Financial Analysis Final Report

February 24, 1995

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## Financial Analysis Final Report February 24, 1995

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## 1. Executive Summary

### 1.1 Objectives of Study

Price Waterhouse was engaged to determine the level of government support that would be required in order to proceed with various HSR options in the Quebec City-Windsor corridor and also to identify the means by which HSR services could be financed.

### 1.2 Scope of Financial Analysis

We examined eight scenarios based upon our firm's expertise in financial analysis and financing, the technical input set out in studies carried out by SNC, Canarail and CIGGT, and on the considerable project finance experience of BNP. Our conclusions on financial matters are based upon the state of financial markets in the third quarter of 1994.

In projecting future costs and revenues, it is important to recognize that the elements are subject to considerable uncertainty. Every attempt has been made to eliminate bias in carrying out our analysis and to fairly present the financial projections in a meaningful way. It is important to note that the Project has been analyzed on the basis that all segments would be constructed simultaneously. This approach permits a logical and unbiased financial analysis framework that clearly distinguishes between the Pre-construction, Construction and Operating Periods for the Project taken as a whole. Should the Project actually proceed, we have been advised that it would be preferable, indeed necessary, to proceed on a phased basis.

In this report, all capitalized terms are defined in the Glossary of Definitions in Appendix 1.

## 1.3 Project Finance Considerations

The HSR Project will, at the outset, be regarded as of being of high overall risk by private sector sponsors and financial institutions. In the context of the Project taken as a whole, no private sector financing commitments of significance could be expected until the completion of the following:

- A fully costed set of engineering specifications;
- Further detailed traffic studies;
- Finalization of environmental reviews;
- A legislative framework tailored to meet the needs of the HSR Project;
- The formation of a workable, public-private institutional and contractual framework;
- The emergence of a committed consortium of sponsors, contractors and financial institutions; and
- Assurance that Construction Period and Operating Period risks that will not be financed by the private sector will be borne by the public sector.

The above conditions precedent are no different that those found in other major transportation infrastructure projects found elsewhere in the world.

For this Project, we are of the opinion that a full private sector ownership option is not achievable for the Project taken as a whole.

Further, we are of the opinion that the maximization of private sector financing would be achieved under a public-private "partnership" concept in which Project risks would be shared, at all stages, by the public and private sectors.

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The type of public-private structure that would most likely maximize private sector capital would be as follows:

Tuna ná dinamaina	Approximate percent of		Fir	Government		
Type of financing	total Project Sources of financing costs		Type Source		backing	
Equity	1.5%	Sponsors ("stakeholders")	Dividends and capital gain	Project cash flow	Partial <sup>(1)</sup>	
Convertible subordinated debentures	7.2%	Private sector investors	for Interest, dividends and capital gain		No	
Project finance debt	20.6%	Commercial banks	Interest - floating rate	Project cash flow	No	
Debt supported by guaranteed annual government subsidy	45.7%	Private sector institutional investors	Interest - fixed rate	Initially, consolidated revenue fund, ultimately fully serviced from Project cash flow by way of Infrastructure and Civil Works lease	Yes <sup>(2)</sup>	
Construction Period government interest subsidy	25.0%	Consolidated revenue fund - government	None	n/a	Yes <sup>(3)</sup>	
Total financing	100%					

Under the aforenoted public-private structure, the public sector would more than fully recoup its investment (on an undiscounted basis) within the first 35 years of operation.

Alternatively, the public sector could take on the entire Project for its own account. This option would likely maximize the public sector's rate of return but would involve higher direct government borrowings ranging from \$5.3 billion for the lowest cost Montreal-Ottawa-Toronto Scenario to \$10.6 billion for the highest cost Quebec City-Windsor scenario (in constant 1993 dollars, without considering the cost of funds).

We are of the opinion that the financeability would be enhanced if the governments participated as 50% equity partners.

The concept most likely to be appropriate would be bonds backed by an annual government subsidy sufficient to fully amortize the debt over the life of the debt (say 35 years). The Northumberland Strait Crossing provides a good case study of this type of financing.

The Construction Period interest subsidy would assist in spreading the cost to government over a longer period of time, thereby helping to even out the public sector's costs and avoiding interest rate risk to the private sector during the Construction Period.

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### 1.4 Financial Analysis

The table below presents our judgement as to the financial results of the eight scenarios examined.

	1 QW-M-300	2 QW-D-200	3 QW-D-300	4 Mot-M-30D	5 MOT-D-200	6 MOT-D-300	7 MOT-D-300NA	8 QT-M-300
Project Cost								
Constant dollars (millions)	\$10,482°	\$9,451	\$10,626	\$6,079	\$5,402	\$6,078	\$5,327	\$7,996
Inflated and fully financed dollars (millions)	\$18,341	\$16,444	\$18,661	\$10,639	\$9,404	\$10,701	\$9,411	\$14,018
Project Financing	. ,							,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
Maximum % of Private sector:								
Risk Financing <sup>(4)</sup> Ranking	25.3% 75.2% 6	22.7% 75.8% 7	26.5% 74.8% 3	25.4% 75.1% 5	22.5% 75.5% 8	27.4% 74.5% 2	28.6% 74.3% 1	26.0% 74.9% 4
Internal Rate of Return								***************************************
Wholly public Ranking	6.58% 6	4.83% 8	7.10% 3	6.91% 4	5.20% 7	7.86% 2	8.18% 1	6.80% 5
Internal Rate of Return		·						
Public-private partnership								
Public sector Private sector Ranking	4.56% 10.79% 6	2.57% 9.38% 8	5.23% 11.34% 5	5.42% 11.15% 3	3.20% 9.66 7	6.65% 12.15% 2	7.13% 12.34% 1	5.49% 11.04% 4
Public-private partnership financeability	No	No	No	No	No	Yes	Yes	No

To determine financeability under the public-private partnership concept, we have chosen a 12.0% (after tax) private sector Internal Rate of Return as being indicative of the minimum acceptable threshold for the private sector. This threshold rate takes into consideration the high risk nature of the Project, the fact that there would be no returns at all until at least the 11<sup>th</sup> year and that other infrastructure projects around the world have typically incurred significant cost overruns, time delays and revenue shortfalls, all of which serve to reduce projected Internal Rates of Return. Lastly, at the time private sector equity sponsors commit their funds, there would be no assurance that the Project would in fact proceed to completion.

The internal rates of return for the public sector range from 4.83% to 8.18% under the wholly-owned public sector options. Such rates are lower under the public-private partnership structures, ranging

Based on a minimum debt service coverage ratio on private sector term debt of 1.75 to 1.

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from 2.57% to 7.13%. It should be noted that the above-noted Internal Rates of Return for the public sector **include** the income and capital tax revenues that are projected to be received by governments. If taxes are excluded, the Internal Rates of Return for the public sector decrease by approximately 4% in each case.

By modifying (as a sensitivity analysis) the payout formula in respect of Project earnings for each of the various scenarios, it is possible to adjust the projected Internal Rates of Return for the private sector to 12% in all cases while retaining the public-private partnership structure. While this would potentially enable each of the above scenarios to be both viable and financeable in a public-private partnership structure, to the extent that the private sector's Internal Rate of Return is enhanced (up to 12%), the public sector's Internal Rate of Return suffers, and vice versa.

#### 1.5 Conclusions

The Project, taken as a whole, is a high risk project from a financing perspective. Overall, our Financial Analysis shows that the 300 kph technology options are financially superior to the 200 kph technology options.

Secondly, the Montreal-Ottawa-Toronto options are financially superior to the Quebec City-Toronto options and the Quebec City-Windsor full corridor options.

The scenarios which would be the most financially attractive from a private sector fund raising perspective are consistent with those scenarios that would provide the highest Internal Rate of Return to the public sector. Although the differences are not major, the highest public sector Internal Rates of Return are achieved under the "wholly public" ownership option.

Even under the most financially attractive scenario, it is unlikely that the private sector would underwrite, at its sole risk, more than 30% of total Project costs. Clearly, the HSR Project will require the public sector to underwrite 70% or more of the initial risks and costs of the HSR Project.

The most positive financial results are achieved under the Montreal-Ottawa-Toronto via Dorval scenario, without Connect Air and the Pearson station.

Notwithstanding our efforts to produce a balanced and fair Financial Analysis, it is important to be aware that variations to assumptions can have a material effect on projected financial returns. Those factors which, when varied, have the most significant effect on rates of return are the duration of the Construction Period, the Construction costs, Project revenues and the Terminal Value of the Project in 2035.

The Internal Rate of Return for the public sector is very sensitive to any changes in assumptions or to modifications to the formula which governs the sharing of cash flows and profits with the private sector.

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## 2. Objectives and Scope of Financial Analysis

### 2.1 Objectives

The Financial Analysis for HSR services in the Quebec City-Windsor corridor is one of many studies commissioned by Transurb as part of its evaluation of the Project's viability.

The focus of the Financial Analysis is mainly on the determination of:

- The level of government support required in order for HSR services to be financially viable;
   and
- The means by which HSR services could be financed.

In this report, when we refer to viability, we refer to the ability of the Project to generate positive cash flows. When we refer to financeability, we refer to the ability of the Project to attract private sector financing.

### 2.2 Scope of Financial Analysis

The cornerstone of our analysis is a comprehensive Financial Model developed to show the evolution of Project Costs and Net Operating Revenues over a 30-year period commencing 1995. The timeframe incorporated into the Financial Model is in accordance with the terms of reference for our study and, in our opinion, is sufficient for purposes of financial analysis at this stage of the Project. However, if the Project proceeds to a further stage of highly detailed analysis as part of the Preconstruction Period, a significantly longer timeframe of analysis (say 40 to 45 years) would likely be required in order to demonstrate the progression of potential financial returns for investors and lenders.

Consistent with the terms of reference for the Financial Analysis, our Financial Model is flexible in that it permits financial analyses to be carried out under various routing configurations, various technology alternatives and various capital structure options.

The following table sets out the speed and route configurations for the eight scenarios considered in our Financial Analysis:

Scenario No. and reference	Route configuration description	Speed
1: QW-M-300	Quebec City-Windsor (via Mirabel)	300 kph
2: QW-D-200	Quebec City-Windsor (via Dorval)	200 kph
3: QW-D-300	Quebec City-Windsor (via Dorval)	300 kph
4: MOT-M-300	Montreal-Ottawa-Toronto (via Mirabel)	300 kph
5: MOT-D-200	Montreal-Ottawa-Toronto (via Dorval)	200 kph
6: MOT-D-300	Montreal-Ottawa-Toronto (via Dorval)	300 kph

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Scenario No. and reference	Rolle continuestion description			
7: MOT-D-300NA	Montreal-Ottawa-Toronto (via Dorval - no Connect Air/no Pearson)	300 kph		
8: QT-M-300	Quebec City-Toronto (via Mirabel)	300 kph		

The Financial Analysis is based aggregates the financial elements set out in the reports of SNC for Project Costs, Canarail for the light freight business, and CIGGT for Operating Revenues, Operating Costs and recurring capital expenditures. Ownership and capital structure considerations draw from the considerable project finance experience of BNP and on KPMG's report on institutional options. In order to fully appreciate the matters dealt with in this report, it is imperative that the reader be fully knowledgeable as to the contents of the aforenoted reports. BNP's report is included as **Appendix 10** to this report.

Other than for BNP, we have not reproduced the aforenoted reports. However, we have read the financial elements contained therein. In addition, excepting the final SNC report, we have discussed (for validation purposes) the principal elements of each study with the Project Manager. In certain instances, the related studies were amended to take into account the issues that we raised. If the financial elements in the aforenoted reports prove to be incorrect, the amounts carried forward into our Financial Analysis would also be incorrect.

The output of the Financial Model is the standard form of communication prescribed for projections by the Canadian Institute of Chartered Accountants, and includes projected balance sheets and statements of operations. Accordingly, the Financial Model permits the evaluation of key financial measures, such as cash flow, Debt Service coverage ratios, debt to equity ratios, Internal Rate of Return, inflation and the time value of money. These are considered of key importance in measuring and evaluating the financial viability of the Project, in determining the required level of government support and the respective levels of participation of the public and private sectors.

While considerable efforts have been taken to fairly present the financial projections relating to each scenario, the specific annual amounts of receipts and expenditures underlying the Project are subject to considerable uncertainty, as they are subject to a myriad of factors including refinements to the scope of the Project, estimate accuracy uncertainties, changing financial markets, economic cycles, inflation, investor and lender perceptions, changing legislative frameworks, evolving preferences of the travelling public, the actions of other competing forms of passenger transport, and so on.

In this context, it is inevitable that the projections included in this report would not be identical to actual future results and the differences could be significant. Accordingly, a decision to proceed with HSR service in the Quebec City-Windsor corridor should not be based solely on the contents of this report. As a minimum, a comprehensive evaluation of Project viability should be carried out during the Pre-construction Period as this would be an essential requirement of the financial community at large.

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## 3. Project Finance Considerations

## 3.1 Methodology to Determine Financeability

### 3.1.1 Research Undertaken by Price Waterhouse

In order to determine the HSR Project's financeability, we frequently met with the project finance specialists of BNP (refer to **Appendix 10**). At the outset of our study, we also consulted two Canadian investment banks and one Canadian Schedule 1 bank. In addition, we researched project finance structures for several North American transportation projects that have either been recently completed, are in progress, or failed to progress due to a lack of financing. Lastly, we consulted a well-known debt rating agency based in New York to ascertain the criteria upon which various financing structures and instruments are rated.

Using this information, together with the resources and cumulative expertise of Price Waterhouse, we scoped out a number of possible financing structures ranging from 100% private sector project finance debt, on one extreme, to 100% public sector equity, at the other extreme. In all, approximately 30 iterations of such models were prepared. The process of testing against private sector financial market criteria enabled us to narrow down the financing structures to those which could possibly prove to be achievable in the market place, while at the same time respecting the pre-established federal, Quebec and Ontario governments' objective of minimizing the annual and aggregate public sector financial commitment to the Project.

#### 3.1.2 Private Sector and Public Sector Orientations

In the subsections that follow, we have explained, from a project finance perspective, the considerations that will bear on the ability of the private sector to raise funds for the Project. We have focused on the private sector since the required public sector contribution can essentially be viewed as a basket of costs that, for various reasons, are not financeable by the private sector.

It is important to recognize that when dealing with project finance in a private sector context, it is important to deal with the best estimate of actual costs that will have to be financed. Even though we are in a low inflation environment, private sector lenders and investors will insist on there being committed financing sufficient to cover Project Costs **inclusive** of inflation. This is understandable because all Construction costs must be financed prior to the date at which the Project begins to generate cash flow.

However, since the objective was to find solutions that would seek to minimize the public sector's financial commitment, it was imperative to first determine the nature, amount and terms of private sector funds.

#### 3.2 Costs to be Financed

For purposes of the Financial Analysis, the HSR Project Costs have been broadly segregated into three distinct (but overlapping) phases:

- (i) Pre-construction Period: This three-year phase includes preliminary design work, environmental assessments, detailed design of engineering and construction plans and specifications, tendering and awarding of contracts for civil works and right-of-way acquisitions.
- (ii) Construction Period: This phase includes earthworks, preparation of the roadbed, installation and testing of the fixed railway plant (i.e. track structure, signalling, power plant and electrification), the manufacturing of rolling stock, the construction and/or modification of stations and the initial start-up of operations.

Depending on the route segment, the duration of the construction phase could range from five years for the Montreal-Ottawa leg to six to seven years for other segments. As all construction is assumed to commence simultaneously (purely for the purposes of the Financial Analysis), the Construction Period under the scenarios contemplated in this report is assumed to be from six to seven years. (5)

(iii) Operating Period: Full operations are expected to commence in Year 11 for purposes of the Financial Model, when all construction work is expected to have been completed.

#### 3.2.1 Constant Dollar Costs

The table below shows the estimated Project Cost for each of the eight scenarios in millions of 1993 dollars (excluding any estimate of inflation and excluding financing costs):

Phase	1 QW-M-300	2 QW-D-200	3 QW-D-300	4 MOT-M-300	5 MOT-D-200	6 Mot-d-300	7 Mot-d- 300na	8 QT-M-300
Infrastructure and Civil Works	\$6,961	\$6,175	\$7,106	\$4,049	\$3,583	\$4,113	\$3,487	\$5,197
Equipment and Technology	3,521	3,276	3,520	2,030	1,818	1,965	1,840	2,799
Total	\$10,482	\$9,451	\$10,626	\$6,079	\$5,401	\$6,078	\$5,327	\$7,996

#### 3.2.2 Total Financing Requirement (including inflation and interest)

When inflation adjustments and approximate construction financing costs are added, total costs that require financing increase by approximately 75% as compared to the amounts presented in the aforenoted table, as follows:

The construction of the full corridor in a single phase is probably not practical or cost-effective. However, for purposes of establishing the comparable costs and benefits of various scenarios, it was deemed preferable by the Project Manager to assume that all construction would proceed in a single six- to seven-year period.

Phase	1 QW-M-300	2 QW-D-200	3 QW-D-300	4 MOT-M-300	5 MOT-D-200	6 MOT-D-300	7 Mot-d- 300na	8 QT-M-300
Infrastructure and Civil Works	\$12,009	\$10,655	\$12,277	\$6,987	\$6,189	\$7,115	\$6,062	\$8,979
Equipment and Technology	6,331	5,790	6,384	3,652	3,215	3,586	3,349	5,039
Total	\$18,340	\$16,445	\$18,661	\$10,639	\$9,404	\$10,701	\$9,411	\$14,018

## 3.3 Risks Relating to this Project

#### 3.3.1 Investor and Lender Expectations

Financing infrastructure is essentially a function of investor and lender expectations as to risk and return on investment, together with the responsiveness of capital markets given the projected performance of the venture. It is the sharing of project risks amongst the various parties (sponsors, governments, investors, lenders, suppliers, operators, etc.) that ultimately determines the financing structure.

Investors and lenders will look for a long-term return on invested capital and a satisfactory risk reward profile.

#### 3.3.2 Credit Risks

(i) Project Economics: A thorough Financial Analysis of the long-term financial viability of the Project is fundamental to this type of risk assessment. The projected ability of the Project to support maintenance and operating expenses, as well as Debt Service, over the life of the financing instruments, with some margin of comfort, is indicative of the strength of the project economics and thus, the feasibility of the Project. In addition, there must be a consideration of uncertainties regarding the level of HSR customer acceptance; i.e., sufficient utilization of HSR services at an economically feasible price. This can be affected by the behaviour patterns of the potential riders as well as by economic cycles.

The main factors to be used in evaluating the Project's economics are as follows:

- An assessment of the need for the HSR Project; i.e. public demand and the assessment of air and road transport alternatives;
- An assessment of the elasticity of demand. Sensitivity analysis becomes essential to avoid overly optimistic demand and/or revenue projections, particularly given the discretionary nature of this mode of transportation; and
- Projections of Debt Service coverage, which are required to provide a margin of error that reflects the uncertain nature of the revenue and cost stream projections.<sup>(6)</sup>

Apart from revenue and cost projections, a prospective investor's or lender's considerations would also include projections as to Debt Service coverage. The following are some relevant considerations which will (continued...)

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Clearly, there is a limit to relevance of other HSR projects worldwide to the proposed Quebec City-Windsor corridor project. Canada's sparse population, its climate, its resource based economy, consumer spending habits, and many other characteristics give this Project a uniqueness that complicates the Project economics and increases the financing risk.

Generally, some of the uncertainties associated with project economics can be reduced if the financial projections have been prepared by reputable and experienced external advisors who have a track record. For this Project, serious and well-researched external studies have been prepared. Our Financial Analysis is based on these studies.

(ii) Legislative Risk: Laws and regulations could become a major barrier to the attainment of a stable legal and regulatory environment that is both attractive to private investors and adequately protective of the public interest.

Legislative risk stems from the fear that regulators could influence the Project completion date, passenger fares and costs and, therefore, the Net Operating Revenues of the Project.

(iii) Construction Risk: Construction risk is always a major concern for large infrastructure projects, particularly in dealing with environmental issues, rights-of-way, permits and other factors beyond the control of the Project sponsors.

Construction risks may be mitigated when the following conditions have been met:

- Environmental permits have been acquired;
- Rights-of-way have been acquired;
- No outstanding litigation exists;
- Financing is available to accommodate unforseen construction delays:
- Adequate construction insurance has been obtained;

add to the credit risk of this Project.

Ramp-up period: The first few years of operation would be critical because the HSR must achieve acceptance from travellers. Until acceptance can be achieved, the HSR Project would be susceptible to a shortfall in revenues and in debt service coverage. During the sensitive initial years, it is normally preferable to have lower Debt Service payments, so that the Debt Service coverage ratios are higher.

**Debt structure:** The security for senior debt can be significantly weakened if financial covenants provide for the protection of subordinate debt holders, particularly if there becomes a need for additional issues of subordinate debt. Extreme caution should be taken to ensure that the financial covenants do not expose or otherwise compromise the position of the senior debt holders.

Level of debt: The availability of additional funding to supplement the primary source of funding reduces risk.

Expenditure control: The assumptions underlying operating and maintenance costs must be reasonable.

<sup>(6)(...</sup>continued)

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- Realistic construction arrangements are in place. A fixed-price contract provides some insurance against cost overruns; however, the conditions under which change orders are permitted should be evaluated;
- The contractors have successful experience in similar projects; and
- There is no political opposition of significance.
- (iv) Operating Risk: An investor's or lender's security is dependant upon the uninterrupted operation of the HSR services.

In order to reduce operating risks, all of the following must be provided for:

- · Quality and track record of the operator;
- Adequate maintenance and proper financial bonding of the infrastructure, equipment, and technology, preferably with a requirement for an annual certificate regarding maintenance;
- Business interruption insurance and a reserve fund to cover debt service during interruption in operations;
- A realistic operating contract providing for penalty/incentive scheme; and
- Adequate insurance to cover any costs to repair damages.

### 3.4 Risk Sharing Among the Private and Public Sectors

#### 3.4.1 Overview

By any measure, a HSR venture in Canada will be judged by private sector investors and lenders as being of **very high risk**. Purely on the basis of such a risk assessment, we can state categorically that the private sector would **not** be willing to underwrite all of the Project risks.

Given the hurdles that this HSR Project must overcome, the Project would be rated as being of particularly high risk during the Pre-construction, Construction and Initial Operating Periods. This will have a direct and adverse effect on the ability of the Project to attract private sector capital at the outset.

As Project cost uncertainties are reduced over time, the overall Project risk would decline. As an operating history develops, the financial risks of relying solely upon revenue forecasts would of course also decline. This is consistent with other transportation infrastructure projects around the world, where we find that the financial attractiveness, and therefore financeability, of the projects improve over time as usage increases and cash flows improve. Ultimately, when sufficient operating experience is gained, lower "utility-type" returns at much lower levels would be sought from investors. As an example, on Eurotunnel which is only now commencing its operations, returns in the 10% to 12% (after tax) are still considered adequate for new investors. Initial investors, of course, expected higher returns, given the higher relative risk at the outset of that project.

To determine financeability under the public-private partnership concept, we have chosen a 12.0% (after tax) private sector Internal Rate of Return as being indicative of the minimum acceptable

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threshold for the private sector. This threshold rate takes into consideration the high risk nature of the Project, the fact that there would be no returns at all until at least the 11<sup>th</sup> year and that other infrastructure projects around the world have typically incurred significant cost overruns, time delays and revenue shortfalls, all of which serve to reduce projected Internal Rates of Return. Lastly, at the time private sector equity sponsors commit their funds, there would be no assurance that the Project would in fact proceed to completion.

In the subsections that follow, we set out our assessment as to how the private and public sectors would likely be willing to share in the Project risks and costs, while respecting the governments' objectives of minimizing government involvement in the overall financing plan.

#### 3.4.2 Pre-construction Period

Pre-construction costs consist primarily of the following:

- Environmental studies:
- Permitting;
- Institutional studies;
- Legislative work;
- Corporate aspects;
- Detailed feasibility studies;
- Preliminary engineering; and
- Project management.

In the three-year Pre-construction Period, the most effective structure would call for the public and private sectors to share (perhaps equally) in the costs. This approach recognizes that private sector suppliers of goods and services to the Project would have a vested interest in providing up-front risk capital to finance the Pre-construction Period costs in the anticipation of securing potentially large contracts during the Construction Period or Operating Period.

#### 3.4.3 Construction Period

Construction Period costs can be roughly broken down into two categories from a project finance perspective:

#### (i) Infrastructure and Civil Works

As a general rule, there will be little or no interest on the part of the private sector to finance the land acquisition and right-of-way, earthworks and sub-grades, stations, bridges, grade separations, maintenance facilities, other accommodations, track and initial start-up costs (collectively referred to herein as Infrastructure and Civil Works). This financing conclusion is based upon compelling empirical evidence in respect of other HSR systems. In effect, we have not been able to identify a single HSR project in which the private sector has financed these elements of cost without some form of irrevocable government guarantee.

Accordingly, it can be safely assumed for this Project that the public sector would be responsible for the scope of work and related risks for Infrastructure and Civil Works costs.

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### (ii) Equipment and Technology

On the other hand, the private sector could be expected to take an interest in financing all or part of the power distribution system, signals, communications, light freight, and rolling stock (collectively referred to herein as "Equipment and Technology"). Again, this conclusion is based upon the empirical evidence of other HSR systems.

For these areas, the private sector would therefore be expected to play an active role in defining the scope of work and in assuming a share of Equipment and Technology cost overrun risks.

### 3.4.4 Operating Period

The degree of ownership and responsibility of the public and the private sectors for operating the HSR services depends largely on how the corporate structure is defined and on the choice of financing instruments.

Both the private and public sectors can be expected to take an interest in the Operating Period in order to exercise joint control and to preserve the risk/return relationship for their respective investments. Joint ownership of the Project or Construction and Operations Company would provide such a mechanism.

## 3.5 Financing Parameters

#### 3.5.1 Overview

It is important to recognize that project finance is an **all-or-nothing affair**. Specifically, project finance requires that all of the required financing, including credit available to cover cost inflation and contingencies, be available and committed prior to the commencement of construction. Investors and lenders will analyze and rely upon detailed financial projections covering the full Pre-Construction, Construction and Operating Periods. In the event that any class of investor or lender group is not able to commit to the full amount of the required funding, the entire financing plan could collapse and be redesigned. Any viable plan must therefore accommodate the minimum requirements of each financing participant. Any changes to the minimum requirements of one financier will inevitably have a ripple effect on the other project finance and public sector participants.

In order to determine optimum financing instruments and the associated financing structure for the Project, it would be necessary to proceed with negotiations with sponsors, lenders, investors, suppliers and governments. Furthermore, it must be recognized that the optimum financing structure would depend upon investors' and lenders' expectations, as well as the responsiveness of capital markets, at the precise time the financing plan is put in place.

It is not possible to predict, with any degree of certainty, future capital market conditions or the future expectations of the investors. Therefore, the financing structure observations and conclusions in this report are intended to provide a fair representation of the current capital markets and environment based on the studies, analyses and research that has been provided by BNP and Price Waterhouse. The financing structure determination relies equally on the results of the various indepth studies undertaken by CIGGT, SNC and Canarail for the projection of operations and capital costs for the Project and on the resulting Project economics.

### 3.5.2 Lender and Investor Perspectives

HSR projects typically have the following characteristics from the perspective of a lender or investor:

- High cost of infrastructure and equipment relative to disposal values;
- Lengthy pre-construction and construction periods with a high level of construction and economic risk;
- Marginally profitable initial operations, with little or no free cash flow;
- Significant profitability and cash flow on a longer term basis as ridership increases and debt is reduced;
- High level of legislative and environmental risk; and
- Significant uncertainties as to ridership and fare structures (i.e. "traffic risk").

### 3.5.3 Financing Instruments

To obtain funds to finance the construction costs of HSR, there are numerous possibilities, not all of which can be expected to be achievable given the circumstances of any particular project.

- **Equity:** Straight equity for a project of this nature is likely to be found almost exclusively among project sponsors or entities having a vested interest in the Project, e.g. the public sector. There is no significant public market for this type of non liquid investment, which has an extremely long lag time before a first dividend is paid, even if the overall long-term returns appear attractive. Therefore, a form of quasi equity (for example, convertible subordinated debentures) would be more adapted for raising "seed money" for this type of project.
- (ii) Convertible Subordinated Debentures: Convertible subordinated debentures are securities which can be converted or exchanged for common equity. These can be attractive investments because the holder enjoys the upside potential of increases in the equity value, while maintaining a greater downside protection on invested capital and a minimum short-term return. Therefore, quasi-equity financing of this type would be attractive for a project of this nature. It must be noted that the marketability of such instruments for the amounts envisaged in the financing plans of the various scenarios has not been tested in Canada, although quasi equity of a similar type has been successfully used for projects in other countries.

In order to measure the likely application of this type of financing, we developed a variety of scenarios so as to combine sponsors' equity and convertible subordinated debentures in amounts that would permit the entire Pre-construction Period and early Construction Period costs to be financed without recourse to project finance debt. Such an approach would greatly assist in the Project's overall financeability by keeping the Construction Period to be financed by more senior debt to a maximum of four to five years. This is crucially important in the financeability of this Project.

The downside relating to subordinated convertible debentures is that they can be expensive. Interest rates are typically well above those in effect for senior debt. By adding a convertible feature, investors are generally willing to forego the cash payment of a portion of the interest providing that the conversion privileges are attractive.

We would envisage that the principal source of such financing would be private investors, although there is no reason why the public sector could not also invest in such instruments, thereby enhancing its overall returns.

When developing a financing plan using this form of funding, care must be applied to ensure that the amount of such funding does not rise to such a point so as to jeopardize debt service ratios and other covenants due to the payment of comparatively high interest rates.

Accordingly, in carrying out our modelling, we tested numerous formulas each time measuring their effects on debt service and debt to equity ratios. In the final analysis, it became evident that the only means to contain debt service costs was to create a convertible debenture instrument that deferred the payment of interest during the Construction Period, contained the payment of interest during the initial years of the Operating Period and offered an attractive conversion feature at such time as the project finance debt was fully repaid. Any options that involved the earlier payment of interest had an immediate adverse effect on the amount of project finance debt that would be achievable.

(iii) High Yield Subordinate Debt: High yield debt is typically raised from private sector institutional investors. The high yield market is underdeveloped in Canada but is highly active and large in the United States. High yield debt securities typically mature up to 10 years subsequent to their issue.

The Project economics are such that this form of financing would not be available until after the Project had demonstrated its viability and profitability for a sustained period of time.

Notwithstanding the conclusions referred to above, we ran our financial model on this basis, using a variety of interest rate options, and found that cash flow for the first full year of operations covered only 30% of interest costs under an 12.5% high yield debt scenario.

Given that this form of financing would not be available for this Project, it was rejected from further consideration.

**Conventional Senior Term Debt:** Conventional senior term debt is generally raised from private sector institutional investors and banks. Conventional senior term debt would normally cover periods extending up to 5 to 10 years.

The lengthy Pre-construction and Construction Periods, the low level of projected financial returns, the inability to cover Pre-construction and Construction Period interest from subsequent cash flows, the non-investment grade characteristics of the Project, the low realization value of the security, and the very long-term nature of the Project in a high risk environment eliminate any possibility of raising conventional senior term debt in respect of this Project.

The Project economics are such that this form of financing would not be available until after the Project had demonstrated its viability and profitability for a sustained period of time.

Notwithstanding the conclusions referred to above, we ran our financial model on this basis, using a variety of interest rate options, and found that cash flow for the first full year of operations covered only 33% of interest costs under a 11.5% conventional debt scenario.

Given that this form of financing would not be available for this Project, it was rejected from further consideration.

(v) Project Finance Debt: Project finance debt constitutes a highly specialized sector of the financial market in which lenders are prepared to accept lengthy construction periods (up to four to five years during which the project would not be generating any cash flow) and lengthy repayment periods (up to 15 to 18 years after completion of construction). In return, project finance lenders require a risk premium in respect of interest rates and high interest coverage ratios to protect against downside risks.

In principle, project finance debt is ideally suited to this Project. In fact, project finance debt is designed specifically for projects with the essential "hockey stick" financial characteristics of this HSR Project.

The non government-guaranteed portion of any such debt that could be raised on the project finance debt market (from a select number of specialized international banks and financial institutions) would be limited. For this Project, amounts of available project finance debt ranging from \$2 billion and \$4 billion should be considered as the upper limit. There is simply not the appetite in the financial markets to absorb larger amounts on this type of project.

This type of debt would attract a margin (over LIBOR) of between 150 and 250 basis points (on a floating basis) depending on the overall project returns and final risk allocation. An initial Debt Service coverage ratio of a minimum of 1.75 to 1 would be required by project debt lenders. This ratio could even be 2 to 1, given that this Project would be the first of its type in Canada.

The marketability of this debt for this Project would be substantially enhanced if it applied to Equipment and Technology, as banks are more likely to support major suppliers on a relationship basis. Such debt could be refinanced by longer term maturity institutional debt, after completion of the Project.

In order to test the validity of our conclusions as referred to above, we ran our financial model using a number of options which varied the interest rate on the project finance debt and, in addition, varied the amount of debt. At the extreme, we tested an option under which all of the Equipment and Technology would be financed by project finance debt. We found that such an approach was unworkable given that cash flows were inadequate to meet the debt service coverage criteria. Even in those cases where we assumed that the public sector would finance 100% of the Infrastructure and Civil Works costs (which represent approximately 66% of total Project costs), the required debt service ratios were not met.

Through the testing of numerous models, we were able to ascertain that the maximum amount of Equipment and Technology costs that could be realistically financed by Project finance debt constituted approximately 60% of total Equipment and Technology costs. Such a scenario was viable only when all Infrastructure and Civil Works costs, plus the remaining balance of 40% of Equipment and Technology costs were financed on a completely subordinate basis.

(vi) Export Credits: Export credits generally require government or bank guarantees. There is a recent trend, however, with export credit agencies (e.g. French COFACE) to consider project finance type risks for limited amounts alongside commercial banks, particularly for certain strategic projects involving key exports. Such credits, if available, would be on purely commercial terms, since countries like Canada (Category 1) do not normally benefit from subsidized rates. There is also a risk that they would be granted on shorter maturities (7 to 12 years), reducing the potential benefit of such a formula.

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Given the relatively small amounts of such financing that would likely be available for this Project, we did not carry out any specific modelling to judge its merits, as the inclusion of such financing instruments would not affect the overall Project economics.

(vii) Revenue Bonds: In the United States, revenue bonds are frequently used as a means of financing transportation infrastructure projects. The United States market for such bonds is well developed and rating agencies are accustomed to handling this form of debt. Historically, there have been a number of highly publicized defaults on such indebtedness. Accordingly, such financing in today's market is available only where there is a proven basis for estimating ridership.

Financing instruments that possess the essential features of revenue bonds are not appropriate for a Canadian HSR project since there is no proven basis for estimating ridership, fare structures, etc. To meet institutional investor expectations and legal for life criteria, it would be necessary for the bonds to be of investment grade. This is clearly not achievable on this Project without government guarantees, due to the Project's relatively weak economics, although there are some precedents for investment grade ratings on certain North American revenue bonds involving new transportation infrastructure.

Given our conclusions, we have not run any financial models specifically using revenue bond options.

(viii) Deep Discount or Zero Coupon Bonds: Another possible means of raising financing during the Construction Period would involve the issuance of the deep discount bonds (also known as zero coupon bonds). These types of financing assist the borrower in accommodating low cash flows in the early years by in effect discounting interest foregone and capitalizing such amounts to the ultimate balance of principal due for payment.

These debt instruments do not carry a coupon or any right to interest but entitle the holder to receive a fixed amount on a specific date or maturity. We are not aware of the present existence of a market for non-investment grade deep discount bonds. Accordingly, we have opted not to include this option in the private sector financed portion of the Project. Of course, the public sector could consider this form of financing for its share of the Project financing. This could help alleviate high cash outflows in the early years but this approach would not improve the overall financial attractiveness of the Project when measured on an Internal Rate of Return or return on investment basis.

Accordingly, we have not run any models specifically on this basis.

(ix) Real Return Bonds: Successfully applied to the Northumberland Strait crossing, this form of financing is a variation upon deep discount bonds. Essentially, bonds are issued at a price equivalent to the net present value of future interest and capital payments, recognizing that the total principal amount due is annually revalued for inflation and that interest payments are based upon the revalued outstanding principal amount. In this way, payments in earlier years are lower than payments in later years, when the project is more able to absorb such costs.

Real return bonds are ideally suited for transportation infrastructure projects, but are presently reserved for public sector issuers. As there is no market for private sector issuers, we have not tested any financial models using this option. In the event that the public sector retains direct ownership of the Infrastructure and Civil Works, and in turn leases such assets to the Project operator, it would appear that real return bonds, issued by a crown

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corporation, would be an attractive way to match Debt Service costs to Infrastructure and Civil Works lease revenues.

(x) Equipment Trust Certificates or Leases: This type of term financing is most relevant for financing rolling stock as an alternative to project finance debt. We do not believe that the terms would provide any additional financial advantages from a viability/financeability perspective.

Therefore, we have not carried out any specific modelling using equipment trust certificate or lease financing.

### 3.6 Ownership Options to Share Project Risks

#### 3.6.1 Alternative Structures

There are number of precedents in Canada, the U.S. and abroad for the development of ownership options. These span the full spectrum from fully public to fully private enterprises and can be described under the following three main alternatives:

(i) Fully Public: Under this option, there is no private participation. Hence, there are no possibilities of productivity gains from the private sector.

In the context of continuing pressures to contain government spending, and considering the size of the required up-front investment, a wholly-public sector option is likely to prove politically unsaleable. Nevertheless, Internal Rate of Return for the wholly-public scenario should serve as useful points of reference for comparison with other ownership options.

(ii) **Private:** By "private", we mean that a government contribution will be fixed from the start, but the Project ownership and risks will remain fully with the private sector. This option, however, reduces public control on administering and spending large sums of funds. On the other hand, all downside risk is borne by the private sector, including environmental issues, permitting, land assembly, etc. Under this scenario, there is limited financial upside for the public sector.

A wholly-private sector venture for this Project would be non-financeable due to the excessive risks relative to the meagre initial returns.

(iii) **Public-Private:** Under this option, the public sector contribution is associated with public sector risk and reward. The same would apply to the private sector contribution.

Public-private infrastructure partnerships have been successfully employed in the past and are being used with increasing frequency for infrastructure projects in Canada.

With the current trend toward reduced federal and provincial funding and continuing constraints on budgets, the public sector is moving more towards public-private partnerships where both risks and rewards are shared.

This option has the non-quantifiable potential advantage of achieving productivity gains from the private sector during the Construction and Operating Periods. Hence, this option permits the government to share in the upside potential, while at the same time enabling costs and risks to be allocated in line with the public and private sectors' domains of competence.

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In our opinion, this option is most likely to attract significant private sector participation. A successful partnership structure will combine the strengths of the public and private sectors to create a complementary relationship. The exact structure of the partnership depends on the division of responsibility, along with the associated risks and rewards, at each stage of development throughout the project life cycle.

BNP has also determined that a public-private partnership is the most feasible and attractive arrangement for this Project in order to maximize the private sector's contribution. This is consistent with the conclusions arrived at by KPMG in their report entitled "Review of Institutional Options And Legislative And Labour Issues" dated May 21, 1993. Lastly, this is the **only** formula prescribed in the Request for Proposals recently drafted by the Florida Intercity Rail Passenger Service. Based on our analysis, we are satisfied with the reasoning behind these conclusions, notwithstanding the absence at present of a legislative framework within which such a public-private partnership would operate.

### 3.6.2 Cautionary Note on the Degree of Private Sector Participation

As noted herein, the extent of Debt Service coverage required by lenders, together with the equity and quasi-equity that can realistically be obtained from the private sector, will, in essence, dictate the amount of debt that can be raised solely upon the financial strength of the Project. This in turn determines the quantum of government support for Project Costs.

Given that the cost of funds to the private sector is higher than that for the public sector, there reaches a point, for financially marginal projects, where it no longer becomes financially desirable to involve the private sector, simply because the Internal Rate of Return to the public sector become insignificant or negative.

## 3.7 Base Case Financing Plan

#### 3.7.1 Financing Objectives

In order to design an optimal ownership structure for this Project, and consistent with the directives we have received, we have identified the following as the key Base Case Financing Plan objectives:

- Private sector financing of capital costs should be obtained to the maximum possible extent as can be supported by the Net Operating Revenues of the Project;
- Public sector financing of Construction Costs is to be structured to minimize up-front government funds, while at the same time retaining mechanisms for public sector control over the invested funds;
- Private sector participation would be through fully taxable entities;
- Dividends to the owners will be paid from the free operating cash flow generated by the Project; and
- The rate of return on invested capital will be a function of the level of risk and responsibility assumed.

### 3.7.2 Public-Private Partnership Option - The Base Case Financing Plan

Keeping in mind the aforenoted financing objectives, the findings of the KPMG study and the financing experience of BNP, the organization structure that would incorporate the considerations of the Pre-construction and Construction Periods, as well as ultimately simplify the structure of financing, would probably take the following public-private partnership form:

- (i) Public Financing Entity: The public sector would incorporate a Public Financing Entity, likely a crown corporation, to finance and own the Infrastructure and Civil Works. Once completed, the Public Financing Entity would lease the Infrastructure and Civil Works to the Construction and Operations Company in order to obtain a return on its investment in both the Infrastructure and Civil Works assets and those Equipment and Technology assets that prove to be unfinanceable from private sector sources. The Public Financing Entity would obtain its financing from private sector institutional investors.
- (ii) Construction and Operations Company: A Construction and Operations Company would be incorporated under joint ownership of the private and public sectors to manage the full scope of the Project during the Construction and Operating Periods. This jointly-owned company would raise financing for the Equipment and Technology costs, and subsequently would operate the HSR services and lease the Infrastructure and Civil Works from the Public Financing Entity.

This approach has successfully been applied for other transportation infrastructure projects and forms the cornerstone of our Base Case Financing Plan. In the subsections that follow, we explain how the aforenoted public-private partnership structure could be applied to this Project for each of the Pre-construction, Construction and Operating Periods. For further clarity, the sources and uses of funds (and partition of risks) for the Base Case Financing Plan for the Pre-construction and Construction Periods are illustrated in **Table 1**.

#### (i) Pre-construction Period

Based on our review of comparable infrastructure projects, equity and quasi-equity sponsors would be required to cover all of the initial Pre-construction costs, together with the initial Construction Period costs.

The most likely form of financing during the three-year Pre-construction Period would be an equity injection by private sector sponsors and a grant or equity by public sector sponsors. This would most likely be followed up by quasi-equity (for example, convertible debentures) for the financing of initial Construction Period costs, as noted below.

#### (ii) Construction Period

#### Infrastructure and Civil Works

As is illustrated in **Table 1**, financing in respect of Infrastructure and Civil Works (land and right-of-way, earthworks and subgrades, bridges, grade separation, track, stations, other accommodations, maintenance facilities start-up costs and other miscellaneous costs) would be financed by private sector institutional investors in the form of Infrastructure and Civil Works Notes. This obligation would be secured by a government guaranteed annual Infrastructure and Civil Works Subsidy, commencing in the first year of full operations, that would be designed to fully repay the Infrastructure and Civil Works Notes over a period of 35 years.

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In order to ensure public sector control and ownership of the Infrastructure and Civil Works costs, the public sector would likely incorporate a Public Financing Entity, which would probably be a crown corporation, through which the Infrastructure and Civil Works Notes would be issued. This could possibly be structured as an off-balance sheet form of financing from a government perspective, depending upon the specific terms of the debt and the considerations of debt rating agencies.

From the perspective of institutional private sector investors, the risk associated with the Infrastructure and Civil Works Notes would be minimal, since the notes would be fully backed by a government guaranteed revenue stream. The Infrastructure and Civil Works Notes would likely achieve an "AA" credit rating, thereby providing the potential to obtain funds at approximately 50 basis points above the governments' average cost of funds (based on the rate prevailing for 30-year government of Canada bonds).<sup>(7)</sup>

This financing structure would ensure that the public sector would minimize its up-front direct financing of the Project. Rather, the governments' payments for the cost of Infrastructure and Civil Works would be spread over a period of 35 years.

For purposes of our Financial Model, we have assumed that the interest rate on the Infrastructure and Civil Works Notes would be 9%. We have also assumed this rate is high from a historical perspective but is slightly below present rates that could be achieved in the market place.

#### **Equipment and Technology**

With respect to Equipment and Technology, the private sector would be expected to take all of the financing risk, without any government guarantees, for that portion financed by the private sector.

Equipment and Technology Notes would be issued to commercial banks and would be secured against the related assets. This form of debt would be expected to bear interest at floating rates at approximately 250 basis points over the equivalent 15-year London Interbank Offering Rate. For purposes of our Financial Model, we have assumed that the cost of 15-year funds would be 9%, which is close to (but slightly below) the rates presently in effect. Thus, the Equipment and Technology Notes would bear interest at 11.5% based on our cost of funds assumptions in the Financial Model. The Equipment and Technology Notes would be repayable on an increasing annual scale (based on the sum-of-the-years-digits method) over the 15-year period subsequent to the completion of the Construction Period.

#### **Convertible Subordinated Debentures**

This quasi-equity component of the Construction Period financing would be structured so as to ensure that the debt to equity ratio would not exceed 4 to 1 in respect of the Equipment and Technology Notes.

There would be no cash payments of interest on the Convertible Subordinated Debentures during the Construction Period. Investors' returns would be in the form of base and participating interest to be received during the Operating Period, and eventually by way of dividends subsequent to conversion.

<sup>(7)</sup> It should be noted that for the duration of the Construction Period leading up to the operations stage of the Project, institutional investors would receive interest directly from the governments by way of the Construction Period Interest Subsidy.

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In the Base Case Financing Plan, we have assumed that the base rate of interest would be 9% commencing with the Operating Period.

#### (iii) Operating Period

#### **Construction and Operations Company**

**Table 2** shows the financing structure during the Operating Period of the Project. In the Operating Period, the Construction and Operations Company would lease the Infrastructure and Civil Works assets from the Public Financing Entity and would also be wholly responsible for servicing the Equipment and Technology Notes. Excess cash flow would be used to pay (on a pari passu basis) dividends to investors (or interest to holders of subordinated debt), to make Infrastructure and Civil Works Lease payments to the Public Financing Entity, and to pay interest on the Convertible Subordinated Debentures.

#### **Public Financing Entity**

The Public Financing Entity would service the Infrastructure and Civil Works Notes by way of the Infrastructure and Civil Works Subsidy. As the Project becomes more profitable, the Guaranteed Infrastructure and Civil Works Annual Subsidy would effectively be reduced by the amount of the Infrastructure and Civil Works Lease payments and by dividends to be received by the Public Sector Financing Entity's equity in the Construction and Operations Company.

### 3.7.3 Basis of Financial Analysis

#### (i) Base Case Financing Plan

In Sections 4 through 11 of this report, each of the eight Project scenarios is consistently analyzed through application of the Base Case Financing Plan. In this way, the relative attractiveness, to each of the public and private sectors, of each scenario can be clearly measured.

In order to ensure comparability, each of Scenarios 1 to 8 has been prepared on the basis of achieving, in 2005, a 1.75 to 1 debt Service coverage ratio in respect of Equipment and Technology Notes. Subject to providing the 12% threshold Internal Rate of Return to private sector investors (the equity sponsors and private investors in Convertible Subordinated Debentures), the Base Case Financing Plan provides a reasonable measure of the maximum achievable financing risk that the private sector would entertain for this Project.

#### (ii) Public Sector Option

In addition, in each of Sections 4 through 11 we also present summary data that enables the reader to assess the attractiveness of the Project on a "wholly public" ownership basis. For purposes of our analyses, the "wholly public" option means "Crown construct and Crown operate", with funds reallocated from other government sources as required, with no Project debt obligations.

#### (iii) Private Sector Option

We have not presented data on a "fully private" basis since such an approach is totally unrealistic from any reasonable viability or financing perspective.

## 4. Scenario 1: Quebec City-Windsor 300 kph (Mirabel)

## 4.1 Project Cost and Financing Risk

	Constant 199 without capital		Inflated dollars with capitalized interest	
	(millions \$)	%	(millions \$)	%
Project Cost	\$10,482	100%	\$18,341	100%
Base Case Financing Plan-			***************************************	30000000000000000000000000000000000000
Public sector risk				
Direct government interest subsidy			\$4,414	24.1%
Private sector loans supported by government guarantee			9,149	49.9%
Equity			137	0.7%
			13,700	74.7%
Private sector risk				
Project finance debt			3,209	17.5%
Convertible debentures			1,295	7.1%
Equity			137	0.7%
			4,641	25.3%
Total			\$18,341	100%

Using a 1.75 to 1 Debt Service coverage ratio, the maximum amount of construction and financing risk that could realistically be assumed solely by the private sector would be 25.3% of total Project costs, or \$4,641 million. **Table 3** provides a breakdown of sources and uses of cash in both constant and inflated dollars. If the Debt Service ratio was increased to 2.0 to 1, the amount of "at risk" private sector financing available would decline to 23.0% of total Project costs, or \$4,227 million.

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## 4.2 Results of Operations

	2005		2025		
	Constant dollars	inflated dollars	Constant dollars	inflated dollars	
	(in millions)				
Operating Revenues	\$805	\$1,148	\$1,370	\$3,528	
Operating Costs	(321)	(450)	(392)	(990)	
Net Operating Revenues	\$484	\$698	\$978	\$2,538	
% of Operating Revenues	60.1%	60.8%	71.4%	71.9%	

**Table 4** provides a graphical presentation of Net Operating Revenues and Debt Service costs for the first 20 years of operations.

## 4.3 Distribution of Cash Flow

1.1.5

	20	105	20	125
	Constant dollars	Inflated dollars	Constant dollars	inflated dollars
		(in mi	llions)	
Public sector				
Intake-				
Taxes	\$20	\$28	\$163	\$419
Dividends	12	17	15	37
Lease of Infrastructure and Civil Works	73	103	496	1,277
	105	148	674	1,733
Outflow-				Wronester Common
Infrastructure and Civil Works interest subsidy	(607)	(866)	(336)	(866)
Net intake (outflow)	\$(502)	\$(718)	\$338	\$867

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,	2005		20	25 ·
:	Constant dollars	inflated dollars	Constant dollars	Inflated dollars
		(in mi	llions)	Barrier Commission Com
Private sector				74.
Intake (on funds at risk)-				
Debt service on Equipment and Technology Notes	\$284	\$400	\$-	\$-
Interest on subordinate convertible debentures	83	117	-	77
Dividends	12	17	158	391
Total	\$379	\$534	\$158	\$391

As shown on the above tables, and also in **Table 4**, in the initial years, cash flow is directed, in first priority, to Debt Service in respect of the Equipment and Technology Notes. Once repaid, cash flow to the public sector increases dramatically, principally through lease payments to the Public Financing Entity.

The accumulated contribution of the public sector (in inflated dollars) up to the first year during which a break-even in cash-flow to the public sector is achieved (i.e. 2019) amounts to \$10,709 million including tax revenues and \$12,813 million excluding tax revenues.

A detailed summary of annual contributions, net of intakes, by the public sector is presented as part of **Appendix 2**.

#### 4.4 Return on Investment

Scenario 1 yields the following Internal Rate of Return, (8) depending on the ownership option:

	Milhallia autic	Private-pi	ublic*
	Wholly public	Including tax revenues	Without taxes
Public sector	6.58%	4.56%	0.49%
Private sector**	n/a	10.79%	10.79%

Base Case Financing Plan.

<sup>\*\*</sup> Equity and Convertible Subordinated Debentures only.

The Internal Rates of Return have been calculated on the basis of the projections set out in Appendix 2 using the methodology detailed in Appendix 1.

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For Scenario 1, the public sector's highest return would be generated under the wholly public ownership option. The public sector's Internal Rate of Return is lower under the public-private ownership option since the cost to the private sector of financing its share of the Project is higher than equivalent public sector borrowing costs. Thus, in order for the Project to absorb the higher private sector financing costs, the public sector's Internal Rate of Return declines.

In respect of the private sector, we believe that the projected Internal Rate of Return under the public-private scenario (as reflected in the Base Case Financing Plan) would approximate 10.79%. This is below the 12% threshold rate that we believe would be required to induce the private sector to commit risk equity capital to the Project (as distinct from risk debt). (9) Private sector equity sponsors would therefore seek to make modifications to the Base Case Financing Plan in order to obtain a greater share of the Project cash flows. Obviously, any such change would cause the public sector's Internal Rate of Return to drop even further.

To test this hypothesis, we modified the public-private payout sharing formula in the Base Case Financing Plan so as to increase the private sector's Internal Rate of Return from 10.79% to the 12% threshold. This Modified Base Case Financing Plan enhances the return to the private sector (i.e. to 12%) but causes the projected Internal Rate of Return to the public sector to decrease from 4.56% to only 1.65%.

All calculations of Internal Rate of Return in our Financial Analysis assume that the Project will have a Terminal Value at the end of the financial projection period in 2035, at which date all Project indebtedness will have been repaid.

In order to estimate the Terminal Value, we have applied the capitalized earnings valuation approach, thereby applying a capitalization factor to year 2035 earnings and deducting therefrom an estimate of the Replacement Cost of Project assets at that time. It is important to note that our estimates of Replacement Cost are not supported by engineering studies or any specific knowledge as to which assets, if any, would be in need of replacement in the year 2035. Rather, the Replacement Cost deduction attempts to provide a measurement of the financial risk (i) that parts of the Project will, for a variety of possible reasons, be rendered technologically or competitively obsolete at some future date, and (ii) that private sector investors and lenders will heavily discount the Terminal Value, regardless of its validity, since it is so far out in the future; hence investors and lenders will reduce their valuations of Terminal Value. Thus the deduction of a Replacement Cost estimate is **not** intended in any way to call into question the adequacy of the ongoing maintenance and capital replacement programs that are already built into the financial projections over the Operating Period. Unlike our estimates of Replacement Cost, such maintenance and capital replacement programs are supported by detailed engineering studies.

In the Base Case Financing Plan, we have therefore included what we believe to be a financially conservative estimate of the Replacement Cost of Project assets, equivalent to approximately 65% of their original cost, fully inflated through to the year 2035. While this may be appropriate for the private sector's analysis of Internal Rates of Return, public sector analysts with a longer term vision may see merit in attributing a lower Replacement Cost to the calculation of Terminal Value.

The Terminal Value estimated for this Project has a reasonably important impact on the calculation of the Internal Rate of Return. We have therefore conducted a sensitivity analysis on the Internal Rate of Return by excluding completely the Terminal Value from the calculation (i.e. a more "pessimistic"

<sup>&</sup>lt;sup>(9)</sup> The 12% threshold rate has been arrived at by consideration of the private sector's costs of financing, given the identified Project risk. The rate is expressed as an after-tax percentage (taxes at 40%).

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case) and by reducing the Replacement Cost of Project assets in the year 2035 to 32.5% of the original cost of Project assets, inflated to the year 2035 (i.e. a more "optimistic" case). The results are summarized in the following table.

	Nil Terminal Value in 2035 ("Pessimistic")	Base Case Financing Plan	2035 Replacement Cost reduced to 32.5% of inflated original cost ("Optimistic")
Public-private partnership			
Public sector (with taxes)	2.71%	4.56%	5.59%
Private sector	10.48%	10.79%	11.18%
Wholly public	5.93%	6.58%	7.15%

The elimination of the Terminal Value from the calculation of the Internal Rate of Return has a negative impact ranging from 0.31% to 1.85%. On the other hand, the limitation of the Replacement Cost of Project assets in 2035 to 32.5% (versus 65%) of inflated original costs has a positive impact on the Internal Rate of Return ranging from 0.39% to 1.03%.

On a net present value basis, we calculate that the public sector's net cost for Scenario 1 would be as follows:

	8% discount rate		9% discount rate		10% discount rate	
	Including tax revenues	Without taxes	including tax revenues	Without taxes	Including tax revenues	Without taxes
Pre-construction Period Construction Period Operating Period (to 2025)	\$127 2,350 1,534	\$127 2,350 2,188	\$126 2,182 1,383	\$126 2,182 1,911	\$125 2,027 1,243	\$125 2,027 1,672
	\$4,011	\$4,665	\$3,691	\$4,219	\$3,395	\$3,824

It should be noted that the above discount rates do not include a risk premium. Rather, they are based upon long-term government borrowing costs (i.e. cost of capital).

Details supporting the above Scenario 1 calculations are provided in Appendix 2.

## 4.5 Other Sensitivity Analyses

#### 4.5.1 Operating Revenues and Costs

The following table shows how key financial ratios from the Base Case Financing Plan compare to results generated from a 10% increase and a 10% decrease in each of the projected Operating Revenues and Operating Costs:

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		Operating Revenues		Operating Costs		Combined	
	Financing Base Case	10% Increase	10% decrease	10% decrease	10% Increase	Optimistic (1)	Pessimistic (2)
Internal Rate of Return - Public sector (with taxes) - Private sector	4.56% 10.79%	6.34% 11.63%	2.97% 9.80%	4.77% 10.89%	4.43% 10.69%	6,51% 11.71%	2.71% 9.66%
Debt Service ratio (Year 2005)	1.75	2.05	1.44	1.79	1.70	2.10	1.40
Debt to equity ratio (Year 2005)	2.72	2.69	2.78	2.71	2.73	2.68	2.79
Net Operating Revenue margin - Year 2005 - Year 2025	60.77% 71.95%	64.54% 75.57%	56,10% 68.71%	62.30% 73.03%	59.24% 70.88%	65.93% 75.55%	54.38% 67.51%
Government funding (income) per passenger - Year 2005 - Year 2025	\$62 \$(45)	\$55 \$(59)	\$69 \$(30)	\$62 \$(46)	\$63 \$(43)	\$53 \$(60)	\$70 \$(29)

<sup>(1)</sup> Operating Revenues increase by 10% and Operating Costs decrease by 10%.

### 4.5.2 Variations to Other Assumptions

The following table shows the impact on key financial ratios of changes to assumptions underlying the Base Case Financing Plan, as follows:

- An overrun in Project Construction costs of 20%;
- Project Construction cost savings of 20%;
- A reduction in the length of the Construction Period from seven to six years; and
- A reduction in the interest rate on the Equipment and Technology Notes from 11.5% to 10.5%.

	20% Cost Overrun	20% Cost Savings	Reduction in Construction Period	Reduction in Interest Rate
Internal Rate of Return - Public sector (with taxes) - Private sector	3.21% 10.48%	6.29% 11.06%	5.97% 11.08%	4.70% 10.87%
Debt Service ratio (Year 2005)	1.48	2.14	1.83	1.89
Debt to equity ratio (Year 2005)	3.31	2.18	2.71	2.70
Net Operating Revenue margin - Year 2005 - Year 2025	60.56% 71.98%	60.98% 71.93%	60.84% 71.95%	60.77% 71.95%

<sup>(2)</sup> Operating Revenues decrease by 10% and Operating Costs increase by 10%.

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	20% Cost Overrun	20% Cost Savings	Reduction in Construction Period	Reduction in Interest Rate
Government funding (income) per passenger				
- Year 2005 - Year 2025	\$78 \$(36)	\$45 \$(53)	\$58 \$(47)	\$61 \$(45)

We have also looked at the sensitivity of overall interest rates. By varying interest rates by 1% in each direction, we can compute additional sensitivity analyses on all of the Project's indebtedness taken as a whole.

	1% reduction in all interest rates	Base Case Financing Plan	1% increase in all interest rates
Internal Rate of Return - Public sector (with taxes) - Private sector	6.27% 10.99%	4.56% 10.79%	3.26% 10.76%
Debt Service ratio (Year 2005)	2.07	1.75	1.51
Debt to equity ratio (Year 2025)	3.10	2.72	2.41
Government funding (income per passenger) - Year 2005 - Year 2025	\$50 \$(49)	\$62 \$(45)	\$74 \$(40)

In order to appreciate the sensitivity of the Internal Rate of Return to a combination of the three most important variables affecting the HSR Project, we have conducted a "super sensitivity" analysis by concurrently varying revenues, the Construction Period and Construction costs. In the "optimistic" analysis, revenues are increased by 10%, the Construction Period has been reduced by one year and Construction costs are reduced by 20%. In the "pessimistic" analysis, revenues are decreased by 10%, the Construction Period has been extended by one year and the Construction costs are increased by 20%. The results of these analyses are summarized and compared to the Base Case Financing Plan in the following table.

	Pessimistic Analysis <sup>(1)</sup>	Base Case Financing Plan	Optimistic Analysis <sup>(2)</sup>
Public-private partnership	,		
Public sector (with taxes)	(0.18)%	4.56%	9.76%
Private sector	8.88%	10.79%	12.11%
Wholly public	3.98%	6.58%	8.43%

<sup>(1)</sup> Operating revenues decrease by 10%, one year added to Construction Period and 20% Construction cost overrun.

<sup>(2)</sup> Operating revenues increase by 10%, one year reduction to Construction Period and 20% Construction cost savings.

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### 4.6 Conclusion

Based on our analysis of the Base Case Financing Plan for Scenario 1, and notwithstanding satisfactory Debt Service coverage, we do not believe that the projected financial results would be sufficiently attractive to induce investors from the private sector to invest risk capital in the Project since the 10.79% Internal Rate of Return for the private sector is too low relative to private sector financing costs and the high risks associated with the HSR Project.

By adjusting the public-private payout sharing formula in the Base Case Financing Plan so as to increase the private sector's Internal Rate of Return from 10.79% to the 12% threshold (and thereby render the Project financeable from a private sector standpoint), the public sector's Internal Rate of Return would decline from 4.56% to 1.65%.

## 5. Scenario 2: Quebec City-Windsor 200 kph (Dorval)

## 5.1 Project Cost and Financing Risk

	Constant 1993 dollars without capitalized interest		Inflated dollars with capitalized interest	
	(millions \$)	%	(millions \$)	%
Project Cost	\$9,451	100%	\$16,444	100%
Base Case Financing Plan-				**************************************
Public sector risk				
Direct government interest subsidy			\$3,860	23.5%
Private sector loans supported by government guarantee			8,721	53.0%
Equity			127.5	0.8%
			12,708	77.3%
Private sector risk				
Project finance debt			2,403	14.6%
Convertible debentures			1,206	7.3%
Equity			127.5	0.8%
	4-4		3,736	22.7%
Total			\$16,444	100%

Using a 1.75 to 1 Debt Service coverage ratio, the maximum amount of construction and financing risk that could realistically be assumed solely by the private sector would be 22.7% of total Project costs, or \$3,736 million. **Table 5** provides a breakdown of sources and uses of cash in both constant and inflated dollars. If the Debt Service ratio was increased to 2.0 to 1, the amount of "at risk" private sector financing available would decline to 20.8% of total Project costs, or \$3,424 million.

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### 5.2 Results of Operations

	20	2005		25		
	Constant Inflated dollars dollars		Constant dollars	inflated dollars		
-	(in millions)					
Operating Revenues	* \$641	\$914	\$1,064	\$2,740		
Operating Costs	(275)	(385)	(329)	(835)		
Net Operating Revenues	\$366	\$529	\$735	\$1,905		
% of Operating Revenues	57.1%	57.9%	69.1%	69.5%		

**Table 6** provides a graphical presentation of Net Operating Revenues and Debt Service costs for the first 20 years of operations.

### 5.3 Distribution of Cash Flow

	20	005	20	125
	Constant dollars	inflated dollars	Constant dollars	inflated dollars
		(in mi	llions)	Control of the Contro
Public sector				3.4430.444.44
Intake-				:
Taxes	\$16	\$23	\$102	\$262
Dividends	6	9	9	24
Lease of Infrastructure and Civil Works	49	70	405	1,044
	71	102	516	1,330
Outflow-				PROPERTY PRO
Infrastructure and Civil Works interest subsidy	(579)	(825)	(320)	(825)
Net intake (outflow)	\$(508)	\$(723)	\$196	\$505

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	2005		20	25
	Constant dollars	inflated dollars	Constant dollars	inflated dollars
		(in mi	llions)	
Private sector				
intake (on funds at risk)-				
Debt service on Equipment and Technology Notes	\$211	\$302	\$-	\$-
Interest on subordinate convertible debentures	76	109	-	-
Dividends	6	9	95	252
Total	\$293	\$420	\$95	\$252

As shown on the above tables, and also in **Table 6**, in the initial years, cash flow is directed, in first priority, to Debt Service in respect of the Equipment and Technology Notes. Once repaid, cash flow to the public sector increases dramatically, principally through lease payments to the Public Financing Entity.

The accumulated contribution of the public sector (in inflated dollars) up to the first year during which a break-even in cash-flow to the public sector is achieved (i.e. 2020) amounts to \$11,515 million including tax revenues and \$12,747 million excluding tax revenues.

A detailed summary of annual contributions, net of intakes, by the public sector is presented as part of **Appendix 3**.

#### 5.4 Return on Investment

Scenario 2 yields the following Internal Rate of Return, (10) depending on the ownership option:

	Whaller world:	Private-p	ublic*
	Wholly public	Including tax revenues	Without taxes
Public sector	4.83%	2.57%	(1.85)%
Private sector**	п/а	9.38%	9.38%

Base Case Financing Plan.

<sup>\*\*</sup> Equity and Convertible Subordinated Debentures only.

The Internal Rates of Return have been calculated on the basis of the projections set out in Appendix 3 using the methodology detailed in Appendix 1.

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For Scenario 2, the public sector's highest return would be generated under the wholly public ownership option. The public sector's Internal Rate of Return is lower under the public-private ownership option since the cost to the private sector of financing its share of the Project is higher than equivalent public sector borrowing costs. Thus, in order for the Project to absorb the higher private sector financing costs, the public sector's Internal Rate of Return declines.

In respect of the private sector, we believe that the projected Internal Rate of Return under the public-private scenario (as reflected in the Base Case Financing Plan) would approximate 9.38%. This is below the 12% threshold rate that we believe would be required to induce the private sector to commit risk equity capital to the Project (as distinct from risk debt). Private sector equity sponsors would therefore seek to make modifications to the Base Case Financing Plan in order to obtain a greater share of the Project cash flows. Obviously, any such change would cause the public sector's Internal Rate of Return to drop even further.

To test this hypothesis, we modified the public-private payout sharing formula in the Base Case Financing Plan so as to increase the private sector's Internal Rate of Return from 9.38% to the 12% threshold. This Modified Base Case Financing Plan enhances the return to the private sector (i.e. to 12%) but causes the projected Internal Rate of Return to the public sector to decrease from 2.57% to an Internal Rate of Return that is lower than (7.5)%.

All calculations of Internal Rate of Return in our Financial Analysis assume that the Project will have a Terminal Value at the end of the financial projection period in 2035, at which date all Project indebtedness will have been repaid.

In order to estimate the Terminal Value, we have applied the capitalized earnings valuation approach, thereby applying a capitalization factor to year 2035 earnings and deducting therefrom an estimate of the Replacement Cost of Project assets at that time. It is important to note that our estimates of Replacement Cost are not supported by engineering studies or any specific knowledge as to which assets, if any, would be in need of replacement in the year 2035. Rather, the Replacement Cost deduction attempts to provide a measurement of the financial risk that (i) parts of the Project will, for a variety of possible reasons, be rendered technologically or competitively obsolete at some future date, and (ii) that private sector investors and lenders will heavily discount the Terminal Value, regardless of its validity, since it is so far out in the future; hence investors and lenders will reduce their valuations of Terminal Value. Thus the deduction of a Replacement Cost estimate is **not** intended in any way to call into question the adequacy of the ongoing maintenance and capital replacement programs that are already built into the financial projections over the Operating Period. Unlike our estimates of Replacement Cost, such maintenance and capital replacement programs are supported by detailed engineering studies.

In the Base Case Financing Plan, we have therefore included what we believe to be a financially conservative estimate of the Replacement Cost of Project assets, equivalent to approximately 65% of their original cost, fully inflated through to the year 2035. While this may be appropriate for the private sector's analysis of Internal Rates of Return, public sector analysts with a longer term vision may see merit in attributing a lower Replacement Cost to the calculation of Terminal Value.

The Terminal Value estimated for this Project has a reasonably important impact on the calculation of the Internal Rate of Return. We have therefore conducted a sensitivity analysis on the Internal Rate of Return by excluding completely the Terminal Value from the calculation (i.e. a more "pessimistic"

The 12% threshold rate has been arrived at by consideration of the private sector's costs of financing, given the identified Project risk. The rate is expressed as an after-tax percentage (taxes at 40%).

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case) and by reducing the Replacement Cost of Project assets in the year 2035 to 32.5% of the original cost of Project assets, inflated to the year 2035 (i.e. a more "optimistic" case). The results are summarized in the following table.

·	Nil Terminal Value in 2035 ("Pessimistic")	Base Case Financing Plan	2035 Replacement Cost reduced to 32.5% of inflated original cost ("Optimistic")	
Public-private partnership			William Control of the Control of th	
Public sector (with taxes)	0.68%	2.57%	4.08%	
Private sector	9.13%	9.38%	9.87%	
Wholly public	4.50%	4.83%	5.72%	

The elimination of the Terminal Value from the calculation of the Internal Rate of Return has a negative impact ranging from 0.25% to 1.89%. On the other hand, the limitation of the Replacement Cost of Project assets in 2035 to 32.5% (versus 65%) of inflated original costs has a positive impact on the Internal Rate of Return ranging from 0.49% to 1.51%.

On a net present value basis, we calculate that the public sector's net cost for Scenario 2 would be as follows:

	8% discount rate		9% dis	count rate	10% discount rate	
	Including tax revenues	Without taxes	Including tax revenues	Without taxes	Including tax revenues	Without taxes
Pre-construction Period Construction Period Operating Period (to 2025)	\$118 2,060 2,009	\$118 2,060 2,390	\$117 1,912 1,765	\$117 1,912 2,071	\$116 1,777 1,552	\$116 1,777 1,800
	\$4,187	\$4,568	\$3,794	\$4,100	\$3,445	\$3,693

It should be noted that the above discount rates do not include a risk premium. Rather, they are based upon long-term government borrowing costs (i.e. cost of capital).

Details supporting the above Scenario 2 calculations are provided in Appendix 3.

### 5.5 Other Sensitivity Analyses

#### 5.5.1 Operating Revenues and Costs

The following table shows how key financial ratios from the Base Case Financing Plan compare to results generated from a 10% increase and a 10% decrease in each of the projected Operating Revenues and Operating Costs:

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		Operating	Revenues	Operatii	ng Costs	Com	bined
	Financing Base Case	10% increase	10% decrease	10% decrease	10% increase	Optimistic (1)	Pessimistic (2)
Internal Rate of Return - Public sector (with taxes) - Private sector	2.57% 9.38%	4,10% 10,16%	(0.34)% 8.25%	2.65% 9.48%	2.28% 9.25%	4.32% 10.26%	(0,77)% 8.08%
Debt Service ratio (Year 2005)	1.75	2.07	1.43	1.80	1.70	2.12	1.38
Debt to equity ratio (Year 2005)	2.77	2.73	2.82	2.76	2.77	2.72	2.83
Net Operating Revenue margin - Year 2005 - Year 2025	57.92% 69.53%	61.97% 72.38%	52.91% 66.01%	59.66% 70.77%	56.18% 68.29%	63.54% 73.50%	50.97% 64.63%
Government funding (income) per passenger - Year 2005 - Year 2025	\$73 \$(31)	\$67 \$(45)	\$80 \$(16)	\$72 \$(33)	\$74 \$(30)	\$65 \$(47)	\$80 \$(15)

<sup>(1)</sup> Operating Revenues increase by 10% and Operating Costs decrease by 10%.

#### 5.5.2 Variations to Other Assumptions

The following table shows the impact on key financial ratios of changes to assumptions underlying the Base Case Financing Plan, as follows:

- An overrun in Project Construction costs of 20%;
- Project Construction cost savings of 20%;
- A reduction in the length of the Construction Period from seven to six years; and
- A reduction in the interest rate on the Equipment and Technology Notes from 11.5% to 10.5%.

	20% Cost Overrun	20% Cost Savings	Reduction in Construction Period	Reduction in Interest Rate
Internal Rate of Return - Public sector (with taxes) - Private sector	0.49% 9.04%	4.23% 9.61%	3.87% 9.69%	2.58% 9.44%
Debt Service ratio (Year 2005)	1.48	2.14	1.83	1.89
Debt to equity ratio (Year 2005)	3.36	2.20	2.77	2.75
Net Operating Revenue margin - Year 2005 - Year 2025	57.73% 69.57%	58.12% 69.50%	58.00% 69.53%	57.92% 69.53%

<sup>(2)</sup> Operating Revenues decrease by 10% and Operating Costs increase by 10%.

