


**High Speed Rail Project
Quebec City-Windsor Corridor**

Financial Analysis Final Report

February 24, 1995

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High Speed Rail Project Quebec City-Windsor Corridor

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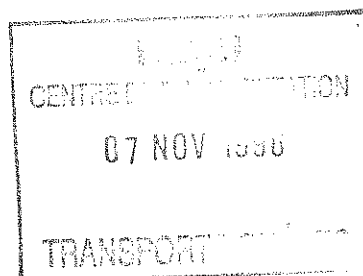
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1. Executive Summary

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 than 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:

Type of financing	Approximate percent of total Project costs	Sources of financing	Financial return		Government backing
			Type	Source	
Equity	1.5%	Sponsors ("stakeholders")	Dividends and capital gain	Project cash flow	Partial ⁽¹⁾
Convertible subordinated debentures	7.2%	Private sector investors	Interest, dividends and capital gain	Project cash flow	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 ⁽²⁾
Construction Period government interest subsidy	25.0%	Consolidated revenue fund - government	None	n/a	Yes ⁽³⁾
Total financing	100%				

Under the aforementioned 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).

⁽¹⁾ We are of the opinion that the financeability would be enhanced if the governments participated as 50% equity partners.

⁽²⁾ 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.

⁽³⁾ 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-300	5 MOT-D-200	6 MOT-D-300	7 MOT-D-300 NA	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 ⁽⁴⁾	25.3%	22.7%	26.5%	25.4%	22.5%	27.4%	28.6%	26.0%
Ranking	75.2%	75.8%	74.8%	75.1%	75.5%	74.5%	74.3%	74.9%
	6	7	3	5	8	2	1	4
Internal Rate of Return								
Wholly public	6.58%	4.83%	7.10%	6.91%	5.20%	7.86%	8.18%	6.80%
Ranking	6	8	3	4	7	2	1	5
Internal Rate of Return								
Public-private partnership								
Public sector	4.56%	2.57%	5.23%	5.42%	3.20%	6.65%	7.13%	5.49%
Private sector	10.79%	9.38%	11.34%	11.15%	9.66%	12.15%	12.34%	11.04%
Ranking	6	8	5	3	7	2	1	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 11th 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

⁽⁴⁾ 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 Pre-construction 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	Route configuration description	Speed
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 aforementioned reports. BNP's report is included as **Appendix 10** to this report.

Other than for BNP, we have not reproduced the aforementioned 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 aforementioned 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:

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- (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 aforementioned table, as follows:

⁽⁵⁾ 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.

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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.⁽⁶⁾

⁽⁶⁾ 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 unforeseen construction delays;
- Adequate construction insurance has been obtained;

⁽⁶⁾(...continued)
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.

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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 11th 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 in-depth studies undertaken by CIGGT, SNC and Canarail for the projection of operations and capital costs for the Project and on the resulting Project economics.

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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.

- (i) **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.

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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.

- (iv) **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.

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- (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.

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

Keeping in mind the aforementioned 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 aforementioned 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).⁽⁷⁾

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.

⁽⁷⁾ 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.

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

4.1 Project Cost and Financing Risk

	Constant 1993 dollars without capitalized interest		Inflated dollars with capitalized interest	
	(millions \$)	%	(millions \$)	%
Project Cost	\$10,482	100%	\$18,341	100%
Base Case Financing Plan-				
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

	2005		2025	
	Constant dollars	Inflated dollars	Constant dollars	Inflated dollars
	(in millions)			
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-				
Infrastructure and Civil Works interest subsidy	(607)	(866)	(336)	(866)
Net intake (outflow)	\$(502)	\$(718)	\$338	\$867

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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	\$284	\$400	\$-	\$-
Interest on subordinate convertible debentures	83	117	-	-
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:

	Wholly public	Private-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.

** Equity and Convertible Subordinated Debentures only.

⁽⁸⁾ 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"

⁽⁹⁾ 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	\$127	\$127	\$126	\$126	\$125	\$125
Construction Period	2,350	2,350	2,182	2,182	2,027	2,027
Operating Period (to 2025)	1,534	2,188	1,383	1,911	1,243	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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	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)	4.56%	6.34%	2.97%	4.77%	4.43%	6.51%	2.71%
- Private sector	10.79%	11.63%	9.80%	10.89%	10.69%	11.71%	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	60.77%	64.54%	56.10%	62.30%	59.24%	65.93%	54.38%
- Year 2025	71.95%	75.57%	68.71%	73.03%	70.88%	75.55%	67.51%
Government funding (income) per passenger							
- Year 2005	\$62	\$55	\$69	\$62	\$63	\$53	\$70
- Year 2025	\$(45)	\$(59)	\$(30)	\$(46)	\$(43)	\$(60)	\$(29)

(1) Operating Revenues increase by 10% and Operating Costs decrease by 10%.

(2) Operating Revenues decrease by 10% and Operating Costs increase 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)	3.21%	6.29%	5.97%	4.70%
- Private sector	10.48%	11.06%	11.08%	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	60.56%	60.98%	60.84%	60.77%
- Year 2025	71.98%	71.93%	71.95%	71.95%

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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	\$78	\$45	\$58	\$61
- Year 2025	\$(36)	\$(53)	\$(47)	\$(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)	6.27%	4.56%	3.26%
- Private sector	10.99%	10.79%	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	\$50	\$62	\$74
- Year 2025	\$(49)	\$(45)	\$(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 ⁽¹⁾	Base Case Financing Plan	Optimistic Analysis ⁽²⁾
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%

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

(2) 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%.

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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%
			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

	2005		2025	
	Constant dollars	Inflated 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

	2005		2025	
	Constant dollars	Inflated dollars	Constant dollars	Inflated dollars
	(in millions)			
Public sector				
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-				
Infrastructure and Civil Works interest subsidy	(579)	(825)	(320)	(825)
Net intake (outflow)	\$(508)	\$(723)	\$196	\$505

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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	\$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:

	Wholly public	Private-public*	
		Including tax revenues	Without taxes
Public sector	4.83%	2.57%	(1.85)%
Private sector**	n/a	9.38%	9.38%

* Base Case Financing Plan.

** Equity and Convertible Subordinated Debentures only.

⁽¹⁰⁾ 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).⁽¹¹⁾ 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"

⁽¹¹⁾ 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)	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% discount rate		10% discount rate	
	Including tax revenues	Without taxes	Including tax revenues	Without taxes	Including tax revenues	Without taxes
Pre-construction Period	\$118	\$118	\$117	\$117	\$116	\$116
Construction Period	2,060	2,060	1,912	1,912	1,777	1,777
Operating Period (to 2025)	2,009	2,390	1,765	2,071	1,552	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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	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)	2.57%	4.10%	(0.34)%	2.65%	2.28%	4.32%	(0.77)%
- Private sector	9.38%	10.16%	8.25%	9.48%	9.25%	10.26%	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	57.92%	61.97%	52.91%	59.66%	56.18%	63.54%	50.97%
- Year 2025	69.53%	72.38%	66.01%	70.77%	68.29%	73.50%	64.63%
Government funding (income) per passenger							
- Year 2005	\$73	\$67	\$80	\$72	\$74	\$65	\$80
- Year 2025	\$(31)	\$(45)	\$(16)	\$(33)	\$(30)	\$(47)	\$(15)

(1) Operating Revenues increase by 10% and Operating Costs decrease by 10%.

(2) Operating Revenues decrease by 10% and Operating Costs increase 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)	0.49%	4.23%	3.87%	2.58%
- Private sector	9.04%	9.61%	9.69%	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	57.73%	58.12%	58.00%	57.92%
- Year 2025	69.57%	69.50%	69.53%	69.53%

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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	\$91	\$56	\$69	\$72
- Year 2025	\$(21)	\$(41)	\$(34)	\$(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)	4.03%	2.57%	0.80%
- Private sector	9.37%	9.38%	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	\$63	\$73	\$84
- Year 2025	\$(37)	\$(31)	\$(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 ⁽¹⁾	Base Case Financing Plan	Optimistic Analysis ⁽²⁾
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%

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

(2) 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)%.

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

6.1 Project Cost and Financing Risk

	Constant 1993 dollars without capitalized interest		Inflated dollars with capitalized interest	
	(millions \$)	%	(millions \$)	%
Project Cost	\$10,626	100%	\$18,661	100%
Base Case Financing Plan-				
Public sector risk				
Direct government interest subsidy			\$4,559	24.4%
Private sector loans supported by government guarantee			9,029	48.4%
Equity			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

	2005		2025	
	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		2025	
	Constant dollars	Inflated dollars	Constant dollars	Inflated dollars
	(in millions)			
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 millions)			
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:

	Wholly public	Private-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.

** Equity and Convertible Subordinated Debentures only.

⁽¹²⁾ 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"

⁽¹³⁾ 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% discount rate		10% discount rate	
	Including tax revenues	Without taxes	Including tax revenues	Without taxes	Including tax revenues	Without taxes
Pre-construction Period	\$127	\$127	\$126	\$126	\$125	\$125
Construction Period	2,427	2,427	2,253	2,253	2,093	2,093
Operating Period (to 2025)	1,259	2,059	1,156	1,803	1,055	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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	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	5.23% 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)

(1) Operating Revenues increase by 10% and Operating Costs decrease by 10%.

(2) Operating Revenues decrease by 10% and Operating Costs increase 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%

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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	\$72	\$41	\$53	\$55
- Year 2025	\$(40)	\$(56)	\$(50)	\$(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)	6.69%	5.23%	3.94%
- Private sector	11.42%	11.34%	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	\$47	\$57	\$67
- Year 2025	\$(52)	\$(48)	\$(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 ⁽¹⁾	Base Case Financing Plan	Optimistic Analysis ⁽²⁾
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%

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

(2) 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%.

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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-				
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

	2005		2025	
	Constant dollars	Inflated dollars	Constant dollars	Inflated dollars
	(in millions)			
Operating Revenues	\$487	\$694	\$837	\$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

	2005		2025	
	Constant dollars	Inflated dollars	Constant dollars	Inflated dollars
	(in millions)			
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		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	\$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:

	Wholly public	Private-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.

** Equity and Convertible Subordinated Debentures only.

⁽¹⁴⁾ 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).⁽¹⁵⁾ 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"

⁽¹⁵⁾ 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% discount rate		10% discount rate	
	Including tax revenues	Without taxes	Including tax revenues	Without taxes	Including tax revenues	Without taxes
Pre-construction Period	\$73	\$73	\$72	\$72	\$72	\$72
Construction Period	1,373	1,373	1,275	1,275	1,185	1,185
Operating Period (to 2025)	821	1,220	746	1,068	674	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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	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)	5.42%	6.85%	3.30%	5.62%	5.22%	7.03%	3.04%
- Private sector	11.15%	11.96%	10.04%	11.27%	11.03%	12.02%	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	60.29%	64.12%	55.55%	61.84%	58.75%	65.51%	53.83%
- Year 2025	71.60%	74.25%	68.31%	72.69%	70.51%	75.24%	67.09%
Government funding (income) per passenger							
- Year 2005	\$64	\$55	\$70	\$63	\$65	\$54	\$71
- Year 2025	\$(50)	\$(65)	\$(33)	\$(51)	\$(48)	\$(67)	\$(31)

(1) Operating Revenues increase by 10% and Operating Costs decrease by 10%.

(2) Operating Revenues decrease by 10% and Operating Costs increase 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)	3.89%	7.00%	6.79%	5.56%
- Private sector	10.81%	11.41%	11.46%	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	60.09%	60.49%	60.36%	60.29%
- Year 2025	71.62%	71.58%	71.60%	71.59%

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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	\$80	\$46	\$59	\$62
- Year 2025	\$(41)	\$(59)	\$(52)	\$(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)	6.81%	5.42%	4.08%
- Private sector	11.17%	11.15%	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	\$53	\$64	\$74
- Year 2025	\$(54)	\$(50)	\$(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 ⁽¹⁾	Base Case Financing Plan	Optimistic Analysis ⁽²⁾
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%

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

(2) 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%.

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

8.1 Project Cost and Financing Risk

	Constant 1993 dollars without capitalized interest		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	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.

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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		2025	
	Constant dollars	Inflated dollars	Constant dollars	Inflated dollars
	(in millions)			
Public sector				
Intake-				
Taxes	\$9	\$13	\$59	\$151
Dividends	4	6	5	14
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		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	\$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:

	Wholly public	Private-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.

** Equity and Convertible Subordinated Debentures only.

⁽¹⁶⁾ 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"

⁽¹⁷⁾ 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% discount rate		10% discount rate	
	Including tax revenues	Without taxes	Including tax revenues	Without taxes	Including tax revenues	Without taxes
Pre-construction Period	\$66	\$66	\$65	\$65	\$65	\$65
Construction Period	1,192	1,192	1,107	1,107	1,029	1,029
Operating Period (to 2025)	1,123	1,343	988	1,165	869	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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	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)	3.20%	5.15%	0.60%	3.46%	2.94%	5.36%	0.22%
- Private sector	9.66%	10.57%	8.52%	9.79%	9.52%	10.67%	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	57.02%	61.15%	51.89%	58.78%	55.25%	62.75%	49.91%
- Year 2025	68.89%	71.80%	65.29%	70.16%	67.62%	72.95%	63.87%
Government funding (income) per passenger							
- Year 2005	\$75	\$67	\$81	\$74	\$76	\$66	\$82
- Year 2025	\$(34)	\$(50)	\$(18)	\$(36)	\$(32)	\$(52)	\$(16)

(1) Operating Revenues increase by 10% and Operating Costs decrease by 10%.

(2) Operating Revenues decrease by 10% and Operating Costs increase 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)	1.34%	5.01%	4.52%	3.31%
- Private sector	9.34%	9.93%	9.98%	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	56.83%	57.20%	57.09%	57.02%
- Year 2025	68.92%	68.86%	68.88%	68.88%

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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	\$92	\$57	\$70	\$73
- Year 2025	\$(24)	\$(44)	\$(36)	\$(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)	4.78%	3.20%	1.58%
- Private sector	9.69%	9.66%	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	\$64	\$75	\$86
- Year 2025	\$(39)	\$(34)	\$(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 ⁽¹⁾	Base Case Financing Plan	Optimistic Analysis ⁽²⁾
Public-private partnership			
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%

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

(2) 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)%.

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

9.1 Project Cost and Financing Risk

	Constant 1993 dollars without capitalized interest		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%
			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		2025	
	Constant dollars	Inflated dollars	Constant dollars	Inflated dollars
	(in millions)			
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:

	Wholly public	Private-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.

⁽¹⁸⁾ 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

⁽¹⁹⁾ 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)	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	\$71	\$71	\$70	\$70	\$70	\$70
Construction Period	1,414	1,414	1,313	1,313	1,220	1,220
Operating Period (to 2025)	509	1,059	486	926	458	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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	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	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)

(1) Operating Revenues increase by 10% and Operating Costs decrease by 10%.

(2) Operating Revenues decrease by 10% and Operating Costs increase 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%

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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	\$69	\$37	\$49	\$51
- Year 2025	\$(48)	\$(64)	\$(58)	\$(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)	7.97%	6.65%	5.41%
- Private sector	12.20%	12.15%	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	\$44	\$53	\$63
- Year 2025	\$(60)	\$(56)	\$(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 ⁽¹⁾	Base Case Financing Plan	Optimistic Analysis ⁽²⁾
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%

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

(2) 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%.

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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 dollars with capitalized interest	
	(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

	2005		2025	
	Constant dollars	Inflated dollars	Constant dollars	Inflated dollars
	(in millions)			
Public sector				
Intake-				
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		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	\$171	\$246	\$-	\$-
Interest on subordinate convertible debentures	43	61	-	-
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:

	Wholly public	Private-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.

** Equity and Convertible Subordinated Debentures only.

⁽²⁰⁾ 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

⁽²¹⁾ 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% discount rate		10% discount rate	
	Including tax revenues	Without taxes	Including tax revenues	Without taxes	Including tax revenues	Without taxes
Pre-construction Period	\$66	\$66	\$66	\$66	\$65	\$65
Construction Period	1,257	1,257	1,167	1,167	1,085	1,085
Operating Period (to 2025)	353	831	349	737	337	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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	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	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)

(1) Operating Revenues increase by 10% and Operating Costs decrease by 10%.

(2) Operating Revenues decrease by 10% and Operating Costs increase 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%

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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	\$63	\$33	\$45	\$47
- Year 2025	\$(50)	\$(66)	\$(60)	\$(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)	8.41%	7.13%	5.94%
- Private sector	12.36%	12.34%	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	\$40	\$49	\$58
- Year 2025	\$(62)	\$(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 ⁽¹⁾	Base Case Financing Plan	Optimistic Analysis ⁽²⁾
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%

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

(2) 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%.

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

11.1 Project Cost and Financing Risk

	Constant 1993 dollars without capitalized interest		Inflated dollars with capitalized interest	
	(millions \$)	%	(millions \$)	%
Project Cost	\$7,996	100%	\$14,018	100%
Base Case Financing Plan-				
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

	2005		2025	
	Constant dollars	Inflated dollars	Constant dollars	Inflated dollars
	(in millions)			
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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	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	\$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:

	Wholly public	Private-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.

** Equity and Convertible Subordinated Debentures only.

⁽²²⁾ 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"

⁽²³⁾ 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)	3.38%	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	\$100	\$100	\$100	\$100	\$99	\$99
Construction Period	1,817	1,817	1,687	1,687	1,568	1,568
Operating Period (to 2025)	1,071	1,592	972	1,393	879	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)

(1) Operating Revenues increase by 10% and Operating Costs decrease by 10%.

(2) Operating Revenues decrease by 10% and Operating Costs increase 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%

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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 ⁽¹⁾	Base Case Financing Plan	Optimistic Analysis ⁽²⁾
Public-private partnership			
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%

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

(2) 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.

⁽²⁴⁾ 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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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⁾

⁽²⁵⁾ It 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.

⁽²⁶⁾ 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 Waterhouse

Chartered Accountants and Financial Advisors

High Speed Rail Project

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Appendix 1

Glossary of Definitions

Appendix 1

Glossary of Definitions

1

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.

Appendix 1

Glossary of Definitions

2

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 Annex 1 to this Appendix 1.
SNC	SNC-Lavalin and Delcan
Terminal Value	Refer to Annex 1 to this Appendix 1.

High Speed Rail Study

Annex 1 Glossary of Definitions

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.

High Speed Rail Study

Annex 1 Glossary of Definitions

2

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 aforementioned 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

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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

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 aforementioned 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.

Price Waterhouse

Chartered Accountants

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.

