535	Residual unallocated to spending category	0.0	(0.0)	(0.0)	(0.0)	(0.0)	0.0	(0.0)	(0.0)
536	**Total Capital Costs**	0.0	35.0	39.9	100.4	318.0	713.2	1,293.1	1,182.9
	TOTAL CASH FLOW (excluding revenues)								
537	Total spent in Quebec	0.0	3.9	5.3	17.2	70.7	126.7	195.7	171.2
538	Total spent in Ontario	0.0	14.7	17.6	38.0	166.2	375.2	764.5	684.3
539	Total spent in the rest of Canada	0.0	0.0	0.0	0.1	0.3	6.7	17.5	42.6
540	Total spend in the rest of the World	0.0	0.7	2.1	3.1	38.8	99.6	210.2	179.6
541	Geographical allocation pending	0.0	15.8	26.4	42.0	42.0	105.0	105.0	105.0
542	Residual unallocated to region	0.0	(0.0)	(0.0)	(0.0)	(0.0)	0.1	0.2	0.2
543	**Total**	0.0	35.0	70.7	100.4	318.0	713.2	1,293.1	1,182.9
910	**NET CASH FLOW**	0.0	(35.0)	(70.7)	(100.4)	(318.0)	(713.2)	(1,293.1)	(1,182.9)

26-Jul-94

HSR STUDY COST DEVELOPMENT

TOTAL CASHFLOW — Reduced (via Dorval) at 300 kph MOT Stand Alone

		2003	2004	2005	2006	2007	2008	2009	2010
501	[A] **RIDERSHIP**	1.3	1.3	6.6	6.7	6.9	7.1	7.2	7.4
502	**ADJUSTED GROSS REVENUE**	63.3	63.5	503.8	517.7	532.0	546.7	561.8	577.3
503	Payments to Travel Agencies	3.5	3.5	27.7	28.5	29.3	30.1	30.9	31.8
504	Payments to Credit Card Companies	0.6	0.6	4.7	4.9	5.0	5.1	5.3	5.4
505	**Revenue Available to HSR Operator**	59.3	59.4	471.4	484.4	497.8	511.5	525.7	540.2
	OPERATING EMPLOYMENT								
904	Total employment	343	343	[illegible]19	1,536	1,552	1,569	1,586	1,604
905	"Skilled" employment	247	247	[illegible]58	976	985	993	1,002	1,011
906	"Unskilled" employment	95	95	552	560	568	576	584	593
907	Employment in Ontario	137	137	993	1,004	1,015	1,026	1,037	1,048
908	Employment in Quebec	206	206	526	532	538	544	549	555
	OPERATING COSTS								
	Labour								
506	Bare wage bill skilled	11.7	11.7	45.9	46.3	46.7	47.1	47.5	47.9
507	Bare wage bill unskilled	2.7	2.7	15.4	15.6	15.9	16.1	16.3	16.6
508	Payroll taxes	1.2	1.2	5.1	5.2	5.3	5.3	5.4	5.4
509	Provisions for pension plan	1.0	1.0	4.6	4.6	4.7	4.7	4.8	4.8
	Purchased materials/services								
510	Electricity	1.8	1.8	16.7	16.9	17.2	17.5	17.8	18.0
511	Advertising/promotion	5.0	5.0	10.1	10.1	10.1	10.1	10.1	10.1
512	Infrastructure maintenance services	3.1	3.1	10.3	10.3	10.3	9.8	9.4	8.9
513	Infrastructure materials/supplies	0.3	0.3	1.1	1.2	1.2	1.3	1.4	1.5
514	Rolling stock materials/supplies	1.2	1.2	9.3	9.4	9.6	9.8	10.0	10.2