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	20% Cost Overrun	20% Cost Savings	Reduction in Construction Period	Reduction in Interest Rate
Government funding (income) per passenger				A Company of the Comp
- Year 2005 - Year 2025	\$91 \$(21)	\$56 \$(41)	\$69 \$(34)	\$72 \$(32)

We have also looked at the sensitivity of overall interest rates. By varying interest rates by 1% in each direction, we can compute additional sensitivity analyses on all of the Project's indebtedness taken as a whole.

	1% reduction in all interest rates	Base Case Financing Plan	1% increase in all interest rates
Internal Rate of Return - Public sector (with taxes) - Private sector	4.03% 9.37%	2.57% 9.38%	0.80% 9.38%
Debt Service ratio (Year 2005)	1.89	1.75	1.63
Debt to equity ratio (Year 2025)	2.88	2.77	2.66
Government funding (income per passenger) - Year 2005 - Year 2025	\$63 \$(37)	\$73 \$(31)	\$84 \$(26)

In order to appreciate the sensitivity of the Internal Rate of Return to a combination of the three most important variables affecting the HSR Project, we have conducted a "super sensitivity" analysis by concurrently varying revenues, the Construction Period and Construction costs. In the "optimistic" analysis, revenues are increased by 10%, the Construction Period has been reduced by one year and Construction costs are reduced by 20%. In the "pessimistic" analysis, revenues are decreased by 10%, the Construction Period has been extended by one year and the Construction costs are increased by 20%. The results of these analyses are summarized and compared to the Base Case Financing Plan in the following table.

	Pessimistic Analysis <sup>(1)</sup>	Base Case Financing Plan	Optimistic Analysis <sup>(2)</sup>
Public-private partnership			
Public sector (with taxes)	(6.11)%	2.57%	7.65%
Private sector	7.20%	9.38%	10.63%
Wholly public	0.65%	4.83%	7.03%

<sup>(1)</sup> Operating revenues decrease by 10%, one year added to Construction Period and 20% Construction cost overrun.

<sup>(2)</sup> Operating revenues increase by 10%, one year reduction to Construction Period and 20% Construction cost savings.

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#### 5.6 Conclusion

Based on our analysis of the Base Case Financing Plan for Scenario 2, and notwithstanding satisfactory Debt Service coverage, we do not believe that the projected financial results would be sufficiently attractive to induce investors from the private sector to invest risk capital in the Project since the 9.38% Internal Rate of Return for the private sector is too low relative to private sector financing costs and the high risks associated with the HSR Project.

By adjusting the public-private payout sharing formula in the Base Case Financing Plan so as to increase the private sector's Internal Rate of Return from 9.38% to the 12% threshold (and thereby render the Project financeable from a private sector standpoint), the public sector's Internal Rate of Return would decline from 2.57% to an Internal Rate of Return that is lower than (7.5)%.

# 6. Scenario 3: Quebec City-Windsor 300 kph (Dorval)

### 6.1 Project Cost and Financing Risk

,	Constant 199 without capital		Inflated dollars with capitalized interest	
	(millions \$)	%	(millions \$)	%
Project Cost	\$10,626	100%	\$18,661	100%
Base Case Financing Plan-				33000000000000000000000000000000000000
Public sector risk				
Direct government interest subsidy			\$4,559	24.4%
Private sector loans supported by government guarantee			9,029	48.4%
Equity	THE REAL PROPERTY AND ADDRESS OF THE PERSON ADDRESS OF THE PERSON AND ADDRESS OF THE PERSON AND ADDRESS OF THE PERSON ADDRESS OF		137	0.7%
			13,720	73.5%
Private sector risk				
Project finance debt			3,509	18.9%
Convertible debentures			1,295	6.9%
Equity			137	0.7%
			4,941	26.5%
Total			\$18,661	100%

Using a 1.75 to 1 Debt Service coverage ratio, the maximum amount of construction and financing risk that could realistically be assumed solely by the private sector would be 26.5% of total Project costs, or \$4,941 million. **Table 7** provides a breakdown of sources and uses of cash in both constant and inflated dollars. If the Debt Service ratio was increased to 2.0 to 1, the amount of "at risk" private sector financing available would decline to 24.1% of total Project costs, or \$4,498 million.

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### 6.2 Results of Operations

	20	2005		25			
	Constant dollars	inflated dollars	Constant dollars	Inflated dollars			
		(in millions)					
Operating Revenues	\$853	\$1,217	\$1,452	\$3,740			
Operating Costs	(326)	(456)	(402)	(1,014)			
Net Operating Revenues	\$527	\$761	\$1,050	\$2,726			
% of Operating Revenues	61.8%	62.5%	72.3%	72.9%			

**Table 8** provides a graphical presentation of Net Operating Revenues and Debt Service costs for the first 20 years of operations.

### 6.3 Distribution of Cash Flow

	2005		20	25
	Constant dollars	inflated dollars	Constant dollars	Inflated dollars
		(in mi	llions)	
Public sector				
Intake-				
Taxes	\$21	\$30	\$186	\$479
Dividends	15	22	17	43
Lease of Infrastructure and Civil Works	81	116	512	1,319
	117	168	715	1,841
Outflow-			,	
Infrastructure and Civil Works interest subsidy	(599)	(854)	(332)	(854)
Net intake (outflow)	\$(482)	. \$(686)	\$383	\$987

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	2005		2025	
	Constant dollars	Inflated dollars	Constant dollars	inflated dollars
		(in mi	llions)	
Private sector				
Intake (on funds at risk)-				
Debt service on Equipment and Technology Notes	\$304	\$435	\$-	\$-
Interest on subordinate convertible debentures	82	117	-	
Dividends	15	22	177	447
Total	\$401	\$574	\$177	\$447

As shown on the above tables, and also in **Table 8**, in the initial years, cash flow is directed, in first priority, to Debt Service in respect of the Equipment and Technology Notes. Once repaid, cash flow to the public sector increases dramatically, principally through lease payments to the Public Financing Entity.

The accumulated contribution of the public sector (in inflated dollars) up to the first year during which a break-even in cash-flow to the public sector is achieved (i.e. 2018) amounts to \$10,057 million including tax revenues and \$12,569 million excluding tax revenues.

A detailed summary of annual contributions, net of intakes, by the public sector is presented as part of **Appendix 4**.

#### 6.4 Return on Investment

Scenario 3 yields the following Internal Rate of Return, (12) depending on the ownership option:

	NATIONAL TO A STATE OF THE STAT	Private-p	oublic*
	Wholly public	Including tax revenues	Without taxes
Public sector	7.10%	5.23%	1.22%
Private sector**	n/a	11.34%	11.34%

Base Case Financing Plan.

<sup>\*\*</sup> Equity and Convertible Subordinated Debentures only.

The Internal Rates of Return have been calculated on the basis of the projections set out in Appendix 4 using the methodology detailed in Appendix 1.

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For Scenario 3, the public sector's highest return would be generated under the wholly public ownership option. The public sector's Internal Rate of Return is lower under the public-private ownership option since the cost to the private sector of financing its share of the Project is higher than equivalent public sector borrowing costs. Thus, in order for the Project to absorb the higher private sector financing costs, the public sector's Internal Rate of Return declines.

In respect of the private sector, we believe that the projected Internal Rate of Return under the public-private scenario (as reflected in the Base Case Financing Plan) would approximate 11.34%. This is below the 12% threshold rate that we believe would be required to induce the private sector to commit risk equity capital to the Project (as distinct from risk debt). (13) Private sector equity sponsors would therefore seek to make modifications to the Base Case Financing Plan in order to obtain a greater share of the Project cash flows. Obviously, any such change would cause the public sector's Internal Rate of Return to drop even further.

To test this hypothesis, we modified the public-private payout sharing formula in the Base Case Financing Plan so as to increase the private sector's Internal Rate of Return from 11.34% to the 12% threshold. This Modified Base Case Financing Plan enhances the return to the private sector (i.e. to 12%) but causes the projected Internal Rate of Return to the public sector to decrease from 5.23% to only 3.36%.

All calculations of Internal Rate of Return in our Financial Analysis assume that the Project will have a Terminal Value at the end of the financial projection period in 2035, at which date all Project indebtedness will have been repaid.

In order to estimate the Terminal Value, we have applied the capitalized earnings valuation approach, thereby applying a capitalization factor to year 2035 earnings and deducting therefrom an estimate of the Replacement Cost of Project assets at that time. It is important to note that our estimates of Replacement Cost are not supported by engineering studies or any specific knowledge as to which assets, if any, would be in need of replacement in the year 2035. Rather, the Replacement Cost deduction attempts to provide a measurement of the financial risk that (i) parts of the Project will, for a variety of possible reasons, be rendered technologically or competitively obsolete at some future date, and (ii) that private sector investors and lenders will heavily discount the Terminal Value, regardless of its validity, since it is so far out in the future; hence investors and lenders will reduce their valuations of Terminal Value. Thus the deduction of a Replacement Cost estimate is not intended in any way to call into question the adequacy of the ongoing maintenance and capital replacement programs that are already built into the financial projections over the Operating Period. Unlike our estimates of Replacement Cost, such maintenance and capital replacement programs are supported by detailed engineering studies.

In the Base Case Financing Plan, we have therefore included what we believe to be a financially conservative estimate of the Replacement Cost of Project assets, equivalent to approximately 65% of their original cost, fully inflated through to the year 2035. While this may be appropriate for the private sector's analysis of Internal Rates of Return, public sector analysts with a longer term vision may see merit in attributing a lower Replacement Cost to the calculation of Terminal Value.

The Terminal Value estimated for this Project has a reasonably important impact on the calculation of the Internal Rate of Return. We have therefore conducted a sensitivity analysis on the Internal Rate of Return by excluding completely the Terminal Value from the calculation (i.e. a more "pessimistic"

The 12% threshold rate has been arrived at by consideration of the private sector's costs of financing, given the identified Project risk. The rate is expressed as an after-tax percentage (taxes at 40%).

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case) and by reducing the Replacement Cost of Project assets in the year 2035 to 32.5% of the original cost of Project assets, inflated to the year 2035 (i.e. a more "optimistic" case). The results are summarized in the following table.

,	Nil Terminal Value in 2035 ("Pessimistic")	Base Case Financing Plan	2035 Replacement Cost reduced to 32.5% of inflated original cost ("Optimistic")
Public-private partnership			
Public sector (with taxes)	3.41%	5.23%	6.12%
Private sector	11.01%	11.34%	11.71%
Wholly public	6.42%	7.10%	7.61%

The elimination of the Terminal Value from the calculation of the Internal Rate of Return has a negative impact ranging from 0.33% to 1.82%. On the other hand, the limitation of the Replacement Cost of Project assets in 2035 to 32.5% (versus 65%) of inflated original costs has a positive impact on the Internal Rate of Return ranging from 0.37% to 0.89%.

On a net present value basis, we calculate that the public sector's net cost for Scenario 3 would be as follows:

	8% discount rate		9% dis	9% discount rate		count rate
	including tax revenues	Without taxes	Including tax revenues	Without taxes	Including tax revenues	Without taxes
Pre-construction Period Construction Period Operating Period (to 2025)	\$127 2,427 1,259	\$127 2,427 2,059	\$126 2,253 1,156	\$126 2,253 1,803	\$125 2,093 1,055	\$125 2,093 1,580
	\$3,813	\$4,613	\$3,535	\$4,182	\$3,273	\$3,798

It should be noted that the above discount rates do not include a risk premium. Rather, they are based upon long-term government borrowing costs (i.e. cost of capital).

Details supporting the above Scenario 3 calculations are provided in Appendix 4.

#### 6.5 Other Sensitivity Analyses

#### 6.5.1 Operating Revenues and Costs

The following table shows how key financial ratios from the Base Case Financing Plan compare to results generated from a 10% increase and a 10% decrease in each of the projected Operating Revenues and Operating Costs:

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	Financian	Operating	Revenues	Operation	ng Costs	Com	bined
	Financing Base Case	10% increase	10% decrease	10% decrease	10% increase	Optimistic (1)	Pessimistic (2)
Internal Rate of Return - Public sector (with taxes) - Private sector	5.23% 11.34%	6.94% 12.19%	3.70% 10.32%	5.42% 11.44%	5.06% 11.24%	7.10% 12.28%	3.47% 10.18%
Debt Service ratio (Year 2005)	1.75	2.05	1.45	1.79	1.71	2.09	1.41
Debt to equity ratio (Year 2005)	2.70	2.68	2.77	2.71	2.71	2.67	2.78
Net Operating Revenue margin - Year 2005 - Year 2025	62.51% 72.88%	66.12% 75.41%	58.05% 69.75%	63.97% 73.92%	61.06% 71.84%	67.43% 76.35%	56.42% 68.59%
Government funding (income) per passenger - Year 2005 - Year 2025	\$57 \$(48)	\$49 \$(62)	\$64 \$(34)	\$56 \$(49)	\$58 \$(47)	\$48 \$(63)	\$64 \$(32)

<sup>(1)</sup> Operating Revenues increase by 10% and Operating Costs decrease by 10%.

#### 6.5.2 Variations to Other Assumptions

The following table shows the impact on key financial ratios of changes to assumptions underlying the Base Case Financing Plan, as follows:

- An overrun in Project Construction costs of 20%;
- Project Construction cost savings of 20%;
- A reduction in the length of the Construction Period from seven to six years; and
- A reduction in the interest rate on the Equipment and Technology Notes from 11.5% to 10.5%.

	20% Cost Overrun	20% Cost Savings	Reduction in Construction Period	Reduction in Interest Rate
Internal Rate of Return - Public sector (with taxes) - Private sector	3.92% 11.02%	6.90% 11.60%	6.67% 11.64%	5.38% 11.42%
Debt Service ratio (Year 2005)	1.47	2.14	1.83	1.89
Debt to equity ratio (Year 2005)	3,30	2.17	2.70	2.70
Net Operating Revenue margin - Year 2005 - Year 2025	62.30% 72.90%	62.73% 72.86%	62.59% 72.88%	62.51% 72.87%

<sup>(2)</sup> Operating Revenues decrease by 10% and Operating Costs increase by 10%.

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	20% Cost Overrun	20% Cost Savings	Reduction in Construction Period	Reduction in Interest Rate
Government funding (income) per passenger - Year 2005	<b>ቀ</b> ፖር	<b>\$41</b>	<b>#</b> E0	ሰ ም ም
- Year 2025	\$72 \$(40)	\$41 \$(56)	\$53 \$(50)	\$55 \$(48)

We have also looked at the sensitivity of overall interest rates. By varying interest rates by 1% in each direction, we can compute additional sensitivity analyses on all of the Project's indebtedness taken as a whole.

	1% reduction in all interest rates	Base Case Financing Plan	1% increase in all interest rates
Internal Rate of Return - Public sector (with taxes) - Private sector	6.69% 1 <b>1</b> .42%	5.23% 11.34%	3.94% 11.32%
Debt Service ratio (Year 2005)	1.90	1.75	1.62
Debt to equity ratio (Year 2025)	2.96	2.70	2.49
Government funding (income per passenger) - Year 2005 - Year 2025	\$47 \$(52)	\$57 \$(48)	\$67 \$(44)

In order to appreciate the sensitivity of the Internal Rate of Return to a combination of the three most important variables affecting the HSR Project, we have conducted a "super sensitivity" analysis by concurrently varying revenues, the Construction Period and Construction costs. In the "optimistic" analysis, revenues are increased by 10%, the Construction Period has been reduced by one year and Construction costs are reduced by 20%. In the "pessimistic" analysis, revenues are decreased by 10%, the Construction Period has been extended by one year and the Construction costs are increased by 20%. The results of these analyses are summarized and compared to the Base Case Financing Plan in the following table.

	Pessimistic Analysis <sup>(1)</sup>	Base Case Financing Plan	Optimistic Analysis <sup>(2)</sup>
Public-private partnership			
Public sector (with taxes)	0.74%	5.23%	10.39%
Private sector	9.40%	11.34%	12.71%
Wholly public	4.70%	7.10%	8.88%

<sup>(1)</sup> Operating revenues decrease by 10%, one year added to Construction Period and 20% Construction cost overrun.

<sup>(2)</sup> Operating revenues increase by 10%, one year reduction to Construction Period and 20% Construction cost savings.

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#### 6.6 Conclusion

Based on our analysis of the Base Case Financing Plan for Scenario 3, and notwithstanding satisfactory Debt Service coverage, we do not believe that the projected financial results would be sufficiently attractive to induce investors from the private sector to invest risk capital in the Project since the 11.34% Internal Rate of Return for the private sector is too low relative to private sector financing costs and the high risks associated with the HSR Project.

By adjusting the public-private payout sharing formula in the Base Case Financing Plan so as to increase the private sector's Internal Rate of Return from 11.34% to the 12% threshold (and thereby render the Project financeable from a private sector standpoint), the public sector's Internal Rate of Return would decline from 5.23% to 3.36%.

## 7. Scenario 4: Montreal-Ottawa-Toronto 300 kph (Mirabel)

### 7.1 Project Cost and Financing Risk

	Constant 1993 dollars without capitalized interest		Inflated dollars with capitalized interest	
	(millions \$)	%	(millions \$)	%
Project Cost	\$6,079	100%	\$10,639	100%
Base Case Financing Plan-				A STATE OF THE STA
Public sector risk	·			
Direct government interest subsidy			\$2,574	24.2%
Private sector loans supported by government guarantee			5,282	49.7%
Equity			79	0.7%
			7,935	74.6%
Private sector risk				
Project finance debt			1,877	17.6%
Convertible debentures			748	7.1%
Equity			79	0.7%
			2,704	25.4%
Total			\$10,639	100%

Using a 1.75 to 1 Debt Service coverage ratio, the maximum amount of construction and financing risk that could realistically be assumed solely by the private sector would be 25.4% of total Project costs, or \$2,704 million. **Table 9** provides a breakdown of sources and uses of cash in both constant and inflated dollars. If the Debt Service ratio was increased to 2.0 to 1, the amount of "at risk" private sector financing available would decline to 23.1% of total Project costs, or \$2,465 million.

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### 7.2 Results of Operations

,	20	2005		25	
	Constant dollars	Inflated dollars	Constant dollars	Inflated dollars	
		(in millions)			
Operating Revenues	\$487	\$694	\$83 <sup>7</sup>	\$2,155	
Operating Costs	(196)	(275)	(242)	(612)	
Net Operating Revenues	\$291	\$419	\$595	\$1,543	
% of Operating Revenues	59.8%	60.1%	71.1%	71.6%	

**Table 10** provides a graphical presentation of Net Operating Revenues and Debt Service costs for the first 20 years of operations.

### 7.3 Distribution of Cash Flow

	20	2005		25
	Constant dollars	Inflated dollars	Constant dollars	Inflated dollars
		(in mi	llions)	A CONTRACTOR OF THE PROPERTY O
Public sector				
Intake-				
Taxes	\$11	\$16	\$99	\$256
Dividends	8	11	9	23
Lease of Infrastructure and Civil Works	45	64	298	768
	54	91	406	1,047
Outflow-				-
Infrastructure and Civil Works interest subsidy	(351)	(500)	(194)	(500)
Net intake (outflow)	\$(287)	\$(409)	\$212	\$547

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	2005		20:	25
·	Constant dollars	inflated dollars	Constant dollars	inflated dollars
		(în mi	llions)	
Private sector				
Intake (on funds at risk)-				
Debt service on Equipment and Technology Notes	\$168	\$239	\$-	\$-
Interest on subordinate convertible debentures	45	67	-	••
Dividends	8	11	93	237
Total	\$221	\$317	\$93	\$237

As shown on the above tables, and also in **Table 10**, in the initial years, cash flow is directed, in first priority, to Debt Service in respect of the Equipment and Technology Notes.. Once repaid, cash flow to the public sector increases dramatically, principally through lease payments to the Public Financing Entity.

The accumulated contribution of the public sector (in inflated dollars) up to the first year during which a break-even in cash-flow to the public sector is achieved (i.e. 2018) amounts to \$6,092 million including tax revenues and \$7,294 million excluding tax revenues.

A detailed summary of annual contributions, net of intakes, by the public sector is presented as part of **Appendix 5**.

#### 7.4 Return on Investment

Scenario 4 yields the following Internal Rate of Return, (14) depending on the ownership option:

	Mile alles modelle	Private-pi	public*	
	Wholly public	Including tax revenues	Without taxes	
Public sector	6.91%	5.42%	1.85%	
Private sector**	n/a	11.15%	11.15%	

Base Case Financing Plan.

<sup>\*\*</sup> Equity and Convertible Subordinated Debentures only.

The Internal Rates of Return have been calculated on the basis of the projections set out in Appendix 5 using the methodology detailed in Appendix 1.

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For Scenario 4, the public sector's highest return would be generated under the wholly public ownership option. The public sector's Internal Rate of Return is lower under the public-private ownership option since the cost to the private sector of financing its share of the Project is higher than equivalent public sector borrowing costs. Thus, in order for the Project to absorb the higher private sector financing costs, the public sector's Internal Rate of Return declines.

In respect of the private sector, we believe that the projected Internal Rate of Return under the public-private scenario (as reflected in the Base Case Financing Plan) would approximate 11.15%. This is below the 12% threshold rate that we believe would be required to induce the private sector to commit risk equity capital to the Project (as distinct from risk debt). Private sector equity sponsors would therefore seek to make modifications to the Base Case Financing Plan in order to obtain a greater share of the Project cash flows. Obviously, any such change would cause the public sector's Internal Rate of Return to drop even further.

To test this hypothesis, we modified the public-private payout sharing formula in the Base Case Financing Plan so as to increase the private sector's Internal Rate of Return from 11.15% to the 12% threshold. This Modified Base Case Financing Plan enhances the return to the private sector (i.e. to 12%) but causes the projected Internal Rate of Return to the public sector to decrease from 5.42% to only 2.74%.

All calculations of Internal Rate of Return in our Financial Analysis assume that the Project will have a Terminal Value at the end of the financial projection period in 2035, at which date all Project indebtedness will have been repaid.

In order to estimate the Terminal Value, we have applied the capitalized earnings valuation approach, thereby applying a capitalization factor to year 2035 earnings and deducting therefrom an estimate of the Replacement Cost of Project assets at that time. It is important to note that our estimates of Replacement Cost are not supported by engineering studies or any specific knowledge as to which assets, if any, would be in need of replacement in the year 2035. Rather, the Replacement Cost deduction attempts to provide a measurement of the financial risk that (i) parts of the Project will, for a variety of possible reasons, be rendered technologically or competitively obsolete at some future date, and (ii) that private sector investors and lenders will heavily discount the Terminal Value, regardless of its validity, since it is so far out in the future; hence investors and lenders will reduce their valuations of Terminal Value. Thus the deduction of a Replacement Cost estimate is **not** intended in any way to call into question the adequacy of the ongoing maintenance and capital replacement programs that are already built into the financial projections over the Operating Period. Unlike our estimates of Replacement Cost, such maintenance and capital replacement programs **are** supported by detailed engineering studies.

In the Base Case Financing Plan, we have therefore included what we believe to be a financially conservative estimate of the Replacement Cost of Project assets, equivalent to approximately 65% of their original cost, fully inflated through to the year 2035. While this may be appropriate for the private sector's analysis of Internal Rates of Return, public sector analysts with a longer term vision may see merit in attributing a lower Replacement Cost to the calculation of Terminal Value.

The Terminal Value estimated for this Project has a reasonably important impact on the calculation of the Internal Rate of Return. We have therefore conducted a sensitivity analysis on the Internal Rate of Return by excluding completely the Terminal Value from the calculation (i.e. a more "pessimistic"

The 12% threshold rate has been arrived at by consideration of the private sector's costs of financing, given the identified Project risk. The rate is expressed as an after-tax percentage (taxes at 40%).

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case) and by reducing the Replacement Cost of Project assets in the year 2035 to 32.5% of the original cost of Project assets, inflated to the year 2035 (i.e. a more "optimistic" case). The results are summarized in the following table.

	Nil Terminal Value in 2035 ("Pessimistic")	Base Case Financing Plan	2035 Replacement Cost reduced to 32.5% of inflated original cost ("Optimistic")
Public-private partnership			
Public sector (with taxes)	3.37%	5.42%	6.26%
Private sector	10.73%	11.15%	11.51%
Wholly public	6.15%	6.91%	7.42%

The elimination of the Terminal Value from the calculation of the Internal Rate of Return has a negative impact ranging from 0.42% to 2.05%. On the other hand, the limitation of the Replacement Cost of Project assets in 2035 to 32.5% (versus 65%) of inflated original costs has a positive impact on the Internal Rate of Return ranging from 0.36% to 0.84%.

On a net present value basis, we calculate that the public sector's net cost for Scenario 4 would be as follows:

	8% discount rate		9% dis	9% discount rate		10% discount rate	
	including tax revenues	Without taxes	Including tax revenues	Without taxes	Including tax revenues	Without taxes	
Pre-construction Period Construction Period Operating Period (to 2025)	\$73 1,373 821	\$73 1,373 1,220	\$72 1,275 746	\$72 1,275 1,068	\$72 1,185 674	\$72 1,185 936	
	\$2,267	\$2,666	\$2,093	\$2,415	\$1,931	\$2,193	

It should be noted that the above discount rates do not include a risk premium. Rather, they are based upon long-term government borrowing costs (i.e. cost of capital).

Details supporting the above Scenario 4 calculations are provided in **Appendix 5**.

### 7.5 Other Sensitivity Analyses

#### 7.5.1 Operating Revenues and Costs

The following table shows how key financial ratios from the Base Case Financing Plan compare to results generated from a 10% increase and a 10% decrease in each of the projected Operating Revenues and Operating Costs:

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	Financina	Operating	Revenues	Operati	ng Costs	Com	bined
	Financing Base Case	10% increase	10% decrease	10% decrease	10% increase	Optimistic (1)	Pessimistic (2)
Internal Rate of Return - Public sector (with taxes) - Private sector	5.42% 11.15%	6.85% 11.96%	3.30% 10.04%	5.62% 11.27%	5.22% 11.03%	7.03% 12.02%	3.04% 9.89%
Debt Service ratio (Year 2005)	1.75	2.06	1.44	1.80	1.71	2.11	1.40
Debt to equity ratio (Year 2005)	2.82	2.79	2.89	2.81	2.83	2.78	2.89
Net Operating Revenue margin - Year 2005 - Year 2025	60.29% 71.60%	64.12% 74.25%	55.55% 68.31%	61.84% 72.69%	58.75% 70.51%	65.51% 75.24%	53.83% 67.09%
Government funding (income) per passenger - Year 2005 - Year 2025	\$64 \$(50)	\$55 \$(65)	\$70 \$(33)	\$63 \$(51)	\$65 \$(48)	\$54 \$(67)	\$71 \$(31)

<sup>(1)</sup> Operating Revenues increase by 10% and Operating Costs decrease by 10%.

#### 7.5.2 Variations to Other Assumptions

The following table shows the impact on key financial ratios of changes to assumptions underlying the Base Case Financing Plan, as follows:

- An overrun in Project Construction costs of 20%;
- Project Construction cost savings of 20%;
- A reduction in the length of the Construction Period from seven to six years; and
- A reduction in the interest rate on the Equipment and Technology Notes from 11.5% to 10.5%.

	20% Cost Overrun	20% Cost Savings	Reduction in Construction Period	Reduction in Interest Rate
Internal Rate of Return - Public sector (with taxes) - Private sector	3.89% 10.81%	7.00% 11.41%	6.79% 11.46%	5.56% 11.24%
Debt Service ratio (Year 2005)	1.48	2.14	1.83	1.90
Debt to equity ratio (Year 2005)	3.41	2.28	2.82	2.80
Net Operating Revenue margin - Year 2005 - Year 2025	60.09% 71.62%	60.49% 71.58%	60.36% 71.60%	60.29% - 71.59%

<sup>(2)</sup> Operating Revenues decrease by 10% and Operating Costs increase by 10%.

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	20% Cost Overrun	20% Cost Savings	Reduction in Construction Period	Reduction in Interest Rate
Government funding (income) per				
passenger - Year 2005 - Year 2025	\$80 \$(41)	\$46 \$(59)	\$59 \$(52)	\$62 \$(50)

We have also looked at the sensitivity of overall interest rates. By varying interest rates by 1% in each direction, we can compute additional sensitivity analyses on all of the Project's indebtedness taken as a whole.

	1% reduction in all interest rates	Base Case Financing Plan	1% increase in all interest rates
Internal Rate of Return - Public sector (with taxes) - Private sector	6.81% 11.17%	5.42% 11.15%	4.08% 11.13%
Debt Service ratio (Year 2005)	1.90	1.75	1.63
Debt to equity ratio (Year 2025)	2.94	2.82	2.72
Government funding (income per passenger) - Year 2005 - Year 2025	\$53 \$(54)	\$64 \$(50)	\$74 \$(45)

In order to appreciate the sensitivity of the Internal Rate of Return to a combination of the three most important variables affecting the HSR Project, we have conducted a "super sensitivity" analysis by concurrently varying revenues, the Construction Period and Construction costs. In the "optimistic" analysis, revenues are increased by 10%, the Construction Period has been reduced by one year and Construction costs are reduced by 20%. In the "pessimistic" analysis, revenues are decreased by 10%, the Construction Period has been extended by one year and the Construction costs are increased by 20%. The results of these analyses are summarized and compared to the Base Case Financing Plan in the following table.

	Pessimistic Analysis <sup>(1)</sup>	Base Case Financing Plan	Optimistic Analysis <sup>(2)</sup>
Public-private partnership			*
Public sector (with taxes)	0.25%	5.42%	10.26%
Private sector	9.17%	11.15%	12.41%
Wholly public	4.50%	6.91%	8.69%

<sup>(1)</sup> Operating revenues decrease by 10%, one year added to Construction Period and 20% Construction cost overrun.

<sup>(2)</sup> Operating revenues increase by 10%, one year reduction to Construction Period and 20% Construction cost savings.

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#### 7.6 Conclusion

Based on our analysis of the Base Case Financing Plan for Scenario 4, and notwithstanding satisfactory Debt Service coverage, we do not believe that the projected financial results would be sufficiently attractive to induce investors from the private sector to invest risk capital in the Project since the 11.15% Internal Rate of Return for the private sector is too low relative to private sector financing costs and the high risks associated with the HSR Project.

By adjusting the public-private payout sharing formula in the Base Case Financing Plan so as to increase the private sector's Internal Rate of Return from 11.15% to the 12% threshold (and thereby render the Project financeable from a private sector standpoint), the public sector's Internal Rate of Return would decline from 5.42% to 2.74%.

## 8. Scenario 5: Montreal-Ottawa-Toronto 200 kph (Dorval)

### 8.1 Project Cost and Financing Risk

	Constant 199 without capitali		Inflated dollars with capitalized interest		
-	(millions \$)	%	(millions \$)	%	
Project Cost	\$5,402	100%	\$9,404	100%	
Base Case Financing Plan-				**************************************	
Public sector risk					
Direct government interest subsidy			\$2,229	23.7%	
Private sector loans supported by government guarantee			4,991	53.1%	
Equity			71	0.7%	
		,	7,292	77.5%	
Private sector risk					
Project finance debt			1,370	14.6%	
Convertible debentures	·		671	7.2%	
Equity			71 <sup>*</sup>	0.7%	
			2,112	22.5%	
Total			\$9,404	100%	

Using a 1.75 to 1 Debt Service coverage ratio, the maximum amount of construction and financing risk that could realistically be assumed solely by the private sector would be 22.5% of total Project costs, or \$2,112 million. **Table 11** provides a breakdown of sources and uses of cash in both constant and inflated dollars. If the Debt Service ratio was increased to 2.0 to 1, the amount of "at risk" private sector financing available would decline to 20.5% of total Project costs, or \$1,928 million.

### 8.2 Results of Operations

-	2005		2025		
	Constant dollars	Inflated dollars	Constant dollars	Inflated dollars	
	(in millions)				
Operating Revenues	· \$382	\$545	\$640	\$1,649	
Operating Costs	(167)	(234)	(202)	(513)	
Net Operating Revenues	\$215	\$311	\$438	\$1,136	
% of Operating Revenues	56.3%	56.9%	68.4%	68.9%	

**Table 12** provides a graphical presentation of Net Operating Revenues and Debt Service costs for the first 20 years of operations.

### 8.3 Distribution of Cash Flow

	2005		20	125
	Constant dollars	Inflated dollars	Constant dollars	Inflated dollars
		(in mi	llions)	
Public sector				
Intake-				
Taxes	\$9	\$13	\$59	\$151
Dividends	4	6	5	44
Lease of Infrastructure and Civil Works	30	43	238	612
•	43	62	302	777
Outflow-				
Infrastructure and Civil Works interest subsidy	(331)	(472)	(183)	(472)
Net intake (outflow)	\$(288)	\$(410)	\$119	\$305

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	2005		20	25	
	Constant dollars	inflated dollars	Constant dollars	Inflated dollars	
	(in millions)				
Private sector					
Intake (on funds at risk)-					
Debt service on Equipment and Technology Notes	\$124	\$178	\$-	\$-	
Interest on subordinate convertible debentures	42	60	-		
Dividends	4	6	52	146	
Total	\$170	\$244	\$52	\$146	

As shown on the above tables, and also in **Table 12**, in the initial years, cash flow is directed, in first priority, to Debt Service in respect of the Equipment and Technology Notes. Once repaid, cash flow to the public sector increases dramatically, principally through lease payments to the Public Financing Entity.

The accumulated contribution of the public sector (in inflated dollars) up to the first year during which a break-even in cash-flow to the public sector is achieved (i.e. 2020) amounts to \$6,521 million including tax revenues and \$7,230 million excluding tax revenues.

A detailed summary of annual contributions, net of intakes, by the public sector is presented as part of **Appendix 6**.

#### 8.4 Return on investment

Scenario 5 yields the following Internal Rate of Return, (16) depending on the ownership option:

***	Whatter work!	Private-pi	ublic*
	Wholly public	Including tax revenues	Without taxes
Public sector	5.20%	3.20%	(0.74)%
Private sector**	n/a	9.66%	9.66%

Base Case Financing Plan.

<sup>\*\*</sup> Equity and Convertible Subordinated Debentures only.

The Internal Rates of Return have been calculated on the basis of the projections set out in Appendix 6 using the methodology detailed in Appendix 1.

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For Scenario 5, the public sector's highest return would be generated under the wholly public ownership option. The public sector's Internal Rate of Return is lower under the public-private ownership option since the cost to the private sector of financing its share of the Project is higher than equivalent public sector borrowing costs. Thus, in order for the Project to absorb the higher private sector financing costs, the public sector's Internal Rate of Return declines.

In respect of the private sector, we believe that the projected Internal Rate of Return under the public-private scenario (as reflected in the Base Case Financing Plan) would approximate 9.66%. This is below the 12% threshold rate that we believe would be required to induce the private sector to commit risk equity capital to the Project (as distinct from risk debt). (17) Private sector equity sponsors would therefore seek to make modifications to the Base Case Financing Plan in order to obtain a greater share of the Project cash flows. Obviously, any such change would cause the public sector's Internal Rate of Return to drop even further.

To test this hypothesis, we modified the public-private payout sharing formula in the Base Case Financing Plan so as to increase the private sector's Internal Rate of Return from 9.66% to the 12% threshold. This Modified Base Case Financing Plan enhances the return to the private sector (i.e. to 12%) but causes the projected Internal Rate of Return to the public sector to decrease from 3.20% to an Internal Rate of Return that is lower than (7.0)%.

All calculations of Internal Rate of Return in our Financial Analysis assume that the Project will have a Terminal Value at the end of the financial projection period in 2035, at which date all Project indebtedness will have been repaid.

In order to estimate the Terminal Value, we have applied the capitalized earnings valuation approach, thereby applying a capitalization factor to year 2035 earnings and deducting therefrom an estimate of the Replacement Cost of Project assets at that time. It is important to note that our estimates of Replacement Cost are not supported by engineering studies or any specific knowledge as to which assets, if any, would be in need of replacement in the year 2035. Rather, the Replacement Cost deduction attempts to provide a measurement of the financial risk that (i) parts of the Project will, for a variety of possible reasons, be rendered technologically or competitively obsolete at some future date, and (ii) that private sector investors and lenders will heavily discount the Terminal Value, regardless of its validity, since it is so far out in the future; hence investors and lenders will reduce their valuations of Terminal Value. Thus the deduction of a Replacement Cost estimate is **not** intended in any way to call into question the adequacy of the ongoing maintenance and capital replacement programs that are already built into the financial projections over the Operating Period. Unlike our estimates of Replacement Cost, such maintenance and capital replacement programs are supported by detailed engineering studies.

In the Base Case Financing Plan, we have therefore included what we believe to be a financially conservative estimate of the Replacement Cost of Project assets, equivalent to approximately 65% of their original cost, fully inflated through to the year 2035. While this may be appropriate for the private sector's analysis of Internal Rates of Return, public sector analysts with a longer term vision may see merit in attributing a lower Replacement Cost to the calculation of Terminal Value.

The Terminal Value estimated for this Project has a reasonably important impact on the calculation of the Internal Rate of Return. We have therefore conducted a sensitivity analysis on the Internal Rate of Return by excluding completely the Terminal Value from the calculation (i.e. a more "pessimistic"

The 12% threshold rate has been arrived at by consideration of the private sector's costs of financing, given the identified Project risk. The rate is expressed as an after-tax percentage (taxes at 40%).

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case) and by reducing the Replacement Cost of Project assets in the year 2035 to 32.5% of the original cost of Project assets, inflated to the year 2035 (i.e. a more "optimistic" case). The results are summarized in the following table.

	Nil Terminal Value in 2035 ("Pessimistic")	Base Case Financing Plan	2035 Replacement Cost reduced to 32.5% of inflated original cost ("Optimistic")
Public-private partnership			
Public sector (with taxes)	1.13%	3.20%	4.54%
Private sector	9.34%	9.66%	10.12%
Wholly public	4.69%	5.20%	6.00%

The elimination of the Terminal Value from the calculation of the Internal Rate of Return has a negative impact ranging from 0.32% to 2.07%. On the other hand, the limitation of the Replacement Cost of Project assets in 2035 to 32.5% (versus 65%) of inflated original costs has a positive impact on the Internal Rate of Return ranging from 0.46% to 1.34%.

On a net present value basis, we calculate that the public sector's net cost for Scenario 5 would be as follows:

	8% discount rate		9% dis	9% discount rate		10% discount rate	
-	Including tax revenues	Without taxes	Including tax revenues	Without taxes	Including tax revenues	Without taxes	
Pre-construction Period Construction Period Operating Period (to 2025)	\$66 1,192 1,123	\$66 1,192 1,343	\$65 1,107 988	\$65 1,107 1,165	\$65 1,029 869	\$65 1,029 1,013	
	\$2,381	\$2,601	\$2,160	\$2,337	\$1,963	\$2,107	

It should be noted that the above discount rates do not include a risk premium. Rather, they are based upon long-term government borrowing costs (i.e. cost of capital).

Details supporting the above Scenario 5 calculations are provided in Appendix 6.

### 8.5 Other Sensitivity Analyses

#### 8.5.1 Operating Revenues and Costs

The following table shows how key financial ratios from the Base Case Financing Plan compare to results generated from a 10% increase and a 10% decrease in each of the projected Operating Revenues and Operating Costs:

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		Operating	Revenues	Operatio	ng Costs	Com	bined
	Financing Base Case	10% increase	10% decrease	10% decrease	10% increase	Optimistic (1)	Pessimistic (2)
Internal Rate of Return - Public sector (with taxes) - Private sector	3.20% 9.66%	5.15% 10.57%	0.60% 8.52%	3.46% 9.79%	2.94% 9.52%	5.36% 10.67%	0.22% 8.36%
Debt Service ratio (Year 2005)	1.75	2.07	1.42	1.80	1.69	2.13	1.37
Debt to equity ratio (Year 2005)	2.89	2.84	2.95	2.88	2.90	2.84	2.95
Net Operating Revenue margin - Year 2005 - Year 2025	57.02% 68.89%	61.15% 71.80%	51.89% 65.29%	58.78% 70.16%	55.25% 67.62%	62.75% 72.95%	49.91% 63.87%
Government funding (income) per passenger - Year 2005 - Year 2025	\$75 \$(34)	\$67 \$(50)	\$81 \$(18)	\$74 \$(36)	\$76 \$(32)	\$66 \$(52)	\$82 \$(16)

<sup>(1)</sup> Operating Revenues increase by 10% and Operating Costs decrease by 10%.

#### 8.5.2 Variations to Other Assumptions

The following table shows the impact on key financial ratios of changes to assumptions underlying the Base Case Financing Plan, as follows:

- An overrun in Project Construction costs of 20%;
- Project Construction cost savings of 20%;
- A reduction in the length of the Construction Period from seven to six years; and
- A reduction in the interest rate on the Equipment and Technology Notes from 11.5% to 10.5%.

	20% Cost Overrun	20% Cost Savings	Reduction in Construction Period	Reduction in Interest Rate
Internal Rate of Return - Public sector (with taxes) - Private sector	1.34% 9.34%	5.01% 9.93%	4.52% 9.98%	3.31% 9.73%
Debt Service ratio (Year 2005)	1.48	2.12	1.83	1.89
Debt to equity ratio (Year 2005)	3.48	2.32	2.90	2.87
Net Operating Revenue margin - Year 2005 - Year 2025	56.83% 68.92%	57.20% 68.86%	57.09% 68.88%	57.02% 68.88%

<sup>(2)</sup> Operating Revenues decrease by 10% and Operating Costs increase by 10%.

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	20% Cost Overrun	20% Cost Savings	Reduction in Construction Period	Reduction in Interest Rate
Government funding (income) per passenger				The second secon
- Year 2005 - Year 2025	\$92 \$(24)	\$57 \$(44)	\$70 \$(36)	\$73 \$(34)

We have also looked at the sensitivity of overall interest rates. By varying interest rates by 1% in each direction, we can compute additional sensitivity analyses on all of the Project's indebtedness taken as a whole.

·	1% reduction in all interest rates	Base Case Financing Plan	1% increase in all interest rates
Internal Rate of Return - Public sector (with taxes) - Private sector	4.78% 9.69%	3.20% 9.66%	1.58% 9.65%
Debt Service ratio (Year 2005)	1.89	1.75	1.63
Debt to equity ratio (Year 2025)	3.00	2.89	2.78
Government funding (income per passenger) - Year 2005 - Year 2025	\$64 \$(39)	\$75 \$(34)	\$86 \$(28)

In order to appreciate the sensitivity of the Internal Rate of Return to a combination of the three most important variables affecting the HSR Project, we have conducted a "super sensitivity" analysis by concurrently varying revenues, the Construction Period and Construction costs. In the "optimistic" analysis, revenues are increased by 10%, the Construction Period has been reduced by one year and Construction costs are reduced by 20%. In the "pessimistic" analysis, revenues are decreased by 10%, the Construction Period has been extended by one year and the Construction costs are increased by 20%. The results of these analyses are summarized and compared to the Base Case Financing Plan in the following table.

	Pessimistic Analysis <sup>(1)</sup>	Base Case Financing Plan	Optimistic Analysis <sup>(2)</sup>
Public-private partnership			A CONTRACTOR OF THE PROPERTY O
Public sector (with taxes)	(3.77)%	3.20%	8.33%
Private sector	7.55%	9.66%	11.01%
Wholly public	1.67%	5.20%	7.28%

<sup>(1)</sup> Operating revenues decrease by 10%, one year added to Construction Period and 20% Construction cost overrun.

<sup>(2)</sup> Operating revenues increase by 10%, one year reduction to Construction Period and 20% Construction cost savings.

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#### 8.6 Conclusion

Based on our analysis of the Base Case Financing Plan for Scenario 5, and notwithstanding satisfactory Debt Service coverage, we do not believe that the projected financial results would be sufficiently attractive to induce investors from the private sector to invest risk capital in the Project since the 9.66% Internal Rate of Return for the private sector is too low relative to private sector financing costs and the high risks associated with the HSR Project.

By adjusting the public-private payout sharing formula in the Base Case Financing Plan so as to increase the private sector's Internal Rate of Return from 9.66% to the 12% threshold (and thereby render the Project financeable from a private sector standpoint), the public sector's Internal Rate of Return would decline from 3.20% to an Internal Rate of Return that is lower than (7.0)%.

# 9. Scenario 6: Montreal-Ottawa-Toronto 300 kph (Dorval)

### 9.1 Project Cost and Financing Risk

	Constant 199 without capitali		Inflated dollars with capitalized interest		
	(millions \$)	%	(millions \$)	%	
Project Cost	\$6,078	100%	\$10,701	100%	
Base Case Financing Plan-					
Public sector risk					
Direct government interest subsidy	,		\$2,653	24.8%	
Private sector loans supported by government guarantee			5,038	47.1%	
Equity			76.5	0.7%	
	٠		7,768	72.6%	
Private sector risk					
Project finance debt			2,133	19.9%	
Convertible debentures			724	6.8%	
Equity			76.5	0.7%	
			2,933	27.4%	
Total			\$10,701	100%	

Using a 1.75 to 1 Debt Service coverage ratio, the maximum amount of construction and financing risk that could realistically be assumed solely by the private sector would be 27.4% of total Project costs, or \$2,933 million. **Table 13** provides a breakdown of sources and uses of cash in both constant and inflated dollars. If the Debt Service ratio was increased to 2.0 to 1, the amount of "at risk" private sector financing available would decline to 24.8% of total Project costs, or \$2,658 million.

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### 9.2 Results of Operations

	2005		2025			
	Constant dollars	Inflated dollars	Constant dollars	inflated dollars		
	(in millions)					
Operating Revenues	\$527	\$751	\$916	\$2,358		
Operating Costs	(200)	(280)	(249)	(627)		
Net Operating Revenues	\$327	\$471	\$667	\$1,731		
% of Operating Revenues	62.0%	62.7%	72.8%	73.4%		

**Table 14** provides a graphical presentation of Net Operating Revenues and Debt Service costs for the first 20 years of operations.

### 9.3 Distribution of Cash Flow

	2005		20	25
	Constant dollars	inflated dollars	Constant dollars	Inflated dollars
		(in mi	llions)	
Public sector		•		
intake-				
Taxes	\$23	\$32	\$123	\$318
Dividends	9	13	11	28
Lease of Infrastructure and Civil Works	46	66	313	807
	78	111	447	1,153
Outflow-				
Infrastructure and Civil Works interest subsidy	(334)	(477)	(185)	(477)
Net intake (outflow)	\$(256)	\$(366)	\$262	\$676

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	2005		2025		
	Constant dollars	inflated dollars	Constant dollars	Inflated dollars	
	(in millions)				
Private sector					
Intake (on funds at risk)-					
Debt service on Equipment and Technology Notes	\$187	\$269	\$-	\$-	
Interest on subordinate convertible debentures	45	65	-	-	
Dividends	. 9	13	117	297	
Total	\$241	\$347	\$117	\$297	

As shown on the above tables, and also in **Table 14**, in the initial years, cash flow is directed, in first priority, to Debt Service in respect of the Equipment and Technology Notes. Once repaid, cash flow to the public sector increases dramatically, principally through lease payments to the Public Financing Entity.

The accumulated contribution of the public sector (in inflated dollars) up to the first year during which a break-even in cash-flow to the public sector is achieved (i.e. 2017) amounts to \$5,437 million including tax revenues and \$6,429 million excluding tax revenues.

A detailed summary of annual contributions, net of intakes, by the public sector is presented as part of **Appendix 7**.

#### 9.4 Return on Investment

Scenario 6 yields the following Internal Rate of Return, (18) depending on the ownership option:

	Mills of the markets of	Private-public*		
	Wholly public	Including tax revenues	Without taxes	
Public sector	7.86%	6.65%	2.95%	
Private sector**	n/a	12.15%	12.15%	

- Base Case Financing Plan.
- \*\* Equity and Convertible Subordinated Debentures only.

The Internal Rates of Return have been calculated on the basis of the projections set out in Appendix 7 using the methodology detailed in Appendix 1.

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For Scenario 6, the public sector's highest return would be generated under the wholly public ownership option. The public sector's Internal Rate of Return is lower under the public-private ownership option since the cost to the private sector of financing its share of the Project is higher than equivalent public sector borrowing costs. Thus, in order for the Project to absorb the higher private sector financing costs, the public sector's Internal Rate of Return declines.

In respect of the private sector, we believe that the projected Internal Rate of Return under the public-private scenario (as reflected in the Base Case Financing Plan) would approximate 12.15%. This is above the 12% threshold rate that we believe would be required to induce the private sector to commit risk equity capital to the Project (as distinct from risk debt). (19) Private sector equity sponsors would therefore be attracted by the Base Case Financing Plan because it would enable them to obtain a satisfactory rate of return from the Project cash flow.

To test this hypothesis, we modified the public-private payout sharing formula in the Base Case Financing Plan so as to decrease the private sector's Internal Rate of Return from 12.15% to the 12% threshold. This Modified Base Case Financing Plan reduces the return to the private sector (i.e. to 12%) but causes the projected Internal Rate of Return to the public sector to increase from 6.65% to 7.19%.

All calculations of Internal Rate of Return in our Financial Analysis assume that the Project will have a Terminal Value at the end of the financial projection period in 2035, at which date all Project indebtedness will have been repaid.

In order to estimate the Terminal Value, we have applied the capitalized earnings valuation approach, thereby applying a capitalization factor to year 2035 earnings and deducting therefrom an estimate of the Replacement Cost of Project assets at that time. It is important to note that our estimates of Replacement Cost are not supported by engineering studies or any specific knowledge as to which assets, if any, would be in need of replacement in the year 2035. Rather, the Replacement Cost deduction attempts to provide a measurement of the financial risk that (i) parts of the Project will, for a variety of possible reasons, be rendered technologically or competitively obsolete at some future date, and (ii) that private sector investors and lenders will heavily discount the Terminal Value, regardless of its validity, since it is so far out in the future; hence investors and lenders will reduce their valuations of Terminal Value. Thus the deduction of a Replacement Cost estimate is **not** intended in any way to call into question the adequacy of the ongoing maintenance and capital replacement programs that are already built into the financial projections over the Operating Period. Unlike our estimates of Replacement Cost, such maintenance and capital replacement programs **are** supported by detailed engineering studies.

In the Base Case Financing Plan, we have therefore included what we believe to be a financially conservative estimate of the Replacement Cost of Project assets, equivalent to approximately 65% of their original cost, fully inflated through to the year 2035. While this may be appropriate for the private sector's analysis of Internal Rates of Return, public sector analysts with a longer term vision may see merit in attributing a lower Replacement Cost to the calculation of Terminal Value.

The Terminal Value estimated for this Project has a reasonably important impact on the calculation of the Internal Rate of Return. We have therefore conducted a sensitivity analysis on the Internal Rate of Return by excluding completely the Terminal Value from the calculation (i.e. a more "pessimistic" case) and by reducing the Replacement Cost of Project assets in the year 2035 to 32.5% of the

The 12% threshold rate has been arrived at by consideration of the private sector's costs of financing, given the identified Project risk. The rate is expressed as an after-tax percentage (taxes at 40%).

original cost of Project assets, inflated to the year 2035 (i.e. a more "optimistic" case). The results are summarized in the following table.

	Nil Terminal Value in 2035 ("Pessimistic")	Base Case Financing Plan	2035 Replacement Cost reduced to 32.5% of inflated original cost ("Optimistic")	
Public-private partnership				
Public sector (with taxes)	4.67%	6.65%	7.29%	
Private sector	11.69%	12.15%	12.46%	
Wholly public	7.04%	7.86%	8.27%	

The elimination of the Terminal Value from the calculation of the Internal Rate of Return has a negative impact ranging from 0.46% to 1.98%. On the other hand, the limitation of the Replacement Cost of Project assets in 2035 to 32.5% (versus 65%) of inflated original costs has a positive impact on the Internal Rate of Return ranging from 0.31% to 0.64%.

On a net present value basis, we calculate that the public sector's net cost for Scenario 6 would be as follows:

	8% discount rate		9% discount rate		10% discount rate	
	Including tax revenues	Without taxes	Including tax revenues	Without taxes	Including tax revenues	Without taxes
Pre-construction Period Construction Period Operating Period (to 2025)	\$71 1,414 509	\$71 1,414 1,059	\$70 1,313 486	\$70 1,313 926	\$70 1,220 458	\$70 1,220 816
	·\$1,994	\$2,544	\$1,869	\$2,309	\$1,748	\$2,106

It should be noted that the above discount rates do not include a risk premium. Rather, they are based upon long-term government borrowing costs (i.e. cost of capital).

Details supporting the above Scenario 6 calculations are provided in Appendix 7.

### 9.5 Other Sensitivity Analyses

#### 9.5.1 Operating Revenues and Costs

The following table shows how key financial ratios from the Base Case Financing Plan compare to results generated from a 10% increase and a 10% decrease in each of the projected Operating Revenues and Operating Costs:

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		Operating Revenues		Operati	ng Costs	Combined	
	Financing Base Case	10% Increase	10% decrease	10% decrease	10% increase	Optimistic (1)	Pessimistic (2)
Internal Rate of Return - Public sector (with taxes) - Private sector	6.65% 12.15%	8.01% 12.97%	4.73% 10.99%	6.83% 12.26%	6.48% 12.05%	8.17% 13.06%	4.52% 10.86%
Debt Service ratio (Year 2005) •	1.75	2.05	1.45	1.79	· 1.71	2.09	1.41
Debt to equity ratio (Year 2005)	2.82	2.78	2.87	2.81	2.81	2.77	2.88
Net Operating Revenue margin - Year 2005 - Year 2025	62.78% 73.43%	66.37% 75.91%	58.34% 70.35%	64.21% 74.44%	61.35% 72.41%	67.66% 76.82%	56.74% 69.22%
Government funding (income) per passenger - Year 2005 - Year 2025	\$53 \$(56)	\$45 \$(71)	\$61 \$(40)	\$52 \$(58)	\$55 \$(55)	\$44 \$(73)	\$62 \$(38)

<sup>(1)</sup> Operating Revenues increase by 10% and Operating Costs decrease by 10%.

#### 9.5.2 Variations to Other Assumptions

The following table shows the impact on key financial ratios of changes to assumptions underlying the Base Case Financing Plan, as follows:

- An overrun in Project Construction costs of 20%;
- Project Construction cost savings of 20%;
- A reduction in the length of the Construction Period from seven to six years; and
- A reduction in the interest rate on the Equipment and Technology Notes from 11.5% to 10.5%.

	20% Cost Overrun	20% Cost Savings	Reduction in Construction Period	Reduction in Interest Rate
Internal Rate of Return - Public sector (with taxes) - Private sector	5.25% 11.78%	8.12% 12.42%	8.09% 12.45%	6.81% 12.23%
Debt Service ratio (Year 2005)	1.48	2.14	1.83	1.89
Debt to equity ratio (Year 2005)	3.40	2.27	2.82	2.81
Net Operating Revenue margin - Year 2005 - Year 2025	62.57% 73.44%	62.99% 73.41%	62.85% 73.42%	62.78% 73.42%

<sup>(2)</sup> Operating Revenues decrease by 10% and Operating Costs increase by 10%.

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·	20% Cost Overrun	20% Cost Savings	Reduction in Construction Period	Reduction in Interest Rate
Government funding (income) per				CELLER RECEIPT CONTRACTOR AND PROPERTY OF A CONTRACTOR AND A CONTRACTOR AN
passenger - Year 2005 - Year 2025	\$69 \$(48)	\$37 \$(64)	\$49 \$(58)	\$51 \$(56)

We have also looked at the sensitivity of overall interest rates. By varying interest rates by 1% in each direction, we can compute additional sensitivity analyses on all of the Project's indebtedness taken as a whole.

	1% reduction in all interest rates	Base Case Financing Plan	1% increase in all interest rates
Internal Rate of Return - Public sector (with taxes) - Private sector	7.97% 12.20%	6.65% 12.15%	- 5.41% 12.09%
Debt Service ratio (Year 2005)	1.89	1.75	1.63
Debt to equity ratio (Year 2025)	2.93	2.82	2.71
Government funding (income per passenger) - Year 2005 - Year 2025	\$44 \$(60)	\$53 \$(56)	\$63 \$(52)

In order to appreciate the sensitivity of the Internal Rate of Return to a combination of the three most important variables affecting the HSR Project, we have conducted a "super sensitivity" analysis by concurrently varying revenues, the Construction Period and Construction costs. In the "optimistic" analysis, revenues are increased by 10%, the Construction Period has been reduced by one year and Construction costs are reduced by 20%. In the "pessimistic" analysis, revenues are decreased by 10%, the Construction Period has been extended by one year and the Construction costs are increased by 20%. The results of these analyses are summarized and compared to the Base Case Financing Plan in the following table.

	Pessimistic Analysis <sup>(1)</sup>	Base Case Financing Plan	Optimistic Analysis <sup>(2)</sup>
Public-private partnership		,	
Public sector (with taxes)	2.01%	6.65%	11.45%
Private sector	10.12%	12.15%	13.49%
Wholly public	5.74%	7.86%	9.53%

<sup>(1)</sup> Operating revenues decrease by 10%, one year added to Construction Period and 20% Construction cost overrun.

<sup>(2)</sup> Operating revenues increase by 10%, one year reduction to Construction Period and 20% Construction cost savings.

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#### 9.6 Conclusion

Based on our analysis of the Base Case Financing Plan for Scenario 6, and taking into account the satisfactory Debt Service coverage, we believe that the projected financial results would be sufficiently attractive to induce investors from the private sector to invest risk capital in the Project, in particular since the 12.15% Internal Rate of Return for the private sector provides a reasonable spread over private sector financing costs, even given the high risks associated with the HSR Project.

By adjusting the public-private payout sharing formula in the Base Case Financing Plan so as to reduce the private sector's Internal Rate of Return from 12.15% to the 12% threshold, the public sector's Internal Rate of Return would increase from 6.65% to 7.19%.

# 10. Scenario 7: Montreal-Ottawa-Toronto 300 kph (Dorval - no Connect Air, no Pearson)

## 10.1 Project Cost and Financing Risk

	Constant 1993 dollars without capitalized interest		Inflated do capitalized	
	(millions \$)	%	(millions \$)	%
Project Cost	\$5,327	100%	\$9,411	100%
Base Case Financing Plan-				**************************************
Public sector risk				
Direct government interest subsidy			\$2,351	25.0%
Private sector loans supported by government guarantee			4,299	45.6%
Equity	,		71.5	0.8%
			6,722	71.4%
Private sector risk				
Project finance debt			1,941	20.6%
Convertible debentures			677	7.2%
Equity			71.5	0.8%
			2,689	28.6%
Total			\$9,411	100%

Using a 1.75 to 1 Debt Service coverage ratio, the maximum amount of construction and financing risk that could realistically be assumed solely by the private sector would be 28.6% of total Project costs, or \$2,689 million. **Table 15** provides a breakdown of sources and uses of cash in both constant and inflated dollars. If the Debt Service ratio was increased to 2.0 to 1, the amount of "at risk" private sector financing available would decline to 25.8% of total Project costs, or \$2,436 million.

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## 10.2 Results of Operations

	2005		2025	
	Constant dollars	Inflated dollars	Constant dollars	inflated dollars
	(in millions)			
Operating Revenues	\$487	\$695	\$847	\$2,180
Operating Costs	(189)	(265)	(232)	(583)
Net Operating Revenues	\$298	\$430	\$615	\$1,597
% of Operating Revenues	61.2%	61.9%	72.6%	73.3%

**Table 16** provides a graphical presentation of Net Operating Revenues and Debt Service costs for the first 20 years of operations.

## 10.3 Distribution of Cash Flow

	21	2005		125
	Constant dollars	Inflated dollars	Constant dollars	inflated dollars
		(in mi	(llions)	
Public sector				
Intake-				Authority of the Control of the Cont
Taxes	\$11	\$16	\$116	\$298
Dividends	10	14	11	27
Lease of Infrastructure and Civil Works	46	66	281	724
	67	96	408	1,041
Outflow-				
Infrastructure and Civil Works interest subsidy	(285)	(407)	(158)	(407)
Net intake (outflow)	\$(218)	\$(311)	\$250	\$642

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,	2005		20	25
	Constant dollars	inflated dollars	Constant dollars	inflated dollars
	(in millions)			
Private sector				
Intake (on funds at risk)-		•		RODO CINA A CILI. A A
Debt service on Equipment and Technology Notes	\$171	\$246	\$-	\$-
Interest on subordinate convertible debentures	43	61	-	<b>.</b>
Dividends	10	. 14	128	185
Total	\$224	\$321	\$128	\$185

As shown on the above tables, and also in **Table 16**, in the initial years, cash flow is directed, in first priority, to Debt Service in respect of the Equipment and Technology Notes. Once repaid, cash flow to the public sector increases dramatically, principally through lease payments to the Public Financing Entity.

The accumulated contribution of the public sector (in inflated dollars) up to the first year during which a break-even in cash-flow to the public sector is achieved (i.e. 2016) amounts to \$4,593 million including tax revenues and \$5,769 million excluding tax revenues.

A detailed summary of annual contributions, net of intakes, by the public sector is presented as part of **Appendix 8**.

#### 10.4 Return on Investment

Scenario 7 yields the following Internal Rate of Return, (20) depending on the ownership option:

	1475 - 11 1-35	Private-p	ublic*
	Wholly public	Including tax revenues	Without taxes
Public sector	8.18%	7.13%	3.59%
Private sector**	n/a	12.34%	12.34%

Base Case Financing Plan.

<sup>\*\*</sup> Equity and Convertible Subordinated Debentures only.

The Internal Rates of Return have been calculated on the basis of the projections set out in Appendix 8 using the methodology detailed in Appendix 1.

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For Scenario 7, the public sector's highest return would be generated under the wholly public ownership option. The public sector's Internal Rate of Return is lower under the public-private ownership option since the cost to the private sector of financing its share of the Project is higher than equivalent public sector borrowing costs. Thus, in order for the Project to absorb the higher private sector financing costs, the public sector's Internal Rate of Return declines.

In respect of the private sector, we believe that the projected Internal Rate of Return under the public-private scenario (as reflected in the Base Case Financing Plan) would approximate 12.34%. This is above the 12% threshold rate that we believe would be required to induce the private sector to commit risk equity capital to the Project (as distinct from risk debt). (21) Private sector equity sponsors would therefore be attracted by the Base Case Financing Plan because it would enable them to obtain a satisfactory rate of return from the Project cash flows.

To test this hypothesis, we modified the public-private payout sharing formula in the Base Case Financing Plan so as to decrease the private sector's Internal Rate of Return from 12.34% to the 12% threshold. This Modified Base Case Financing Plan reduces the return to the private sector (i.e. to 12%) but causes the projected Internal Rate of Return to the public sector to increase from 7.13% to 8.27%.

All calculations of Internal Rate of Return in our Financial Analysis assume that the Project will have a Terminal Value at the end of the financial projection period in 2035, at which date all Project indebtedness will have been repaid.

In order to estimate the Terminal Value, we have applied the capitalized earnings valuation approach, thereby applying a capitalization factor to year 2035 earnings and deducting therefrom an estimate of the Replacement Cost of Project assets at that time. It is important to note that our estimates of Replacement Cost are not supported by engineering studies or any specific knowledge as to which assets, if any, would be in need of replacement in the year 2035. Rather, the Replacement Cost deduction attempts to provide a measurement of the financial risk that (i) parts of the Project will, for a variety of possible reasons, be rendered technologically or competitively obsolete at some future date, and (ii) that private sector investors and lenders will heavily discount the Terminal Value, regardless of its validity, since it is so far out in the future; hence investors and lenders will reduce their valuations of Terminal Value. Thus the deduction of a Replacement Cost estimate is **not** intended in any way to call into question the adequacy of the ongoing maintenance and capital replacement programs that are already built into the financial projections over the Operating Period. Unlike our estimates of Replacement Cost, such maintenance and capital replacement programs **are** supported by detailed engineering studies.

In the Base Case Financing Plan, we have therefore included what we believe to be a financially conservative estimate of the Replacement Cost of Project assets, equivalent to approximately 65% of their original cost, fully inflated through to the year 2035. While this may be appropriate for the private sector's analysis of Internal Rates of Return, public sector analysts with a longer term vision may see merit in attributing a lower Replacement Cost to the calculation of Terminal Value.

The Terminal Value estimated for this Project has a reasonably important impact on the calculation of the Internal Rate of Return. We have therefore conducted a sensitivity analysis on the Internal Rate of Return by excluding completely the Terminal Value from the calculation (i.e. a more "pessimistic" case) and by reducing the Replacement Cost of Project assets in the year 2035 to 32.5% of the

The 12% threshold rate has been arrived at by consideration of the private sector's costs of financing, given the identified Project risk. The rate is expressed as an after-tax percentage (taxes at 40%).

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original cost of Project assets, inflated to the year 2035 (i.e. a more "optimistic" case). The results are summarized in the following table.

	Nil Terminal Value in 2035 ("Pessimistic")	Base Case Financing Plan	2035 Replacement Cost reduced to 32.5% of inflated original cost ("Optimistic")
Public-private partnership			
Public sector (with taxes)	5.13%	7.13%	7.68%
Private sector	11.84%	12.34%	12.62%
Wholly public	7.30%	8.18%	8.54%

The elimination of the Terminal Value from the calculation of the Internal Rate of Return has a negative impact ranging from 0.50% to 2.00%. On the other hand, the limitation of the Replacement Cost of Project assets in 2035 to 32.5% (versus 65%) of inflated original costs has a positive impact on the Internal Rate of Return ranging from 0.28% to 0.55%.

On a net present value basis, we calculate that the public sector's net cost for Scenario 7 would be as follows:

	8% discount rate		9% dis	9% discount rate		count rate
	Including tax revenues	Without taxes	Including tax revenues	Without taxes	Including tax revenues	Without taxes
Pre-construction Period Construction Period Operating Period (to 2025)	\$66 1,257 353	\$66 1,257 831	\$66 1,167 349	\$66 1,167* 737	\$65 1,085 337	\$65 1,085 652
	\$1,676	\$2,154	\$1,582	\$1,970	\$1,487	\$1,802

It should be noted that the above discount rates do not include a risk premium. Rather, they are based upon long-term government borrowing costs (i.e. cost of capital).

Details supporting the above Scenario 7 calculations are provided in Appendix 8.

## 10.5 Other Sensitivity Analyses

#### 10.5.1 Operating Revenues and Costs

The following table shows how key financial ratios from the Base Case Financing Plan compare to results generated from a 10% increase and a 10% decrease in each of the projected Operating Revenues and Operating Costs:

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	<b> </b>	Operating	Revenues	Operatio	Operating Costs		bined
•,	Financing Base Case	10% increase	10% decrease	10% decrease	10% Increase	Optimistic (1)	Pessimistic (2)
Internal Rate of Return - Public sector (with taxes) - Private sector	7.13% 12.34%	8.45% 13.14%	5.27% 11.20%	7.31% 12.43%	6.96% 12.22%	8.65% 13.23%	5.06% 11.06%
Debt Service ratio (Year 2005)	1.75	2.05	1.44	1.79	1.70	2.09	1.40
Debt to equity ratio (Year 2005)	2.83	2.80	2.90	2.84	2.84	2.80	2.91
Net Operating Revenue margin - Year 2005 - Year 2025	61,91% 73.28%	65.59% 75.77%	57.37% 70.19%	63.37% 74.30%	60.46% 72.26%	66.90% 76.69%	55.74% 69.05%
Government funding (income) per passenger - Year 2005 - Year 2025	\$49 \$(58)	\$40 \$(73)	\$56 \$(42)	\$48- \$(59)	\$50 \$(56)	\$39 \$(74)	\$57 \$(40)

<sup>(1)</sup> Operating Revenues increase by 10% and Operating Costs decrease by 10%.

#### 10.5.2 Variations to Other Assumptions

The following table shows the impact on key financial ratios of changes to assumptions underlying the Base Case Financing Plan, as follows:

- An overrun in Project Construction costs of 20%;
- Project Construction cost savings of 20%;
- A reduction in the length of the Construction Period from seven to six years; and
- A reduction in the interest rate on the Equipment and Technology Notes from 11.5% to 10.5%.

	20% Cost Overrun	20% Cost Savings	Reduction in Construction Period	Reduction in Interest Rate
Internal Rate of Return - Public sector (with taxes) - Private sector	5.80% 11.97%	8.56% 12.59%	8.61% 12.61%	7.30% 12.42%
Debt Service ratio (Year 2005)	. 1.48	2.13	1.83	1.89
Debt to equity ratio (Year 2005)	3.42	2.30	2.83	2.83
Net Operating Revenue margin - Year 2005 - Year 2025	61.71% 73.29%	62.12% 73.26%	61.98% 73.27%	61.91% 73.27%

<sup>(2)</sup> Operating Revenues decrease by 10% and Operating Costs increase by 10%.

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	20% Cost Overrun	20% Cost Savings	Reduction in Construction Period	Reduction in Interest Rate
Government funding (income) per passenger	***	400		•
- Year 2005 - Year 2025	\$63 \$(50)	\$33 \$(66)	\$45 \$(60)	\$47 \$(58)

We have also looked at the sensitivity of overall interest rates. By varying interest rates by 1% in each direction, we can compute additional sensitivity analyses on all of the Project's indebtedness taken as a whole.

	1% reduction in all interest rates	Base Case Financing Plan	1% increase in all interest rates
Internal Rate of Return - Public sector (with taxes) - Private sector	8.41% 12.36%	7.13% 12.34%	5.94% 12.28%
Debt Service ratio (Year 2005)	1.89	1.75	1.62
Debt to equity ratio (Year 2025)	2.96	2.83	2.73
Government funding (income per passenger) - Year 2005 - Year 2025	\$40 \$(62)	\$49 \$(58)	\$58 \$(54)

In order to appreciate the sensitivity of the Internal Rate of Return to a combination of the three most important variables affecting the HSR Project, we have conducted a "super sensitivity" analysis by concurrently varying revenues, the Construction Period and Construction costs. In the "optimistic" analysis, revenues are increased by 10%, the Construction Period has been reduced by one year and Construction costs are reduced by 20%. In the "pessimistic" analysis, revenues are decreased by 10%, the Construction Period has been extended by one year and the Construction costs are increased by 20%. The results of these analyses are summarized and compared to the Base Case Financing Plan in the following table.

	Pessimistic Analysis <sup>(1)</sup>	Base Case Financing Plan	Optimistic Analysis <sup>(2)</sup>
Public-private partnership			
Public sector (with taxes)	2.67%	7.13%	11.97%
Private sector	10.34%	12.34%	13.62%
Wholly public	6.16%	8.18%	9.82%

<sup>(1)</sup> Operating revenues decrease by 10%, one year added to Construction Period and 20% Construction cost overrun.

<sup>(2)</sup> Operating revenues increase by 10%, one year reduction to Construction Period and 20% Construction cost savings.

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## 10.6 Conclusion

Based on our analysis of the Base Case Financing Plan for Scenario 7, and taking into account the satisfactory Debt Service coverage, we believe that the projected financial results would be sufficiently attractive to induce investors from the private sector to invest risk capital in the Project, particular since the 12.34% Internal Rate of Return for the private sector provides a reasonable spread over private sector financing costs, even given the high risks associated with the HSR Project.

By adjusting the public-private payout sharing formula in the Base Case Financing Plan so as to decrease the private sector's Internal Rate of Return from 12.34% to the 12% threshold, the public sector's Internal Rate of Return would increase from 7.13% to 8.27%.

## 11. Scenario 8: Quebec City-Toronto 300 kph (Mirabel)

## 11.1 Project Cost and Financing Risk

	ì	Constant 1993 dollars without capitalized interest		llars with I interest
	(millions \$)	%	(millions \$)	%
Project Cost	\$7,996	100%	\$14,018	100%
Base Case Financing Plan-				THE
Public sector risk				
Direct government interest subsidy			\$3,403	24.4%
Private sector loans supported by government guarantee			6,855	48.9%
Equity			108.5	0.7%
			10,367	74.0%
Private sector risk				
Project finance debt		-	2,517	18.0%
Convertible debentures			1,026	7.3%
Equity			108.5	0.7%
			3,651	26.0%
Total			\$14,018	100%

Using a 1.75 to 1 Debt Service coverage ratio, the maximum amount of construction and financing risk that could realistically be assumed solely by the private sector would be 26.0% of total Project costs, or \$3,651 million. **Table 17** provides a breakdown of sources and uses of cash in both constant and inflated dollars. If the Debt Service ratio was increased to 2.0 to 1, the amount of "at risk" private sector financing available would decline to 23.7% of total Project costs, or \$3,321 million.