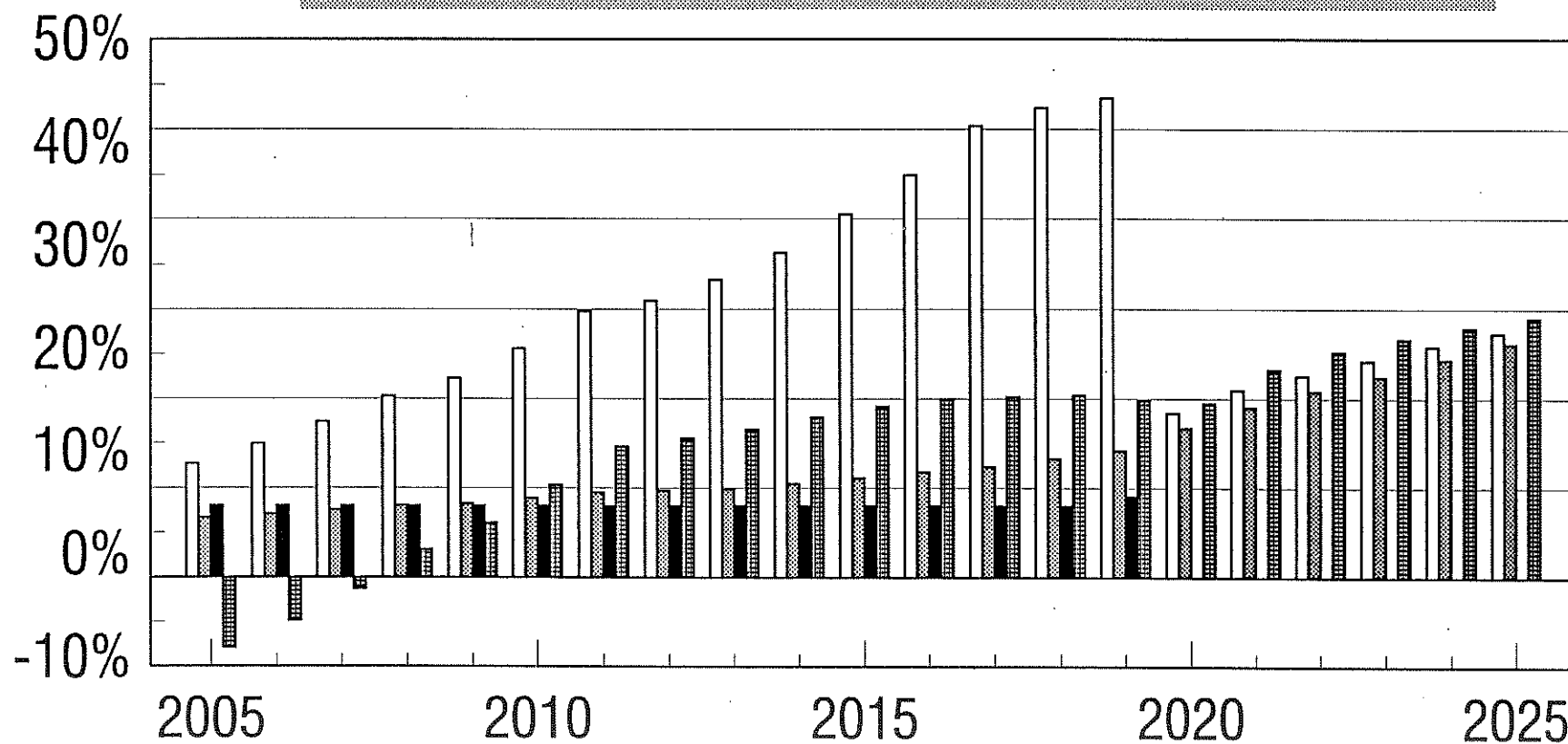
14. Other Assumptions and Hypotheses

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 Mirabel)

Investment Returns - 2005-2025



Dividend yield



Net return on invested capital



Yield on convertible
unsecured debentures



After-tax return on equity
(operating company)

Quebec-Ontario High Speed Rail Project

Full Corridor 300 kph (via Mirabel)

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 Mirabel) Quebec—Windsor Corridor
Balance Sheet
(In millions of inflated dollars)

[illegible]

Quebec-Ontario High Speed Rail Project
Final 300 Composite (via Mirabel) Quebec-Windsor Corridor
Statements of Operations
(In millions of inflated dollars)

	Pre-construction			Construction and Start-up							Full Operations																						
	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025		
OPERATOR																																	
Revenues	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$50	\$167	\$809	\$630	\$853	\$875	\$699	\$922	\$947	\$972	\$998	\$1,025	\$1,052	\$1,080	\$1,109	\$1,138	\$1,169	\$1,200	\$1,232	\$1,264	\$1,299	\$1,333	\$1,368		
Pasenger revenues, constant dollars	0	0	0	0	0	0	0	0	(9)	(6)	(44)	(46)	(47)	(50)	(49)	(51)	(52)	(53)	(55)	(56)	(59)	(61)	(63)	(64)	(68)	(70)	(71)	(73)	(75)	(76)			
Less Agency commissions	0	0	0	0	0	0	0	0	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)			
Less Credit card account	0	0	0	0	0	0	0	0	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)			
Net passenger revenues, constant dollars	0	0	0	0	0	0	0	0	46	156	757	777	798	819	841	863	886	910	934	959	984	1,010	1,037	1,065	1,093	1,122	1,152	1,183	1,214	1,247	1,280		
Net light freight revenues, constant dollars	0	0	0	0	0	0	0	0	0	0	46	50	52	53	55	57	59	61	63	65	67	69	71	73	76	78	80	83	86	89			
Inflation adjustment	0	0	0	0	0	0	0	0	16	60	343	367	435	487	542	601	664	731	803	866	933	1,001	1,145	1,245	1,362	1,498	1,586	1,717	1,855	2,002	2,158		
Net revenues	0	0	0	0	0	0	0	0	62	216	1,148	1,215	1,255	1,358	1,438	1,521	1,609	1,702	1,800	1,904	2,014	2,130	2,253	2,383	2,521	2,666	2,820	2,983	3,155	3,336	3,526		
Operating Costs, constant dollars																																	
Labour	0	0	0	0	0	0	0	0	17	39	123	124	126	127	128	129	130	132	133	134	135	137	139	141	142	143	145	147	149	151	153		
Electricity	0	0	0	0	0	0	0	0	2	4	27	28	28	29	30	30	31	31	32	33	34	34	34	34	35	36	37	37	38	39	40		
Advertising/promotion	0	0	0	0	0	0	0	0	5	6	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16		
Infrastructure maintenance services	0	0	0	0	0	0	0	0	3	9	21	21	21	20	19	18	17	16	16	16	16	16	16	16	16	16	16	16	16	16	16		
Infrastructure materials/supplies	0	0	0	0	0	0	0	0	0	1	2	2	2	2	3	3	3	3	3	4	4	4	4	4	4	4	4	4	4	4	4		
Rolling stock material/supplies	0	0	0	0	0	0	0	0	1	4	15	16	16	16	16	17	17	17	18	18	19	19	19	20	20	21	21	22	22	24	25		
Telecommunication/computer services	0	0	0	0	0	0	0	0	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16		
Insurance services/franchise fees etc	0	0	0	0	0	0	0	0	2	4	12	12	12	12	12	12	12	12	13	13	13	13	13	13	14	14	14	14	14	14	15		
Food/dietary sundries	0	0	0	0	0	0	0	0	0	1	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2		
Unscheduled materials/services	0	0	0	0	0	0	0	0	11	28	48	48	48	48	48	48	48	48	48	48	49	49	49	49	49	49	49	49	50	50	50		
Property taxes	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
Contingency	0	0	0	0	0	0	0	0	3	7	21	21	21	21	21	21	21	21	21	21	21	22	22	22	22	23	23	23	23	24	24		
Total operating costs, constant dollars	0	0	0	0	0	0	0	0	47	107	363	368	368	391	410	412	414	416	418	421	425	428	436	444	449	455	461	468	475	483	491	499	
Capital taxes	0	0	0	0	0	0	0	0	0	0	19	19	17	17	15	16	15	15	14	14	14	13	13	13	12	11	11	11	11	12	12		
Inflation adjustment	0	0	0	0	0	0	0	0	16	41	129	143	158	173	189	205	222	240	259	279	301	327	351	376	402	431	461	492	526	561	596		
Total operating costs	0	0	0	0	0	0	0	0	64	148	490	467	484	500	517	535	554	573	595	616	642	676	704	732	764	795	830	866	905	946	990		
Gross operating cash flow	0	0	0	0	0	0	0	0	(1)	67	686	748	801	859	920	966	1,055	1,129	1,205	1,286	1,372	1,454	1,549	1,650	1,757	1,871	1,991	2,117	2,250	2,391	2,536		
Large corporations taxes	0	0	0	0	0	0	0	0	0	0	9	9	9	9	8	8	8	7	7	7	7	7	6	6	6	5	5	5	6	6	6		
Income taxes	0	0	0	0	0	0	0	0	0	0	0	0	0	0	22	23	30	36	42	49	56	63	71	79	87	96	105	114	124	134	144		
Net operating cash flow	0	0	0	0	0	0	0	0	(1)	67	686	739	792	850	900	955	1,018	1,065	1,099	1,129	1,169	1,219	1,262	1,310	1,416	1,495	1,743	1,847	1,914	2,016	2,132		
Interest on secured and bank debt	0	0	0	0	0	0	0	0	(1)	67	374	368	362	354	341	306	316	253	269	252	219	189	146	117	69	18	32	30	12	0	0		
Principal repayments on secured debt	0	0	0	0	0	0	0	0	0	26	51	77	102	128	153	179	204	230	255	281	307	332	358	383	0	0	0	0	0	0	0		
Cash flow available to debenture holders, loan payments and dividends	0	0	0	0	0	0	0	0	0	289	319	354	394	421	456	523	536	571	612	669	729	803	874	964	1,070	1,171	1,817	1,902	2,016	2,132	2,250		
Base interest on convertible debentures	0	0	0	0	0	0	0	0	0	173	209	237	277	305	349	406	422	454	486	552	613	686	758	847	1,061	1,594	1,817	1,902	2,016	2,132	2,250		
Excess cash flow available for loan payments, excess interest on convertible debentures and dividends	0	0	0	0	0	0	0	0	0	116	117	117	117	117	117	117	117	117	117	117	117	117	117	117	117	117	117	117	117	117	117		
Loan payments	0	0	0	0	0	0	0	0	0	103	122	142	166	189	209	243	253	272	297	331	367	411	454	508	516	955	1,089	1,140	1,208	1,277	1,346		
Excess interest on convertible debentures	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
Dividends	0	0	0	0	0	0	0	0	0	35	41	46	56	61	70	82	85	91	100	111	123	138	143	146	154	172	365	362	405	428	458		
Residual cash flow for Operating Company	0	0	0	0	0	0	0	0	0	35	41	47	55	61	70	81	84	91	99	110	123	137	152	169	272	319	363	360	403	428	458		
Less: Equipment and technology depreciation	0	0	0	0	0	0	0	0	0	209	209	211	212	218	219	220	229	229	229	230	230	232	242	242	242	244	253	253	253	253	255		
Add: Principal repayments on secured debt	0	0	0	0	0	0	0	0	0	26	51	77	102	128	153	179	204	230	255	281	307	332	358	383	0	0	0	0	0	0	0		
Add: Dividends	0	0	0	0	0	0	0	0	0	35	41	46	56	61	70	82	85	91	100	111	123	138	143	146	154	172	365	362	405	428	458		
Net income (loss) for Operating Company	0	0	0	0	0	0	0	0	0	(114)	(77)	(39)	3	31	75	123	153	183	209	225	273	320	365	410	457	192	239	476	507	553	599		
PUBLIC FINANCE COMPANY																																	
Infrastructure and civil works interest subsidy	0	0	0	0	0	0	0	0	0	(866)	(866)	(866)	(866)	(866)	(866)	(866)	(866)	(866)	(866)	(866)	(866)	(866)	(866)	(866)	(866)	(866)	(866)	(866)	(866)	(866)	(866)		
Interest on Government guaranteed debt	0	0	0	0	0	0	0	0	0	823	820	815	811	805	801	795	786	781	774	765	757	747	736	724	711	697	682	665	649	630	606		
Loan payments	0	0	0	0	0	0	0	0	0	109	122	142	166	189	209	243	253	272	297	331	367	411	454	508	516	955	1,089	1,140	1,208	1,277	1,346		
Depreciation on infrastructure and civil works	0	0	0	0	0	0	0	0	0	42	46	50	55	60	65	71	78	85	92	100	109	119	130	142	154	168	194	200	218	236	254		
Net income and cash flow of Public Finance Company	0	0	0	0	0	0	0	0	0	103	122	142	166	189	209	243	253	272	297	331	367	411	454	508	516	955	1,089	1,140	1,208	1,277	1,346		
Senior debt coverage ratio																																	
Equipment and technology notes - Actual											1.75	1.78	1.83	1.86	1.90	2.01	2.13	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		
Equipment and technology notes - Required											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		
Return on equity																																	
Operating company											-8.0%	-5.9%	-3.2%	0.2%	2.0%	6.6%	10.4%	12.3%	13.7%	15.4%	1												

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 Value	Pre-construction				Construction and Start-up								Full Operations																						
		1995	1996	1997	Total	1998	1999	2000	2001	2002	2003	2004	Total	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	Total	
Infrastructure and civil works																																				
Construction period interest subsidy	1,563	0	0	0	0	41	146	359	559	662	757	765	3,310	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Equipment and technology																																				
Construction period interest subsidy	493	0	0	0	0	0	14	46	117	234	330	361	1,104	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Initial sponsor																																				
Share capital	129	137	0	0	137	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Annual subsidy	3,203	0	0	0	0	0	0	0	0	0	0	0	0	666	666	666	666	666	666	666	666	666	666	666	666	666	666	666	666	666	666	666	666	666	18,183	
Taxes	(490)	0	0	0	0	0	0	0	0	0	0	0	0	(20)	(27)	(26)	(25)	(47)	(47)	(53)	(106)	(150)	(183)	(218)	(249)	(261)	(313)	(353)	(368)	(268)	(261)	(347)	(308)	(419)	(4,183)	
Dividends	(146)	0	0	0	0	0	0	0	0	0	0	0	0	(17)	(20)	(24)	(26)	(31)	(30)	(41)	(42)	(46)	(50)	(55)	(58)	(72)	(73)	(82)	(86)	(32)	(33)	(35)	(37)	(873)		
Lease payments	(1,254)	0	0	0	0	0	0	0	0	0	0	0	0	(103)	(122)	(142)	(160)	(183)	(208)	(243)	(253)	(272)	(297)	(331)	(367)	(411)	(454)	(508)	(510)	(555)	(1,009)	(1,143)	(1,208)	(1,277)	(10,546)	
Total per annum		137	0	0	—	41	160	408	678	915	1,087	1,127	—	717	697	674	646	606	578	520	463	398	329	263	186	105	27	(88)	(418)	(434)	(536)	(555)	(765)	(809)	—	
Total cumulative		137	137	137	137	41	202	608	1,284	2,200	3,287	4,414	4,414	717	1,414	2,088	2,734	3,340	3,915	4,444	4,906	5,304	5,543	5,906	6,086	6,200	6,228	6,159	5,741	5,308	4,771	4,118	3,351	2,483	—	

Present value with taxes (cumulative)

126

2,182

Present value without taxes (cumulative)

126

2,182

1,383

1,511

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

Total net contribution with taxes

10,709

Total net contribution without taxes

12,813

Present value of contribution with taxes

3,997

Present value of contribution without taxes

4,345

In millions of 1993 constant dollars

	Present Value	Pre-construction				Construction and Start-up								Full Operations																					
		1995	1996	1997	Total	1998	1999	2000	2001	2002	2003	2004	Total	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	Total
Infrastructure and civil works																																			
Construction period interest subsidy	1,275	0	0	0	0	36	123	291	442	522	583	553	2,530	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Equipment and technology																																			
Construction period interest subsidy	395	0	0	0	0	0	11	36	82	179	245	261	829	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Initial sponsor																																			
Share capital	118	129	0	0	129	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Annual subsidy	1,964	0	0	0	0	0	0	0	0	0	0	0	0	507	590	572	556	540	524	509	494	479	465	452	439	426	414	401	390	378	367	357	346	336	9,642
Taxes	(263)	0	0	0	0	0	0	0	0	0	0	0	0	(20)	(19)	(17)	(16)	(20)	(20)	(31)	(52)	(83)	(97)	(113)	(136)	(136)	(150)	(164)	(174)	(113)	(119)	(143)	(153)	(183)	(1,959)
Dividends	(85)	0	0	0	0	0	0	0	0	0	0	0	0	(12)	(16)	(18)	(18)	(19)	(21)	(24)	(24)	(25)	(27)	(29)	(31)	(34)	(34)	(37)	(38)	(14)	(14)	(14)	(15)	(493)	
Lease payments	(574)	0	0	0	0	0	0	0	0	0	0	0	0	(73)	(83)	(94)	(107)	(114)	(127)	(143)	(144)	(151)	(160)	(173)	(186)	(202)	(217)	(236)	(307)	(418)	(462)	(470)	(493)	(4,902)	
Total per annum	--	129	0	0	--	36	134	330	534	702	800	814	--	503	475	445	415	378	346	311	264	220	182	137	94	52	13	(33)	(198)	(190)	(227)	(270)	(306)	(337)	--
Total cumulative	--	129	129	129	--	36	170	500	1,034	1,736	2,545	3,359	--	503	977	1,423	1,838	2,215	2,562	2,874	3,138	3,358	3,540	3,677	3,773	3,825	3,837	3,606	3,618	3,420	3,201	2,931	2,625	2,268	--

Present value with taxes (cumulative)

118

1,670

Present value without taxes (cumulative)

118

1,670

942

1,205

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

Total net contribution with taxes

7,294

Total net contribution without taxes

8,300

Present value of contribution with taxes

2,659

Present value of contribution without taxes

3,046

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

Statistics and general information	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
Ridership (in millions)	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	15.8	16.2	16.5	16.9	17.3	17.7	18.1	18.5
Growth of ridership in percentage	N/A	2.31%	2.31%	2.31%	2.31%	2.31%	2.31%	2.31%	2.31%	2.31%	2.31%	2.31%	2.31%	2.31%	2.31%	2.31%	2.31%	2.31%	2.31%	2.31%	2.31%
Total operating revenues	\$1,148	\$1,215	\$1,285	\$1,359	\$1,438	\$1,521	\$1,609	\$1,702	\$1,800	\$1,904	\$2,014	\$2,130	\$2,253	\$2,383	\$2,521	\$2,665	\$2,820	\$2,983	\$3,155	\$3,338	\$3,528
Growth of revenues 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%	5.78%	5.77%	5.77%	5.77%	5.77%	5.77%	5.77%	5.77%	5.72%
Total operating expenses	\$450	\$467	\$484	\$500	\$517	\$535	\$554	\$573	\$595	\$618	\$642	\$676	\$704	\$733	\$764	\$795	\$830	\$866	\$905	\$946	\$990
Growth of expenses in percentage	N/A	3.65%	3.65%	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%	4.53%	4.59%
Government funding	(\$869)	(\$869)	(\$869)	(\$869)	(\$869)	(\$869)	(\$869)	(\$869)	(\$869)	(\$869)	(\$869)	(\$869)	(\$869)	(\$869)	(\$869)	(\$869)	(\$869)	(\$869)	(\$869)	(\$869)	(\$869)
Lease payment to Government	\$103	\$122	\$142	\$166	\$183	\$209	\$243	\$253	\$272	\$297	\$331	\$367	\$411	\$454	\$508	\$516	\$555	\$1,069	\$1,140	\$1,208	\$1,277
Debt service	\$516	\$536	\$555	\$573	\$585	\$600	\$611	\$614	\$615	\$624	\$618	\$606	\$595	\$600	\$593	\$243	\$296	\$30	\$12	\$0	\$0
Operating expenses to revenues ratio	39.23%	38.44%	37.68%	36.82%	35.99%	35.19%	34.41%	33.67%	33.05%	32.45%	31.89%	31.74%	31.24%	30.77%	30.31%	29.82%	29.42%	29.04%	28.68%	28.35%	28.05%
Revenues per passenger (A)	\$99	\$101	\$104	\$108	\$112	\$115	\$119	\$123	\$128	\$132	\$138	\$141	\$146	\$151	\$155	\$161	\$167	\$172	\$178	\$184	\$190
Government funding (B) per passenger (B)	\$65	\$62	\$59	\$56	\$53	\$50	\$46	\$44	\$42	\$39	\$36	\$33	\$29	\$26	\$22	\$3	(\$9)	(\$19)	(\$19)	(\$19)	(\$22)
B/A	66.40%	61.28%	56.33%	51.48%	47.52%	43.19%	38.70%	36.03%	32.99%	29.88%	26.56%	23.41%	20.18%	17.28%	14.21%	1.89%	-3.17%	-7.47%	-8.68%	-10.24%	-11.67%

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 infrastructure notes	65.82%	66.25%	66.70%	67.35%	67.08%	67.73%	68.40%	68.85%	68.39%	69.10%	69.72%	70.08%	69.41%	70.13%	70.86%	71.24%	70.86%	71.39%	71.42%	69.84%	68.03%
Percentage of capital assigned to equipment notes	24.19%	24.27%	24.34%	23.95%	24.45%	23.50%	22.48%	21.33%	21.05%	19.12%	16.93%	14.70%	13.42%	9.97%	5.08%	4.81%	4.49%	1.90%	0.00%	0.00%	0.00%
Percentage of capital assigned to debenture holders	9.29%	9.42%	9.54%	9.68%	9.70%	9.88%	10.03%	10.18%	10.21%	10.41%	10.62%	10.80%	10.84%	11.11%	11.41%	11.68%	11.81%	0.00%	0.00%	0.00%	0.00%
Percentage of capital assigned to shareholders	0.90%	0.05%	0.00%	0.00%	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%	28.70%	28.58%	30.16%	31.97%
Debt to equity ratio for operating company																					
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	4.00	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																					
Senior debt	1.75	1.78	1.83	1.88	1.96	2.01	2.13	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 payout ratio (including lease payments)	37.01%	37.76%	38.68%	39.81%	40.50%	41.45%	43.39%	43.86%	44.88%	45.83%	47.78%	49.78%	51.94%	53.57%	56.06%	60.61%	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%	66.33%	66.95%	67.55%	68.11%	68.26%	68.78%	69.23%	69.69%	70.18%	70.58%	70.98%	71.32%	71.65%	71.95%
Net return on invested capital	8.19%	8.70%	9.22%	9.85%	10.15%	10.86%	11.64%	11.98%	12.28%	12.99%	13.78%	14.58%	15.22%	16.20%	17.27%	18.29%	20.44%	24.78%	26.09%	27.29%	28.69%
Pre-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%	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%	9.00%	N/A	N/A	N/A	N/A
Pre-tax return on share capital	12.66%	14.87%	17.36%	20.33%	22.34%	25.58%	29.76%	30.92%	33.29%	36.34%	40.49%	44.90%	50.30%	62.25%	53.39%	59.97%	62.95%	23.25%	24.34%	25.79%	27.20%
After-tax return on equity (operating company)	-8.05%	-5.89%	-3.21%	0.23%	2.78%	6.56%	10.44%	12.28%	13.66%	15.37%	16.77%	17.54%	17.80%	17.70%	17.37%	7.23%	8.78%	16.78%	17.13%	17.78%	18.27%
Cash flow/total debt outstanding (operating company)	3.84%	5.19%	6.63%	8.40%	9.53%	11.72%	14.60%	16.88%	18.84%	23.28%	29.70%	38.30%	46.45%	68.44%	N/A	N/A	N/A	N/A	N/A	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

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 aforementioned 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.