515	Telecommunications/computer services	1.7	1.7	8.6	8.8	9.0	9.3	9.5	9.7
516	Insurance services/franchise fees etc	1.8	1.8	6.0	6.1	6.1	6.2	6.2	6.3
517	Food/related sundries	0.2	0.2	1.1	1.1	1.1	1.1	1.2	1.2
518	**Unscheduled materials/services**	11.2	19.4	32.2	32.2	32.3	32.4	32.5	32.5
519	**Allowance for contingencies**	3.1	3.7	11.9	12.0	12.1	12.1	12.1	12.1
520	**TOTAL OPERATING COSTS**	46.0	54.9	178.2	179.8	181.5	182.7	183.9	185.2
521	**OPERATING PROFIT**	13.3	4.5	293.2	304.6	316.3	328.8	341.7	355.0
909	**COST REVENUE RATIO**	1.29	1.08	2.65	2.69	2.74	2.80	2.86	2.92
522	Operating costs (Ontario)	18.4	21.9	120.1	121.2	122.4	123.1	123.8	124.5
523	Operating costs (Quebec)	27.6	32.9	58.1	58.6	59.2	59.6	60.1	60.6
	CAPITAL COSTS				52.4				
524	Total spent in Quebec	126.4	106.2	6.9	0.0	0.0	0.0	0.0	18.2
525	Total spent in Ontario	408.4	226.5	17.7	0.0	0.0	0.0	0.0	18.2
526	Total spent in the rest of Canada	37.1	32.2	0.0	0.0	0.0	0.0	0.0	0.0
527	Total spend in the rest of the World	98.9	40.6	2.9	0.0	0.0	0.0	0.0	0.0
528	Geographical allocation pending	126.0	126.0	84.0	73.5	0.0	0.0	60.0	4.9
529	Residual unallocated to region	0.2	0.1	0.0	0.0	0.0	0.0	0.0	0.0
530	**Total Capital Costs**	796.9	531.7	111.5	73.5	0.0	0.0	60.0	41.4
531	Total spent on skilled labour	186.2	99.1	8.2	0.0	0.0	0.0	0.0	0.0
532	Total spent on unskilled labour	49.5	16.3	1.4	0.0	0.0	0.0	0.0	0.0
533	Total spent on material	438.4	361.7	98.1	73.5	0.0	0.0	60.0	41.4
534	Total spent on plant	122.8	54.5	3.9	0.0	0.0	0.0	0.0	0.0
535	Residual unallocated to spending category	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
536	**Total Capital Costs**	796.9	531.7	111.5	73.5	0.0	0.0	60.0	41.4
	TOTAL CASH FLOW (excluding revenues)								
537	Total spent in Quebec	154.0	139.2	65.0	58.6	59.2	59.6	60.1	78.9
538	Total spent in Ontario	426.8	248.5	137.8	121.2	122.4	123.1	123.8	142.8
539	Total spent in the rest of Canada	37.1	32.2	0.0	0.0	0.0	0.0	0.0	0.0
540	Total spend in the rest of the World	98.9	40.6	2.9	0.0	0.0	0.0	0.0	0.0
541	Geographical allocation pending	126.0	126.0	84.0	73.5	0.0	0.0	60.0	4.9
542	Residual unallocated to region	0.2	0.1	0.0	0.0	0.0	0.0	0.0	0.0
543	**Total**	842.9	586.5	289.7	253.3	181.5	182.7	243.9	226.6
910	**NET CASH FLOW**	(783.6)	(527.1)	181.7	231.1	316.3	328.8	281.7	313.6