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## 11.2 Results of Operations

,	2005		2025		
·	Constant dollars	inflated dollars	Constant dollars	Inflated dollars	
	(in millions)				
Operating Revenues	\$637	\$908	\$1,089	\$2,806	
Operating Costs	(255)	(357)	(312)	(789)	
Net Operating Revenues	\$382	\$551	\$777	\$2,017	
% of Operating Revenues	60.0%	60.7%	71.3%	71.9%	

**Table 18** provides a graphical presentation of Net Operating Revenues and Debt Service costs for the first 20 years of operations.

## 11.3 Distribution of Cash Flow

	20	2005		)25
	Constant dollars	inflated dollars	Constant dollars	inflated dollars
		(in m	illions)	
Public sector				
Intake-				
Taxes	\$15	\$22	\$132	\$339
Dividends	10	14	12	30
Lease of Infrastructure and Civil Works	56	80	386	995
	81	116	530	1,364
Outflow-				
Infrastructure and Civil Works interest subsidy	(455)	(649)	(252)	(649)
Net intake (outflow)	\$(374)	\$(533)	\$278	\$715

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	20	105	20:	25
-	Constant dollars	inflated dollars	Constant dollars	Inflated dollars
·		(in mi	llions)	V ROOF SEEDING AND DESIGNATION OF THE PROPERTY
Private sector				NOTICE TO A STATE OF THE STATE
Intake (on funds at risk)-			X III	
Debt service on Equipment and Technology Notes	\$221	\$315	\$-	\$-
Interest on subordinate convertible debentures	64	92	-	•
Dividends	10	14	127	318
Total	\$295	\$421	\$127	\$318

As shown on the above tables, and also in **Table 18**, in the initial years, cash flow is directed, in first priority, to Debt Service in respect of the Equipment and Technology Notes. Once repaid, cash flow to the public sector increases dramatically, principally through lease payments to the Public Financing Entity.

The accumulated contribution of the public sector (in inflated dollars) up to the first year during which a break-even in cash-flow to the public sector is achieved (i.e. 2018) amounts to \$8,002 million including tax revenues and \$9,565 million excluding tax revenues.

A detailed summary of annual contributions, net of intakes, by the public sector is presented as part of **Appendix 9**.

#### 11.4 Return on Investment

Scenario 8 yields the following Internal Rate of Return, (22) depending on the ownership option:

	Whallis muhlia	Private-p	ublic*
	Wholly public	Including tax revenues	Without taxes
Public sector	6.80%	5.49%	1.83%
Private sector**	n/a	11.04%	11.04%

Base Case Financing Plan.

<sup>\*\*</sup> Equity and Convertible Subordinated Debentures only.

The Internal Rates of Return have been calculated on the basis of the projections set out in Appendix 9 using the methodology detailed in Appendix 1.

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For Scenario 8, the public sector's highest return would be generated under the wholly public ownership option. The public sector's Internal Rate of Return is lower under the public-private ownership option since the cost to the private sector of financing its share of the Project is higher than equivalent public sector borrowing costs. Thus, in order for the Project to absorb the higher private sector financing costs, the public sector's Internal Rate of Return declines.

In respect of the private sector, we believe that the projected Internal Rate of Return under the public-private scenario (as reflected in the Base Case Financing Plan) would approximate 11.04%. This is below the 12% threshold rate that we believe would be required to induce the private sector to commit risk equity capital to the Project (as distinct from risk debt). (23) Private sector equity sponsors would therefore seek to make modifications to the Base Case Financing Plan in order to obtain a greater share of the Project cash flows. Obviously, any such change would cause the public sector's Internal Rate of Return to drop even further.

To test this hypothesis, we modified the public-private payout sharing formula in the Base Case Financing Plan so as to increase the private sector's Internal Rate of Return from 11.04% to the 12% threshold. This Modified Base Case Financing Plan enhances the return to the private sector (i.e. to 12%) but causes the projected Internal Rate of Return to the public sector to decrease from 5.49% to only 2.52%.

All calculations of Internal Rate of Return in our Financial Analysis assume that the Project will have a Terminal Value at the end of the financial projection period in 2035, at which date all Project indebtedness will have been repaid.

In order to estimate the Terminal Value, we have applied the capitalized earnings valuation approach, thereby applying a capitalization factor to year 2035 earnings and deducting therefrom an estimate of the Replacement Cost of Project assets at that time. It is important to note that our estimates of Replacement Cost are not supported by engineering studies or any specific knowledge as to which assets, if any, would be in need of replacement in the year 2035. Rather, the Replacement Cost deduction attempts to provide a measurement of the financial risk that (i) parts of the Project will, for a variety of possible reasons, be rendered technologically or competitively obsolete at some future date, and (ii) that private sector investors and lenders will heavily discount the Terminal Value, regardless of its validity, since it is so far out in the future; hence investors and lenders will reduce their valuations of Terminal Value. Thus the deduction of a Replacement Cost estimate is **not** intended in any way to call into question the adequacy of the ongoing maintenance and capital replacement programs that are already built into the financial projections over the Operating Period. Unlike our estimates of Replacement Cost, such maintenance and capital replacement programs **are** supported by detailed engineering studies.

In the Base Case Financing Plan, we have therefore included what we believe to be a financially conservative estimate of the Replacement Cost of Project assets, equivalent to approximately 65% of their original cost, fully inflated through to the year 2035. While this may be appropriate for the private sector's analysis of Internal Rates of Return, public sector analysts with a longer term vision may see merit in attributing a lower Replacement Cost to the calculation of Terminal Value.

The Terminal Value estimated for this Project has a reasonably important impact on the calculation of the Internal Rate of Return. We have therefore conducted a sensitivity analysis on the Internal Rate of Return by excluding completely the Terminal Value from the calculation (i.e. a more "pessimistic"

The 12% threshold rate has been arrived at by consideration of the private sector's costs of financing, given the identified Project risk. The rate is expressed as an after-tax percentage (taxes at 40%).

case) and by reducing the Replacement Cost of Project assets in the year 2035 to 32.5% of the original cost of Project assets, inflated to the year 2035 (i.e. a more "optimistic" case). The results are summarized in the following table.

	Nil Terminal Value in 2035 ("Pessimistic")	Base Case Financing Plan	2035 Replacement Cost reduced to 32.5% of inflated original cost ("Optimistic")
Public-private partnership			
Public sector (with taxes)	3.38%	5.49%	6.29%
Private sector	.10.61%	11.04%	11.40%
Wholly public	6.04%	6.80%	7.32%

The elimination of the Terminal Value from the calculation of the Internal Rate of Return has a negative impact ranging from 0.43% to 2.11%. On the other hand, the limitation of the Replacement Cost of Project assets in 2035 to 32.5% (versus 65%) of inflated original costs has a positive impact on the Internal Rate of Return ranging from 0.30% to 0.80%.

On a net present value basis, we calculate that the public sector's net cost for Scenario 8 would be as follows:

	8% discount rate		9% discount rate		10% discount rate	
	Including tax revenues	Without taxes	Including tax revenues	Without taxes	Including tax revenues	Without taxes
Pre-construction Period Construction Period Operating Period (to 2025)	\$100 1,817 1,071	\$100 1,817 1,592	\$100 1,687 972	\$100 1,687 1,393	\$99 1,568 879	\$99 1,568 1,221
	\$2,988	\$3,509	\$2,759	\$3,180	\$2,546	\$2,888

It should be noted that the above discount rates do not include a risk premium. Rather, they are based upon long-term government borrowing costs (i.e. cost of capital).

Details supporting the above Scenario 8 calculations are provided in Appendix 9.

#### 11.5 Other Sensitivity Analyses

#### 11.5.1 Operating Revenues and Costs

The following table shows how key financial ratios from the Base Case Financing Plan compare to results generated from a 10% increase and a 10% decrease in each of the projected Operating Revenues and Operating Costs:

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	Financing Base Case	Operating	Revenues	Operating Costs		Combined	
		10% increase	10% decrease	10% decrease	10% Increase	Optimistic (1)	Pessimistic (2)
Internal Rate of Return - Public sector (with taxes) - Private sector	5.49% 11.04%	6.78% 11.82%	3.44% 9.94%	5.68% 11.16%	5.30% 10.92%	6.96% 11.90%	3.20% 9.79%
Debt Service ratio (Year 2005)	1.75	2.05	1.44	1.79	1.70	2.10	1.40
Debt to equity ratio (Year 2005)	2.77	2.74	2.83	2.77	2.78	2.74	2.84
Net Operating Revenue margin - Year 2005 - Year 2025	60.63% 71.88%	64.42% 74.51%	55.93% - 68.63%	62.16% 72.95%	59,10% 70.80%	65.80% 75.48%	54.22% 67.42%
Government funding (income) per passenger - Year 2005 - Year 2025	\$62 \$(49)	\$54 \$(64)	\$69 \$(33)	\$61 \$(51)	\$63 \$(47)	\$53 \$(66)	\$70 \$(31)

<sup>(1)</sup> Operating Revenues increase by 10% and Operating Costs decrease by 10%.

## 11.5.2 Variations to Other Assumptions

The following table shows the impact on key financial ratios of changes to assumptions underlying the Base Case Financing Plan, as follows:

- An overrun in Project Construction costs of 20%;
- Project Construction cost savings of 20%;
- A reduction in the length of the Construction Period from seven to six years; and
- A reduction in the interest rate on the Equipment and Technology Notes from 11.5% to 10.5%.

	20% Cost Overrun	20% Cost Savings	Reduction in Construction Period	Reduction in Interest Rate
Internal Rate of Return - Public sector (with taxes) - Private sector	3.99% 10.70%	7.05% 11.31%	6.87% 11.35%	5.63% 11.13%
Debt Service ratio (Year 2005)	1.48	2.14	1.83	1.89
Debt to equity ratio (Year 2005)	3.37	2.22	2.77	2.76
Net Operating Revenue margin - Year 2005 - Year 2025	60.42% 71.90%	60.83% 71.85%	60.70% 71.87%	60.63% 71.87%

<sup>(2)</sup> Operating Revenues decrease by 10% and Operating Costs increase by 10%.

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	20% Cost Overrun	20% Cost Savings	Reduction in Construction Period	Reduction in Interest Rate
Government funding (income) per passenger				
- Year 2005 - Year 2025	\$78 \$(40)	\$45 \$(58)	\$58 \$(51)	\$61 \$(49)

We have also looked at the sensitivity of overall interest rates. By varying interest rates by 1% in each direction, we can compute additional sensitivity analyses on all of the Project's indebtedness taken as a whole.

	1% reduction in all interest rates	Base Case Financing Plan	1% increase in all interest rates
Internal Rate of Return - Public sector (with taxes) - Private sector	6.86% - 11.07%	5.49% 11.04%	4.17% 11.01%
Debt Service ratio (Year 2005)	1.89	1.75	1.62
Debt to equity ratio (Year 2025)	2.89	2.77	2.67
Government funding (income per passenger) - Year 2005 - Year 2025	\$52 \$(54)	\$62 \$(49)	\$72 \$(44)

In order to appreciate the sensitivity of the Internal Rate of Return to a combination of the three most important variables affecting the HSR Project, we have conducted a "super sensitivity" analysis by concurrently varying revenues, the Construction Period and Construction costs. In the "optimistic" analysis, revenues are increased by 10%, the Construction Period has been reduced by one year and Construction costs are reduced by 20%. In the "pessimistic" analysis, revenues are decreased by 10%, the Construction Period has been extended by one year and the Construction costs are increased by 20%. The results of these analyses are summarized and compared to the Base Case Financing Plan in the following table.

	Pessimistic Analysis <sup>(1)</sup>	Base Case Financing Plan	Optimistic Analysis <sup>(2)</sup>
Public-private partnership	•		NOTATION AND ADDRESS OF THE PARTY OF THE PAR
Public sector (with taxes)	0.49%	5.49%	10.22%
Private sector	9.04%	11.04%	12.29%
Wholly public	4.35%	6.80%	8.60%

<sup>(1)</sup> Operating revenues decrease by 10%, one year added to Construction Period and 20% Construction cost overrun.

<sup>(2)</sup> Operating revenues increase by 10%, one year reduction to Construction Period and 20% Construction cost savings.

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#### 11.6 Conclusion

Based on our analysis of the Base Case Financing Plan for Scenario 8, and notwithstanding satisfactory Debt Service coverage, we do not believe that the projected financial results would be sufficiently attractive to induce investors from the private sector to invest risk capital in the Project since the 11.04% Internal Rate of Return for the private sector is too low relative to private sector financing costs and the high risks associated with the HSR Project.

By adjusting the public-private payout sharing formula in the Base Case Financing Plan so as to increase the private sector's Internal Rate of Return from 11.04% to the 12% threshold (and thereby render the Project financeable from a private sector standpoint), the public sector's Internal Rate of Return would decline from 5.49% to 2.52%.

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## 12. Financial Analysis

#### 12.1 Project Costs

Table 19 provides a comparative analysis of Project Costs.

In respect of the Quebec City-Windsor corridor, the 200 kph technology option (Scenario 2) provides the lowest overall cost solution, being approximately 10% lower than the 300 kph technology options (Scenarios 1 and 3). Under the 300 kph technology scenarios, the Dorval routing (Scenario 3) is slightly more costly than the Mirabel routing (Scenario 1).

In respect of the Montreal-Ottawa-Toronto scenarios, the 300 kph technology option without Connect Air and without a Pearson station (Scenario 7) provides the lowest cost solution, being approximately 2% to 12% below the other options (Scenarios 4, 5 and 6). Under the 300 kph technology option, the Dorval and Mirabel routings are of equal cost, with some significant additional savings being achieved by eliminating airport connectors in Montreal and Toronto and the Pearson station (Scenario 7).

The Quebec City-Toronto scenario provides an intermediate cost solution, being approximately 21% lower than the Quebec City-Windsor scenarios (Scenarios 1, 2 and 3) and approximately 40% higher than the Montreal-Ottawa-Toronto scenarios (Scenarios 4, 5, 6 and 7).

### 12.2 Financing

**Table 19** also provides a comparative analysis of financing options under the Base Case Financing Plan.

We can see from the analysis that the highest percentage of private sector financing is achieved under the 300 kph technology option for the Montreal-Ottawa-Toronto corridor (Scenarios 4, 6 and 7). Within this reduced corridor, private sector financing is maximized under the 300 kph Dorval routing without Connect Air and without the Pearson station (Scenario 7).

The elimination of Montreal and Toronto airport connectors and the Pearson station (Scenario 7) significantly reduces the total public sector financing commitment.

Within the full Quebec City-Windsor corridor, again the 300 kph technology options (Scenarios 1 and 3) enable a higher percentage of private sector financing and, therefore, a lower percentage of public sector financing. The Dorval routing (Scenario 3) is preferable to the Mirabel routing (Scenario 1).

The Quebec City-Toronto routing (Scenario 8) provides a marginally lower percentage of private sector financing than the Quebec City-Windsor via Dorval routing (Scenario 3) and, therefore, a higher percentage of public sector financing. The financial results of Scenario 8 (via Mirabel, without Connect Air and without a Pearson station) could likely be improved significantly by means of a Dorval routing and by eliminating Connect Air and the Pearson station.

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## 12.3 Results of Operations

**Table 20** provides comparative analyses of key operating data in respect of the eight scenarios under the Base Case Financing Plan.

We have chosen to focus the comparative analysis on Internal Rate of Return for the public and private sectors and public sector funding (income) per passenger. In addition, we present comparative data in respect of the optimistic and pessimistic scenarios as set out in Sections 4 to 11 of this report.

The 300 kph technology option in the Montreal-Ottawa-Toronto corridor without Connect Air and without a Pearson station (Scenario 7) is superior to all other alternatives.

In both the full length and reduced length corridors, the 300 kph technology option produces superior results to the 200 kph technology option.

The 300 kph Quebec City-Toronto (via Mirabel) option ranks slightly behind the 300 kph Quebec City-Windsor (via Dorval) option. Although no specific modelling has been carried out, we are of the view that the results of the Quebec City-Toronto scenario would be significantly superior were they to be calculated on the basis of a Dorval routing.

#### 12.4 Institutional Options

In **Table 21**, we have compared the various ownership options and, for the public-private and "wholly" private options, expressed our views as to their viability and financeability. We caution that these represent our views based on our assessment of current market conditions, which can and do frequently change.

#### Wholly public-

The highest returns for the public sector are achievable under the wholly-public ownership option. (24) The returns are superior for 300 kph technology options (Scenarios 3, 4, 6, 7 and 8) and are maximized in the Montreal-Ottawa-Toronto reduced corridor (Scenarios 4, 6 and 7). Dorval routing (Scenarios 6 and 7) is superior to Mirabel routing (Scenario 4), and the exclusion of the Montreal and Toronto airport connectors and the Pearson station (Scenario 7) gives a much enhanced result.

The 300 kph Quebec City-Toronto (via Mirabel) option ranks slightly behind the 300 kph Quebec City-Windsor (via Dorval) option. Although no specific modelling has been carried out, we are of the view that the results of the Quebec City-Toronto scenario would be significantly superior were they to be calculated on the basis of a Dorval routing.

This is because the private sector's cost of funds is higher, at least for this type of Project, than the governments' cost of funds. Therefore, in virtually any scenario that involves the private sector taking financing risks, the cost of funds differential, by deduction, must be absorbed by the public sector. This does **not** mean that the private sector would be earning "excessive" returns unless those returns were far above the underlying cost of funds. This is **clearly** not the case for this Project. Indeed, the Internal Rate of Return, even under the most desirable scenario (i.e., Scenario 7) is a very modest 12.34%.

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## High Speed Rail Project Quebec City-Windsor Corridor

### Financial Analysis Final Report February 24, 1995

#### Public-private partnership-

The Base Case Financing Plan is premised on a 1.75 to 1 debt service coverage ratio on private sector project finance debt, with residual cash flow being remitted to the public sector, on account of the lease of the Project infrastructure, and to the public and private sectors for their respective equity and subordinate convertible debt investments.

In transportation infrastructure projects of this type, the private sector can be expected to establish a "hurdle rate", which is defined as the minimum Internal Rate of Return that must be reached (based on projections). If the "hurdle rate" is not met in the projections, the private sector simply will abandon further consideration of the Project until further financial enhancements are offered (of course by the public sector). This in turn reduces the public sector's Internal Rate of Return. This "circular" scenario of positioning often leads to the project financing plan collapsing.

For purposes of our analysis set out in **Table 21**, we have considered 12.0% (after-tax) as the private sector's "hurdle rate". Since there has been no comparable project in Canada, let alone North America, we cannot empirically test this rate. However, it is **certainly** not too high in the case of the private sector.

We see that the 12.0% "hurdle rate" is achieved only under the Montreal-Ottawa-Toronto corridor, and only for the 300 kph technology on the Dorval routing (Scenarios 6 and 7). The highest Internal Rate of Return, both for the public and private sectors, is achieved in Scenario 7. We believe both Scenarios 6 and 7 to be financially viable **and** financeable under the Base Case Financing Plan. All other scenarios (Scenarios 1, 2, 3, 4, 5 and 8) are viable (in that they provide for positive cash flows), but are unlikely to be financeable, unless further concessions are provided by the public sector to the private sector. It is possible that with Dorval routing and the elimination of Connect Air and the Pearson station, a revised Quebec City-Toronto option would become both viable and financeable under the Base Case Financing Plan:

#### Private sector option-

Any scenario which involves the private sector taking on the full construction risk is neither viable nor would it be financeable within the private sector.

#### 12.5 Net Present Value of Public Sector Contributions

In **Table 22**, we present summarized net present value calculations of the public sector's projected net contributions to the Project under the Base Case Financing Plan for each of Scenarios 1 to 8. (25)

In our calculations, we have included only those net costs that have been specifically projected in our 31-year financial model (10-year Pre-construction and Construction Periods plus the first 21 years of operation). (26)

lt should be appreciated that the Base Case Financing Plan is designed to maximize the private sector's share of "at risk" financing. Accordingly, the public sector's cash costs are minimized under the Base Case Financing Plan.

For purposes of this analysis, we have not extrapolated the public sector's net intake of funds beyond 2025, nor have we incorporated any estimate of Terminal Value. In the Internal Rate of Return calculations set out in Section 2.3 and in each of Sections 4 to 11, we have extrapolated the results of the HSR operations through to the year 2035 and have also calculated an estimate of the Terminal Value of Project assets at that time.

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As would be expected, the net present value calculations show that the public sector's lowest cost during the Pre-construction and Construction Periods would be for the lower cost 200 kph technology option (Scenario 5) and for the lower cost 300 kph technology option (Scenarios 3, 7 and 8).

The net present value analyses also show, however, that the 300 kph technology options (Scenarios 1, 3, 4, 6, 7 and 8) greatly outperform the 200 kph technology options (Scenarios 2 and 5) once operations commence. This is, of course, due to the projected superior passenger volumes.

Within the 300 kph technology options (Scenarios 1, 3, 4, 6, 7 and 8), the analysis shows the superiority in operating results of the Dorval routing (Scenarios 3, 6 and 7). Again, this is due to enhanced ridership when compared to the Mirabel routing (Scenarios 1, 4 and 8).

When we look at the net present value of the public sector's cost of the Project on a per passenger basis, we clearly see that this percentage is lowest under the 300 kph Montreal-Ottawa-Toronto scenarios (Scenarios 6 and 7). This, of course, is due to the superior projected operating results of these scenarios. The exclusion of the Montreal and Toronto airport connectors and Pearson station (Scenario 7) has a fairly significant positive effect on the HSR operating results.

The 300 kph Quebec City-Toronto (via Mirabel) option ranks slightly behind the 300 kph Quebec City-Windsor (via Dorval) option. Although no specific modelling has been carried out, we are of the view that the results of the Quebec City-Toronto scenario would be significantly superior were they to be calculated on the basis of a Dorval routing.

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#### 13. Conclusions

On the basis of the scope of our work and on the financial analyses carried out, it is our opinion that:

- The Project, taken as a whole, is of high financing risk for each party involved.
- A wholly-owned private sector option is neither viable nor financeable as the private sector's
  cost of funds would significantly exceed the HSR Project's financial returns, regardless of the
  scenario envisaged.
- Public sector risk and financial support would be minimized if construction, operating and financing risks were to be shared with the private sector.
- A wholly-owned public sector option would provide the public sector with higher financial returns than would public-private options. However, this would require the public sector to underwrite 100% of all risks and construction costs.
- The returns on the Project are most sensitive to variations in Construction costs, the duration of the Construction Period, Project revenues and to the Terminal Value of the Project, with real interest rates also potentially playing a major factor.
- Regardless of the public-private scenario envisaged, government financial support for the project will likely equal or exceed 70%.
- The 300 kph technology options are clearly financially superior to the 200 kph technology options.
- Dorval routing is clearly financially superior to Mirabel routing.
- The full Quebec City-Windsor corridor option is financially inferior to the Montreal-Ottawa-Toronto and the Quebec City-Toronto corridor options.
- Applying the Base Case Financing Plan public-private ownership structure (which is designed to minimize the public sector participation in the financing and Construction risks), only the 300 kph Montreal-Ottawa-Toronto (via Dorval) options would be both viable and financeable from the private sector's perspective. It is quite possible that a 300 kph Quebec City-Toronto (via Dorval) option would also be viable and financeable from the private sector's viewpoint.
- Acceptance of Construction and financing risks by the private sector is optimized on the Montreal-Ottawa-Toronto corridor.
- The private sector will not be interested in underwriting the costs of Infrastructure and Civil Works; its interest will lie almost exclusively in sharing construction and financing risks relating to the Equipment and Technology.
- The private sector financial support for the Project could range from 22.5% to 29.0% depending on the public-private scenario envisaged.
- It is expected that the public sector would more than fully recoup its investment (on an undiscounted basis) within the first 35 years of operation.

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- By modifying the distribution of cash flows (as between the public and private sectors), it is possible to adjust the projected Internal Rates of Return for the private sector for any of the scenarios envisaged to 12%. This would potentially enable each of the scenarios to be both viable and financeable from the private sector's perspective, while still maintaining a public-private partnership structure. However, such skewing of cash distributions would weaken the relationship between risk and return.
- If the income and capital tax revenues were to be excluded from the calculation of the Internal Rates of Return for the public sector, it would affect the results in a negative way by approximately 4% in each case.
- The Internal Rates of Return are very sensitive to changes in assumptions, as both the public and private sector investors would share only in the Project's residual cash flows (after payment of Project Debt Service).

Price Waterhause

Chartered Accountants and Financial Advisors

## High Speed Rail Project

Financial Analysis Final Report February 24, 1995

Appendix 1

**Glossary of Definitions** 

Term	Definition .
Base Case Financing Plan	Refers to the public-private financing structure, for each scenario under study, that maximizes the private sector's financial contribution to the HSR Project, and minimizes the public sector's annual contribution as well as its overall financial risk and commitment to the Project. A Debt Service ratio of 1.75 to 1 has been built into the Financial Model commencing with the year 2005.
BNP .	Banque Nationale de Paris
Canarail	Canarail Inc.
CIGGT	Canadian Institute of Guided Ground Transport, now Boon, Jones and Associates, Inc. on behalf of Queen's University.
Construction and Operations Company	Refers to the corporation, likely 50% owned by each of the public and private sectors, which would own the Equipment and Technology, supervise the Project construction, and operate the HSR system.
Construction Period	Refers to the period after completion of detailed feasibility studies and prior to full operations. Normally, this would include the years 199[8] through 2004.
Construction Period Interest Subsidy	Refers to government subsidy during the Construction Period designed to cover interest costs on Infrastructure and Civil Works Notes and Equipment and Technology Notes.
Debt Service	Aggregate of principal and interest payments on any given debt instrument.
Equipment and Technology	Refers to power distribution system, signals, communications and rolling stock.
Equipment and Technology Notes	Refers to secured project finance debt raised by the Construction and Operations Company.
Financial Analysis	Refers to the study commissioned by Transurb Inc.
Financial Model	Refers to proprietary software developed and owned by Price Waterhouse relating to the Financial Analysis.
HSR	High-speed passenger rail
Infrastructure and Civil Works	Refers to land, rights-of-way, earthworks and sub-grades, stations, bridges, grade separations, maintenance facilities, other accommodations, track and initial start-up items.
Infrastructure and Civil Works Notes	Refers to 35-year debt raised by the Public Financing Entity principally for the Infrastructure and Civil Works costs. Repayment would be covered for a government guaranteed Infrastructure and Civil Works Subsidy.
Infrastructure and Civil Works Subsidy	Refers to a guaranteed subsidy from governments designed to fully repay interest and principal on the Infrastructure and Civil Works Notes over a 35-year period.

## **Glossary of Definitions**

Term	Definition
Internal Rate of Return	Refer to Annex 1 to this Appendix 1.
KPMG	Peat Marwick Thorne or associated group.
Modified Base Case Financing Plan	Refers to the public-private financing structure, for each scenario under study, that fixes the private sector's Internal Rate of Return to 12% and fixes the Debt Service Ratio to 1.75 to 1.
Net Operating Revenues	In the Operating Period, refers to the excess of all HSR revenues over operating costs, excluding interest, taxes, depreciation and lease payments.
Operating Period	Refers to the Period of full operations commencing 2005.
Pre-construction Period	Refers to the period in which detailed feasibility studies are prepared prior to Construction Period.
Project	Refers to project to develop high-speed passenger rail in the Quebec City-Windsor corridor under a variety of technology and routing options.
Project Costs	Refers to the totality of pre-construction and construction costs incurred during the Pre-construction and Construction Periods and designed to bring any particular HSR scenario to its full operating status.
Project Manager	Transurb Inc I.B.I Monenco-Agra
Public Financing Entity	Refers to a corporation, likely owned by the crown, responsible for the ownership and financing of the Infrastructure and Civil Works, and the leasing thereof to the Construction and Operations Company.
Replacement Cost	Refer to <b>Annex 1</b> to this Appendix 1.
SNC	SNC-Lavalin and Delcan
Terminal Value	Refer to <b>Annex 1</b> to this Appendix 1.

#### Internal Rate of Return Calculation

The Internal Rate of Return has been calculated on the basis of the detailed projections for each scenario for the years 1995 to 2025. We have then extrapolated the results through to the year 2035, at which time we have calculated a Terminal Value of the HSR system.

#### Base Case Financing Plan Internal Rate of Return Calculations

#### (a) Public Sector

Outflows for the Public sector are made up of:

- Equity (50%);
- Capitalized interest during Construction on the Infrastructure and Civil Works Notes;
- Construction Period Interest Subsidy during construction on the Equipment and Technology Notes;
- Infrastructure and Civil Works Subsidy over the years 2005 to 2035; and
- A portion (75%) of the hypothetical Replacement Cost of Project assets in the year 2035.

#### Inflows are made up of:

- Dividends (public sector ownership share only);
- Lease payments on lease of Infrastructure and Civil Works;
- Taxes (capital and income); and
- Terminal Value of Project to public sector.

#### (b) Private Sector

Outflows for the private sector are made up of:

- Equity (50%):
- Convertible Unsecured Debentures; and
- A portion (25%) of the hypothetical Replacement Cost of Project assets in the year 2035.

Inflows for the private sector are made up of:

- Dividends (private sector share only);
- Interest on the Convertible Unsecured Debentures (net of tax); and
- Terminal Value of Project attributable to private sector (net of tax).

## Wholly Public Internal Rate of Return Calculations

In the wholly public scenario, the public will assume all of the costs for the Infrastructure and Civil Works, including inflation adjustments, and all of the costs for Equipment and Technology, including inflation adjustments. On the other hand, the public sector will receive all of the Project's operating income, less depreciation. In the year 2035, the public sector will be responsible for the full Replacement Cost and will also be entitled to the full Terminal Value.

#### **Terminal Value**

The Terminal Value of each scenario is calculated as the excess of capitalized cash flows over Replacement Cost.

#### (a) Base Case Financing Plan

#### Replacement Cost-

In order to calculate the Terminal Value, we have determined that there is a financial risk that in the year 2035 a significant share of Project assets will need to be replaced because of technological or competitive obsolescence. Purely for Financial Analysis purposes, we have conservatively estimated the Replacement Cost at approximately 65% of original cost, inflated through to the year 2035 (i.e. the replacement cost ranges from \$15,000 million for Scenario 7 to \$31,000 million for Scenario 3). This estimate is not supported by any detailed engineering studies and reflects risk from a financing standpoint only.

The public sector would assume 75% of the aforenoted Replacement Cost, based on the relative sharing of cash flow as between lease and dividend payments. The private sector would be responsible for 25% of such Replacement Costs, or approximately \$3,750 million for Scenario 7 and \$7,750 million for Scenario 3.

#### Capitalized Cash Flows-

The capitalized cash flow value in 2035 for the public sector represents the income for the year 2035 capitalized at a rate of 9%. The income stream includes lease payments and income and capital taxes (public sector only).

For the private sector, the capitalized cash flows consist only of dividends, capitalized at a rate of 7.5%, in the year 2035.

#### (b) Wholly Public

#### Replacement Cost-

The public sector would be responsible for the full Replacement Cost estimated at \$15,000 million for Scenario 7 and \$31,000 million for Scenario 3.

#### Capitalized Cash Flows-

In the wholly public option, the capitalized cash flows are made up of the operating cash flows, plus capital taxes, less depreciation. The amount for the year 2035 is then capitalized at a rate of 9%.

## **High Speed Rail Project**

## Financial Analysis Final Report February 24, 1995

## Appendix 2

## Financial Projections - Scenario 1: Full Corridor 300 kph (via Mirabel)

- 1. Report on Financial Projections
- 2. Notes on Basis of Preparation
- 3. Projected Balance Sheet (Combined Public Financing Entity and Construction and Operating Company)
- 4. Projected Statement of Operations (Segregated as Between Construction and Operating Company and Public Financing Entity
- 5. Investment Returns (2005-2025)
- 6. Capital Structure (2005 and 2025)
- 7. Public Sector Annual Contributions (Government Share of Capital Cost)
- 8. Statistics and Financial Ratios

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Appendix 2

## Price Waterhouse

October 24, 1994

#### Report on Financial Projection

To the Project Manager

Re: Scenario 1 - Full Corridor 300 kph (via Mirabel)

The accompanying financial projections of the HSR Project, consisting of projections of the balance sheets and of the statement of operations, has been prepared using assumptions and hypotheses provided by consultants engaged by the Project Manager. Our examination was made in accordance with the applicable Auditing Guideline of The Canadian Institute of Chartered Accountants. We have no responsibility to update this report for events and circumstances occurring after the date of our report.

In our opinion, as at the date of this report, the assumptions and hypotheses that we have used are consistent with those developed by the aforenoted consultants.

Since this projection is based on assumptions and on hypotheses regarding future events, actual results would vary from the information presented and the variations may be material. Accordingly, we express no opinion as to whether the projections could be achieved. The projections have been prepared in accordance with accounting policies deemed to be appropriate for a HSR Project.

Chartered Accountants

Price Waterbase

#### Note on Basis of Preparation

The projections were prepared in accordance with generally accepted accounting principles relating to measurement, presentation and disclosure of financial projections. The projections reflect the judgment of various consultants and are consistent with the purpose of the information but are not necessarily the most probable set of industry, regulatory and economic conditions and planned courses of action given these conditions and uses of assumptions, hypotheses with an effective date of September 30, 1994.

#### Significant Assumptions and Hypotheses

#### 1. Inflation

Current dollars are inflated at a rate of 3%.

#### Interest on Infrastructure and Civil Works Notes

The interest rate used for the Infrastructure and Civil Works Notes is based on a government of Canada cost of 30-year funds, which is assumed to be 8.5% per annum, plus 50 basis points.

#### 3. Interest on Equipment and Technology Notes

The interest rate used for the Equipment and Technology Notes is based on LIBOR for 15-year funds, which is assumed to be 8.5%, plus 250 basis points.

#### 4. Interest on Convertible Subordinate Debentures

Interest on the convertible subordinate debentures is calculated at a basic rate of 9% (government of Canada cost of 30-year funds plus 50 basis points) and a maximum rate of 12.5% (government of Canada cost of 30-year funds plus 400 basis points), subject to the Project's cash flow, after deducting Debt Service on Equipment and Technology Notes and interest on short- term bank indebtedness.

Base interest is capitalized and not paid throughout the Construction Period. Commencing in the Operating Period, base interest on the initial and capitalized balance of the Convertible Subordinate Debentures is paid annually. Excess interest, up to a maximum additional rate of 3.5%, is paid only if Project cash flow allocated to service the Convertible Subordinate Debentures exceeds the 9% base rate.

#### 5. Interest Rate on Bank Indebtedness

Interest on short-term bank indebtedness and overdrafts is assumed to be chargeable at 9% per annum.

#### 6. Repayment Period for the Infrastructure and Civil Works Notes

The Infrastructure and Civil Works Notes are repaid by way of equal annual instalments of principal and interest over a 35-year period starting with the first year of full operations in 2005.

#### 7. Repayment Period for the Equipment and Technology Notes

The Equipment and Technology Notes are repaid over a 15-year period beginning with the first full year of operations in 2005 using an Annual Sum-of-the-Years'-Digits method, such that payments in later years are greater than those in earlier years.

#### 8. Conversion of Convertible Subordinate Debentures

The debentures are convertible at the holder's option, on a dollar-for-dollar basis, into Share Capital.

#### 9. Share Capital

Share capital consists of common shares.

#### 10. Lease Payments to Public Financing Entity

The Public Financing Entity is assumed to enter into an operating lease for the rental of the Infrastructure and Civil Works to the Construction and Operating Company for a term of 35 years based on Project cash flows. Each annual lease payment is calculated by applying percentage of the initial Infrastructure and Civil Works Notes principal amount as a function of total long-term liabilities to 80% of Project cash flow, after deducting Debt Service on the Equipment and Technology Notes, interest on bank debt and base interest on convertible subordinate debentures.

#### 11. Dividends

Dividends are paid to the shareholders on a pari passu basis with lease payments to the Public Financing Entity and excess interest on the Convertible Subordinate Debentures. The amount of Project cash flows allocated to pay dividends is determined by applying a percentage to 80% of Project cash flows, after deducting Debt Service on Equipment and Technology Notes, interest on short-term bank indebtedness and base interest on the Convertible Subordinate Debentures. The applicable percentage is a function of the par value of share capital as it relates to total long-term liabilities (Equipment and Technology Notes and Guaranteed Infrastructure and Civil Works Notes) and share capital.

#### 12. Fixed Assets and Depreciation

Equipment and Technology are recorded at cost, net of the Construction Period Interest Subsidy, and are depreciated on a straight-line basis at a rate of 4%.

Infrastructure and Civil Works are recorded at cost, net of the Construction Period Interest Subsidy and are depreciated on a sinking fund basis using a rate of 8% per annum.

#### 13. Income Taxes, Capital Taxes and Large Corporations Taxes

The effective tax rates for the HSR are projected at 40% for income taxes, 0.2% for large corporations taxes and 0.4% for provincial capital taxes.

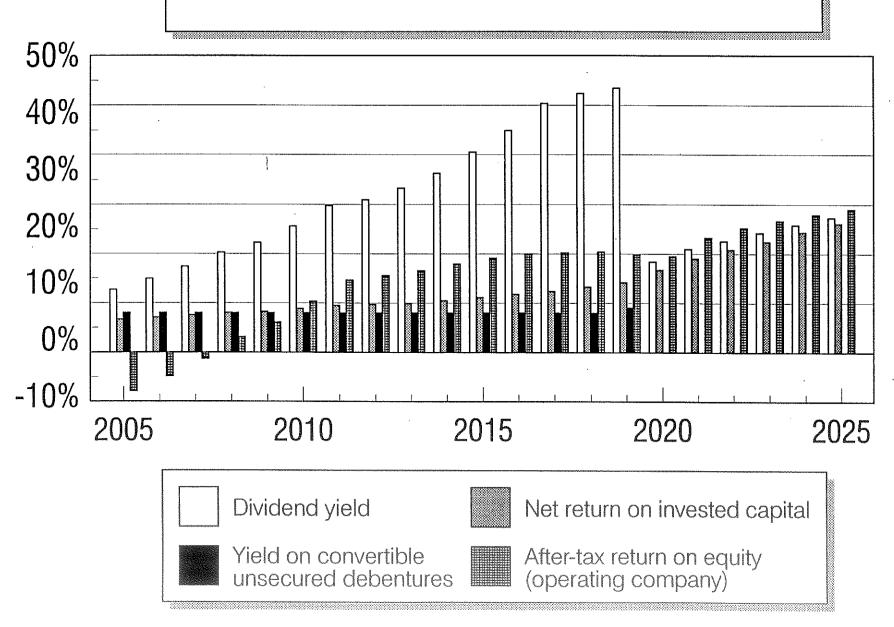
The Infrastructure and Civil Works Notes do not give rise to capital or large corporations taxes as they are obligations of the Public Sector Financing Company.

#### 14. Other Assumptions and Hypotheses

Assumptions and hypotheses contained in the reports prepared by Price Waterhouse, SNC, IBI, CIGGT, Canarail and KPMG are incorporated by reference into the projections underlying the Financial Analysis. It is essential for the reader to have a detailed understanding of such reports and assumptions in order to understand the projections.

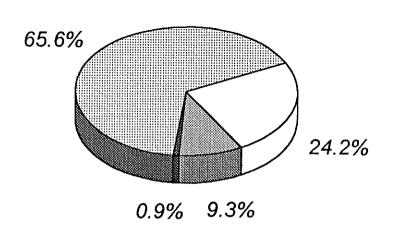
# **Quebec-Ontario High Speed Rail Project**

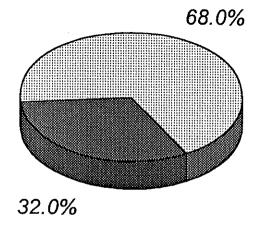
Full Corridor 300 kph (via Mirabel) Investment Returns - 2005-2025



# **Quebec-Ontario High Speed Rail Project**

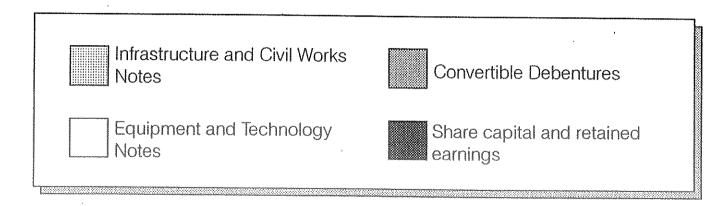
Full Corridor 300 kph (via Mirabel) Capital Structure





2005

2025



Quebec-Ontario High Speed Rail Project Final 300 Composite (via Mirabel) Quebec-Windsor Corridor Balance Sheet (in millions of inflated dollars)

		-construc	ntion 1																·												
	1995			1998	1999	2000	lon and St	5005 E	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	, Fu 2014	II Operation 2015		2017	2010	00101	- Fran I	/T		1		
Assets Current assets Cash	\$231	**=.																2012	2010	2011	2013	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
Accounts receivable	0	\$184 0	\$49 0	\$520 0	\$420 0	\$73 0	\$0 0	\$0 0	\$0	\$0 13	50 63	\$0 65	\$0 66	02 68	\$0 70	\$0 72	\$0 74	\$0 76	\$0 78	\$0 80	30 62	\$0 84	\$0	\$0	\$0	\$0	\$0	\$0	\$37	\$363	\$713
Supple sand other inventories Prepaid expenses	0	0	0	0	0	0	0	0	100	500	206	212	219	225	535	239	246	253	261	269	277	295	96 294	99 303	91 312	94 321	96 331	99 340	101 351	104 351	107 372
Lishard exhausas	231	164	40	520	420	73	- :	- 0	111	533	21	296	307	23 316	23 325	335	25	25	26	27	20	29	29	30	31	322	33	34	35	36	372
Fixed Assets at cost		`	,				. ]				250	230	**/	310	323	350	344	354	365	376	397	396	410	422	434	447	460	473	524	964	1,229
infrastructure and civil works Exadend Rightofway												- 1										- [					1	i			
Earthworks/subgrade	16	31	24 66	152 205	351 573	1,200	1,732	1,091	1,691	409 1,691	469 1,891	1,691	1,891	1,091	489 1,891	469 1,691	469 1,691	1,891	1,691	469	469	469	489	469	499	489	409	409	489	409	480
Setions	3	7	e	9	12	36	92	210	366	366	399	366	366	366	386	399	388	399	369	1,891	1,891	1,691	1,891	1,691 366	1,691	1,691 366	1,891	1,891	1,091	1,891	1,891
Maintanance facilities Other accommodations	3	6	6	9	12 59	36 135	90 160	204 160	376 160	378 1601	979 160	160	378 160	378	379	370	370	978	378	970	978	370	378	376	378	378	379	378	369 378	300 370	366 376
Bridges	4	9	17]	44.	131	401	637	714	714	714	714	714	714	150 714	160 714	160 714	150 714	160 714	160 714	160 714	160 714	160 714	160	160	160	160	160	160	160	160	160
Grade separations Track	10	21	41	113	332	939	1,457	1,612	1,612	1,612	1,612	1,612	1,612	1,612	1,612	1,612	1,612	1,612	1,612	1,612	1,612	1,612	714 1,612	1,612	714 1,612	714 1,612	714 1,612	714 1,612	714 1,612	714 1.612	714 1.612
Delene distant up and other costs	1	1	4	23	59 24	185 53	497	645	1,054 209	1,062 266	1,062 266	1,062	1,062	1,062	1,062 266	1,062 266	1,062	1,062	1,062	1,062	1,062	1,062	1,062	1,052	1,062	1,062	1,062	1,062	1,062	1,062	1,062
The second secon	40	80	178	575	1,552	3,465	5,230	6,271	6,895	6,961	6,961	6,951	6,961	6,961	8,961	6,961	266 5,951	6,961	266 6.961	266 6.961	266 6.961	266 6,961	266 6,961	266 5,951	266	266	266	266	266	266	266
Capitalized interest Construction period interest subsidy	.0	0	0	41 (41)	198	546 (546)	1,106	1,797	2,544	3,310	3,310	3,310	3,310	3,310	3.910	3,310	3,910	3,310	3,310	3,310	9,310	3,910	3,310	3,310	6,961 3,310	5,961 9,310	6,961 3,310	6,961 3,310	6,961 3,310	6,961 3.310	6,961 3,310
Inflationardjustment	2	6	18	82	271	711	1,182	1,797	(2,544) 1,714	(3,310)	(3,310)	(3,310) 1,739	(3,310) 1,739	(3,310)	(3,310) 1,739	(3,310)	(3,310) 1,739	(9,310) 1,739	(3,310) 1,739	(3,310)	(3,310)	(3,310)	(3,310)	(3310)	(3,310)	(3,310)	(3,310)	(3,310)	(3,310)	(3,310)	(3,310)
**	43	97	196	657	1,823	4,176	5,412	7,770	9,609	9,700	6,700	8,700	6,700	6,700	6,700	6,700	8,700	6,700	0,700	1,739 6,700	1,739 8,700	1,739 8,700	1,739 8,700	1,739 6,700	1,739 6,700	1,739 9,700	1,739	1,739	1,739	1.739	1,739
Accumulated depreciation  Not intrastructure and civil works	43	0 87	196	657	1,823	4,175	6,412	7,770	0 0,609	0.700	(42)		(139)	(1941)	(254)	(319)	(390)	(468)	(552)	(644)	(745)	(554)	(974)	(1,104)	(1,245)	(1,400)	8,700	6,700 (1,752)	8,700 (1,952)	6,700 (2,170	8,700 (2,409)
Equipment and technology Power distribution system			130		1,023		.			9,700	0,557	0,611	0,561	9,506	6,448	8,361	9,310	0,232	9,148	0,055	7,955	7,846	7,726	7,596	7,454	7,300	7,132	6,948	6,740	6,530	6,292
Signate	0	- 1	5	22 14	49 32	142 93	962 237	657 429	675 572	902 590	902 590	902 590	902 590	902 590	902 590	902	902	902	902	902	902	902	902	902	902	902	902	902	902	902	902
Communications	ō.	ò	2	7	15	43	109	198	263	272	272	272	272	272	272	590 272	590 272	590 272	590 272	590 272	590 272	590	590	590	590	590	590	590	590	590	590
Light freight Rolling stock	0	0	0	0	۵	0	0	0	0	226	228	228	255	255	255	256	256	201	201	262	289	272 322	272 322	272 323	272 323	272 349	272 350	272	272	272	272
Capital expenditures	0	2	12	39	84	241	614	1,114	1,484	1,530	1,530	1,530 104	1,530	1,530	1,650	1,650	1,650	1,650	1,770	1,770	1,770	1,770	1,890	1,690	1,690	1,090	1,960	360 1,960	378 1,900	976 1,980	978 1,980
	Ŏ	3	25	61	181	520	1,322	2,309	3,194	3,521	3,571	3,625	3,710	3,770	296 9,955	4,023	427	4,199	1,399	4,496	763 4,565	4,715	963 4,998	1,072	1,158	1,311	1,442	1,581	1,729	1,083	2,049
Capitalized interest Construction period interest subsidy	0	0	0	0	94	231	449	797	1,255	1,750	1,760	1,760	1,760	1.760	1,760	1,760	1,760	1,760	1,760	1,760	1,760	1,760	1.760	5,048 1,760	5,165 1,760	5,314 1,760	5,535 1,760	5,674 1,750	5.940 1.760	6,005 1,760	6,170 1,760
Inflation adjustment	ő	6	3	12	(14) 31	(62) 109	(179) 323	(413) 651	(742) 926	(1,104) 1,050	(1,104)	(1,104) 1,051	(1,104) 1,064	(1,104)	(1,104) 1,197	(1,104) 1,197	(1,104) 1,13 <del>8</del>	(1,104)	(1,104)	(1,104)	(1,104)	(1,104)	(1,104)	(1,104)	(1.104)	(1,104)	(1,104)	(1,104)	(1,104)	(1,104)	(1,104)
And the second second	0	4	26	93	292	799	1,916	3,433	4,632	5,228	5,278	5,332	5,430	5,491	5.748	5,617	5,690	6.011	1,254 6,309	1,254 6,396	1,261	1,293 6,664	7,012	7,122	1.418 7.239	1,449	1,566	1,567	1,606	1 607	607
Accumulated depreciation Not a quipment and technology	a	0	26	0		- 0	0	0		a	(207)	(420)	(636)	(857)	(1,087)	(1,320)	(1,555)	(1,796)	(2,046)	(2,304)	(2,564)	(2,831)	(9,111)	(3,396)	(3,686)	7,419	7,757	7,697 (4,609)	6,111 (4,933)	6,260 (5,264)	6,434
<del></del>	`I	1	_ ~	76.5	292	799	1,918	3,433	4,632	5,228	5,071	4.912	4,793	4,634	4,661	4,497	4,394	4,215	4,261	4,092	3,939	3,839	3,901	3,726	3,554	3,437	3,464	3,269	3,178	3,004	2,633
Not had absola  Total a sests	43 \$274	90 \$274	225 \$274	750 \$1,269	2,115	4,975	6,329	11,203	19,241	13,927	13,729	13,523	13,351	13,140	19,107	12,878	12,644	12,447	12,409	12,147	11,894	11,679	11,627	11,322	11,009	10,737	10,596	10,236	9,926	9,534	9.125
		4517		#1 <sub>1</sub> 203	\$2,535	\$5,048	<b>₩</b> 0,3<8	11,203	13,302	\$14,36U	614,018	\$19,821	\$ 13,681	§ 13,456	\$13,432	£13,212 :	\$12,990	\$12,601	\$12,773	\$12,523	\$12,200	12,076	12,036	\$11,744	\$11,142	\$11,183	\$11,066	\$10,710 1	10,450	10,399 \$	10,354
Liabilities and Owners' Equity Current liabilities														-																	
Bank indebtedness Accounts payable and accruals	\$0	\$0 0	\$0	\$0 0	\$0	\$0	\$142	\$142	\$242	\$348	\$306	\$295	\$317	\$291	\$455	\$417	\$369	\$363	\$525	\$463	\$404	\$363	\$531	\$421	\$296	\$533	\$493	\$202	50	**	
Current portion of long-term debt		0	8	ő	0	0	8	91	12	27	76	76 97	127	79 157	76 160	79	79	60	60	61	62	84	95	96	67	86	69	91	92	93	95 95
	0	ō	Ö	ō	ő	0	142	142	254	375	450	468	521	526	720	219	250 698	725	920	949 B91	362 666	416 693	452	466	525	154	160	184	500	218	238
Long-term liabilities			[		- 1					ı						]			72.0	DOT	000	00.3	1,067	995	908	776	750	477	292	311	333
Equipment and technology noises	0	٥	٥	0	اه	,	531	1,799	2,690	3,057	3,041	2,990	2,913	2,811	2,683	2,530	200		4.04-				ļ		l	1					ļ
Infrastructure and civil works notes	0	. 0	_ o	356	1,543	3,965	6,372	7,954	6,903	9,149	9,107	9,061	9,010	6,955	0.895	0.630	2,351 8,759	2,147 8,682	1,917 9,597	1,661 9,505	1,390 9,404	1,073 8,295	741	363	0	0	0	0	0	0	0
Owners' Equity	0	0	0	356	1,543	3,965	7,002	9,763	11,673	12,216	12,149	12,050	11,923	11,766	11,579	11,360	11,110	10,626	10,514	10,166	9,784	9,368	0,176 0,917	9,046 8,429	7,904	7,749	7,591 7,581	7,397	7,197	6,979	6,742
Convertible unsecured debenture	n	n]	ا م	639	719	909	910	1.024	1,151	1,295	1,295	1,295						1	· 1				5,517	U, 1E.J	1,301	1,175	1,001	7,397	7,197	6,979	6,742
Share capital	274	274	274	274	274	274	274	274	274	274	274	274	1,295	1,295 274	1,295	1,295 274	1,295	1,295	1,295	1,295	1,295 274	1,295	1,295	1,295	1,295	1,295	1,295	0	o	o	0
Patained earnings (defics)	274	274	0	0	0	D	0	0	0	0	(149)	(266)	(353)	(406)	(436)	(431)	(390)	(321)	(229)	(104)	58	255	274	274 750	274 1.061	274 1,089	1,155	1,569	1,569	1.569	1,569
	2/4	4/4	274	913	993	1,083	1,184	1,296	1,425	1,569	1,420	1,303	1,216	1,163	1,134	1,136	1,180	1.240	1,340	1,466	1,629	1,825	2.052	2,320	2,630	2,658	2,724	2,835	2,960	1,539 3,108	1,710 3,279
Total liabilities and owners' equity	\$274	\$274	5274	\$1,269	\$2,535	\$5,040	\$6,329	11,203	\$19,352	\$14,160	\$14,010	\$19,621	\$13,681	819,456	\$13,432	\$13.212	\$12,999	\$12.001	\$12 772	\$12 522	\$12,200 1	12 078	112 000							3,7,00	-,E/3
Debt to equity ratio	1																	T 15,00 1	T.E.I.G.	÷ 16,080	- iz zoo   1	112,010 2	12,000	a:1,/44]:	311,442	511,183	\$11,056	\$10,710 \$	10,450 \$	10,399 \$	10,354
Резплания	N/A	N/A	N/A	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	400	* 00 ¹	4.00*														
Actual	N/A	N/A	N/A	0.00	0.00	0.00	0.62	1,65	2.32	2.46	2.72	2.94	3.13	3.19	4.00 3.33	4.00 3.18	4.00 2.90	4.00 2.60	2.39	4.00 1.99	4.00 1.61	1.27	4.00	4.00	4.00	4.00	4.00	4.00	4.(X)	4.00	4.00
																		2.00	C. 0.07	1,331	1.01		1.06	0.75	0.49	0.43	0.41	0.29	0.22	0.21	0.21

Quebec—Ontario High Speed Rail Project Final 300 Composite (via Mirabel) Quebec—Windsor Corridor Statements of Operations (m millions of Inflated dollars)

1	Pre	-constru		1		Constru	clion and Start-up												Fri	I Operation										
OPERATOR	1995			1998	1999		2001 2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014			2017	2018	2019	2020	2021	2022	2023	2024	2025
GPERATOR Revenues				1													-				23.12				EVEU	EUZ	. 2002	eves	-2027	2023
Fa seenger revenues, constant dollars	\$0	\$0	\$1		l so	l so	\$0 \$0			****	****	****												- 1	ŀ	- 1			ļ	
Less Agency commissions	80	™ ا	7	1 7	l *∾	300	30 30	\$50	\$167	\$809	\$830	1853	\$875	\$899	\$922	\$947	\$972	\$996	\$1,025		\$1,080	\$1,109	\$1,198	\$1,169	\$1,200	\$1,232	\$1,264	\$1,298	\$1,333	\$1,368
Less Credit card discount	ō	ة ا	i è	il ö	Ιŏ		اه ا	1 101	13	81	(46)	(47)	(48)	(49)	ទេប	(52)	(53)	(55)	(56)	(50)	(59)	(61)	(63)	(64)	(66)	(68)	(70)	(71)	(73)	(75)
Net passenger swenues, constant dolars	0	ō		ō	0	0	ō ŏ	46	156	757	777	798	819	841	663	966	910	934	959	984	1,010	1,037	1,065	1,093	1,122	1,152	1,189	1,211	1,247	(13)
Net light freight revenues, constant dollars		ا ا		J	، ا		، ا، ا	ا ا	اما	_	50				_1	į			1			.,,	,,,,,,	1,033	1,122	1,102	1, 103	1,411	1,247	1,200
inflation adjustment	ă	ة ا			۱ ۲			1 56	60	343	397	435	53 487	55 542	57 601	59	61	63	65	67	69	71	73	76	78	60	63	96	66	90
Net revenues	0	0	-	Ö	ŏ	Ö	ŏ ŏ	62	216	1,148	1,215	1,265	1,359	1,439	1,521	1,609	1,702	1,600	1,904	963 2,014	2,130	2,253	1,245	1,352	1,466 2,666	1,598	2,983	1,655 3,155	2,003	2,158
Operating Costs, constant dollars			l	1	!	1	1 1		i			1	,		.,	1,1.2.	"""	1,004	1,00	2,017	2,100	2,233	g.,303	2,321	2,000	2,020	2,563	3,155	3,339	3,526
Labour		l n		J.	١ ،		ه اه ا	17	39	123	124	126												1		i		1		1
Ebolnoity	ő	0	ءَ ا	il ä	0			"	389	27	28	26	127 29	129 29	129	130	132	133	134	135	137	130	139	141	142	143	145	146	147	149
Advertising/promotion	ő	0	6	ة ا	lő	ő	0 0	5	a a	16	16	16	16	16	16	16	31 16	31 16	32 15	32	33	33	34	34	36	36	36	37	37	30
inimistructura maintamance services	0	0		) 0	0	0	0 0	3	ě	21	21	21	20	19	18	17	16	16	15	16 16	16 16	16 16	16	16	16	16	16	16]-	16	16
ntrautructuse meterials/supplies	0	0		) 0	0	0	0 0	0	1	2	2	ž	Ĩ	, a	3	3	a	- "a"	4	10	101	10	16 11	16	16	16 15	15	15 18	16	16
folling stock materials/supplies	0	0	0	0	0	0	0 0	1	4	15	16	16	16	17	17	17	17	19	10	18	19	19	20	20	50	21	21	21	20 22	22
elecommunications/compuler services naurance services/franchise lees etc	0	0		9	0	0	0 0	1 1	4	16	16	16	17	17]	16	18	16	19	19	20	20	21	21	21	22	22	23	24	24	25
ood/elated sundras	0		1 2	1 2	1 0	] 0	0 0	2	4	12	12	12	12	12	12	12	13	13	19	13	13	19	13	14	14	14	14	14	14	15
inscheduled meterals/services			1 7	1 6	1 ,	١ ٪	1 0 0			2	2	2	2	2	2	2	2	2	2	3	3	3	3	3	3	3	3	9	3	3
roperty taxes		lŏ	1 0	ة ا	1 6	1 6	1 0 0	13	20	d	-0	<del>1</del> 6	#	49	46	49	40	48	49	49	49	49	49	19	49	49	49	50	50	50
Contingency	O	. 0	i c	i o	lõ	l ŏ	l ől ő	l šl	7	21	21	21	21	21	2,1	21	21	21	21	21	0	0	.01	0	.0	O	0	0	0	9
obil operating costs, constant dollars	0	0	0	0	0	0	0 0	47	107	303	306	308	310	912	314	316	318	32	325	328	336	340	22 344	349	23 353	358	363	23	24	24
and to a	_	_	1 -		Ι.	1	1 .			1	- 1	ŀ		- 1			7.0	~	~~	- V-		3-10	जन्म	379	353	358	363	369	374	379
apral taxas ifationadrustment	0	0	9	9 2	0	0	0 0	0	0	19	18	17	17	16	16	15	15	14	14	14	13	19	13	12	11	11	13	11	ادر	12
otal operating costs	<u>u</u>	<u>v</u>		9	- 2	0	0 0	18	-11	129	143	150	173	189	205	222	240	259	279	301	327		376	403	431	461	192	526	561	598
on operating come	ű	, ,	. ا	"	۱ °	٠ '	"  "	64	148	450	467	484	500	517	535	554	573	595	618	542	676	351 704	733	764	795	830	966	905	946	990
ross operating cash flow	G	0	0	0	0	0	0 0	(1)	67	696	748	601	959	920	986	1,055	1,129	1,205	1,206	1,372	1,454	1,549	1,650	1,757	1,871	1,991	2,117	2,250	2,391	2,539
rge corpositions taxes	o	0		0	0		0 0	اه	a	او	9	9	В	اء	a	R	,	,	7	,	-	اء	اء		ا۔	_	- 1		-,	.,,
come taxes	0	. 0	0	0	. 0	5 0	<u> </u>	0	0	0	0	ő	ő	22	23	30	86	128	159	196	229	261	295	334	371	242	5	-6	-6	6
et operating cash flow	٥	0	1 0	0	0	0	0 0	(1)	67	698	739	792	850	890	955	1,018	1,035	1,059	1,120	1,169	1,219	1,282	1,349	1,416	1,495	1,743	265 1,947	1,914	2,016	2,132
e rest on secured and bank debt		,	١.,		١.	1 .		1					1			i	1		- 1			,	.,		.,	117-15	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	1,311	2,010	2,132
incipal repayments on secured debt	ŏ		۱ ۲	i š	"	1 0	2 2		67	374 26	368 51	362 77	354	341	336	316	293	269	252	219	163	146	117	69	18	32	30	12	a	- (
shillow available to debenture holders, loase			<del> </del>	† <u>`</u>	· · · · · ·		<del> </del>		- '	- 40	. 51		102	128	153	179	204	230	258	281	307	332	368	303	. 0	0	O	0	ā	
yments and dividends	0	0	0	0	0	0	0 0	0	0	269	319	354	394	421	466	523	538	571	612	669	729	603	974	964	1,479	1,711	1,817	1.902	2.016	
se interest on convertible debenjuies	n	п	۱ ,	1.	١ ,	١ ,	، ا، ا	ا ا	۰										- 1	ì			i		1,410	1,711	1,007	SIAU,I	2,016	2,13
xcess cash flow available for loans payments, excess				·	ļ	1		<u></u>	Y	117	117	117	117	. 117	117	117	117	117	117	117	117	117	117	117	117	117	0	0	0	
ereet on convertible debentures and dividends	0	a	l a	1 0		1 0	ه اه ا	اه ا	٥	173	203	237	277	305	240	400	400													
			· .	1	-	•		ĭ	ı ı	,,,,	203	237	*''	امتح	349	406	422	454	498	552	613	696	758	847	1,361	1,594	1,817	1,902	2,016	2,13
ase peyments	0	a	0	0	0	0	0 0	٥	0	103	122	142	166	183	209	243	253	272	297	331	367	411	454	E			4 000			
ceas interest on convertible debentures	0	Ð	0	0	0	0		0	o	۵	0	0	0	0	0	0	a	2/2	237	331	367	411	454	509 24	615 109	955 149	1,089	1,140	1,209	1,277
vidends salduel cash flow for Operating Company	0	0	ļ <u>0</u>		0	0	0 0	0	0	35	- 41	40	56	61	70	82	65	91	100	111	123	136	143	146	164	172	965	962	405	426
ages came sow for obeisting combins	0	0	l °	'l °	1 0	l °	0 0		0	35	41	47	55	61	70	91	84	91	99	110	123	137	152	169	272	319	363	360	403	42
s: Equipment and technology depreciation	n	n	_ n	۱ ۸	n	l n	م اه ا	اما	اہ	2091	(809)	أبيم		240					[		- 1						,	~~~	703	-12
d. Principal repayments on secured debt	ol	0	lă	ő	١٥	ة ا	ا ا	اة ا	8	26	51	(211) 77	(211) 102	(216) 120	(519)	(219)	(220)	(229)	(229)	(530)	(2:32)	(242)	(242)	(242)	(244)	(253)	(253)	(255)	(255)	(25
l: Dividands	0	0	ŏ	, o	ŏ	ا ا	0 0	اة ا	ň	35	41	46	56	61	153	179 62	204 95	230	256 100	261	307	332	358	363	0	0	0	0	0	, ,
t income (loss) for Operating Company	0	0	0	0	Ö	0	0 0	ő	ő	(114)	an	(36)	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	31	75	123	153	91	225	273	129	198 265	143	146	164	172	365	362	405	42
N 10 54 N 20 50 10 10 10 10 10 10 10 10 10 10 10 10 10	- 1			I	l	I	I I		- 1	1	. 1	` 1	1			,,,,		.~.	563	2,0	320	303	410	457	192	230	476	507	553	59
BLIC FINANCE COMPANY structure and civil works interest subsidy	ا۔	_				I -	I .l			-	- 1	l		- 1				-			- 1	- 1	- 1	1			-			
est on Government geranteed debt	0	0	0	0	0	0	0 0	0	0	(866)	(966)	(866)	(966)	(866)	(966)	(966)	(966)	(866)	(966)	(966)	(866)	(966)	(966)	(966)	(966)	(966)	(966)	mee	(866)	(96
199 payments	0	0	1 0	, n	١ ٪	0		0	οĬ	823	980	815	911	9CX5	601	795	760	761	774	765	756	747	736	724	711	697	582	666	649	62
prociation on info structure and civil works	ő	G		0	0	"	0 0	0	0	103	122	142 50	166	163	508	243	253	272	297	331	367	411	454	508	816	955	1,009	1,140	1,206	1.27
t income and cash flow of Public Finance Company	Ď	0	Ö	ŏ	ŏ	1 0	0 0	0		103	122	142	166	163	209	243	78	85	92	100	109	119	130	142	154	168	184	200	210	296
nior debt coverage ration							······································	·		1221	ree]		100	103	- sna	273	253	272	297	331	367	411	454	508	816	955	1,083	1,140	1,208	1,27
pupment and technicopy notes - Actual	- 1		1	ī		1	· · · · · · · · · · · · · · · · · · ·	Y	· · · · · · · · · · · · · · · · · · ·	( 70	4 70 1																			
uipment and technology notes Required				1						1.75	1.78	1.03	1.00	1.96	2.01	2.13	2.27	2.42	2.53	2.74	2.97	3.24	3.47	3.98	N/A	N/A	N/A	N/A	N/A	N/A
				.~	• • •	•	turnum I				1.73	1.13	1.73	1.70]	1.01	1.75	1.75	1.75	1.75	1,75	1.75	1,75	1.75	1.75	1.75	1.75	1.75	1.75	1.75	1.75
eturn on equity perating company			T	¥	r		<u></u>																							
			·	. P	l	1	L	L1		~8.0%	-5.9%	~3.2%	0.2%	2.8%	6.6%	10.4%	12.3%	13.7%	15.4%	16.6%	17.5%	17.0%	17.7%	17.4%	7.2%	9.8%	16.6%	17.1%	17.6%	18.3%
Nat operating margin										60.8%	61.6%	62.3%	63.2%	64.0%	54 69c	65.6%	66 296	67.0%	67 69 T	66.1%	ED DO	en nor "	00 00t	- CA TO	70.00					
															31.0.0}	00.0.6]	w.38	01.0%	01,036	00.1%	00,3%	00.0%	69.2%	69.7%	70.2%	70.6%	71.0%	71.3%	71.7%	72.0%
stnentqupe to believe laukie or on, mutor for equipment	and techn	atony at a	and of 35	NOO F DOOR	a polani	4																								

Internal rate of return (no residual value for equipment and technology at end of 55—year concession)
Futble sector (ps = 30)
Findisp(Public quity and committee detentions (after tax) 4.56% 10.79% Quebec.—Ontario High Speed Rail Project Final 300 Composite (via Mirabel) Quebec.—Windsor Corridor Government share of capital costs

#### In millions of inflated dollars

	Present		Pre-co	net uotion		т		Con	et uellen s	nd Blatt-	uo			1																					
	Value	1295	1996			1996	e 1999	2000	2001	2002	2003	2004	Total	2005	2006	2007	2008	2009	2010	Po c c l	251-1			Full Ope											
infrast solute and civil works			-			1							1544			20,	200	200	2010	2011	2012	2013	2014	2015	2018	2017	2018	2019	2020	2031	2022	2023	2024	2025	Total
Construction period interest substay	(echnology																																		
Equipment and technology	hoology hoology		٥																																
Construction period inferest subsidy	493	0	٥	٠	,	، ا	0 14	46	117	234	330	361	1, 104	٥	0	0	o	٥	o	٥	0	0	۰	0											ŀ
Initial sponsor					İ	1			1						ĺ										-	1	Ĭ	Ĭ	Ĭ	ď	٩	1	٩	0	٥
Share capital	159	137	٥		13	7 (	0	0	0	٥	0	۰	0	٥	a	٥	٥	0	0	٥	0	٥	٥	0	0	٥	0			,					
Annual subsidy	3,203	0	٥	•		• (		0	o	٥	o	٥	0	eds	666	968	855	956	956	966	966	965	966	866	806	966	866	ess	956	966	964	966	ess	055	18, 153
Takion	(490)	0	٥	G	1	٥	٥	0	Q	0	۰	0	٥	(2 <del>0</del> )	(27)	(26)	(25)	(47)	(47)	(53)	(108)	(150)	(180)	(215)	(248)	(261)	(313	(353)	(300)	(250)	(201)	(347)	(3666		(4,163)
Dividends	(148)	0	0	G	1	9	٥	0	0	0	0	0	۰	(17)	(20)	(24)	(26)	(31)	(35)	(41)	(42)	(40)	(50)	(55)	(82)	(89)	(72	(73	(62)	(96)	(32)	(33)	(36)	(419)	(970)
Lease payments	(1,254)	0	0	Q		• •	0	0	0	٥	۰	0	٥	(103)	(122)	(142)	(१६व)	(163)	(209)	(243)	(253)	(272)	(297)	(331)	(367)	(411)	(45-0	(508)	(010)	(255)	(1,002)	(1,140)	(1,206)	(1,277)	(10,546)
Total per annum		137	0		-	41	160	406	676	915	1,097	1,127		717	597	674	546	606	575	529	403											-		(	(10,010)
Yotal cumulativa		137	137	137	13	7 41	202	50e	1,264	2,200	3,297	4.414	4,414	717	1.414	2,096	2,734	3,340	3,915	4444		398	339	263	184	105	27	(68)	(416)	(434)	(536)	(655)	(765)	(868)	-
Present value with laxes (cumulative)					12	]					.,,,,,		2 440	1		1,000		*****	7,910	4444	4,906	5,304	5,543	5,905	6,095	6,200	6,226	0,159	5,741	5,306	4771	1,115	3,351	2,483	

Contribution of public sector before break-even point in cash flow is achieved

Total nel confibution with taxes

Present value without taxes formulative

10,709 12,913

Total and contribution without taxes

Present value of contribution with taxes 3,997

Present value of contribution without laxes 4.346

#### In millions of 1993 constant dollars

	Present	·	- Pt	e-can	ruellon	•			Con	at uction a	and Olas I				,																					
	Value		995	1996	1997	Total	1996	1999			2002		T	Total	2005										Full Ope	ations										
Intrast uch a and civil works		1				111.		1200	1000			2003	يم	1000	2000	2006	2007	2008	2009	5010	2011	2012	2013	2014	2015	2015	2017	2018	2019	2020	2021	2022	2023	2024	2025	Ŧo
Constuction period interest superdy	1,275	s	a	٥	0	٥		123	291	442	522	583	553	2,530	۰	a	c				,															
quipment and technology				1															Ī	Ĭ	Ĭ	. "	ĭ	ď	۰	0	.0	۰	٥	٥	٥	۰	٩	0	٥	
onatuctor period interest subsidy	395	5	0	0	0	٥		11	39.	85	179	245	251	624	۰	0		c	٥	اء				ا		_		<b>l</b> .						I		
Rillal spotser												1				:		,		1	Ĭ	ŭ	Ĭ	Ĭ	٦	٥	°	l °		٩	٥	٥	. 0	٥	0	
Share capital	115		120	٥	e	129	٠	٥	o	۵	0	٥			۰	0	0	a	٥	٥		0						١.	]							
inhus) subsidy	1,954	4	0	0	o	0	٠	0	0	٥	0	٥		,	607	590	572	556	540	524	509	494	479	405	452	439	426	414	401	390	٥	٩	9	٥	0	
LETON	{253	*	0	٥	c	0	۰	0	٥	0	0	٥			(20)	(18)	(17)	(10)	(29)	(20)	(31)	(62)	(83)	(97)	(113	(126)	(136)			(17-6	37ti	367	357	346	3:36	1
ividends	(62	1	0	Đ	a	0	٠	0	٥	0	٥	0			(12)	(19	(15)	(18)	(19)	(21)	(24)	(24)	(25)	(27)	(29		(34)	1	(10-4)	(1749	(113)	(110)	(143)	(155)	(163)	(
oaso payments	(874	9	0	٥	a	٥	٥	•	0	G	٥	٥	۰	-	(73)	(83)	(9-9)	(107)	(114)	(127)	(143)	(144)	(151)	(160)	(173)	(186	(202)	``	(235)	(367)	(36)	(19	(14)	(14)	(15)	
folst per annum			129	0	0	-	36	134	330	534	702				503	475	445	415	378	346	201	254	220			(,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	(202)	(419)	(235)		(418)	(+62)	(470)	(493)	(496)	(4
Total cumulative			129	129	129		36	170	500	1,634	1,736	2,545	3,359		503	977	1,423	1,636	2,215	2,563	311	t		182	137	96	52	13	(31)	(186)	(190)	(227)	(270)	(306)	(337)	
Prosest value with taxes (cumulation)								-	1								1,163	,,036	2,215	2,563	2,074	0.138	3,350	3,540	3,677	3,773	3,825	3,637	3,606	3,515	3,426	3,201	2,931	2,625	2,200	_