Price Waterhouse

Chartered Accountants

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.

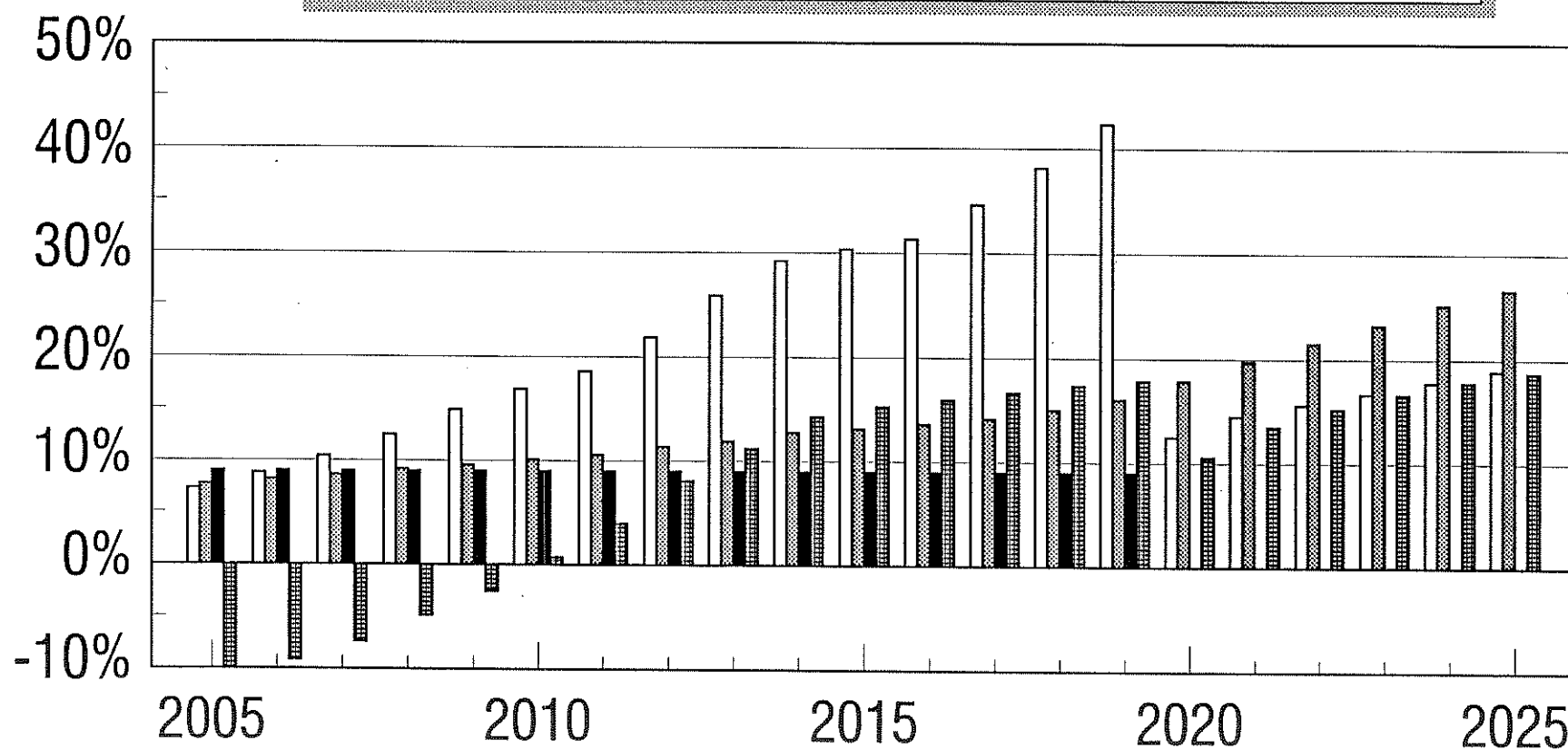
14. Other Assumptions and Hypotheses

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



.0726
.0878

Yield on convertible
unsecured debentures



Net return on invested capital

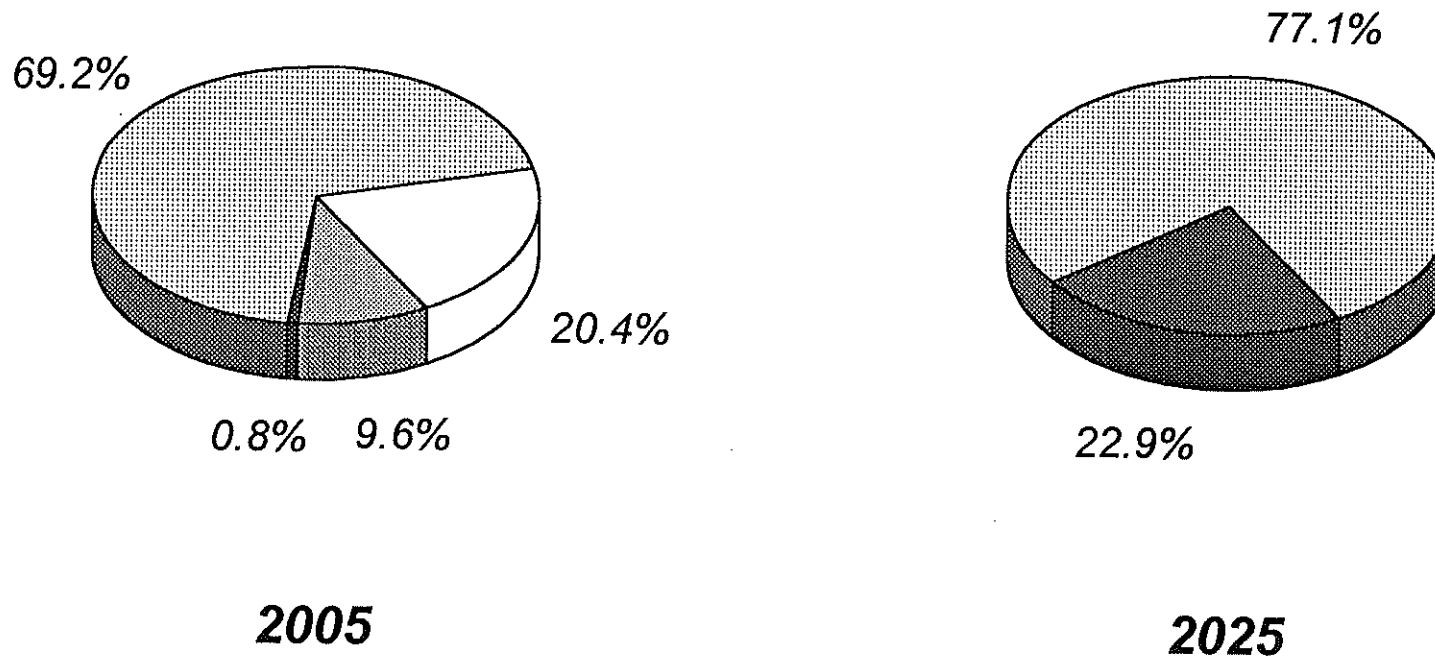


After-tax return on equity
(operating company)

Quebec-Ontario High Speed Rail Project

Full Corridor 200 kph (via Dorval)

Capital Structure



Infrastructure and Civil Works Notes

Convertible Debentures

Equipment and Technology Notes

Share capital and retained earnings

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

	Pre-construction			Construction and Start-up																	Full Operations																			
	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025									
Assets																																								
Current assets																																								
Cash	\$217	\$175	\$61	\$400	\$333	\$93	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$250									
Accounts receivable	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0									
Supplies and other inventories	0	0	0	0	0	0	0	0	0	0	100	200	212	219	225	236	246	259	261	269	277	285	294	303	312	321	331	340	351	361	372									
Prepaid expenses	0	0	0	0	0	0	0	0	0	0	8	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38										
Fixed Assets at cost																																								
Infrastructure and civil works																																								
Land and Right-of-way	1	3	15	131	327	448	467	467	467	467	467	467	467	467	467	467	467	467	467	467	467	467	467	467	467	467	467	467	467	467	467									
Earthwork/upgrade	14	27	58	169	460	1,045	1,517	1,654	1,654	1,654	1,654	1,654	1,654	1,654	1,654	1,654	1,654	1,654	1,654	1,654	1,654	1,654	1,654	1,654	1,654	1,654	1,654	1,654	1,654	1,654	1,654									
Stations	4	8	10	12	18	69	170	294	475	475	475	475	475	475	475	475	475	475	475	475	475	475	475	475	475	475	475	475	475	475	475									
Maintenance facilities	3	6	6	9	13	51	126	219	354	354	354	354	354	354	354	354	354	354	354	354	354	354	354	354	354	354	354	354	354	354	354									
Other accommodations	1	2	3	8	51	124	148	149	149	149	149	149	149	149	149	149	149	149	149	149	149	149	149	149	149	149	149	149	149	149	149									
Bridges	5	10	23	92	225	480	634	678	678	678	678	678	678	678	678	678	678	678	678	678	678	678	678	678	678	678	678	678	678	678	678									
Grade separations	7	14	26	71	211	629	990	1,106	1,106	1,106	1,106	1,106	1,106	1,106	1,106	1,106	1,106	1,106	1,106	1,106	1,106	1,106	1,106	1,106	1,106	1,106	1,106	1,106	1,106	1,106	1,106									
Traffic	0	1	3	7	22	54	170	472	1,029	1,037	1,037	1,037	1,037	1,037	1,037	1,037	1,037	1,037	1,037	1,037	1,037	1,037	1,037	1,037	1,037	1,037	1,037	1,037	1,037	1,037	1,037									
Delivered start-up and other costs	1																																							
Capitalized interest	36	71	153	520	1,415	3,069	4,602	5,530	6,113	6,175	6,175	6,175	6,175	6,175	6,175	6,175	6,175	6,175	6,175	6,175	6,175	6,175	6,175	6,175	6,175	6,175	6,175	6,175	6,175	6,175	6,175									
Construction period interest subsidy	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0									
Inflation adjustment	2	5	16	24	249	626	1,037	1,320	1,520	1,544	1,544	1,544	1,544	1,544	1,544	1,544	1,544	1,544	1,544	1,544	1,544	1,544	1,544	1,544	1,544	1,544	1,544	1,544	1,544	1,544	1,544									
Accumulated depreciation																																								
Net infrastructure and civil works	36	77	163	594	1,663	3,696	5,639	6,950	7,633	7,719	7,719	7,719	7,719	7,719	7,719	7,719	7,719	7,719	7,719	7,719	7,719	7,719	7,719	7,719	7,719	7,719	7,719	7,719	7,719	7,719	7,719									
Equipment and technology																																								
Power distribution system	0	1	7	22	47	133	357	667	893	921	921	921	921	921	921	921	921	921	921	921	921	921	921	921	921	921	921	921	921	921	921									
Signals	0	0	4	12	25	70	167	350	469	493	493	493	493	493	493	493	493	493	493	493	493	493	493	493	493	493	493	493	493	493	493									
Communications	0	0	2	7	14	39	105	196	262	270	270	270	270	270	270	270	270	270	270	270	270	270	270	270	270	270	270	270	270	270	270									
Lightweight	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0									
Rolling stock	0	0	11	34	73	207	554	1,094	1,429	1,429	1,429	1,429	1,429	1,429	1,429	1,429	1,429	1,429	1,429	1,429	1,429	1,429	1,429	1,429	1,429	1,429	1,429	1,429	1,429	1,429	1,429									
Capital expenditures	0	0	0	0	0	0	0	0	0	0	45	92	142	195	252	312	375	442	514	590	670	755	846	942	1,044	1,152	1,267	1,389	1,518	1,655	1,800									
Capitalized interest	0	0	3	23	75	159	449	1,203	2,246	3,009	3,270	3,320	3,363	3,433	3,497	3,560	3,627	3,697	3,769	3,842	3,916	4,000	4,088	4,180	4,275	4,373	4,474	4,578	4,685	4,795	4,906									
Construction period interest subsidy	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0									
Inflation adjustment	0	0	0	0	0	16	63	142	279	1,123	1,536	1,536	1,536	1,536	1,536	1,536	1,536	1,536	1,536	1,536	1,536	1,536	1,536	1,536	1,536	1,536	1,536	1,536	1,536	1,536	1,536									
Accumulated depreciation	0	3	26	66	261	701	1,751	3,218	4,361	4,965	4,717	4,587	4,436	4,287	4,143	4,003	3,873	3,750	3,634	3,525	3,425	3,330	3,241	3,157	3,077	2,999	2,925	2,853	2,783	2,714	2,646									
Net fixed assets																																								
	36	80	194	690	1,924	4,398	7,300	10,068	11,395	12,594	12,396	12,222	12,023	11,821	11,796	11,578	11,361	11,153	11,123	10,875	10,663	10,401	10,267	10,017	9,721	9,418	9,369	9,048	8,693	8,369	7,970									
Total assets																																								
	\$255	\$255	\$255	\$1,081	\$2,256	\$4,491	\$7,300	\$10,068	\$12,108	\$12,610	\$12,671	\$12,508	\$12,316	\$12,122	\$12,105	\$11,897	\$11,709	\$11,490	\$11,470	\$11,232	\$11,031	\$10,779	\$10,657	\$10,418	\$10,134	\$9,940	\$9,826	\$9,497	\$9,156	\$8,806	\$8,710									
Liabilities and Owners' Equity																																								
Current liabilities																																								
Bank indebtedness	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$19	\$306	\$274	\$298	\$295	\$209	\$481	\$442	\$444	\$411	\$578	\$526	\$514	\$455	\$533	\$492	\$495	\$597	\$650	\$443	\$218	\$13	\$0									
Accounts payable and accruals	0	0	0	0	0	0	0	0	10	24	65	65	66	67	68	69	69	68	68	69	70	72	73	74	75	76	77	78	79	80	80									
Current portion of long-term debt	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0									
Long-term liabilities																																								
Equipment and technology notes	0	0	0	0	0	451	1,367	2,058	2,304	2,265	2,247	2,189	2,112	2,018	1,901	1,767	1,613	1,440	1,248	1,037	867	657	268	0	0	0	0	0	0	0	0									
Infrastructure and civil works notes	0	0	0	231	1,332	3,493	5,736	7,395	8,513	8,721	8,660	8,506	8,356	8,179	8,416	8,349	8,275	8,194	8,106	8,011	7,916	7,793	7,669	7,534	7,396	7,226	7,051	6,860	6,652	6,426	6,186									
Owners' Equity	0	0	0	231	1,332	3,493	6,109	8,761	10,569	11,025	10,565	10,083	10,777	10,648	10,406	10,317	11,115	9,868	9,634	9,355	9,048	8,713	8,349	7,957	7,534	7,066	6,551	6,000	5,422	4,826	4,203									
Convertible unsecured debenture	0	0	0	595	669	753	847	953	1,072	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	1,206	1,206	1,206	1,206	1,206	1,206	1,206	1,206									
Share capital	255	255	255	255	255	255	255	255	255	255	255	255	255	255	255	255	255	255	255	255	255	255	255	255	255	255	255	255	255	255	255									
Retained earnings (deficit)	255	255	255	590	924	1,006	1,120	1,208	1,267	1,461	1,308	1,178	1,071	991	929	860	796	735	675	619	569	523	480	439	399	361	325	291	258	227	197									
Total liabilities and owners' equity																																								
	\$255	\$255	\$255	\$1,081	\$2,256	\$4,491	\$7,300	\$10,068	\$12,108	\$12,610	\$12,671	\$12,508	\$12,316	\$12,122	\$12,105	\$11,897	\$11,709	\$11,490	\$11,470	\$11,232	\$11,031	\$10,779	\$10,657	\$10,418	\$10,134	\$9,940	\$9,826	\$9,497	\$9,156	\$8,806	\$8,710									
Debt to equity ratio																																								
Revised 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	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00									
Actual	N/A	N/A	N/A	0.00	0.00	0.00	0.59	1.66	2.36	2.47	2.77	3.06	3.36	3.66	3.91	3.95	3.96	3.63	3.50	3.05	2.62	2.16	1.83	1.45	1.06	0.99	1.06	0.92	0.79	0.65	0.62									

in millions of inflated dollars

In millions of 1993 constant dollars

[illegible]

Quebec–Ontario High Speed Rail Project
200 Kph Composite (via Dorval) Quebec–Windsor Corridor
Statistics and financial ratios
(In millions of inflated dollars)