TOTAL CASHFLOW

Reduced (via Dorval) at 300 kph MOT Stand Alone

		2011	2012	2013	2014	2015	2016	2017	2018
501	[A] **RIDERSHIP**	7.6	7.8	8.0	8.2	8.4	8.6	8.8	9.0
502	**ADJUSTED GROSS REVENUE**	593.3	609.6	626.5	643.8	661.5	679.8	698.6	717.9
503	Payments to Travel Agencies	32.6	33.5	34.5	35.4	36.4	37.4	38.4	39.5
504	Payments to Credit Card Companies	5.6	5.7	5.9	6.0	6.2	6.4	6.5	6.7
505	**Revenue Available to HSR Operator**	555.1	570.4	586.1	602.3	619.0	636.0	653.6	671.6
	OPERATING EMPLOYMENT								
904	Total employment	1,621	1,639	1,657	1,675	1,693	1,712	1,731	1,750
905	"Skilled" employment	1,020	1,029	1,038	1,047	1,056	1,065	1,075	1,084
906	"Unskilled" employment	602	610	619	628	638	647	656	666
907	Employment in Ontario	1,060	1,071	1,083	1,095	1,107	1,119	1,131	1,144
908	Employment in Quebec	561	568	574	580	586	593	599	606
	OPERATING COSTS								
	Labour								
506	Bare wage bill skilled	48.4	48.8	49.2	49.6	50.1	50.5	50.9	51.4
507	Bare wage bill unskilled	16.8	17.0	17.3	17.5	17.8	18.1	18.3	18.6
508	Payroll taxes	5.5	5.5	5.6	5.6	5.7	5.8	5.8	5.9
509	Provisions for pension plan	4.9	4.9	5.0	5.0	5.1	5.1	5.2	5.3
	Purchased materials/services								
510	Electricity	18.3	18.6	18.9	19.2	19.5	19.9	20.2	20.5
511	Advertising/promotion	10.1	10.1	10.1	10.1	10.1	10.1	10.1	10.1
512	Infrastructure maintenance services	8.4	8.0	8.0	8.0	8.0	8.0	8.0	8.0
513	Infrastructure materials/supplies	1.6	1.7	1.8	1.9	2.2	4.3	4.8	5.3
514	Rolling stock materials/supplies	10.4	10.6	10.8	11.0	11.2	11.4	11.6	11.8
515	Telecommunications/computer services	9.9	10.2	10.4	10.7	10.9	11.2	11.4	11.7
516	Insurance services/franchise fees etc	6.3	6.4	6.5	6.5	6.6	6.7	6.7	6.8
517	Food/related sundries	1.2	1.2	1.3	1.3	1.3	1.4	1.4	1.4
518	**Unscheduled materials/services**	32.6	32.7	32.7	32.8	32.9	33.0	33.0	33.1
519	**Allowance for contingencies**	12.2	12.2	12.3	12.4	12.5	12.8	13.0	13.1
520	**TOTAL OPERATING COSTS**	186.4	187.7	189.6	191.5	193.6	197.9	200.3	202.7
521	**OPERATING PROFIT**	368.6	382.7	396.5	410.8	425.3	438.2	453.3	468.9
909	**COST REVENUE RATIO**	2.98	3.04	3.09	3.14	3.20	3.21	3.26	3.31
522	Operating costs (Ontario)	125.3	126.1	127.4	128.7	130.2	133.5	135.2	137.0
523	Operating costs (Quebec)	61.1	61.6	62.2	62.8	63.4	64.4	65.0	65.7
	CAPITAL COSTS								
524	Total spent in Quebec	0.0	0.0	0.0	0.0	19.1	0.0	0.0	0.0
525	Total spent in Ontario	0.0	0.0	0.0	0.0	19.1	0.0	0.0	0.0
526	Total spent in the rest of Canada	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
527	Total spend in the rest of the World	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
528	Geographical allocation pending	9.8	9.8	99.8	9.8	8.7	18.6	89.5	29.5
529	Residual unallocated to region	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
530	**Total Capital Costs**	9.8	9.8	99.8	9.8	46.9	18.6	89.5	29.5
531	Total spent on skilled labour	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
532	Total spent on unskilled labour	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
533	Total spent on material	9.8	9.8	99.8	9.8	46.9	18.6	89.5	29.5
534	Total spent on plant	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
535	Residual unallocated to spending category	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
536	**Total Capital Costs**	9.8	9.8	99.8	9.8	46.9	18.6	89.5	29.5
	TOTAL CASH FLOW (excluding revenues)								
537	Total spent in Quebec	61.1	61.6	62.2	62.8	82.5	64.4	65.0	65.7
538	Total spent in Ontario	125.3	126.1	127.4	128.7	149.3	133.5	135.2	137.0
539	Total spent in the rest of Canada	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
540	Total spend in the rest of the World	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
541	Geographical allocation pending	9.8	9.8	99.8	9.8	8.7	18.6	89.5	29.5
542	Residual unallocated to region	0.0	0.0	0.0	0.0	0.0	(0.0)	0.0	0.0
543	**Total**	196.3	197.6	289.5	201.4	240.5	216.4	289.8	232.3
910	**NET CASH FLOW**	358.8	372.8	296.7	400.9	378.4	419.6	363.8	439.4