Prosent value with taxes (cumulative) Present value without taxes (complative)

118

1,670 1,670

2 182

942

1,393

1,911

Contribution of public sector before treak-even point in cash flow is schleved

Total nel contibution with large

7,294

Total not contibution without layer Present value of contribution with leaves 2,658

Present value of contribution without laxes 3,046

1,205

Quebec-Ontario High Speed Hail Project Final 300 Composite (via Mirabel) Quebec-Windsor Corridor Statistics and financial ratios (In millions of inflated dollars)

2005	2008	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
11.6	120	123	126	12.9	13.2	13.5	13.8	14.1	14.4	14,8	15.1	15.5	15.8	16.2	16.5	18.9	17.3			
N/A	231%	231%	2.31%	2.31%	231%	2.31%	2.31%	2.31%	2.31%	2.31%	2.31%	2.31%	231%	231%	231%	2.31%				
\$1,148	\$1,215	\$1,295	\$1,359	\$1,438	\$1,521	\$1,609	\$1,702	\$1,800	\$1,904	\$2,014	\$2,130	\$2,253	\$2,383	\$2,521	\$2,666			- 1		\$3,529
N/A	5.78%	5.78%	5.78%	5.78%	5.78%	5.76%	5.78%	5.78%	5.78%	5.78%	5.78%	5.76%	5.77%	5.77%	5,77%	5.77%			-	
\$450	\$467	\$484	\$500	\$517	\$535	\$554	\$573	\$595	\$61B	\$642	\$876	\$704	\$733	\$764	\$795	\$830	\$865		·	
N/A	3.65%	3.68%	3.37%	3.40%	3.42%	3.45%	3.48%	3.84%	3.85%	3.97%	5,27%	4.12%	4.16%	4.21%	4.05%	4.35%	4.41%	4.48%	• • • • • • • • • • • • • • • • • • • •	
· (\$856)	(\$866)	(\$860)	(\$966)	(\$866)	(\$866)	(\$866)	(\$866)	(\$865)	(\$966)	(\$868)	(\$866)	(\$966)	(\$869)	(\$866)	(\$866)	(\$856)	(\$866)	(\$866)		
\$103	\$122	\$142	\$166	\$183	\$209	\$243	\$253	\$272	\$297	<b>\$</b> 331	\$367	\$411	\$454	\$508	\$816	\$955	\$1,089	\$1,140	, ,	1 ""
\$516	\$536	\$555	\$573	\$585	\$505	\$611	\$614	\$615	\$624	\$618	\$606	\$595	\$600	\$593	\$243	\$296	\$30	\$12	\$0	\$0
39.23%	38.44%	37.68%	36.82%	35,99%	35.19%	34.41%	33.67%	33.05%	32.45%	31.69%	31,74%	31.24%	30.77%	30.31%	29.82%	29.42%	29.04%	28.68%	28.35%	28.05%
\$98	\$101	\$104	\$108	\$112	\$115	\$119	\$123	\$128	\$132	\$136	\$\$41	\$140	\$151	\$156	\$161	\$167	\$172	\$178	\$184	\$190
\$65	\$62	\$59	\$56	\$53	\$50	\$46	\$44	\$42	<b>\$39</b>	\$36	\$33	\$29	\$26	\$22	<b>\$</b> 3	, (\$5)	(\$13)	(\$15)	1519	
66.40%	d).28%	56.33%	51,48%	47.52%	43.19%	38.70%	36.03%	32.99%	29.88%	26.58%	23.41%	20.18%	17.29%	14.21%	1.89%	-3.17%	-7,47%	6.68%		1 "-1
	11.6 N/A \$1,148 N/A \$450 N/A (\$860) \$103 \$516 39.23% \$99	11.8 12.0  N/A 2.31%  \$1,149 \$1,215  N/A 0.78%  \$450 \$467  N/A 3.65%  (\$8669 \$103 \$122  \$510 \$530  39.23% \$6.44%  \$99 \$101  \$455 \$52	11.8 12.0 12.3 N/A 2.31% 2.31% 2.31% 2.31% 2.31% 4.1,148 \$1,215 \$1,285 N/A 8.78% 5.78% 3.68% 3.68% 3.68% 3.68% 3.68% 3.68% 3.555 39.23% 38.44% 37.68% 3.98 \$101 \$104 \$65 \$65 \$62 \$550	11.8 12.0 12.3 12.6 N/A 2.31%	11.6 12.0 12.3 12.5 12.9 N/A 2.31% 2.31% 2.31% 2.31% 2.31% 2.31% 1.148 \$1,215 \$1,295 \$1,399 \$1,438 N/A 5.76% 5.76% 5.76% 5.76% 5.76% 5.76% 5.76% 5.76% 5.76% 5.76% 5.76% 5.76% 5.76% 5.76% 5.576% 5.76	11.6 12.0 12.3 12.6 12.9 13.2 N/A 2.31% 2.31% 2.31% 2.31% 2.31% 2.31% 2.31% 2.31% 2.31% 1.148 \$1,215 \$1,295 \$1,359 \$1,438 \$1,521 N/A 5.78% 5.78% 5.78% 5.78% 5.78% 5.78% 5.78% 5.535 N/A 3.65% 3.65% 3.37% 3.40% 3.42% 3.42% (\$900) (\$900	11.8 12.0 12.3 12.5 12.9 13.2 13.5 N/A 2.31% 3.76% 3.76% 3.76% 3.76% 3.76% 3.40% 3.42% 3.42% 3.45% 3.4	11.8 12.0 12.3 12.6 12.9 13.2 13.5 13.6 N/A 2.31% 2.31	11.8 12.0 12.3 12.5 12.9 13.2 13.5 13.8 14.1 N/A 2.31%	11.8 12.0 12.3 12.6 12.9 13.2 13.5 13.8 14.1 14.4 N/A 2.31%	11.8	11.8	11.6	11.8	11.6 12.0 12.3 12.6 12.9 12.2 13.5 13.6 14.1 14.4 14.8 15.1 15.5 15.8 16.2 N/A 2.31%	11.8 12.0 12.3 12.6 12.9 13.2 13.5 13.8 14.1 14.4 14.8 15.1 15.5 16.8 16.2 16.5 N/A 2.31%	11.8 12.0 12.3 12.6 12.9 13.2 13.5 13.6 14.1 14.4 14.8 15.1 15.5 15.8 16.2 16.5 16.9 N/A 2.31% 2	11.8 12.0 12.3 12.5 12.9 13.2 13.5 13.6 14.1 14.4 14.8 15.1 15.5 15.8 10.2 16.5 16.9 17.3 N/A 2.31% 2.	11.6 12.0 12.3 12.6 12.9 13.2 13.5 13.6 14.1 14.4 14.8 15.1 15.5 15.8 16.2 16.5 16.9 17.3 17.7 N/A 2.31% 2.3	11.8 12.0 12.3 12.5 12.9 13.2 13.5 13.8 14.1 14.4 14.8 15.1 15.5 15.8 15.2 15.5 16.9 17.3 17.7 18.1 N/A 2.31% 2.31

Financial ratios																					
	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
Capital structure ratios Percentage of capital assigned to intrastructure notes	65.62%	66.25%	66.70%	67.35%	67.05%	67,73%	58.40%	68.95%	68.39%	69.10%	69.72%	70.08%	59.41%	70.13%	70.5 <b>6</b> %	71.24%	70.66%	71,39%	71.42%	69.84%	68.03%
Percentage of capital assigned to aquipment notes	24.19%	24.27%	24.34%	23.95%	24.45%	23.60%	22.46%	21,33%	21.05%	19.12%	16.93%	14.70%	13.42%	9,97%	5.98%	4.81%	4.49%	1.90%	0.00%		
Percentage of capital assigned to debenture holders	9,29%	9.42%	9.54%	9.68%	9.70%	9.66%	10.03%	10.18%	10.21%	19.41%	10.62%	10.80%	10.84%	11.51%	11.41%	11.68%	11.81%	0.00%	0.00%	0.00%	0.00%
Percentage of cepital assigned to share holders	0.90%	0.05%	0.00%	9.00%	0.00%	0.00%	0.00%	0.00%	0.35%	1.37%	2.72%	4.41%	6.33%	8.79%	11.76%	12.28%	13.03%	26.70%	28.58%		
Debt to equity ratio for operating company			I	1											11,747	, E Ka/6	13.03%	20.70%	26.58%	30.16%	31.97%
Actual	2.72	2.94	3.13	3.19	3.33	3.18	2.90	2.60	2.39	1.99	1.61	1.27	1.06	0.75	0.48	0.43	0.41	0.29	0.22	0.21	0.21
Maximum permitted	4.00	4.00	4.00	4.00	4.96	4.00	4.00	4.00	4.00	4.00	4.00	4,00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	
Interest coverage operating company			Į											***		4.00	4,00	4.00	4.00	4.00	4.00
Senior debt	1.75	1.78	1.83	1.88	1.96	2.01	213	2.27	2.42	2.53	2.74	2.97	3.24	3.47	3.88	N/A	N/A	N/A	N/A	N/A	N/A
Percentage payoutratio (including lease payments)	37.01%	37.76%	38.66%	39.81%	40,50%	41.45%	43.39%	43.86%	44.88%	45.83%	47.78%	49,78%	51,94%	53.57%	56.06%	80.61%	79.87%	78.72%	79,49%	80.00%	80,00%
Gross margin	60.77%	61.56%	62.32%	63.18%	64.01%	64.81%	65.59%	56.33%	66.95%	67.55%	68.11%	68,26%	68.76%	69.23%	69.69%	70,18%	70.58%	70.96%	71.32%	71.65%	71.95%
floots a turn on invested capital	8.19%	8.70%	9.22%	9.85%	10.15%	10.06%	11.64%	11.98%	12.25%	12.99%	13.78%	14,56%	15.22%	16.20%	17.27%	18.29%	20.44%	24.76%	26.09%	- 1	- 1
Pre tax return on convertible unsecured debentues	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%	9,00%	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%	0.00%	0.00%	0,00%				27.29%	29.59%
Pre taxretum on where capital	12.66%	14.87%	17.39%	20.33%	22.34%	25.58%	29.76%	30.92%	33.29%	36,34%	40,49%	44,90%	50.30%	52.25%	53.39%	1	0,00%	NA	N/A	33/4	N/A
After tex return on a quity (operating company)	- 8.05%	- 5.89%	3.21%	0.23%	2.78%	5,56%	10,44%	12.29%	13.66%	15.37%	10.77%	17.54%			THE PERSON NAMED IN	59.97%	62.95%	23,25%	24.34%	25.79%	27.26%
Cash flow/ total debt outstanding (operating company)	3.84%	5,19%	6.63%	8,40%	9.53%	11.72%	14.60%	16.88%	16.84%	23.28%			17.80%	17.70%	17.37%	7.23%	8.76%	16.79%	17.13%	17.78%	18.27%
					3.4070	71.7676	.4.00%	10,00%	10.84%	23.28%	29.70%	38.30%	46,45%	68.44%	N/A	N/A	N/A	P4/A	NyA	N/A	N/A

## High Speed Rail Project

### Financial Analysis Final Report February 24, 1995

# Appendix 3

### Financial Projections - Scenario 2: Full Corridor 200 kph (via Dorval)

- 1. Report on Financial Projections
- 2. Notes on Basis of Preparation
- 3. Projected Balance Sheet (Combined Public Financing Entity and Construction and Operating Company)
- 4. Projected Statement of Operations (Segregated as Between Construction and Operating Company and Public Financing Entity
- 5. Investment Returns (2005-2025)
- 6. Capital Structure (2005 and 2025)
- 7. Public Sector Annual Contributions (Government Share of Capital Cost)
- 8. Statistics and Financial Ratios

ENERGY.

1250 René-Lévesque Blvd. West 35th Floor Montreal (Quebec) H3B 2G4 (514) 938 5600 Telecopier (514) 938 5709

Appendix 3

# Price Waterhouse

October 24, 1994

### Report on Financial Projection

To the Project Manager

Re: Scenario 2 - Full Corridor 200 kph (via Dorval)

The accompanying financial projections of the HSR Project, consisting of projections of the balance sheets and of the statement of operations, has been prepared using assumptions and hypotheses provided by consultants engaged by the Project Manager. Our examination was made in accordance with the applicable Auditing Guideline of The Canadian Institute of Chartered Accountants. We have no responsibility to update this report for events and circumstances occurring after the date of our report.

In our opinion, as at the date of this report, the assumptions and hypotheses that we have used are consistent with those developed by the aforenoted consultants.

Since this projection is based on assumptions and on hypotheses regarding future events, actual results would vary from the information presented and the variations may be material. Accordingly, we express no opinion as to whether the projections could be achieved. The projections have been prepared in accordance with accounting policies deemed to be appropriate for a HSR Project.

Chartered Accountants

Prie Waterhause

#### Note on Basis of Preparation

The projections were prepared in accordance with generally accepted accounting principles relating to measurement, presentation and disclosure of financial projections. The projections reflect the judgment of various consultants and are consistent with the purpose of the information but are not necessarily the most probable set of industry, regulatory and economic conditions and planned courses of action given these conditions and uses of assumptions, hypotheses with an effective date of September 30, 1994.

#### Significant Assumptions and Hypotheses

#### 1. Inflation

Current dollars are inflated at a rate of 3%.

#### 2. Interest on Infrastructure and Civil Works Notes

The interest rate used for the Infrastructure and Civil Works Notes is based on a government of Canada cost of 30-year funds, which is assumed to be 8.5% per annum, plus 50 basis points.

#### 3. Interest on Equipment and Technology Notes

The interest rate used for the Equipment and Technology Notes is based on LIBOR for 15-year funds, which is assumed to be 8.5%, plus 250 basis points.

#### 4. Interest on Convertible Subordinate Debentures

Interest on the convertible subordinate debentures is calculated at a basic rate of 9% (government of Canada cost of 30-year funds plus 50 basis points) and a maximum rate of 12.5% (government of Canada cost of 30-year funds plus 400 basis points), subject to the Project's cash flow, after deducting Debt Service on Equipment and Technology Notes and interest on short-term bank indebtedness

Base interest is capitalized and not paid throughout the Construction Period. Commencing in the Operating Period, base interest on the initial and capitalized balance of the Convertible Subordinate Debentures is paid annually. Excess interest, up to a maximum additional rate of 3.5%, is paid only if Project cash flow allocated to service the Convertible Subordinate Debentures exceeds the 9% base rate.

#### 5. Interest Rate on Bank Indebtedness

Interest on short-term bank indebtedness and overdrafts is assumed to be chargeable at 9% per annum.

#### 6. Repayment Period for the Infrastructure and Civil Works Notes

The Infrastructure and Civil Works Notes are repaid by way of equal annual instalments of principal and interest over a 35-year period starting with the first year of full operations in 2005.

#### 7. Repayment Period for the Equipment and Technology Notes

The Equipment and Technology Notes are repaid over a 15-year period beginning with the first full year of operations in 2005 using an Annual Sum-of-the-Years'-Digits method, such that payments in later years are greater than those in earlier years.

#### 8. Conversion of Convertible Subordinate Debentures

The debentures are convertible at the holder's option, on a dollar-for-dollar basis, into Share Capital.

#### 9. Share Capital

Share capital consists of common shares.

#### 10. Lease Payments to Public Financing Entity

The Public Financing Entity is assumed to enter into an operating lease for the rental of the Infrastructure and Civil Works to the Construction and Operating Company for a term of 35 years based on Project cash flows. Each annual lease payment is calculated by applying percentage of the initial Infrastructure and Civil Works Notes principal amount as a function of total long-term liabilities to 80% of Project cash flow, after deducting Debt Service on the Equipment and Technology Notes, interest on bank debt and base interest on convertible subordinate debentures.

#### 11. Dividends

Dividends are paid to the shareholders on a pari passu basis with lease payments to the Public Financing Entity and excess interest on the Convertible Subordinate Debentures. The amount of Project cash flows allocated to pay dividends is determined by applying a percentage to 80% of Project cash flows, after deducting Debt Service on Equipment and Technology Notes, interest on short-term bank indebtedness and base interest on the Convertible Subordinate Debentures. The applicable percentage is a function of the par value of share capital as it relates to total long-term liabilities (Equipment and Technology Notes and Guaranteed Infrastructure and Civil Works Notes) and share capital.

#### 12. Fixed Assets and Depreciation

Equipment and Technology are recorded at cost, net of the Construction Period Interest Subsidy, and are depreciated on a straight-line basis at a rate of 4%.

Infrastructure and Civil Works are recorded at cost, net of the Construction Period Interest Subsidy and are depreciated on a sinking fund basis using a rate of 8% per annum.

#### 13. Income Taxes, Capital Taxes and Large Corporations Taxes

The effective tax rates for the HSR are projected at 40% for income taxes, 0.2% for large corporations taxes and 0.4% for provincial capital taxes.

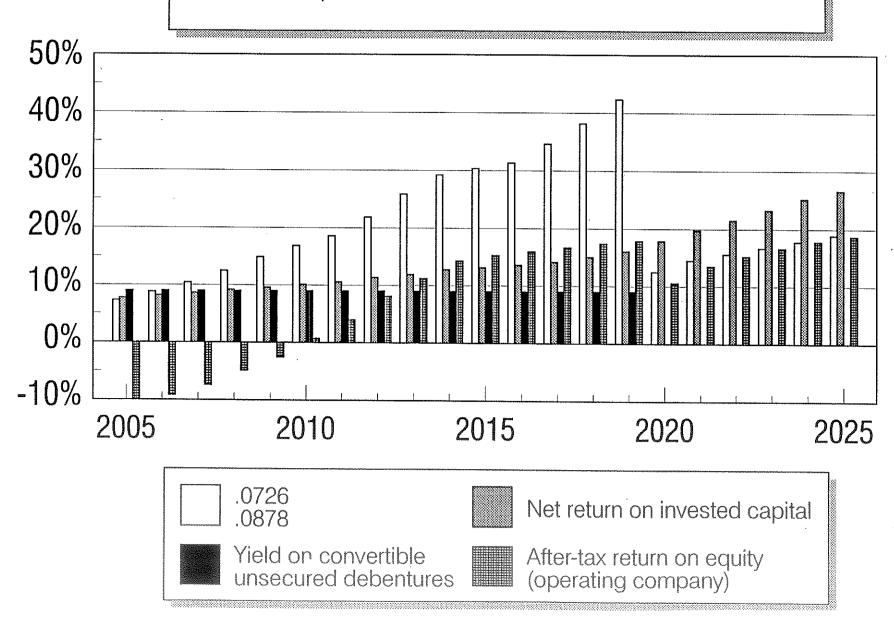
The Infrastructure and Civil Works Notes do not give rise to capital or large corporations taxes as they are obligations of the Public Sector Financing Company.

#### 14. Other Assumptions and Hypotheses

Assumptions and hypotheses contained in the reports prepared by Price Waterhouse, SNC, IBI, CIGGT, Canarail and KPMG are incorporated by reference into the projections underlying the Financial Analysis. It is essential for the reader to have a detailed understanding of such reports and assumptions in order to understand the projections.

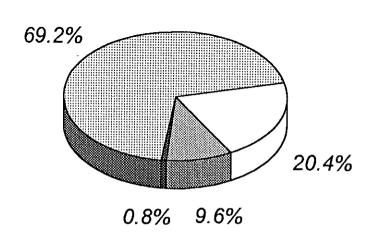
# **Quebec-Ontario High Speed Rail Project**

Full Corridor 200 Kph (via Dorval) *Investment Returns - 2005-2025* 

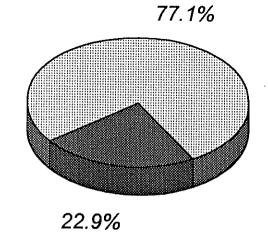


# **Quebec-Ontario High Speed Rail Project**

Full Corridor 200 kph (via Dorval) Capital Structure



2005



2025 Infrastructure and Civil Works Convertible Debentures Notes Equipment and Technology Share capital and retained Notes earnings

Quebec - Ontario High Speed Rail Project 200 Kph Composite (via Dorval) Quebec - Windsor Corridor Balance Sheet (in millions of inflated dollars)

	Pre	-constru	clion	r		Congrue	tion and S	itari –up							· · · · · · · · · · · · · · · · · · ·					6	l Operation										
	1995	1996	1997	1996	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2011			2017	2018	2019	2020	2021	2022	2023	2024	2025
Assels Current assets										İ								-													
Cash Accounts receivable	\$217	\$175	\$61 0	\$400 0	\$333	\$93	<b>5</b> 0	\$0	50	\$0	\$0	\$0 51	50	\$0 53	\$0	\$0	\$0	\$0	50	\$0	so	\$0	50	\$0	\$0	\$0	\$0	160	so	\$o	\$250
Supplies and other inventore a	Ď	ŏ	Ö	ő	ŏ	0	ő	ő	100	500	206	212	219	225	232	56 236	57 246	59 253	60 261	62 269	63 277	65 265	56 294	303	70 312	72 321	73 331	75	77	79	81
Proposid expenses	217	175	61	0 400	333	0	0	0	6	20	21	21	22	23	23	24	25	25	26	27	26	29	29	303	31	321	331	940 94	351 35	361 36	372 37
"Fixe d Assets at cost	"	"	, ,,	700	333	93	١	ı "	112	232	276	264	292	301	310	319	329	337	347	367	368	376	390	401	419	425	437	450	469	476	740
Infrastructure and civil works				ŀ					ł	- 1												- 1	ŀ	-			1	l			
Landand Right - of -way Earthy orks/subgrada	.!	3	15 58	131	327	148	167	467	467	467	467	467	467	467	467	467	467	467	467	467	467	467	467	467	467	467	467	467	467	7.00	467
Stations	1 4	27 0	10	169 12	466 18	1,045 69	1,517	1,654 294	1,654 475	1,654 475	1,654	1,654 475	1,654	1,654	1,654 475	1,654 475	1,654 475	1,654 475	1,654	1,654	1,654	1,654	1,654	1,654	1,651	1,654	1,654	1,654	1,654	1,654	1,654
Maintenance facilities	3	6	6	9	13	51	126	219	354	354	351	354	354	354	354	354	354	354	475 354	475 954	475 354	475 364	475 354	475 354	475 354						
Other accommodations Bridges	5	10	3	8 89	51 228	124 490	148 634	148 678	149 678	149 678	148 678	148 679	148	148	146	148	140	148	148	149	- 148	140	148	140	148	140	149	146	148	148	148
Grade separations	7	14	26	71	211	629	990	1,106	1,106	1,106	1,106	1.106	678 1,106	578 1,106	678 1,106	678 1,106	679 1,106	678 1.106	676 1.106	678 1,105	679 1,106	678 1,106	679 1,106	670	676	67B	679	578	678	670	678
Track Delore distart up and other coats	0	. !	7	22	54	170	472	622	1,029	1,097	1,037	1,037	1,007	1,097	1,097	1,097	1,037	1,037	1,037	1,097	1,037	1.037	1,037	1,106	1,106	1,106	1,106	1,106	1,106	1,106	1,106
•	36	71	153	520	1,415	3,069	4,502	5,530	6,113	256 6,175	256 6,175	256 6,175	256 6,175	256 5,175	256	256	256	256	255	256	256	256	256	256	256	256	256	256	256	256	256
Capitalized interest	a	0	ő	36	173	490	983	1,584	2,256	2,935	2,935	2,935	2,935	2,935	6,175 2,995	6,175 2,935	6,175 2,935	6,175 2,935	6,175 2,935	6,175 2,935	6,175 2,935	6,175 2,935	6,175 2,935	6,175 2,935	6,175 2,935	6,175 2,935	6,175 2,935	6,175 2,935	6,175 2,935	6,175	6,175
Construction period interest subardy Inflation adjustment	0 2	0	16	(36)	(173) 240	(490) 626	(989) 1,037	(1,594) 1,320	(2,256) 1,520	(2,935) 1,544	(2,935)	(2,935)	(2,935)	(2,935)	(2,935)	(2,935)	(2.935)	(2,995)	(2,935)	(2,935)	(2,935)	(2.935)	(2,935)	(2,935)	(2,935)	2,935	(2,935)	(2,935)	2,935	2,935 (2,935)	2,935
	36	77	169	594	1,669	3,698	5,639	6,850	7,633	7,719	7,719	7,719	7,719	7,719	7,719	7,719	1,544 7,719	7,719	7,719	7,719	1,544 7,719	7 710	1,544 7,719	1,544	1,544	1,544	1,544	1,544	1,541	1,544	1,544
Accumulated depleciation Net infrastructure and civilworks	36	77	159	594	1.000	0	. 0	0	0	0	(10)	(64)	(133)	(185)	(242)	(304)	(372)	(446)	(526)	(514)	(710)	7,719	(928)	7,719	7,719	7,719 (1,334)	7,719 (1,495)	7,719 (1,670)	7,719	7,719	7,719
Stort state of the Craft at V V2		"	103	264	1,663	3,696	5,639	6,950	7,633	7,719	7,679	7,635	7,597	7,534	7,477	7,415	7,347	7,274	7,193	7,105	7,009	6,905	6,791	6,667	6,532	6,385	5,225	6,050	5,659	5,651	5,425
Equipment and lectinology										I		I	į	- 1	1			ł		- 1			- 1							.	,,,,,
Power distribution system Signals	0	1	7	22	47 25	133	357 187	567 350	669	921	921	921	921	921	921	921	921	921	921	921	921	921	921	921	921	921	921	921	921	921	921
Communications	ő	ŏ	2	1,5	14	39	105	198	468 262	493 270	483 270	483 270	493 270	483 270	403 270	483 270	493 270	483 270	463 270	483 270	483 270	463	463	463	463	483	483	463	483	403	483
Light freight Rolling stock	0	0	0	0	0	0	0	0	0	173	173	198	169	169	189	189	205	205	205	205	229	270 229	270 230	270 247	270 248	270 248	270 264	270	270	270	270
Capital expenditures	0	0	11	34	73	207	554	1,034	1,366	1,429	1,429	1,429	1,429	1,429	1,548	1,546	1,546	1,546	1,669	1,663	1,663	1,663	1,733	1,733	1,733	1,733	1,850	264 1,850	265 1,650	2 <del>0</del> 1 1.850	261 1,850
	0	3	23	75	159	449	1,203	2,246	3,009	3,276	3,320	3,363	3,433	195 3,487	3,660	3,720	375	3,667	4,056	590 4,132	4,296	1321	846	942	1,044	1,152	1,267	1,369	1,518	1,655	1,800
Capitalized interest Construction period interest suberdy	0	0	0	o o	(12)	211	415	729	1,123	1,536	1,536	1,536	1,536	1,595	1,536	1,536	1,536	1,536	1,598	1,536	1,536	1,535	1,483	4,596 1,596	4,699 1,536	1,536	5,055 1,536	5,177 1,536	5,307 1,536	5,460 1,536	5,605 1,536
Inflation acjustment		0	3	11	27	(53) 94	(162) 295	(371)	(646) 975	(925) 978	(925) 976	(925) 965	(926) 985	(925) 985	(925) 1,056	(925) 1,056	(925) 1,067	(925) 1.067	(925) 1,152	(925)	(925)	(925)	(925)	(925)	(925)	(925)	(925)	(925)	(925)	(925)	(925)
Booting tate of the accounting	0	3	26	96	261	701	1,751	9,210	4,361	4,865	4,910	4,979	5,030	5,083	5,329	5,308	5,178	5,545	5,629	1,162 5,905	1,183 5,030	1,184 8,117	1,257 6,351	1,276 6,494	1,277 5,597	1,278 5,696	7,115	1,449	1,450	1,474	1,474
Accumulated depreciation Net equipment and technology	- <u>0</u>	- 0	26	96	261	701	1,751	2210	4700	1000	(193)	(392)	(593)	(796)	(1,010)	(1,225)	(1,444)	(1,666)	(1,899)	(2,135)	(2,377)	(2,621)	(2,975)	(3,135)	(3,358)	(3,666)	(3,951)	7,238 (4,240)	7,369 (4,535)	7,545	7,690 (5,144)
			20	500		701	1,731	3,210	4,961	4,865	4,717	4,587	4,436	4.297	4,316	4,163	4,033	3,879	3,930	3,770	3,654	3,495	3,476	3,349	3,109	3,030	3,164	2,998	2,634	2,708	2,546
Net fixed assets Fotal a scota	98 \$255	BO EMEE	194	680	1,924	4,398	7,390	10,068	11,995	12,564	12,396	12,222	12,029	11,821	11,796	11,578	11,381	11,153	11,123	10,875	10,663	10,401	10,267	10,017	9,721	9,416	9,369	9,048	8,693	8,359	7,970
LEATITION	- *e 35	\$255	\$255	\$1,081	\$2,256	\$4,491	*1,2690	<b>▶10,068</b>	≱ f2,†06	\$12,0161	₹12,671	¥12,506	<b>≨12,316</b>	\$12,122	\$12,105	\$11,097	\$11,709	\$11,490	\$11,470 1	11,232	\$11,031	10,779	10,657	\$10,418	\$10,134	\$9,840	\$9,626	\$9,497	\$0,150	\$6,638	\$9,710
Liabilities and Owners' Equity											İ			İ			}								İ						
Current liebilities Bank indebtedness	1 50	ŧn	\$0	\$0	\$0	•	100	500	6100			****			_ [	_ ,		-		-	1	ļ	ŀ		- 1			-	]	]	l
Accounts payable and accruais	0	0	%	90 0	0	\$0 0	\$38	962	\$199	\$306 24	\$274 65	\$296 65	\$295 56	\$209 66	\$461 67	\$442 67	\$444 68	\$411 68	\$578 69	\$526	\$514	\$455	\$533	\$492	\$405	\$537	\$650	\$443	\$218	\$13	\$0
Current portion of long—term debt	0	. 0	. 0	0		ō	ŏ	ō		o	60	62	106	129	153	177	505	226	253	260	70 307	72 335	72 363	73 303	74 423	75 147	76	77	78	79	90
•		0	l °	0	٥	Ö	90	90	210	330	398	446	467	483	681	667	714	707	901	975	891	962	968	958	902	759	161	175 694	191	206	227 307
Long-term tiabilities										l			- 1		- 1			- 1		- 1			- 1		-				~1	1,3-4	301
Equipment and technology noises Infrastructure and civil works noise	0	0	0	0	0	0	451	1,367	2.056	2,304	2,295	2,247	2,189	2,112	2,016	1,901	1,767	1,613	1,440	1,240	1,097	607	557	298	m	,m	, m	, m	[ _		
- 10 min model of the Charles   1000		0	0	231 231	1,332	3,483	5,736 6,189	7,395 9,761	8,513 10,569	8,721 11,025	8,680 10,965	8,636 10,883	6,566	9,536	8,479	0,416	6,349	8,275	0,194	9,106	8,011	7,906	7,793	7,569	7,504	7,366	7,226	7,051	6.950	6,652	(D) 6,426
Owners' Equity	"		ľ			i	0,112	0,701	10,508	14,023	10,505	10,063	10,777	10,646	10,495	10,317	10,115	9,000	9,634	9,355	9,040	6,713	8,349	7,957	7,534	7,366	7.226	7,051	6,060	6,652	6,426
Convertible unsecured debenture Share capital	0 255	0 255	0 255	595	669	753	847	969	1,072	1,206	1,205	1,206	1,206	1,206	1,206	1,206	1,206	1,206	1,206	1,206	1,206	1,206	1,206	1,206	1.206		a l	ا	اء	اء	ا
Retained earnings (deficit)	0	233 0	255	255 0	255 0	.255	255	255	255	255	255 (153)	255 (264)	255 (390)	255 (471)	255	255	255	255	255	255	255	255	255	255	255	1,461	1.461	1,461	1,461	1,461	1.461
	255	255	255	950	924	1,008	1,102	1,208	1,327	1,461	1,308	1,179	1,071	991	(532) 929	(569)	(582)	565 696	(527) 935	1,003	1,093	(257)	1,339	1,503	1.698	233	252	291	348	423	517
Total liabilities and owners' equity	\$255	\$255	\$255	\$1,081	\$2,258	\$4.401	\$7.000	\$10.068	Eto the	\$12.015	112 071	* 10 EOC	*10.046	-40 40c		1	1									1,695	1,713	1,752	1,609	1,864	1,978
	1			*	<del>*</del> ¢, £, 70 ]	97,461)		€10,000	# (K, K/G)	₽ 12,81 €	+12,0/1	\$ 12,500 ]	¥2,916	\$12,122	\$12,105	511,097	\$11,709	\$11,490	\$11,470 1	11,232	\$11,031	10,779	10,657	\$10,418	\$10,194	\$9,040	\$9,826	\$9,497	\$9,156	\$8,836	\$0,710
Dobt to equity ratio Permitted maximum	N/A	N/A	N/A	4.00	4001	4.001	4657	4.00	100	1.00	440																				
Actual	N/A	N/A	N/A N/A	9.00	0.00	4.00 0.00	4.00 0.59	1.00 : 1.66	4.00	4.00	4.00	4.00 9.08	4.00 9.35	4.00	4.00	4,00	4.00	4.00	4.00	4.00	4.00	4.00	1.00	4.00	4.D0	4.00	4.00	4.00	4.00	4.00	4.00
						5.50		,,,,,,		611	E.(1)	V-100 }	3.33	3.56	3.91	3.95	9.B6	3.63	3.50	3.05	2.62	2.16	1.83	1.45	1.09	0.99	1.06	0.92	0.78	0.65	0.62

Quebec-Ontario High Speed Rall Project 200 Kph Composite (via Dorvat) Quebec-Windsor Corridor Statements of Operations (in millions of initiated dollars)

•				,																										
	199	re-constr		1996	1999	Construct 2000	ion and Start u 2001 200	2 2003	2004	2005	2000	and T							Ful	Operation	10									
OPERATOR	1.00	1		1	3033	2000	2001 200	2003	2004	2005	2006	2007	2006	2009	2010	2011	2012	2013	2014	2015		2017	2018	2019	2020	2021	2022	2023	2024	2025
Provinces			ļ	1	1		- 1					1	- 1	- 1		i									2020	EUE I	2022	2023	2021	8050
Passenger revenues, constant dellars Less Agency commissions	1 8	0 \$4				\$0	\$0	0 \$52	\$150	\$633	\$549	\$665	\$682	\$699	\$716	\$734	\$753	\$772	\$791	\$811	****			- 1	f				- 1	
Less Credit card discount				2 2		0	0	이 예	(9)	(36)	(36)	(סיו	(37)	(36)	(39)	(40)	(41)	(42)	(43)	(45)	\$831 (46)	\$852	\$873	\$895	\$910	\$941	\$964	\$909	\$1,013	\$1,039
Net passenger revenues, constant dollars		ň	5	<del>(   </del>	1 2	0	0	0 (0)	140	(6)	(6)	(6)	(6)	(7)	(7)	`(r)	`@	m	77	(45)	(40)	(47)	(46)	(49)	(50)	(52)	(53)	(54)	(56)	(57)
			1	Ί ,	1 .	ľΙ	9	49	140	592	607	622	639	654	670	697	704	722	740	759	779	797	817	636	859	990	902	925	948	(10)
Net light freight revenues, constant dollars Inflation adjustment		0 (	0 (	) 0	0	e	o	اه اه	o	49	51	52	54	56	50						- 1	1			0.0.1	~~	302	960	940	972
Not reversion		0 (	2	0	0	0	. 0	0 17	54	273	908	346	366	429	475	524	577	533	66 693	68 757	70	72	75	n	79	62	85	87	90	92
	- 1 '	0 (	, ,	) 0	1 0	0	0	0 66	194	914	966	1,020	1,078	1,139	1,200	1,271	1,343	1.419	1,499	1,584	1,673	1,767	975	1,058	1,146	1,239	1,336	1,445	1,557	1,676
Operating Costs, constant deltars			1		i			1 1			- 1			- !			.,=		1,1.20	1,001	1,013	1,767	1,667	1,973	2,064	2,201	2,326	2,457	2,595	2,740
Labour	-   - (	0 0	) (	ه اد	l 0:	0	o	0 15	36	111	112							- 1								1		- 1		
Electricity Advantising/promotion	-   '	0 (	) (	0	0	0		0 1	2	15	15	113	115	116	117	118	119	120	121	122	123	124	125	126	127	129	130	131	132	122
Infratiructure mainterrance services	1 !	0 0	2	0	0	0	o l	0 4	6	13	13	13	13	13	12	10	16	17	17	17	17	18	18	18	16	19	19	19	20	130 20
infrastructure materials/supplies					0	0	0	0 2	6	16	16	16	16	15	15	14	14	14	131	13	13	13	13	13	13	13	19	13	13	13
Rolling stock materials/supplies	1 1	0 0		: :	1 0		0	이	1	2	5	2	2	2	3	a	9	3	3	17	7	14	14	14	14	14	14	14	14	14
Telecommunications/computer services	- 1 - 3			i ő	ا م		ň	XI :	3	12	12	12	12	12	13	13	19	13	14	14	14	141	15	15	11	12	14	15 16	17	19
Insurance service s/manchise less etc	-   - (	s - c	) (	· a	l ŏ.	0	ŏÌ	0 2	- 21	13	12	12	14	15	15	15	16	16	16	17	17	17	ie	18	18	19	19	20	16 20	17
Food/letated sundres Unscheduled materials/services	9	0	}	0	0	D	o	اة اه	0	2	2	12	اوً'	12	12	12	12	13	13	13	13	13	13	13	14	14	14	14	14	20 14
Propedy taxes	1 :	9	(	, o	0		٥	0 11	27	46	46	46	46	47	45	47	47	الإي	47	2	2	47	2	2	2	2	2	2	3	3
Contingency		5 6	1 6		1 %		0		0	0	0	0	٥	Q.	0	0	اه	اة	10	7	7	7/	17	47	40.	46	48	49	49	49
Foral operating costs, constant dollars		- T	0	1 6	<u> </u>	- 6	ŏ	41	95	18 259	18	18	18	18	10	18	18	18	19	19	19	19	20	20	20	0	20	21	0	0
Capital taxes	-	.1		l i	"		1	<u>"      "                              </u>	30	239	251	261	265	267	269	270	272	275	277	290	296	290	553	297	300	304	308	312	317	21 321
ingagen acknowns	9	2 0	9	0	0	0	D	0 0	0	15	15	14	13	13	12	10	11		اء	ا۔	_1						~~	3.2	3''	361
Total operating costs		()	·	- Ö	ļ ģ	. 0	0	0 14	37	110	122	135	149	101	175	190	205	221	239	10 256	9 279	299	9	9	7	7	7	7	7	8
	,	′] "	'l "	ľ	"	"	a	0 55	132	365	398	413	427	441	456	172	408	507	526	546	575	596	321 622	343 640	367	392	418	446	475	506
Gross operating cash flow		0	0	0	0	0	0	0 10	63	529	567	600							i			350	022	040	674	702	733	765	799	035
Large corpositions times					l	]	1	۱۳۱ ا	~1	Jes	207	600	651	698	747	796	955	912	973	1,097	1,098	1,170	1,245	1,325	1,410	1,499	1,593	1,692	1,797	1,905
income tales	1 9	}	0	0	0	0	0	c  o	0	е	7	. 7	7					اد		-		i			.,	.,,	,,,,,,,,	1,032	1.797	1,865
Net operating casts flow			0	0	0	0	0	0 0	0	0	0	ū	اهٔ	ă	0	22	23	22	22	74	. 5	5	- 1	4	3	9	3	4	4	4
	,	'  4	1 1	ľ	0}	0	0	0 10	63	522	560	601	645	691	741	772	826	995	946	956	126 968	159	185	216	292	200	188	206	220	251
interest on secured and bank debt		0 0	0		ا، ا			اء. ا	٠ا										V-10		900	1,006	1,055	1,105	1,115	1,296	1,401	1,482	1,565	1,650
Principal repayments on secured debt		0	ō	ľ		ő	ň	10	53	263	279	276 58	269	260	260	245	230	210	200	175	150	120	96	63	24	32				
Cash Row assistie to debenture holders, lease payments and dividends					1			<u> </u>		19	- 30	- 50	- 77	96	115	134	154	173	192	211	230	250	269	266	6	32	39	27	13	1
be huse and distributes	1 0	'  °	0	0	0	0	0	o  o	o	219	242	267	298	335	966	392	442	502	554	-								<del></del>		
Base interest on convertible debentures	1 .	ہ ا			ام ا						-				-		772	302	334	572	587	636	690	754	1,091	1,264	1,362	1,456	1,552	1,650
Excess cash flow a valleble for loans payments, exce	R63	·			— <u>"</u>	U		0	0	109	100	109	-109	109	109	109	109	109	109	109	109	109	109	109	_	_	- 1		ļ	1
interest on convertible debantures and dividends	0	0	0		o	.0	اه	0 0	۸	111	134	150	190									1,5-5	100	109	<u>-</u> -	- 0	- 0	- 0	D.	0
Legge payments			1	1			-	7	ı,	""	137	150	180	227	257	263	334	393	445	463	479	527	582	645	1.091	1.264	1,362	1,456	1,552	1,650
Excess interest on conventible debentures	0	9	0	0	0	0	o .	0 0	0	70	65	100	120	143	163	179	211	249	262	293					· 1	.,	,,	1,150	1,332	1,650
Dividende		ő	ة ا	ľ	,	9	0		악	0	0	0	0	0	0	Ö	o	0	202	293	303	394	368	408	690	600	962	921	902	1,044
Remidual cash flow for Operating Company	0	0	0	ŏ	ŏ	- 6	0	<u> </u>	81	22	22	.26	32	38	43	47	56	66	74	77	90	eĕ	97	100	162	211	0	0	0	0
Less: Equipment and technology depreciation					<sup>-</sup>	- 1	1	] "[	1	~	"	32	36	45	51	57	67	79	69	93	96	105	118	129	218	253	272	243	260	276
Add: Principal repayments on secured debt	0	0	0	0	0	0	0	0	οľ	(195)	(195)	(196)	(196)	(203)	203	(204)	(204)	510	. ا			1					47 C	521	3101	330
Add: Dividenda	"	1 %	0 0		0	0	9	0	0	19	36	59	77	96	115	134	154	(213) 173	(213)) 1 192	(214) 211	(214) 230	(220)	(222)	(222)	(222)	(231)	(234)	(234)	(236)	62361
Net income (loss) for Operating Company	0	1 0	1 7	1 - i	0	- 0	0	(	<u> Ş</u> l	19	22	26	32	36	43	47	56	56	74	77	230 50	250 88	269 97	266 106	0	0	0	0	0	` o ]
	1	1 -	ľ	*	ľ	ĭ,	"I	Ή "Ι	ا	(136)	(108)	(80)	(49)	(24)	7	34	72	105	143	167	192	223	261	303	182	211	220	243	260	276
PUBLIC FINANCE COMPANY infrastructure and civil works mierest subsidy	1 .	1 .	_		l				- 1	1			ļ		- 1				-	- 1				~~-	173	23,7	500	301	334	370
hierest on Government garanteed debt	0	0	0	0	ø	٥	0 +	0	0	(825)	(825)	(825)	(825)	(825)	(925)	(825)	(825)	(925)	لسا			- 1	1	- 1	.)	- 1			1	1
Lease payments	1 0	"	, ,	, n	, , , , , , , , , , , , , , , , , , ,	0	0	9	jo j	765	781	777	773	768	763	757	751	745	(825) 737	(925) 730	(825) 721	(825)	(825)	(825)	(825)	(825)	(825)	(852)	(925)	(825)
Depreciation on inha structure and civil works	Lő	ا ا	0	6	'n	0	0	0	ol.	70	86	100	120	143	163	179	211	249	262	293	303	712 334	701 960	690 400	679	565	650	635	617	599
Not income and cash flow of Public Finança Compan	y0	0	ă	ŏ	0	ő	ŏ ö	0		40	95	100	52	57	62	68	74	61	69	96	104	114	124	125	690 147	800 161	862	921	982	1,044
Senior debt coverage ratios	_						···· · · · · · · · · · · · · · · · · ·	· · · · · · · · · · · · · · · · · · ·				rou]	120	143	163	179	211	249	202	293	303	334	360	400	690	800	175	191 921	992	227
Equipment and technology notes - Actual	+	т				· · · · · · · · · · · · · · · · · · ·	. ,															-						ac i	3532	1,011
Equipment and technology notes - Required		]			1	- 1			- 1	1.75	1.79	1.62	1.03	1.96	1.99	2.11	2.23	2.36	2.48	2.60	2.B9	3.16	0.441	0.701						
								<u> </u>		1.75	1.75	1.75	1.75	1,75	1.75	1.75	1.75	1.75	1.75	1.75	1.75	1.75	3.41 1.75	3.78 1.75				V/A	N/A	N/A
Return on equity																					::1		1.70	1.73[	1.75	1.75	1.75	1.75	1.75	1.75
Operating company		1	L					I		-10.3%	-9.2%	-7.4%	-40%	-3 69	0.8%	200	0.00	4	····											
Not operating margin			-														8,0%		14.2%				17.4%	17.9%	10.5%	13.4%	15.2%	15.6%	17.7%	18.7%
· · · · · · · · · · · · · · · · · · ·	·		ł	L1			~l	1	L	57.9%	50.6%	59.6%	60.4%	61.3%	62.1%	62.9%	63.6%	64.3%	64.9%	65 5% T	65.7%.1	EE OO	66 my [	47						
Intermel make of return (no residual value for equipme	nt and lechr	ology at a	nd of 35	your conce	noion													- 110-70	7 110 10	- No I	201.1701	10.50	66.7%	67.2%	67.7%	66.1%	69.5%	69.9%	69.2%	69.5%
Lapic rector (his - fex)						***	2.57%																							
Private/Publice quity and convertible debentures (after tax)							9,36%																							

Quebec - Ontario High Speed Rail Project 200 Kph Composite (via Dorvel) Quebec-Windsor Corridor Government share of capital costs

#### in millions of inflated dollars

	Present	3	D	nstruction																															
	Value	1995							raction a															Full On-											
irir est voture and civil works	¥2.00	1995	1996	199	7 Total	1996	1999	2000	2001	2002	2003	2004	Total	2005	2006	2007	2008	2009	2015	2011	2012	2013	2014	Full Oper 2015	2016	2017	2018	2019	2020	202 1	2022	2023	2024	2025	Total
Construction period interest subsidy	1,307					36	134	318	492	601	672	580	2,935																						
Equipment and lechnology																'	. ]			٦	Ĭ	ď	· ·	٩	c	٩	.0	٩	٥	٩	٥	a	٥	0	٥
Constuction period interest subsidy	416		0	,	٥	٥	12	41	110	206	275	279	£25	۰	d		· c	٥																	+
initial sponsor		İ																-		Ĭ	1	Ĭ	Ů	ď	ů	ាំ	•	٩	•]	٩	٩	٥	٥	٥	0
Share capital	120	126	٥		126	۰	٥	0	٥	٥	0	0	0	۰	c	۰	٥	o	0	٥	٥	a				١									
Annual subsidy	3,053	0	۰		٥	٥	0	۰	6	۰	٥	٥	0	825	025	825	R25	825	625	825	825	925	825	625	025	925	825	625	925	925	825	-		٩	°
Тахов	(209)	٥	٥	,	٥	0	0	٥	٥	۰	٥	0	0	(23)	(22	(21)	(20)	(19)	(15)	(39)	(40)	(36)	ron	(69	(140	1	- 1	(228	(302)	(210		825	825	625	17,331
Dividends	(66)	۰	٥	(	۰	٥	0	0	٥	0	0	0	۰	(9)	(11)	(13)	(16)	(19)	(22)	(24)	(29)	(33)	(37)	(39)	(40	(44)	(,	15-6	(342)	(2)0	(190)	(217)	(23%)	{262)	[2,53-9]
Loane paymonts	(1,013)	۰	0	٠	0	٥	0	۰	•	۰	٥	0	۰	(70)	(85)	(100)	(130)	(143)	(163)	(179)	(510)	(249)	(202	(293)	(303	(33-6	, ""	(409)	(590)	(600)	(20)	(21)	(23)	(24)	(559)
Total per sanum		128	0			 36	146	359	602	810	947	956		723	708	691	989	644	622	583					1		(***)		(020)		(902)	(921)	(982)	(1,044)	(8,600)
Total cumulative	L		120	128	126		184	543	1,145	1,965	2,902	3,860	3,860	723	1,431	2,122	2,791	3,435	1,057	4 640	5,195	5,692	489 6.161	6,566	342 6,908	275	210	135	(183)	(203)	(255)	(334)	(418)	(505)	
Present value with laxes (cumulative)					107								1,612	]				-4.1.5	1997		7,00	5,092	4,101	0,006	6,908	7, 163	7,393	7,527	7,344	7,142	6,667	6,553	6 (34)	5,600	

Contribution of public sector before break-even point in cash (low is achieved

Total net contribution with laxes

12,747

117

Total pat contribution without laxes

Proson) value without taxes taxes (cumulative)

Present value of contribution with laxes 3,951

Present value of contribution without taxon 4,145

#### In millions of 1993 constant dollars

	Present Value		Pre-cor																																
Infrastructure and civil works	Atline							Cons	Tuellon an	d SI& I-1	<b>1</b> 0		7																						
		1095	1998	1997	Total	1998	1999	2000	2001	2002	2003	2004	Total	2005	2006	2007	2008	2000	2010	2011	2012	2013	2014	Full Cloer 2015	ations 2015	2017								****	
					l	1		- 1	-			]											2014		2016	2017	2016	2019	, 2020	2021	2022	2023	2024	2025	l'ate
Construction pertod interest subsidy	1,132	0	٥		0	30	113	256	369	461	500	491	2 244	اه		ا،		_	ا	_			- 1			- 1			- 1				- 1		
Equipment and lechnology									1		-	İ		1	1	٦	1	ď	٦	٩	٩	°	ាំ	٩	٥	٥	٥	0	٥	٩	٠	٥	0	٥	ь
Construction period interest subsidy	333	۰	0	٥	0	۰	10	33	87	160	205	201	696	۰		,	ا			ا				_				.						- 1	
(mida) aponser	l	-					İ			- 1	- 1				1		٦	Ĭ	١	ไ	٩	٩	ា	٩	ាំ	٥	٩	٥	٥	۰	0	0	٥	0	0
Shara capital	. 110	120	٥		120	٥	٥	۰	٥	٥	٥	٥	٥	0	۵	. ,		. ,									.		1			.	i		
Annual subsidy	1,672	0	٥	a		٥	٥	۰	0	٥	٥	0	٥	579	562	546	530	514	493	495	421	457	444	, "	418		. 0	٩	٥	0	٥	٥	٥	9	0
Tures	(150)	٥	0	٥	۰	٥	٥	0	٥	0	0	٥	٥	(16)	(15)	(14)	(13)	/12	(11)	(23)	(23)	707	(20	(47)	- 1	406	394	363	372	361	360	340	330	3350	9,190
Districtance	(51)	0	0	٥	٥	١	0	٥	۰	0	٥	۰	٥	(6)	(e	191	(10)	(12)	(13		(16)		(20)	(20)	(715	(85)	(95)	(108)	(136)	(92)	(8-9)	(69)	(96)	[102)	(1,109)
Lease payments	(54)	٥	0	۵	٥	۰	٥	٥	٥	اه	۵	٥	٥	(49)	(56)	766	(77)	rese	(99)	(105)	(120)	(136)	(151)	- 1	(20)	(22)	(23)	(25)	(7)	(6)	(9)	(9)	(2)	(9	(207)
Total per snoum		120	0	٥	-	33	122	292	475	521	705	692		507	492	467	430			(105)	(120)			(153)	(153)	(164)	(176)	(109)	(311)	(350)	(366)	(379	(393)	(405)	(3,993)
Folial cumulative		120	126	120		33	155	447	922	1,543	2,247	2,940	-	507	999	1,446	1,676	2,277	377	342	311	200	252	211	173	195	100	62	(82)	(89)	(108)	(136)	(167)	(196)	-
Proposi value with laxes (cumulative)					110							Γ	1,465				4070	24//	2,053	2,996	3,307	3,587	3,839	4,050	4,224	4359	4,450	4.522	4,439	4,351	4243	4, 105	3,936	3,742	

Present value without taxes taxes (cumulative)

Total net contribution with faxes

Total net contibution without large 8,152

Pratoni value of contibution with lanes 2,770 Present value of contribution without taxes 2,667

110 Conflibution of public sector before break-even point in cash flow is schlaved

1,465

1,912

1,130

1,200

1,765

2,071

Quebec—Onterio High Speed Rail Project 200 Kph Composite (via Dowal) Quebec—Windsor Corridor Statistics and financial ratios (In millions of Inflated dollars)

Statistics and general information	]																				
	2005	2005	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
flidership (in millions)	10.0	10.2	10.4	10.6	10.9	\$1.1	11,3	11.5	11.8	12.1	123	12.6	129	13.2	13.4	13.7	14.0	14,3	14.6	14.9	
Growth of ridership in percentage	N/A	2.15%	215%	2.15%	2.15%	2.15%	2.15%	2.15%	2.15%	2.15%	2.15%	2.15%	2.15%	2.15%	2.15%	2.15%	2.15%	215%	2.15%	215%	215%
Total operating revenues	\$914	\$966	\$1,020	\$1,078	\$1,139	\$1,203	\$1,271	\$1,343	\$1,419	\$1,499	\$1,584	\$1,673	\$1,767	\$1,867	\$1,973	\$2,084	\$2,201	\$2,326	\$2,457	\$2,595	
Growth of revenues in percentage	N/A	5.65%	5.65%	5.65%	5.65%	5.65%	5.65%	. 5,65%	5.65%	5.65%	5.65%	5,65%	5.65%	5.64%	5.64%	5.64%	5.64%	5.54%	5.54%	5,64%	5.56%
Total operating expenses	\$365	\$398	\$413	\$427	\$441	\$456	\$472	\$488	\$507	\$526	\$546	\$575	\$598	\$622	\$648	\$674	\$702	\$733	\$765	\$799	
Growth of expenses in percentage	N/A	3.57%	3.59%	3.36%	3.41%	3.43%	3.46%	3.48%	3.75%	3.77%	3.89%	5.18%	4.04%	4.08%	4.12%	3,98%	4.27%	4.32%	4.38%	4.44%	4,50%
Government funding	. (\$825)	(\$825)	(\$825)	(\$825)	(\$825)	(\$825)	(\$825)	(\$825)	(\$825)	(\$825)	(\$825)	(\$825)	(\$825)	(\$825)	(\$825)	(\$625)	(\$825)	(\$825)	(\$825)	(\$925)	(\$825)
Lease payment to Government	\$70	\$95	\$100	\$120	\$143	\$163	\$179	\$211	\$249	\$262	\$293	\$303	\$334	\$368	\$408	\$690	\$800	\$962	\$921	\$982	\$1,044
Debt service	\$411	\$426	\$442	\$455	\$465	\$483	\$499	\$492	\$492	\$501	\$495	\$489	\$478	\$473	\$459	\$24	\$32	\$39	\$27	\$13	\$1
Operating expenses to revenues ratio	42.08%	41.25%	40.44%	39.57%	38.73%	37.92%	37.13%	36.37%	35.72%	35,08%	34.50%	34.35%	33.83%	33.32%	32.84%	32.33%	31.91%	31.51%	31.13%	30.78%	30,47%
Revenues per passinger (A)	\$92	\$95	\$98	\$101	\$105	\$100	\$112	\$116	\$120	\$124	<b>\$</b> 128	\$133	\$137	\$142	\$147	\$152	\$157	\$162	\$158	\$174	\$179
Government funding (seturn) per passenger (B)	\$76	\$73	\$70	\$56	\$63	\$50	\$57	<b>\$5</b> 3	\$49	\$45	<b>\$</b> 43	\$41	\$38	\$35	\$31	\$10	\$2	(\$3)	(\$7)	(\$10)	(\$14)
B/A	82.63%	76.69%	71.08%	65.42%	59.88%	55.05%	50.81%	45.73%	40.63%	36.2 <del>0</del> %	33.51%	31.23%	27.81%	24.48%	21.14%	6.48%	1,16%	-1.58%	-3.90%	- 6.04%	7.98%

	2005	2005	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016									
- 11-4							E-01.1	EG, E	2013	8 2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	202
Capital structure ratios Percentage of capital assigned to intestructure notes	69.18%	69.77%	70.500	***									ł								l
manual of only manding to strategons to st	09,1070	09.77%	70.50%	71.23%	70.90%	71,67%	72.30%	73.09%	72.58%	73.40%	73.96%	74.82%	74.70%	75.33%	78.23%	77.15%	75.76%	76.70%	77.67%	78.34%	77.08
Percentage of capital assigned to equipment notes	20.45%	20.76%	20.75%	20.55%	21.38%	20,78%	20.14%	19,07%	19.22%	17.61%	15.07%	13.93%	12.65%	10.14%						70.017	11.50
Percentage of capital assigned to debenture holders	9.57%	9.70%						i	1	,,,,,,,	10.07/4	10.00%	12.00%	10.24%	6.89%	5.50%	6.67%	4.70%	2.40%	0.14%	0.00
A new reada on control sortification of departure (1010%) 2	9.57%	9.70%	9.85%	10.01%	10.02%	10,20%	10.36%	10.56%	10.58%	10.81%	11.00%	11.27%	11.40%	11.65%	11.99%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00
Percentage of capital assigned to share holders	0.81%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	1.26%	2.87%	4.89%						
Debt to equity ratio for operating company	i										4.0010	5.00/6	(.20/4	20170	4.69%	17.35%	17,57%	18.60%	19.93%	21.51%	22,92
and the admit a man (of obsessing opticities))										ı											1
Actas(	277	3,08	3.35	3.56	3.91	3.95	3.88	3.63	3,50	3.05	2.62	218	1.83	1.45	1.08						1
Maximum permitted	4.00	4.00	4.00					1					1.00	1.40	1.00	0.99	1,06	0.92	Q.7B	0.65	0.6
	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.0
nterest coverage operating company				İ	1	1						.									!
Senior debt	1.75	1.79	1.82	1,68	1,96													j			i
	1.77	1.10	1.02	1,00	1.90	1.99	211	2.23	2.38	2.48	2.68	2.89	3.16	3.41	3.78	N/A	N/A	N/A	N/A	N/A	N/
Percentage payoutratic (including lease payments)	37.77%	38,51%	39.15%	40,40%	41.92%	42.45%	43.45%	45,48%	47.83%	49.12%	50.00%	50,78%	52.75%	54,40%	56,56%						
Gross margin	57,92%	58.75%	59.56%	80.43%					- 1		00.0075	54,7076	UE. 10/8	34,40%	00,00%	78,26%	78.01%	77.77%	78.57%	79.33%	79.969
	37,86/6	36.75%	99.50%	80.43%	61.27%	62.08%	62.97%	63.63%	64.28%	84,92%	65.50%	65.65%	66.17%	66.68%	67.16%	67.67%	68.09%	68.49%	<b>68.67%</b>	69,22%	69,539
Swire turn on invested capital	7.72%	B.14%	8.61%	9.15%	9.53%	10.12%	10.57%	11.32%	11,89%	12.74%	13.11%	13.55%	14.11%	14,99%	16,03%	17.86%		1			
Pro haxestan on convertible unsecuad depentuses	9.00%	9,00%	9.00%	9.00%	A 8004							14.4475	14.712	14,9976	16,0,1%	17.86%	19.75%	21.55%	23.31%	25.14%	26.527
The state of the s	34.00276	9,00%	9.100%	9.UA7%	9.00%	9,00%	9.00%	9.00%	9.00%	9,00%	9.00%	9.00%	9.00%	9.00%	9.00%	N/A	N/A	N/A	N/A	N/A	N
Pre tax return on share capital	7.26%	8.78%	10.37%	12.45%	14.86%	16.68%	18.59%	21.88%	25.79%	29.20%	30.37%	31.38%	34,59%	38.15%	42.31%	12.48%			1		
After – is a return on equity (opera in g company)	-10.30%	9.18%	- 7.45%	- 4.95%	# 5777			į			,	01.0072	04.0076	30.13%	4231%	12.46%	14.46%	15.59%	16.66%	17,78%	18.869
	, 0.0078	8, 1076	-7.43%	- 4.93%	-2.57%	0.75%	3.91%	8.04%	11.20%	14.25%	15.27%	15.92%	16.66%	17.36%	17.86%	10.55%	13.43%	15.20%	16.61%	17.75%	18,715
Cash flow/total debt outstanding (operating company)	3.04%	4.26%	5,59%	7.20%	8.43%	10.28%	12.19%	15.24%	17.48%	21.67%	26.03%	32.59%	39,69%	55,26%					1		

## High Speed Rail Project

Financial Analysis Final Report February 24, 1995

### Appendix 4

#### Financial Projections - Scenario 3: Full Corridor 300 kph (via Dorval)

- 1. Report on Financial Projections
- 2. Notes on Basis of Preparation
- Projected Balance Sheet (Combined Public Financing Entity and Construction and Operating Company)
- 4. Projected Statement of Operations (Segregated as Between Construction and Operating Company and Public Financing Entity
- 5. Investment Returns (2005-2025)
- 6. Capital Structure (2005 and 2025)
- 7. Public Sector Annual Contributions (Government Share of Capital Cost)
- 8. Statistics and Financial Ratios

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Appendix 4

# Price Waterhouse

October 24, 1994

#### Report on Financial Projection

To the Project Manager

Re: Scenario 3 - Full Corridor 300 kph (via Dorval)

The accompanying financial projections of the HSR Project, consisting of projections of the balance sheets and of the statement of operations, has been prepared using assumptions and hypotheses provided by consultants engaged by the Project Manager. Our examination was made in accordance with the applicable Auditing Guideline of The Canadian Institute of Chartered Accountants. We have no responsibility to update this report for events and circumstances occurring after the date of our report.

In our opinion, as at the date of this report, the assumptions and hypotheses that we have used are consistent with those developed by the aforenoted consultants.

Since this projection is based on assumptions and on hypotheses regarding future events, actual results would vary from the information presented and the variations may be material. Accordingly, we express no opinion as to whether the projections could be achieved. The projections have been prepared in accordance with accounting policies deemed to be appropriate for a HSR Project.

Chartered Accountants

Price Waterhause

#### Note on Basis of Preparation

The projections were prepared in accordance with generally accepted accounting principles relating to measurement, presentation and disclosure of financial projections. The projections reflect the judgment of various consultants and are consistent with the purpose of the information but are not necessarily the most probable set of industry, regulatory and economic conditions and planned courses of action given these conditions and uses of assumptions, hypotheses with an effective date of September 30, 1994.

#### Significant Assumptions and Hypotheses

#### 1. Inflation

Current dollars are inflated at a rate of 3%.

#### 2. Interest on Infrastructure and Civil Works Notes

The interest rate used for the Infrastructure and Civil Works Notes is based on a government of Canada cost of 30-year funds, which is assumed to be 8.5% per annum, plus 50 basis points.

### 3. Interest on Equipment and Technology Notes

The interest rate used for the Equipment and Technology Notes is based on LIBOR for 15-year funds, which is assumed to be 8.5%, plus 250 basis points.

#### 4. Interest on Convertible Subordinate Debentures

Interest on the convertible subordinate debentures is calculated at a basic rate of 9% (government of Canada cost of 30-year funds plus 50 basis points) and a maximum rate of 12.5% (government of Canada cost of 30-year funds plus 400 basis points), subject to the Project's cash flow, after deducting Debt Service on Equipment and Technology Notes and interest on short- term bank indebtedness.

Base interest is capitalized and not paid throughout the Construction Period. Commencing in the Operating Period, base interest on the initial and capitalized balance of the Convertible Subordinate Debentures is paid annually. Excess interest, up to a maximum additional rate of 3.5%, is paid only if Project cash flow allocated to service the Convertible Subordinate Debentures exceeds the 9% base rate.

#### 5. Interest Rate on Bank Indebtedness

Interest on short-term bank indebtedness and overdrafts is assumed to be chargeable at 9% per annum.

#### 6. Repayment Period for the Infrastructure and Civil Works Notes

The Infrastructure and Civil Works Notes are repaid by way of equal annual instalments of principal and interest over a 35-year period starting with the first year of full operations in 2005.

#### 7. Repayment Period for the Equipment and Technology Notes

The Equipment and Technology Notes are repaid over a 15-year period beginning with the first full year of operations in 2005 using an Annual Sum-of-the-Years'-Digits method, such that payments in later years are greater than those in earlier years.

#### 8. Conversion of Convertible Subordinate Debentures

The debentures are convertible at the holder's option, on a dollar-for-dollar basis, into Share Capital.

#### 9. Share Capital

Share capital consists of common shares.

#### 10. Lease Payments to Public Financing Entity

The Public Financing Entity is assumed to enter into an operating lease for the rental of the Infrastructure and Civil Works to the Construction and Operating Company for a term of 35 years based on Project cash flows. Each annual lease payment is calculated by applying percentage of the initial Infrastructure and Civil Works Notes principal amount as a function of total long-term liabilities to 80% of Project cash flow, after deducting Debt Service on the Equipment and Technology Notes, interest on bank debt and base interest on convertible subordinate debentures.

#### 11. Dividends

Dividends are paid to the shareholders on a pari passu basis with lease payments to the Public Financing Entity and excess interest on the Convertible Subordinate Debentures. The amount of Project cash flows allocated to pay dividends is determined by applying a percentage to 80% of Project cash flows, after deducting Debt Service on Equipment and Technology Notes, interest on short-term bank indebtedness and base interest on the Convertible Subordinate Debentures. The applicable percentage is a function of the par value of share capital as it relates to total long-term liabilities (Equipment and Technology Notes and Guaranteed Infrastructure and Civil Works Notes) and share capital.

#### 12. Fixed Assets and Depreciation

Equipment and Technology are recorded at cost, net of the Construction Period Interest Subsidy, and are depreciated on a straight-line basis at a rate of 4%.

Infrastructure and Civil Works are recorded at cost, net of the Construction Period Interest Subsidy and are depreciated on a sinking fund basis using a rate of 8% per annum.

#### 13. Income Taxes, Capital Taxes and Large Corporations Taxes

The effective tax rates for the HSR are projected at 40% for income taxes, 0.2% for large corporations taxes and 0.4% for provincial capital taxes.

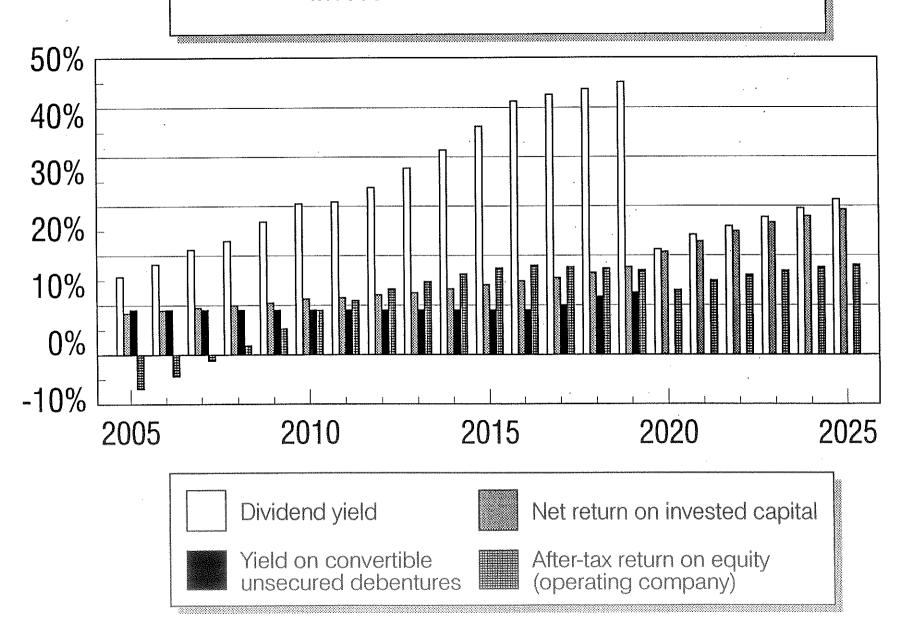
The Infrastructure and Civil Works Notes do not give rise to capital or large corporations taxes as they are obligations of the Public Sector Financing Company.

#### 14. Other Assumptions and Hypotheses

Assumptions and hypotheses contained in the reports prepared by Price Waterhouse, SNC, IBI, CIGGT, Canarail and KPMG are incorporated by reference into the projections underlying the Financial Analysis. It is essential for the reader to have a detailed understanding of such reports and assumptions in order to understand the projections.