Statistics and general information																					
	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
Ridership (in millions)	10.0	10.2	10.4	10.6	10.9	11.1	11.3	11.5	11.8	12.1	12.3	12.6	12.9	13.2	13.4	13.7	14.0	14.3	14.6	14.9	15.3
Growth of ridership in percentage	N/A	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%	2.15%	2.15%	2.15%	2.15%	2.15%	2.15%
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	\$2,740
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%	5.64%	5.64%	5.64%	5.65%
Total operating expenses	\$395	\$398	\$413	\$427	\$441	\$456	\$472	\$488	\$507	\$526	\$546	\$575	\$598	\$622	\$646	\$674	\$702	\$733	\$765	\$799	\$835
Growth of expenses in percentage	N/A	3.57%	3.59%	3.38%	3.41%	3.43%	3.46%	3.48%	3.75%	3.77%	3.69%	5.18%	4.04%	4.06%	4.12%	3.98%	4.27%	4.32%	4.38%	4.44%	4.50%
Government funding	(\$829)	(\$829)	(\$829)	(\$829)	(\$829)	(\$829)	(\$829)	(\$829)	(\$829)	(\$829)	(\$829)	(\$829)	(\$829)	(\$829)	(\$829)	(\$829)	(\$829)	(\$829)	(\$829)	(\$829)	(\$829)
Lease payment to Government	\$70	\$85	\$100	\$120	\$143	\$163	\$179	\$211	\$249	\$282	\$293	\$303	\$334	\$368	\$408	\$490	\$600	\$862	\$921	\$982	\$1,044
Debt service	\$411	\$426	\$442	\$455	\$465	\$483	\$498	\$492	\$492	\$501	\$495	\$489	\$478	\$473	\$459	\$24	\$32	\$39	\$27	\$13	\$1
Operating expenses to revenues ratio	42.06%	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 passenger (A)	\$92	\$95	\$98	\$101	\$105	\$108	\$112	\$116	\$120	\$124	\$128	\$133	\$137	\$142	\$147	\$152	\$157	\$162	\$168	\$174	\$179
Government funding (return) per passenger (B)	\$76	\$73	\$70	\$66	\$63	\$60	\$57	\$53	\$49	\$45	\$43	\$41	\$38	\$35	\$31	\$10	\$2	(\$3)	(\$7)	(\$10)	(\$14)
B/A	82.63%	76.69%	71.08%	65.42%	59.98%	55.05%	50.81%	45.73%	40.63%	36.28%	33.61%	31.23%	27.81%	24.48%	21.14%	6.48%	1.18%	-1.58%	-3.90%	-6.04%	-7.98%

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 infrastructure notes	69.18%	69.77%	70.50%	71.23%	70.90%	71.67%	72.30%	73.09%	72.58%	73.40%	73.96%	74.82%	74.70%	75.33%	76.23%	77.15%	75.78%	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%	16.07%	13.93%	12.65%	10.14%	6.69%	5.50%	6.67%	4.70%	2.40%	0.14%	0.00%
Percentage of capital assigned to debenture holders	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%	11.56%	11.99%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Percentage of capital assigned to shareholders	0.81%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	1.28%	2.87%	4.89%	17.35%	17.57%	18.60%	19.93%	21.51%	22.92%
Debt to equity ratio for operating company																					
Actual	2.77	3.08	3.35	3.56	3.91	3.95	3.88	3.63	3.50	3.05	2.62	2.16	1.83	1.45	1.08	0.99	1.06	0.92	0.78	0.65	0.62
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																					
Senior debt	1.75	1.79	1.82	1.88	1.96	1.99	2.11	2.23	2.39	2.48	2.68	2.89	3.15	3.41	3.78	N/A	N/A	N/A	N/A	N/A	N/A
Percentage payout ratio (including lease payments)	37.77%	38.51%	39.15%	40.40%	41.92%	42.46%	43.48%	45.48%	47.83%	49.12%	50.00%	50.78%	52.75%	54.40%	56.56%	78.26%	78.01%	77.77%	78.57%	79.33%	79.96%
Gross margin	57.92%	58.75%	59.50%	60.43%	61.27%	62.08%	62.87%	63.63%	64.28%	64.92%	65.50%	65.95%	66.17%	66.68%	67.16%	67.67%	68.09%	68.49%	68.87%	69.22%	69.53%
Net return on invested capital	7.72%	8.14%	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%	19.75%	21.55%	23.31%	25.14%	26.52%
Pre-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%	9.00%	9.00%	9.00%	9.00%	9.00%	N/A	N/A	N/A	N/A	N/A	N/A
Pre-tax return on share capital	7.26%	8.76%	10.37%	12.45%	14.86%	16.98%	18.59%	21.88%	25.79%	29.20%	30.37%	31.38%	34.59%	38.15%	42.91%	12.48%	14.48%	15.59%	16.66%	17.78%	18.88%
After-tax return on equity (operating company)	-10.30%	-9.18%	-7.45%	-4.95%	-2.57%	0.75%	3.91%	6.04%	11.20%	14.25%	15.27%	15.92%	16.66%	17.36%	17.86%	10.55%	13.43%	15.20%	16.61%	17.75%	18.71%
Cash flow/total debt outstanding (operating company)	3.04%	4.20%	5.59%	7.20%	8.43%	10.28%	12.19%	15.24%	17.48%	21.87%	25.03%	32.59%	39.59%	55.28%	91.33%	N/A	N/A	N/A	N/A	N/A	N/A

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
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

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 aforementioned 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.

Price Waterhouse

Chartered Accountants

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.

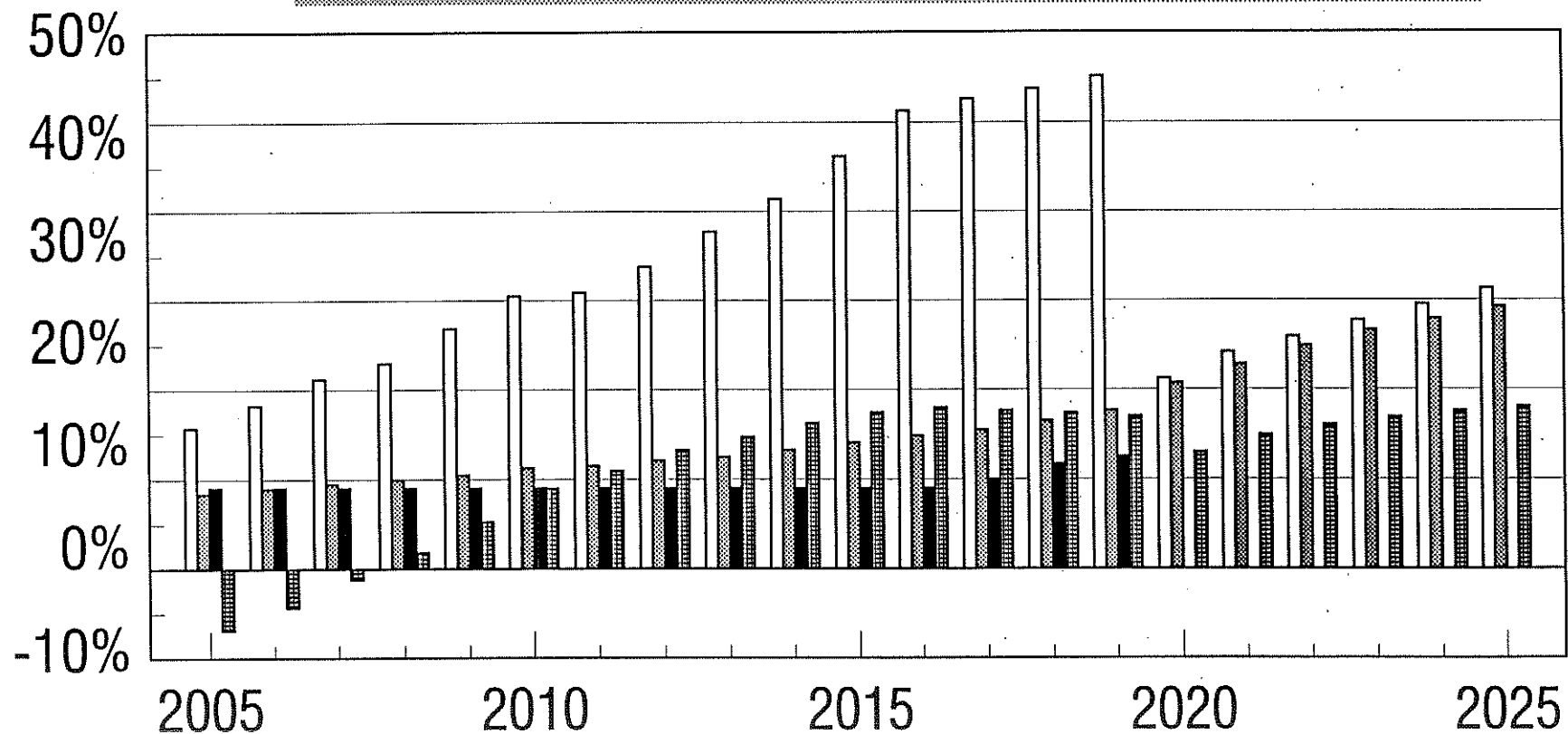
14. Other Assumptions and Hypotheses

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



Dividend yield



Net return on invested capital



Yield on convertible
unsecured debentures



After-tax return on equity
(operating company)

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)

	Pre-construction			Construction and Start-up								Full Operations																			
	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
Assets																															
Current assets																															
Cash	\$229	\$181	\$51	\$569	\$470	\$118	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$409	\$783	
Accounts receivable	0	0	0	0	0	0	0	0	5	15	57	69	71	73	75	77	79	81	83	85	87	90	92	94	97	100	102	105	108	111	114
Supplies and other inventories	0	0	0	0	0	0	0	0	0	100	200	212	219	225	232	239	246	253	261	269	277	285	294	303	312	321	331	340	351	362	372
Prepaid expenses	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Fixed Assets at cost	229	181	51	569	470	118	0	0	112	235	294	302	311	320	330	339	349	359	370	381	392	403	415	427	440	453	466	479	553	917	1,306
Infrastructure and civil works																															
Land and Right-of-way	1	3	15	130	325	444	464	464	464	464	464	464	464	464	464	464	464	464	464	464	464	464	464	464	464	464	464	464	464	464	464
Earthworks/subgrade	15	30	63	180	524	1,141	1,674	1,832	1,832	1,832	1,832	1,832	1,832	1,832	1,832	1,832	1,832	1,832	1,832	1,832	1,832	1,832	1,832	1,832	1,832	1,832	1,832	1,832	1,832	1,832	1,832
Stations	4	8	10	13	19	73	179	297	475	475	475	475	475	475	475	475	475	475	475	475	475	475	475	475	475	475	475	475	475	475	475
Maintenance facilities	3	6	8	10	15	57	140	233	374	374	374	374	374	374	374	374	374	374	374	374	374	374	374	374	374	374	374	374	374	374	374
Other accommodations	1	2	3	11	57	134	159	159	159	159	159	159	159	159	159	159	159	159	159	159	159	159	159	159	159	159	159	159	159	159	159
Bridge	6	11	20	94	247	554	778	846	846	846	846	846	846	846	846	846	846	846	846	846	846	846	846	846	846	846	846	846	846	846	846
Grade separations	11	21	42	117	343	959	1,480	1,835	1,835	1,835	1,835	1,835	1,835	1,835	1,835	1,835	1,835	1,835	1,835	1,835	1,835	1,835	1,835	1,835	1,835	1,835	1,835	1,835	1,835	1,835	1,835
Track	0	1	7	22	56	175	482	835	1,044	1,052	1,052	1,052	1,052	1,052	1,052	1,052	1,052	1,052	1,052	1,052	1,052	1,052	1,052	1,052	1,052	1,052	1,052	1,052	1,052	1,052	1,052
Deferred start-up and other costs	1	1	3	9	25	54	79	147	210	268	269	269	269	269	269	269	269	269	269	269	269	269	269	269	269	269	269	269	269	269	269
Capitalized interest	42	84	177	505	1,610	3,602	5,435	6,448	7,039	7,106	7,106	7,106	7,106	7,106	7,106	7,106	7,106	7,106	7,106	7,106	7,106	7,106	7,106	7,106	7,106	7,106	7,106	7,106	7,106	7,106	7,106
Construction period interest subsidy	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Inflation adjustment	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Accumulated depreciation	45	90	196	669	1,601	4,342	6,664	7,366	8,700	8,672	8,672	8,672	8,672	8,672	8,672	8,672	8,672	8,672	8,672	8,672	8,672	8,672	8,672	8,672	8,672	8,672	8,672	8,672	8,672	8,672	8,672
Net infrastructure and civil works	45	90	196	669	1,601	4,342	6,664	7,366	8,700	8,672	8,650	8,705	8,735	8,681	8,622	8,557	8,467	8,411	8,328	8,237	8,139	8,039	7,912	7,794	7,644	7,492	7,335	7,144	6,947	6,732	6,498
Equipment and technology																															
Power distribution system	0	1	7	22	47	134	355	658	960	907	907	907	907	907	907	907	907	907	907	907	907	907	907	907	907	907	907	907	907	907	907
Signals	0	1	4	14	30	86	229	425	587	585	585	585	585	585	585	585	585	585	585	585	585	585	585	585	585	585	585	585	585	585	585
Communications	0	0	2	7	14	40	106	196	262	270	270	270	270	270	270	270	270	270	270	270	270	270	270	270	270	270	270	270	270	270	270
Lighting	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Rolling stock	0	1	11	37	80	226	559	1,110	1,484	1,530	1,530	1,530	1,530	1,530	1,530	1,530	1,530	1,530	1,530	1,530	1,530	1,530	1,530	1,530	1,530	1,530	1,530	1,530	1,530	1,530	1,530
Capital expenditures	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Capitalized interest	0	3	25	60	171	495	1,289	2,390	3,193	3,520	3,571	3,625	3,710	3,771	3,856	4,025	4,099	4,201	4,433	4,521	4,621	4,751	4,846	5,057	5,174	5,324	5,506	5,747	6,022	6,300	6,547
Construction period interest subsidy	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Inflation adjustment	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Accumulated depreciation	0	3	29	92	291	757	1,676	3,426	4,634	5,230	5,281	5,335	5,494	5,495	5,535	5,622	5,685	5,717	5,731	5,731	5,731	5,731	5,731	5,731	5,731	5,731	5,731	5,731	5,731	5,731	5,731
Net equipment and technology	0	3	29	92	291	757	1,676	3,426	4,634	5,230	5,074	4,915	4,796	4,598	4,089	3,521	3,057	2,623	2,210	1,842	1,514	1,229	949	689	431	169	0	0	0	0	0
Net fixed assets	45	93	223	760	2,172	5,100	8,540	11,411	13,414	14,102	13,964	13,700	13,531	13,318	13,287	13,059	12,826	12,631	12,446	12,364	12,100	11,915	11,805	11,500	11,191	10,929	10,617	10,255	9,850	9,438	8,938
Total assets	\$274	\$274	\$274	\$1,330	\$2,642	\$5,218	\$8,540	\$11,411	\$13,527	\$14,336	\$14,198	\$14,002	\$13,842	\$13,639	\$13,617	\$13,398	\$13,175	\$12,990	\$13,016	\$12,795	\$12,522	\$12,316	\$12,220	\$11,930	\$11,631	\$11,375	\$11,063	\$10,706	\$10,255	\$9,850	\$9,438
Liabilities and Owners' Equity																															
Current liabilities																															
Bank indebtedness	\$0	\$0	\$0	\$0	\$0	\$0	\$156	\$156	\$256	\$353	\$316	\$297	\$311	\$281	\$436	\$300	\$344	\$305	\$544	\$475	\$409	\$379	\$456	\$395	\$105	\$434	\$501	\$200	\$0	\$0	\$0
Accounts payable and accruals	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Current portion of long-term debt	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Long-term liabilities																															
Equipment and technology notes	0	0	0	0	0	0	652	1,369	2,942	3,353	3,325	3,269	3,186	3,074	2,994	2,766	2,571	2,347	2,095	1,816	1,509	1,174	810	411							

Quebec-Ontario High Speed Rail Project
Final 300 Composite (via Dorval) Quebec-Windsor Corridor
Statements of Operations
(In millions of inflated dollars)

OPERATOR	Pre-construction			Construction and Start-up											Full Operations																			
	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025			
Revenue																																		
Passenger revenues, constant dollars	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$54	\$166	\$661	\$864	\$907	\$931	\$956	\$982	\$1,009	\$1,035	\$1,062	\$1,090	\$1,119	\$1,149	\$1,180	\$1,211	\$1,244	\$1,277	\$1,311	\$1,346	\$1,382	\$1,418	\$1,456			
Less Agency commissions	0	0	0	0	0	0	0	0	(4)	(10)	(47)	(49)	(50)	(51)	(53)	(54)	(55)	(57)	(58)	(60)	(62)	(63)	(65)	(67)	(69)	(70)	(72)	(74)	(76)	(78)	(80)			
Less Credit card discount	0	0	0	0	0	0	0	0	(1)	(2)	(9)	(9)	(9)	(9)	(9)	(9)	(10)	(10)	(10)	(10)	(10)	(11)	(11)	(11)	(12)	(12)	(13)	(13)	(14)	(14)	(15)			
Net passenger revenues, constant dollars	0	0	0	0	0	0	0	0	60	174	605	807	849	871	895	919	943	968	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			
Net light freight revenues, constant dollars	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
Inflation adjustment	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
Net revenue	0	0	0	0	0	0	0	0	60	174	605	807	849	871	895	919	943	968	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			
Operating Costs, constant dollars																																		
Labour	0	0	0	0	0	0	0	0	17	36	124	125	126	126	129	130	132	133	134	136	137	139	140	141	143	144	146	147	149	151	152			
Electricity	0	0	0	0	0	0	0	0	2	4	28	28	29	29	30	31	31	32	32	33	33	34	35	35	36	36	37	38	39	39	40			
Advertising/promotion	0	0	0	0	0	0	0	0	6	9	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17			
Infrastructure maintenance services	0	0	0	0	0	0	0	0	3	8	21	21	21	21	20	19	18	17	16	16	16	16	16	16	16	16	16	16	16	16	16			
Infrastructure materials/supplies	0	0	0	0	0	0	0	0	0	1	3	15	16	16	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17			
Rolling stock materials/supplies	0	0	0	0	0	0	0	0	0	1	2	2	3	3	3	3	3	3	4	4	4	5	9	10	11	12	14	15	16	16	16			
Telecommunications/computer services	0	0	0	0	0	0	0	0	0	1	3	15	16	16	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17			
Insurance services/franchise fees etc	0	0	0	0	0	0	0	0	0	2	4	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12			
Food/beverage services	0	0																																

In millions of inflated dollars

In millions of 1993 constant dollars

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

Total net contribution with taxes	7,051
Total net contribution without taxes	5,273
Present value of contribution with taxes	2,926
Present value of contribution without taxes	3,047

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

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 aforementioned 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.

Price Waterhouse

Chartered Accountants

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.