26-Jul-94 **HSR STUDY COST DEVELOPMENT**

TOTAL CASHFLOW **Reduced (via Dorval) at 300 kph MOT Stand Alone**

		2019	2020	2021	2022	2023	2024	2025	2026
501	[A] **RIDERSHIP**	9.2	9.4	9.7	9.9	10.1	10.4	10.6	10.9
502	**ADJUSTED GROSS REVENUE**	737.7	758.0	779.0	800.5	822.6	845.3	868.6	892.6
503	Payments to Travel Agencies	40.6	41.7	42.8	44.0	45.2	46.5	47.8	49.1
504	Payments to Credit Card Companies	6.9	7.1	7.3	7.5	7.7	7.9	8.1	8.4
505	**Revenue Available to HSR Operator**	690.2	709.2	728.8	748.9	769.6	790.9	812.7	835.1
	OPERATING EMPLOYMENT								
904	Total employment	1,769	1,788	1,808	1,828	1,848	1,869	1,889	1,910
905	"Skilled" employment	1,093	1,103	1,113	1,123	1,132	1,142	1,152	1,162
906	"Unskilled" employment	676	685	695	706	716	726	737	748
907	Employment in Ontario	1,156	1,169	1,182	1,195	1,208	1,221	1,235	1,248
908	Employment in Quebec	613	619	626	633	640	647	655	662
	OPERATING COSTS								
	Labour								
506	Bare wage bill skilled	51.8	52.3	52.7	53.2	53.7	54.1	54.6	55.1
507	Bare wage bill unskilled	18.9	19.1	19.4	19.7	20.0	20.3	20.6	20.9
508	Payroll taxes	5.9	6.0	6.1	6.1	6.2	6.3	6.3	6.4
509	Provisions for pension plan	5.3	5.4	5.4	5.5	5.5	5.6	5.6	5.7
	Purchased materials/services								
510	Electricity	20.8	21.2	21.5	21.9	22.2	22.6	22.9	23.3
511	Advertising/promotion	10.1	10.1	10.1	10.1	10.1	10.1	10.1	10.1
512	Infrastructure maintenance services	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0
513	Infrastructure materials/supplies	5.9	6.5	7.2	8.0	8.8	9.8	10.8	12.0
514	Rolling stock materials/supplies	12.0	12.3	12.5	12.7	13.0	13.2	13.5	13.7
515	Telecommunications/computer services	12.0	12.3	12.6	12.9	13.2	13.5	13.8	14.1
516	Insurance services/franchise fees etc	6.8	6.9	7.0	7.0	7.1	7.2	7.2	7.3
517	Food/related sundries	1.5	1.5	1.5	1.6	1.6	1.7	1.7	1.7
518	**Unscheduled materials/services**	33.2	33.2	33.3	33.4	33.5	33.5	33.6	33.7
519	**Allowance for contingencies**	13.3	13.4	13.6	13.7	13.9	14.1	14.3	14.5
520	**TOTAL OPERATING COSTS**	205.3	208.0	210.8	213.6	216.6	219.8	223.1	226.5
521	**OPERATING PROFIT**	484.9	501.3	518.1	535.3	553.0	571.1	589.6	608.6
909	**COST REVENUE RATIO**	3.36	3.41	3.46	3.51	3.55	3.60	3.64	3.69
522	Operating costs (Ontario)	138.9	140.9	142.9	145.1	147.3	149.7	152.2	154.8
523	Operating costs (Quebec)	66.4	67.1	67.8	68.6	69.3	70.1	70.9	71.8
	CAPITAL COSTS								
524	Total spent in Quebec	0.0	18.2	0.0	0.0	0.0	0.0	0.0	0.0
525	Total spent in Ontario	0.0	18.2	0.0	0.0	0.0	0.0	0.0	0.0
526	Total spent in the rest of Canada	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
527	Total spend in the rest of the World	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
528	Geographical allocation pending	29.5	35.2	86.1	11.4	4.9	9.8	9.8	26.9
529	Residual unallocated to region	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
530	**Total Capital Costs**	29.5	71.7	86.1	11.4	4.9	9.8	9.8	26.9
531	Total spent on skilled labour	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
532	Total spent on unskilled labour	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
533	Total spent on material	29.5	71.7	86.1	11.4	4.9	9.8	9.8	26.9
534	Total spent on plant	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
535	Residual unallocated to spending category	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
536	**Total Capital Costs**	29.5	71.7	86.1	11.4	4.9	9.8	9.8	26.9
	TOTAL CASH FLOW (excluding revenues)								
537	Total spent in Quebec	66.4	85.4	67.8	68.6	69.3	70.1	70.9	71.8
538	Total spent in Ontario	138.9	159.1	142.9	145.1	147.3	149.7	152.2	154.8
539	Total spent in the rest of Canada	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
540	Total spend in the rest of the World	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
541	Geographical allocation pending	29.5	35.2	86.1	11.4	4.9	9.8	9.8	26.9
542	Residual unallocated to region	0.0	0.0	0.0	0.0	(0.0)	(0.0)	0.0	0.0
543	**Total**	234.9	279.7	296.9	225.0	221.6	229.6	232.9	253.4
910	**NET CASH FLOW**	455.3	429.5	431.9	523.9	548.0	561.2	579.8	581.7