# **Quebec-Ontario High Speed Rail Project**

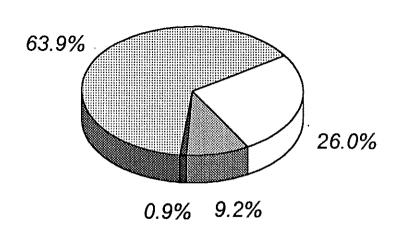
Full Corridor 300 Kph (via Dorval) *Investment Returns - 2005-2025* 

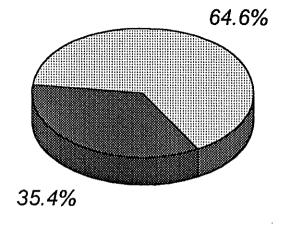


# **Quebec-Ontario High Speed Rail Project**

Full Corridor 300 kph (via Dorval)

Capital Structure





2005 2025

Infrastructure and Civil Works

Notes

Convertible Debentures

Equipment and Technology
Notes

Share capital and retained earnings

Quebec—Ontario High Speed Rail Project Final 300 Composite (via Dorval) Quebec—Windsor Corridor Balance Sheet (In millions of inflated dollars)

		-construc	tion			Construct	ion and S	tart-up						1.5						Frd	l Operation										
	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2008	2007	2006	2009	2010	2011	2012	2013			2010	2017	2016	2019	2020	2021	2022	5053	2024	2025
Assets Curent selects Cash Accounts receivable Supple send other imentories Prepaid expenses	\$229 0 0 0 229	\$181 0 0 0 0 181	\$51 0 0 0 51	\$569 0 0 0 569	\$470 0 0 0 470	\$118 0 0 0 118	\$0 0 0 0	\$0 0 0	\$0 5 100 8 112	\$0 15 200 20 236	\$0 67 206 21 294	\$0 69 212 21 302	\$0 71 219 22 311	\$0 73 225 23 320	\$0 75 232 23 330	\$0 77 239 24 339	\$0 79 246 25 349	\$0 81 253 25	\$0 63 261 26	\$0 65 269 27	\$0 67 277 26 392	\$0 90 295 29 403	\$0 92 294 29 415	\$0 94 303 30 427	\$0 97 312 31 440	\$0 100 321 32 453	\$0 102 331 33 466	\$0 105 340 34	\$60 108 361 35 553	\$409 111 361 36 917	\$783 114 372 37 1,306
Floor d Assets at cost												1		1								100		٠		1.33	***	7/3	333	817	1,300
Infrastructure and civil works Landand Picht - oft-way Earthworksploppade Statione Maintaneace facilities Other accommodations Bridges Gede separations Tack Defended statt—up and other costs Capitalized in prost	1 15 1 3 1 6 1 1 0 1 1 0 1 1 0 1 1 0 1 1 0 1 1 0 1 1 0 1 1 0 1	3 30 6 6 2 11 21 1 1	15 63 10 6 3 26 42 7 7 3	130 180 13 10 11 94 117 22 9 586 43	925 524 19 15 57 247 949 56 25 1,610	444 1,141 73 57 134 584 959 175 54 3,602 568	464 1,674 179 140 159 778 1,460 482 79 5,435 1,151	464 1,632 297 233 159 646 1,635 835 147 6,446 1,652	464 1,632 475 974 159 846 1,635 1,044 210 7,039 2,624	464 1,832 475 374 159 846 1,635 1,052 268 7,106 9,405	464 1,632 475 374 159 846 1,635 1,052 268 7,106 3,405	464 1,832 475 374 159 846 1,636 1,052 268 7,106 3,405	464 1,892 475 374 159 646 1,595 1,052 268 7,106 9,405	464 1,632 475 974 159 946 1,635 1,052 2,68 7,106 2,405	464 1,832 475 374 159 846 1,635 1,052 268 7,106 3,405	464 1,832 475 374 159 846 1,635 1,052 258 7,106 3,405	464 1,832 475 374 159 846 1,635 1,052 269 7,106 3,405	464 1,632 475 374 159 646 1,635 1,052 260 7,106 3,405	464 1,832 475 374 159 946 1,035 1,052 268 7,106 3,405	464 1,832 475 374 159 846 1,655 1,052 269 7,106 3,405	464 1,632 475 374 159 646 1,635 1,052 269 7,106	464 1,832 475 374 159 846 1,635 1,052 26 7,108 3,405	464 1,832 475 374 159 846 1,635 1,052 269 7,108	464 1,832 475 374 159 646 1,635 1,052 268 7,106 2,405	464 1,632 475 374 159 846 1,635 1,652 268 7,106	464 1,832 475 374 159 646 1,635 1,052 266 7,105 3,405	464 1,832 475 374 159 846 1,635 1,052 260 7,106 3,405	464 1,832 475 374 159 846 1,635 1,052 269 7,106 3,405	464 1,632 475 374 159 646 1,635 1,052 269 7,106	464 1,632 475 374 159 846 1,636 1,052 268 7,106	464 1,632 475 374 159 646 1,635 1,052 268 7,106
Construction period interest subardy inflation adjustment	0 9 45	0 6 90	0 16 196	(43) 83 669	(195) 262 1,691	(568) 740 4,342	(1,151) 1,229 6,664	(1,652) 1,538 7,986	(2,524) 1,741 6,790	(3,405) 1,767 8,872	(3,405) 1,767 8,872	(3,405) 1,767 6,672	(3,405) 1,767 8,872	(3,405) 1,767 8,672	(3,405) 1,767 9,672	(3,405) 1,767 8,872	(3,405) 1,767 8,972	1,767	(3,405) 1,767	(3.405) 1.767	(3,405) 1,767	(3,405) 1,767	(3,405) 1,767	(3,405) 1,767	(3,405) 1,767	(9,405) 1,767	(9,405) 1,767	(9,405) 1,767	(3,405) 1,767	3,405 (3,405) 1,757	3,405 (3,405) 1,767
Accumulated depreciation Net infrastructure and civil works	0 45	90	0 196	669	0 1,891	4,342	0 6,664	7,996	0 8,790	0 8,872	(42) 8,890	(67) 6,765	(137) 8,735	(191) 8,661	(250) 0,622	(315) 0,557	(385)	8,872 (461) 8,411	6,672 (545) 6,326	6,672 (636) 6,237	6,672 (735) 6,136	8,872 (943) 8,030	6,672 (960) 7,912	6,672 (1,066) 7,764	6,672 {1,229} 7,644	0,672 (1,361) 7,492	0,872 (1,547) 7,326	6,672 (1,726) 7,144	6,672 (1,925) 5,947	6,672 [2,140] 6,732	0,872 (2,375)
Equipment and bechnology Power distribution system Signals Communications Light trength Rolling stock Capital expenditues	0 0 0 0 0	1 1 0 0	7 4 2 0 11	22 14 7 0 37	47 30 14 0 80	134 96 40 0 226	355 229 106 0 599 0	658 425 196 0 1,110	990 567 262 0 1,494	907 585 270 226 1,530	907 585 270 228 1,530	907 565 270 226 1,530	907 585 270 255 1,530	907 565 270 255 1,590	907 585 270 255 1,650 269	907 595 270 256 1,650 358	907 565 270 256 1,650 431	907 585 270 281 1,650 508	907 585 270 261 1,800 590	907 565 270 262 1,600	907 585 270 289 1,600 769	907 565 270 322 1,600	907 585 270 322 1,990	907 585 270 323 1,690	907 565 270 323 1,660	907 565 270 349 1,890	907 585 270 360 2,040	907 585 270 350 2,040	907 505 270 976 2,040	907 585 270 378 2,040	907 585 270 378 2,040
Capitatzed interest Construction period interest authority infaction adjustment Accumulated depreciation Not a quipment and technology	0 0 0 0	3 0 0 0 3 0	25 0 0 3 20 0	0 0 15 0 0 0	171 92 (19) 30 201 0 201	496 227 (57) 102 757 0	1,269 445 (174) 316 1,676 0	2,390 799 (414) 652 3,426 0	3,193 1,276 (764) 926 1,634 0	3,520 1,910 (1,154) 1,053 5,230 0 5,230	9,571 1,810 (1,154) 1,059 5,261 (207)	3,625 1,810 (1,154) 1,054 5,335 (421) 4,915	3,710 1,810 (1,154) 1,067 5,434 (636) 4,796	3,771 1,810 (1,154) 1,068 5,495 (858)	3,955 1,810 (1,154) 1,140 5,753 (1,086) 4,665	4,025 1,810 (1,154) 1,140 5,822 (1,321) 4,501	4,099 1,810 (1,154) 1,141 5,895 (1,557)	4,201 1,810 (1,154) 1,160 6,017 (1,797)	4,439 1,816 (1,154) 1,261 6,371 (2,052)	4,521 1,010 (1,154) 1,261 6,458 (2,310)	4,521 1,810 (1,154) 1,298 6,566 (2,573)	4,751 1,810 (1,154) 1,320 6,720 (2,942)	971 4.946 1,910 (1,154) 1,419 7,015 (9,129)	1,082 5,057 1,610 (1,154) 1,414 7,127 (3,406)	1,199 5,174 1,610 (1,154) 1,414 7,245 (3696)	1,323 5,324 1,810 (1,154) 1,446 7,426 (3,995)	1,455 5,606 1,810 (1,154) 1,639 7,902 (4,311)	1,594 5,747 1,810 (1,154) 1,640 8,043 (4632)	1,743 5,922 1,010 (1,154) 1,679 6,258 (4,969)	1,900 6,080 1,810 (1,154) 1,680 9,417 (5,299)	2,067 6,247 1,810 (1,154) 1,690 8,584 (5,643)
Net had as sets	45	93	223	760	2,172	5,100	0,540	11,411	13,414	14,102	13,904	19,700	19,531	13,318	13,297	13,059	12.826	12,631	4,319	12,364	12,130	3,665 11,915	3,893	3,719 11,503	3,547	10,929	3,591	3,411	3,295	3,118	2,941
Total a seets	\$274	\$274	\$274	\$1,330	\$2,842	\$5,218	\$0,540	\$11,411	\$13,527	\$14,396	\$14,190	\$14,002	\$13,842	\$13,639	13,517	\$13,398	\$13,175	\$12,990		1							10,917 \$11,983	10,555	10,243	9,650 \$10,767	9,439
Liabilities and Owners' Equity Curent liabilities Bank indibledness Accounts payables and accrusis Curent portion of long-term datx	\$0 0 0	\$0 0 0	\$0 0 0	\$0 0 0	\$0 0 0	\$0 0 0	\$156 0 0	\$156 0 0 0	\$256 12 0	\$363 27 0 390	\$316 77 70 463	\$297 77 101 475	\$311 78 134 523	\$261 79 166 526	\$436 79 199 714	\$390 90 232 702	\$344 90 266 690	\$306 81 300 716	\$544 62 335	\$475 82 370 927	\$409 83 406	\$379 95 443	\$456 97 401 1,029	\$335 66 519 942	\$195 e9 559 843	\$434 90 152 676	\$501 91 166 756	\$200 93 181	50 94 197	\$0 96 215	\$0 97 234
Long - term lis bilitie e Equipment and bedhindogy nobs Infrastrudius and civil works nobs Owns are Equity	0 0 0	0 0	0 0	0 417 417	0 1,649 1,649	0 4,135 4,135	652 8,548 7,200	1,969 7,999 9,958	2,942 9,691 11,833	3,353 9,024 12,377	3,325 6,982 12,307	9,269 6,936 12,206	3,196 6,867 12,072	3,074 8,632 11,906	2,994 8,773 11,707	2,766 8,709 11,475	2,571 0,639 11,210	2,347 8,562 10,910	2,095 8,479 10,575	1,616 6,366 10,204	1,509 6,269 9,798	1,174 9,181 9,355	910 6,063 6,074	419 7,935 8,354	(0) 7,795	(0) 7,649 7,649	736 (0) 7,477 7,477	7,296	7,099 7,099	311 (0) 6,864 6,864	331 (0) 6,649 6,649
Convertible unescured debenture Stare capital Antaired earnings (delicit)	0 274 0 274	0 274 - 0 274	0 274 0 274	639 274 0 913	719 274 0 993	909 274 0 1,063	910 274 0 1,164	1,024 274 0 1,298	1,151 274 0 1,425	1,295 274 0 1,569	1,295 274 (141) 1,420	1,295 274 (249) 1,321	1,295 274 (322) 1,247	1,295 274 (363) 1,206	1,295 274 (374) 1,195	1,295 274 (348) 1,221	1,295 274 (299) 1,276	1,295 274 (205) 1,365	1,295 274 (89) 1,480	1,295 274 64 1,639	1,295 274 256 1,626	1,295 274 487 2,056	1,295 274 753 2,323	1,295 274 1,064 2,694	1,295 274 1,423 2,992	0 1,569 1,467 3,056	0 1,569 1,579 3,140	0 1,569 1,596 3,265	1,569 1,837 3,406	1,569 2,003 3,572	0 1,569 2,195 3,761
Total liabilities and owners' equity	\$274	\$274	\$274	\$1,330	\$2,642	\$5,218	\$8,540	\$11,411	\$13,527	\$14,396	\$14,198	\$14,002	\$13,642	\$13,639	\$13,617	\$13,398	\$19,175	\$12,990	13,016	12,765	\$12,522	\$12,310	\$12,220	\$11,030	\$11,631	\$11,975	\$11,363	\$11.035	\$10.796	\$10.767	\$10.745
Debt to equity ratio Permited maximum Actual	N/A N/A	N/A N/A	N/A N/A	4.00 0.00	4.00 0.00	4.00 0.00	4.00 0.58	4.00 1.64	4.00 2.32	4.00 2.46	4.00 2.70	4.00 2.69	4.00 3.03	4.00 3.04	4.00 3.11	4.90 2.90	4.00 2.61	4.00 2.30	4.00 2.11	4.00 1.72	4.00 1.96	4.00 1.04	4.00 0.82	4.00 0.54	4.00 0.30	4.00 0.24	4.00 0.26	4.00 9.16	4.00 9.10	4.00 0.10	4.00

Quebec—Ontaño High Speed Rall Project Final 300 Composite (via Dorval) Quebec—Windsor Corridor Satements of Operations (In millions of inflated dollars)

	,																															
0050-100	191	Pre – con 95 1	istructio	1997	1998	1999	Constru 2000	ction and s	qu-11 et	2003	2004	2005	2006	2007		1					Fu	l Operatio	ns									
OPERATOR Rown (res				-12.51			1 200	2.007		2003	2003	212	2006	2007	5006	2009	2010	2011	2012	2013	2014	2015	2016	2017	2016	2019	2020	2021	5055	2023	2024	2025
Passanger avenues, constant dollars		\$0	\$0	50	\$0	\$0	\$0	\$0	50	\$84	\$166	\$861	\$884	\$907	\$991	\$956									J							
Less Agency commissions Less Cradit card discount		0	٥	0	0	0	0		Ö	(4)	(10)	(47)	(49)	(50)	(51)	(53)	\$982 (54)	\$1,009 (55)	\$1,035 (57)	\$1,062 (58)	\$1,090	\$1,119 621	\$1,149	\$1,160	\$1,211	\$1,244	\$1,277	\$1,311	\$1,346	\$1,362	\$1,418	\$1,456
Net passenger avenues, constant dollars		ő	0	-0	0		- B	- 8	0	(1) 60	174	(e) (0)5	(9) 827	(9) 649	(9) 871	(9)	(a)	(9)	(10)	(10)	(10)	(10)	(11)	(11)	(67) (11)	(58) (121	(70) (12)	(72)	(74) (13)	(76) (13)	(78) (13)	(90) (14)
Not light freight revenues, constant dollars	İ	0		n	ا ا		١.,					"~			- 1	895	919	943	969	994	1,020	1,047	1,075	1,104	1,133	1,164	1,195	1,226	1,259	1,293	1,327	1,362
infattonacjustment Net revenues		o o	o	. 0	ő	0	0	"	0	21	67	49 364	50 411	52 462	53 516	55 574	57 637	59	.61	63	65	67	69	71	73	76	78	80	83	96	e e	- 00
•		0	Ð	0	O	D	O	Ö	O	81	241	1,217	1,298	1,362	1,441	1,524	1,612	1,705	1,604	1,906	2,018	1,021 2,135	2,250	1,214	1,320	1,433	1,554	1,683	1,820	1,967	2,123	2,266
Operating Costs, constant dollars Labour		_										1 1		1							-,	-,		2,505	2,520	2,672	2,627	2,990	3,162	3,345	3,538	3,740
Electricity		0	0	0	0	0	0	0	0	17	36	124	125	126	120	129	130	132	133	134	136	197	139	140	141	143			il	i		
Achertising/promotion infrastructure mainterance services		0	0	ő	ő	ŏ	ő	. 0	ă	6	4 B	26 17	26 17	29	29 17	30 17	30	31	31 17	32	32	33	33	34	35	35	144 36	146 36	147 37	149	151 38	152 39
Infrastructure materials/suppties		p p	0	0	o o	0	0	0	0	] 3	e	21	21	21	20	19	10	17	16	16	17 16	17	17	17 16	17	17	17 16	17	17	17	17	17
Rolling stock materally supplies Telecommunications/compuler services		0	0	ō	ŏ	ō	ő	ŏ	ŏ	1	3	15	16	16	18	3	3 17	3	.1	. 4	4	5	g	10	11	12	14	18 15	16	16	16 21	16 23
Insurance service effranchies fees etc		a .	0	0	0	0	0	0	0	2	4	17	17	17	18	18	19	19	19	16 20	18 20	19 21	19	20	20 22	20 23	21	21	21	22	22	53
Food/elated sundriss Unachsculed materata/services		0	0	ö.	ō	ŏ	ŏ	ő	ŏ	ő	7	12	12	12	12	12	12	12	19	13	19	13	13	13	13	14	29 14	24 14	24 14	25 14	25 15	23 26 15
Property taxes		0	0	å	0	0	0	0	0	11	26	48	48	40	4ē	46	49	40	49	49	49	49	49	3	3	3	3	3	3	3	3	3
Contingency Total operating costs, constant dollars		0	0	ő	ŏ	ő	ő	ŏ		9	7	0 21	21	21	0 0	21	0	0	0	اه	o	ő	0	0	0	49	99	50 0	50	50	50	50
		٠	o l	입	이	0	0	Ö	ő	47	108	306	309	312	314	316	319	321	323	326	2t 330	334	342	22 346	23 351	23 355	23	23	23	24	24	24
Cepital taxes Inflation adjustment	- 1	0	0	ō	0	0	0.	o	a	اه	0	20	19	19	18	18	17	17	16	16		- 1		- 2	- 1		360	365	371	376	392	366
Total operating costs	<b></b>	0	0	. 0	- 8	0	0	0	2	16 63	41 149	130	145	160	175	191	208	225	243	263	15 284	15 306	15 333	358	14 384	14 411	12 440	12 471	13	13	14	14
Gross operating cash flow		_							1	- 03	148	456	473	491	506	525	544	563	583	505	629	654	699	718	749	791	912	B48	503	927	969	1,014
_		"	١	ı "	٩	0		0	٥	18	92	761	814	871	933	999	1,069	1,143	1,221	1,303	1,369	1,491	1,569	1,670	1,778	1,892	2,014	2,141	0.070			
Large corpositions taxes income taxes		0	0	0	0	0	0	0	o	0	o	10	10	9	اه	اه	اه	٥	ا	اہ	ا		.,	,,,,,	,,,,,	1,000	2,014	2,171	2,276	2,418	2,569	2,726
Not operating cash flow	-	0	0		0	<u>0</u>	<u>.</u>	0	0	0	0	0	0		21	24	27	90	130	160	189	220	264	7 301	304	7 373	6 458	6 361	6	7	7	7
interest on secured and bank debt		٨			أم		,		•	"	34	751	905	962	903	966	1,033	1,044	1,003	1,135	1,193	1,245	1,298	1,362	1,437	1,512	1,550	1,774	362 1,900	2,019	426 2.136	457 2,262
Principal repayments on secured debt	L	ŏ	0	6	اة	0	0	0	0	16	92	407 28	401 56	394 84	965	370	364	342	316	590	274	237	198	159	121	56	12	26	30			
Cash flow available to debenture holders, lease payments and dividends										- 1			30	- 64	112	140	156	198	224	251	279	307	335	969	391	419	0	0	30	12	0	0
		"	۳	ď	°	0	0	0	0	이	0	316	348	364	406	458	501	507	543	594	640	701	765	841	925	1,024	1,536	1,740				
Base interest on convertible debentures Excess cash flow a valiable for lease payments, exc	va	0	0	- 0	0	0	9	0	0	. 0	0	117	117	117	117	117	117	117	117	117	117	117			- 1		1,330	1,770	1.676	2,007	2,136	2,262
shrebivib bna cewynedeb elditrevnon no teetelni	~~	0	0	0	o	٥	0	٥	اه	اه		199	231	268	299								117	117	117	117	0	0	0	0	0	0
Lease payments			0	۰	ا			_	- 1	Ĭ	ľ		- 1	200	200	339	365	390	427	477	523	584	649	725	909	909	1,538	1,749	1,678	2,007	2,196	2,262
Excess interest on convertible debentures Diviriende		ō	Ö	ő	٥	ŏ	0	ő	0	°I	S S	116	135	156	169	198	224	220	249	278	305	341	978	423	472	529	897	1,019	1,095	1.171		- 1
Pasidual cash flow for Operating Company		0	0		0		0	0	- 0	0		43	50	50	63	73	83	0 85	92	103	113	127	140	19 144	20	46	O.	0	0	1.170	1,246	1,319
· · · ·		]	1	۱	اد		ا	ا	o.	0	٥	40	46	54	58	68	77	78	85	95	105	117	130	145	162	151	333	379 350	407 376	495	463	490
Less: Equipment and technology depie cation Add; Principal repayments on secured debt		0	0	0	0	٥	Q n	0	0	0	o.	(209)	(209)	(211)	(211)	(219)	(219)	(219)	(220)	6311	(231)	(232)	(234)	(242)				1	1		727	452
Add: Dividends Net Income (loss) for Operating Company		0	0	ō	ő	ŏ		0		0	a	28 43	56 50	84 59	112	140	168 83	195	221	251	279	307	335	363	(242) 391	(242) 419	(244)	(258) D	(258) 0	(261)	(561)	(261)
	- [ '	٥	0	٥	o l	a	0	0	0	ő	ő	(98)	(57)	(15)	21	62	109	140	101	219	266	127 319	140 371	144	147 459	151	333	379	407	495	463	490
PUBLIC FINANCE COMPANY Infrastructure and civil works interest subardy							Ì		l			1	- 1	,	-			1				-,-	٠.,	710	100	510	397	470	525	576	630	682
interest on Government garanteed debt		0	0	8	0	0	0	0	္ငါ	0	ō	(054)	(054)	(054)	(954)	(854)	(954)	(954)	(954)	(954)	(954)	(854)	(854)	(954)	(954)					i	l	
Lease payments Depreciation on infra structure and civil works		0	0	ŏ	ő	ő	ŏ	0	0	0	0	812 116	908 135	904 156	169	795 198	790 224	794 228	777	771	763	755	746	736	726	(954) 714	(054) 702	(954) 599	(954) 673	(954) 657	(054) 630	(054) 620
Nat income and cash flow of Public Finance Comp	any	0	0	- 0	- 0	0	- 8	0	- 0	<u>o</u>	0	42	-46	50	54	59	64	70	249 76	276 83	905 91	341 99	378 106	123	472 128	529 140	897 152	1,019	1,095	1,171	1,246	1,319
Senior debt coverage ratios						×1			U	91	<u>01</u>	116]	136	156	169	198	224	226	249	270	305	341	378	423	472	529	897	1,019	1,095	1,171	1,245	1,319
Equipment and technology notes - Actual		1					1	<u>1</u>	·	<del></del>		4 767	1 70	4.00															.,,,,		- 0ETU	(3)3
Equipment and technology notes — Required				1			l				l	1.75	1.78	1.82	1.98	1.96	2.01	2.13	2.26 1.75	2.41	2.51	2.72	2.94	3.21	3.47	3.66	N/A	N/A	N/A	N/A	N/A	N/A
Poturn on equity																	11: -1	1.501	1111	1.751	1.75	1.75	1.75	1.75	1.75	1.75	1,75	1.75	1.75	1,75	1.75	1.75
Operating company		J		Г			I		<u>.</u>		I	-6.9%	-4.3%	-1.2%	1.8%	5.2%	9.0%	10.9%	13.3%	13 890	16.3%	17.5%	10.04.7	470 704								
Net operating margin		1					T					62.5%	63 29K											17.7%	17.4%		13.0%	14.9%				16.1%
Internal rate of return (no residual value for equipm	nent and lech	notoov s	at end r	136	2010000	nnion)			·- ·- ·- ·- ·- · · · · · · · · · · · ·			OE. 0 79 1	93.E 70	01.036	D4.076	05.5%	D6.3%	57.0%	67.7%	68.3%	68.8%	69.4%	69.5%	69.9%	70.4%	70.0%	71.3%	71.6%	72.0%	72.3%	72.6%	72.9%
			er mind C	. 33-4	ed Couce	sea On)		5.23%																								
Private/Publice quity and convertible debenture a (atter to	9							11.34%													. •											

Quebec - Ontario High Speed Raif Project Final 300 Composite (via Dorvat) Quebec - Windsor Corridor Government share of capital costs

#### In millions of inflated dollars

	Present			n st ucde	1	L			ruction a	nd Blari-u							1,7							Full Oper	tlans										- 1
	Value	1995	1996	199	7 Tolai	1996	1999	2000	2001	5005	2003	2004	Total	2005	2006	2007	2008	2000	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	Total
intestucture and civil works			l	i	1		i I	- 1	i						- 1	ĺ	1		1				- 1.												
Constuction period interest subsidy	1,610	٥			0 0	43	150	373	582	701	773	781	3,405	0	0	٥	0	٥	0	۰	۰	0	٥	٥	a	٥	0	0	٥	o	0	0	0	0	٥
Equipment and technology					İ																						-				ł				
Constuction period interest subsidy	514	٥		기	0 0	٥	13	44	117	240	350	390	1, 154	0	0	٥	o	٥	0	۰	0	0	c	0	٥	0	0	0	0	0	٥	۰	0	0	٥
Initial sponed			ļ							1					1	ļ									1										İ
Stare capital	129	137			0 157	٥	٥	٥	٥	0	٥	٥	o	٥	٥	0	0	٥	0	0	0	a	0	o	0	0	0	0	0	0	0	٥	٥	0	٥
Annual subsidy	3,160	۰	,	•	• •	۰	٥	۰	o	0	٥	٥	0	854	854	854	854	954	954	854	854	864	954	<b>65</b> 4	854	854	. 854	654	854	854	954	954	954	954	17,933
T BK-04	(610)	۰	٠	9	0 0	۰	٥	٥	c	٥	٥	0	0	(30)	(29)	(20)	(40)	(51)	(53)	(115)	(154)	(184)	(212)	(250)	(296)	(322)	(365)	(39-6)	(476)	(380)	(301)	(412)	(440)	(479)	(5,006)
Ohidends	(155)	۰	٠	4	0 0	۰	0	٥	٥	٥	٥	0	0	(22)	(25)	(23)	(31)	(37)	(42)	(42)	(46)	(52)	(57)	(63)	(70)	(72)	(74)	(75)	(29)	(33)	(36)	(36)	(40)	(43)	(956)
Leave payments	(1,306)	0	٠ ا	7	0 0	٥	٥	۰	o	0	٥	- 0	0	(116)	(135)	{15G	(160)	(198)	(224)	(220)	(249)	(276)	(308)	(341)	(37 <del>0</del> )	(423)	(472)	(529)	(897)	(1,019)	(1,095)	(1,179	(1,246)	(1,310)	(10,047)
Total per annum		137			-	43	165	418	899	941	1,122	1,121		596	665	641	605	550	535	469	405	341	280	200	120	37	(45)	(145)	(549)	(578)	(658)	(767)	(879)	(987)	_
Folal cumulativa	L	-	137	13	7 137	L	200	625	1,325	2,266	3,388	4,559	4,550	596	1,362	1,993	2,598	3, 187	3,701	4,170	4,574	4,915	5, 195	5,395	6,515	5,552	5,506	6,361	4,612	4,234	3,576	2,009	1,931	944	
Present value with laxes (complains)					126	)						(	2,250	)																					1, 156

1,003

520

1,143

2,253

1,724

1,724

Contribution of public sector before break-even point in cash flow is achieved

126

118

118

Folal net contribution with taxes 10,249

Folal net contribution without taxes 12,569

Present value of contribution without taxes 3,222

Present value of contribution without taxes 4,330

#### In millions of 1993 constant dollars

Present value without laxes (cumulative)

	Present		Pre-co	nekuoż	-	-				i ruellon																											
	Value	1005	1906	d (		otel	1990	1999	2000				n 20	04 Y	A fail	2006	2006	2007	2006	2000	00/0	2011			·	Full Op											
intrastructure and civil works	74100	(83)		1	,	V.		1979		2001		1 ~		-	O1E	200	200	2007	2000	2002	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	Total
Construction period interest subsidy	1,314	G	١ ،	9	0	٥	37	126	303	480	53	57	5 5	64	2,804	0	0	Q	0		۰	٥	,		٥	0	٥	0	0	-	0	0	0	0	٥	o	0
Equipment and technology				ļ	1		1																		ŀ		ŀ										Į.
Constuction pertod interest subsidy	410	q	۱ ۱	힉	٥	9	٥	11	36	92	19	20	io 2	193	865	ď	o	٥		•	۰	٥	١ ،	9 0	٥	۰	٥	٥	٥	c	۰	0	0	٥	ø	٥	0
Initial sponsor				1		- 1									1											Ì											
Share capital	118	129	1	•	٥	129	0	٥	0	0		9	٥	a	9	0	0	0	0	•	٥	٥			٥	٥	٥	0	ه		٥	٥	0	٥	0	o	0
Annual sobaldy	(,937	d	1	اد	0	۰	٥	۰	٥	0		4	0	0	۰	599	582	565	540	532	517	502	487	473	459	446	433	420	409	396	364	373	362	352	342	332	9,510
TEXAS ,	(323	¢		1	o	٥	٥	٥	٥	0		ه	•	٥	٥	(21)	(20)	(19)	(31)	(30	(302)	(60	(86	(102	(114	(131)	(145)	(159	(170)	(163	(214)	(166)	(182)	(170)	(179)	(156)	(2, 300)
Dividends	(21)	•	' ا	1	٥	٥	٩	٥	٥	٥			0	0	٥	(15)	(17)	{19	(50)	(23	(25)	(25	(20	(20	(30)	(30)	(36)	(36)	(35)	(35	(13)	(1-9	(15)	(16)	(15)	(17)	(495)
L sesso payments	(700)	c		١	٥	٥	٥	۰	٥	٥			0	٥	٥	(61)	(92)	(103	(1,08)	(123	(136	(194	(142	(154	(164	(170	(191)	(50a	(225)	(246	(40-1)	(440)	(465)	(482)	(190)	(512)	(5,092)
Total per unhum	-	121		0	0	-	37	136	340	552	72	83	r5 6	46		461	453	424	398	354	324	275	231	199	151	104	81	18	(22)	(67	(247)	(253)	(279)	(315)	(251)	(363)	
Total cumulative		129	15:	<u>-                                     </u>	129		37	175	515	1,057	1,78	2,52	3,4	169	- 1	481	935	1,358	1,747	2,101	2,425	2,700	2,931		3,270	3,374	3,435	3,450	3,431	3,354	3,117	2,864	2,585	2,269	1,910	1,534	-

Coat ibulion of public sector before break-even point in cash llow is achieved

Total net contribution with taxes 7,051

Total net contribution without taxes 9,273

Present value of contribution with taxes 2,550

Present value of contribution with taxes 3,047

Prosent value with taxes (cumulative)

Present value without lexes (camulative)

Quebec—Ontario High Speed Rail Project Final 300 Composite (via Dorvat) Quebec—Windsor Corridor Statistics and financial ratios (In millions of Inflated dollars)

Statistics and general Information																					
	2005	2006	2007	2008	5008	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
Ridership (In militons)	123	128	12.9	13.2	13.5	13.9	14.2	14.5	14.9	15.2	16.6	15.9	16.3	16.7	17.1	17.5	17.0	18.3	18.8	19.2	19.7
Growth of ridership in percentage	N/A	2.36%	2.36%	2.36%	2.36%	2.36%	2.36%	2.36%	2.36%	2.36%	2.36%	2.36%	2.36%	2.35%	2.36%	2.36%	2.36%	2.36%	2.36%	2.36%	2.36%
Total operating revenues	\$1,217	\$1,208	\$1,362	\$1,441	\$1,524	\$1,512	\$1,705	\$1,804	\$1,908	\$2,018	\$2,135	\$2,258	\$2,389	\$2,526	\$2,672	\$2,627	\$2,990	\$3,162	\$3,345	\$3,538	\$3,740
Growth of travenues in percentage	N/A	5.78%	5.78%	5.78%	5.78%	5.78%	5.78%	5.78%	5.78%	5.78%	5.78%	5.78%	5. <i>77</i> %	5.77%	5.77%	5.77%	5.77%	5.77%	5.77%	5.77%	5.72%
Total operating expenses	\$456	\$473	\$491	\$508	\$525	\$544	\$563	\$583	\$605	\$629	\$654	\$689	\$718	\$749	\$781	\$812	\$848	\$698	\$927	\$969	\$1,014
Grawth of expenses in percentage	N/A	3.71%	3.73%	3.43%	3,46%	3.49%	3.52%	3.54%	3.89%	3.91%	4.02%	6.35%	4.18%	4.22%	4.27%	4.10%	4.43%	4.48%	4.54%	4.59%	4.65%
Government funding	. (\$854)	(\$854)	(\$854)	(\$854)	(\$854)	(\$854)	(\$854)	(\$854)	(\$854)	(\$954)	(\$854)	(\$854)	(\$854)	(\$854)	(\$ <del>0</del> 54)	(\$854)	(\$854)	(\$854)	(\$854)	(\$854)	(\$854)
Lease payment to Government	\$116	\$135	\$155	\$169	\$198	\$224	\$228	\$249	\$278	\$305	\$341	\$378	\$423	\$472	\$529	\$897	\$1,019	\$1,095	\$1,171	\$1,246	\$1,319
Debt service	\$552	\$574	\$594	\$613	\$527	\$648	\$654	\$656	\$658	\$670	\$561	\$650	\$651	\$656	\$650	\$12	\$26	\$30	\$12	\$0	\$0
Operating expenses to revenues ratio	37.49%	36.75%	36.04%	35.24%	34.47%	33.72%	33.00%	32,30%	31.73%	31.17%	30.65%	30,53%	30.07%	29.63%	29.21%	28.74%	28.36%	28.03%	27.70%	27,39%	27.12%
Revenues per passenger (A)	\$99	\$102	\$105	\$109	\$113	\$116	\$120	\$124	\$128	\$133	\$137	\$142	\$148	\$151	\$156	\$161	\$167	\$172	\$178	\$184	\$190
Government funding (return) per passenger (B)	\$60	\$57	\$54	\$52	\$48	\$45	\$44	\$42	\$39	\$36	\$33	\$30	\$26	\$23	\$19	(\$2)	(89)	(\$13)	(\$17)	(\$20)	(\$24)
B/A	60.61%	55.85%	51.23%	47.56%	43.05%	39.05%	36.73%	33.54%	30.16%	27.16%	24.05%	21,08%	18.05%	15.13%	12.15%	-1.53%	- 5,53%	-7.63%	-9.47%	-11.08%	-12.44%

Financial ratios																					
	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2917	2018	2019	2020	2021	2022	2023	2024	2025
Capital structure ratios: Percentage of capital assigned to intastructure notes	63.90%	64.50%	64.92%	65.54%	65.24%	65.67%	66.50%	66.92%	66.20%	66.85%	67.43%	67.76%	67,43%	68.09%	68.75%	69.07%	67,69%	68.33%	68.17%	56,52%	64.65%
Percentage of capital assigned to equipment notes	25.98%	28.01%	26.01%	25.57%	25.93%	24.95%	23.75%	22.51%	22.35%	20.27%	17.89%	15.43%	13.43%	9.67%	5.32%	3.85%	4.44%	1.82%	0.00%	0.00%	0.00%
Percentage of capital assigned to debenture holders	9.17%	9.30%	9.41%	9.55%	9.57%	9,73%	9.89%	10.04%	10.02%	10.21%	10.41%	10.59%	10.68%	10.94%	11.22%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Percentage of capital assigned to shareholders	0.94%	0.15%	0.00%	0.00%	0.00%	0.00%	0.00%	0.54%	1,43%	2.60%	4,26%	6.22%	8.47%	11.30%	14.70%	27,08%	27.88%	29.84%	311.83%	33,46%	35.35%
Debt to equity ratio for operating company																					
Actas	2.70	2.89	3.03	3.04	3.11	2.90	2.61	2.30	2.11	1.72	1.36	1.04	0.82	0.54	0.30	0.24	0,26	0.16	0.10	0.10	0,10
Maximum permitted	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
Interest coverage operating company			1		İ							i									
Senior debit	1.75	1.78	1.82	1.68	1,98	2.01	213	2.26	2.41	2.51	2.72	294	3.21	3.47	3.88	N/A	N/A	N/A	N/A	N/A	N/A
Percentage payoutratio (including lease payments)	36.74%	37.45%	38.37%	39.55%	40.16%	41.10%	41.07%	42.28%	43.89%	44.87%	45.68%	48.92%	51.12%	53.13%	55.74%	79.40%	78.83%	78.74%	79.53%	80.00%	80.00%
Gross margin	62.51%	63.25%	63.96%	64.76%	65.53%	66.28%	67,00%	67.70%	68.27%	68.83%	69.35%	69.47%	69.93%	70.37%	70.79%	71.26%	71.62%	71.97%	72.30%	72,61%	72.88%
Notreken on invested capital	8.41%	8.95%	9.51%	9.98%	10,49%	11.23%	11.53%	12.08%	12.49%	13.26%	14.10%	14.91%	15.54%	16.57%	17.70%	20,70%	22.76%	24.84%	26.59%	27.90%	29.21%
Pre taxretum on convertible unsecured detentues:	9,00%	9.00%	9.00%	9.00%	9.00%	9,00%	9.00%	9.00%	9,00%	9.00%	9,00%	9.00%	10.01%	11.17%	12.53%	N/A	N/A	N/A	NIA	N/A	NIA
Pre tax return on share capital	15.76%	18,27%	21.17%	22.88%	26.81%	30,44%	30.86%	33.76%	37.73%	41.41%	45.19%	51 25%	52.55%	53.72%	55.06%	21.24%	24.14%	25.93%	27.72%	29.50%	31.23%
After-tax raturn on aquity (operating company)	6,88%	4.32%	-1.24%	1.78%	5,22%	8.96%	10.94%	13.26%	14.79%	16.31%	17.47%	18.04%	17.67%	17,40%	17.03%	12.99%	14.95%	16.07%	16.90%	17.62%	18.11%
Cash flow/total debt outstanding (operating company)	4.20%	5.58%	7.08%	8.51%	10,10%	12.39%	14.24%	17.00%	19.15%	23.77%	30.43%	39.50%	46,68%	74,01%	9,00%	9.00%	0,00%	0.00%	0.00%	0.00%	0.00%

. . .

# High Speed Rail Project

### Financial Analysis Final Report February 24, 1995

## Appendix 5

### Financial Projections - Scenario 4: Montreal-Ottawa-Toronto 300 kph (via Mirabel)

- 1. Report on Financial Projections
- 2. Notes on Basis of Preparation
- 3. Projected Balance Sheet (Combined Public Financing Entity and Construction and Operating Company)
- 4. Projected Statement of Operations (Segregated as Between Construction and Operating Company and Public Financing Entity
- 5. Investment Returns (2005-2025)
- 6. Capital Structure (2005 and 2025)
- 7. Public Sector Annual Contributions (Government Share of Capital Cost)
- 8. Statistics and Financial Ratios

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Appendix 5

# Price Waterhouse

October 24, 1994

#### Report on Financial Projection

To the Project Manager

Re: Scenario 4 - Montreal-Ottawa-Toronto 300 kph (via Mirabel)

The accompanying financial projections of the HSR Project, consisting of projections of the balance sheets and of the statement of operations, has been prepared using assumptions and hypotheses provided by consultants engaged by the Project Manager. Our examination was made in accordance with the applicable Auditing Guideline of The Canadian Institute of Chartered Accountants. We have no responsibility to update this report for events and circumstances occurring after the date of our report.

In our opinion, as at the date of this report, the assumptions and hypotheses that we have used are consistent with those developed by the aforenoted consultants.

Since this projection is based on assumptions and on hypotheses regarding future events, actual results would vary from the information presented and the variations may be material. Accordingly, we express no opinion as to whether the projections could be achieved. The projections have been prepared in accordance with accounting policies deemed to be appropriate for a HSR Project.

Chartered Accountants

Price Waterhause

#### Note on Basis of Preparation

The projections were prepared in accordance with generally accepted accounting principles relating to measurement, presentation and disclosure of financial projections. The projections reflect the judgment of various consultants and are consistent with the purpose of the information but are not necessarily the most probable set of industry, regulatory and economic conditions and planned courses of action given these conditions and uses of assumptions, hypotheses with an effective date of September 30, 1994.

#### Significant Assumptions and Hypotheses

#### 1. Inflation

Current dollars are inflated at a rate of 3%.

#### 2. Interest on Infrastructure and Civil Works Notes

The interest rate used for the Infrastructure and Civil Works Notes is based on a government of Canada cost of 30-year funds, which is assumed to be 8.5% per annum, plus 50 basis points.

#### 3. Interest on Equipment and Technology Notes

The interest rate used for the Equipment and Technology Notes is based on LIBOR for 15-year funds, which is assumed to be 8.5%, plus 250 basis points.

#### 4. Interest on Convertible Subordinate Debentures

Interest on the convertible subordinate debentures is calculated at a basic rate of 9% (government of Canada cost of 30-year funds plus 50 basis points) and a maximum rate of 12.5% (government of Canada cost of 30-year funds plus 400 basis points), subject to the Project's cash flow, after deducting Debt Service on Equipment and Technology Notes and interest on short- term bank indebtedness.

Base interest is capitalized and not paid throughout the Construction Period. Commencing in the Operating Period, base interest on the initial and capitalized balance of the Convertible Subordinate Debentures is paid annually. Excess interest, up to a maximum additional rate of 3.5%, is paid only if Project cash flow allocated to service the Convertible Subordinate Debentures exceeds the 9% base rate.

#### 5. Interest Rate on Bank Indebtedness

Interest on short-term bank indebtedness and overdrafts is assumed to be chargeable at 9% per annum.

#### 6. Repayment Period for the Infrastructure and Civil Works Notes

The Infrastructure and Civil Works Notes are repaid by way of equal annual instalments of principal and interest over a 35-year period starting with the first year of full operations in 2005.

#### 7. Repayment Period for the Equipment and Technology Notes

The Equipment and Technology Notes are repaid over a 15-year period beginning with the first full year of operations in 2005 using an Annual Sum-of-the-Years'-Digits method, such that payments in later years are greater than those in earlier years.

#### 8. Conversion of Convertible Subordinate Debentures

The debentures are convertible at the holder's option, on a dollar-for-dollar basis, into Share Capital.

#### 9. Share Capital

Share capital consists of common shares.

#### 10. Lease Payments to Public Financing Entity

The Public Financing Entity is assumed to enter into an operating lease for the rental of the Infrastructure and Civil Works to the Construction and Operating Company for a term of 35 years based on Project cash flows. Each annual lease payment is calculated by applying percentage of the initial Infrastructure and Civil Works Notes principal amount as a function of total long-term liabilities to 80% of Project cash flow, after deducting Debt Service on the Equipment and Technology Notes, interest on bank debt and base interest on convertible subordinate debentures.

#### 11. Dividends

Dividends are paid to the shareholders on a pari passu basis with lease payments to the Public Financing Entity and excess interest on the Convertible Subordinate Debentures. The amount of Project cash flows allocated to pay dividends is determined by applying a percentage to 80% of Project cash flows, after deducting Debt Service on Equipment and Technology Notes, interest on short-term bank indebtedness and base interest on the Convertible Subordinate Debentures. The applicable percentage is a function of the par value of share capital as it relates to total long-term liabilities (Equipment and Technology Notes and Guaranteed Infrastructure and Civil Works Notes) and share capital.

#### 12. Fixed Assets and Depreciation

Equipment and Technology are recorded at cost, net of the Construction Period Interest Subsidy, and are depreciated on a straight-line basis at a rate of 4%.

Infrastructure and Civil Works are recorded at cost, net of the Construction Period Interest Subsidy and are depreciated on a sinking fund basis using a rate of 8% per annum.

#### 13. Income Taxes, Capital Taxes and Large Corporations Taxes

The effective tax rates for the HSR are projected at 40% for income taxes, 0.2% for large corporations taxes and 0.4% for provincial capital taxes.

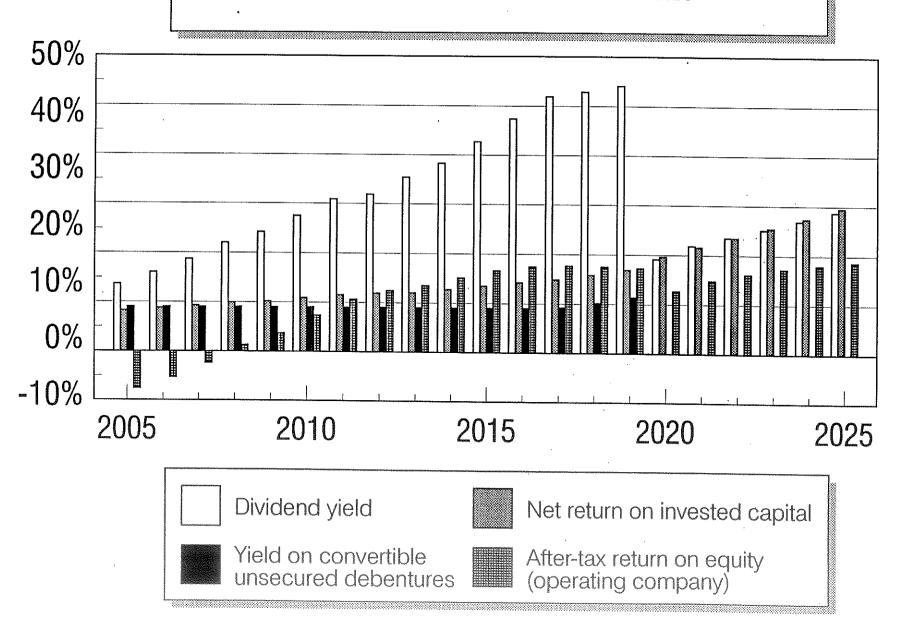
The Infrastructure and Civil Works Notes do not give rise to capital or large corporations taxes as they are obligations of the Public Sector Financing Company.

#### 14. Other Assumptions and Hypotheses

Assumptions and hypotheses contained in the reports prepared by Price Waterhouse, SNC, IBI, CIGGT, Canarail and KPMG are incorporated by reference into the projections underlying the Financial Analysis. It is essential for the reader to have a detailed understanding of such reports and assumptions in order to understand the projections.

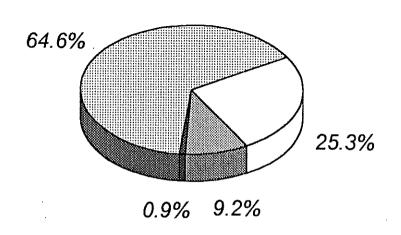
# **Quebec-Ontario High Speed Rail Project**

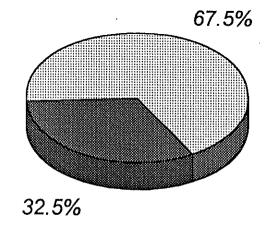
Montreal-Ottawa-Toronto 300 Kph (via Mirabel) *Investment Returns - 2005-2025* 



# **Quebec-Ontario High Speed Rail Project**

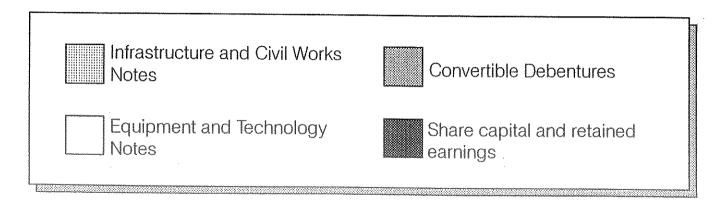
Montreal-Ottawa-Toronto 300 kph (via Mirabel) Capital Structure





2005

2025



Quebec-Ontario High Speed Rail Project Montreal - Ottawa - Toronto 300 kph (via Mirabel) Balance Sheet fin millions of Inflated dollars)

	P=-	-constru	ction			Constr	line and A																								
	1995			1998	1999	2000	lion and S 2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013		Operation 2015	2016	2017	2010	2015	0005	00077				
Assets Current selects Cate Accounts receivable	\$132 0	\$100	\$22 0	\$299 0	\$213 0	\$0 0	\$0 0	\$0 0	\$0	\$0	\$0 39	\$0 40	\$0	\$0	\$0	\$0 45	\$0	\$0	\$0	\$9	\$0	\$0	\$0	\$0	2019 \$0	2020	2021	\$0	2023	2024	2025
Supples and other investore's Prepaid exponses Flest Assets at cost	132	100	52 0	0 0 299	0 0 213	. 0	D 0	0	100 8 111	206 20 224	206 21 266	212 21 274	219 22 262	225 23 290	232 23 299	239 24 307	246 25 317	253 25 326	261 26 26 336	50 269 27 346	51 277 28 366	53 265 29 366	54 294 29 377	909 909 966	57 312 31 400	59 321 32 412	60 331 33 424	62 940 34 496	63 351 35 449	65 361 36 463	67 372 37 597
Infrastructure and civis works Landard Right - olway Earth workshopmes Sis bors Manihamore facilities Ofter accommodations Bridge Bridge	1 9 3 2 1 9	1 18 6 5 1	14 40 7 6 2	54 155 8 7 10 33	136 396 10 9 36 90	177 763 34 26 89 277	185 1,038 78 64 105 433	185 1,142 170 140 105 492	185 1,142 332 274 105 492	185 1,142 332 274 105 492	195 1,142 332 274 105 492	185 1,142 332 274 105 492	185 1,142 332 274 105 492	185 1,142 332 274 105 492	185 1,142 332 274 105 492	185 1,142 332 274 105 492	165 1,142 332 274 105 492	165 1,142 332 274 105 492	165 1,142 332 274 105 492	195 1,142 332 274 105 492	185 1,142 332 274 105 462	195 1,142 332 274 106 492	185 1,142 332 274 105 492	165 1,142 332 274 105 492	166 1,142 332 274 105 492	165 1,142 332 274 105 492	185 1,142 332 274 105 492	165 1,142 332 274 105 492	105 1,142 332 274 105 492	185 1,142 332 274 105	185 1,142 332 274 105
Gade separations Tack Deters distartup and other costs  Capitalized interest Construction period interest subardy	0 1 25	10 1 2 50	20 4 5 100 0	72 12 16 378 28	196 43 43 941 117	477 124 94 2,063 330	690 291 131 3,016 651	771 451 152 3,508 1,042	771 576 167 4,044 1,496	771 561 167 4,049 1,931	771 581 167 4,049 1,931	771 561 167 4,049 1,931	771 581 167 4,049 1,931	771 581 167 4,049 1,991	771 581 167 4,049 1,931	771 591 187 4,049 1,931	771 561 167 4,049 1,931	771 591 167 4,049 1,931	771 561 167 4,049 1,931	771 581 167 4,049 1,991	771 581 167 4,049 1,931	771 581 167 4,049 1,931	771 581 167 4,049 1,931	771 561 167 4,049 1,931	771 561 167 4,049 1,931	771 581 167 4,049 1,931	771 581 167 4,049 1,931	771 581 167 4,049 1,931	771 581 167 4,049	492 771 591 167 4,049 1,931	492 771 561 167 4,049
Infinition adjustment Accumulated depreciation Net infrastructure and civilworks	26 0 26	54 54 55 54	11 119 0 119	(26) 54 432 0 432	(117) 169 1,104 0 1,104	(330) 421 2,464 0 2,464	(651) 676 3,692 0 3,692	(1,042) 956 4,465 0 4,465	(1,406) 1,006 5,050 0 5,050	(1,931) 1,009 5,057 0 5,057	(1,931) 1,008 5,057 (24) 5,032	(1,931) 1,008 5,057 (51) 5,006	(1,931) 1,008 5,057 (90) 4,977	(1,931) 1,006 5,057 (112) 4,945	(1,931) 1,008 5,057 (147) 4,910	(1,931) 1,008 5,057 (184) 4,873	(1,931) 1,006 5,057 (225) 4,832	(1,931) 1,008 5,057 (270) 4,767	(1,931) 1,008 5,057 (319) 4,738	(1,931) 1,009 5,057 (372) 4,685	(1,931) 1,006 5,057 (430) 4,627	(1,931) 1,008 5,057 (493) 4,564	(1,991) 1,008 5,057 (562) 4,495	(1,931) 1,008 5,057 (537) 4,420	(1,931) 1,008 5,057 (719) 4,336	(1,931) 1,008 5,057 (908) 4,249	(1,991) 1,008 5,057 (905) 4,151	(1,931) 1,006 5,057 (1,011) 4,045	(1,931) 1,006 5,057 (1,127) 3,930	(1,931) 1,006 5,057 (1,253) 3,804	1,931 (1,931) 1,008 5,057 (1,390) 3,667
Equipment and technology Power distribution bystem Signale Communications Light height Rolling stock	0 0 0	1 1 0 0 2	4 3 1 0	12 8 4 0 24	34 22 10 0	101 65 29 0 199	211 137 61 0 417	949 225 100 0 686	469 903 135 0 927	486 914 139 190 960	405 914 139 130 960	486 314 139 130 960	466 914 139 131 960	466 914 139 191 960	466 314 139 131 1,050	486 314 139 131 1,050	486 314 139 131	485 314 139 131 1,050	496 914 139 131 1,200	486 914 139 131	466 314 139 134	466 314 139 151	406 314 139 161	406 314 139 162	466 314 139 152	466 314 139 152	496 314 139 162	486 914 139 163	466 314 139 163	406 314 139 199	486 314 139 196
Capital expenditures  Capitalized interest  Construction period interest subsidy Initiation adjustment	0 0 0 0	0 0	0 15 0 0 2	0 48 0 0 7	0 132 58 (12) 23	0 394 147 (49) 94 576	0 826 268 (112) 199 1,181	0 1,962 464 (242) 362 1,946	0 1,695 729 (439) 525 2,655	0 2,030 1,022 (643) 600 3,008	2,061 1,022 (643) 800 3,040	65 2,096 1,022 (643) 600 3,073	100 2,130 1,022 (543) 600 3,109	138 2,158 1,022 (643) 600	178 2,298 1,022 (643) 654	220 • 2,340 • 1,022 (643) 654	265 2,366 1,022 (643) 654	912 2,433 1,022 (643) 654	363 2,533 1,022 (643) 775	1,200 416 2,687 1,022 (543) 775	1,200 473 2,747 1,022 (643) 778	1,200 539 2,894 1,022 (543) 905	1,260 597 2,956 1,022 (643) 967	1,260 665 3,026 1,022 (643) 967	1,260 737 3,099 1,022 (643) 967	1,260 614 3,175 1,022 (643) 967	1,350 694 3,346 1,022 (643) 984	1,350 980 3,432 1,022 (543)	1,950 1,072 3,524 1,022 (643) 904	1,350 1,169 3,646 1,022 (643) 1,022	1,350 1,271 3,748 1,022 (543) 1,022
Accumulated depreciation Not equipment and technology Not fixed assets	0 0 26	0 4 50	0 17 136	0 55 406	202 1,306	9,060	0 1,181 4,872	1,946 6,411	2,655 7,705	3,006 3,006 9,065	(119) 2,921 7,953	2,831 7,837	7,719	3,146 (492) 2,654 7,599	9,331 (625) 2,705 7,616	3,373 (760) 2,613 7,465	9,416 6997) 2,521 7,353	3,466 (1,036) 2,430 7,217	3,786 (1,187) 2,600 7,336	3,841 (1,341) 2,500 7,185	3,904 (1,497) 2,407 7,034	4,018 (1,656) 2,360 5,929	4,204 (1,826) 2,376	4,272 (1,997) 2,275 6,695	4,945 (2,171) 2,174 6,512	4,421 (2,947) 2,074 5,323	4,709 (2,536) 2,173 6,324	4,795 (2,728) 2,068	4,007 (2,923) 1,964	5,047 (3,125) 1,922 5,726	5,149 (3,331) 1,619
Total a magia	\$150	\$ 150	\$158	\$705	\$1,519	\$3,060	\$4,872	\$6,411	\$7,817	\$8,299	\$8,219	\$0,110	\$9,001	\$7,899	\$7 014	\$7,793	\$7 RE0	\$7,543	\$7,674	87 FO4										5,720	5,495
Liabilities and Owners' Equity Current liabilities Bank indibitatives Accounte payable and accrueis Current portion of tong-term debt	\$0 0 0	\$0 0 0	\$0 0 0	\$0 0 0	\$0 0 0	\$59 0 0	\$87 0 0	\$97 0 0	\$197 12 0 199	\$297 14 0 311	\$279 46 39 365	\$275 47 57 378	\$268 47 74 389	\$255 48 91 386	\$396 48 109 543	\$367 46 127 542	\$343 49 145	\$319 49 154 532	\$562 49 163	\$529 50 202	\$495 51 222 768	\$7,290 \$503 52 242 797	\$573 52 263 999	\$7,083 \$512 59 264 949	\$441 54 306	\$549 55 89	\$605 56 57	\$6,549 \$444 56 106	\$269 57 116	\$6,106 \$143 56 126	\$0 59 137
Long—barm liabilitia e Equipment and technology notes infrastrodure and civilworks notes Owne re' Equity Convertible unsecured debenture	0 0	0 0 0	0	0 268 269	0 946 946 415	0 2,376 2,376 467	433 3,568 4,102	1,024 4,550 5,574	1,581 5,204 6,795	1,769 5,262 7,072	1,774 5,258 7,032	1,745 5,231 6,976	1,700 5,202 6,902	1,640 5,170 6,810	1,566 5,136 6,701	1,476 5,090 6,574	1,372 5,057 6,429	1,253 5,012 6,265	1,118 4,963 5,062	969 4,910 5,979	605 4,952 5,657	626 4,769 5,415	432 4,720 5,153	224 4,645 4,669	0 4,563 4,563	693 0 4,474 1,474	758 6 4,377 4,377	606 0 4,271 4,271	0 4.155 4.155	0 4,029 4,029	196 0 3,692 3,892
Stere captal Petarrad earnings (delicit)  Total liabilities and owners' aquity	156 0 158 \$158	158 0 158 \$158	158 0 158 \$158	158 0 527	158 0 573	159 0 625	150 0 683	159 0 749	158 0 823	746 158 0 906 \$8,269	158 (94) 022 \$8,219	748 158 (150) 757 \$9,110	748 158 (196) 710 \$8,001	748 158 (222) 594 \$7,869	748 158 (236) 670 \$7,914	749 158 (229) 677 \$7,790	748 150 (203) 703 \$7,669	748 156 (160) 746 \$7,543	748 159 (100) 790 \$7,674	748 158 (36) 870	746 158 56 964 \$7,969	748 159 171 1,077	748 158 304 1,210	748 158 460 1,366	748 158 642 1,549	749 156 661 1.567	908 708 1,614	0 906 767 1,673	906 840 1,746	906 926 1,832	906 1,029 1,934
Dobt to equity ratio Formitted instantum Actual	N/A N/A	N/A N/A	N/A N/A	4.00 0.00	4.00 0.00	4.00	4.00 0.73	4.00 1.60	4.00 2.95	4.00 2.55	4.00 2.02	4.00 3.04	4.00 3.19	1.00 3.23	4.00 3.41	4.00 9.25	4.00 2.97	4.00	4.00 2.62	4.00 2.21	4.00 1.61	4.00 1.40	4.00 1.23	4.00 0.91	4.00 0.63	4.00 0.55	4.00 0.57	4.00 0.46	4.00 0.35	\$8,106 4.00 0.27	\$6,023 4.00 0.19

Quebec-Ontario High Speed Rail Project Montreal - Ottawa - Toronto 300 kph (vla Mirabel) Statements of Operations (in millions of inflated dollars)

		e-constr	uction	Т		Constructi	on and Start - up			:									F	l Operation										
OPERATOR	1995	199	199	7 1996	1999	2000	2001 200	2 2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014			2017	2018	2019	2020	2021	2022	2023	2024	2025
Revenues					ł						1					ľ		1	ĺ	l	1									
Passenger revenues, constant dollars Lesa Agency commissiona	\$6	\$	0 5	\$0	\$0	\$0	\$0 \$	0 549	\$50	\$503 (29)	\$516	\$530	\$545	\$559	\$575	\$590	\$606	\$623	\$639	\$657	\$675	\$693	\$712	\$731	\$751	\$771	\$792	\$914	\$636	\$858
Less Cradit card discount		5	0 1	0 0		ő	ŏ	0 6	(0)	(20)	(20) (5)	(29) (5)	(30) (5)	(31) (51	(32)	(32)	(33)	(34) (6)	(35)	(36) 60	(37)	(36)	(39)	(40)	(1)	(42)	(44)	(45)	(46)	(47)
Net passenger avenues, constant dollars	1	י וי	이 '	0	0	0	0	0 46	46	470	483	496	510	523	530	552	567	582	598	615	631	649	666	584	703	722	741	761	782	903 (B)
Net light freight revenues, constant dollars Inflation adjustment	9		0 1	0 0	0	0	0	0 0	0	16	17	16	18	19	20	20	21	22	23	23	24	25	26	27	26	29	30	31	30	24
Net revenues				0 0	0	0	0	0 16	18	207 594	234 734	263	294 822	326 870	364 921	402 975	1,031	467	534	594	636	696	757	822	892	966	1,046	1,130	1,221	1,310
Operating Costs, constant dollars				1 '	-	<u>"</u>	1	"	\ \frac{1}{2}	۵-۱	,31	""	022	670	921	9/5	1,031	1,091	1,155	1,222	1,294	1,369	1,449	1,533	1,622	1,717	1,617	1,923	2,034	2,155
Enbour		, (	، ا	ه اه	اه	اه	α	17	. ,,	75	76	77	77	78	79	90	81	81		- 63						1	ł			1
Electricity Advantising/promotion	9	3	2	9 0	0	و	ŏ	0 2	5	17	17	18	18	18	18	19	19	19	62 20	20	94 j 20 j	65 21	96 21	67 21	67 22	96 22	89 23	90 23	91 23	92 24
Infrastructure maintainance pervices	0		5 6	5 6	0		o o	0 3	5	10	10	10	10	10	10	10	10	10	10	10	10	10	10	1D 9	10	10	10	10	10	10
Infrastructure materials/supplies Rolling stock materials/supplies	9	3 :	: :	2 0	0	0	0	0 0	0		- 31	2	2	2	2	ž	2	2	2	3	5	6	7	7	9	9	10	9 11	12	9 13
Te lecommunications/computer services	à	<u>نا</u>	á  á	í] ŏ		ő	ö	i i	2	10	10	10	10	11	11	11	11	12	12	12	12	13	13	13	13	14	14	14	14	15
Insurance service afronchise fees etc Food/elsted sundries		: !		0	0	0	0	2	2	6	6	5	6	6	8	6	6	6	7	- 7	51	7	12	12	12	13	13	13	13	14
Unscheduled materials/se naces	6	3]		6 6	0		a	0 11	50	33	33	33	1 30	39	33	33	33	1 34	1 34	. [	!!	1	- 1	1	2	2	2	2	2	2
Property taxes Continuency	0	: :	3 9	0	ò	0	0	0	a	ő	ő.	0	0	0	0	0	0	0	0	34	34	34	34	34	34	34	34	34	34	34
Total operating costs, constant dollars	- 0	i	3		8	0	0	3 0 47	56	195	13	13	190	192	193	194	196	198	200	202	207	14 210	14	14		14	15	15	15	15
Capital taxes			, ,	, ,	ا، ا					11				1				.~"	200	202	20"	210	212	215	219	221	224	220	231	235
Inflationadjustment	Ŏ			0	0	0	0	16	22	79	99	97	106	10	126	137	148	159	172	185	202	217	232	7	6	-6	6	7	7	7
Total operating costs	0	' '	) (	0	0	٥	0	0 64	76	275	266	296	307	317	328	340	352	366	360	395	417	434	452	249 471	266 491	205 512	304 535	325 559	347 585	370 612
Gross operating cash flow	0	1	3 (	0	0	0	0	0 2	(14)	410	446	481	515	553	592	634	679	726	775	827	877	995	997	1,062	1,132	1,204				
Eargo corposations taxes			، ا		٥	اه	اه	م ا	ا، ا		اء	اء	_	اء	_						***		337	1,002	1,132	1,225	1,202	1,353	1,449	1,543
income taxos Net operating cash, flow	0		2 .	<u> </u>	0	<u>ā</u>	. 0	0 0	ő	ŏ		ă	0	13	13	26	61	60	93	115	135	154	174	197	219	171	193	3 204	3	
· · ·	٥	"  '	'l '	"	٥	0	٥	9 2	(14)	413	443	475	511	535	575	604	613	642	678	708	736	m	619	961	910	1,031	1,095	1,155	1,222	1,294
Interest on secured and bank debt Principal repayments on secured debt	0	: :	्री १	9	0	0	Q.	2	(14)	224	221	217	212	204	203	192	178	163	162	143	122	102	84	56	26	33	36	27	16	
Cash flow available to debonture holders, lease	×	1	<u>'</u>	1 "				9 0	. 0	15	30	45	50	75	69	104	119	134	149	164	179	194	508	224	a	0	- 30	o	0	. 0
paymonia and dividenda	٥	1 1	) (	0	0	0	0 +	0	0	174	199	214	239	257	262	308	316	344	367	400	497	481	526	501	683	998	1.059	1.129	1,205	1,296
Base interest on convertible debentures			) (	0	o	0		ه اه	٥	67	67	67	67	67	67	67	67	. 67	67	67	67	67	1	- 1		-	,,000	1,12.3	1,203	1,200
Excess cast flow switchle for lease payments, excess interest on convertible debentures and divideads	، ا	Ι,	, ,			0																	67	67	67	0	- 0	. 0	0	0
		1	1	1 *	"	9	٠ '	ή "	"	107	125	146	172	190	215	241	249	277	299	339	370	414	458	514	816	999	1,059	1,129	1,205	1,266
Lease payments  Excess interest on convertible debentures	0				0	0	0	0	0	64	75	67	103	113	128	144	149	165	179	199	221	247	274	307	. 400	596	633	675	720	768
Dividends	0	ļ		Ö	ō	ŏ	. 0	0	0	22	25	. 90	35	36	44	49	50	56	61	67	75	82	9 64	19 86	69	0	0	0	0	0
Residual cash flow for Operating Company	0	Ή '	'l '	'l °	0	٥١	0	9	0	21	25	29	34	36	. 43	48	50	55	60	67	74	83	92	103	96	202	214	226 226	244	260 257
Less: Equipment and technology deprecation Add: Principal repayments on secured debt	0	:		0	Ď	اه	0	0	0	(120)	(150)	(120)	(120)	(126)	(126)	(126)	(126)	(137)	(137)	(197)	(13ea	(144)	040	(144)	(144)	(153)	- 1			
Add: Dividends	0			3 8	0	8		0 0	0	15 22	30 25	45 30	60 35	75 39	89	104	119	134	149	164	179	194	209	224	0	[0]	(153) D	(153) 0	(155) 0	(155)
Natincome (loss) for Operating Company	0	1	1	Ö	Ö	ä	ŏ	0	0	(62)	(40)	(17)	9	25	50	75	50 99	56 109	133	67 161	75 196	214	84 240	85 268	96 115	202	214	228 302	244	260
PUBLIC FINANCE COMPANY				1				1		- 1			1			1	- 1	}					2 10	200	113	פרי	×/3	312	330	362
Infrastructure and civil works interest aubardy Interest on Government garanteed debt	0			0	Đ	0	0	0	0	(500)	(500)	(500)	(500)	(500)	(500)	(500)	(500)	(500)	(500)	(500)	(500)	(500)	(500)	(500)	(500)	(500) <u>1</u>	e.v.]	ACOO.	-	
Loase payments	0	] }	i		0	0	0 0	0 0	0	475 84	473 75	471 97	168 103	465 113	452 128	459 144	455 149	451	447	442	437	431	425	418	411	403	(500) 394	(500) 364	(500) 974	(500) 363
Depectation on infastructue and civil works Not income and cash flow of Public Finance Company	0	<b> </b>		, o	0		0	0	ŏ	24	27	29	32	35	39	41	45	165 49	179 53	199	221 63	247 69	274	307 62	499 89	596 97	633 106	675 116	720	760 137
•	<u> </u>	·		,	0)		0 (	0	1. 0	64	75	67	103	113	126	144	149	165	179	199	221	247	274	307	400	596	633	675	126 720	768
Senior debt coverage ratios  Equipment and technology notes — Actual			T		······································	· · · · · · · · · · · · · · · · · · ·			,																					
Equipment and technology notes - Required	L	L		<u> </u>						1.75	1.79	1.84	1.90	1.90	2.02 1.75	2.14 1.75	2.28	2.44	2.49	2.69	2.91	3.16	3.40	3.79	N/A	N/A	N/A		N/A	N/A
Poturo on equity	1									****			!::-71		1.101	1.121	1.79	1.791	1.45	1:10	1.75	1.75	1,75	1.75	1.75	1.75	1.75	1.75	1.75	1.75
Operating company		<u></u>	1	1				Τ	· · · · · · · · · · · · · · · · · · ·	-7.6%	-5.3%	-2.4%	1.9%	3.7%	7 4%	10.7%	12.5%	13.6%	15.2%	16 79/1	17.60	17.70								
Not operating mergin		Υ	1	T				7													17.5%			17.3%			16.3%			18.7%
				-			L	J	L	60.3%	61.1%	61.9%	62.7%	63.5%	64.3%	65.1%	65.9%	66.5%	67.1%	67.7%	67.8%	69.3%	60.6%	69.2%	69.7%	70,2%	70.5%	70.9%	71.2%	71.6%
Internal rate of return (no residual value for equipment Public sector (pre-nax)	and lech	notogy at	end of 35-	-year cond	ension)		5.42%																							
Private/Publice quity and convertible debentures (after tax)						VPINITUM VI	11.15%																							

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Cuebec -- Ontario High Speed Hall Project Mostreal -- Ottawa -- Torosto 300 kph (vis Mirabel) Government share of capital costs

Constituting and a property costs																																				
In millions of inflated dollars																		;																		
	Preser Value		Pre-	-con sir ya	1927 Ye	14	1996	1999	2000	1 BC Hon 2001	nd Slari- 2002	-up 2003	2004	Total				2006			22.27				Full Ope	ations										
Intrest ucture and creti works	7200	1 1	,	1990	1997		11889	1999		2001	2002	2003	2004	LDM	2005	2006	2007	2006	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	5050	3031	2022	2023	2024	2025	Total
Constuction period interest subsidy	91	э	٥	ø	0	۰	20	<b>79</b>	213	322	391	444	***	1,931	0	0	٥	,o	0	٥	0	a	o	0	٥	٥	٥		٥	0	۰	۰	o	0	٥	0
Equipment and technology																																	.		ĺ	
Construction period interest subsidy	26	9	0	۰	o	۰	٥	12	37	53	130	191	211	643	0	0	0	٥	0	٥	0	0	o	۰	٥	۰	٥	٥		٥	٥	٥				
inital sponger			ŀ																															1		-
Эй ште серим		4	79	٥	o	72	0	٥	0	٥	٥	٥	٥		o	0	0	0	a	٥	0	o	٥	0	٥	٥	٥	۰	٥	۰	۵	٥				٥
Annual subsidy	1,84	9	0	٥	0	٥	0	٥	0	0	0	٥			500	500	500	500	500	500	500	500	500	500	500	500	500	500	500	500	500	500	500	500	500	10,497
Taxos	(30	49	0	٥	0	٥	٥	0	0	0	c	٥	٥	c	(15)	(15)	(15)	(15)	(27)	(27)	(39)	(74)	(93)	(105)	(127)	(146)	(186)	(195]	(208)	(226)	(160)	(193)	(219	(235)		(2,500)
Dividends	{€	o o	0	٥	0	٥	٥	٥	٥	٥	o	٥	۰		(1)	(13)	(15)	(17)	(19)	(22)	(24)	(25)	(26)	(30)	(34)	(37)	(40	(42)	(43)	(40)	//8	(19)	(20)	(20)	(23)	(549)
L esse payments	(75	6	٥	0	o	٥	a	0	0	o	0	٥	۰	0	(6-0)	(75)	(87)	(103)	(113)	(120)	(144)	(149)	(165)	(179)	(199)	(221)	(247)	(27-9	(307)	(400)	(590)	(633)	(875)	(720)	. 1	(5,335)
Total per annum	1	+	79	a.	0	_	20	100	250	364	521	635	655		409	397	382	365	340	323	292	252	214	106	140	95	46									
Total cumulative		<u> </u>		79	79	79 -	-	120	378	769		1,919			409	806	1,199		1,693	2,216		2760	2,974	3,150	3,300	3,395	3,441	3,440	3,382	(264) 3,118	(294) 2,824	(344) 2,480	2,071	1,594	17:14	
Present value with Jazes (cumulative)						72								1,275	1															47.1-1					-,,,,,,	
Present value without faxes (cumulative)						72								1,275																					L	746
															,																					1,008
Contribution of public sector before treak-	even point	in camh i	owr to no	hleved																																
Total net contribution with taxes	6,00	2																																		
Folsi net contitution without takes	7,29	1																																		
Present value of contribution with texas	2,29	<u> </u>																																		
Present value of contribution without layer	2,49	<u> </u>																																		
In millions of 1993 constant dollars	7																																	•		
	Presen	¢	Pro-	constru	tion				Cons	Tuction (	and Start-	-DO													F0.4											
Intrastructure and civil works	Value	19	25	996	1997 To		1998	1999	2000	2001	3003	. 2003	2004	Fotal	2005	2005	2007	2008	2009	2010	2011	2012	2013	2014	Full Oper 2015	2015	2017	2018	2019	2020	2021	2022	2023	2024	2025	Tolai
Constuction period interest subsidy	74		0	٥		۵	24	34	173	254	300	330	321	1,476						ا																
Equipment and lechnology														,,,,,,,	ľ	Ĭ	•	ľ	1	ĭ	9	٥	ů,	ាំ	1	٩	٥	٩	٥	٩	0	٩	٩	۰	٥	0
Constuction period interest subsidy	23	,	0	٥				10	30	50	100	142	152	401	,					ا													Į			
Initial sponsor	1																	Ĭ	1	Ĭ	Ĭ	Ĭ	Ĭ	ľ	9	٩	ျ	٩	0	٩	0	٩	٩	٥	٥	0
Share capital			74	0		74	٥	٥				a								ا										-	l					
Annual subsidy	1,13		٥										, ,		351	340	330	ľ					0	٩	٩	٥	٥	٥	٥	٥	٥	0	٥	٥	٥	٥
Taxes	(16		٥	٥						اً ا	Š				351 (†1)	,,,,	(10)		312	302	294	295	277	269	261	253	245	239	232	225	210	212	206	200	194	5,567
Dividenda	{5		0				a			ٳ	Å	٠	,		(112	(1) (A	(10)	` 1	(17)	(16)	(23)	(42)	- 7	(56)	. (86)	(7-6)	(01)	1	(90)	(103)	(79)	(62)	(66)	(3-0	(99)	(1,200)
Louise payments	(40	1	٥				a		[ `	ٳٞ	Ž			ا '	(0)	(51)	(10)		(12)	(13)	- 1	(14)		(16)	(18)	(19)	(50)	,,1	(20)	(22)	(e)	(6)	(8)	(9)	(19)	(202)
Folki per annum			1-	<u> </u>	1	1_							0	°	(45)		(58)	(65)	(71)	(78)	(85)	(85)	(92)	(96)	(10-9	(118	(122)	(191)	(142)	(350)	(261)	(268)	(278)	(566)	(290)	(2,940)
Folul per annum	-	+	74 74	74	74	-	24	108	203	303 615	1,014	472 1,487	473 1,960		287 287	270 557	253	234	212	195	172	144	1 19	100	73	48	23	(t)	(27)	(119	(126)	(140)	(160)	(191)	(213)	-
Prosent value with large (oungletive)	·	.1		::1			£I	104	4111	012]	1,014	1,48?	1,460			557)	819	1,044	1,256	1,451	1,623	1,767	1,995	1,985	2,058	2,105	2,129	2,120	2,101	1,983	1,854	1,700	1,540	1,349	t, ta7	
•						68								977																						515
Present value without taxed (cumulative)					L	<b>¢</b> 8								977																					[	676
Contribution of public sector before break-	iniog neve	in cash li	ow is so	hiovod																															·—	

rexat dilw nottudi toco ten late t 4,163 1,791 Present value of contribution with taxes [5645] Present value of contribution without laxes [1,755]

The second disease there have been been there were second to the second transfer to the second transfer to the

Quebec—Ontario High Speed Rail Project Montreal — Ottawa — Toronto 300 kph (via Mirabel) Statistics and financial ratios (In millions of inflated dollars)

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Statistics and general information	l																				
	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
Ridership (in millions)	5.5	6.7	6.9	7.1	7.2	7.4	7.6	7.8	8.0	8.1	8.3	8.5	8.7	9.0	9,2	9.4	9.6	9.8	10.1	10,3	10.6
Growth of ridership in percentage	N/A	2.39%	2.39%	2.39%	2.39%	2.39%	2.39%	2.39%	2.39%	2.39%	2.39%	2.39%	2.39%	2.39%	2.39%	2.39%	2.39%	2.39%	2.39%	2.39%	2.39%
Total operating revenues	\$694	\$734	\$777	\$822	\$870	\$921	\$975	\$1,031	\$1,091	\$1,155	\$1,222	\$1,294	\$1,369	\$1,449	\$1,533	\$1,622	\$1,717	\$1,817	\$1,923	\$2,034	\$2,155
Growth of revenues in percentage	N/A	5.83%	5.83%	5.83%	6,83%	5.83%	5.83%	5.83%	5.83%	· 5.83%	5.83%	5, B3%	5.83%	6.62%	5.62%	5.82%	5.82%	5.82%	5.82%	5.82%	5.94%
Total operating superise a	\$275	\$296	\$296	<b>\$307</b>	\$317	\$328	\$340	\$352	\$366	\$380	\$395	\$417	\$434	\$452	\$471	\$491	\$512	\$535	\$559	\$585	\$612
Growth of expenses in percentage	N/A	3.71%	3.74%	3.45%	3.49%	3.51%	3.54%	3.57%	189%	3.90%	4.01%	5.34%	4.17%	4.21%	4.26%	4.11%	4.40%	4,40%	4.52%	4,57%	4.63%
Government funding	(\$500)	(\$500)	(\$500)	(\$500)	(\$500)	(\$500)	(\$500)	(\$500)	(\$500)	(\$500)	(\$500)	(\$500)	(\$500)	(\$500)	, (\$500)	(\$500)	(\$500)	(\$500)	(\$500)	(\$500)	(\$500)
Lease payment to Government	\$54	\$75	\$87	\$103	\$113	\$120	\$144	\$149	\$185	\$179	\$199	\$221	\$247	\$274	\$307	\$488	\$596	\$633	\$675	\$720	\$768
Debt service	\$306	\$318	\$329	\$339	\$346	\$360	\$363	\$365	\$365	\$379	\$375	\$369	\$365	\$369	\$366	\$163	\$33	26:3	\$27	\$16	22
Operating expenses to revenues ratio	39.71%	38.91%	36.14%	37.29%	36.46%	35.66%	34.89%	34.15%	33.52%	32.91%	32.35%	32.20%	31.70%	31.21%	30.75%	30.25%	29.84%	29.45%	29.10%	28,75%	28,40%
Revenue's per passenger (A)	\$105	\$109	\$113	. \$115	\$120	\$124	\$128	\$133	\$137	\$142	\$147	\$151	\$157	\$162	\$167	\$173	\$179	\$185	\$191	\$197	\$204
Government funding (return) per passenger (8)	\$65	\$53	\$50	\$58	\$53	\$50	\$47	\$45	\$42	\$39	\$35	\$33	\$29	\$25	\$21	\$1	(\$10)	(\$13)	(\$17)	(\$21)	(\$25)
B/A	62.86%	57.91%	53,10%	48.29%	44.43%	40.34%	36.52%	34.07%	30.54%	27.79%	24.61%	21.56%	18.46%	15.60%	12.58%	0.75%	-5.61%	-7.31%	- 9.08%	-10.84%	-1245%

Financial ratios																					
	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
Capital structure ratios Percentage of capital assigned to infastructure notes	64.63%	65.20%	65,77%	66.34%	65.73%	66.31%	66.90%	67.45%	65.73%	66.36%	66.91%	87,04%	66.53%	07.14%	67.74%	68.32%	66,84%	67,40%	67.94%	67,78%	67.57%
Percentage of capital assigned to equipment notes	25.31%	25.41%	25.30%	24.94%	25.75%	24.96%	23.87%	22.57%	23.80%	22.02%	19.96%	18.07%	18,58%	13,43%	9,60%	6.22%	9.04%	8.83%	4.28%	2.33%	0.00%
Percentage of capital assigned to debenture holders	9.15%	9.28%	9.41%	9.54%	9.51%	9.66%	9.82%	9.98%	9.81%	10,00%	10.19%	10.34%	10,39%	10.64%	10.91%	11.20%	0.00%	0.00%	0.00%	0.00%	
Percentage of capital assigned to share holders	0.90%	0.11%	9,00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.66%	1.64%	2.04%	4.65%	0.41%	8.79%	11.67%	12.26%	24.11%	25.77%	27.78%		0.00%
Debt to aquity ratio for operating company															1,,_1,,	7227	E-7.1175	23.77%	27.75%	29.89%	32.43%
Actual	2.82	3.04	2.19	3.23	3.41	3.25	2.97	2.63	2.52	2.21	1.81	1.48	1.23	0.91	0,63	0.55	0.57	0.48	0.35		
Maximum permitted	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4,00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00		0.27	0.19
Interest coverage operating company						}								1.00	7.00	4.00	4.00	4.00	4.00	4.00	4.00
Senior debt	1.75	1.79	1,84	1.90	. 1.96	2.02	214	2.28	2.44	2.49	2.69	2.91	3.16	3.40	3.79	N/A	N/A				
Percentage payoutratio (including lease payments)	37.03%	37,79%	38.77%	40.15%	40.90%	41.62%	43.03%	43.38%	45.01%	45.25%	47,17%	49.18%	51.25%	53.02%	65.55%	79.15%	77,44%	N/A 77,35%	N/A	N/A	N/A
Gross mergin	60.29%	61.09%	61.90%	62.71%	63.54%	64.34%	65,11%	65.65%	66.46%	67.09%	67.65%	67.80%	68.30%	68.79%	69.25%	69.75%	70.16%		78.16%	78.94%	79.47%
Motratum no invested capital	8.24%	8.76%	9.33%	9.97%	10.23%	10.93%	11.58%	11.94%	12.06%	12.79%	13.57%	14.30%	14.96%	15.91%	16.97%	16.07%	21,96%	70.54%	70.90%	71.25%	71.50%
Pre fax return on convertible unsecured debentures	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%	9.24%	10.24%	11.48%	18.23%		23.66%	25.53%	27.37%	29.49%
Pro taxistum on share capital	13.70%	16.04%	18.74%	22.05%	24.29%	27.53%	30.87%	31.84%	35,47%	38,38%	42.68%	47.38%	51.85%	52.85%	ĺ	- 1	N/A	14/A	N/A	N/A	N/A
After tex return on a quity (operating company)	-7.59%	- 5.30%	2.36%	1.25%	3.69%	7.36%	10.70%	12,49%	13.60%	15.23%	15.69%	17.49%			54.09%	60,84%	22.29%	23,65%	25.22%	26.93%	28.73%
Cash flow/ total debt outstanding (operating company)	3.85%	5.15%	6.62%	8.38%	9.34%	11.35%	13.75%	15.94%	16,63%	20.05%			17.71%	17.55%	17.29%	7.34%	15,43%	16.34%	17.27%	18.01%	18.73%
	l				2.0474	-,,,,,,,,,	73.737	13.9472	10,03%	20.05%	24.96%	30,76%	36.73%	49.50%	74.05%	N#4	NA	N/A	N/A	, MA	N/A

# High Speed Rail Project

Financial Analysis Final Report February 24, 1995

# Appendix 6

# Financial Projections - Scenario 5: Montreal-Ottawa-Toronto 200 kph (via Dorval)

- 1. Report on Financial Projections
- 2. Notes on Basis of Preparation
- Projected Balance Sheet (Combined Public Financing Entity and Construction and Operating Company)
- 4. Projected Statement of Operations (Segregated as Between Construction and Operating Company and Public Financing Entity
- 5. Investment Returns (2005-2025)
- 6. Capital Structure (2005 and 2025)
- 7. Public Sector Annual Contributions (Government Share of Capital Cost)
- 8. Statistics and Financial Ratios

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Appendix 6

# Price Waterhouse

October 24, 1994

## Report on Financial Projection

To the Project Manager

Re: Scenario 5 - Montreal-Ottawa-Toronto 200 kph (via Dorval)

The accompanying financial projections of the HSR Project, consisting of projections of the balance sheets and of the statement of operations, has been prepared using assumptions and hypotheses provided by consultants engaged by the Project Manager. Our examination was made in accordance with the applicable Auditing Guideline of The Canadian Institute of Chartered Accountants. We have no responsibility to update this report for events and circumstances occurring after the date of our report.