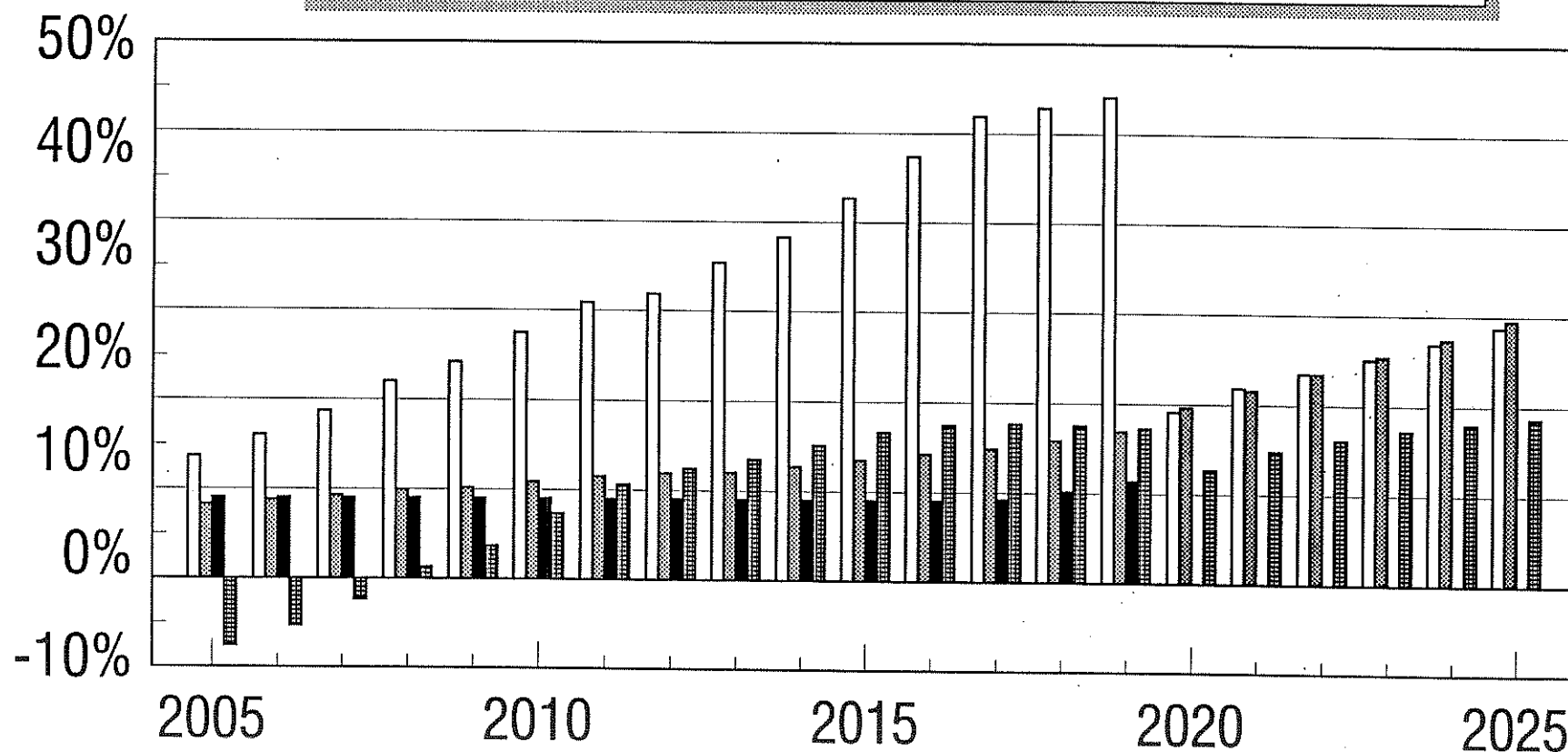
14. Other Assumptions and Hypotheses

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



Dividend yield



Net return on invested capital



Yield on convertible
unsecured debentures

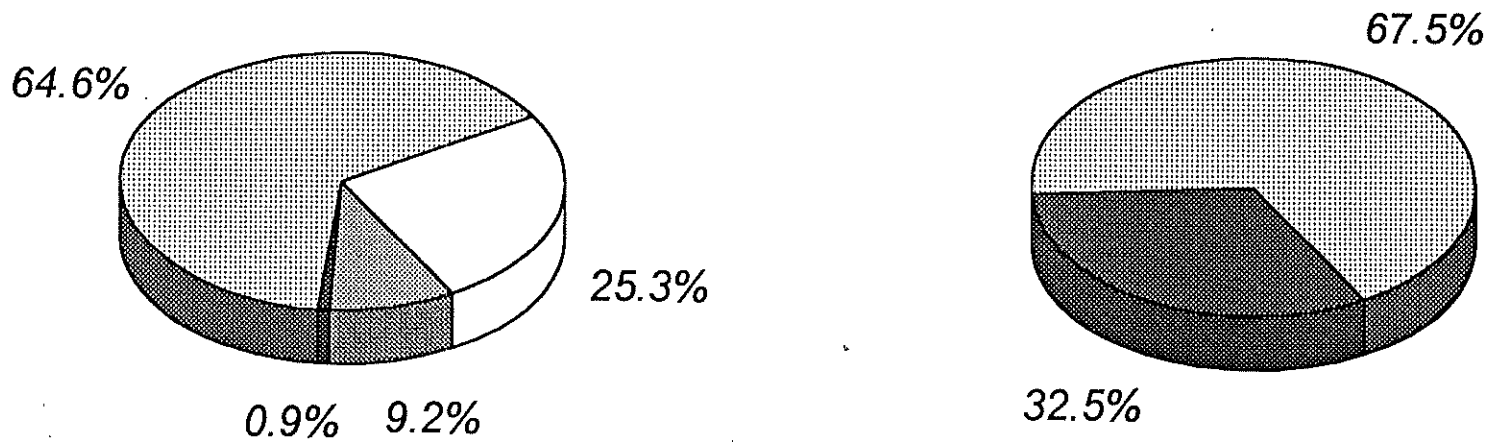


After-tax return on equity
(operating company)

Quebec-Ontario High Speed Rail Project

Montreal-Ottawa-Toronto 300 kph (via Mirabel)

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
 Montreal - Ottawa - Toronto 300 kph (via Mirabel)
 Balance Sheet
 (\$ in millions of inflated dollars)

	Pre-construction			Construction and Start-up								Full Operations																						
	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025			
Assets																																		
Current assets																																		
Cash	\$132	\$100	\$22	\$299	\$213	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$61			
Accounts receivable	0	0	0	0	0	0	0	0	0	4	4	39	40	41	42	44	45	46	47	49	50	51	53	54	55	57	59	60	62	63	65	67		
Supplies and other inventories	0	0	0	0	0	0	0	0	0	100	200	206	212	219	225	232	239	246	253	261	269	277	285	294	303	312	321	331	340	351	361	372		
Prepaid expenses	0	0	0	0	0	0	0	0	0	5	20	21	21	22	23	23	24	25	25	26	27	28	29	29	30	31	32	33	34	35	36	37		
Fixed Assets at cost	132	100	22	299	213	0	0	0	111	224	266	274	282	290	299	307	317	325	336	346	356	366	377	386	400	412	424	436	449	463	537			
Infrastructure and civil works																																		
Land and Right-of-way	1	1	14	54	136	177	185	185	185	185	185	185	185	185	185	185	185	185	185	185	185	185	185	185	185	185	185	185	185	185	185			
Earthworks/upgrade	9	18	40	155	306	763	1,038	1,142	1,142	1,142	1,142	1,142	1,142	1,142	1,142	1,142	1,142	1,142	1,142	1,142	1,142	1,142	1,142	1,142	1,142	1,142	1,142	1,142	1,142	1,142	1,142			
Stations	3	6	7	8	10	34	76	170	332	332	332	332	332	332	332	332	332	332	332	332	332	332	332	332	332	332	332	332	332	332	332	332		
Maintenance facilities	2	5	6	7	8	26	64	140	274	274	274	274	274	274	274	274	274	274	274	274	274	274	274	274	274	274	274	274	274	274	274	274		
Other accommodations	1	1	2	10	36	89	105	105	105	105	105	105	105	105	105	105	105	105	105	105	105	105	105	105	105	105	105	105	105	105	105	105		
Bridges	3	6	11	33	90	277	433	492	492	492	492	492	492	492	492	492	492	492	492	492	492	492	492	492	492	492	492	492	492	492	492	492		
Grade separations	5	10	20	72	106	477	690	771	771	771	771	771	771	771	771	771	771	771	771	771	771	771	771	771	771	771	771	771	771	771	771	771		
Track	0	1	4	12	43	124	291	451	576	581	581	581	581	581	581	581	581	581	581	581	581	581	581	581	581	581	581	581	581	581	581	581		
Deferred start-up and other costs	1	2	5	18	43	94	131	152	167	167	167	167	167	167	167	167	167	167	167	167	167	167	167	167	167	167	167	167	167	167	167	167		
Capitalized interest	25	50	108	378	941	2,063	3,016	3,508	4,044	4,049	4,049	4,049	4,049	4,049	4,049	4,049	4,049	4,049	4,049	4,049	4,049	4,049	4,049	4,049	4,049	4,049	4,049	4,049	4,049	4,049	4,049	4,049		
Construction period interest subsidy	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
Inflation adjustment	1	4	11	54	163	421	676	856	1,006	1,009	1,009	1,009	1,009	1,009	1,009	1,009	1,009	1,009	1,009	1,009	1,009	1,009	1,009	1,009	1,009	1,009	1,009	1,009	1,009	1,009	1,009	1,009		
Accumulated depreciation	26	54	119	432	1,104	2,494	3,682	4,465	5,050	5,057	5,057	5,057	5,057	5,057	5,057	5,057	5,057	5,057	5,057	5,057	5,057	5,057	5,057	5,057	5,057	5,057	5,057	5,057	5,057	5,057	5,057	5,057		
Net infrastructure and civil works	26	54	119	432	1,104	2,494	3,682	4,465	5,050	5,057	5,057	5,057	5,057	5,057	5,057	5,057	5,057	5,057	5,057	5,057	5,057	5,057	5,057	5,057	5,057	5,057	5,057	5,057	5,057	5,057	5,057	5,057		
Equipment and technology																																		
Power distribution system	0	1	4	12	34	101	211	348	466	486	486	486	486	486	486	486	486	486	486	486	486	486	486	486	486	486	486	486	486	486	486	486		
Signals	0	1	3	8	22	65	137	225	303	314	314	314	314	314	314	314	314	314	314	314	314	314	314	314	314	314	314	314	314	314	314	314		
Communications	0	0	1	4	10	29	61	100	135	139	139	139	139	139	139	139	139	139	139	139	139	139	139	139	139	139	139	139	139	139	139	139		
Light freight	0	0	0	0	0	0	0	0	0	130	130	130	131	131	131	131	131	131	131	131	131	131	131	131	131	131	131	131	131	131	131	131		
Rolling stock	0	2	8	24	67	159	417	896	927	960	960	960	960	960	1,050	1,050	1,050	1,050	1,050	1,050	1,200	1,200	1,200	1,200	1,200	1,200	1,200	1,200	1,200	1,200	1,200			
Capital expenditures	0	0	0	0	0	0	0	0	0	0	31	65	100	138	178	220	265	312	363	416	473	533	592	655	727	794	860	924	994	1,064	1,134	1,204		
Capitalized interest	0	4	15	48	132	394	826	1,362	1,895	2,000	2,001	2,005	2,130	2,168	2,298	2,340	2,365	2,430	2,533	2,667	2,747	2,894	2,958	3,026	3,099	3,175	3,249	3,343	3,446	3,549	3,648	3,748		
Construction period interest subsidy	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
Inflation adjustment	0	0	2	7	23	64	199	362	525	600	600	600	600	600	600	600	600	600	600	600	600	600	600	600	600	600	600	600	600	600	600	600		
Accumulated depreciation	0	4	17	55	202	576	1,181	1,946	2,655	3,006	3,040	3,073	3,109	3,146	3,201	3,237	3,248	3,266	3,288	3,311	3,334	3,357	3,380	3,403	3,426	3,449	3,472	3,495	3,518	3,541	3,564	3,587		
Net equipment and technology	0	4	17	55	202	576	1,181	1,946	2,655	3,006	3,040	3,073	3,109	3,146	3,201	3,237	3,248	3,266	3,288	3,311	3,334	3,357	3,380	3,403	3,426	3,449	3,472	3,495	3,518	3,541	3,564	3,587		
Net fixed assets	26	58	136	486	1,306	3,060	4,872	6,411	7,705	8,065	7,953	7,897	7,719	7,599	7,615	7,465	7,363	7,217	7,396	7,185	7,034	6,923	6,873	6,855	6,812	6,734	6,740	6,549	6,343	6,106	5,823	5,495		
Total Assets	\$159	\$158	\$158	\$795	\$1,519	\$3,060	\$4,872	\$6,411	\$7,817	\$8,269	\$8,219	\$8,110	\$8,001	\$7,899	\$7,914	\$7,793	\$7,669	\$7,543	\$7,674	\$7,531	\$7,399	\$7,290	\$7,250	\$7,063	\$6,912	\$6,794	\$6,740	\$6,549	\$6,343	\$6,106	\$5,823			
Liabilities and Owners' Equity																																		
Current liabilities																																		
Bank indebtedness	\$0	\$0	\$0	\$0	\$0	\$59	\$97	\$97	\$187	\$297	\$279	\$275	\$268	\$265	\$396	\$367	\$343	\$319	\$352	\$529	\$495	\$503	\$573	\$512	\$441	\$549	\$605	\$444	\$269	\$143	\$0			
Accounts payable and accruals	0	0	0	0	0	0	0	0	0	12	14	46	47	47	48	48	49	49	49	50	51	52	52	53	54	55	56	57	58	59	60			
Current portion of long-term debt	0	0	0	0	0	0	0	0	0	0	39	57	74	91	109	127	145	164	189	202	222	242	263	284	306	327	34							

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

OPERATOR	Pre-construction			Construction and Start-up										Full Operations																	
	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
Revenue	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$49	\$50	\$503	\$516	\$530	\$545	\$559	\$575	\$590	\$606	\$623	\$639	\$657	\$675	\$693	\$712	\$731	\$751	\$771	\$792	\$814	\$836	\$859
Less Agency commissions	0	0	0	0	0	0	0	0	(3)	(3)	(26)	(26)	(29)	(30)	(31)	(32)	(32)	(33)	(34)	(35)	(36)	(37)	(38)	(39)	(40)	(41)	(42)	(44)	(45)	(46)	(47)
Less Card and discount	0	0	0	0	0	0	0	0	(5)	(5)	(5)	(5)	(5)	(5)	(5)	(5)	(5)	(5)	(5)	(5)	(5)	(5)	(5)	(5)	(5)	(5)	(5)	(5)	(5)	(5)	(5)
Net passenger revenues, constant dollars	0	0	0	0	0	0	0	0	46	46	470	483	496	510	523	538	552	567	582	596	615	631	649	666	684	703	722	741	761	782	803
Net light freight revenues, constant dollars	0	0	0	0	0	0	0	0	0	0	16	17	18	18	19	20	20	21	22	23	24	25	26	27	28	29	30	31	32	34	
Inflation adjustment	0	0	0	0	0	0	0	0	16	18	207	234	263	294	328	364	402	443	487	534	584	638	696	757	822	892	968	1,046	1,130	1,223	1,318
Net revenues	0	0	0	0	0	0	0	0	62	64	694	734	777	822	870	921	975	1,031	1,091	1,155	1,222	1,294	1,369	1,449	1,530	1,622	1,717	1,817	1,923	2,034	2,155
Operating Costs, constant dollars																															
Labour	0	0	0	0	0	0	0	0	17	17	75	78	77	77	78	79	80	81	81	82	83	84	85	86	87	87	88	89	90	91	92
Electricity	0	0	0	0	0	0	0	0	2	2	17	17	18	18	18	18	19	19	19	20	20	20	21	21	21	22	22	23	23	24	
Advertising/promotion	0	0	0	0	0	0	0	0	5	5	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
Infrastructure maintenance services	0	0	0	0	0	0	0	0	3	3	11	11	11	11	11	10	10	9	9	9	9	9	9	9	9	9	9	9	9	9	9
Infrastructure materials/supplies	0	0	0	0	0	0	0	0	0	0	1	1	2	2	2	2	2	2	2	2	3	5	6	7	7	7	7	7	7	7	7
Rolling stock materials/supplies	0	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Telecommunications/computer services	0	0	0	0	0	0	0	0	1	2	9	9	9	9	9	9	10	10	10	10	11	11	12	12	13	13	13	14	14	14	15
Insurance services/franchise fees etc	0	0	0	0	0	0	0	0	2	2	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6
Food/beverage	0	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Unscheduled materials/services	0	0	0	0	0	0	0	0	11	20	33	33	33	33	33	33	33	33	34	34	34	34	34	34	34	34	34	34	34	34	34
Property taxes	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Contingency	0	0	0	0	0	0	0	0	3	4	13	13	13	13	13	13	13	13	13	13	13	14	14	14	14	14	14	15	15	15	15
Total operating costs, constant dollars	0	0	0	0	0	0	0	0	47	58	185	187	189	190	192	193	194	196	199	200	202	207	210	212	215	216	221	224	228	231	236
Capital taxes	0	0	0	0	0	0	0	0	0	0	11	11	10	10	10	9	9	9	9	9	8	8	8	8	7	7	6	6	6	7	7
Inflation adjustment	0	0	0	0	0	0	0	0	16	22	79	89	97	106	115	126	137	148	159	172	185	202	217	232	249	265	282	304	325	347	370
Total operating costs	0	0	0	0	0	0	0	0	64	79	275	286	296	307	317	328	340	352	366	380	395	417	434	452	471	491	512	535	559	585	612
Gross operating cash flow	0	0	0	0	0	0	0	0	22	(14)	418	446	481	515	553	592	634	679	726	775	827	877	935	997	1,062	1,132	1,204	1,282	1,363	1,449	1,543
Large corporations taxes	0	0	0	0	0	0	0	0	0	0	5	5	5	5	5	5	5	4	4	4	4	4	4	4	4	3	3	3	3	3	4
Income taxes	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Net operating cash flow	0	0	0	0	0	0	0	0	22	(14)	413	441	475	511	548	587	634	683	732	783	835	889	949	1,015	1,086	1,161	1,241	1,324	1,411	1,502	1,597
Interest on secured and bank debt	0	0	0	0	0	0	0	0	22	(14)	224	221	217	212	204	203	192	178	163	162	143	122	102	84	56	26	33	36	27	16	9
Principal repayments on secured debt	0	0	0	0	0	0	0	0	15	30	45	50	55	60	65	69	73	76	79	82	84	86	88	90	91	92	93	94	95	96	97
Cash flow available to debenture holders, lease payments and dividends	0	0	0	0	0	0	0	0	0	0	174	193	214	235	257	282	308	316	344	367	400	437	481	526	581	630	698	769	843	920	1,000
Base interest on convertible debentures	0	0	0	0	0	0	0	0	0	0	67	67	67	67	67	67	67	67	67	67	67	67	67	67	67	67	67	67	67	67	67
Excess cash flow available for lease payments, excess interest on convertible debentures and dividends	0	0	0	0	0	0	0	0	0	0	107	125	146	172	190	215	241	249	277	299	333	370	414	458	514	567	636	709	786	867	952
Lease payments	0	0	0	0	0	0	0	0	0	0	64	75	87	103	113	129	144	149	165	179	199	221	247	274	307	346	391	441	496	556	620
Excess interest on convertible debentures	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Dividends	0	0	0	0	0	0	0	0	0	0	22	25	30	35	39	44	49	50	56	61	67	75	82	94	95	96	96	96	96	96	96
Residual cash flow for Operating Company	0	0	0	0	0	0	0	0	0	0	21	25	29	34	38	43	48	50	55	60	67	74	83	92	102	109	115	120	124	128	132
Less: Equipment and technology depreciation	0	0	0	0	0	0	0	0	0	0	(120)	(120)	(120)	(120)	(120)	(120)	(120)	(120)	(120)	(120)	(120)	(120)	(120)	(120)	(120)	(120)	(120)	(120)	(120)	(120)	(120)
Add: Principal repayments on secured debt	0	0	0	0	0	0	0	0	0	0	15	30	45	60	75	89	104	119	134	149	164	179	199	221	247	274	307	346	391	441	496
Add: Dividends	0	0	0	0	0	0	0	0	0	0	22	25	30	35	39	44	49	50	56	61	67	75	82	94	95	96	96	96	96	96	96
Net income (loss) for Operating Company	0	0	0	0	0	0	0	0	0	0	(52)	(40)	(17)	9	25	50	75	93	109	133	161	186	214	240	269	299	330	362	396	432	469
PUBLIC FINANCE COMPANY																															
Infrastructure and civil works interest subsidy	0	0	0	0	0	0	0	0	0	0	(500)	(500)	(500)	(500)	(500)	(500)	(500)	(500)	(500)	(500)	(500)	(500)	(500)	(500)	(500)	(500)	(500)	(500)	(500)	(500)	(500)
Interest on Government guaranteed debt	0	0	0	0	0	0	0	0	0	0	475	473	471	468	465	462	459	455	451	447	442	437	431	425	418	411	403	394	384	374	363
Lease payments	0	0	0	0	0	0	0	0	0	0	64	75	87	103	113	129	144	149	165	179	199	221	247	274	307	346	391	441	496	556	620
Depreciation on infrastructure and civil works	0	0	0	0	0	0	0	0	0	0	24	27	29	32	35	39	41	45	49	53	58	63									

Quebec - Ontario High Speed Rail Project
 Montreal - Ottawa - Toronto 300 kph (via Mirabel)
 Government share of capital costs