26-Jul-94 **HSR STUDY COST DEVELOPMENT**

CAPITAL COST SUMMARY **Reduced (via Dorval) at 300 kph MOT Stand Alone**

		1995	1996	1997	1998	1999	2000	2001	2002
201	Right-of-Way	0.00	0.31	0.31	2.03	26.67	50.02	31.39	5.56
202	Earthworks/subgrade	0.00	7.70	7.70	17.41	89.26	185.31	316.88	242.06
203	Bridges	0.00	4.14	4.14	11.31	62.69	120.66	227.05	127.50
204	Grade separations	0.00	4.82	4.82	10.40	54.40	116.78	284.54	201.04
205	Other accommodations	0.00	0.19	0.19	0.34	3.74	8.64	12.75	4.52
206	Track	0.00	0.00	0.85	2.76	7.48	26.91	70.82	149.94
207	Power distribution system	0.00	0.00	0.79	2.57	7.49	18.95	57.56	98.89
208	Stations	0.00	0.71	0.71	0.35	0.82	1.65	15.64	27.90
209	People movers (included in stations)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
210	Signals	0.00	0.64	2.09	5.81	13.45	39.90	65.90	69.01
211	Communications	0.00	0.29	0.93	2.58	5.98	17.73	29.28	30.66
212	Equipment maintenance facilities	0.00	0.00	0.00	0.00	0.00	16.50	49.51	49.51
213	Infrastructure maintenance facilities	0.00	0.00	0.00	0.00	0.00	0.00	7.07	21.20
214	Information/ticketing systems	0.00	0.00	0.00	0.00	0.00	0.00	2.56	12.82
215	Rolling stock	0.00	15.75	15.75	42.00	42.00	105.00	105.00	105.00
216	Commissioning	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.44
217	Administration allowance	0.00	0.49	1.66	2.83	4.00	5.17	9.77	15.50
218	Startup and training	0.00	0.00	0.00	0.00	0.00	0.00	7.37	11.38
219	**TOTAL INITIAL CAPITAL COSTS**	0.00	35.04	39.94	100.41	317.98	713.21	1,293.09	1,182.92
220	**Additional fleet requirements**								
221									
222									
223									
224		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
225	**Rolling Stock Overhauls**	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
226	**Infrastructure Renewal**	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
227	**Other ongoing capital**	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
228	*Cross check initial capital*								

26-Jul-94 **HSR STUDY COST DEVELOPMENT**

CAPITAL COST SUMMARY — Reduced (via Dorval) at 300 kph MOT Stand Alone

		2003	2004	2005	2006	2007	2008	2009	2010
201	Right-of-Way	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
202	Earthworks/subgrade	92.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00
203	Bridges	48.37	0.00	0.00	0.00	0.00	0.00	0.00	0.00
204	Grade separations	76.27	0.00	0.00	0.00	0.00	0.00	0.00	0.00
205	Other accommodations	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
206	Track	147.67	114.99	4.33	0.00	0.00	0.00	0.00	0.00
207	Power distribution system	128.83	115.00	15.73	0.00	0.00	0.00	0.00	0.00
208	Stations	12.80	22.70	0.00	0.00	0.00	0.00	0.00	0.00
209	People movers (included in stations)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
210	Signals	59.44	37.03	0.00	0.00	0.00	0.00	0.00	0.00
211	Communications	26.41	16.45	0.00	0.00	0.00	0.00	0.00	0.00
212	Equipment maintenance facilities	33.01	16.50	0.00	0.00	0.00	0.00	0.00	0.00
213	Infrastructure maintenance facilities	10.60	28.26	3.53	0.00	0.00	0.00	0.00	0.00
214	Information/ticketing systems	2.56	6.41	1.28	0.00	0.00	0.00	0.00	0.00
215	Rolling stock	126.00	126.00	84.00	73.50	0.00	0.00	0.00	0.00
216	Commissioning	7.83	31.32	2.61	0.00	0.00	0.00	0.00	0.00
217	Administration allowance	11.18	10.64	0.00	0.00	0.00	0.00	0.00	0.00
218	Startup and training	13.78	6.38	0.00	0.00	0.00	0.00	0.00	0.00
219	**TOTAL INITIAL CAPITAL COSTS**	796.88	531.68	111.48	73.50	0.00	0.00	0.00	0.00
220	**Additional fleet requirements**								
221									
222									
223									
224		0.00	0.00	0.00	0.00	0.00	0.00	60.00	0.00
225	**Rolling Stock Overhauls**	0.00	0.00	0.00	0.00	0.00	0.00	0.00	4.92
226	**Infrastructure Renewal**	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
227	**Other ongoing capital**	0.00	0.00	0.00	0.00	0.00	0.00	0.00	36.50
228	*Cross check initial capital*								