In our opinion, as at the date of this report, the assumptions and hypotheses that we have used are consistent with those developed by the aforenoted consultants.

Since this projection is based on assumptions and on hypotheses regarding future events, actual results would vary from the information presented and the variations may be material. Accordingly, we express no opinion as to whether the projections could be achieved. The projections have been prepared in accordance with accounting policies deemed to be appropriate for a HSR Project.

Chartered Accountants

Price Waterhause

## Note on Basis of Preparation

The projections were prepared in accordance with generally accepted accounting principles relating to measurement, presentation and disclosure of financial projections. The projections reflect the judgment of various consultants and are consistent with the purpose of the information but are not necessarily the most probable set of industry, regulatory and economic conditions and planned courses of action given these conditions and uses of assumptions, hypotheses with an effective date of September 30, 1994.

## Significant Assumptions and Hypotheses

#### Inflation

Current dollars are inflated at a rate of 3%.

#### 2. Interest on Infrastructure and Civil Works Notes

The interest rate used for the Infrastructure and Civil Works Notes is based on a government of Canada cost of 30-year funds, which is assumed to be 8.5% per annum, plus 50 basis points.

#### 3. Interest on Equipment and Technology Notes

The interest rate used for the Equipment and Technology Notes is based on LIBOR for 15-year funds, which is assumed to be 8.5%, plus 250 basis points.

#### 4. Interest on Convertible Subordinate Debentures

Interest on the convertible subordinate debentures is calculated at a basic rate of 9% (government of Canada cost of 30-year funds plus 50 basis points) and a maximum rate of 12.5% (government of Canada cost of 30-year funds plus 400 basis points), subject to the Project's cash flow, after deducting Debt Service on Equipment and Technology Notes and interest on short- term bank indebtedness.

Base interest is capitalized and not paid throughout the Construction Period. Commencing in the Operating Period, base interest on the initial and capitalized balance of the Convertible Subordinate Debentures is paid annually. Excess interest, up to a maximum additional rate of 3.5%, is paid only if Project cash flow allocated to service the Convertible Subordinate Debentures exceeds the 9% base rate.

#### 5. Interest Rate on Bank Indebtedness

Interest on short-term bank indebtedness and overdrafts is assumed to be chargeable at 9% per annum.

## 6. Repayment Period for the Infrastructure and Civil Works Notes

The Infrastructure and Civil Works Notes are repaid by way of equal annual instalments of principal and interest over a 35-year period starting with the first year of full operations in 2005.

## 7. Repayment Period for the Equipment and Technology Notes

The Equipment and Technology Notes are repaid over a 15-year period beginning with the first full year of operations in 2005 using an Annual Sum-of-the-Years'-Digits method, such that payments in later years are greater than those in earlier years.

#### 8. Conversion of Convertible Subordinate Debentures

The debentures are convertible at the holder's option, on a dollar-for-dollar basis, into Share Capital.

#### 9. Share Capital

Share capital consists of common shares.

#### 10. Lease Payments to Public Financing Entity

The Public Financing Entity is assumed to enter into an operating lease for the rental of the Infrastructure and Civil Works to the Construction and Operating Company for a term of 35 years based on Project cash flows. Each annual lease payment is calculated by applying percentage of the initial Infrastructure and Civil Works Notes principal amount as a function of total long-term liabilities to 80% of Project cash flow, after deducting Debt Service on the Equipment and Technology Notes, interest on bank debt and base interest on convertible subordinate debentures.

#### 11. Dividends

Dividends are paid to the shareholders on a pari passu basis with lease payments to the Public Financing Entity and excess interest on the Convertible Subordinate Debentures. The amount of Project cash flows allocated to pay dividends is determined by applying a percentage to 80% of Project cash flows, after deducting Debt Service on Equipment and Technology Notes, interest on short-term bank indebtedness and base interest on the Convertible Subordinate Debentures. The applicable percentage is a function of the par value of share capital as it relates to total long-term liabilities (Equipment and Technology Notes and Guaranteed Infrastructure and Civil Works Notes) and share capital.

## 12. Fixed Assets and Depreciation

Equipment and Technology are recorded at cost, net of the Construction Period Interest Subsidy, and are depreciated on a straight-line basis at a rate of 4%.

Infrastructure and Civil Works are recorded at cost, net of the Construction Period Interest Subsidy and are depreciated on a sinking fund basis using a rate of 8% per annum.

#### 13. Income Taxes, Capital Taxes and Large Corporations Taxes

The effective tax rates for the HSR are projected at 40% for income taxes, 0.2% for large corporations taxes and 0.4% for provincial capital taxes.

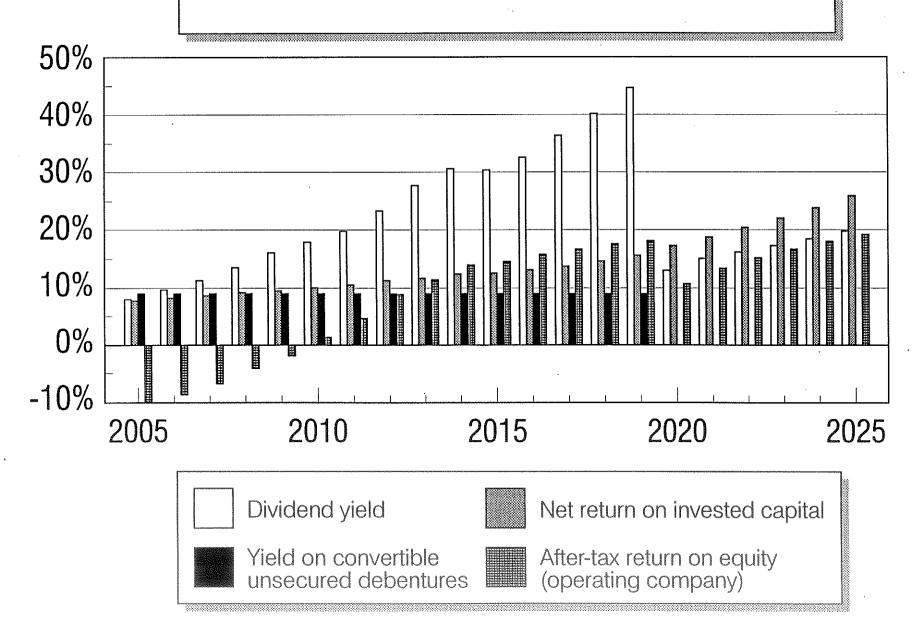
The Infrastructure and Civil Works Notes do not give rise to capital or large corporations taxes as they are obligations of the Public Sector Financing Company.

## 14. Other Assumptions and Hypotheses

Assumptions and hypotheses contained in the reports prepared by Price Waterhouse, SNC, IBI, CIGGT, Canarail and KPMG are incorporated by reference into the projections underlying the Financial Analysis. It is essential for the reader to have a detailed understanding of such reports and assumptions in order to understand the projections.

# **Quebec-Ontario High Speed Rail Project**

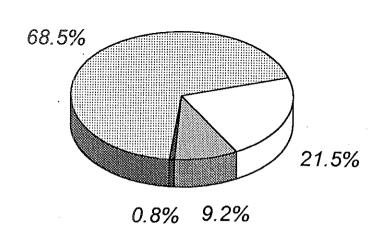
Montreal-Ottawa-Toronto 200 Kph (via Dorval) *Investment Returns - 2005-2025* 

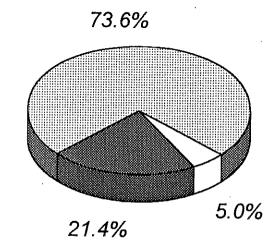


# **Quebec-Ontario High Speed Rail Project**

Montreal-Ottawa-Toronto 200 kph (via Dorval)

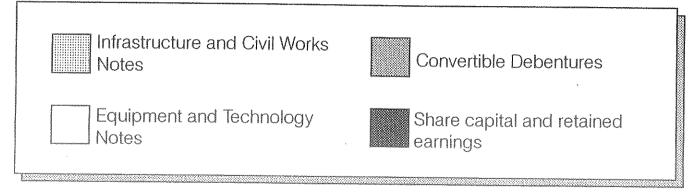
Capital Structure





2005

2025



Quebec.-Ontario High Speed Rail Project Montreal - Ottawa - Toronto 200 kph (via Dorval) Balance Sheet (in millions of inflated dollars)

		-constru	clion			Cand	Man - L. ·																								
	1995			1998	1099	2000	2001		2003	2004	2005	2008	2007	2008	2009	2010	2011	2012	2013	2014	Il Operation		2043	2022							
Assets Current a secia Cash Accounts receivable Supplies and other inventore's Prepaid expenses	\$119 0 0 0 119	0	0	\$226 0 0 0 226	\$169 . 0 0 0 169	\$0 0 0	\$0 . 0 0	\$0 0 0 0	\$0 4 100 8 112	\$0 4 200 20 20 224	\$0 30 206 21 257	\$0 31 212 21 265	\$0 32 219 22 272	\$0 39 225 23 290	\$0 34 232 23 289	\$0 35 239 24 297	\$0 35 246 25	\$0 36 253 25 315	\$0 37 261 26 324	\$0 36 269 27 334	\$0 39 277 26	2016 30 40 205 29 354	\$0 41 294 29 364	\$0 42 303 30 375	2019 \$0 43 312 31 366	\$0 50 44 321 32 398	\$0 46 331 33 409	2022 \$0 47 940 94 421	2023 80 46 351 35	\$024 \$0 49 361 36	2025 20 50 50 372 37 460
Fixed Assets at cost		Ì		l				- 1					l		- 1		1	- 1												ł	
Infrastructure and citri works Land and Fight – ci – way Earthworkshubgrade Salvore Manihanace scilities Offer accommodations Bridges Grade separations Tack Deferred start – up and other costs	1 6 4 2 1 3 3 0	1 15 7 4 1 7 7	9 5 2 17 13 3	45 120 11 7 5 77 45 11	127 301 16 10 30 165 120 37	178 607 65 39 76 354 327 105	167 839 153 92 93 427 466 256	197 927 248 149 93 454 546 417	167 927 416 251 90 454 546 542 160	187 927 418 251 99 454 546 547	197 927 418 251 93 454 546 547	167 927 416 251 99 454 546 547 160	187 927 416 251 93 454 546 547	107 927 418 251 93 454 546 547	187 927 418 251 93 454 546 547	187 927 418 251 93 454 546 547	187 927 418 251 93 454 546 547	187 927 418 251 93 454 546 546 547	197 927 419 261 93 454 546 546 547	167 927 418 251 93 454 546 547	197 927 419 251 93 454 546 546	187 927 418 251 99 454 546 547 160	187 927 418 251 93 454 546 547	197 927 419 251 93 454 546 547	187 527 418 251 93 454 546 547	197 927 418 251 93 454 546 547	187 927 418 251 93 454 546 546 547	167 927 416 251 93 454 546 546	167 927 416 251 93 454 546 547	187 927 418 251 93 454 546 547	167 927 418 251 93 454 546 547
Capitalized interest Construction period interest subsidy Inflational djustment	22 0 0 1 23	45 0 0 3	90 0 0 9	339 26 26 26 49 366	109 (109) 152	1,843 300 (300) 376 2,219	2,660 594 (584) 593 3,259	9,167 927 (927) 748 3,915	3,579 1,321 (1,321) 690	3,583 1,714 (1,714) 691	9,583 1,714 (1,714) 891	3,583 1,714 (1,714) 891	9,563 1,714 (1,714) 691	3,563 1,714 (1,714) 691	3,589 1,714 (1,714) 891	3,583 1,714 (1,714) 891	3,589 1,714 (1,714) 891	3,563 1,714 (1,714) 691	3,589 1,714 (1,714) 891	9,563 1,714 (1,714) 691	9,589 1,714 (1,714) 891	9,563 1,714 (1,714) 891	3,569 1,714 (1,714) 691	9,589 1,714 (1,714) 891	3,583 1,714 (1,714) 691	3,589 1,714 (1,714) 691	3,563 1,714 (1,714) 891	3,589 1,714 (1,714) 691	3,593 1,714 (1,714) 691	3,593 1,714 (1,714) 991	9,589 1,714 (1,714) 691
Accumulated depreciation Net infrastructure and civil works	0	40	99	366	1,021	2,219	9,253	9,915	4,468 0 4,466	4,475 0 4,475	4,475 (23) 4,451	4,475 (46) 1,426	4,475 (76)	4,475 (106) 4,369	4,475 (138) 4,336	4,475 (174) 4,301	4,475 (213) 4,262	4,475 (265) 4,219	4,475 (301)	4,475 (352) 4,123	4,475 (406)	4,475 (466) 4,009	4,475 (591)	4,475 (602)	4,475 (679)	4,475 (764)	4,475 (856)	4,475 (956)	4,475 (1,055)	4 475 (1 104)	4,475 (1,313)
Equipment and technology  Power distribution system  Signals	0	1 0	3 2	11	30 15	97 46	169 100	329 175	456 242	474 252	474 252	474 252	474 252	474	474	474	474	474	474	474	474	474	3,943	3,873	3,795 474	3,711	3,619	3,519 474	3,410	3,291	3,161
Communications Light feding Rolling stock Capital expenditues	0 0 0	0 0 1 0	1 0 6	3 0 20 0	9 0 55 0	25 0 158 0	54 0 345 0	94 0 602 0	131 0 835	136 91 967 0	136 91 967 26	196 106 967 55	136 106 867 84	252 136 106 667	252 136 106 960 150	252 136 105 960 185	252 136 106 960 223	252 136 106 960 263	262 136 107 1,077	252 136 122 1,077 351	252 136 125 1,077 399	252 136 125 1,077 449	252 136 125 1,124	262 136 125 1,124	252 136 126 1,124	252 136 141 1,124	252 136 141 1,241	252 136 141 1,241	252 136 142 1,241	252 196 142 1,241	252 136 142 1,241
Capitalized interest Construction period interest subsidy infestion adjustment	0 0 0 0	9 0 0	12 0 0 1	40 0 0 6	110 51 (10) 19	.315 127 (39) 67	580 237 (23) 156 894	1,200 400 (201) 322 1,722	1,564 622 (367) 482 2,411	1,616 655 (515) 541	1,845 955 (515) 541	1,898 955 (515) 548	1,910 955 (515) 540	1,950 955 (515) 548	2,077 655 (515) 605	2,113 655 (515) 605	2,151 655 (515) 605	2,191 655 (515) 605	2,350 955 (515) 700	2,411 855 (515) 713	2,462 655 (515) 715	2,513 855 (515) 716	503 2,613 955 (515) 764	2,671 955 (515) 764	621 2,732 655 (515) 765	595 2,911 955 (515) 789	753 2,997 655 (515) 934	925 9,069 955 (515) 935	902 3,146 855 (515) 935	984 3,228 855 (515) 936	1,070 3,314 855 (515) 936
Accumulated depreciation Net equipment and technology	0	9	13	46	171	470	0 994	1,722	2,411	2,699 0 2,699	2,726 (107) 2,619	2,776 (216) 2,558	2,906 (390) 2,476	2,838 (444) 2,394	3,022 (565) 2,457	3,059 (687) 2,371	3,096 (911) 2,265	3,136 (936) 2,200	3,390 (1,072) 2,318	3,463 (1,210) 2,253	9,517 (1,951) 2,166	3,568 (1,494) 2,074	3,719 (1,642) 2,075	3,775 (1,793) 1,982	3,936 (1,947) 1,989	3,934	4,271 (2,275)	4,344	4,421 (2,626)	4,504 (2,806)	4,590 (2,989)
Net fixed as sets	23	52	112	434	1,192	2,689	4,247	5,637	6,000	7,174	7,071	6,964	6,875	6,763	8,799	6,671	8,547	6,419	6,492	6,976	5,234	6,083	6,019	5,954	5,685	1,830	1,996	1,896	1,796	1,698	1,600
Total a secta	\$142	\$142	\$142	\$661	\$1,361	\$2,689	\$1,247	\$5,637	\$8,991	\$7,398	\$7,327	\$7,249	\$7,147	\$7,043	\$7,082	\$8,969	\$8,853	\$6,734			1			i		5,541	5,615	5,414	5,206	4,999	4.762
Liabilities and Owners' Equity Current liabilities Bank indebtedness Accounts peptide and docrusis Cursat portion of long-term debt	\$0 0 0	\$0 0 0	\$0 0 0	\$0 0 0	\$0 0 0	\$5 0 0	\$60 0 0	\$50 0 0	\$161 10 0	\$271 13 0 294	\$256 40 34 330	\$263 40 47 370	\$295 40 60 365	\$282 41 74 397	\$426 41 97 556	\$420 41 101 562	\$410 41 115 566	\$393 42 130 565	\$6,916 \$593 42 144 760	\$504 42 159 786	\$564 43 175	\$534 44 191	\$6,369 \$596 44 207	\$5.55 45 224	\$6,071 \$508 46 241	\$5,939 \$620 46 84	\$8,024 \$782 47 92	\$5,805 \$667 47 100	\$5,639 \$542 48 109	\$406 49 119	\$5,221 \$259 49 100
Long—term liabilitie a Equipment and technology noba intrastructure and civil works nobs	0 0	0	0	0 196 196	0 847 847	2,123 2,123	271 3,303 3,574	732 4,172 4,905	1,169 4,919	1,910 4,991	1,290 4,969	1,277 4,943	1,244 4,916	1,201 4,986	1,146	1,081 4,617	1,004 4,779	917 4,736	819 4,690	709 4,640	761 589 4,585	769 458 4,525	917 4,460	164 4,389	796 (0) 4,912	750 (0) 1,228	921 (0) 4,136	614 (D)	699 (0) 3,927	574 (0)	437 (0)
Owno ra' Equity Convortible unsecured debenture Strare capital Paramad earnings (deficit)	0 142 0 142	0 142 0 142	0 142 0 142	331 142 0 473	372 142 0 514	419 142 0 561	9,574 471 142 0 613	4 590 142 0 672	6,091 596 142 0 736	6,301 671 142 0 813	6,267 671 142 (63) 730	6,220 671 142 (154) 659	6,160 671 142 (211) 602	6,086 671 142 (253) 560	5,969 671 142 (286) 527	5,898 671 142 (305) 508	5,783 671 142 (309)	5,653 671 142 (297) 516	5,509 671 142 (275)	5,349 671 142 (236) 575	5,175 671 142 (191) 622	4,984 671 142 (129)	4,777 671 142 (54)	4,553 671 142 39 952	4,312 671 142 151	1,226 N/A 613 146	4,136 N/A 813 155	4,036 N/A 813 172	3,927 N/A 613 201	3,808 3,808 N/A 813 241	9,678 3,678 N/A 813 293
Total liabilities and owners' aguity	\$142	\$142	\$142	1888	\$1,361	\$2,689	\$4,247	\$5,637	\$6,991	\$7,398	\$7,327	\$7,249	\$7,147	\$7,043	\$7,082	\$6,969	\$0,053	\$6,734			- 1							905	1,014	1,054	1,106
Dobt to equity ratio Permited maximum	N/A	N/A	N/A	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.001	4.00	4.00	4.00	4.00	4001			\$6,437			\$6,071			\$5,835	\$5,639	\$5,435	\$5,221
Actual	N/A	N/A	N/A*	0.00	0.00	0.00	0.62	1.50	2.40	2.58	2.89	3.22	3.50	3.70	4.13	4.17	4.06	3.79	3.83	3.43	4.00 2.96	4.00 2.49	4.00 2.15	1.71	1.00	4.00 1.27	4.00) 1.44	4.00 1.30	4 00 1.15	4.00 0.99	4.00 0.62

Quebec—Ontario High Speed Rail Project Montreal — Ottawa — Toronto 200 kph (via Dorval) Statements of Operations (in millions of Inflated dollars)

	D-	9 - CO591	nickop	т		Construction an	dend up																							
	199			1996	1090			2003	2004	2005	2006	2007	2000	2009	2010	2011	2012	2013	2014	Operation 2015	2018	2017	2018	2019	2020	2021	2022	2023	2024	2025
OPERATOR Revenues											,		,				···												Loz	
Passenger sevenues, constant doltars	\$4		io so	so so	\$0	so	so so	\$52	\$52	\$391	\$401	5-111	\$421.	\$432	\$443	\$454	\$466	\$478	\$490	\$503	\$516	\$529	\$542	\$556	\$571	sses	\$600	\$615	\$631	\$647
Less Agency commissions			0 0	0	0	0	0 0	(3)	(3)	(21)	(22)	(23)	(23)	(24)	(24)	(25)	(26)	(26)	(27)	(29)	(20)	(29)	(30)	(31)	(21)	(35)	(33)	(34)	(35)	(36)
Less Cie dit card discount Net passenger revenues, constant dollars	ļ;		0 0	0 0	0	0	0 0	(D)	(O)	365	(4) 375	(4) 384	(4) 394	(4) 404	415	425	(4)	(4)	- 61	<u>(5)</u>		(5)	(5)	<u>(5)</u>	(5)	(5)	(6)	(6)	(6)	(6)
not passoriges terestoria, custassin consis	`		١,	'I	ľ	"	"	"	79	300	3/3	301	354	701	110	453	436	447	459	470	402	495	508	520	534	547	561	576	591	506
Net light freight revenues, constant dollars	9		0 9	0	0	0	0 0	0	0	17	18	19	19	20	20	21	22	23	23	24	25	26	27	20	29	30	31	32	99	95
inflationscijustment Net revenues	<u> </u>		0 0	3 0	0	0	0 0	17 65	19 67	163 545	184 576	206 609	230 544	256 680	719	700	945 803	379 <del>9</del> 49	415	453	494	598	586	694	597	743	803	967	935	1,009
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Operating Costs, constant dollars	Ι.				_	_		ll		1					- 1				i	- 1	1									Ì
Labour Electricity	;		0 0	3 6	"	0	0 0	16	16	69	68	69	70	70	71	72	72	73	74	74	75	76	77	77	76	79	60	80	81	82
Advertising/promotion	7	il	ŏ č	0	ŏ	ő	o o	1 4	- 4	9	ě	9	ě	10	8	e	8	10	iu R	11	11	11 A.	11	11 8	11	12	12	12	12	12 9
Infrastructura mainte nance services	1 9		0 9	0	0	0	0 0	2	2	9	8	9	9	e	ė	7	7	7	7	7	7	7	7	ž	7	7	7	7	7	71
infratitudure materials/supplies Rolling stock materials/supplies	}		0 8	0 0	0	0	0 0	0	0.	1		1	1	1	5	2	2	2	5	2	5	5	6	6		8	9	9	10	12
Telecommunications/computer services	7	[	ŏ d	ő	ŏ	ő	o o		2	7	7	ě	9	8	e e	8	9	9	9	9	91	9	10	10	10	10	10	10	11	11
ksurance service afranchise fees etc Food/elated sundres	9	1	0 0	9	ļ ,	0	0 0	2	2	6	6	6	6	6	6	6	6	6	6	7	7	ź	7	7	ř	7	7	7	7	'7
r cocyesated suncres Unscheduled materials/services	6	1	0 6	i	"	0	اه اه	11	20	32	22	32	32	32 l	32	32	32	1 33	33	33	1	1	.1	1	1	.1	1	1	1	1
Property taxes	ì	1	0 0	o a	٥	ŏ	ة اة	o	a	6	ő	0	0	~	0	0	~ 0	33	331	33	33	33	33	39	33	39	33	33	33	33
Contingency Total operating costs, constant dollars			0 0	9 0		. 0	0 0	3	3 50	11	11	- 11		. 11	11	11	. 11	11	11		12	12	12	12	12	12	13	19	13	13
Lotte obergrudgebært counsitet domini	۱ '	1	1 '	ʻl "	l °	1 "	" "	41	50	158	160	161	162	169	164	165	167	168	170	172	176	178	160	182	184	107	189	192	195	199
Capital taxes	0		0 0	0	0	0	0 0	0	0	9	e	8	6	7	7	7	6	6	6	6	5	5	5	5		4	4	4	4	4
inflationadustment Total operating costs	<del> </del>		N - S	· · · · · · · · · · · · · · · · · · ·	0	0	0 0	14	19	234	75 243	93 252	91 260	269	107 279	116	126 299	136 310	146 322	157	171	184	197	211	225	241	257	274	292	311
· ·		1	1	1	_	<u> </u>		~	, ,	. 201	5.13		200	2.00	213	2009	255	310	322	335	352	367	383	397	414	431	450	470	491	513
Gross operating cash flow		1	0 (	0	Ö	0	0 0	9	(3)	911	333	357	363	411	440	471	504	539	575	613	550	692	737	795	695	869	946	1,005	1,060	1,136
Large corpositions taxes	١,	,	0 0		۱ ،		ه اه	n			ا۔		ارا	اد	ا	٦	ا		اء	_		_					- 1-	.,	,,,,,,	1,100
income taxes		d	0 6	0	ŏ	0	ŏ ŏ	ă	ă	6	5		0	31	0	13	14	11	12	3 54	75	92	107	125	167	113	104	116	130	5
Net operating cash flow	(	1	0 (	, 0	0	0	0 0	9	(3)	307	329	353	379	407	437	455	487	524	560	557	571	597	620	650	667	774	839	967	936	909
interest on secured and bank debt		, l	0 0	ه اد	۱۰	0	ه اه	g	D)	167	165	154	160	155	157	149	140	129	129	117	102	85	72							- 1
Principal repayments on secured debt		1	0 (	0	0	0	0 0	ū	o o	11	22	30	44	55	65	76	67	99 .	109	120	131	142	153	52 164	30	37	47	40	32	24
Cash flow available to debenture holders, lease payments and dividends	١,	J			۱ ،	اما	م ام			129	143	157	176	400																
, ,	· `	1	ή,	1 °	ľ	"	"  "	Ť	٠,	123	143	107	176	198	214	229	260	297	322	320	339	371	403	442	636	737	792	847	903	965
Base interest on convertible debentures Excess cash flow a vallable for losse payments, excess		·	0 (	0	0	0	0 0	0	0	60	. 60	60	60	60	60	60	60	60	50	60	60	60	60	60	0	o	a	0	اه	n
interest on convertible debentures and dividends	١,		0 0		ه ا	0	ه اه	n		56	82	96	115	137	153	169	199	236												
	· `	1	]	1 1	"	"	"		, ,	~		~	170	137	153	109	1869	230	261	259	278	310	943	361	636	797	792	847	903	965
Lease payments Excess interest on convertible debentures	5	1	0 0	21 2	0	0	0 0	0	0	43	52	61	73	87	97	107	126	150	166	164	176	197	217	242	403	467	502	537	573	612
Dividends	7		0 1	5 6	۱ŏ	0	0 0	u o	0	11	14	16	19	23	0 25	59	33	39	43	43	.0	0 52	0 57	0	0	0	. 0	۵	0	o
Besidual cash flow for Operating Company	7		0 (	0	0	0	0 0	0	0	14	16	19	53	27	31	34	40	47	52	52	56	62	69	63 76	106	123	132 158	141	150	150
Less: Equipment and technology depreciation	, ا		0 4	, ,	۸ ا		م ام	ا ا	n	(100)	(109)	(109)	000	,,,,,	, and	,,,,,	,,,,,,			- 1			- 1					1	.~'	1
Add: Principal repayments on secured debt	?	1	ō i	0	ŏ	ŏ	ŏ ŏ		ő	11	22	33	(109) 44	(115) 55	(115) 65	(115) 76	(115) 97	(123) 98	(125) 109	(125) 120	(125) 131	(129) 142	(129) 153	(129) 164	(130)	(141)	(141)	(141)	(141)	(141)
Add: Dwidends Net (neome (loss) for Operating Company			0 0	0	0	<u> </u>	0 0	0	<u>0</u>	11	14	16	19	23	25	20	33	39	43	43	46	52	57	63	106	123	132	141	150	160
Her receive from tot obsisting combant	i '		۱ ۱	Ί "	l "	1 "	"  "	0	0	(72)	(57)	(41)	(23)	(10)	7	29	45	61	80	90	109	127	150	175	103	129	149	169	190	213
PUBLIC FINANCE COMPANY			_							- 1				ļ	1	1	i					- 1				-		j		
Infrastructure and civil works interest subsidy Interest on Government garanteed debt	) ?		0 0	3	0	0	0 0	0	0	(472) 449	(472) 447			(472)	(472)	(472)	(172)	(472)	(472)	(472)	(472)	(472)	(472)	(472)	(472)	(472)	(472)	(472)	(472)	(472)
Feese betweents	?		ol d	5 6	۱۷	اة	0 0	a a	0	43	52	445 61	442 73	440 97	437 97	434 107	130 126	426 150	422 166	418 164	413 176	407 197	401 217	395	366	360	372	363	353	343
Depreciation on infrastructure and civil works		<u> </u>	0 0	9	0	<u> </u>	0 0	- 0	0	23	25	27	30	33	36	39	42	46	50	55	60	65	71	242 77	403 84	467 92	502 100	537 109	573 119	612 130
Net Income and cash flow of Public Finance Company	·	<u> </u>	01 (	0	L	<u> </u>	0 0	0	01	43	52	61	73	97	97	107	126	150	166	164	176	197	217	242	403	467		537	573	612
Senior debt coverage ratios	l	,	,																											
Equipment and technology notes — Actual Equipment and technology notes — Pequired				1						1,75	1.79		1.66	1.96	1.97	2.09	2.22	2.37	2.41	2.59	2.79	3.05	3.26	3.64	N/A	N/A	N/A	N/A	N/A	N/A
Freducing a min contactor times - section	·				·	ı		L		1.75	1.75	1.75	1.75	1.75	1.75	1.75	1.75	1.75	1.75	1.75	1.75	1.75	1.75	1.75	1.75	1.75	1,75	1.75	1.75	1.75
Plature on equity																														
Operating company	l	1	1		l	l		LT		-9.9%	-8.6%	-6.8%	-4.1%	1.9%	1.3%	4.6%	B.6%	11.4%	14.0%	14.5%	15.0%	16.7%	17.6%	16.1%	10.7%	13.4%	15.2%	16.7%	18.0%	19.2%
Net operating mergin	L				Ĺ			T		57.0%	57.9%	58.7%	59.6%	60.4%	61.2%	62.0%	62.6%	69.5%	64 194	EA TOL	64.000 7	CE 40 1	or noil	66 40 T	60.001					
	2011	nnio	t and -te-	10000000		1		4h-						VO. 10	V1.6.41	JE.U/0]	32.U.S.	63.5%	U1.176	04./76]	04.87% [	05.9%	t5.9% [	05.4%	66.9%	67.3%	67.6%	68.1%	68.5%	68.9%
internal rate of return (no residual vajue (or equipment Public sector (one -lax)	and tech	nology E	s and 0135	-year cond	989(00)	3.20	96T																							
Private/Publice quity and convertible debentures (after tax)						9.66																								

Quebec -- Ontario High Speed Rail Project Montreal -- Ottawa -- Yorosto 200 kph (via Dorval) Government share of capital costs

in millions of inflated dollars																																			
	Present		Pre-co	et ucton				Cont	struction :	nd Start-	·up						ᆏ							Full Oper											
intrastucture and civ8 works	Value	1995	1995	1997	Tola	1996	1999	2000	2001	2002	2003	2004	Tolat	2005	2006	2007	2006	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2010	2020	2021	2022	5053	2024	2025	Total
Construction period inferest subsidy	812	0	٥	٥	۰	\$6	63	191	264	343	363	1940	6714		٥	٥		٥	o		٥	٥	٥	٥	٥	٥	9		ا،		ا				
Equipment and technology								1						1			- ' '											Ĭ		1	1	1	٦	ไ	Ů
Construction period interest subardy	232	o	0	•	٥	٥	10	29	54	100	156	158	515	o	۰	۰	اه	٥	٥	۰	۰ ه	0	٥	0	٥	٥		اه	ا						
Initial sponsor						i :				l	ł																				7	1	1	٦	٦
Strare capital	67	71	٥	۰ ا	71	ه	0	۰	٥	٥	0	٥	٥	0	p	۵	٥	0	۰	0	٥	0	٥	0	۰	اه	۰	ا	ا		۸				
Annuel subsidy	1,740	٥	٥	0	٥	٥	۰	٥	٥	۰	0	٥	o	472	472	472	472	472	472	472	472	472	472	472	472	472	472	472	472	472	472	472	472	472	9,920
Faxon	(107)	0	٥	. •	0	0	٥	o	٥	٥	0	o	0	(13)	(12)	(12)	(11)	(11)	(10)	(23)	(24)	(21)	(21)	(63)	(84)	(100)	(114)	(132)		(119	(1)0	(122	(136)	(151)	(1,460)
Dividende	(52)	٥	0	٥	a	٥	ه	٥	0	۰	٥	٥	o	(6)	(7)	(9)	(19)	(11)	(13)	{1:0	(12)	(20)	(22)	(22)	(23)	(26)	(30)	(32)		````	(12)	(12	` 1	(151)	
Lease payments	(598)	٥	٥	0	٥	۰	٥	٥	o	٥	۰	۰	o	(43)	(52)	(61)	(73)	(69)	(97)	(107)	(126)	(150)	(166)	(154)	(176)	(197)	(217)	6242	1403	(487)	(502)	(537)	(573)	(612)	(326)
Total per annum		71	. 0	0	-	26	\$3	220	335	452	549	552		411	401	391	370	363	362	329	308	262										(331)	(3.4)	(012)	(3,052)
Tols: cumulative		-	71	71	71		(19	339	677	i, 120	1,877	2,229	2,223	411	812	1,203	1,502	1,946	2,297	2,625	2,931	3214	3,478	224	3,891	4.041	4 154	4221	(112)	(12-0)	(151)	(199)	(249)	(30-1)	
Present value with laxes (comutative)					85								1,107	·							7571		24/0	104	// ca)	3011	134	<b>4,221</b>	4 107	3,993	3,831	3,530	3,394	3,079	
Present value without taxes (cumulative)					as							ַ	1,107																						986

المال في القرائل الأولى الأولى الأولى الأولى الأولى الأولى الأولى الأولى الأولى المستحد المستحد المستحد المستحد

Contribution of public sector before break-even point in cash flow is schieved

Total nel contribution with taxes 6,521 Total net contribution without taxes

Present value of contribution with taxes 2254

Present value of contribution without laxes 2,367

#### In millions of 1993 constant dollars

	Presen																																			
	Value		5 199	natucs.	on 197 Tol		1998		2000		nd Blari-				ļ										Full Dog	tations										
Intrastructure and civil works	78.42			"	15	-	1990	1902	200	2001	2002	5003	2004	Total	2005	2008	2007	2008	2009	2010	2011	2012	2010	2014	2015	2016	2017	2010	2019	5050	2021	2022	2023	2024	2025	Total
Construction period interest subsidy	66	,	0	0	۵	0	22	70	155	224	260	293	285	1,312			٥		، ا		٥		0		ا											
Equipment and technology							l		- 1									•					Ĭ		ا	Ĭ			Ϊ ΄	"	ျ	٩	. 0	٩	o	0
Construction period interest subsidy	10	5	۰	٩	٥	۰	٥	اه	24	43	83	118	114	366	o	٥	0			a			٥	٥	٥	۵	0				ا	ا				l
initial sponeor						1																			-	Ĭ	Ĭ		1			٩	ាំ	0	٩	٥
Share capital	6	•	7	٥	٥	67	٥	0	٥	٥	0	0	٥			0	٥	c		- o	0	۰	٥	٥	٥	0	۰								ŀ	
Annual substdy	1,07	1	۰	ا	0	٥	٥	0	۰	0	٥	٥	0		331	322	312	303	294	266	277	269	262	254	247	239	232	226	219	213	206	200	1	°	0	٥
Taxos	(9)	Ŋ	١	╸	0	٥	٥	0	۰	٥	٥	٥	0	٠	(9)	(8	(8)	(7	(7	(6)	(10)	(13)	(H)	(11)	(30)		(49)	(54	1	129	(52)	147	195	(84)	183	5,260
Dividends	(3)	2	١	9	٥	٥	٥	0	0	٥	0	٥	0	·	(4)	(5)	(5)	(6	0.00	(6)	(8)	. (9)	(11)	(12)	(11)	(12)	(13)	(15	. (15	(4)	(32)	177	(50)	(54)	(se)	(675)
Leane payments	(32)	7	١		٥	٥	٥	٥	o	٥	٥	٥	۰	d	(30)	(35)	(40)	(47	(5-6	(59)	(63)	(72)	(63)	(69)	(96)	(86)	(97)	(104)	1112	(182)	(204)	(213)	(221)	(558)	(230)	(159)
Total per annum	L		7		a -		22	76	179	267	340	409	399		200	273	259	243	226	213	193	175	150	(42	117	95				1		(1.07)	(24.)	(229)	(230)	(2.347)
Total cumulative	L	1	7 6:	1	67	L_	22	100	279	546	892	1,300	1,699	-	200	561	820	1.063		1,502	1,695	1,870	2,020	2,100	2,205			- 34	31	(51)	(54)	(64)	(03)	(100)	(116)	
Presont value with (axes (cumulative)						<b>a</b> )								849	]			.,,,,,,,	1	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	1,000	1,650	- Kowi	2,100	4200]	2,361	2.454	2,508	2,532	2,496	2,434	2,370	2,266	2, 196	2,070	

549

Contribution of public sector before break-oven point in cash flow is achieved

Total net contribution with leaves 4,005

61

Total net contibution without taxes Present value of contribution with lakes [1,584]

Preson) value of conkibution without laxes [1644]

Present value without taxes (cumulative)

634 721

Quebec—Ontario High Speed Rail Project Montreal — Ottawa — Toronto 200 kph (via Dorval) Statistics and financial ratios (in millions of Inflated dollars)

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The contract of the contract o

Statistics and general information	7									•											
	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
Ridership (in millions)	5.6	5.7	5.8	5.9	6.1	6.2	6.4	5.5	6.6	6.8	6.9	7.1	7.2		7.6	7.7	7.9	8.1	8.3	8.4	
Growth of ridership in percentage	N/A	2.21%	2.21%	2.21%	221%	2.21%	2.21%	2.21%	2.21%	221%	2.21%	2.21%	2.21%	2.21%	2.21%	2.21%	2.21%	2.21%	221%	2.21%	8.6
Total operating revenues	\$545	\$576	\$509	\$644	\$680	\$719	\$760	\$803	\$849	\$897	\$948	\$1,002	\$1,059	\$1,119	\$1,182	\$1,250	\$1,321	\$1,394	\$1,475	\$1,559	2.21% \$1,649
Growth of revenues in percentage	N/A	5.89%	5,59%	5.69%	5.09%	5,69%	5.69%	5.59%	6.69%	5.69%	5.68%	5.68%	5.58%	5.58%	5.58%	5.68%	5,58%	5.68%	5.68%	5.58%	5,83%
Total operating expenses	\$234	\$243	\$252	\$260	\$269	\$279	\$289	\$299	\$310	\$322	\$335	<b>\$</b> 352	\$367	\$382	\$397	\$414	\$431	\$450	\$470	\$491	1,63% \$513
Growth of expenses in percentage	N/A	3.62%	3.64%	3.45%	3.48%	3.50%	3,52%	3.55%	3.79%	3.8t%	3.92%	5.25%	4.07%	4.11%	4.16%	4.03%	4.30%	4.35%	4,41%	4,47%	4,53%
Government funding	- (\$472)	(\$472)	(\$472)	(\$472)	(\$472)	(\$472)	(\$472)	(\$472)	(\$472)	(\$472)	(\$472)	(\$472)	(\$472)	(\$472)	(\$472)	(\$472)	(\$472)	(\$472)		(\$472)	(\$472)
Lease payment to Government	\$43	\$52	\$61	\$73	\$87	\$97	\$107	\$126	\$150	\$1.56	\$164	\$176	\$197	\$217	\$242	\$403	\$467	\$502	<b>\$</b> 537	\$573	\$612
Debt service	\$238	\$247	\$257	\$264	\$270	\$283	\$296	\$288	\$268	\$299	\$297	\$293	\$287	\$285	\$276	\$30	\$37	\$47	\$40	\$32	\$012 \$24
Operating expenses to revenues ratio	42.96%	42.14%	41.32%	40.45%	39.60%	38.78%	37.99%	37.22%	36.55%	35.90%	35.30%	35.1 <i>8</i> %	34.62%	34.10%	33.61%	33.09%	32.66%	32.25%	31.86%	31,50%	31,11%
Revenues per passenger (A)	\$98	\$101	\$105	\$108	\$112	\$116	\$120	\$124	\$128	\$132	\$137	\$145	\$146	\$151	\$156	\$182	\$167	\$173	\$179	\$185	
Governmentfunding (rebrn) per pussenger (B)	\$77	\$74	\$71	\$67	\$63	\$60	\$58	\$53	\$49	\$45	\$44	\$42	\$38	\$34	<b>\$30</b>	92	*107	(\$4)	(\$8)	(\$12)	\$191
В/А	78.71%	72 94%	67.54%	62.05%	56.66%	52.19%	48.10%	43.10%	38.00%	34.20%	32.49%	29.54%	26.04%	22.60%	19.51%	5.53%	0.39%	-213%	-4.35%	-6,43%	(\$15) 8.44%
	<u> </u>											L				1	2.02,4	21378	- 4.3074	, ~0.93%	-0.44%

Financial ratios																					
	2005	2006	2007	2008	2009	2010	2011	20t 2	2013	2014	2015	2016	2017	2016	2019	2020	2021	2022	2023		
Capital structure ratios Percentage of cepital assigned to infastructure notes	68.50%	68.92%	69,55%	70.20%	69.39%	70.05%	70.72%	71.41%	69,92%	70,34%	71.00%	71.72%	71.39%	72.12%	72.96%	73.18%	70,73%	71.45%	72.18%	2024 72,90%	2025
Percentage of capital assigned to equipment notes	21.49%	21.94%	21.98%	21.80%	23.13%	22.51%	21.88%	20.89%	22.14%	21.04%	19.46%	17.58%	16.63%	14.10%	11.15%	10.52%	13.08%	11.53%	9.69%	1	73.61%
Percentage of capital assigned to debenture holders	9.21%	9.31%	9.44%	9.58%	9,53%	9.69%	9.85%	10.03%	9.91%	10.06%	10.27%	10.50%	10,59%	10.85%	11.14%	0.00%	0.00%	0.00%	0.00%	7.53%	5.00%
Percentage of capital assigned to stareholders	0.80%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.20%	1.40%	2.93%	4.00%	16.31%	16.19%	17.02%	18.13%	0.00%	0.00%
Debt to equity ratio for operating company		İ														10.01%	14.12%	17.02%	10.13%	19,57%	21,39%
Actual	2.89	3.22	3,50	3.70	4.13	4.17	1.06	3.79	3.83	3.43	296	2.49	2.15	1.71	1.31	1.27	1.44	1.30			l
Maximum permitted	4.00	4,00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00		1.15	0.99	0.82
Interest coverage operating company									į					4.00	4.00	• • •	4.00	4.00	4.00	. 4.00	4.00
Senior debt	1.75	1.79	1.82	1.68	1.96	1.97	2.09	2.22	2.37	2.41	2.59	2.79	3.05	3,28	3,84	N/A	N/A				
Percentage payout ratio (including tease payments)	37.53%	38.33%	38.91%	40.21%	41.79%	41.92%	42.94%	45.13%	47.61%	48.12%	48.15%	49.55%	51.67%	53.27%	55,58%	76.34%	76.16%	N/A	N/A	N/A	N/A
Gross mergin	57.02%	57.66%	58.68%	59.55%	50,40%	61.22%	62.01%	62.78%	53.45%	64,10%	64.70%	64.84%	65.38%	65.90%	66.39%	86.91%	67.34%	75.53%	76,39%	77.22%	78.03%
Netreturn on invested capital	7.80%	6.20%	8.56%	9.20%	9.50%	10.06%	10,54%	11.28%	11.67%	12.38%	12.57%	13.15%	13.72%	14.63%	15.64%	17.29%	18.77%	67.75% 20.45%	68.14%	68.50%	68.89%
Pre tax return on convertible unsacured debantures	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%	9,00%	9.00%	9,00%	9.00%	9.00%	9.00%	9.00%	9.00%	N/A	N/A		22.07%	23,87%	25.95%
Pre tax return on share capital	8.00%	9.63%	11.29%	13.50%	18.07%	17.95%	19.76%	23.33%	27.69%	30.60%	30.36%	32.01%	36,35%	40,15%	44.66%	13.02%		N/A	N/A	N/A	NA
After - tex ratura on equity (operating company)	- 9,67%	-8,63%	-6.78%	~4.11%	~1.91%	1.33%	4.63%	8.80%	11.42%	13,98%	14.52%	15.82%	16.72%	17.58%	19,14%	10.73%	15,06%	16.20%	17.32%	19.46%	19.74%
Cash flow/ total debt outstanding (operating company)	3.02%	4.15%	5.38%	6.88%	7.84%	9.39%	11.15%	13.84%	14.95%	17.70%	20.29%	24.05%	29.14%	38,47%		10.73%	13.37%	15.17%	16.71%	18,04%	19,23%
l											23.2071	41,00%	scat, 1 476	38,47%	54.61%	34/44	N/A	34/4	N/A	N/A	N/A

## High Speed Rail Project

Financial Analysis Final Report February 24, 1995

## Appendix 7

## Financial Projections - Scenario 6: Montreal-Ottawa-Toronto 300 kph (via Dorval)

- 1. Report on Financial Projections
- 2. Notes on Basis of Preparation
- 3. Projected Balance Sheet (Combined Public Financing Entity and Construction and Operating Company)
- 4. Projected Statement of Operations (Segregated as Between Construction and Operating Company and Public Financing Entity
- 5. Investment Returns (2005-2025)
- 6. Capital Structure (2005 and 2025)
- 7. Public Sector Annual Contributions (Government Share of Capital Cost)
- 8. Statistics and Financial Ratios

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Appendix 7

# Price Waterhouse

October 24, 1994

## Report on Financial Projection

To the Project Manager

Re: Scenario 6 - Montreal-Ottawa-Toronto 300 kph (via Dorval)

The accompanying financial projections of the HSR Project, consisting of projections of the balance sheets and of the statement of operations, has been prepared using assumptions and hypotheses provided by consultants engaged by the Project Manager. Our examination was made in accordance with the applicable Auditing Guideline of The Canadian Institute of Chartered Accountants. We have no responsibility to update this report for events and circumstances occurring after the date of our report.

In our opinion, as at the date of this report, the assumptions and hypotheses that we have used are consistent with those developed by the aforenoted consultants.

Since this projection is based on assumptions and on hypotheses regarding future events, actual results would vary from the information presented and the variations may be material. Accordingly, we express no opinion as to whether the projections could be achieved. The projections have been prepared in accordance with accounting policies deemed to be appropriate for a HSR Project.

Chartered Accountants

Price Waterhause

## Note on Basis of Preparation

The projections were prepared in accordance with generally accepted accounting principles relating to measurement, presentation and disclosure of financial projections. The projections reflect the judgment of various consultants and are consistent with the purpose of the information but are not necessarily the most probable set of industry, regulatory and economic conditions and planned courses of action given these conditions and uses of assumptions, hypotheses with an effective date of September 30, 1994.

## Significant Assumptions and Hypotheses

#### 1. Inflation

Current dollars are inflated at a rate of 3%.

### 2. Interest on Infrastructure and Civil Works Notes

The interest rate used for the Infrastructure and Civil Works Notes is based on a government of Canada cost of 30-year funds, which is assumed to be 8.5% per annum, plus 50 basis points.

### 3. Interest on Equipment and Technology Notes

The interest rate used for the Equipment and Technology Notes is based on LIBOR for 15-year funds, which is assumed to be 8.5%, plus 250 basis points.

### 4. Interest on Convertible Subordinate Debentures

Interest on the convertible subordinate debentures is calculated at a basic rate of 9% (government of Canada cost of 30-year funds plus 50 basis points) and a maximum rate of 12.5% (government of Canada cost of 30-year funds plus 400 basis points), subject to the Project's cash flow, after deducting Debt Service on Equipment and Technology Notes and interest on short- term bank indebtedness.

Base interest is capitalized and not paid throughout the Construction Period. Commencing in the Operating Period, base interest on the initial and capitalized balance of the Convertible Subordinate Debentures is paid annually. Excess interest, up to a maximum additional rate of 3.5%, is paid only if Project cash flow allocated to service the Convertible Subordinate Debentures exceeds the 9% base rate.

## 5. Interest Rate on Bank Indebtedness

Interest on short-term bank indebtedness and overdrafts is assumed to be chargeable at 9% per annum.

## 6. Repayment Period for the Infrastructure and Civil Works Notes

The Infrastructure and Civil Works Notes are repaid by way of equal annual instalments of principal and interest over a 35-year period starting with the first year of full operations in 2005.

## 7. Repayment Period for the Equipment and Technology Notes

. The Equipment and Technology Notes are repaid over a 15-year period beginning with the first full year of operations in 2005 using an Annual Sum-of-the-Years'-Digits method, such that payments in later years are greater than those in earlier years.

#### 8. Conversion of Convertible Subordinate Debentures

The debentures are convertible at the holder's option, on a dollar-for-dollar basis, into Share Capital.

#### 9. Share Capital

Share capital consists of common shares.

#### 10. Lease Payments to Public Financing Entity

The Public Financing Entity is assumed to enter into an operating lease for the rental of the Infrastructure and Civil Works to the Construction and Operating Company for a term of 35 years based on Project cash flows. Each annual lease payment is calculated by applying percentage of the initial Infrastructure and Civil Works Notes principal amount as a function of total long-term liabilities to 80% of Project cash flow, after deducting Debt Service on the Equipment and Technology Notes, interest on bank debt and base interest on convertible subordinate debentures.

#### 11. Dividends

Dividends are paid to the shareholders on a pari passu basis with lease payments to the Public Financing Entity and excess interest on the Convertible Subordinate Debentures. The amount of Project cash flows allocated to pay dividends is determined by applying a percentage to 80% of Project cash flows, after deducting Debt Service on Equipment and Technology Notes, interest on short-term bank indebtedness and base interest on the Convertible Subordinate Debentures. The applicable percentage is a function of the par value of share capital as it relates to total long-term liabilities (Equipment and Technology Notes and Guaranteed Infrastructure and Civil Works Notes) and share capital.

#### 12. Fixed Assets and Depreciation

Equipment and Technology are recorded at cost, net of the Construction Period Interest Subsidy, and are depreciated on a straight-line basis at a rate of 4%.

Infrastructure and Civil Works are recorded at cost, net of the Construction Period Interest Subsidy and are depreciated on a sinking fund basis using a rate of 8% per annum.

#### 13. Income Taxes, Capital Taxes and Large Corporations Taxes

The effective tax rates for the HSR are projected at 40% for income taxes, 0.2% for large corporations taxes and 0.4% for provincial capital taxes.

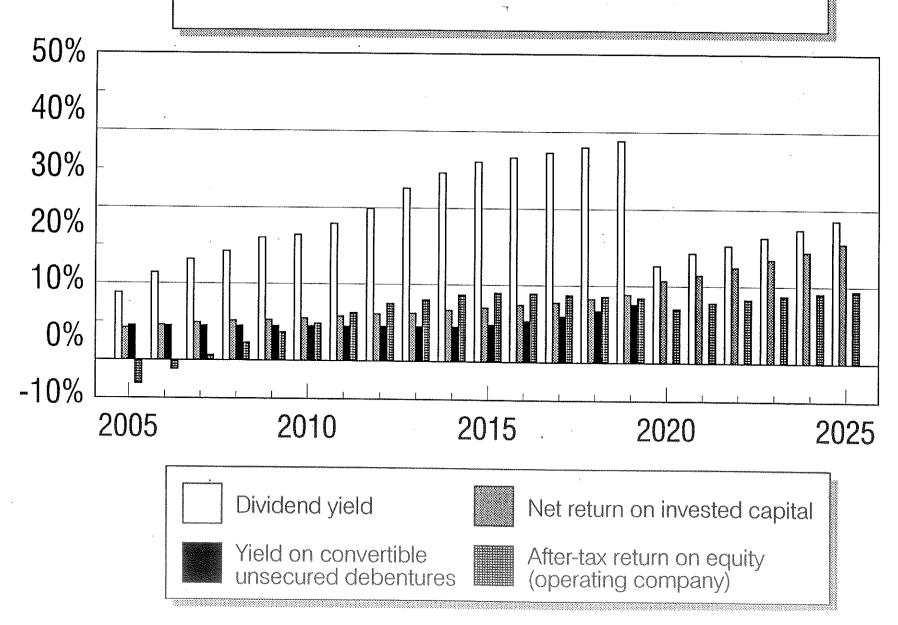
The Infrastructure and Civil Works Notes do not give rise to capital or large corporations taxes as they are obligations of the Public Sector Financing Company.

## 14. Other Assumptions and Hypotheses

Assumptions and hypotheses contained in the reports prepared by Price Waterhouse, SNC, IBI, CIGGT, Canarail and KPMG are incorporated by reference into the projections underlying the Financial Analysis. It is essential for the reader to have a detailed understanding of such reports and assumptions in order to understand the projections.