In millions of inflated dollars

	Present Value	Pre-construction				Construction and Start-up							Full Operations																							
		1995	1996	1997	Total	1998	1999	2000	2001	2002	2003	2004	Total	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	Total	
Infrastructure and civil works																																				
Construction period interest subsidy	913	0	0	0	0	26	86	213	322	361	444	1,931	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Equipment and technology																																				
Construction period interest subsidy	269	0	0	0	0	0	12	37	83	130	191	643	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Initial sponsor																																				
Share capital	74	79	0	0	79	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Annual subsidy	1,943	0	0	0	0	0	0	0	0	0	0	0	500	500	500	500	500	500	500	500	500	500	500	500	500	500	500	500	500	500	500	500	500	500	10,497	
Taxes	(304)	0	0	0	0	0	0	0	0	0	0	0	(15)	(15)	(15)	(15)	(27)	(27)	(29)	(74)	(93)	(105)	(127)	(145)	(165)	(185)	(208)	(228)	(180)	(143)	(216)	(235)	(256)	(2,586)		
Dividends	(86)	0	0	0	0	0	0	0	0	0	0	0	(11)	(11)	(11)	(11)	(19)	(19)	(22)	(24)	(25)	(28)	(30)	(34)	(37)	(41)	(42)	(43)	(48)	(118)	(118)	(20)	(21)	(29)	(548)	
Lease payments	(756)	0	0	0	0	0	0	0	0	0	0	0	(64)	(75)	(87)	(103)	(113)	(126)	(144)	(149)	(165)	(178)	(199)	(223)	(247)	(274)	(307)	(348)	(396)	(453)	(517)	(720)	(758)	(6,335)		
Total per annum	73	0	0	0	26	100	250	364	521	635	655	0	409	397	392	365	340	323	292	252	214	166	140	95	46	11	158	(264)	(294)	(344)	(400)	(477)	(547)	0		
Total cumulative	73	73	73	73	99	125	375	739	1,260	1,919	2,574	2,574	409	806	1,198	1,553	1,893	2,216	2,508	2,760	2,974	3,160	3,300	3,395	3,441	3,440	3,382	3,118	2,824	2,480	2,071	1,594	1,047	0		

Present value with taxes (cumulative)

72

1,275

746

Present value without taxes (cumulative)

72

1,275

1,099

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

Total net contribution with taxes

6,292

Total net contribution without taxes

7,294

Present value of contribution with taxes

2,295

Present value of contribution without taxes

2,428

In millions of 1993 constant dollars

	Present Value	Pre-construction				Construction and Start-up							Full Operations																						
		1995	1996	1997	Total	1998	1999	2000	2001	2002	2003	2004	Total	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	Total
Infrastructure and civil works																																			
Construction period interest subsidy	746	0	0	0	0	24	74	173	254	300	330	321	1,478	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Equipment and technology																																			
Construction period interest subsidy	231	0	0	0	0	0	10	30	50	100	142	152	483	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Initial sponsor																																			
Share capital	68	74	0	0	74	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Annual subsidy	1,134	0	0	0	0	0	0	0	0	0	0	0	0	351	340	330	321	312	302	294	295	277	268	261	253	246	236	232	225	218	212	206	200	194	5,567
Taxes	(160)	0	0	0	0	0	0	0	0	0	0	0	0	(11)	(11)	(10)	(10)	(17)	(16)	(23)	(42)	(51)	(56)	(60)	(74)	(81)	(86)	(90)	(103)	(79)	(82)	(88)	(94)	(99)	(1,203)
Dividends	(50)	0	0	0	0	0	0	0	0	0	0	0	0	(8)	(8)	(10)	(11)	(12)	(13)	(14)	(16)	(16)	(16)	(16)	(20)	(20)	(20)	(22)	(19)	(19)	(19)	(19)	(19)	(202)	
Lease payments	(407)	0	0	0	0	0	0	0	0	0	0	0	0	(45)	(51)	(58)	(66)	(71)	(78)	(85)	(89)	(92)	(96)	(104)	(110)	(122)	(131)	(142)	(220)	(261)	(268)	(278)	(288)	(298)	(2,948)
Total per annum	—	74	0	0	—	24	84	203	303	400	472	473	—	287	270	253	234	212	195	172	144	118	100	73	49	27	11	(27)	(113)	(126)	(146)	(158)	(171)	(212)	—
Total cumulative	—	74	74	74	—	24	108	311	615	1,014	1,487	1,960	—	287	557	810	1,044	1,256	1,451	1,623	1,767	1,885	1,985	2,059	2,106	2,129	2,120	2,101	1,983	1,854	1,708	1,540	1,342	1,137	—

Present value with taxes (cumulative)

68

977

516

Present value without taxes (cumulative)

68

977

678

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

Total net contribution with taxes

4,163

Total net contribution without taxes

4,791

Present value of contribution with taxes

1,640

Present value of contribution without taxes

1,755

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

Statistics and general information																					
	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	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	2.30%	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%	5.83%	5.83%	5.83%	5.83%	5.83%	5.83%	5.83%	5.83%	5.83%	5.82%	5.82%	5.82%	5.82%	5.82%	5.82%	5.82%	5.82%
Total operating expenses	\$275	\$286	\$296	\$307	\$317	\$328	\$340	\$352	\$366	\$380	\$395	\$417	\$434	\$452	\$471	\$491	\$512	\$536	\$559	\$585	\$612
Growth of expenses in percentage	N/A	3.71%	3.74%	3.48%	3.49%	3.61%	3.54%	3.57%	3.89%	3.90%	4.01%	5.34%	4.17%	4.21%	4.29%	4.11%	4.40%	4.46%	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	\$64	\$75	\$87	\$103	\$113	\$128	\$144	\$149	\$185	\$179	\$199	\$221	\$247	\$274	\$307	\$488	\$596	\$633	\$675	\$720	\$768
Debt service	\$306	\$318	\$329	\$339	\$348	\$360	\$363	\$365	\$365	\$379	\$375	\$369	\$365	\$369	\$365	\$183	\$33	\$36	\$27	\$16	\$9
Operating expenses to revenues ratio	39.71%	38.91%	38.14%	37.29%	36.46%	35.66%	34.89%	34.18%	33.52%	32.91%	32.95%	32.20%	31.70%	31.21%	30.78%	30.25%	29.84%	29.48%	29.10%	28.75%	28.40%
Revenues per passenger (A)	\$105	\$109	\$113	\$116	\$120	\$124	\$128	\$133	\$137	\$142	\$147	\$151	\$157	\$162	\$167	\$173	\$179	\$185	\$191	\$197	\$204
Government funding (B) per passenger (B)	\$66	\$63	\$60	\$56	\$53	\$50	\$47	\$45	\$42	\$39	\$36	\$33	\$29	\$25	\$21	\$1	(\$19)	(\$13)	(\$17)	(\$21)	(\$25)
B/A	62.86%	57.91%	53.10%	48.29%	44.43%	40.34%	36.52%	34.07%	30.64%	27.79%	24.61%	21.56%	18.46%	15.60%	12.58%	0.75%	-5.61%	-7.31%	-9.08%	-10.84%	-12.46%

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 infrastructure notes	64.63%	65.20%	65.77%	66.34%	65.73%	66.31%	66.90%	67.48%	65.73%	66.35%	66.91%	67.04%	66.53%	67.14%	67.74%	68.32%	68.84%	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%	24.90%	23.87%	22.57%	23.80%	22.02%	19.96%	18.07%	16.68%	13.43%	9.69%	8.22%	9.04%	6.83%	4.28%	2.33%	0.00%
Percentage of capital assigned to debenture holders	9.15%	9.28%	9.41%	9.54%	9.51%	9.60%	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%	0.00%
Percentage of capital assigned to shareholders	0.90%	0.11%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.66%	1.64%	2.04%	4.85%	6.41%	8.79%	11.67%	12.26%	24.11%	25.77%	27.78%	29.69%	32.43%
Debt to equity ratio for operating company																					
Actual	2.82	3.04	3.19	3.23	3.41	3.25	2.97	2.63	2.62	2.21	1.81	1.48	1.23	0.91	0.63	0.55	0.57	0.40	0.35	0.27	0.19
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																					
Senior debt	1.75	1.79	1.84	1.90	1.98	2.02	2.14	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	N/A
Percentage payout ratio (including lease payments)	37.03%	37.70%	38.77%	40.15%	40.90%	41.62%	43.03%	43.38%	45.01%	45.25%	47.17%	49.18%	51.25%	53.02%	55.55%	59.15%	77.44%	77.35%	78.16%	78.94%	79.47%
Gross margin	60.29%	61.09%	61.86%	62.71%	63.54%	64.34%	65.11%	65.65%	66.48%	67.09%	67.65%	67.80%	68.30%	68.79%	69.25%	69.75%	70.18%	70.54%	70.90%	71.25%	71.60%
Net return on 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%	14.98%	15.91%	16.97%	18.07%	21.96%	23.66%	25.53%	27.37%	29.49%
Pre-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%	9.00%	9.00%	9.24%	10.24%	11.48%	18.23%	N/A	N/A	N/A	N/A	N/A
Pre-tax return 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%	58.85%	64.09%	60.84%	22.25%	23.65%	25.22%	26.93%	28.73%
After-tax return on equity (operating company)	-7.56%	-6.30%	-2.36%	1.25%	3.69%	7.36%	10.70%	12.49%	13.80%	15.23%	16.69%	17.49%	17.71%	17.55%	17.29%	7.34%	15.43%	16.34%	17.27%	18.01%	18.73%
Cash flow/total debt outstanding (operating company)	3.85%	5.15%	6.62%	8.36%	9.34%	11.35%	13.75%	15.94%	18.63%	20.05%	24.96%	30.78%	36.73%	49.50%	74.85%	N/A	N/A	N/A	N/A	N/A	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
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

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 aforementioned 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.

Price Waterhouse

Chartered Accountants

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.

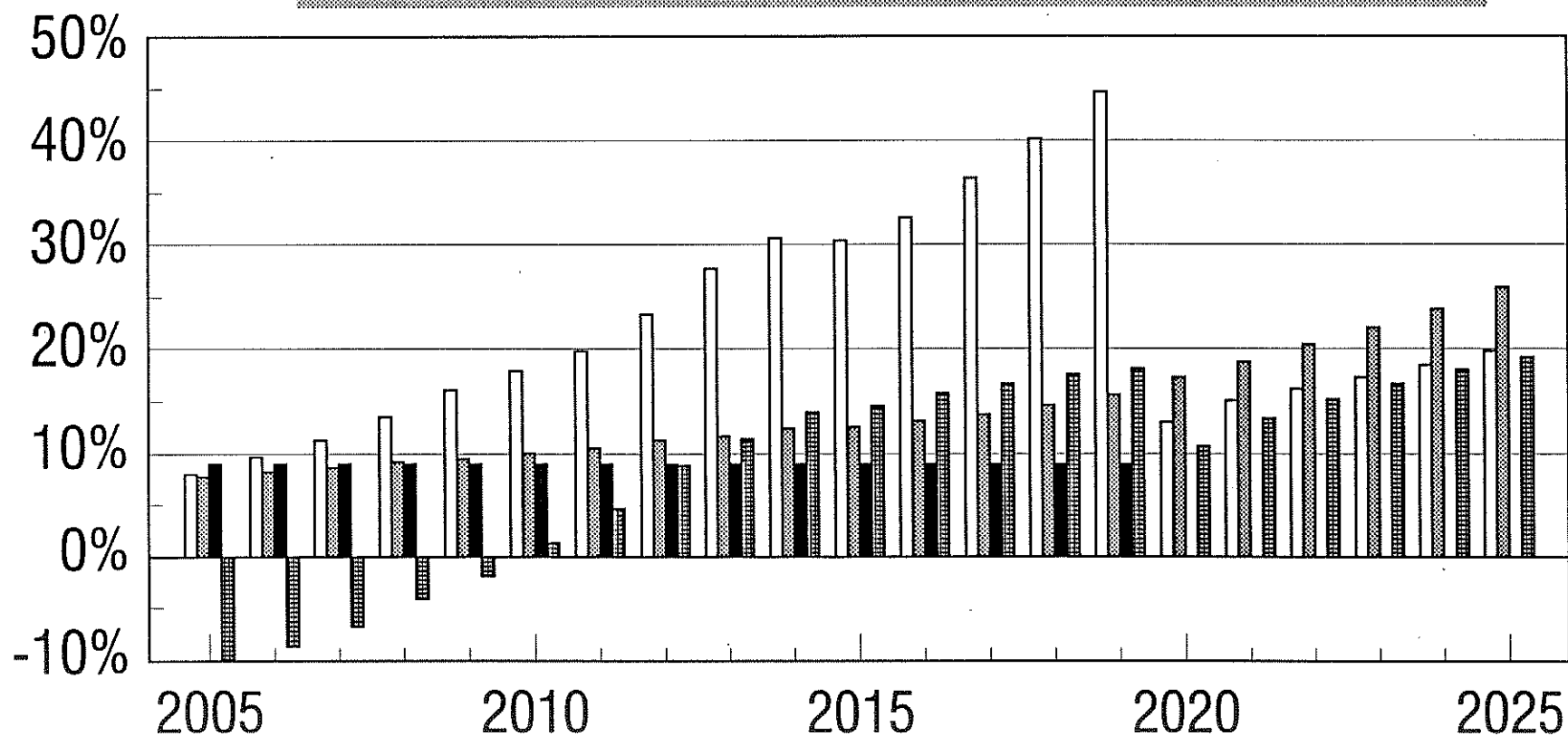
14. Other Assumptions and Hypotheses

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 200 Kph (via Dorval)

Investment Returns - 2005-2025



Dividend yield



Net return on invested capital



Yield on convertible
unsecured debentures

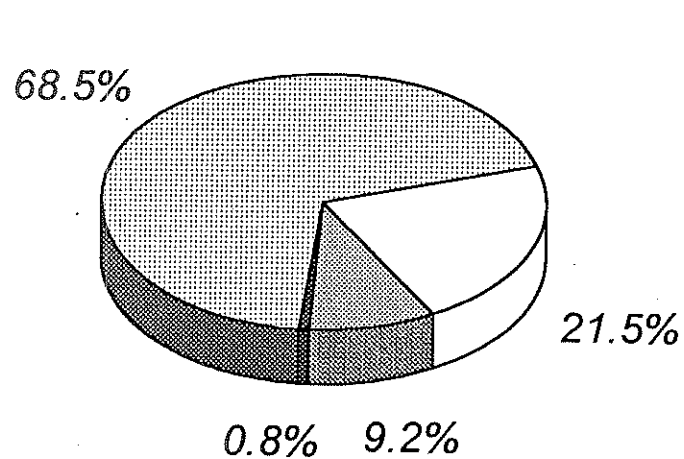


After-tax return on equity
(operating company)

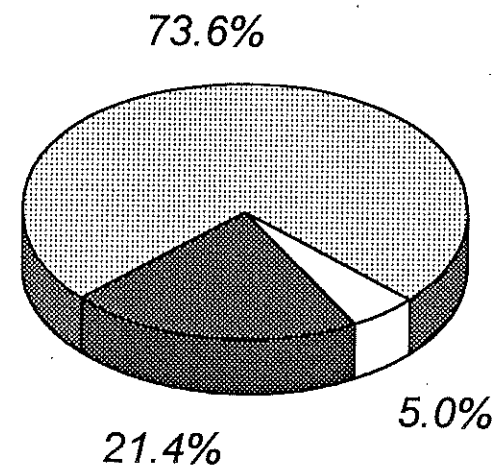
Quebec-Ontario High Speed Rail Project

Montreal-Ottawa-Toronto 200 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
Montreal - Ottawa - Toronto 200 kph (via Dorval)
Balance Sheet
(In millions of inflated dollars)

[illegible]

Quebec-Ontario High Speed Rail Project
Montreal - Ottawa - Toronto 200 kph (via Dorval)
Statements of Operations
(In millions of inflated dollars)