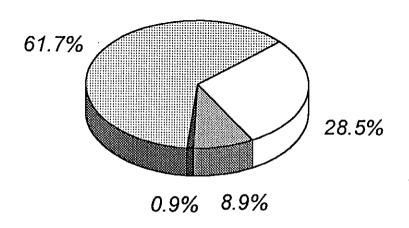
# **Quebec-Ontario High Speed Rail Project**

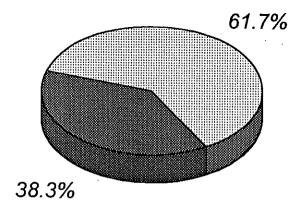
Montreal-Ottawa-Toronto 300 Kph (via Dorval) Investment Returns - 2005-2025



# **Quebec-Ontario High Speed Rail Project**

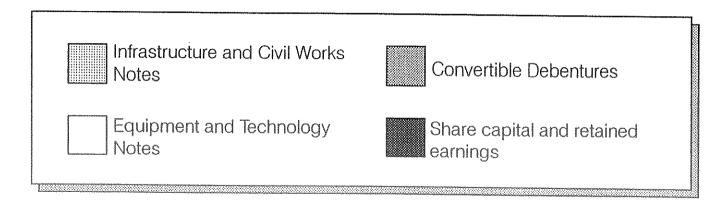
Montreal-Ottawa-Toronto 300 kph (via Dorval) Capital Structure





2005

2025



Quebec-Ontario High Speed Rail Project Montreal - Ottawa - Toronto 300 kph (via Dorvat) Balance Sheet fin millions of inflated dollars)

	1995	-constru		1996	1999	Construct 2000	2001		2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	Ful 2014	Operation 2015	2016	2017	2018	2019	once I					
Assets Current exects Cash Accounts receivable Supplis aand other inventorie's Prepaid exponess	\$126 0 0 0 126	93 0 0 \$93	\$24 0 0 0 24	\$342 0 0 0 342	\$252 0 0 0	\$0 0 0 0	\$0 0 0 0	\$0 0 0	\$0 5 100 8	\$0 5 200 20 225	150 43 206 21 270	\$0 44 212 21 277	\$0 45 219 22 265	\$0 46 225 23	\$0 47 232 23	\$0 49 239 24	\$0 50 246 25 321	\$0 52 253 25 300	\$0 50 261 26	\$0 54 269 27	\$0 56 277 29	2016 50 57 205 29	\$0 59 294 29 362	\$0 61 303 30 393	2019 \$0 62 312 31 405	2020 \$0 64 321 32 417	\$0 66 331 33	\$0 69 340 34 442	\$023 \$0 70 351 35 455	\$0 72 361 36	\$104 73 972 97
Fine d Assets at cost	}			.						1								-	- "	-	-	5,1		323	~~ .	7"	430	772	455	469	587
Infrastructure and civil works Landand Piphi -of-way Earthworksbubgrade Stations Manthanance skelitius Other accommodations Bridges Grade separations Tack Defend start -upand other costs	0 8 4 2 1 4 5 0	1 17 7 5 1 8 10 11 2	35 35 6 20 21 4 5	36 127 12 7 9 83 76 11 17	109 324 17 11 35 205 195 195 39 44	145 670 70 45 65 497 491 110 96	152 941 164 106 102 569 704 267 135	152 1,044 256 165 102 619 784 426 154	152 1,044 418 269 102 619 794 551 167	152 1,044 418 269 102 619 784 556 167 4,119	152 1,044 418 269 102 619 794 556 167	152 1,044 418 269 102 619 794 556 167	152 1,044 419 269 102 619 784 556 167 4,113	152 1,044 410 269 102 619 794 556 167	152 1,044 416 269 102 619 784 556 167	152 1,044 418 269 102 619 784 556 167	152 1,044 416 269 102 619 764 556 167	152 1,044 418 269 102 619 794 556 167	152 1,044 418 269 102 619 784 556 107	152 1,044 418 269 102 619 764 556	152 1,044 418 269 102 619 784 556 157	152 1,044 418 269 102 619 784 556 167	152 1,044 418 269 102 619 784 556 167	152 1,044 416 269 102 619 794 556	152 1,044 418 269 102 619 764 556	152 1,044 418 269 102 619 784 556 157	152 1,044 418 269 102 619 764 556	152 1,044 418 269 102 619 784 556	152 1,044 418 269 102 619 794 556 167	152 1,044 418 269 102 619 784 556 167	152 1,044 418 269 102 619 704 556 167
Capitalized interest Construction period interest subsidy Inflation adjustment	0 0 2 27	0 0 4 56	0 0 10	29 (29) 54 433	121 (121) 170 1,142	944 (944) 440 2,588	660 (660) 705 3,646	1,062 (1,062) 676	1,533 (1,533) 1,015 5,124	1,964 (1,984) 1,017	1,984 (1,984) 1,017 5,131	1,984 (1,994) 1,017 5,131	1,994 (1,964) 1,017 5,131	4,113 1,964 (1,984) 1,017 5,131	4,119 1,984 (1,984) 1,017 5,191	4,119 1,964 (1,964) 1,017 5,131	4,113 1,964 (1,964) 1,017 5,131	1,113 1,984 (1,984) 1,017 5,131	4,113 1,984 (1,984) 1,017 5,131	4,119 1,964 (1,964) 1,017 5,131	4,113 1,964 (1,964) 1,017	4,113 1,984 (1,984) 1,017	4,113 1,964 (1,964) 1,017	4,113 1,984 (1,984) 1,017	4,113 1,994 (1,994) 1,017	4,113 1,964 (1,964) 1,017	4,113 1,964 (1,964) 1,017	4,113 1,964 (1,984) 1,017	4,113 1,994 (1,994) 1,017	4,113 1,984 (1,984) 1,017	4,113 1,984 (1,984) 1,017
Accumulated depreciation Net infrastructure and civil works	0 27	0 56	114	433	1,142	2,586	0 3,846	0 4,580	5,124	5,131	5,107	(49) 5,082	(77) 5,054	5,024	(140) 4,991	(176) 4,965	©15) 4,916	(258) 4,873	(304)	(365)	5,131 (410) 4,720	5,131 (470) 4,660	5,131 (536) 4,594	5,131 (508) 4,523	5,131 (686)	5,131 (771) 4,360	5,131 (854)	5,131 [965]	5,131 (1,075)	5,131 (1,195)	5,131 (1,326)
Equipment and technology Power distribution system Signate	0	1	3:	11	30	<del>6</del> 8	190	326	440	464	464	464	464	464	464	464	464	464	464	464	464	464	464	464	4,445	464	4,267	4,166	4,056	3,936 464	3,605
Contributications Light foright Rolling stock Capital expendatures	0 0	0 0 2 0	1 0 7 0	3 0 22 0	20 9 0 61 0	58 26 0 177 0	125 55 0 360	214 95 0 652 0	294 131 0 897	905 196 190 930	305 136 130 930	905 196 190 990 63	905 196 131 930	905 136 131 930 134	305 136 131 1,050	305 136 131 1,050 215	905 136 131 1,050 258	305 136 131 1,050 305	305 136 131 1,200	905 136 131 1,200 405	305 136 134 1,200 462	905 196 161 1,200 521	905 196 161 1,260 583	305 136 162 1,260 649	305 136 162 1,260 720	305 136 152 1,260 794	305 136 162 1,410	305 136 163 1,410	305 136 163 1,410	305 136 186 1,410	305 136 199 1,410
Capitalized interest Construction period Interest subsidy Inflation adjustment	0 0	9 0 0	19 0 0 2	44 0 0 6	120 55 (10) 21 186	349 136 (43) 74	750 253 (101) 181 1,082	1,267 446 (231) 344 1,846	1,769 721 (435) 510 2,565	1,965 1,036 (669) 586 2,917	1,996 1,096 (669) 596 2,948	2,028 1,036 (669) 596 2,981	2,063 1,036 (569) 586 3,015	2,100 1,036 (669) 596 3,052	2,259 1,036 (569) 658 3,264	2,300 1,095 (669) 658 3,325	2,944 1,036 (669) 659 3,369	2,390 1,036 (569) 659	2,590 1,096 (669) 790	2,642 1,096 (669) 780	2,701 1,036 (669) 782	2,786 1,036 (669) 809	2,909 1,096 (669) 971	2,975 1,036 (669) 871	3,046 1,036 (569) 871	3,121 1,036 (569) 972	973 3,350 1,036 (669)	957 3,434 1,036 (569) 1,065	1,046 3,523 1,036 (669) 1,066	1,140 3,643 1,036 (669)	1,241 9,749 1,036 (669) 1,104
Accumulated depreciation Net equipment and technology	0	9	0 15	0 50	186	517	1,062	1,846	2,565	2,917	(115)	2,746	(355) 2,660	(477) 2,575	(609) 2,675	(742) 2,583	(876)	9,416 (1,013) 2,403	9,736 (1,163) 2,573	9,766 . (1,314) 2,474	9,850 (1,468) 2,362	3,962 (1,527) 2,335	4,147 (1,792) 2,354	4,213 (1,961) 2,252	4,284 [2,132] 2,152	4,359 (2,307) 2,052	4,782 (2,496) 2,294	4,966 (2,693) 2,174	4,956 (2,891)	5,113 (3,095)	5,213 (9,304)
Net fixed assets	27	60	129	483	1,328	3,105	4,926	6,426	7,689	0,048	7,940	7,626	7,714	7,598	7,666	7,538	7,409	7,275	7,400	7,250	7,102	6,995	6,949	6,775	6,596	6,412	6,551	6,340	6,121	2,018 5,954	1,910 5,714
Total a seste	\$153	\$ 153	\$153	\$825	\$1,500	\$3,105	\$4,928	\$6,426	\$7,802	\$8,273	\$8,209	\$8,105	\$7,999	\$7,892	\$7,988	<b>\$7,9</b> 50	\$7,729	\$7,606	\$7,740	\$7,600		\$7,367	\$7,331	\$7,169		\$6,029	\$6,990	\$6,782		\$6,422	\$6,301
Liabilities and Owners' Equity Current labilities Dank indebtedness Accounte psyable and econuls Current portion of long-term debt	\$0 0 0	\$0 0 0	\$0 0 0	\$0 0 0	\$0 0 0	\$26 0 0	\$100 0 0	\$100 0 0	\$200 12 0 212	\$311 14 0 325	\$291 47 40 378	\$279 47 59 365	\$263 46 79 369	\$245 46 96	\$416 49 118 582	\$394 49 138	1:369 49 158 576	\$339 50 176 567	\$574 50 199 823	\$533 51 220 604	\$491 51 242 784	\$490 53 264 604	\$546 59 286 865	\$463 54 309 626	\$370 55 332 757	\$491 56 65	\$657 56 99	\$474 57 101	\$277 50 110	\$126 59 120	\$0 60 131
Long—term liabilities Equipment and technology notes Inhastructure and civil works notes	0 0	0 0	0 0	0 915 315	0 1,026 1,026	0 2,474 2,474	430 3,737 4,167	1,123 4,479 5,602	1,764 5,029 6,793	2,033 5,038 7,071	2,016 5,015 7,031	1,962 4,969 6,972	1,932 4,962 6,899	1,864 4,931 6,795	1,779 4,896 6,677	1,577 4,852 6,540	1,559 4,623 6,362	1,423 4,781 6,204	1,271 4,734 6,005	1,101 4,683 5,785	915 4,628 5,543	712 4,568 5,279	491 4,502 4,990	254 4,430 4,505	(0) 4,352 4,362	622 (0) 4,267	(0) 4,175	(0) 4,074	445 (0) 3,969	306 (0) 3, <del>8</del> 43	191 (0) 3,712
Ownan Equity Comartible unsecured debenture Share capital Potatred earnings (descrit)	0 159 0 153	0 159 0 159	0 153 0 153	357 159 0 510	402 153 0 555	452 153 0 605	508 153 0 661	572 153 0 725	543 159 0 796	724 153 0 877	724 153 (77) 900	724 153 (129) 748	724 153 (160) 717	724 153 (171) 706	724 153 (169) 708	724 153 (148) 729	724 163 (106) 771	724 153 (42) 835	724 153 35 912	724 153 135 1,012	724 153 259 1,136	724 153 406 1,283	724 153 576 1,453	0 677 791 1,650	0 877 1,016	0 077 1,063	4,175 0 677 1,123 2,000	4,074 0 677 1,199 2,076	3,969 0 977 1,291 - 2,167	3,043 0 977 1,397	3,712 0 677 1,521 2,398
Total liabilities and owners' equity	\$153	\$153	\$153	\$925	\$1,500	\$3,105	\$4,928	\$8,428	\$7,902	\$0,273	\$6,209	\$8,105	\$7,999	\$7,892	\$7,908	\$7,650	\$7,729	\$7,606	\$7,740	\$7,800	\$7,462	\$7,367	\$7,331	\$7,169	\$7,002	\$8,829	\$6,960			\$0,422	. [
Debt to equity retto Ferretad ersemum Actual	N/A N/A	N/A N/A	N/A N/A	4.00 0.00	4.00 0.00	4.00 0.00	4.00 0.64	4.00 1.55	4.00 2.35	4.00 2.57	4.00 2.62	4.00 2.90	4.00 3.04	4.00 3.00	4.00 3.13	4.00 2.90	4.00 2.59	4.00 2.21	4.00 2.14	4.00 1.74	1.00 1.37	4.00 1.07	4.00 0.85	4.00 0.56	4.00	4.00 0.24	4.00 0.39	4.00 0.29	4.00 0.14	4.00 9.07	4,00 0.02

Quebec-Ontatio High Speed Rail Project Montreal - Ottawa - Toronto 300 kph (via Dorvat) Statements of Operations (in millions of inflated dollars)

	1995	-constru		1996	1999		2001 20		003 2004	2005	2008	2007	2009	2009	2010	2011	2012	2013	2014	Operation 2015	2016	2017	201B	2019	2020	2021	2022	2023	2024	2025
OPERATOR	1	,,,,,,,		T						7														5014	EVE	EUE I	EVEZ	2020	EUE 1	2023
Pavenues	so	**	so so	. so		so l	\$0	so l	\$63 \$63	\$546	\$561	\$576	\$592	\$609	\$626	\$643	\$661	\$679												
Paissengerieventes, constant dellars Less Apency commissions	30. 0	. a-u	30	**	.* ا	1 20	<b>30</b>	<b>3</b> 0	(3) (3)	1 (30)	(31)	5376	(33)	(33)	(34)	(35)	(36)	(37)	\$698 (36)	\$717 (39)	\$737 (41)	\$757 (42)	\$778 (43)	\$800 (44)	\$822 (45)	\$045 (46)	\$656	\$693 (49)	\$917	\$943 (52)
Less Credit card discount	l ŏ	Ö	0	ō	0	ō	ō	ŏ	_iilii		[5]	(5)	(6)	(6)	(6)	(8)	(6)	(6)	7	(7)	m	`````	n	iei.	493	(8)	(6)	(9)	(9)	691
Net passenger revenues, constant dollars	0	0	0	0	0	0	0	0	59 59	511	525	539	554	569	505	602	618	636	653	671	690	709	728	749	769	791	813	835	656	662
Net light freight revenues, constant dollars		,	م ا	ہ ا	، ا	ام ا	ام	0	م ام	16	17	18	18	10	20	20	21	22	23	22	94	~	ایم	27	~	29	30	31		
Inflation adjustment	0	o	ا ا	ة اد	ا	اة ا	ă	٥	20 23	224	254	205	319	956	395	437	482	530	501	636	695	758	825	697	973	1.055	1.143	1.236	1.335	1.442
Net revenues	0	ō	0	0	-	0	ū	0	90 82	751	795		8G2	944	1,000	1,059	1,121	1,187	1,257	1,331	1,409	1,492	1,579	1,672	1,771	1,875	1,985	2,102	2,225	2,350
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Operating Costs, constant deliars		۱ ،	، ا		، ا	اه ا	أم	n	07 10	75	76	77	78	79	79	eo.	61	82	83	64	65	95	87	ee		69		91	92	~
Electricity	0	lŏ	ا ا		ا	اة ان	ől	ŏ	2 2	18	19	18	10	19	19	19	20	20	20	21	21	21	22	22	96 22	53	90 23	24	24	93 24
Advertising/promotion	0	Ō	1 0	0	0	0	0	ō l	5 5	11	11	11	11	11	11	11	11	11	11	11	11	111	11	11	11	11	11	ii.	11	11
Infrastructure maintenance services	0	0	0	0	į g	0	0	0	3 3	11	11	11	10	10	9	9	0	0	6	8	е	8	8	8	е	8	θ	8	8	6
infrastructure materials/supplies Rolling stock materials/supplies	0	"	11 2	2	1 9	9	9	, i	0 0	1	10	11		2	.2	.2	12	12	12	12	-6	.6	7	6	` θ	9	10	11	13	14
Telecommunications/computer services	ő	ة ا		, i	1 8	اة ا	ő	ăl	ء اه	او ا	10	10	10	10	10	- 61	11	11	12	12	12	13	13	13 13	13 13	14	14	14	15	15 15
insurance service effranchise fees etc	0	- ŏ	) ă	0 0	0	اة اد	ō	0	2 2	6	6	6	6	6	6	6	6	6	7	7	7	7	7	7	7	'7	'71	7	7	7
Food/elated sundres	0	0	0	) p	, ,	0	0	ا ٥	0 0	1 .1	1	1	1	. 1	1	1		1	1	1	1	2	2	2	2	2	2	2	5	2
Unacheduled materials/services Property laxes	0		3 2	,	1 :		0	a l	111 19	33	33	33	33	33	33	33	33	33	34	34	અ	34	34	34	34	34	34	34	34	34
Contingency	0	l ő	( )	, i	1 7		ă	اة	ăl ă	13	19	13	13	13	13	19	13	13	13	13	0	14	- 0	0	0	15	15	0	0	0
Total operating costs, constant dollars	0	Ŏ	1 6	ŏ		Ö	0	ő	46 55	169	190	192	193	194	196	197	199	201	203	206	211	213	216	219	222	226	229	232	236	240
	1 ]						_	.1				.1		. 1	_ [			1									"			
Cupiul laxes	0	0	2 2			0	0	2	.01 .5	12	11	11	111	11	10	10	10	10	9	9	9	9	9	9	0	e	6	в	9	9
inflation adjustment Yotal operating costs	0			<u> </u>		3			62 77	290	290	301	312	323	126 334	139 346	150 359	162 373	175 387	188	205 425	220 443	237	254 461	271 501	290	310 547	302 572	354	376
roan opolating coats	ľ	•	′I	Ί	١,	1 1	٦,	٦	~  "	-~1		~′	312	SE.3	907	3-63	333	3/3	307	703	723	773	462	401	201	524	547	2/5	599	627
Gross operating cash flow	0	0	) 0	0		0	0	0	17 5	472	505	541	560	622	656	713	762	814	869	926	984	1,049	1,116	1,191	1,269	1,351	1,438	1,529	1,626	1,731
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Large corpositions taxes income taxes	0		() :	1 8	1 :		äl	6		15	6	ا م	15	96	47	5	91	107	122	148	169	189	233	4	4	1	- 1	- 1	1	5
Net operating cash flow	0		<del>il - </del>	<del>il ö</del>	<del> </del>	0	<del>- il</del>	ŏ	17	451	500	536	559	592	614	536	667	702	742	775	811	957	233 860	262 925	293 973	1,111	1,200	1,269	1,342	1,423
· -		1	1	1	'				1								- 1			****	•"	957	~~	320	313	*****	1,200	1,209	1,572	1,763
interest on secured and bank debt	0	0		9	9	0	0	0	17 5	252	249	245	236	558	230	217	201	184	161	159	135	111	99	57	22	29	39	28	17	0
Principal repayments on secured debt Cash flow available to debenture holders, lease	0	i d	)	9 0		0	- 0	0	0 0	17	34	51	60	85	102	119	136	152	169	196	203	220	237	254	0	. 0	0	0	0	. 0
payments and dividends	۱ ،		) 6	) a	، ا	اه ا	a	اه	ا اه	181	216	240	254	278	280	303	330	365	392	430	473	525	554	613	951	1,083	1,160	اميم	4 000	
page and an an an an an an an an an an an an an	1 -	-		1 -	`	1 1	-1		٦,			"	ا.مغ				~~			130	713	323	357	013	801	1,003	1,160	1,240	1,326	1,415
Base interest on convertible debentures	0	0	) (	0		0	0 .	0	0 0	65	65	65	65	65	65	65	65	65	65	65	85	65	ū	. 0	. 0	0	0	0	0	O.
Excess cash flow a valiable for lease payments, excess interest on convertible debentures and dividends	١ ,	. ا	J.	. 1.	Ι,	اما.				115	. 151	الدرا	100				است					[								
INSIDE OF COMMUNION REPORTED BY BUT CHAINEVER		١ ،	'l '	'l	1 '	'l 'i	٧I	0	9 '	l III	. 131	175	100	213	217	230	265	300	327	365	408	460	554	613	951	1,093	1,160	1,240	1,326	1,415
Lease payments	0	c	) (	o 1		اه اد	0	0	0 (	66	96	100	107	121	124	135	151	171	197	. 208	232	262	318	350	542	617	661	707	756	807
Excess interest on convertible debentures	0	C	) (	) 0		0	0	0	0 0	Ö	0	0	0	0	0	0	Ö	0	0	4	12	55	0,0	0	10	017	. "	100	750	0.07
Dividends	0	0	1	2 0	1 9	0	0	0	0 0	27	35	40	43	. 49	50	55	61	69	75	.80	82	64	127	141	219	249	267	205	305	326
Residual cash flow for Operating Company	0	l 6	'l '	<b>'</b> l °	1	ʻ  °	Q.	١	0 (	23	30	35	3e	43	43	49	53	60	65	13	82	922	111	123	190	217	535	248	265	200
Less: Equipment and technology deprecation	0		ه اه	0	1 6	1 0	0	0	0 0	(117)	(117)	017	(117)	(124)	(124)	(124)	(124)	(135)	(135)	(136)	(136)	(143)	(143)	(143)	(143)	(156)	0561	· nse	(159)	(SEC)
Add: Principal repayments on secured debt	0	Ì	<u>ار</u> ا	a <b>l</b> ŏ		ه (د	ō	0	0 0	17	34		68	85	102	119	196	152	169	106	203	220	237	254	(143) (1	(196)	(156)	(156)	(129)	(159)
Add: Dividenda	0		2	2 0	<u></u>	0	0	0	0 0	27	35	40	43	49	50	55	61	69	75	80	82	84	127	141	219	249	267	205	305	326
Net income (loss) for Operating Company	0	1 0	'l '	1 0	1 '	0	0	٥l	9 9	(50)	{10	9	32	52	71	96	125	146	175	204	229	253	333	375	266	309	342	377	411	450
PUBLIC FINANCE COMPANY			1	1	1	1 1			l					- 1			1				1	- 1			1		- 1	- 1	- 1	į
intrastructure and civil works interest-subsidy	0	C	) (	0	(	0 0	0	٥	0 0	(477)	(477		(477)	(477)	(477)	(477)	(477)	(477)	(477)	(477)	(477)	(377)	(477)	(477)	(477)	(477)	(477)	(477)	(477)	(477)
interest on Government garanteed debt	0	9	) [	0	1 9	0	0	0	0 (	453	451		447	444	443	430	434	430	126	122	417	411	405	399	392	364	376	367	357	346
Lease payments  Depreciation on inhestructure and civil works	0	1 5	:1 :	KI 🕺	1 2		21	<u></u>		66	96 25	100	107	121	124 36	135	151 43	171	187 51	508	232	262	316	360	542	617	561	707	756	807
Net Income and cash flow of Public Finance Company		1	51 6	š š	1	5 0	- 8	6	6 6	56			107	121	124	135	151	171	187	208	232	262	72 316	78 350	95 542	93 617	101	110	120	131
				• • •		······································	<del>-</del> 1		······································	-			.511		157			1111	10/1		ESZ	eue ]	310]	J. J. J. J. J. J. J. J. J. J. J. J. J. J	212	517	661	707	756	907
Senior debt coverage ratios		<b>,</b>	.,	.,	· · · · · · · · · · · · · · · · · · ·	,,			. ,			·																		
Equipment and technology notes - Actual				1						1.75 1.75	1.78	1.09	1.90	1.98	2.01	2.13	2.26	2.42	2.49	2.69	2.91	3.17	3.42	3.63	N/A	N/A	N/A	N/A	N/A	N/A
Equipment and technology noise Required		1		_L	1			1	L	1.75	1.75	1 1.75]	1.75	1.75	1.75	1.75	1.75	1.75	1.75	1,75	1.75	1,75	1.75	1.75	1.75	1.75	1.75	1.75	1.75	1.75
Fleturn on equity	٦																													
Operating company	T	T	T	T	1	II	' [			-6.2%	-2.4%	1.3%	4.5%	7.3%	9.7%	12.5%	15.0%	16.0%	17.3%	17.9%	17.8%	17.4%	20.1%	19,6%	19.7%	15.5%	16.5%	17.4%	10.1%	18.6%
										#	***	1																		
Not operating margin		1		.1	L	<u> </u>		t		\$ 52.8%	63.5%	64.3%	65,1%	65.8%	66.6%	67,3%	69.0%	69.6%	69.2%	69.7%	69.6%	70.3%	70.8%	71.2%	71.7%	72.1%	72.4%	72.0%	73.1%	73.4%

 Quebec -- Ontario High Speed Rail Project Montreal -- Ottawa -- Toronto 300 kph (via Dorvat) Government share of capital costs

11 70	of indicate declines

	Present		Pre-cor	eruction				Cons	truction at	d Slari-i	(P													Full Oper	ations										$\neg$
	Value	1995	1995	1997	Folal	1990	(929)	2000	500 (	2002	2003	2004	Tolei	2005	2006	2007	2006	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	Total
intrastructure and civil works													- 1				1	į	1																
Construction period interest subsidy	940	۰	۰	۰	١	29	93	223	3/3/6	402	451	451	1,904	9	٩	٥	2	٥	0	٥	٥	0	٥	٩	٩	0	0	٥	0	0	0	۰	٥	0	0
Equipment and technology								1					ı						- 1			1	1		ļ					1			1		
Construction period interest subady	299	۰	۰	٥	١	۰	10	32	59	130	204	234	669	0	٥	٥	٥	0	٥	0	٥	٥	٥	٥	9	0	٥	٥	٥	٥	۰	0	۰	٥	o
Inital aponeor									ł				- 1								1	ĺ				ĺ									1
Share capital	72	77	٥	٩	77	٥	0	٥	р	0	٥	0	٥	٥	٥	٥	٥	٩	٥	٥	0	٥	۰	٥	٥	٥	٥	٥	٥	٥	0	۰	٥	٥	٥
Annual subaldy	1,764	٥	٥	٩	9	0	٥	٩	٥	٩	٥	٥	٥	477	477	477	477	477	477	477	477	477	477	477	477	477	477	477	477	477	477	477	477	477	10,013
Táxes	(বাৰ	۰	٩	۱°	. '	۰	٥	٩	٩	٥	0	٩	٥	(35)	(17)	(17)	(32)	(41)	(62)	(95)	(105)	(122	(136)	(162)	(182)	(201)	(2-16)	(275)	(30-6)	(247)	(246)	(269)	(293)	(318)	(3,391)
Dividends	(92)	1	٥	l ٩	9	٥	٩	٩	o o	٥	•	٩	٩	(13)	(17)	(20)	, (22)	(54)	(25)	(27)	(30)	(35)	(36)	(40)	(41)	(42)	(10)	(12)	(19)	(82)	(23)	(25)	(27)	(20)	(542)
i, ease payments	(900)	٥	0	0	(	٥	٥	٥	0	. 0	٥	٥	٩	(05)	(96)	(100)	(107)	(121)	(124)	(135)	(151)	(17.0	(107)	(206)	(232)	(262)	(316)	(350)	(542)	(617)	(60 i)	(זיסד)	(756)	(807)	(6,706)
Tolsiper annum		77	٥	٥		29	103	255	394	532	655	686		365	356	340	316	291	266	229	190	149	116	67	22	(26)	(96)	(180)	(300)	(409)	(454)	(524)	(590)	(676)	-
Total cumulative	<u> </u>	<u> </u>		77	77	<u>L</u>	132	367	781	1,313	1,258	2,653	2,653	365	721	1,061	1,377	1,508	1,933	2,163	2,353	2,502	2,618	2,696	2,707	2,679	2,582	2,422	2,034	1,625	1,171	647	42	(627)	-
Prozoni value with taxes (cumulative)					70							[	1,313																					(	486
Prosoni value without taxes (cumulative)					75							(	1,313																					(	926

الرابيان فالربا فللناء فللناء فالأراف فالنار فللزاء فالنار فأنان فريان فالنار الأريال فللناء فللناء ملايات النايل والا

Conflibution of public sector before break-even point in cash flow is schieved

5,437 resal fill worth design of the last of

Total not contribution without laxes 5,429

Presont value of contribution with taxes 2 161

Present value of contribution without taxes 2,365

#### In millions of 1993 constant dollars

	Presont	т	Pro-c	- C + F 11c	Hoe				Con	ktiellen e	nd Slar L-	145			F										Full Ope											
	Value	199:				Tolui I	1995	1999	2000	2001	2002	2003	2004	Total	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015		2017	2018	2019	2020	2021	2022	2023	2024	202	el 144
triff a sit contact a and civil works			T	Т							-									,								25.15						2027	- 202	5 Tota
Construction period interest subsidy	766		٥	٥	۰	۰	25	70	161	562	308	336	326	1,510	٥	٥	٥	۰	٥	٥	٥	٥	٥	0	۰	٥	٥	o	0	٥	0	٥	۰	0		٥
Equipment and technology							1																													1
Construction period interest subsidy	236		۰	۰	٥	٥	٥	۰	26	+6	100	152	169	502	o	0	٥	ò	¢	0	٥	۰	G	٥	٥	٥	o	٥	٥	0	٥	٥	٠ ،	D		0
Inital sponsor						l			1													ļ	ļ								İ	ĺ	ĺ			
Share capital	56	7	2	٥	0	72	۰	۰	٥	٥	٥	0	0	٥	0	0	0	0	٥	٥	٥	٥	٥	ه	¢	٥	0	٥	٥	0	0	٥	۰	٥	İ	٥
Annual subaidy	1,061		٥	٥	٥	٥	0	0	٥	۵	o	O'	٥	0	334	325	315	306	207	200	200	272	264	256	249	242	235	226	221	215	208	202	196	191	le te	5 50
Yaxos	(221)		٥	٥	٥	٥	۰	0	۰	c	c	0	٥	a	(23)	(12)	(19	(20)	(25)	(36)	(50)	(60)	(67)	(73)	(8-9)	(02)	(99)	(118)	(127)	(137)	(108	(104)	(116	(117)	(12	D) (1.6
Dividends	(55)		0	٥	٥	0	a	0	0	a	0	0	٥	0	(9	(12)	(13)	(14)	(15)	(15)	(16)	(17)	(19)	(20)	(21)	(21)	(21)	(5)	(8)	(9)	(9)	(10)	(10)	(11)	(1	s (:
Lease payments	(430)		٥	٥	٥	٥	٥	0	٥	0	0	D	o	0	(46)	(59)	(56)	(69)	(76)	(75)	(60)	(96)	(95)	(100)	{ 100}	(118)	(129)	(151)	(162)	(244)	(270)	(20 f)	(221)	(302)	(3)	a) (a)
Total per annum	-	7	2	0	٥	-	25	96	207	311	409	467	495		255	242	225	209	181	161	135	108	83	63	25	- 11	(14)	(40)	(74	(179)	(179)	(193)	(216)	(239)	(26	<del>-</del> le
Total cumulative	1 -	7	2 1	2	72	_	25	111	316	630	1,037	1,524	2.020	-	255	499	723	926	1, 107	1,266	1,403	1,511	1,594	1,656	1,891	5 700	1,696	1,642	1,588	1,393	1,214	1,022	806	567	30	

Present value with laxes (cumulative) Present value without laces (cumulative)

1,006

Contribution of public sector before breex - even point in cash flow is achieved

Join not contribution with lates

Total net contribution without laxes 4,350 Present value of convibution with issue

Present value of contribution without lawer 1,687

375 596

Quebec—Ontario High Speed Rail Project Montreal — Ottawa — Toronto 300 kph (via Dorval) Statistics and financial ratios (In millions of Inflated dollars)

Statistics and general information 2006 2007 Tig 2014 2008 2009 2010 2011 2012 2013 2016 2017 2018 2019 2020 2021 2022 2023 2024 2025 Ridership (in millions) 7.1 7.3 7.4 7.6 78 ĦΛ 8.2 8.4 9.5 97 100 10.5 10.5 10.7 11.0 11.2 11.5 Growth of ridership in percentage 2.45% 2.46% 2.46% 2.45% 2.40% 2.45% 2.48% 2.46% 2.46% 2.46% 2 48% 2.46% 2.48% 2.46% 2.45% 2.46% 2 46% 2 48% 2 48% 2.46% Total operating revenues \$751 \$795 \$892 \$842 \$944 \$1,000 \$1.050 \$1,121 \$1,187 \$1,257 \$1,331 \$1,409 \$1,492 \$1.579 \$1,672 \$1,771 \$1,875 \$1,965 \$2,102 \$2,225 \$2,358 Growth of revenues in percentage 5 R0% 5 80% 5.89% 5.89% 5.89% 5,89% 5.88% 5.66% 5.88% 5.88% 5.88% 5 B8% 5.88% 5.88% 5.88% 5 88% 5 68% 5.88% 5.88% 5.98% Total operating expenses \$290 \$290 \$301 \$312 \$323 **\$334** \$346 \$359 \$373 \$387 \$403 \$425 \$443 \$462 \$481 \$501 \$524 \$547 \$572 \$599 \$627 Growth of expenses in percenture 3.75% 3.78% 3.52% 3.54% 3.56% 3,59% 3.61% 3.92% 3.94% 4.05% 5.40% 4.21% 4.25% 4.31% 4.14% 4.45% 4.50% 4.56% 4 62% 4.68% Government funding (\$477) Lease payment to Government \$66 \$85 \$100 \$107 \$121 \$124 \$135 \$151 \$171 \$187 \$208 \$232 \$262 \$316 \$350 \$542 \$617 \$501 \$707 \$756 \$807 Daht saruka \$335 \$348 \$361 \$371 2379 \$305 \$400 \$402 \$402 \$415 \$414 \$415 \$419 \$326 \$311 \$22 \$29 \$39 \$20 \$17 \$8 Operating expenses to revenies ratio 37.22% 36.47% 35.74% 34.94% 34,17% 33.42% 32.69% 31.99% 31.40% 30.82% 30.29% 30.15% 29.68% 29.22% 28.79% 28.32% 27.94% 27.57% 27.23% 26 91% 26.57% Revenues per passenger (A) \$105 \$109 \$113 \$117 \$121 \$125 \$129 \$133 \$138 \$142 \$147 \$152 \$157 \$152 \$168 \$173 \$179 \$185 \$191 \$198 \$205 Government funding (return) per passenger (8) \$58 \$54 \$51 \$46 \$45 \$44 \$42 \$39 \$35 \$33 \$30 \$26 \$23 217 \$13 (\$13) (\$17) (\$21) (\$29) (\$25 B/A 54,66% 49.11% 44.78% 41.43% 37.66% 32.24% 29.08% 25.75% 23.10% 20.19% 17.34% 14.37% 10.20% 7.61% -3.67% ... 7 499/ - 9 20% -- 10.95% -12.53% -13.99%

Financial ratios																					
	2005	2008	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
Capital structure ratios Percentage of capital assigned to intestructure notes	61.73%	62.24%	62,75%	63.25%	62.27%	52.90%	63.31%	63,84%	62.17%	62.71%	63.19%	63,28%	62.76%	63.28%	63.78%	64.26%	61.63%	52.08%	62.50%	62.28%	61,58%
Percentage of capital assigned to equipment notes	28.47%	28,48%	28.24%	27.75%	28.76%	27.86%	25.65%	25.11%	25.97%	23.89%	21,49%	19.18%	17.28%	13.41%	8.96%	7.10%	9.49%	7.05%	4.25%	1.99%	0.00%
Percentage of capital assigned to debanture holders	8.67%	6.96%	9.10%	9.23%	9.14%	9.28%	9.42%	9.58%	9.41%	9.59%	9.77%	9,90%	9.94%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0,00%	0.00%
Percentage of capital assigned to shareholders	0,94%	0.30%	0.00%	0.00%	0.00%	0.07%	0.61%	1.47%	2.45%	3.82%	5.58%	7.65%	10.02%	23.31%	27.24%	28.64%	28.88%	30.87%	33.25%	35,73%	38.42%
Debt to equity retio for operating company						1				-							-0.02%	200,70	30.23/4	30.73%	30.42%
Actual	2.82	2.98	3.04	3.00	3.13	. 290	2.59	2.21	214	1.74	1.37	1.07	0.85	0.56	0.32	0.24	0,33	0.23	0.14	0.07	0.02
Maximum permitted	4.00	4.00	4,00	4.00	4,00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	- 4.00	4.00	4.00	4.00	4.00	4.00
Interest coverage operating company	1			ĺ									Ì				"""	•••	4.00	4.00	•.00
Senior debt	1.75	1.78	1.83	1.90	1.98	2.01	2.13	2.26	2.42	2.46	2.69	2.91	3.17	3.42	3,83	N/A	N/A	N/A	N/A	N/A	N/A
Percentage payoutratio (including lease payments)	35.08%	37.2 <del>6</del> %	36.29%	38.60%	39.77%	38.95%	40,01%	41.53%	43.50%	44.04%	45.08%	48.26%	50.58%	50,34%	53.07%	78.19%	77.92%	77.37%	78.21%	79.01%	79.57%
Grass margin	62.76%	69,53%	84.2 <del>6</del> %	65.06%	65,83%	66.58%	67.31%	68.01%	69.60%	69.18%	69.71%	69,85%	70.32%	70.78%	71.21%	71.66%	72.08%	72.43%	72.77%	73.09%	73.43%
Natratura on invested capital	8.42%	9.22%	9.66%	10.34%	10.64%	11.05%	11.63%	12.32%	12.57%	13,38%	14.17%	14.86%	15.52%	17,36%	18.70%	21,14%	22.77%	24,83%	26.89%	28.89%	30,96%
Pro tax return on convertible unsecured debentures	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%	9,00%	9.00%	9.00%	9.58%	10.70%	12.08%	N/A	N/A	N/A	. N/A	N/A	N/A	N/A	N/A
Pre have ten on shere capital	17,47%	22.74%	26.29%	28.33%	31.97%	32.69%	35.73%	39.80%	45.14%	49.20%	52.15%	53.27%	54.65%	14.53%	16.09%	24,94%	28.40%	30.44%	32.54%	34.78%	37.13%
After - mx retien on equity (operating company)	6.22%	-2.38%	1.30%	4.55%	7.31%	9.70%	12.50%	14.97%	16.04%	17.26%	17.94%	17.83%	17.44%	20.07%	19.83%	13.72%	15.46%	16.50%	17.39%	18.09%	18.75%
Cash flow/ total dabt outstanding (operating company)	4.03%	5,83%	7.41%	8.83%	9.87%	11.28%	13,46%	16.35%	17.56%	21,37%	25.31%	31.93%	36,14%	63.16%	105.66%	N/A	N/A	N/A	17.38% N/A	18.(A% N/A	18.75%

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# High Speed Rail Project

Financial Analysis Final Report February 24, 1995

## **Appendix 8**

Financial Projections - Scenario 7: Montreal-Ottawa-Toronto 300 kph (via Dorval - no Connect Air, no Pearson)

- 1. Report on Financial Projections
- 2. Notes on Basis of Preparation
- 3. Projected Balance Sheet (Combined Public Financing Entity and Construction and Operating Company)
- 4. Projected Statement of Operations (Segregated as Between Construction and Operating Company and Public Financing Entity
- 5. Investment Returns (2005-2025)
- 6. Capital Structure (2005 and 2025)
- 7. Public Sector Annual Contributions (Government Share of Capital Cost)
- 8. Statistics and Financial Ratios

1250 René-Lévesque Blvd. West 35th Floor Montreal (Quebec) H3B 2G4 (514) 938 5600 Telecopier (514) 938 5709

Appendix 8

# Price Waterhouse

October 24, 1994

## Report on Financial Projection

To the Project Manager

Re: Scenario 7 - Montreal-Ottawa-Toronto 300 kph (via Dorval - no Connect Air, no Pearson)

The accompanying financial projections of the HSR Project, consisting of projections of the balance sheets and of the statement of operations, has been prepared using assumptions and hypotheses provided by consultants engaged by the Project Manager. Our examination was made in accordance with the applicable Auditing Guideline of The Canadian Institute of Chartered Accountants. We have no responsibility to update this report for events and circumstances occurring after the date of our report.

In our opinion, as at the date of this report, the assumptions and hypotheses that we have used are consistent with those developed by the aforenoted consultants.

Since this projection is based on assumptions and on hypotheses regarding future events, actual results would vary from the information presented and the variations may be material. Accordingly, we express no opinion as to whether the projections could be achieved. The projections have been prepared in accordance with accounting policies deemed to be appropriate for a HSR Project.

Chartered Accountants

Price Waterhause

### Note on Basis of Preparation

The projections were prepared in accordance with generally accepted accounting principles relating to measurement, presentation and disclosure of financial projections. The projections reflect the judgment of various consultants and are consistent with the purpose of the information but are not necessarily the most probable set of industry, regulatory and economic conditions and planned courses of action given these conditions and uses of assumptions, hypotheses with an effective date of September 30, 1994.

## Significant Assumptions and Hypotheses

#### 1. Inflation

Current dollars are inflated at a rate of 3%.

#### 2. Interest on Infrastructure and Civil Works Notes

The interest rate used for the Infrastructure and Civil Works Notes is based on a government of Canada cost of 30-year funds, which is assumed to be 8.5% per annum, plus 50 basis points.

#### 3. Interest on Equipment and Technology Notes

The interest rate used for the Equipment and Technology Notes is based on LIBOR for 15-year funds, which is assumed to be 8.5%, plus 250 basis points.

#### 4. Interest on Convertible Subordinate Debentures

Interest on the convertible subordinate debentures is calculated at a basic rate of 9% (government of Canada cost of 30-year funds plus 50 basis points) and a maximum rate of 12.5% (government of Canada cost of 30-year funds plus 400 basis points), subject to the Project's cash flow, after deducting Debt Service on Equipment and Technology Notes and interest on short- term bank indebtedness.

Base interest is capitalized and not paid throughout the Construction Period. Commencing in the Operating Period, base interest on the initial and capitalized balance of the Convertible Subordinate Debentures is paid annually. Excess interest, up to a maximum additional rate of 3.5%, is paid only if Project cash flow allocated to service the Convertible Subordinate Debentures exceeds the 9% base rate.

#### 5. Interest Rate on Bank Indebtedness

Interest on short-term bank indebtedness and overdrafts is assumed to be chargeable at 9% per annum.

## . 6. Repayment Period for the Infrastructure and Civil Works Notes

The Infrastructure and Civil Works Notes are repaid by way of equal annual instalments of principal and interest over a 35-year period starting with the first year of full operations in 2005.

## 7. Repayment Period for the Equipment and Technology Notes

The Equipment and Technology Notes are repaid over a 15-year period beginning with the first full year of operations in 2005 using an Annual Sum-of-the-Years'-Digits method, such that payments in later years are greater than those in earlier years.

#### 8. Conversion of Convertible Subordinate Debentures

The debentures are convertible at the holder's option, on a dollar-for-dollar basis, into Share Capital.

#### 9. Share Capital

Share capital consists of common shares.

## 10. Lease Payments to Public Financing Entity

The Public Financing Entity is assumed to enter into an operating lease for the rental of the Infrastructure and Civil Works to the Construction and Operating Company for a term of 35 years based on Project cash flows. Each annual lease payment is calculated by applying percentage of the initial Infrastructure and Civil Works Notes principal amount as a function of total long-term liabilities to 80% of Project cash flow, after deducting Debt Service on the Equipment and Technology Notes, interest on bank debt and base interest on convertible subordinate debentures.

#### 11. Dividends

Dividends are paid to the shareholders on a pari passu basis with lease payments to the Public Financing Entity and excess interest on the Convertible Subordinate Debentures. The amount of Project cash flows allocated to pay dividends is determined by applying a percentage to 80% of Project cash flows, after deducting Debt Service on Equipment and Technology Notes, interest on short-term bank indebtedness and base interest on the Convertible Subordinate Debentures. The applicable percentage is a function of the par value of share capital as it relates to total long-term liabilities (Equipment and Technology Notes and Guaranteed Infrastructure and Civil Works Notes) and share capital.

### 12. Fixed Assets and Depreciation

Equipment and Technology are recorded at cost, net of the Construction Period Interest Subsidy, and are depreciated on a straight-line basis at a rate of 4%.

Infrastructure and Civil Works are recorded at cost, net of the Construction Period Interest Subsidy and are depreciated on a sinking fund basis using a rate of 8% per annum.

## 13. Income Taxes, Capital Taxes and Large Corporations Taxes

The effective tax rates for the HSR are projected at 40% for income taxes, 0.2% for large corporations taxes and 0.4% for provincial capital taxes.

The Infrastructure and Civil Works Notes do not give rise to capital or large corporations taxes as they are obligations of the Public Sector Financing Company.

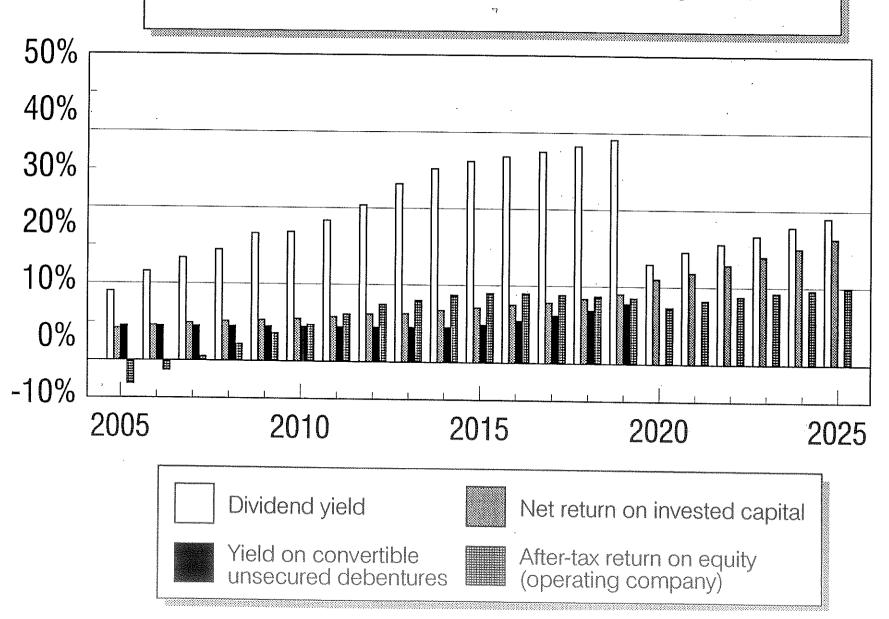
## 14. Other Assumptions and Hypotheses

Assumptions and hypotheses contained in the reports prepared by Price Waterhouse, SNC, IBI, CIGGT, Canarail and KPMG are incorporated by reference into the projections underlying the Financial Analysis. It is essential for the reader to have a detailed understanding of such reports and assumptions in order to understand the projections.

# **Quebec-Ontario High Speed Rail Project**

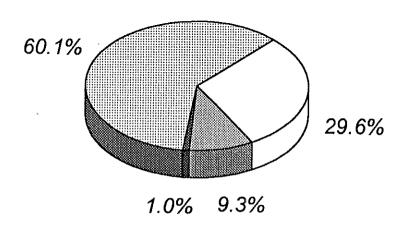
Montreal-Ottawa-Toronto 300 Kph Reduced (via Dorval)

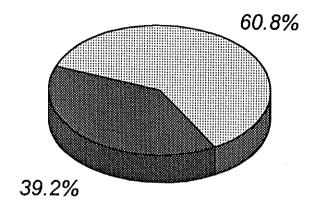
Investment Returns - 2005-2025



# **Quebec-Ontario High Speed Rail Project**

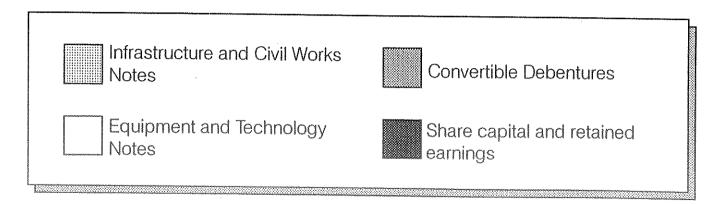
Montreal-Ottawa-Toronto 300 kph Reduced (via Dorval) Capital Structure





2005

2025



Quebec—Ontario High Speed Rall Project
Montreal — Ottawa — Toronto 300 kph (via Dorval) (no connect air/ no Pearson airport)
Balance Sheet
(in militons of inflated dollars)

	Pro-	construc	tion			Construct	lion and S	tart –up		r	•			- 1						Ful	Operation										
	1095	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2006	2009	2010	2011	2012	2013	2014	2015	2018	2017	2018	2019	2020	2021	2022	2023	2024	2025
Assets								- 1	- 1	l			1			1									1		1	- 1			
Curent assets Cash			****									٠		· 🚜							ŀ	ļ	- 1	- 1	- 1			- 1	1		i
Accounts receivable	\$121	\$9G	\$26	\$317	\$233	\$0	\$0	\$0	\$0	\$0	\$0 30	\$0 40	\$0 41	43	\$0	\$0	\$0	\$0	\$0 40	50 50	\$0	50	\$0 54	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$27
Supple sand other inventorias	ŏ	ő	ŭ.	ŏ	ő	ő	ŏ	ĭi	100	200	206	212	219	225	232	239	246	253	261	269	277	205	294	56 303	58 312	59 321	61 331	62 340	64 351	961	58 372
Prepard expenses	0	0	0	0	0	0		ä	9	20	21	21	22	23	23	24	25	25	26	27	26	29	29	30	31	32	33	34	35	36	37
	121	9/3	26	317	239	0	0	a	112	225	265	274	202	590	299	308	317	326	336	346	356	367	378	369	400	412	424	437	450	463	504
Fixed Assets at cost							•	- 1					İ	-		. 1					į			- 1			į		ĺ	1	1
Infrastructure and civil works				: [		l	ļ					1				`		1			l					l					
Landand Right-of-way	0	1	3	29	79	111	116	116	116	116	116	116	116	116	116	116	116	116	116	116	116	116	116	116	116	116	116	116	116	116	116
Earthworks/subgrade	0	15	33	122	307	624	966	958	958	950	958	950	958	958	958	958	958	968	958	958	950	956	958	950	958	958	958	958	958	950	966
Stationa		4	2	3	13	20 62	4 <del>0</del> 150	61 190	63 261	83 261	63 261	93 261	93 261	93 261	83 261	93 261	83 261	89 261	63	83	63	63	63	63	63	83	63	83	83	83	83
Other accommodations	ō	o	1	1	13	26	30	30	30	30	30	30	30	30	30	30	· 30	30	261 30	261 30	261 30	261 20	261	261	261 30	261 30	261 30	261 30	261 30	261	261 30
Bridges	4	9	20	82	203	430	557	606	606	606	606	606	606	606	506	606	506	606	606	506	606	606	606	606	606	806	606	606	606	606	606
Grade separations Track	5	. 10	20	71	191	476 109	677 259	759 406	759	753 526	753	753	753	753	753	753	753	753	753	753	753	753	753	753	753	753	753	753	753	753	753
Defensed start—up and other costs	"	2	5	iel	44	95	133	147	521 152	152	526 152	526 152	526 152	526 152	526 152	526 152	526 152	526 152	526 152	525 152	526	526 152	526 152	526	526 152	526 152	526	526 152	526	526	526
	21	49	91	352	694	1,953	2,836	3,269	3,482	3,487	3,487	3,497	3,487	3,407	3,467	3,487	3,487	3,497	3,467	3,407	3,487	3,497	3.467	3,487	3,487	3,487	3,467	3,497	152 3,407	3,487	152 3,467
Capitalized interest	0	0	Ď	27	113	315	619	973	1,353	1,733	1,733	1,733	1,733	1,733	1,739	1,733	1,733	1,733	1,733	1,733	1,733	1,733	1,733	1,733	1,733	1,733	1,733	1,733	1,733	1733	1,733
Construction period interest subsidy Inflation adjustment	0	0	0	(27) 51	(113) 156	(315) 399	(619) 636	(979) 767	(1,353) 640	(1,739) B42	(1,739) 842	(1,733) 842	(1,733) 842	(1,733) 842	(1,739) 642	(1,733) 842	(1,733)	(1,733) 842	(1,733)	(1.733)	(1,733)	(1,733)	(1,733)	(1,733)	(1,733)	(1,733)	(1,739)	(1,733)	(1,733)	(1.733)	(1,733)
•	22	47	101	403	1,050	2,352	3,472	4,035	4,323	4,329	4,329	4,329	4,329	4,329	4,329	4,329	4,329	4,329	4,329	4,329	4,329	4,329	4,329	4,329	942 4,329	4,329	4,329	4,329	4,329	4,329	842
Accumulated depreciation	0	0	0	0	. 0	0	0	0		0	(20)	(42)	(65)	(91)	(119)	(150)	(183)	(220)	(259)	(303)	(350)	(401)	(457)	(519)	(505)	(658)	(737)	(823)	(917)	(1,020)	1,329
Not infrastructure and civil works	22	47	101	403	1,050	2,352	3,472	4,035	4,323	4 329	4,309	4,297	4,264	4,236	4,210	4,179	4,146	4,109	4,069	4,026	3,979	9,920	9,871	3,010	3,741	3,671	3,592	3,506	3,412	3,309	3.198
Equipment and technology	Į.				j		- 1	1	1					- 1			1				- 1	- 1		1		·	1		- 1		
Power distribution system	0	1	3	. 11	30	87	196	315	430	146	446	446	446	446	446	446	446	446	446	446	446	446	446	446	445	446	446	446	446	446	446
Signate	0	1	5	7	20	57	123	207	283	293	293	293	293	293	293	293	293	293	293	293	293	293	299	293	293	293	293	293	293	293	293
Communications Light freight		ď	,	0	'n	26 0	54	92	126	130 130	130 130	130 130	130 131	130	130 131	130 131	130	130	130 131	130 131	130	130	130	130	130	130	130	130	130	130	130
Holling stock	a	ī	Ğ	20	56	165	351	594	910	840	B40	840	B40	840	960	960	960	960	1,110	1,110	134	1,110	161	1,170	162 1,170	162 1,170	162	163 1,290	163	106	198
Capilel expenditures	0	O	. 0	0	0	0	0	. 0	0	Ð	28	. 5a	90	124	159	197	237	560	325	373	124	478	536	597	661	730	602	1,290 879	1,290 961	1,290 1,048	1,290 1,140
Capiblized injerest	0	3	13	42	114 52	335 130	714 238	1,206	1,649	1,640 962	1,858 962	1,699	1,930	1,964	2,119	2,157	2,190	2,240	2,436	2,464	2.538	2,619	2,737	2,798	2,062	2,931	3,124	3,201	3,263	3,395	3,497
Construction period interest suburdy	o	ŏ	ŏ	ő	(10)	(41)	(95)	(217)	- (404)	(618)	(616)	962 (619)	962 (618)	962	962 (618)	962 (616)	962 (518)	962 (616)	962 (618)	962 (610)	962 (618)	962 (610)	962 (618)	962	962	962	962	962	962	962	962
Inflation adjustment	0	0	2	6	20	71	172	323	474	548	548	548	548	548	620	620	620	1059	741	742	744	771	633	(618) 833	618) 833	(610) 834	(616) 999	(618) 989	(618) 989	(616) 1,027	(618) 1,027
Annual latest demonstrative	0	3	14	48	176	495	1,028	1,732	2,391	2,730	2,759	2,789	2,621	2,854	3,083	9,121	3,161	3,204	3,520	3,569	9,625	3,733	3,912	3,974	4,039	4,100	4,455	4,533	4,615	4.765	4,657
Accumulated depreciation Net equipment and technology	0	3	14	48	176	495	1,026	1,732	2,391	2,730	(100) 2,651	2,569	2,486	2,408	(570) 2,513	(595)	(821)	(9-19)	(1,090)	(1,233)	(1,378)	(1,527)	(1,584)	(1,843)	(2,004)	(2,169)	(2,347)	(2,528)	(2.713)	(2,903)	(3,090)
								.,,	2,00.	2,,	#,UU1	2,344	2,700	2,700	2,513	2,426	2,340	2,255	2,430	2,336	2,247	2,205	2,229	2,131	2,034	1,939	2,109	2,005	1,903	1,062	1,760
Net fixed assets	22	50	115	450	1,226	2,647	4,499	5,767	6,714	7,059	6,960	6,866	6,752	6,546	6,722	6,605	5,496	6,364	6,500	6,362	6,226	6,133	6,100	5,941	5,778	5,610	5,701	5,511	5,314	5,171	4,957
Total a saets	<u>\$143</u>	\$143	\$143	\$769	\$1,459	\$2,647	\$4,499	\$5,767	\$6,627	\$7,284	\$7,225	\$7,130	\$7,034	\$6,936.	\$7,021	\$6,913	\$6,902	\$8,690	\$6,836	\$8,708	\$6,582	\$0,500	\$6,476	\$6,330	\$6,179	\$6,022	\$0,125	\$5,940	\$5,764	\$5,635	\$5,462
Liabilities and Owners' Equity																		-				}				1					
Curent liabilities						- 1		- 1	, 1	ŀ	- 1		1	ļ	1			- 1					-						-		l
Bank in dibledness	\$0	\$0	50	\$0	\$0	\$20	\$85	£85	\$186	\$296	\$276	\$267	\$254	\$239	\$412	\$393	\$371	\$345	\$584	\$549	\$512										1
Accounts payable and accruals	0	a	0	0	٥	0	ő	ő	11	14	45	45	45	46	45	48	47	47	47	30-99 46	¥312 48	\$514 50	\$579 50	\$511 51	\$434 51	\$534 52	\$656 53	\$492 53	\$313	\$192	\$0
Curent portion of long-term debt	0	<u>ŏ</u>	Ŏ	0	0	0	0	0	<u>D</u>	. 0	36	53	70	96	105	123	142	160	179	198	217	237	257	278	299	73	79	86	94	102	56 112
	"	U	ا ا	0	a	20	95	65	197	310	356	365	369	373	563	563	559	552	810	794	777	901	996	840	784	659	796	631	461	340	169
Long—term liebilitie e						ı		- 1			- 1	1	1	i		ļ	- 1			1					}		- 1		l		1
Equipment and technology noise	0	. 0	0	0	٥	0	407	1,029	1,601	1,856	1,840	1,810	1,763	1,701	1,624	1,531	1,423	1,299	1,160	1,005	635	650	449	232	,roy	m	m	m	. D.	m	
infrastructure and civil works notes		<u> </u>	0	291	940 940	2,252	3,389	3,975	4,283	4,299	4,279	1,257	4,233	4,206	4 179	4,149	4,115	4,079	4,039	3,996	3,949	3,897	3,641	3,780	3,714	3,641	. 3,562	3,476	3,362	3,279	3,167
Owne re' Equity	"	٥	ا ۱	241	i-Mil	2,252	3,796	5,004	5,865	6,155	6,119	6,067	5,996	5,909	5,003	5,680	5,536	5,378	5,199	5,001	4,784	4,547	4,290	4,012	3,714	3,641	3,562	3,476	3,362	3,279	3,167
Convertible unsecured debenture	0	٥	0	334	376	423	476	535	602	677	677	677	677	677	677	677	677	677	577	677	677	677	677	677	677		.		اء		
Share capital	143	143	143	143	143	143	143	143	143	143	143	143	143	143	143	143	143	143	143	143	143	143	143	143	143	650	820	820	620	620	820
Retained earnings (deficit)	143	143	143	477	519	566	619	678	745	820	(70) 750	(121) 699	(153)	(166)	(166)	(150)	(115)	(60)	6	93	201	332	482	658	961	902	955	1,021	t,102	1,196	1,306
	l I				4.9	0	0.9	0,0	143	020	150	099	600	554	555	670	705	760	986	913	1,022	1,152	1,302	1,478	1,681	1,722	1,775	1,941	1,922	2,016	2,126
Total liabilities and owners' equity	\$143	\$149	\$143	\$788	\$1,459	\$2,847	\$4,499	\$5,767	\$6,827	\$7,204	\$7,225	\$7,130	\$7,004	\$6,938	\$7,021	\$0,913	\$6,802	\$6,690	\$6,836	\$6,700	\$8,582	\$8,500	\$8,478	\$6,330	\$6,179	\$6,022	\$6,126	\$5,946	\$5,764	\$5,635	\$5,462
Debt to equity ratio	1																										,			1-0-0	
Permitted maximum	N/A	N/A	N/A	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4001	4001	4 661	4001	400	1001		
Actual	' N/A	N/A	N/A	0.00	0.00	0.00	0.66	1.55	2.35	2.59	2.83	3.00	3.08	3.05	3.23	3.01	2.70	2.33	2.29	1.89	1.50	1.19	0.96	4.00 0.67	4.00 0.42	4.00 0.33	4.00 0.40	4.00 0.30	4.00 0.20	4.60	4,00 0.04
																											U. 10 J	9.00	0.29	V. 30 ]	0.01

Quebec-Ontario High Speed Rail Project Montreal -- Ottawa -- Toronto 300 kph (via Dorval) (no connect air/ no Pearson airport) Statements of Operations (in millions of inflated dollars)

	1995	-construc 1996	1997	1998	1999	Construction and 2000 2001	2002	2003	2004	2005	2006	2007	2000	2009	2010	2011	2012	2013		Operation 2015		2017	2018	2019	2020	2021	2022	2023	2021
ATOR		-			*																								
QO S										****																	- 1	-	
nger svenues, consant dollars Igency commissions	\$0 0	\$0	\$0	50	\$0	\$0 \$0	\$0	\$63	\$64	\$504 (26)	\$510 (20)	\$532 (29)	\$547 (30)	\$562 (31)	\$577 (32)	\$593 (39)	\$610	\$626 (34)	\$644	\$662	\$680	\$699	\$718	\$738	\$758	\$779	\$800	\$923	\$845
to dit card discount	ŏ	ŏ	ő	1 6	,	0 0	۱ ň		61	5	(5)	(5)	5	5	(5)	(33)	157	461	(35)	(36)	(37)	(30)	(39)	(41)	(42)	(43)	(44)	(45)	(46)
ssenger revenues, constant dollars	ŏ	ō	0	ŏ	. 0	0 0	ő	59	59	47 i	464	498	512	526	540	555	570	586	602	619	536	554	672	690	709	729	749	770	791
	- 1	- 1		1		į						ı	- 1	1	- 1				1			- 1				7.24			
hi fraight revenues, constant dollars	0	0	O	0	g	0 0	0	0	0	16	17	10	10	19	20	20	21	22	23	23	24	25	26	27	20	29	90	31	32
nadjustment	0	0	0	0	0	0 0	0	20	23	208	235	264	296	329	365	404	446	490	536	586	643	701	763	829	900	976	1,056	1,142	1,234
Venues	0	0	0	이	0	0 0	0	90	62	695	736	779	625	874	925	900	1,037	1,096	1,163	1,231	1,303	1,380	1,461	1,546	1,637	1,733	1,835	1,943	2,057
ting Costs, constant dollars		- 1		1 1			1				- 1			j	1		- !	- 1				1	1	- 1	ĺ	- 1	. 1	- 1	
ting coast, consum dolars			n	ام <b>ا</b>			1 0	17	17	71	72	73	73	74	75	76	76	77	70	79	79	60	e1 ]	82	83	64	65	ا ــــــــــــــــــــــــــــــــــــ	~
sity	ő	ŏ	ō	اة ا	õ	ő ő	Ĭ	2	2	17	17	17	17	10	18	18	19	19	19	20	20	20	21	21	21	22	22	95 22	53 96
sing/promotion	ō	ō Ì	ō	l öl	o	6 0	l o	5	5	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
uctura maintenence services	0	0]	0	l ol	٥	0 0	0	3	3	10	10	10	10	9	9	8	9	e	0	8	e	el	el	8	ě	ě	, ă	6	a
ucture materials/supptes	0	0	0	0	0	0 0	0	٥	0	1	- 1]	1	- 1	- 1	1	2	2	2	2	2	4	5	5	6	7	7		9	10
stock materials/supplies	0	0}	0	미	0	0 0	0	1	1	9	9]	10	10	10	10	10	11	11	11	11	11	12	12	12	12	12	13	13	13
muncations/computer services	0	0	0	I º∣	0	0 0	1 0	2	2	9	9]	91	9	9	10	10	10	10	11	11	11	11	12	12	12	13	13	13	13
ce service afranchise fees etc	0		0		0	0 0	0	2	2	6	6	51	9	6	6	6	6	6	7	7	7	7	7	7	7	7	7	7	7
alated sundres duled materials/services	0	,	0	ا ۱ ۱	0	0 0	n	.:	10	32	32	2	2	32	33	33	33	39	2	~ 1	ا'یہ	الہ	.1	.1	2	2	2	2	2
A taxos	ň	ň	n	اہ ا	0	0 0	1 %	',	13	32	ام	× 1	~ i		33	33	33	33	33	33	33	33	33	33	33	33	33	33	34
ency	ă	ā	ŏ	اة ا	ă	0 0	ة ا	3	1 4	12	12	12	12	12	12	12	12	12	12	13	13	12	12	13	13	14	14	0	0
erating costs, constant dollars	Ö	ă		ŏ	0	0 0	ŏ	46	55	176	180	182	183	184	185	187	198	190	192	194	198	200	203	205	208	211	214	217	220
	i										- 1	- 1	- 1														• • • • • • • • • • • • • • • • • • • •	•"	220
BX98	0	0	0	0	0	0 0	0	0	0	11	10	10	10	10	9	9	9	9	9	8	Ð	8	8	8	7	7	. 7	7	9
sdjuskment	0	<u> </u>	<u>9</u>	. 0	0	0 0	0	15	21	76	84	93	102	111	121	131	142	153	165	178	193	207	222	238	254	272	290	309	330
barating costs	0	o l	0	미	0	0 0	0	62	76	265	275	205	295	305	316	327	330	362	365	360	399	415	439	451	469	489	511	533	557
perating cash flow	ū	0	0	0	C	0 0	0	18	6	430	462	495	531	569	609	653	699	746	797	951	904	964	1,026	1,096	1,160	1,244	1,324	1,409	1, 199
acest enotinous	n			اہا		ه ا	۱ .	ا،	ا	اء		اء	ا ۔	-		اء	_			.1	.]			1	, ,			. [	
taxes	0	اة	ň	1 8	ő	0 0	ة ا	1 0		ň	5	6	14	17	40	62	82	97	111	134	153	170	188	210	257	3			
arating cash flow	<u>-</u>		ŏ	Ö	0	0 0	0	18	6	425	456	490	511	547	564	566	612	645	563	713	747	790	636	982	908	216 1,024	219	241	263
•	- 1	- 1		1	- 1	- 1	1 -		ľ		,		***	*"	~ .		-	975		""	171	130	030	002	900	1,024	1,101	1,165	1,233
on secured and bank debt	0	0	0	0	a	0 0	0	18	6	231	228	224	218	210	211	200	186	170	168	146	127	106	86	57	26	32	39	90	19
al repayments on secured debt	0	0	- 0	0	Ð	0 0	0	0	0	15	31	46	62	77	93	106	124	139	155	170	196	201	217	232	-c	0	ان ،	0	
low available to debenture holders, lease																	- 1										1		
nia and dividenda	0	٥	0	0	٥	9 0	0	0	[ 0	178	197	219	231	260	260	278	302	335	359	394	436	403	533	592	982	992	1,052	1,135	1,214
		اہ				ا ا	١.	ا ا	.				ابد											-			ı İ		
terest on convertible debentures a cash flow a variable for lease payments, excuss			<u>v</u>	V	9	. 4 . 0	1 0			D1	- 61	6t	61	61	. 61	- 61	61	51	- 61	61	61	61	61	51	0	- 0	0	0	0
t on convertible debentures and dividends	0	0	a		0	0 0	ه ا	اه ا	ا ا	118	136	150	171	199	199	217	242	274	298	333	974	422	473	531	662		استنا		
	-	1		1 1	- 1	·   •	1 -	"								*	***		250	333	3/4	722	773	531	062	992	1,062	1,135	1,214
eigenenis	0	0	0		0	0 0		0	0	66	76	e l	95	111	111	121	135	153	167	165	209	236	264	297	493	554	593	634	678
interest on conventible debentures	0	0	0	l ol	0	0 0		0	0	0	0	0	0	0	0	o l	o l	0	ū	5	13	23	33	45	0	15~	333	0.51	0/0
de	0	0	0	0	0	0 0	. 0	0	0	26	33	36	41	49	49	52	58	66	72	75	77	79	81	69	213	236	256	274	293
alicanh flow for Operating Company "	o l	0	0	º	. 0	0 0	0	0	0	24	27	32	34	40	+0	43	46	55	50	67	75	84	95	106	176	198	212	227	243
quipment and technology deprecation				ا ا		ما م		ا ا	١.	4.00	400		4.55													i			
rincipal repayments on secured debt	Ň	٥,	0	اۃ	ŏ	0 0		"		(109)	(109)	(109)	(109) 62	(117)	(117)	108	(117)	(126)	(120)	(120)	(130)	(135)	(135)	(135)	(135)	(146)	(146)	(146)	(149)
videnda	ŭ	č	,	1 1	ů	0 0	,			13	31	70	62	"	50	108 52	124	139	155	170 75	196	201	217	232	0	0	, p	0	0
come (loss) for Operating Company	ū	0	0	ă		ŏ ŏ	0		0	(42)	(10)	7	26	48	64	67	113	133	159	104	207	79 229	257	89 266	213 254	230	256 322	274 355	293
				<b>!</b>						1	1	1	- 1										20.		131		, <b>**</b> *	3.73	307
FINANCE COMPANY				ا ا			، ا		,	400																			
atue and civil works interest subsidy on Government garanteed debt		U U	ŭ	1 %	ů	0 0				(407)	(407)	(407)	(407)	(407)	(407)	(407)	(407)	(407)	(407)	(407)	(407)	(407)	(407)	(407)	(407)	(407)	(407)	(407)	(407)
seyments		٨		1 %		0 0			0	387 66	365	363	361 95	379	376	373	370	367	364	360	355	351	346	340	334	326	321 593	313	304
Blion on shin structure and civil works		ď	0	1 %	ŭ	0 0				20	22	22	90	111	111	121	135	153	167	186	209	236	264	297	493	554		534	670
ome and cash flow of Public Finance Company	<u>0</u>					0 0				66	76	68	95	111	31	121	135	153	167	47	51	56	61	67	73	79	96	94	102
	•			<u> </u>				, ,		·			42]		1111	16!1	1001	133	ויטו	106	209	236	264	297	493	554	583	634	678
debt coverage ratios reni and technology noiss - Actual		-					·	-		1.75	1.78	160	1.00	1 ne T	0.001	2101	0.00		0.451									**********	
rent and technology notes - Pequied				l			<u> </u>			1.75	1.75	1,63 1,75	1.90 1.75	1.96 1.75	2.00 1.75	2.12 1.75	2.26 1.75	2.41 1.75	2.47 1.75	2.67 1.75	2.09 1.75	9.14 1.75	3.39 1.75	3.79 1.75	N/A 1.75	N/A 1.75	N/A 1.75	N/A 1.75	N/A 1.75
on equily																													
ng company							1			-5.6%	~2.6%	1.0%	4.3%	7.4%	9.5%	12.3%	14 996	16 0%	17.4%	18.0%	10.0%	17.6%	17 40	17.00	14.7%	10 40/ 1	17.5%		19.2%
ang wan puny																													

inb.mai rais of mism (no metalai value for equipment and technology at end of 35-year concession)

Public sector (no -ax)

Private(Pobles quity and convertible debontures (after ax)

E to the first severe was the first than the first than the first trees to the first trees the

Quebec.-Ontario High Speed Rail Project Monthaal - Ottawa - Toronto 300 kph (via Derval) (no connect at/ no Pearxon at port) Government share of capital costs

#### In millions of inflated dollars

	Present		F7 0 −C	onstu	c Bon				Con	tuction i	nd 81#1-	up													East On	er ations										
	Value	!9	95 19	96	1997	Total	1998	1905	2000		2002	2003	2004	tow	2005	2006	2007	200s	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	Tolal
intrastructure and civil works	İ			Ì		i																			1	1	•				***		2023	2027	5023	1000
Constuction period interest subsidy	B25	s	0	•	٥	٥	27	85	203	303	354	360	361	1,739	٥	٥	0		0	٥	0	0	0	، ا	, ,		0	0	0	۰	0	0	٥	٥	o	
Equipment and technology																		6.3																		i I
Construction period interest subsidy	276	5	0	٥	o	٥	0	10	31	55	121	197	214	619	٥	٥	0	٥	0	٥	0		٥	٥	,		٥	٥	c	٥	٥	۰	0	0	o	٥
Initial aponsor																																				
Shara capital	6.	'	72	0	٥	72	a	Q	0	٥	٥	0	o	0	٥	0	٥	c	0	0	٥	٥	۰	۰	,	0	٥	٥	٥	٥	٥	o	۰		ď	
Annual subaidy	1,500	5	٥	0	٥	٥	¢.	0	٥	0	۰	0	0	0	407	407	407	407	407	407	407	407	407	407	407	407	407	407	407	407	407	407	407	407	407	8,543
Texes	(365	1	C	٩	٥	٥	0	c	٥	a	0	, 0	. 0	Q	(16)	(16)	(15)	(29)	(31)	(চন্চ	(76)	(26)	(115)	(123	(147	(165)	(182)	(200)	(222)	(267)	(227)	(230)	(252)	(274)	(296	(3,032)
Dividends	(95	1	o	٥	٥	0	¢	0	٩	٥	o	0	0	0	(14)	(15)	(19)	(21)	(24)	(24)	(26)	(29)	(30)	(36	(37	(38)	(39)	(40)	(42)	(19)	(21)	(22)	(24)	(26)	(27	(576)
Lease payments	(716	5	0	0	٥	٥	0	0	٥	0	0	0	0	٥	(66)	(76)	(66)	(95)	(115)	(310)	(129)	(136)	(153)	(107	(100	(209	(235)	(264)	(297)	(493)	(65-6	(593)	(63-9	(679)	(724	(5,993)
Total per ennum			72	٥	٥		27	95	234	350	475	567	505	_	311	299	284	545	- 240	217	(63	147	110	ĎI	36	150	(51)	(97)	(153)	(372)	(395)	(430)	(503)	(57 H	1640	
Total cumulative		-		13	72	72		123	356	715	1,190	1,757	2,352	2,352	311	609	663	1, 155	1,395	1,612	1,798	t,943	2,053	2,130	2,170	2,154	2,113	2,016		1,491	1,096	657	154	(418)	(1,060	1
Present value with taxes (cumulative)					Ę	66							(	1,187																						349
Present value without faxes (cumulative)						66							. (	1,167																						727

737

481

Contribution of public sector before break-even point in cash flow is achieved

rexal ret contribution with large

Total net contribution without laxes 5.769

Present value of contribution with laxes 1,867

Present value of contribution without taxes 2,083

#### In millions of 1993 constant dollars

	Prosont		Pro-cor						eruction a															Full Oper	stione									
stuckre and civil works	Yelue	1995	1998	1997	Tolei	1998	1999	5000	2001	2002	2003	2004	Total	2005	2006	2007	2006	2004	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	5033	2024	2025
		1					[	- 1	- 1													- 1	- 1				- 1							
tucken period interest subsidy	675	٥	٥	ò	۰	23	72	165	239	271	263	275	1,326	٥	0	0	٥	0	0	c	۰	0	o	٥	0	٥	a	٥	٥	٥	۰	o		٥
neni and lechnology														.									-							-				1
cion period interest subsidy	220	٥	٥	0	a	٥		25	44	93	139	155	464	0	a	0	c	٥	D	o	0	0		0	a	٥	٥	۰	۵				,	
ponser																												1			Ï	- 1	Ĭ	1
pini	65	67	٥	٥	67	0	٥	o	٥	g	0	٥	٥	٥	Q	0	0	0	0	6	0	0		٥	٥	ا		۵				ا		
subsidy	923	۰	0	٥	а	a	o	a	0	0	a	0	0	265	277	269	251	254	245	239	232	225	219	212	206	200	194	102	163	178	173	150	163	150
	(19-6)	۰	۰	٥	0	a	٥	c	۰	0	o	٥	٥	(10	(11)	(10)	(19)	(19)	(33)	(45)	(55)	(81)	(66)	(77)	(8-6)	(90)	(95)	(103)	(150	(99)	(98)	1100	(110	(116)
10	(56)	٥	0	0	0	٥	0	c	0	٥	0	٥	0	(10)	(11)	(13)	(13)	(15)	(15)	(15)	(17)	(16)	(19)	(20)	. (19)	(19)	(19)	(19	(8)	(9	(9)	(10	/10	
nyments	(396)	٥	٥	٥	a	0	٥	0	0	0	G	٥	0	(46)	(52)	(58)	(6 F)	(69)	(67)	(79)	(77)	(95)	(90)	(97)	(105)	(118)	(126)	(136)	(222	(242)	(252)	(20)	(271)	(291)
r Bonum +		67	a	0		23	80	190	283	364	422	430		218	203	108	160	150	131	106	94	41	+1	19	(3	(26)		(70	/107	(173)	(166)	- 1		- 1
mulative		67	67	67	l <del>.</del>	23	100	293	577	941	1,362	1,792	-	218	421	609	777	927	1,058	1,166	1,250	1,310	1,354	1,373	1,370	1,345	1,299	1,227	1,060	067	701	(207)	(229)	(250)
value with laxes (cumulative)					62								895	1									<del>-</del>										~~~	

895

Contribution of public sector before ty sax - even point in cash flow is schleved

Total net contibution with laxes

Present value without faxes (cumulative)

62

Total net contribution without lages

3,865

Present value of contribution with faxes [ 1365]

Present value of consibution without large [1495]

Quebec—Ontario High Speed Rail Project Montreal — Ottawa — Toronto 300 kph (via Dorval) (no connect air/ no Pearson airport) Statistics and financial ratios (In millions of inflated dollars)

Statistics and general information	l																				
	2005	2005	2007	2008	2009	2010	2011	2012	2013	7 2014	201 5	2016	2017	2018	2019	2020	2021	2022	2023		
Ridership (in millions)	0.6	6.7	6.0	7.1	7.2	7.4	7.6	7.8	6.0	8.2	8.4	8,6	8.8	9.0	9.2	9.4				2024	2025
Growth of ridership in percentage	N/A	2.43%	2.43%	2.43%	2.43%	2.43%	2.43%	2.43%	2.43%	2.43%	2.43%	2.43%	2.43%	2.43%	2.43%		9.7	9.9	10.1	10.4	
Total operating revenues	\$495	\$736	\$779	\$825	\$874	\$925	\$980	\$1,037	\$1,098	\$1,153	\$1,231	\$1,303				2.43%	2.43%	2 43%	2.43%	2.43%	2.43%
Growth of revenues in percentage	N/A	5.88%	5.86%	5,88%	5.68%	5.88%	5.88%	5.88%	5.86%	5,87%	5.87%		\$1,380	\$1,461	\$1,546	\$1,637	\$1,733	\$1,035	\$1,943	\$2,057	\$2,180
Yotal operating expenses	\$265	\$275	\$285	\$295	\$305	\$316	\$327	£338			- 1	5.87%	5,87%	5.87%	5.87%	5.67%	. 6.87%	5.87%	5.87%	5.87%	5,98%
Growth of expenses in percentage	N/A	271%	3.73%	3.46%	3.49%				\$352	\$365	\$380	\$399	\$415	\$433	\$451	\$459	\$489	\$511	\$533	\$557	\$583
Government funding	(\$407)	(\$407)				3.51%	3.53%	3.55%	3.07%	3.86%	3.96%	5.06%	4.11%	4.15%	4.20%	4.02%	4.34%	4.36%	4.43%	4.48%	4.53%
Lease payment to Government	,		(\$407)	(\$407)	(\$407)	(\$407)	(\$407)	(\$407)	(\$407)	(\$407)	(\$407)	(\$407)	(\$407)	(\$407)	(\$407)	(\$407)	(\$407)	(\$407)	(\$407)	(\$407)	(\$407)
Debt service	\$66	\$76	\$88	\$95	\$111	\$111	\$121	\$135	\$153	\$157	\$196	\$200	\$236	\$264	\$297	\$493	\$554	\$593	\$634	\$876	\$724
	\$308	\$320	\$331	\$341	\$348	\$366	\$369	\$371	\$370	\$384	<b>\$385</b>	\$387	\$391	\$397	\$395	\$26	\$32	\$39	\$30	\$19	\$11
Operating expenses to revenues ratio	38.09%	37.30%	36.55%	35.71%	34.91%	34.13%	33.37%	32.64%	32.02%	31.41%	30.85%	30.52%	30.11%	29.62%	29.16%	28.65%	28.23%	27.84%	27.46%	27,10%	26.72%
Pavenues per passenger (A)	\$106	\$109	\$113	\$117	\$121	\$125	\$129	\$133	\$138	\$142	\$147	\$152	\$157	\$163	\$158	\$174	\$179	\$185	\$192	\$198	
Government funding (retain) per passenger (8)	\$52	\$49	\$48	\$44	\$41	\$40	\$38	\$35	\$32	\$29	\$26	\$23	\$10	\$16	<b>\$</b> 12	(\$9)	(\$15)	(\$19)	1		\$205
B/A	49.06%	44.92%	40,86%	37.75%	33.82%	31.94%	29.16%	26.21%	23.06%	20.65%	17,93%	15.20%	12.38%	9.77%	7.11%	-5.24%	. 1		(\$22)	(\$26)	(\$30)
		i	l.												7.1176	-3.24%	- 8.51%	10,16%	-11.71%	~13.20%	14.56%

Financial ratios																					
	2005	2006	2007	2008	2009	2010	2011	. 2012	2013	2014	2015	2016	2017	2018	2019	2020	T				
Capital structure ratios														20,0	2019	2020	2021	2022	2023	2024	2025
Percentage of capital assigned to infast ucture notes	59,87%	60.39%	50.91%	61.44%	60.32%	60.96%	01.41%	61.95%	60.09%	60.65%	61.15%	61.22%	60.63%	61.17%	61.69%	82.20%	59,96%	60,42%	80.87%	**	Í
Percentage of capital assigned to equipment notes	29.69%	29.75%	29.53%	29.06%	30,30%	29.38%	28.15%	26.61%	27.74%	25.64%	23.22%	20.92%	19.11%	15,29%	10.87%	8.95%	10.61%	8.35%		60,61%	50.66%
Percentage of capital assigned to debenture holders	9.43%	9.50%	9.69%	9.83%	9.71%	9,86%	10.02%	10.19%	9.97%	10.17%	10.36%	10.50%	10.53%	10.78%	11.05%	0.00%			5.48%	3.26%	0.00%
Percentage of capital assigned to stere holders.	1.01%	0.31%	0.00%	0.00%	0.00%	0.00%	0.41%	1.25%	2.20%	3.54%	5.27%	7.36%	9.72%	- 1			0.00%	0.00%	0.00%	0.00%	0.00%
Debt to equity ratio for operating company	ł	}									5.2173	7.30%	10.72%	12.76%	16.39%	26.85%	29.23%	31,23%	33.65%	36.13%	39.34%
Actm (	2.83	3.00	3.08	2.05	3,23	3.01	2.70	2.33	2.29	4.50											
Maximum permitted	4.00	4.00	4.00	4.00	4.00	4.00	4.00		- 1	1.89	1.50	1.19	0.96	0.67	0,42	0.33	. 0.40	0,30	0.20	0,13	0.04
Interest coverage operating company		"""	7.00	7.00	7.00	4.00	4.00	4.00	4.00	4.00	4.60	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
Senior debt	1.75													ļ	Ì						
		1.78	1.63	1.90	1.98	2.00	212	2.26	2.41	2.47	2.67	2.09	3.14	3.39	3.79	N/A	N/A	N/A	N/A	N/A	N/A
Perconnage payoutratio (including bease payments)	36.45%	37.24%	38.29%	38.59%	40.24%	39.03%	40.02%	41.53%	43.51%	43.01%	45.95%	48.18%	50.49%	52.49%	55.12%	77.70%	77.49%	77,14%	77.97%	78.78%	79.33%
Gross margin	61,91%	62.70%	63.45%	64.29%	65.09%	65.87%	66.63%	67.36%	67.98%	68.59%	69.15%	69.38%	59.89%	70.38%	70.84%	71.35%	71,77%	72.16%	72.54%	72.90%	73.28%
Netretus on invested capital	6.56%	9,17%	9,84%	10,34%	10.73%	11.11%	11.70%	12.42%	12.64%	13,49%	14.28%	15.01%	15.69%	16.81%	18.03%	21,93%	23,58%	25.72%	27.90%		
Pre axteam on convertible unsecured debentures	9,00%	9.00%	9.00%	9,00%	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%	9.80%	10,99%	12.42%	13.90%	15.63%	N/A				30.00%	32.59%
Pra tax return on share capital	19.83%	22.99%	26.66%	26.76%	33,59%	33.60%	36.58%	40.75%	46.30%	50,35%	52.42%	53,51%	55,04%	56.52%	58.24%	- ","	N/A	N/A	NIA	N/A	N/A
After - tax return on equity (operating company)	~ 5.59%	-2.00%	1.03%	4.26%	7.37%	9.51%	12.34%	14,91%	16.04%	17.37%	17,98%	-			ļ	25.94%	29.18%	31.23%	33.39%	35,71%	38.13%
Cash flow/ total debt outstanding (operating company)	4.49%	5.88%	7.47%	8,90%	10,09%	11.34%	13.47%	16,32%				17.96%	17.60%	17.37%	17.04%	14,74%	15.43%	17.51%	19.46%	19.19%	19,90%
		1		2,4479	, 3,7070	11.04/6	; 3.4174	10,32%	17.34%	20.99%	25,49%	30.66%	36.06%	49.25%	75.78%	N/A	N/A	P4/A	N/A	N/A	N/A

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## High Speed Rail Project

## Financial Analysis Final Report February 24, 1995

## Appendix 9

## Financial Projections - Scenario 8: Quebec City-Toronto 300 kph (via Mirabel)

- 1. Report on Financial Projections
- 2. Notes on Basis of Preparation
- 3. Projected Balance Sheet (Combined Public Financing Entity and Construction and Operating Company)
- 4. Projected Statement of Operations (Segregated as Between Construction and Operating Company and Public Financing Entity
- 5. Investment Returns (2005-2025)
- 6. Capital Structure (2005 and 2025)
- 7. Public Sector Annual Contributions (Government Share of Capital Cost)
- 8. Statistics and Financial Ratios

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Appendix 9

### Price Waterhouse

October 24, 1994

### Report on Financial Projection

To the Project Manager

Re: Scenario 8 - Quebec City-Toronto 300 kph (via Mirabel)

The accompanying financial projections of the HSR Project, consisting of projections of the balance sheets and of the statement of operations, has been prepared using assumptions and hypotheses provided by consultants engaged by the Project Manager. Our examination was made in accordance with the applicable Auditing Guideline of The Canadian Institute of Chartered Accountants. We have no responsibility to update this report for events and circumstances occurring after the date of our report.