	Pre-construction			Construction and Start-up										Full Operations																								
OPERATOR	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025							
Revenue	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$52	\$301	\$401	\$411	\$421	\$432	\$443	\$454	\$465	\$476	\$487	\$498	\$509	\$516	\$529	\$542	\$556	\$571	\$585	\$600	\$615	\$631	\$647							
Passenger revenues, constant dollars	0	0	0	0	0	0	0	0	(3)	(11)	(21)	(22)	(23)	(24)	(25)	(26)	(27)	(28)	(29)	(30)	(31)	(32)	(33)	(34)	(35)	(36)	(37)	(38)	(39)	(40)	(41)							
Lesse Agency commissions	0	0	0	0	0	0	0	0	49	10	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34							
Lesse Card/d account	0	0	0	0	0	0	0	0	49	10	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34							
Net passenger revenues, constant dollars	0	0	0	0	0	0	0	0	-49	-10	-14	-15	-16	-17	-18	-19	-20	-21	-22	-23	-24	-25	-26	-27	-28	-29	-30	-31	-32	-33	-34							
Net light freight revenues, constant dollars	0	0	0	0	0	0	0	0	0	0	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37							
Inflation adjustment	0	0	0	0	0	0	0	0	17	19	163	194	206	230	256	294	314	345	373	415	452	494	538	585	634	687	743	803	867	935	1,009							
Net revenues	0	0	0	0	0	0	0	0	65	67	545	576	609	644	680	719	760	803	849	897	949	1,002	1,059	1,119	1,182	1,250	1,321	1,396	1,475	1,559	1,649							
Operating Costs, constant dollars																																						
Labour	0	0	0	0	0	0	0	0	16	16	68	68	69	70	70	71	72	72	73	74	74	75	76	77	77	79	80	80	81	82	82							
Electricity	0	0	0	0	0	0	0	0	1	1	9	9	9	9	10	10	10	10	10	10	11	11	11	11	11	12	12	12	12	12	12							
Advertising/promotion	0	0	0	0	0	0	0	0	4	4	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8							
Infrastructure maintenance services	0	0	0	0	0	0	0	0	2	2	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8							
Infrastructure materials/supplies	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1							
Rolling stock materials/supplies	0	0	0	0	0	0	0	0	1	1	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7							
Telecommunications/computer services	0	0	0	0	0	0	0	0	1	2	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7							
Insurance service/franchise fees etc.	0	0	0	0	0	0	0	0	2	2	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6							
Food/related sundries	0	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1							
Unscheduled materials/services	0	0	0	0	0	0	0	0	11	20	32	32	32	32	32	32	32	32	32	33	33	33	33	33	33	33	33	33	33	33	33							
Property taxes	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0							
Contingency	0	0	0	0	0	0	0	0	3	3	11	11	11	11	11	11	11	11	11	11	11	12	12	12	12	12	12	12	12	12	12							
Total operating costs, constant dollars	0	0	0	0	0	0	0	0	41	50	158	160	161	162	163	164	166	167	168	170	172	176	176	179	180	182	184	187	189	192	195	198						
Capital taxes	0	0	0	0	0	0	0	0	0	0	9	8	8	8	7	7	6	6	6	6	6	5	5	5	5	4	4	4	4	4	4							
Inflation adjustment	0	0	0	0	0	0	0	0	14	19	87	75	93	91	90	107	116	126	136	146	157	171	184	197	211	225	241	257	274	292	311							
Total operating costs	0	0	0	0	0	0	0	0	55	70	244	243	252	260	269	279	299	306	310	322	326	352	367	382	397	414	431	450	470	491	513							
Gross operating cash flow	0	0	0	0	0	0	0	0	9	(3)	911	333	357	383	411	440	471	504	539	575	613	650	682	717	765	808	846	889	946	1,005	1,060	1,136						
Large corporations taxes	0	0	0	0	0	0	0	0	0	0	4	4	4	4	4	3	3	3	3	3	3	3	3	3	2	2	2	2	2	2	2							
Income taxes	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0							
Net operating cash flow	0	0	0	0	0	0	0	0	9	(3)	307	329	353	379	407	437	455	487	524	560	597	637	679	725	775	828	886	949	1,018	1,090	1,166	1,246						
Interest on secured and bank debt	0	0	0	0	0	0	0	0	9	(3)	167	165	164	166	155	157	149	140	129	129	117	102	85	72	52	30	37	47	40	32	24							
Principal repayments on secured debt	0	0	0	0	0	0	0	0	0	0	11	22	30	44	55	65	76	87	96	109	120	131	142	153	164	0	0	0	0	0	0							
Cash flow available to debenture holders, lease payments and dividends	0	0	0	0	0	0	0	0	0	0	129	143	157	176	198	214	229	260	297	322	320	339	371	403	442	636	737	792	847	903	965							
Base interest on convertible debentures	0	0	0	0	0	0	0	0	0	0	58	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60							
Excess cash flow available for lease payments, excess interest on convertible debentures and dividends	0	0	0	0	0	0	0	0	0	0	68	82	96	115	137	153	169	199	236	261	259	278	310	343	381	636	737	792	847	903	965							
Lease payments	0	0	0	0	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							
Excess interest on convertible debentures	0	0	0	0	0	0	0	0	0	0	11	14	16	19	23	25	28	30	39	43	43	46	52	57	63	106	123	132	141	150	160							
Residual cash flow for Operating Company	0	0	0	0	0	0	0	0	0	0	14	18	19	23	27	31	34	40	47	52	52	56	62	69	76	127	147	158	169	181	193							
Less: Equipment and technology depreciation	0	0	0	0	0	0	0	0	0	0	(108)	(109)	(109)	(108)	(115)	(115)	(115)	(115)	(123)	(125)	(125)	(129)	(129)	(130)	(130)	(141)	(141)	(141)	(141)	(141)	(141)							
Add: Principal repayments on secured debt	0	0	0	0	0	0	0	0	0	0	11	22	30	44	55	65	76	87	96	109	120	131	142	153	164	0	0	0	0	0	0							
Add: Dividends	0	0	0	0	0	0	0	0	0	0	11	14	16	19	23	25	28	30	39	43	43	46	52	57	63	106	123	132	141	150	160							
Net Income (Loss) for Operating Company	0	0	0	0	0	0	0	0	0	0	(72)	(57)	(41)	(23)	(10)	7	23	45	61	80	108	127	150	175	193	129	149	169	190	213	237							
PUBLIC FINANCE COMPANY																																						
Infrastructure and civilworks interest subsidy	0	0	0	0	0	0	0	0	0	0	(472)	(472)	(472)	(472)	(472)	(472)	(472)	(472)	(472)	(472)	(472)	(472)	(472)	(472)	(472)	(472)	(472)	(472)	(472)	(472)	(472)							
Interest on Government guaranteed debt	0	0	0	0	0	0	0	0	0	0	449	447	445	442	440	437	434	430	426	422	418	413	407	401	395	388	380	372	363	353	343							
Lease payments	0	0	0	0	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							
Depreciation on infrastructure and civilworks	0	0	0	0	0	0	0	0	0	0	23	26	27	30	33	36	39	42	46	50	55	60	65	71	77	84	92	100	109	119	130							
Net Income and cash flow of Public Finance Company	0	0	0	0	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							
Senior debt coverage ratios																																						
Equipment and technology notes - Actual											1.75	1.79	1.82	1.88	1.96	1.97	2.00	2.22	2.37	2.41	2.59	2.79	3.05	3.28	3.64	N/A	N/A	N/A	N/A	N/A	N/A							
Equipment and technology notes - Required											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							
Return on equity																																						
Operating company											-9.9%	-8.6%	-6.8%	-4.1%	-1.9%	1.3%	4.6%	8.8%	11.4%	14.0%	14.5%	15.8%	16.7%	17.6%	18.1%	18.7%	13.4%	15.2%	16.7%	18.0%	19.2%							
Net operating margin											57.0%	57.9%	58.7%	59.6%	60.4%	61.2%	62.0%	62.8%	63.5%	64.1%	64.7%	64.8%	65.4%	65.9%	66.4%	66.6%	67.3%	67.8%	68.1%	68.5%	68.9%							
Internal rate of return (no residual value for equipment and technology at end of 35-year concession)											9.20%																											
Public sector (pre-tax)											9.66%																											
Private/Public equity and convertible debentures (after tax)																																						

In millions of inflated dollars

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

Total net contribution with taxes	0.521
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Total net contribution without taxes	7,200
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Present value of contribution with taxes	2,254
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Present value of contribution without taxes	2,367
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In millions of 1993 constant dollars

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

Total net contribution with taxes	4,305
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Total net contribution without taxes	4,667
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Present value of contribution with taxes	1,504
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Present value of contribution without taxes      1.644
  
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Quebec-Ontario High Speed Rail Project
Montreal - Ottawa - Toronto 200 kph (via Dorval)
Statistics and financial ratios
(in millions of inflated dollars)

Statistics and general information																					
	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	6.5	6.6	6.8	6.9	7.1	7.2	7.4	7.6	7.7	7.9	8.1	8.3	8.4	8.6
Growth of ridership in percentage	N/A	2.21%	2.21%	2.21%	2.21%	2.21%	2.21%	2.21%	2.21%	2.21%	2.21%	2.21%	2.21%	2.21%	2.21%	2.21%	2.21%	2.21%	2.21%	2.21%	2.21%
Total operating revenues	\$545	\$576	\$609	\$644	\$680	\$719	\$760	\$803	\$849	\$897	\$948	\$1,002	\$1,059	\$1,119	\$1,182	\$1,250	\$1,321	\$1,396	\$1,475	\$1,559	\$1,649
Growth of revenues in percentage	N/A	5.69%	5.69%	5.69%	5.69%	5.69%	5.69%	5.69%	5.69%	5.69%	5.68%	5.68%	5.68%	5.68%	5.68%	5.68%	5.68%	5.68%	5.68%	5.68%	5.63%
Total operating expenses	\$234	\$243	\$252	\$260	\$269	\$279	\$289	\$299	\$310	\$322	\$335	\$352	\$367	\$382	\$397	\$414	\$431	\$450	\$470	\$491	\$513
Growth of expenses in percentage	N/A	3.62%	3.64%	3.45%	3.48%	3.50%	3.52%	3.55%	3.79%	3.81%	3.92%	5.25%	4.07%	4.11%	4.16%	4.03%	4.30%	4.38%	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)	(\$472)
Lease payment to Government	\$43	\$52	\$61	\$73	\$87	\$97	\$107	\$126	\$150	\$166	\$164	\$176	\$197	\$217	\$242	\$403	\$467	\$502	\$537	\$573	\$612
Debt service	\$238	\$247	\$257	\$264	\$270	\$283	\$286	\$288	\$288	\$299	\$297	\$293	\$287	\$285	\$276	\$30	\$37	\$47	\$40	\$32	\$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%	35.18%	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	\$141	\$146	\$151	\$156	\$162	\$167	\$173	\$179	\$185	\$191
Government funding (return) per passenger (B)	\$77	\$74	\$71	\$67	\$63	\$60	\$58	\$53	\$49	\$45	\$44	\$42	\$38	\$34	\$30	\$9	\$1	(\$4)	(\$8)	(\$12)	(\$16)
B/A	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%	22.80%	19.51%	5.53%	0.39%	-2.13%	-4.35%	-6.43%	-8.44%

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 infrastructure 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%	71.48%	72.18%	72.90%	73.61%
Percentage of capital assigned to equipment notes	21.49%	21.94%	21.98%	21.80%	23.13%	22.61%	21.88%	20.89%	22.14%	21.04%	19.48%	17.58%	18.63%	14.10%	11.15%	10.62%	13.08%	11.53%	9.69%	7.53%	5.00%
Percentage of capital assigned to debenture holders	9.21%	9.31%	9.44%	9.56%	9.53%	9.69%	9.85%	10.03%	9.91%	10.08%	10.27%	10.50%	10.59%	10.85%	11.14%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Percentage of capital assigned to shareholders	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%	4.86%	16.31%	16.19%	17.02%	18.13%	19.57%	21.39%
Debt to equity ratio for operating company																					
Actual	2.89	3.22	3.50	3.70	4.13	4.17	4.06	3.79	3.83	3.43	2.96	2.49	2.15	1.71	1.31	1.27	1.44	1.30	1.15	0.99	0.82
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																					
Senior debt	1.75	1.79	1.82	1.88	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	N/A	N/A	N/A	N/A
Percentage payout ratio (including lease 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%	76.10%	75.53%	76.39%	77.22%	78.03%
Gross margin	57.02%	57.60%	58.68%	59.55%	60.40%	61.22%	62.01%	62.78%	63.45%	64.10%	64.70%	64.84%	65.36%	65.90%	66.39%	66.91%	67.34%	67.75%	68.14%	68.50%	68.89%
Net return on invested capital	7.00%	8.20%	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%	20.45%	22.07%	23.87%	25.95%
Pre-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%	9.00%	9.00%	9.00%	9.00%	9.00%	N/A	N/A	N/A	N/A	N/A	N/A
Pre-tax return on share capital	8.00%	9.63%	11.25%	13.50%	16.07%	17.95%	19.76%	23.33%	27.69%	30.60%	30.38%	32.61%	36.35%	40.15%	44.66%	13.02%	15.06%	16.20%	17.32%	18.48%	19.74%
After-tax return on equity (operating company)	-9.87%	-8.63%	-6.78%	-4.11%	-1.91%	1.33%	4.63%	8.80%	11.42%	13.98%	14.62%	15.92%	16.72%	17.58%	18.14%	10.73%	13.37%	15.17%	16.71%	18.04%	19.23%
Cash flow/total debt outstanding (operating company)	3.02%	4.15%	5.38%	6.88%	7.84%	9.39%	11.15%	13.64%	14.95%	17.70%	20.29%	24.85%	29.14%	38.47%	54.61%	N/A	N/A	N/A	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

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 aforementioned 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.

Price Waterhouse

Chartered Accountants

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.

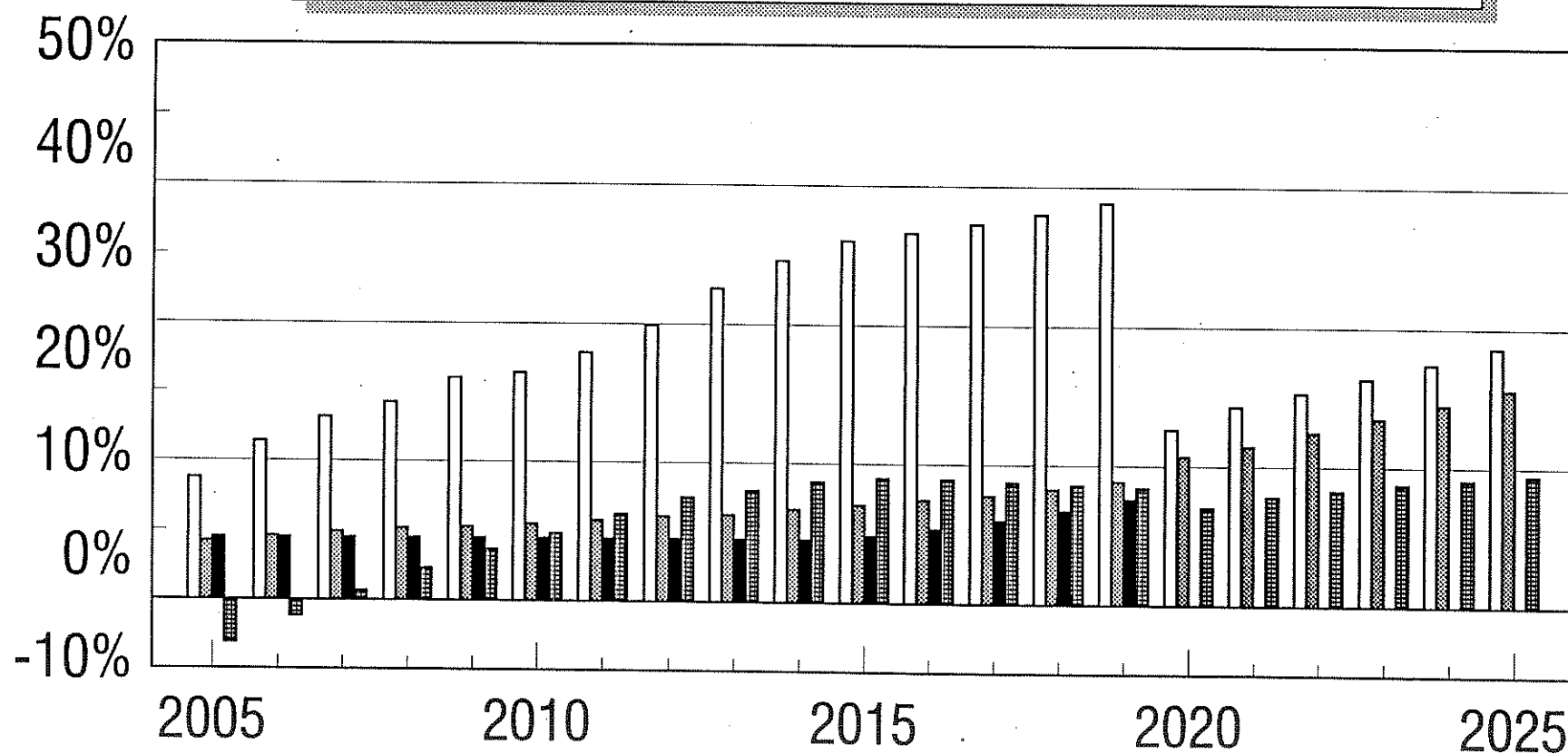
14. Other Assumptions and Hypotheses

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



Dividend yield



Net return on invested capital



Yield on convertible unsecured debentures



After-tax return on equity (operating company)

Quebec-Ontario High Speed Rail Project

Montreal-Ottawa-Toronto 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
Montreal - Ottawa - Toronto 300 kph (via Dorval)
Balance Sheet
(in millions of inflated dollars)

	Pre-construction				Construction and Start-up										Full Operations																			
	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025			
Assets																																		
Current assets																																		
Cash	\$126	\$93	\$24	\$342	\$252	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$104			
Accounts receivable	0	0	0	0	0	0	0	0	5	5	43	44	46	47	46	50	52	53	54	56	57	59	61	62	64	66	66	70	72	73				
Supplies and other inventories	0	0	0	0	0	0	0	0	100	200	206	212	219	225	232	239	246	253	261	269	277	285	294	303	312	321	331	340	351	361	372			
Prepaid expenses	0	0	0	0	0	0	0	0	0	0	21	21	22	23	23	24	25	25	26	27	28	29	30	31	32	33	34	35	36	37				
Fixed Assets at cost	126	93	24	342	252	0	0	0	112	225	270	277	285	294	302	311	321	330	340	350	360	371	382	393	405	417	430	442	455	469	587			
Infrastructure and civil works																																		
Land and Right-of-way	0	1	3	36	109	145	152	152	152	152	152	152	152	152	152	152	152	152	152	152	152	152	152	152	152	152	152	152	152	152	152			
Entrances/subgrade	0	17	35	127	324	670	941	1,044	1,044	1,044	1,044	1,044	1,044	1,044	1,044	1,044	1,044	1,044	1,044	1,044	1,044	1,044	1,044	1,044	1,044	1,044	1,044	1,044	1,044	1,044	1,044			
Stations	4	7	9	12	17	72	154	256	418	418	418	418	418	418	418	418	418	418	418	418	418	418	418	418	418	418	418	418	418	418	418			
Maintenance facilities	2	5	6	7	11	45	106	165	269	269	269	269	269	269	269	269	269	269	269	269	269	269	269	269	269	269	269	269	269	269	269			
Other accommodations	1	1	2	9	35	85	102	102	102	102	102	102	102	102	102	102	102	102	102	102	102	102	102	102	102	102	102	102	102	102	102			
Bridges	4	8	20	89	205	437	569	619	619	619	619	619	619	619	619	619	619	619	619	619	619	619	619	619	619	619	619	619	619	619	619			
Grade separations	5	10	21	76	165	441	704	784	784	784	784	784	784	784	784	784	784	784	784	784	784	784	784	784	784	784	784	784	784	784	784			
Track	0	1	4	11	39	110	207	424	551	556	556	556	556	556	556	556	556	556	556	556	556	556	556	556	556	556	556	556	556	556	556			
Deferred start-up and other costs	0	2	5	17	44	36	125	154	167	167	167																							

Quebec-Ontario High Speed Rail Project
Montreal - Ottawa - Toronto 300 kph (via Dorval)
Statements of Operations
(In millions of inflated dollars)