In our opinion, as at the date of this report, the assumptions and hypotheses that we have used are consistent with those developed by the aforenoted consultants.

Since this projection is based on assumptions and on hypotheses regarding future events, actual results would vary from the information presented and the variations may be material. Accordingly, we express no opinion as to whether the projections could be achieved. The projections have been prepared in accordance with accounting policies deemed to be appropriate for a HSR Project.

Chartered Accountants

Price Waterhause

### Note on Basis of Preparation

The projections were prepared in accordance with generally accepted accounting principles relating to measurement, presentation and disclosure of financial projections. The projections reflect the judgment of various consultants and are consistent with the purpose of the information but are not necessarily the most probable set of industry, regulatory and economic conditions and planned courses of action given these conditions and uses of assumptions, hypotheses with an effective date of September 30, 1994.

### Significant Assumptions and Hypotheses

### 1. Inflation

Current dollars are inflated at a rate of 3%.

### 2. Interest on Infrastructure and Civil Works Notes

The interest rate used for the Infrastructure and Civil Works Notes is based on a government of Canada cost of 30-year funds, which is assumed to be 8.5% per annum, plus 50 basis points.

### 3. Interest on Equipment and Technology Notes

The interest rate used for the Equipment and Technology Notes is based on LIBOR for 15-year funds, which is assumed to be 8.5%, plus 250 basis points.

### 4. Interest on Convertible Subordinate Debentures

Interest on the convertible subordinate debentures is calculated at a basic rate of 9% (government of Canada cost of 30-year funds plus 50 basis points) and a maximum rate of 12.5% (government of Canada cost of 30-year funds plus 400 basis points), subject to the Project's cash flow, after deducting Debt Service on Equipment and Technology Notes and interest on short- term bank indebtedness.

Base interest is capitalized and not paid throughout the Construction Period. Commencing in the Operating Period, base interest on the initial and capitalized balance of the Convertible Subordinate Debentures is paid annually. Excess interest, up to a maximum additional rate of 3.5%, is paid only if Project cash flow allocated to service the Convertible Subordinate Debentures exceeds the 9% base rate.

### 5. Interest Rate on Bank Indebtedness

Interest on short-term bank indebtedness and overdrafts is assumed to be chargeable at 9% per annum.

### 6. Repayment Period for the Infrastructure and Civil Works Notes

The Infrastructure and Civil Works Notes are repaid by way of equal annual instalments of principal and interest over a 35-year period starting with the first year of full operations in 2005.

### 7. Repayment Period for the Equipment and Technology Notes

The Equipment and Technology Notes are repaid over a 15-year period beginning with the first full year of operations in 2005 using an Annual Sum-of-the-Years'-Digits method, such that payments in later years are greater than those in earlier years.

### 8. Conversion of Convertible Subordinate Debentures

The debentures are convertible at the holder's option, on a dollar-for-dollar basis, into Share Capital.

### 9. Share Capital

Share capital consists of common shares.

### 10. Lease Payments to Public Financing Entity

The Public Financing Entity is assumed to enter into an operating lease for the rental of the Infrastructure and Civil Works to the Construction and Operating Company for a term of 35 years based on Project cash flows. Each annual lease payment is calculated by applying percentage of the initial Infrastructure and Civil Works Notes principal amount as a function of total long-term liabilities to 80% of Project cash flow, after deducting Debt

Service on the Equipment and Technology Notes, interest on bank debt and base interest on convertible subordinate debentures.

### 11. Dividends

Dividends are paid to the shareholders on a pari passu basis with lease payments to the Public Financing Entity and excess interest on the Convertible Subordinate Debentures. The amount of Project cash flows allocated to pay dividends is determined by applying a percentage to 80% of Project cash flows, after deducting Debt Service on Equipment and Technology Notes, interest on short-term bank indebtedness and base interest on the Convertible Subordinate Debentures. The applicable percentage is a function of the par value of share capital as it relates to total long-term liabilities (Equipment and Technology Notes and Guaranteed Infrastructure and Civil Works Notes) and share capital.

### 12. Fixed Assets and Depreciation

Equipment and Technology are recorded at cost, net of the Construction Period Interest Subsidy, and are depreciated on a straight-line basis at a rate of 4%.

Infrastructure and Civil Works are recorded at cost, net of the Construction Period-Interest Subsidy and are depreciated on a sinking fund basis using a rate of 8% per annum.

### 13. Income Taxes, Capital Taxes and Large Corporations Taxes

The effective tax rates for the HSR are projected at 40% for income taxes, 0.2% for large corporations taxes and 0.4% for provincial capital taxes.

The Infrastructure and Civil Works Notes do not give rise to capital or large corporations taxes as they are obligations of the Public Sector Financing Company.

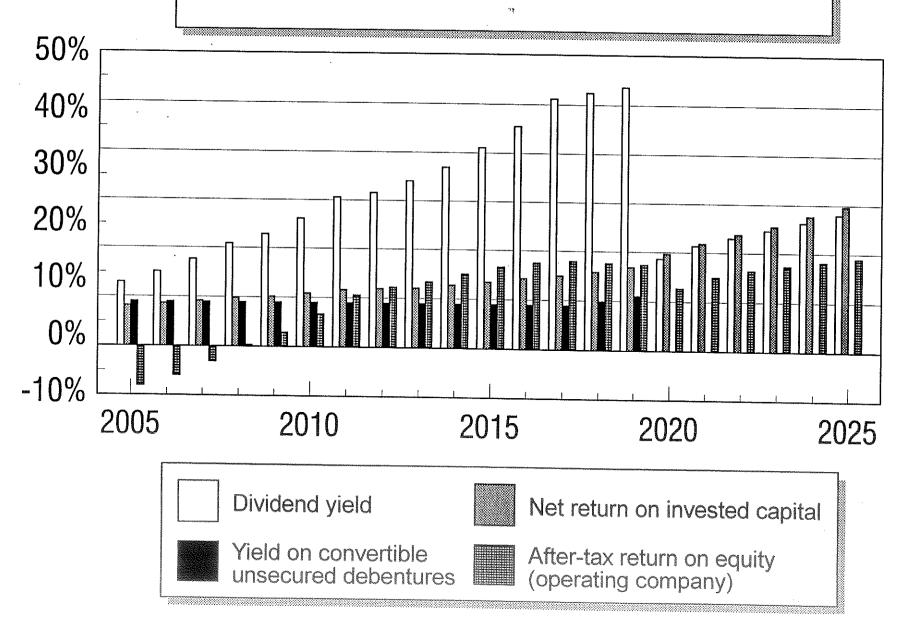
### 14. Other Assumptions and Hypotheses

Assumptions and hypotheses contained in the reports prepared by Price Waterhouse, SNC, IBI, CIGGT, Canarail and KPMG are incorporated by reference into the projections underlying the Financial Analysis. It is essential for the reader to have a detailed understanding of such reports and assumptions in order to understand the projections.

## **Quebec-Ontario High Speed Rail Project**

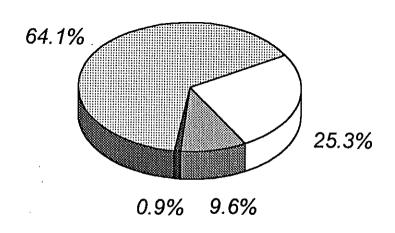
Quebec-Toronto 300 Kph (via Mirabel)

Investment Returns - 2005-2025



## **Quebec-Ontario High Speed Rail Project**

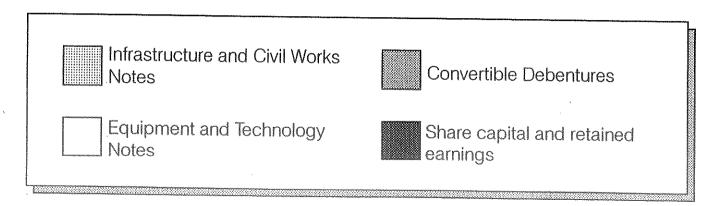
Quebec-Toronto 300 kph (via Mirabel) Capital Structure



32.5%

2005

2025



Quebec—Ontario High Speed Rali Project Quebec — Toronto 300 kph (via Mirabel) Balance Sheet (in millions of Inflated dollars)

	<u> </u>	-conetna	otion																												
	1995			1996	1999		ction and 8 2001		2003	2004	2005	2008	2007	2008	2009	2010	2011	2012	2013		Operatio 2015	2016	2017	2016	2019	2020	0007	none 1			0.005
Assets Current assets Cush																			2013			2016	2017	5018	2019	2020	2621	2022	2023	2024	2025
Caun  Counts receivable Supplies and other inventories  Preperd expenses	\$162	\$143 0	\$13 0 0	\$361 0 0	\$292 0	\$0 0	\$0 0	\$0 0 0	\$0 4 100	\$0 13 200	\$0 50 206	\$0 52 212	\$0 59 219	\$0 55 225	\$0 56 232	\$0 59 239	\$0 59 246	\$0 61 253	\$0 62 261	\$0 64 269	\$0 56 277	\$0 66 265	\$0 69 294	\$0 71 309	\$0 79 312	\$0 75 321	\$0 77 331	\$0 79	\$0 81	\$0 84	\$90 96
Figure 4 Appropria	182	143	13	361	292	0	0	0	111	236	21	21 265	22 294	302	29 911	24 320	25 330	25 340	26 350	27 360	26 370	29 361	29	30	91	32	33	340 34	351 35	361 36	372 37
Fine d'Assats et cost																			-~-		310	. 301	393	404	416	428	441	151	467	401	586
infrastructure and civil works Landend PigntOt-way Earthworkstungende Sa tions Maintenance facilities Other accommodations Bridges Gade separations Tack	1 13 3 3 4 4 7	2 25 6 5 1 7	22 57 8 7 2 14 32 7	96 165 9 6 10 39 92 20	191 500 11 10 45 115 267	242 996 36 32 96 306 666	249 1,977 90 60 115 526 986 420	249 1,461 199 175 115 564 1,067 673	249 1,461 361 320 115 564 1,667 600	249 1,481 361 320 115 564 1,067	249 1,491 361 320 115 594 1,087 904	249 1,481 361 320 115 564 1,067 604	249 1,461 361 320 115 564 1,067	249 1,461 361 320 115 564 1,067	249 1,461 361 320 115 584 1,067	249 1,461 361 320 115 594 1,067 604	249 1,491 361 320 115 584 1,067 804	249 1,461 361 320 115 564 1,067 804	249 1,491 361 320 115 594 1,067 804	249 1,461 361 320 115 594 1,067 804	249 1,461 361 320 115 584 1,067 604	249 1,491 961 320 115 594 1,067	249 1,461 361 320 115 564 1,067	249 1,481 381 320 115 564 1,067	249 1,481 361 320 115 584 1,067	249 1,461 361 320 115 564 1,067	249 1,481 361 320 115 564 1,067	249 1,461 361 320 115 584 1,067	249 1,461 361 320 115 504 1,067	249 1,401 361 320 115 584 1,067	249 1,481 961 320 115 584 1,067
Debreo distart—up and other costs Captibilized introduction Construction period inbrest subsidy infation adjustment	33 0 0 2 36	55 0 0 5	7 157 0 0 17	29 464 34 (34) 69)	59 1,251 151 (151 217	124 2,704 429 (428) 551	958 (956) 904	199 4,744 1,369 (1,369) 1,129	215 5,193 1,995 (1,935) 1,277	215 5,197 2,502 (2,502) 1,279	215 5,197 2,502 (2,502) 1,279	215 5,197 2,502 (2,502) 1,279	215 5,197 2,502 (2,502) 1,279	215 5,197 2,502 (2,502) 1,279	215 5,197 2,502 (2,502) 1,279	215 5,197 2,502 (2,502) 1,279	215 5,197 2,502 (2,502) 1,279	215 5,197 2,502 (2,502) 1,279	215 5,197 2,502 (2,502) 1,279	215 5,197 2,502 (2,502) 1,279	215 5,197 2,502 (2,502) 1,279	215 5,197 2,502 (2,502) 1,279	904 215 5,197 2,502 (2,502) 1,279	904 215 5,197 2,502 (2,502) 1,279	215 5,197 2,502 (2,502) 1,279	5,197 2,502 2,502 2,502 1,279	904 215 5,197 2,502 (2,502) 1,279	5,197 2,502 (2,502) 1,279	904 215 5,197 2,502 (2,502) 1,279	5,197 2,502 (2,502)	215 5,197 2,502 (2,502)
Accumulated depreciation Net infrastructure and civilworks	36	070	174 0 174	552 0 552	1,468 0 1,468	3,256 0 3,255	4,931 0 4,931	5,867 0 5,867	8,470 0 6,470	6,476 6,476	6,476 (32) 6,445	6,476 (56) 6,410	6,476 (104) 6,372	6,476 (145) 6,331	6,476 (190) 6,266	6,476 (239) 6,237	6,476 (292) 6,184	8,476 (350) 6,126	6,476 (414) 6,063	5,476 (463) 5,994	6,476 (558) 5,918	5,476 (540) 5,636	6,476 (729) 5,747	6,476 (927) 5,650	5,476 (933) 5,543	6,476 (1,049) 5,426	6,476 (1,175) 6,301	6,476 (1,313)	6,476 (1,462)	1,279 6,476 (1,526)	1,279 6,475 (1,604)
Equipment and technology Power distribution system Signate Communications Light treight Fight agreement and the communications Capital expenditures	0 0	3 1 0 2	7 5 2 0 13	19 14 6 0	43 31 14 0 78	131 94 41 0 237	915 226 100 0 571	524 976 186 0 961	661 474 209 0 1,200	678 466 214 191 1,230	676 466 214 191 1,230	578 466 214 191 1,230	678 496 214 191 1,230	678 466 214 191 1,230	676 406 214 191 1,320	678 486 214 191 1,320	678 466 214 191 1,320	678 496 214 217 1,320	676 466 214 217	879 496 214 217 1,470	679 466 214 222 1,470	678 496 214 222 1,470	678 496 214 223 1,560	676 465 214 250 1,560	678 496 214 250 1,560	679 496 214 251	678 465 214 251 1,650	5,164 679 466 214 251 1,650	5,014 678 486 214 277 1,650	4,851 678 466 214 277 1,650	4,672 678 496 214 277 1,650
Capitalized interest Construction period interest subardy Inflation adjustment	0 0 0 0	4 0 0 0	27 0 0 9 30	74 0 0 11 95	165 76 (12 26 256	503 195 (60) 106 743	1,212 978 (164) 295 1,721	2,016 665 (361) 540 2,661	2,545 1,024 (618) 722 3,673	2,799 1,420 (901) 820 4,139	51 2,850 1,420 (901) 820 4,169	104 2,903 1,420 (901) 820 4,243	161 2,960 1,420 (901) 620 4,900	9,021 1,420 (901) 620 4,361	266 3,175 1,420 (901) 675 4,570	3,249 1,420 (901) 975 4,636	426 3,316 1,420 (901) 875 4,710	502 3,417 1,420 (901) 694 4,831	583 3,649 1,420 (901) 1,015 5,183	9,735 1,420 (901) 1,015 5,270	761 9,691 1,420 (901) 1,020 5,971	958 3,929 1,420 (901) 1,020	961 4,122 1,420 (901) 1,113	1,070 4,258 1,420 (901) 1,143	1,165 4,374 1,420 (901) 1,149	1,308 4,497 1,420 (901) 1,144	1,439 4,718 1,420 (901) 1,250	1,577 4,656 1,420 (901) 1,261	1,723 5,026 1,420 (901) 1,297	1,879 5,164 1,420 (901) 1,297	2,044 5,349 1,420 (901) 1,297
Accumulated depreciation Net equipment and lechnology	0	- 0	30	95 95	256	743	1,721	2,661	3,673	0 4,139	(154) 4,026	(333) 3,910	(505) 3,795	(600) 3,661	3,707	(1,048) 3,590	(1,236) 3,474	(1,430) 3,401	(1,537) 3,546	(1,040)	(2,063) 3,308	5,460 (2,291) 3,187	5,755 (2,511) 3,243	5,921 (2,748) 3,172	6,037 (2,990) 3,047	6,161 (3,236) 2,924	6,498 (3,496) 3,002	6,637 (3,762) 2,875	6,845 (4,035) 2,810	7,001 (4,315)	7,166 (4,602)
Not fixed assets	35	74	201	637	1,724	3,009	6,652	9,720	10,143	10,615	10,470	10,320	10,167	10,012	9,993	9,827	9,650	9,527	9,609	9,415	9,227	9,029	6,990	0,822	6,591	8,352	8,303	6,039	7,824	2,606	2,564
Total a secie	\$217	\$217	1217	\$1,010	\$2,018	<b>\$3,999</b>	\$6,652	\$8,726	\$10,254	\$10,848	\$10,747	\$10,605	\$10,481	\$10,315	\$10,305	\$10,14B	\$9,900	\$9,867	\$9,958	\$9,775	\$9,597					\$8,780				7,537	7,237
Liabilities and Owners' Equity Current liabilities Bank (ndoblodosas Accounts payable and accrusis Current portion of long-term debt	\$0 0	\$0 0 0	\$0 0 0	#0 0 0	\$0 0 0	\$49 0 0 49	\$121 0 0 121	\$121 0 0 121	\$220 12 0 232	\$327 27 0 354	\$311 60 52 423	\$314 61 75 449	\$313 61 98	\$305 62 121 468	\$439 62 145	\$424 62 169	\$389 63 199 655	\$419 63 219 700	\$650 64 243	\$626 65 269 960	\$595 65 295 965	\$545 67 322 934	\$669 68 349	\$656 69 377	\$576 69 406	\$736 70 116	\$756 71 126	\$555 72 130	\$399 73 150	\$164 75 163	\$7,822 \$0 76 170
Long - term liebilities Equipment and technology nobe infrastructure and civil works nobe	0 0	0 0	0 0	0 295 295	0 1,290 1,290	0 3,093 3,093	665 4,930 5,594	1,525 6,055 7,560	2,100 6,705 6,693	2,307 6,655 9,252	2,377 6,623 9,200	2,997 6,769 9,125	2,277 6,751 9,026	2,197 6,710 8,907	2,097 6,665 8,762	1,977 5,616 9,593	1,897 6,563 9,400	1,678 6,505 8,182	1,498 5,441 7,939	1,298 6,372 7,671	1,078 6,297	899 6,215	1,066 579 6,126	1,102 900 6,028	1,051 (0) 5,962	5,806	953 (0) 5,690	765 (0) 5,543	622 (0) 5,303	402 (0) 5,229	254 (0) 5,051
Owners' Equity Conventible unsoured debenture Share expital Retained earnings (deficit)	217 0 217	0 217 0 217	0 217 0 217	506 217 0 723	569 217 0 796	640 217 0 857	720 217 0 937	811 217 0 1,029	912 217 0 1,129	1,026 217 0 1,249	1,026 217 (118) 1,124	1,026 217 (212) 1,030	1,026 217 (201) 962	1,026 217 (323) 920	1,026 217 (946) 696	1,026 217 (343) 900	1,026 217 (311) 932	1,026 217 (256) 985	1,026 217 (191)	1,026 217 (96) 1,145	7,376 1,026 217 23 1,266	7,054 1,026 217 174 1,417	6,705 1,026 217 349 1,592	1,026 217 563	5,922 1,026 217 791 2,034	5,606 1,026 217 810 2,052	5,660 0 1,243 968 2,111	5,549 0 1,249 943 2,186	5,393 0 1,243 1,033 2,276	5,229 0 1,243 1,143 2,306	5,051 0 1,243 1,274 2,517
Total liabilities and owners' equity	\$217	\$217	\$217	\$1,016	\$2,016	\$3,999	\$6,652	\$9,728	\$10,254	\$10,848	\$10,747	\$10,605	\$10,461	\$10,315	\$ 19,305	\$10,146	\$9,988	\$9,667	\$9,950	\$9,775	\$9,597	\$9,405	- 1	\$9,226				\$6,493			
Debt to equity ratio Fermitiof maximum Actual	N/A N/A	N/A N/A	N/A N/A	4.00 9.00	4.00 0.00	4.00 0.00	4.00 0.64	4.00 1.79	4.00 2.34	4.00 2.50	4.00 2.77	4.00 9.01	4.00 3.19	4.00 3.26	4.00 3.41	4.00 3.28	4.00 3.01	4.00 2.73	4.00 2.64	4.00 2.25	4.00 1.65	4.00	4.00 1.24	4.00 0.95	4.00 0.67	4.00 0.60	4.00 0.50	4.00 0.49	4.00 0.41	4.00 0.30	4.00 0.22

Quebec—Ontario High Speed Hall Project Quebec — Toronto 300 kph (via Mirabel) Statements of Operations (In millions of Inflated dollars)

			·										:d																	
	1995	1996 1996		1998	1999	Construction and 9 2000 2001	tart-⊔p 2002	2003 20	04	2005 2	008	2007	2008	2009	2010	2011	60401	55/61		Operation										
OPERATOR Provegues				1		LUGO KOO!	EOOE	2000 20	<u>~ -</u>	200	- C	2001	200	2003	AV IU	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
Passenger revenues, constant dollars	S	al 14	يو اه		£0	<b>5</b> 0 50	\$0	\$49 \$1	66	\$648 \$	665	\$663	****	\$720	\$740							1								
Less Agency commissions	1 7	ō	o	ő	~	0 0	~~ 0	(3)	(9)		(37)	(36)	\$7(1) (36)	(40)	\$740 (41)	\$760 (42)	\$790 (43)	\$801	\$823	\$945 (46)	\$668 (40)	\$691 (49)	\$915	2940	\$965	\$991	\$1,018	\$1,045	\$1,073	\$1,102
Less Credit card discount Not pessenger levenues, constant dotters			2	0	0	0 0	0	(0)	(2)	(6)	(6)	(6)	73	(7)	(7)	eni.	(7)	ωĵ	(9)	(9)	100	(8)	(50) (9)	(52) (9)	(53) (9)	(54) (0)	(56) (10)	(57)	(59)	(61)
· · ·	1 '	'l '	" "	'l °	U	0 0	0	46	56	606	622	639	656	674	692	711	730	750	770	790	812	834	956	879	909	927	952	978	1,004	(10) 1,031
Net light freight revenues, constant dollars	(	0 (	0 (	0	0	0 0	0	o	٥	31	32	33	34	36	36	36	30	40	41	43	امد	ا مد	47	49						1
inflationacjustment Net revenues	- 5	9	0 0	0 0	0	0 0	0		50		307	344	305	429	475	526	579	637	698	763	833	900	988	1.073	1,164	1,261	53 1,364	1,474	57 1.591	59 1.717
	1 '	"  '	'l '	'l "l	Ų	0 0	0	62	!15	906	961	1,018	1,075	1,139	1,204	1,274	1,348	1,426	1,509	1,597	1,669	1,787	1,991	2,001	2,117	2,239	2,369	2,507	2,652	2,606
Operating Costs, constant dollars		1		1					ļ				1	ı			1		1	- 1			- 1	İ				1		
Labour Electricity	1 9	0 9	0 1	2 0	0	0 0	a	17	39	97	98	99	100	101	102	103	104	105	106	107	109	109	110	112	113	114	115	116	117	
Advertising/promotion	1 7	1	3 3	31 81	0	0 0	0	2	4	22 13	22	22	23	23	24	24	24	25	25	26	26	26	27	27	28	28	29	29	30	118
infrastructure maintenance services		5	ă   à	6	Ö	0 0	اة	3	ä	16	16	19	13 15	13 14	13	19	13	13	13 12	13	13	13	13	13	13	19	13	13	13	13
infrastructure materials/supplies Rolling stock materals/supplies		2 9	2 (	0	0	0 . 0	ä	ō	ī	2	2	2	2	2	2	3	3	3	3	12	12	12	121	12	12	12	12	12	15	12
Telecommunications/computer servicus		3 3	31 3		0	0 0	0	!	1	12	13	13	13	19	14	14	14	15	15	15	15	16	16	16	17	17	17	18	16 18	19
Insurance service afranches lees etc	1 6	ة - اة	ة اذ		ŏ	م اه	l äl	اد	21	15	12	12	13	19	13	13	14	14	14	15	15	15	15	16	16	17	17	18	18	18
Food/elated sundres		2 0	) d	0	Ď	a  o	ŏ	اة	1	ī	2	2	2	2	2	<b>#</b>	اد	9	9	9	10	10	10	10	10	10	10	10	10	11
Unscheduled materials/services Property taxes	5	31 9	21 9	9	0	0 0	ō	11	26	40	41	41	11	41	41	41	41	41	41	45	42	42	42	42	42	2	42	42	2	42
Contingency	1 8	( )		31 SI	0		0	0	7	16	0	0	0	.0	0	0	.0	0	0	0	ő	ō	ō	ô	ō	6	0	0	72	48
Total operating-costs, constant dollars	-	1 0	5	Ď	ō	ŏ ŏ	0	47	107	240	243	245	247	248	250	252	253	255	259	17 261	268	271	18 274	16 278	19 282	19	19	19	20	20
Capital taxes	١,	, ,		ا ا	_			ا	ا؞									-~-		***	233	471	2/1	210	262	205	290	294	296	303
Inflation edjustment		<u> </u>	<u>- 1</u>		ő	0 0	0	16	41	15 102	14 114	14	13	13 150	163	12 177	12 191	11	.11	11	10	10	10	10	Ð	e	a	9	9	10
Total operating costs		) (		0	0	0 0	ő	64 1	10		371	364	397	411	425	440	456	206 479	222 492	239 511	261 538	290 561	300 594	321	344	368	393	419	447	477
Gross operating cash flow	<del> </del> ,	,	, ,																,		~~	351	200	609	634	661	691	722	754	789
	١ ،	Ί,	1 `	Ή "Ι	ď	ا ا	· · · · · · · · · · · · · · · · · · ·	(2)	67	550	590	632	678	727	779	834	692	953	1,017	1,085	1,151	1,227	1,307	1,392	1,483	1,570	1,679	1,765	1,698	2,017
Large corporations taxes		1 0	) (		0	5 0	٥	o ŧ	a	7	7	7	7	6	6	6	اء							ا۔					.,	
income taxes Net operating cash flow			?		0	0 0	0	0	0	0	0		٥	17	10	23	69	100	121	151	178	205	290	259	269	226	244	269	5	5
THE SPORTING COMMITTEE STATE OF THE STATE OF	,	Ί `	Ή `	""	"	0 0	ို	(2)	67	543	583	625	671	703	754	604	817	847	691	929	960	1,017	1,072	1,120	1,190	1,348	1,431	1,511	295 1,598	324 1,686
Interest on secured and bank debt		) (	) (	0	0	0 0	o	ei e	67	295	292	266	201	271	268	253	236	218	212	187	150	129	107	74					.,,	.,
Principal repayments on secured debt Cash flow available to debenture holders, lesse				0	0	0 0	0	0	0	20	40	60	60	100	120	140	160	100	200	220	240	260	260	300	35	44	45	33	24	10
payments and dividends	c	1 0	ا ا		6	ا ا	اه	اه	٨	220	251	278	311	332	367												<del></del>	······································		
B					-1	· · · · · · · · · · · · · · · · · · ·	<u> </u>	1	ľ	-	ESI	2,0	311	332	307	412	422	449	479	523	569	628	585	755	1,156	1,304	1,366	1,478	1,574	1,678
Sees interest on convertible debentures. Excess cash flow a valuable for lease payments, excess		4	· · · · · · ·	<u> </u>	0	0 0	- 0	0	0	92	92	92	9/2	92	92	92	92		92	92	92	92	92	92	. 92		0	ا ،		
interest on convertible debentures and dividende	0	, ,	) (	o l	a	o a	اه	اه	٨	136	159	198	219	240	275	319												┉╬	U	u
t	Ι.		1		- 1	] ]	- 1	٦	ľ	,	133	100	213	270	2/0	319	330	357	367	430	476	536	593	662	1,064	1,304	1,366	1,478	1,574	1,679
Lease payments  Excess interest on convertible debentures	۱ ،		() (		9	0 0	0	0	9	80	94	110	130	142	163	189	195	212	229	255	262	317	362	393	630	773	621	876	933	995
Dividende		0	) .	اه	ő	0 0	ö	šI		26	33	30	45	50	57	66	68	-0	90	0	٥	0	9	-21	90	0	0	0	0	0
Realdust cash flow for Operating Company	0	0	) 0	D	Ô	0 0	0	Ö	0	27	32	37	44	49	55	64	56	71	77	99 96	95	111	114	116	131	270	287	306	326	348
Less: Equipment and technology deprecation	-	، ا	, ,	ا ا		ا ا		ا			]							- ''			**	'''	",9	132	213	261	277	296	315	336
Add: Principal repayments on secured debt	š		5 6		ől	0 0	۵	äl	ŏ	(166)	166) 40	(166) 60	(166) BO	(171) 100	(171) 120	(171) 140	(173) 160	(184) 180	(184)	(184)	(184)	(192)	(194)	(194)	(194)	(202)	(202)	(205)	(205)	(205)
Add: Dividends Not Income (loss) for Operating Company		5	2 - 2	2	0	0 0	0		0	20	33	30	45	50	57	66	58	74	200	220 89	240 99	260 111	200	300 116	131	270	0 207	0	0	0
	l "	Ί '	ή '	'l °	9	9 9	0	٥	G.	(90)	(61)	(30)	3	26	60	99	121	141	173	210	249	295	318	354	149	329	362	397	326 436	948 479
PUBLIC FINANCE COMPANY	l	1	i	1	-		1			1				ł				1	1				- 1	1	-				~~	7,3
Infrastructure and civil works interest subardy Interest on Government garanteed debt	9	9	2 2	0	0	0 0	0	0	٥			(649)	(649)	(649)	(649)	(649)	(649)	(649)	(649)	(649)	(549)	(649)	16491	(649)	80.40V		- 45	n.c.		
Lease payments	"		1 6		0	0 0	9	0	0			611	506	604	600	595	591	585	580	574	567	559	551	543	(649) 533	(849) 523	(649) 511	(649) 499	(649) 485	(649) 471
Depreciation on infrastructure and civil works			)		0	اه اه	اة	ö	ă		94 35	110	130	142	163	169 53	195 58	212	229 59	255	282	317	352	393	630	773	821	676	933	996
Net income and cash flow of Public Finance Company	0	<u> </u>	0 0	0	0	0 0	0	ō	0	60	94	110	130	142	163	189	195	212	229	75 255	262	317	97	105 393	116 630	126	138	150	163	178
Senior debt coverage retica	1								-									TIP1			EVE.		375	333	0.00	773	821	876	233	995
Equipment and technology notes - Actual	l	T		1			Т			1.75	.78	1.62	1.00	1.96	2017	2101		2 401	· ATTACK	0.57	0.00									
Equipment and technology notes ~ Pequired	<u> </u>	J		1		<u> </u>					.75	1.75	1.75	1.75	2.01 1.75	1.75	2.26 1.75	2.40 1.75	1.75	2.67 1.75	1.75	3.15 1.75	3.36 1.75	3.73	N/A	N/A	N/A	N/A	N/A	N/A
Polurn on equily	1																	177.00			0.131	1.73]		1.75	1.75	1.75	1.75	1.75	1.75	1.75
Operating company			<u> </u>	1	Т					0.0% -5	9% -	3.1%[	0.4%	2 00 7	6.7%	10.60	10.00	40.10.7												
Not operation as rain				· · · · · · · · · · · · · · · · · · ·												10.6%			15.1%			19.0%	17.7%	17,4%	7.3%	15.5%		17.4%	18.3%	19.0%
Net operating reargin	L	1			Т				- 60	0.6% 61	4% 6	2.2% 6	3.0%	63.9%	54.7%	65.4%	66.2%	66.6%	67.4%	69.0%	68.1%	68.6%	69.1%	69.69.1	70.1%	70 5%	70 GH.	71 NV F	71.00	71.44
internal rate of return (no residual value for equipment	and tech	nology at	and of 35	- year conce	(noise																					10.575	19.08	(1.6%)	(1.6%	[1,9%]
Public sector (pre – tex)						5.49%																								
Private/Publice quity and convertible dependues (after tax)						11.04%																								

Quebec — Ontario High Speed Rall Project Quebec — Toronto 300 kph (via Mirabel) Government where of capital costs

in n	anthons	of left	stadi	dollar	7.0	

	Presont	1	Pre-co	net uc bon		1		Cos	stuction s	nd Sleri-							11																		
•	Value	1995				1298	1999	2000	2001	2002	2003	nod i	total	2005	2006	*******								Full Ope										-	
init astructure and civil works		1	1	1	1	<del>                                     </del>					- 2003	-204	1500		2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	3018	2017	2015	2019	2020	2021	2022	2023	2024	2025	total
Construction period interest subsidy	1,165		,			34	188	277	426	512	567	567	2,502	۰	٥		, ,	0	٠	٥	۰	a				ا			ا ا	ا۔					
Equipment and lechnology				-													1 1							1	1	آ	٦		li	ไ	اً ٠	١	o	0	٩
Construction period interest subsidy	405	,	, ,		۰	۰	12	+0	103	197	257	263	901	۰	٥		, ,	۰	۰	c	۰	0			٥	,									
Initiat aponeor									1					ļ										]		آ ا	ľ	ľ	1	ไ	٦	°		٥	9
Shwe capital	102	100	, ,		109		٥	0	o	0	c	0	٥	٥	٥	۰		e	٥	۰	٥	۰		٥						إ					
Annual subsidy	2,400		,			٥	a	c	٥	0	c	0	٥	640	649	649	549	649	649	649	542	649	649	649	849	849	649	649	849	. 649	649	849	619	549	12,624
Taxos	(397	•	,	•	٥	۰	a	c	٥	٥	٥	0	٥	(22)	(21)	(2)	) (20)	(37)	(37)	(41)	(87)	(117)	(138)	(167)	(193)	(220	(245)	(273)	(30)	(236)	(256)	(202	(309)	(339)	(3,363)
Dhidenda	(115	٠.	, ,	•		٥	٥	0	۰	۰	٥	0	٥	(14)	(16)	(19	(83)	[25]	(20)	(33)	(3-6	(37)	(40)	(45)	(49	(55)	(57)	(58)	(85)	(24)	(50)	(27)		(30)	(734)
L sase payments	(972	9	٠ ا	9 9	۰	۰	٥	٥	٥	۰	٥	۰	0	(80)	(9-1)	{(110	(130	(142)	(183	(189)	(195)	(212)	(229)	(265)	(262)	(317)	(352)	(393)	(630)	1773	1021	(675)	(933)	, ,	(0, 173)
Total per annum		109				34	129	325	531	710	824	850		532	517	499	477	445	421	385	332	283	242	182	124		15	1750	(348)	(360)			,		12.74
Total cumulative	L	<u></u>	106	100	109	<u> </u>	163	486	1,020	1,729	2,553	3,403	3,403	532	1,049	1,546	2,025	2,470	2,001	3,275	3,608	3,991	4,133	4315	4.439	4.495	4,490	4.415	4.067	3,061	1,227	(537)	(621)	(715)	
Present value with taxes (cumulative)					100	]							1,587										4.55		.,452	74601	- 440	4,110	300/	4001	372/	2,590	2,069	1,054	

Contribution of public sector buttre treak-even point in cash flow is schlaved

Total net pont (bullon with large

fraseni value without taxes (cumulative)

6,002 9,565 100

Total not contribution without laxes

Present Value of contribution with laxes 3,023 Present value of contribution without taxes 3,267

in millions of 1993 constant dollars

	Preson					,																													
	Velue	199		netucto		ļ.,,,,,,,		Con	uruction a									·						Full Ope	Atlanta										
infrastructure end civil works	79146	120	1996	199	7 Total	1998	1999	2000	2001	2002	2003	2004	Total	2005	2006	2007	2008	2009	2015	2011	2012	20t3	2014	2015		2017	2019	2019	3050	2021	2022	2023	2024	2025	Total
Constuction period interest subsidy	966	, .		•	0 0	26	96	226	336	393	422	410	1,915	٥	0	٥		٥	۰	c				ا		ا	ا	ا		_[				- 1	
Equipment and lechnology										ı											1		1		Ĭ	ľ	ไ	ไ	٦	ាំ	٩	ា	٩	٩	٩
Construction period interest subsidy	325			,	0 0	e	IQ.	39	82	151	191	204	679	0	0	١,	c	۰	١	۰	اه						ا								
inital sponsor																					1	1	Ĭ	ľ	١	ไ	9	۰	ាំ	ိ	0	9	٥	٩	9
Share capital	94	10	2 (	,	0 102	6	0	٥	0	c	٥	¢		٥	٥		٥	۵				,		,								1		- 1	-
Annual subsidy	5,473				0 0	٥	۰	٥	0	c	0	¢		455	442	429	415	404	393	361	370	358	349	306	329					°	٩	٥	9	٥	9
Taxos	(20)	,				٥	· o	0	۰	c	0	0	۰	(15)	(14	(140	(136	(23	(22)	(24)	(50	(65)		(87)	196	(108)	310	301	595	264	275	267	259	252	7,225
Dividends	(6)		0 0	,	0	٥	0	0	a	0	a	0		(10)	0.0	113	(15)	1 1		(,,,	/10	(20)	(559	(23)	(25)	` 1	(27)	(127)	(135)	(104)	(109)	(116)	(123)	(131)	(1,570)
1. sess payments	(523	,		,	0 0	٥	0	0	0	0	0	٥		(56)	(64	(73	(806	(99)	(99)	,,,,		(117)	(123	`1	` 1	(27)	1	(27)	(29)	(10)	(15)	(16	(19)	(12)	(276)
Total per sonum	-	IC			0 -		106	264	420	544	513	514		373	352	300			1				(123	(1,4,5	(14.3)	(156)	(168)	(162)	(20-0)	(336)	(349)	(361)	(373)	(366)	(3,800)
Total cumulative		10	102	10	2	29	137	402	921	1.365	1,976	2.592		3/3	705	1,055	308 1,361	1,639	255	226	190	157	136	95	63	27	(2)	(35)	(157)	(169)	(193)	(221)	(249)	(276)	-
Proseni value with laxes (cumulative)	-		-			1					,,,,,,,	4544		, 3/2/		,,,,,,,	1,301	1,030	1,893	2 119	2.300	2,465	2,595	2,501	2,753	2,781	2,779	2,744	2,587	2,410	2,226	2,005	1,756	1,478	-
12 a zout Amina miki Texa a (crimitale so)					94	<u>i</u>							1,293	]																				f	572

Contribution of public sector betwee treek-even point in cash flow is schlered

sexat dilw nottudi tnoo ton tato T

6,200

Proxest ratio of contribution with texes 2,170

Present value of contribution without taxes 233

Present value without taxes (cumulative)

Total not contribution without taxes

1,667

1,293

962

573

972

1,393

Quebec—Ontario High Speed Rail Project Quebec — Toronto 300 kph (via Mirabel) Statistics and firancial ratios (In millions of inflated dollars)

Statistics and general information	<u></u>																				
The state of the s	2005	2006	2007	2008	2009	2010	2011	2012	2013	7 2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
Ridership (in millions)	6.8	9.0	9.2	9.4	9.6	9.8	10.1	10.3	10.5	10.8	11.0	11.3	11.6	11.8	121	124	12.7	13.0	13.3	13.6	
Growth of ridership in percentage	N/A	2.34%	2.34%	2 34%	2 34%	2.34%	234%	2.34%	2.34%	2.34%	2.34%	2.34%	2.34%	2.34%	2.34%	234%	2.34%	234%	234%	234%	
Total operating revenues	\$908	\$961	\$1,016	\$1,076	\$1,138	\$1,204	\$1,274	\$1,348	\$1,426	\$1,509	\$1,597	\$1,589	\$1,787	\$1,891	\$2,001	<b>\$2,</b> 117	\$2,239	\$2,369			
Growth ofrevenues in percentage	N/A	5.61%	6.81%	5.81%	5.81%	6.81%	5.81%	5.81%	5.81%	5.00%	5.80%	5.80%	5.80%	5.80%	5.80%	5.80%	5.60%		\$2,507	\$2,652	
Total operating expenses	\$357	\$371	\$364	\$397	\$411	\$425	\$440	\$456	\$473	\$492	\$511	\$538	\$561	\$584	\$000	\$634	\$661	5.80%	5.90%	5.80%	5.82%
Growth of expenses in percentage	N/A	3.68%	3.71%	3.41%	3.45%	3.47%	3.50%	3.53%	3.86%	3.87%	3.99%	5.29%	4.14%	4.18%	4.23%	4.07%		\$691	\$722	\$754	\$769
Government funding	(\$549)	(\$649)	(\$649)	(\$649)	(\$649)	(\$649)	(\$549)	(\$549)	(\$649)	(\$649)	(\$649)	(\$649)	(\$649)	(\$849)		ŀ	4.37%	4.44%	4.49%	4.54%	4.60%
Leam payment to Government	<b>\$80</b>	\$94	\$110	\$130	\$142	\$163	\$189	\$195	\$212	\$229	\$255	\$282	\$317	\$352	(\$849)	(\$649)	(\$649)	(\$649)	(\$649)	(\$649)	(\$649)
Debt service	\$407	\$424	\$440	\$453	\$463	\$480	\$485	\$487	\$490	\$504	\$409	\$492	1		\$393	\$530	\$773	, \$821	\$876	\$933	\$995
Operating expenses to revenues ratio	39.37%	38.56%	37.81%	36.96%	36.13%	35.33%	34.56%	33.82%	33.19%	32.59%	. 1		\$481	\$468	\$487	\$216	\$44	845	\$33	\$24	\$10
Revenues per passanger (A)	\$104	\$107	\$111	8114	\$118	\$122	\$127	\$131			32.03%	31.87%	31.37%	30.89%	30,43%	29.94%	29,53%	29.16%	28,79%	28.45%	28,12%
Government funding (return) per passenger (8)	\$65	\$62	\$59	\$55	<b>\$</b> 53	\$49			\$135	\$140	\$145	\$149	\$154	\$160	\$165	\$171	\$176	\$182	\$189	\$195	\$202
B/A	62.60%	57.74%	53.00%	48.27%	· l	• • •	\$40	\$44	\$41	<b>\$39</b>	\$36	\$32	\$29	\$25	\$21	\$1	(\$1 C)	(\$13)	(\$17)	(\$21)	(\$25)
<u> </u>	3200A	37.74%	53.00%	46.27%	44.51%	40.35%	36.06%	33.63%	30.64%	27.80%	24.66%	21.69%	18.54%	15.72%	12.80%	0,86%	-5.54%	~7.28%	-9.07%	-10.72%	~12.34%

Financial ratios																					
	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022			
Capital structure ratios															2.51.0	*020	2021	2022	2023	2024	2025
Percentage of capital assigned to infrastructure notes	64.15%	64.71%	65.26%	65.85%	65.51%	66.09%	66,66%	66.94%	65.74%	66.34%	66.85%	67.44%	66.72%	66.90%	67.45%	67,99%	66,95%	67,45%	67.45%	67.90%	67.51%
Percentage of capital assigned to equipment notes	25.33%	25.51%	25,47%	25.18%	<b>85.74%</b>	24.99%	23.94%	23.01%	23.63%	21.87%	19.86%	17,39%	16.19%	13.49%	9.80%	8.45%	8.71%	6.59%	4.85%		'
Percentage of capital assigned to debenture holders	9.60%	9.73%	9.86%	10.01%	10.02%	10.17%	10.34%	10.45%	10.37%	10.56%	10,76%	10.99%	11.01%	11.20%	11,48%	11.76%	0.00%			2.06%	0.00%
Percentage of capital assigned to shareholders	0.92%	0.04%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.26%	1.23%	2.52%	4.19%	4.08%	8.41%			ł	0.00%	0,00%	0.00%	0.00%
Debt to equity ratio for operating company		- Andrews			İ				4.2470	1.10470	2.0270	7.1276	4.00%	0.41%	11.28%	11.79%	24.34%	25.95%	27.70%	30.04%	32.49%
Actual	2.77	, 3.01	3.19	3.26	3.41	3.28	3.01	2.73	200				i				İ				
Maximum permitted	4.00	4.00	4.00	4.00					2.64	2.25	1.65	1.47	1.24	0.95	0.67	0.80	0.60	0.49	0.41	0.30	0.22
· '	1.00	4.00	7.00	4.00	. 4.00	4.00	4.00	4.00	4.00	4.50	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
Interest coverage operating company		i	1	1			İ		l	-	l						Į.				
Santor debt	1.75	1,78	1.82	1.88	1.96	2.01	212	2.26	2.40	2.47	2.67	2.68	3.15	3.38	3.73	N/A	N/A	N/A	N/A	N/A	
Percentage payoutratio (including teams payments)	36.98%	37.62%	38.50%	39.80%	40.44%	41.37%	43.25%	43.58%	44.62%	45,10%	48.98%	48.90%	51.22%	52.88%	55.16%	79.23%	77.38%	77,47%	78.24%		N/A
Gross margin	60.63%	61.42%	82.19%	63.04%	63,87%	84.67%	65.44%	66.18%	68.81%	67.41%	87,97%	68.13%	58.63%	69.11%	69.57%	Ī				78.80%	79.53%
Natraturn on invested capital	8.12%	8.64%	9.20%	9.85%	10.15%	10.87%	11.65%	11.95%	12.11%	12.82%	13.59%	14,44%		1		70.06%	70.47%	70.85%	71.21%	71.55%	71.88%
Pre tax ratum on convertible unsecured debenture x	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%					15,10%	15,94%	16.98%	18.07%	22 14%	23.65%	25.53%	27.64%	29,66%
Pre tarretura on share capital	12.95%	15.18%	17.72%	20.88%					9.00%	9,00%	9.00%	9.00%	9,00%	9.89%	11.04%	17.73%	N/A	N/A	N/A	N/A	NjA
After - tax ratus on equity (operating company)	- 6.04%	-			22.92%	26.24%	30.51%	31.48%	34.10%	36,92%	41.08%	45.49%	51.14%	52.43%	53.59%	60.28%	21.74%	23.10%	24.64%	26.25%	27.99%
· · · · · · · · · · · · · · · · · · ·		5.92%	3,13%	0.36%	2.92%	6.71%	10.57%	12.27%	13.42%	15.12%	16.62%	17.59%	17.96%	17.70%	17,42%	7.28%	15.56%	16.50%	17.44%	1 B. 28%	19.01%
Cash flow/ total debt outstanding (operating company)	3.82%	5.11%	6.56%	6.30%	9.38%	11.45%	14.14%	16.06%	17.08%	20,59%	25.57%	32,79%	39.04%	50.66%	75,92%	N/A	N/A	N/A	AVA	N/A	N/A

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## High Speed Rail Project

Financial Analysis Final Report February 24, 1995

Appendix 10

Banque Nationale de Paris - Note on Financial Structure

### BANQUE NATIONALE DE PARIS DIRECTION DES FINANCEMENTS SPECIALISES Département des Financements de Projets

September 14, 1994

### FINAL DRAFT

High Speed Rail Project Quebec-Windsor Corridor

### Note on the Financial structure

Banque Nationale de Paris (B.N.P.) has been retained as a financial advisor by the Steering Committee for the study of the High Speed Rail Project in the Quebec-Windsor Corridor (the Project) to review the various elements of the feasability study from a "project financing" point of view.

After reviewing the major project consultant's reports B.N.P. was first approached by Peat Marwick (KPMG) on certain financial aspects relating to the institutional options. B.N.P.'s comments have been incorporated in KPMG's Report.

In a second stage B.N.P. worked closely with Price Waterhouse (PW) in the preparation of their Financial Analysis Report. B.N.P.'s brief was to advise in conjunction with PW on the most appropriate financing structure, based on the main findings of the KPMG Report and drawing on BNP's experience of similar projects.

B.N.P. also advised on the bankability of various financial options, assisted in defining the key financial parameters and ratios to be achieved and reviewed the financial model prepared by Price Waterhouse.

B.N.P. major findings and conclusion have been incoporated in the PW Financial Analysis Report.

This note expands on the rationale which led to the selection of the overall financing plan finally retained by the financial advisors.



2

### Introduction

One of the principal PW terms of reference was to determine a financing scheme which could maximize the private sector contribution to the Project.

In order to achieve this, PW and B.N.P. essentially reviewed three main options which are reported upon in the Financial Analysis Report:

- (i) Fully public financing
- (ii) Private financing
- (iii) Public/private partnership

Option (i) is the situation of reference to which the governments will compare any alternative involving the Private Sector.

Key project cash flows and projects returns have been calculated for this option for comparison purpose.

Option (ii) tries to ensure the transfer to the private sector of the maximum acceptable amount of project risks while recognizing the necessity of public support rendered necessary by the project economics. In this option the government would pass the project in its entirety to the Private Sector after contributing an up-front subsidy agreed in advance contractually with the private Party.

Option (iii) is an intermediate solution where the government finances a specific part of the Project and Icaves the rest to the Private Sector on a purely private basis, with a lease payment by the Private Sector ensuring a long term return on the Government's investment.

The present note attempts to elaborate on the three options above and explains the rationale behind PW and B.N.P. recommendations in the Financial Analysis Report.



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### I. Risk Analysis

The Canadian High Speed Rail Project can be compared in terms of scope, size and overall risk profile to only a few major projects financing, like HUROTUNNEL or the yet unrealized Texas HSR (Houston, Dallas, Austin San Antonio triangle) (1). The financial community's perception of this type of risk can be derived from these experiences:

- lividently it is a very large and very long term financing meaning in particular that

  (i) the financing sources cannot be limited to the Canadian market and institutions, due to capacity constraints; (ii) only a limited number of large specialized international banks would consider such a long term investment (15 to 20 years). North american banks are generally conservative in this respect and a substantial participation of non american banks (European and Japanese) will be necessary. As it may be difficult to entice banks to support a project competing directly with their "national" technologies, this market may not be available in full.
  - These two remarks both point in the same direction: There is a limited market for the amount of private financing which can be expected to be raised for a project of this type, scope and complexity.
- 2) It will be perceived as "high tisk", particularly in the following areas:
  - (i) Land acquisition, permitting and environment, all risks which will be considered to be largely controlled and, in any event, better addressed by the Public Sector.
  - (ii) Civil works: "mega projects" (like the Canadian HSR) have a reputation of frequently going beyond budgets and schedules.
  - (iii) Revenues: there is little established track record for forecasting reliably the revenue stream of HSR projects. No doubt, the French and European successful experiences as well as the (less recent) japanese one will give a favourable "a priori" on this issue. In addition the symbolic value of such a great national undertaking could significantly improve its financeability, as could be witnessed for example on a project like BUROTUNNIS.

<sup>(</sup>I) B.N.P. was closely involved in both project. The Texas HSR was officially abandonned in August 1994, due to lack of sufficient public support.

However there is no comparable experience in a North American context, where geography and travelling patterns are quite different from Europe or Japan and it is our view that financiers will remain on the conservative side in terms of revenue projections.

(iv) This type of project financing does not generally benefit from the experience and ressources of an established owner-operator (although this can be mitigated to a certain extent in the Canadian context).

The difficulties of such a situation have been exposed in the case of BUROTUNNEL and are well known to the financial community. All efforts should be made to reduce this risk hy introducing experienced players in the Concession Company, while trying to preserve the benefits and drive of a new enterprise.

This, however, is likely to remain a concern for bankers.

Generally speaking the Canadian HSR project if conducted on a purely private basis would be, in our view, perceived as broadly comparable to EUROTUNNEL in term of financing

#### 11. Choice between the options

The three options outlined above have been examined in the context of the Government target of maximizing the Private Sector contribution.

Option (i) clearly remains open, but is mentionned for reference only, being outside our mandate. The choice between option (ii) and (iii) was driven by certain key considerations :

- From the first preliminary financial calculations it appears that a very substantial public contribution will be necessary, most probably beyond 50 % of the total financing requirements. It is our general view and experience that purely private solutions are not advisable financially when the public contribution represent a dominant part of the financing. It would also be politically difficult to justify, in particular:
  - A "private" solution (in the way described in the introduction to this Note) would not provide the government with sufficient control over the construction and operation of the line, while it supplies the bulk of the financing.
  - Such a solution would not ensure a return to the Government on its investment, even a long term one (beyond the socio-economic benefits).

Opponents to the Project may easily argue that the Governments are "subsidizing private profits".

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- Certain of the key project risks outlined above will be seen as belonging to the Public Sector, particularly the route selection, and the permitting and environmental work on which the Private Sector has no or little influence.
- The private solution, as envisaged above, discharge all project risks onto the Private Sector after payment of an upfront contribution by the public.

  This is acceptable when the Government contribution is small, say in the 10-25 % range. When it becomes higher in this case over 50 % it creates an unbalance whereby the private sector carries 100 % of the risks on a less than 50 % project base. This unfavorable leverage effect is likely to deter the Private Sector.
- As commented earlier, the amount of project funds which could be raised from the specialized financial markets for this type of project is limited and would not conceivably cover the totality of the potential private share.
  - The financeability of the project will be greatly enhanced if the private financing is based on the technology items (electrification, signalling, telecommunications and controls,
  - Rolling stock). Propertive financing banks would be, in our opinion, much more likely to engage in a non-recourse or limited recourse financing if it is to support major clients and key exports.
    - In addition Export Credit Agencies could be approached for additional support.
- The preliminary soundings made in the Canadian banking community have demonstrated little or no appetite for financing the civil engineering portion of such a project, which is generally considered to be of a Public Sector nature.

Based on the analysis of paragraph II above, it is our conclusion that the option most likely to attract a substantial amount of private capital is a public/private partnership.

## 111. Public/private partnership: the basic concept

As discussed earlier we believe that the "private" option would not be seen as an attractive proposition by the financial community, or would carry an unacceptable price to restore a financeable risk-reward balance while depriving the public sector of most of its control and regulatory powers.

Besides the amount of private funds necessary to finance it, is not likely to be found on the relatively narrow financial markets available for this type of investments.



Our approach has been therefore to look for the best combination of public and private sectors involvement in order to meet the three key criteria below:

- attractiveness for the Private Sector,
- safeguard of Public Sector interest and return on its investment (albeit long term),
- sound and efficient project management.

The guiding principles must be in our view that each party, public and private, must be responsible for the part of the project for which it is the most competent and controls the best.

It follows that the Public Sector should take charge of the main infrastructure works since (i) it has available resources and experience to oversee this type of projects; (ii) it has the best control over the permitting and environmental risk; (iii) it is the most likely to obtain competitive prices in this area due to its natural buying power.

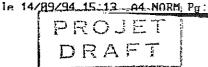
On the other side of the ledger the equipment and technology items are designed and built by a limited number of private suppliers and are closely related to the operation and maintenance of the system for which private sector experience and efficiency is being sought.

It is therefore proposed to split the Project in two parts clearly separated in terms of allocation of risks, but within an integrated project management structure. Broadly speaking the Public Sector would oversee and finance the infrastructure and civil works while the private sector would take full charge of the equipment and technology supply, financing and operation (see chart 1). In consideration of the utilization of the infrastructure, the private operator would pay an annual lease payment to the public entity (see chart 2).

It is proposed that a single project management structure be implemented to ensure coherence and consistency in the many areas of interface between the two main project parts (see V-3).

It is also proposed that the public portion be pre-financed by private funds via "Guaranteed Infrastructure Notes" of very long maturities, avoiding large up front payments by the Governments and spreading the cost to the public sector over a long period of time. This long term annuity payment can be set off against the lease payment made by the operating company (plus the dividends perceived by the State as a shareholder) and, if applicable, against the savings in subsidies by the Federal or Provincial Governments necessary to support the existing rail systems to be phased out or replaced by the High Speed Rail. The resulting balance becomes positive for the governments after some time, depending on the overall project economics.

FAX émis par: 33 1 40 14 69 25 BNP Project Finance



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The type of institutional arrangement described above is very similar to the one currently used by the Swedish Railways and more importantly recommended by the 1991 European Union directive 91-440 calling for a separation 1) of the ownership and management of the infrastructure and the operation of the networks. This is designed to ensure a free access to foreign operators on the national networks against payment of user's fees. This Directive is currently being implemented, most notably in the UK with the privatization of British Rail and the oreation of the Railtrack Company as owner/manager of the infrastructure, in Italy with the TAV program, but is also under advanced consideration in Germany, Spain and France.

#### IV. Equity - quasi equity

Three elements are to be taken into account in dimensioning the equity:

- (i) The amount of funds necessary to bring the project to a stage of definition where major equity and debt placements can be done on the financial markets: In a first approach this amount has been estimated at 280 million CAD for the full corridor - CAD 160 million for the Montreal-Toronto section - (these figures would certainly need to be reassessed in detail in a further analysis).
- (ii) The amount and type of equity which can be reasonably estimated to be raised for the Project during the construction phase: It is our experience that straight equity for this type of project would be very difficult to raise from traditional investors on the private placement market, due to its level of risk but more importantly, to its non liquid/non rated nature and absence of significant dividends in the first 10 years.

Straight equity would essentially come from parties with a vested interest in the Project like main suppliers, operators, banks, transportation companies, utilities, real estate firms as well as Governments or Local Authorities.

This confirms the order of magnitude of (i) above, of 150 to 300 million CAD as a starting capital base.

(iii) The total amount of subordinated financing (equity/quasi-equity) necessary is dictated by the level of senior debt coverage required (2) our assessment of the minimum required level of coverage of the debt (e.g., the ratio between the cash available for servicing the debt after operating expenses and taxes to the annual debt service) is between 1.75 and 2.00 for a risk of this type given the current market conditions.

The vehicle proposed is a long term (25 to 30 years) convertible unsecured debenture.

<sup>(1)</sup> The Directive calls for an accounting separation only as a first step.
(2) The senior debt is described in the financial model as the "Equipment and Technology Notes", and finances broadly the electromechanical equipments and rolling stock.

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This quasi equity instrument would ensure a base interest (8 % in the financial model) plus an excess interest in case of cash flows superior to the base forecast and would offer a convertibility option.

The total of quasi equity required under these assumptions amounts to 1.2 billion CAD for the total corridor and 750 million CAD for Montreal-Toronto. These numbers appear reasonable. It must be stressed however that the marketability of such an instrument on the Canadian or North American markets has not been tested at this stage.

Note: A potential improvement of the overall financing plan, which has not been incorporated in the base model, would be to raise additional equity just before or just after the opening, when the project has gained more visibility and the most important risks have been weathered away. Ideally a public issue should be made, opening the project equity to individual investors and capitalizing on the "great national undertaking" image which could be generated by the Project. This has proved successful in the case of laurotunnel for example. However it should be noted that, the tighter North-American securities regulations may not easily allow such a public issue, and that it would be, in any event, highly dependent on the successful implementation of the project at the time of the issue.

Finally the returns on equity generated by the Project in the scenarios studied by the Report are not sufficient to consider the placing of additional equity.

## V. Outline of the financial and contractual structure

## 1. Outline of the financing scheme (see Chart 1)

The overall scope of the project can be divided into main items of work broadly arranged by increasing scale of "privatability" like:

- . Legislative work
- . Environmental studies
- . Permitting
- . Land acquisition
- . Liarthworks
- . Grade separation
- . Stations
- Ballast
- Track
- . Electrification
- . Signalling
- . Control and maintenance centers
- . Rolling Stock
- . lingineering

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Plus two "shared items":

Development studies: comprizing all the technical and financial feasibility studies leading to the definition of a "bankable" structure and the signing of the key project agreements, they can be considered to be the responsibility of the project sponsors, therefore in the Private Sector. However they are highly dependent upon environmental and permitting issues for example, plus a political agenda, which makes it unlikely that the private sponsors will accept to carry their very high costs without some government support.

The best option, in our opinion, is the sharing of these costs (we have assumed 50/50) between the Private and Public sectors. This has the advantage of ensuring the commitment and vested interest of the two parties having the most essential roles in the success of the venture.

. Project Management which would also be a shared item under the structure described in paragraph V below.

The concept is to divide the Project into two parts at some level on the "privatability" scale above taking into account:

- (i) the amounts of private financing which can be realistically sustained by the Project as discussed in the previous chapters of this Note.
- (ii) the necessity to split the work into two "packages" having a technical and industrial logic.

A typical breakdown would be, for example, to separate the Rolling Stock, Controls, Signalling and Electrification as a private package to be financed under a limited recourse project financing scheme, with the balance - mainly civil works - remaining as the public share backed by conventional state guaranteed financing.

It must be understood however that this separation (illustrated by the dotted line on Chart 1) is a movable one, depending on the criteria above and the results of the financial analysis. For example the private share of the works could range from the Track and Hallast or even Stations downward (representing concelvably above 50 % of the Project, including Project Management) if the project returns prove sufficients or, at the other extreme, could be limited to the supply of Rolling Stock (i.e. 15 % of total project costs).

### 2. The financing vehicles

Pach of these two shares of the Project will be financed by two separate entities under a joint management structure (see 3 below):

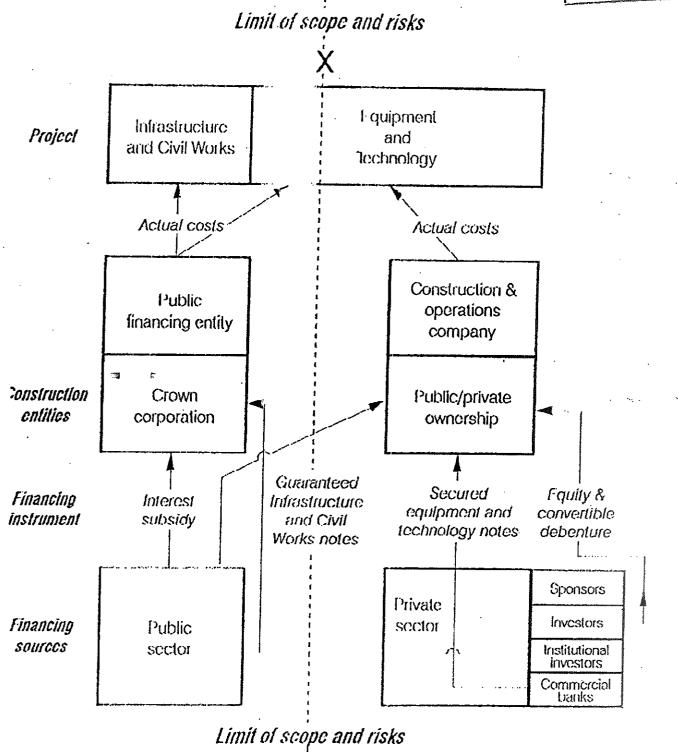
(i) A Public Financing Entity (PFF), presumably a crown corporation will take charge of the financing of the public share (described by simplification as "Infrastructure and Civil Works"), including all the risks and contingencies associated to it.

CHART 1

## High Speed Rail Study

Financing Scheme - Construction Phase

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In order to avoid large up-front payments by the Public Sector, this will be done through Guaranteed Infrastructure Notes (GIN) with very long amortization periods (30 to 35 years) issued by the PIE to institutional investors under a government guarantee. This will permit to spread the Governments contribution over a very long time span. It could be envisaged to reduce or cancel the guarantee after a certain point when the project cash flows have become sufficiently strong to support the entire debt service.

These GIN repayments will be gradually offset by the lease payments made by the Construction and Operation Company as described below.

(ii) A Construction and Operation Company (COOC), a public/private partnership, will take charge of (i) the design, construction and installation of the private share (described here as "Equipment and Technology", but, as we have seen, this could cover different items of work depending on the project economics), including all associated risks and contingencies and (ii) the overall design, project management and operation of the entire Project. The financing of this portion would be realized through a project financing approach, with equity and quasi-equity from project sponsors and investors and Equipment and Technology Notes (ETN) issued to commercial banks secured principally by the project net operating revenues and, to the extent permitted by law, by a first charge over movable project assets (rolling stock, equipments, etc...). The debt to equity ratio is set at approximately at 2.5 to 1 in the financial cases presented in the Report (full corridor and Montreal-Toronto). The equity of the COOC would be originally shared 50/50 between the Public and Private Sectors, then would become majority private as the subordinated bonds are converted into equity.

In addition to pay dividends to its public shareholder the COOC will pay an annual lease to the PFE in consideration for its usage of the Infrastructure. The payment of this lease would be however subordinated to operating costs and ETN service as shown in chart 2. In the financial cases presented, the annual lease payment would offset the GIN service from 2020 onward, i.e. 15 years after the start of operations. From that point the Project would become a net contributor to the Public Sector.

### 3. Contractual arrangements

Although contractual arrangements for the project implementation are not specifically part of the Financial Analysis brief, they are briefly discussed below to the extent they have a significant bearing on the financial structure.

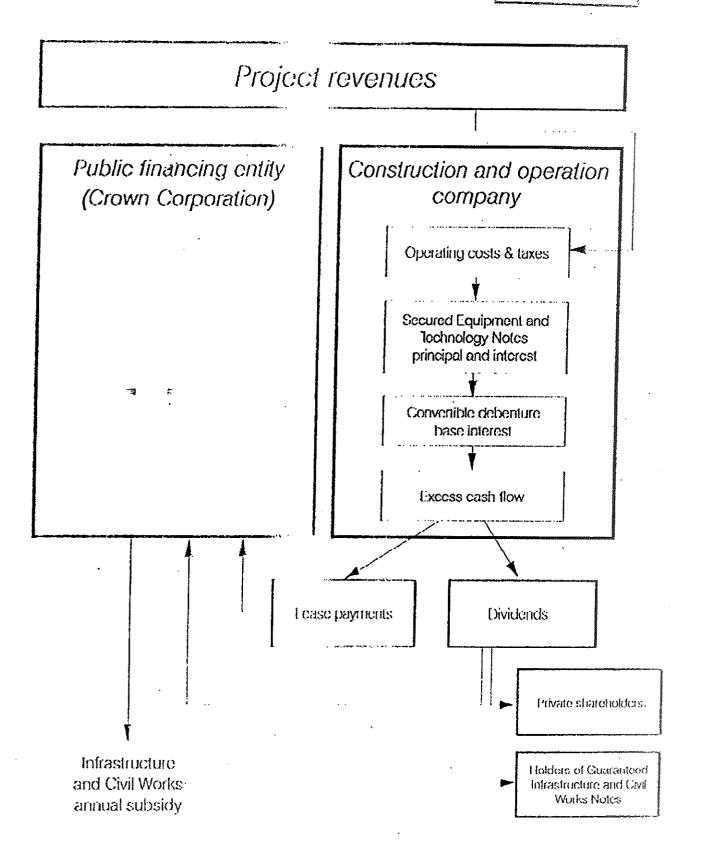
Although the proposed financial arrangements separate the public and the private shares for financing purpose, an integrated approach to the design and implementation of the total project seems advisable, in view of its complexity and the necessary interactions between its many components, particularly in term of design and project management.

CHART 2

## High Speed Rail Study

Financing Scheme - Operations Phase

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A tentative organization schedule is shown in Chart 3, under which a Program Manager (private) would undertake the management and design of the entire work under the supervision of a public/private Board. A Governments' Commission would work alongside the Program Manager, deal with the specifically public aspects of the project (environment, permitting, legislations, land, government relations, etc...) and report to the Board on the Governments behalf.

The Program Manager, which would be selected among the top Design-Engineering Firms through a competitive bidding, would itself complete the design, launch tenders for the works and supplies and supervise the project, under the scrutiny of the Government Commission and the Board.

This solution would maximize the Private Sector participation with the benefit of a private sector management structure, while keeping the necessary public review on the process.

This is clearly a very preliminary approach however, which would need to be carefully reviewed and studied with the public and private entities finally selected to complete the Project.

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# High Speed Rail Study Option 3 (Discussion) - Tentative Contractual Scheme

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