	Pre-construction			Construction and Start-up								Full Operations																							
OPERATOR	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025				
Revenues	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$63	\$63	\$546	\$561	\$578	\$592	\$609	\$626	\$643	\$661	\$679	\$698	\$717	\$737	\$757	\$776	\$800	\$822	\$845	\$868	\$893	\$917	\$943				
Passenger revenues, constant dollars	0	0	0	0	0	0	0	0	(1)	(1)	(30)	(31)	(32)	(33)	(34)	(35)	(36)	(37)	(38)	(39)	(40)	(41)	(42)	(43)	(44)	(45)	(46)	(47)	(48)	(49)	(50)				
Less Credit card discount	0	0	0	0	0	0	0	0	(1)	(1)	(5)	(5)	(5)	(5)	(5)	(5)	(5)	(5)	(5)	(7)	(7)	(7)	(7)	(8)	(8)	(8)	(8)	(8)	(8)	(8)	(8)				
Net passenger revenues, constant dollars	0	0	0	0	0	0	0	0	59	59	511	525	539	554	569	585	602	618	635	653	671	690	709	728	749	769	791	813	835	859	882				
Net light freight revenues, constant dollars	0	0	0	0	0	0	0	0	0	16	17	18	18	19	20	20	21	22	22	23	23	24	25	26	27	28	29	30	31	32	34				
Inflation adjustment	0	0	0	0	0	0	0	0	20	22	224	254	265	276	285	295	307	319	332	346	361	376	391	406	421	437	452	468	484	500	516				
Net revenues	0	0	0	0	0	0	0	0	80	82	751	795	842	862	884	900	919	939	959	979	1,001	1,023	1,046	1,070	1,094	1,118	1,143	1,168	1,193	1,218	1,243				
Operating Costs, constant dollars	0	0	0	0	0	0	0	0	17	17	75	76	77	78	79	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94				
Labour	0	0	0	0	0	0	0	0	2	2	19	19	19	19	19	19	19	19	20	20	20	21	21	22	22	23	23	24	24	24	24				
Electricity	0	0	0	0	0	0	0	0	5	5	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11				
Advertising/promotion	0	0	0	0	0	0	0	0	2	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1				
Infrastructure maintenance services	0	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1				
Infrastructure materials/supplies	0	0	0	0	0	0	0	0	0	0	1	1	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2				
Rolling stock materials/supplies	0	0	0	0	0	0	0	0	1	1	10	10	11	11	11	11	11	12	12	12	12	12	12	13	13	13	14	14	14	15	15				
Telecommunications/computer services	0	0	0	0	0	0	0	0	2	2	9	10	10	10	10	10	11	11	11	12	12	12	12	12	13	13	13	14	14	14	15	15			
Insurance service/franchise fees etc.	0	0	0	0	0	0	0	0	2	2	6	6	6	6	6	6	6	6	6	6	7	7	7	7	7	7	7	7	7	7	7				
Food/beverage services	0	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1	1	1	1	1	1	2	2	2	2	2	2	2	2				
Unscheduled materials/services	0	0	0	0	0	0	0	0	11	11	30	33	33	33	33	33	33	33	33	34	34	34	34	34	34	34	34	34	34	34	34	34			
Property taxes	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
Contingency	0	0	0	0	0	0	0	0	3	4	13	13	13	13	13	13	13	13	13	13	13	13	14	14	14	14	15	15	15	15	15				
Total operating costs, constant dollars	0	0	0	0	0	0	0	0	46	55	189	190	192	193	194	196	197	199	201	203	206	211	213	216	219	222	226	229	232	236	240				
Capital taxes	0	0	0	0	0	0	0	0	0	0	12	11	11	11	11	11	10	10	10	10	9	9	9	9	9	8	8	8	8	9	9				
Inflation adjustment	0	0	0	0	0	0	0	0	16	21	90	99	98	108	110	129	139	150	162	175	198	205	220	237	254	271	290	310	332	354	376				
Total operating costs	0	0	0	0	0	0	0	0	62	77	280	290	301	312	323	334	346	359	373	387	403	425	443	462	481	501	524	547	572	599	627				
Gross operating cash flow	0	0	0	0	0	0	0	0	17	65	472	505	541	580	622	666	713	762	814	869	928	994	1,049	1,116	1,191	1,269	1,351	1,438	1,529	1,626	1,731				
Large corporate taxes	0	0	0	0	0	0	0	0	0	0	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8				
Income taxes	0	0	0	0	0	0	0	0	0	0	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15				
Net operating cash flow	0	0	0	0	0	0	0	0	17	65	451	500	536	559	592	644	698	747	802	857	916	979	1,042	1,109	1,182	1,259	1,341	1,428	1,520	1,618	1,726				
Interest on secured and bank debt	0	0	0	0	0	0	0	0	17	5	252	249	245	238	229	201	217	201	184	181	159	135	111	89	57	22	29	39	28	17	0				
Principal repayments on secured debt	0	0	0	0	0	0	0	0	0	0	17	34	51	68	85	102	119	136	152	169	186	203	220	237	254	0	0	0	0	0	0				
Cash flow available to debenture holders, lease payments and dividends	0	0	0	0	0	0	0	0	0	0	181	216	240	254	278	280	303	330	365	392	430	473	525	554	613	651	1,083	1,160	1,240	1,326	1,415				
Base interest on convertible debentures	0	0	0	0	0	0	0	0	0	0	85	65	65	65	65	65	65	65	65	65	65	65	65	65	65	65	65	65	65	65	65				
Excess cash flow available for lease payments, income interest on convertible debentures and dividends	0	0	0	0	0	0	0	0	0	0	115	151	175	188	213	217	236	265	300	327	365	406	460	554	619	651	1,083	1,160	1,240	1,326	1,415				
Lease payments	0	0	0	0	0	0	0	0	0	0	66	86	100	107	121	124	136	151	171	187	208	232	262	318	350	542	617	661	707	756	807				
Excess interest on convertible debentures	0	0	0	0	0	0	0	0	0	0	27	35	40	43	49	55	61	69	75	82	91	102	114	127	141	219	249	287	305	336	366				
Dividends	0	0	0	0	0	0	0	0	0	0	23	30	35	38	43	43	48	53	60	65	73	82	92	101	112	123	130	137	144	151	159				
Residual cash flow for Operating Company	0	0	0	0	0	0	0	0	0	0	23	30	35	38	43	43	48	53	60	65	73	82	92	101	112	123	130	137	144	151	159				
Less: Equipment and technology depreciation	0	0	0	0	0	0	0	0	0	0	(117)	(117)	(117)	(117)	(124)	(124)	(124)	(124)	(135)	(135)	(136)	(136)	(149)	(149)	(149)	(149)	(156)	(156)	(156)	(159)	(159)				
Add: Principal repayments on secured debt	0	0	0	0	0	0	0	0	0	0	17	34	51	68	85	102	119	136	152	169	186	203	220	237	254	0	0	0	0	0	0				
Add: Dividends	0	0	0	0	0	0	0	0	0	0	27	35	40	43	49	55	61	69	75	82	91	102	114	127	141	219	249	287	305	336	366				
Net income (loss) for Operating Company	0	0	0	0	0	0	0	0	0	0	(50)	(10)	9	32	52	71	96	125	146	175	204	229	253	303	335	266	309	342	377	411	450				
PUBLIC FINANCE COMPANY																																			
Infrastructure and civil works interest, subsidy	0	0	0	0	0	0	0	0	0	0	(477)	(477)	(477)	(477)	(477)	(477)	(477)	(477)	(477)	(477)	(477)	(477)	(477)	(477)	(477)	(477)	(477)	(477)	(477)	(477)	(477)				
Interest on Government guaranteed debt	0	0	0	0	0	0	0	0	0	0	453	451	449	447	444	441	436	434	430	426	422	417	411	405	399	392	384	376	367	357	346				
Lease payments	0	0	0	0	0	0	0	0	0	0	66	100	107	121	124	136	151	171	187	208	232	262	318	350	542	617	661	707	756	807	857				
Depreciation on infrastructure and civil works	0	0	0	0	0	0	0	0	0	0	23	30	35	38	43	43	48	53	60	65	73	82	92	101	112	123	130	137	144	151	159				
Net income and cash flow of Public Finance Company	0	0	0	0	0	0	0	0	0	0	66	96	100	107	121	124	135	151	171	187	206	222	262	318	350	542	617	661	707	756	807				
Senior debt coverage ratios																																			
Equipment and technology sales - Actual											1.75	1.78	1.83	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 sales - Required											1.75	1.73	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				
Return on equity																																			
Operating company											-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%	19.3%	15.5%	16.5%	17.4%	18.1%	18.6%				
Net operating margin											62.6%	63.5%	64.3%	65.1%	65.8%	66.6%	67.3%	68.0%	68.6%	69.2%	69.7%	69.9%	70.3%	70.6%	71.2%	71.7%	72.1%	72.4%	72.6%	73.1%	73.4%				
Internal rate of return (no residual value for equipment and technology at end of 35-year concession)											6.65%																								
Public sector (pre																																			

In millions of inflated dollars

Present value of contribution without taxes 2,365

Present Value of contribution without taxes 1,667

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

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
Ridership (In millions)	7.1	7.3	7.4	7.6	7.8	8.0	8.2	8.4	8.6	8.8	9.0	9.3	9.5	9.7	10.0	10.2	10.5	10.7	11.0	11.2	11.5
Growth of ridership in percentage	N/A	2.46%	2.46%	2.46%	2.46%	2.46%	2.46%	2.46%	2.46%	2.46%	2.46%	2.46%	2.46%	2.46%	2.46%	2.46%	2.46%	2.46%	2.46%	2.46%	2.46%
Total operating revenues	\$751	\$793	\$842	\$892	\$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	\$2,358
Growth of revenues in percentage	N/A	5.89%	5.89%	5.89%	5.89%	5.89%	5.89%	5.89%	5.89%	5.89%	5.89%	5.89%	5.89%	5.89%	5.89%	5.89%	5.89%	5.89%	5.89%	5.89%	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 percentage	N/A	3.78%	3.78%	3.52%	3.54%	3.56%	3.59%	3.61%	3.62%	3.94%	4.09%	5.40%	4.21%	4.25%	4.31%	4.14%	4.45%	4.50%	4.55%	4.62%	4.68%
Government funding	(\$477)	(\$477)	(\$477)	(\$477)	(\$477)	(\$477)	(\$477)	(\$477)	(\$477)	(\$477)	(\$477)	(\$477)	(\$477)	(\$477)	(\$477)	(\$477)	(\$477)	(\$477)	(\$477)	(\$477)	(\$477)
Lease payment to Government	\$66	\$86	\$100	\$107	\$121	\$124	\$135	\$151	\$171	\$187	\$208	\$232	\$262	\$316	\$350	\$542	\$617	\$661	\$707	\$756	\$807
Debt service	\$335	\$348	\$361	\$371	\$379	\$396	\$400	\$402	\$402	\$415	\$414	\$415	\$419	\$326	\$311	\$22	\$29	\$39	\$29	\$17	\$8
Operating expenses to revenues ratio	37.22%	36.47%	35.74%	34.94%	34.17%	33.42%	32.69%	31.99%	31.45%	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	\$136	\$142	\$147	\$152	\$157	\$162	\$168	\$173	\$179	\$185	\$191	\$198	\$205
Government funding (return) per passenger (B)	\$58	\$54	\$51	\$48	\$45	\$44	\$42	\$39	\$35	\$33	\$30	\$26	\$23	\$17	\$13	(\$6)	(\$13)	(\$17)	(\$21)	(\$25)	(\$29)
B/A	54.65%	49.11%	44.78%	41.43%	37.65%	35.29%	32.24%	29.08%	25.75%	23.10%	20.19%	17.34%	14.97%	10.20%	7.61%	-3.67%	-7.48%	-9.20%	-10.95%	-12.53%	-13.99%

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 infrastructure notes	61.73%	62.24%	62.75%	63.25%	62.27%	62.80%	63.31%	63.84%	62.17%	62.71%	63.19%	63.28%	62.75%	63.28%	63.78%	64.28%	61.63%	62.08%	62.50%	62.28%	61.58%
Percentage of capital assigned to equipment notes	28.47%	28.48%	28.24%	27.75%	28.78%	27.80%	26.65%	25.11%	25.97%	23.89%	21.49%	19.18%	17.28%	13.41%	8.98%	7.10%	9.49%	7.05%	4.25%	1.99%	0.00%
Percentage of capital assigned to debenture holders	8.67%	8.96%	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%	3.62%	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 ratio for operating company																					
Actual	2.82	2.98	3.04	3.00	3.13	2.90	2.59	2.21	2.14	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																					
Senior debt	1.75	1.78	1.83	1.90	1.98	2.01	2.13	2.26	2.42	2.48	2.69	2.91	3.17	3.42	3.63	N/A	N/A	N/A	N/A	N/A	N/A
Percentage payout ratio (including lease payments)	35.06%	37.26%	38.29%	38.60%	38.77%	38.95%	40.01%	41.53%	43.50%	44.04%	46.08%	48.26%	50.58%	50.34%	53.07%	78.18%	77.92%	77.37%	78.21%	79.01%	79.57%
Gross margin	62.78%	63.53%	64.26%	65.04%	65.83%	66.58%	67.31%	68.01%	68.60%	69.18%	69.71%	69.85%	70.32%	70.78%	71.21%	71.68%	72.06%	72.43%	72.77%	73.09%	73.43%
Net return on invested capital	8.42%	9.22%	9.88%	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%	30.98%
Pre-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-tax return on share capital	17.47%	22.74%	25.29%	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%	37.12%
After-tax return on equity (operating company)	-6.22%	-2.98%	1.30%	4.55%	7.31%	9.70%	12.50%	14.97%	16.04%	17.28%	17.94%	17.83%	17.44%	20.07%	19.83%	13.72%	15.45%	16.50%	17.39%	18.09%	18.75%
Cash flow/ total debt outstanding (operating company)	4.03%	5.83%	7.41%	8.83%	9.87%	11.28%	13.46%	16.35%	17.68%	21.37%	25.31%	31.92%	38.14%	63.16%	105.66%	N/A	N/A	N/A	N/A	N/A	N/A

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

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 aforementioned 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.

Price Waterhouse

Chartered Accountants

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.

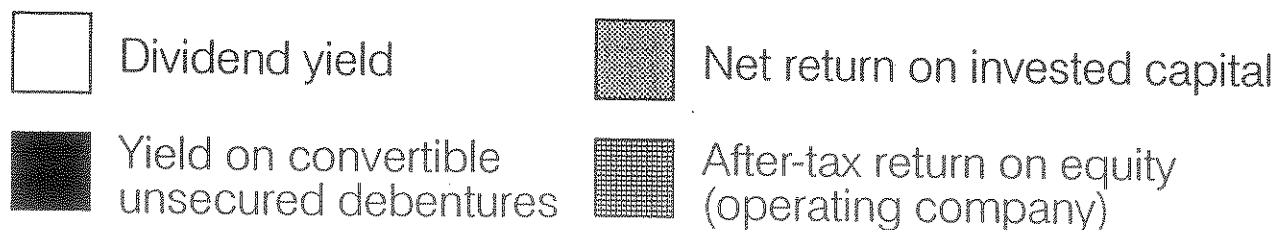
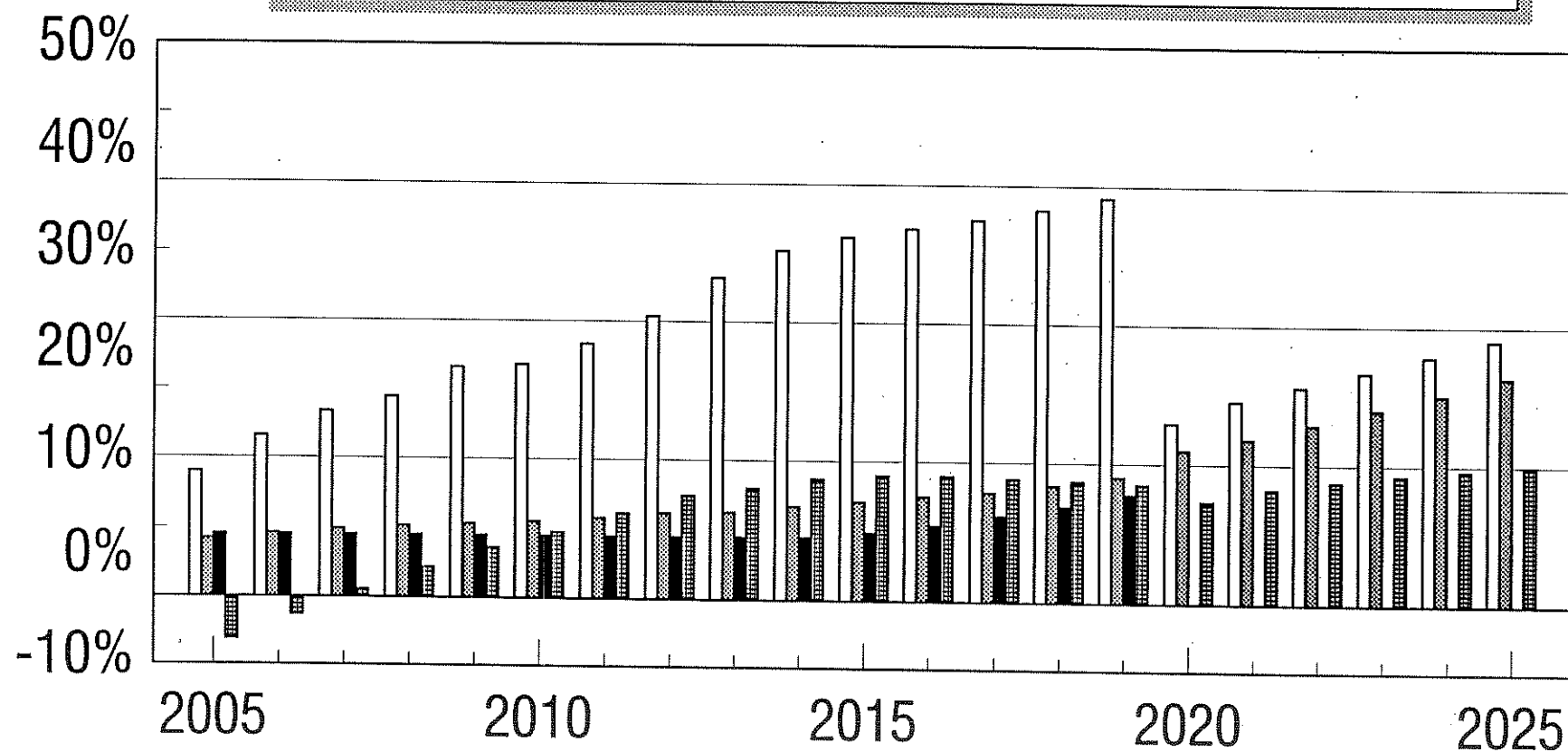
14. Other Assumptions and Hypotheses

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)

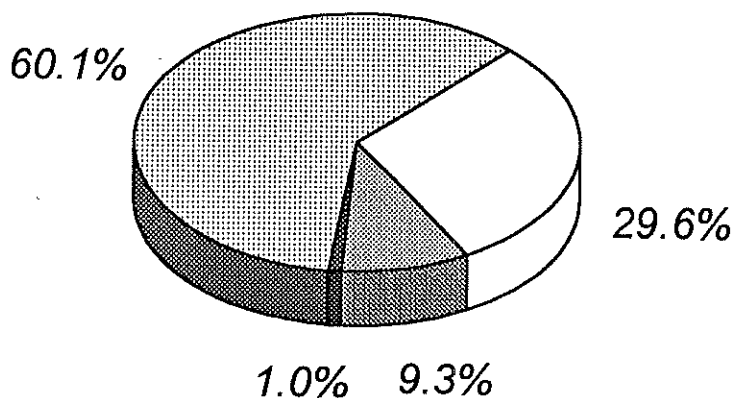
Investment Returns - 2005-2025



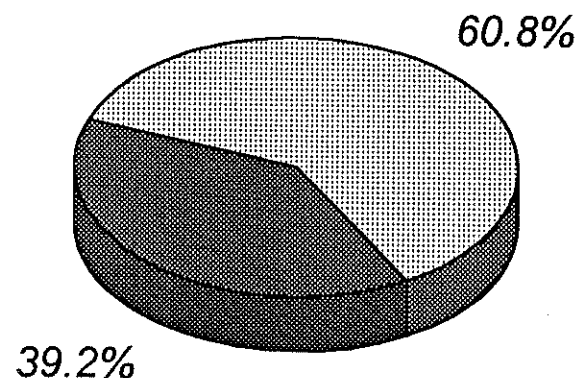
Quebec-Ontario High Speed Rail Project

Montreal-Ottawa-Toronto 300 kph Reduced (via Dorval)

Capital Structure



2005



2025

Infrastructure and Civil Works Notes

Convertible Debentures

Equipment and Technology Notes

Share capital and retained earnings

Quebec-Ontario High Speed Rail Project
 Montreal - Ottawa - Toronto 300 kph (via Dorval) (no connect air/ no Pearson airport)
 Balance Sheet
 (\$ in millions of inflated dollars)

	Pre-construction			Construction and Start-up										Full Operations																	
	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
Assets																															
Current assets																															
Cash	\$121	\$59	\$26	\$317	\$233	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$27
Accounts receivable	0	0	0	0	0	0	0	0	0	5	39	40	41	43	44	45	46	46	49	50	52	53	54	55	58	59	61	62	64	66	68
Supplies and other inventories	0	0	0	0	0	0	0	0	0	100	200	205	212	219	225	232	239	246	253	261	269	277	285	294	303	312	321	331	340	351	372
Prepaid expenses	0	0	0	0	0	0	0	0	0	8	20	21	21	22	23	23	24	25	25	26	27	28	29	30	31	32	33	34	35	37	37
	121	59	26	317	233	0	0	0	112	225	266	274	282	290	298	306	317	326	336	346	356	367	378	389	400	412	424	437	450	463	504
Fixed Assets at cost																															
Infrastructure and civil works																															
Land and Right-of-way	0	1	3	20	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	866	958	958	958	958	958	958	958	958	958	958	958	958	958	958	958	958	958	958	958	958	958	958	958	958
Stations	1	1	2	3	4	20	46	81	83	83	83	83	83	83	83	83	83	83	83	83	83	83	83	83	83	83	83	83	83	83	83
Maintenance facilities	2	4	6	8	12	62	150	190	261	261	261	261	261	261	261	261	261	261	261	261	261	261	261	261	261	261	261	261	261	261	261
Other accommodations	0	0	1	4	13	26	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30
Bridges	4	8	20	82	203	430	557	606	606	606	606	606	606	606	606	606	606	606	606	606	606	606	606	606	606	606	606	606	606	606	606
Grade separations	5	10	20	74	191	476	677	753	753	753	753	753	753	753	753	753	753	753	753	753	753	753	753	753	753	753	753	753	753	753	753
Track	0	1	4	11	38	109	259	405	521	526	526	526	526	526	526	526	526	526	526	526	526	526	526	526	526	526	526	526	526	526	526
Deferred start-up and other costs	1	2	5	18	44	95	133	147	152	152	152	152	152	152	152	152	152	152	152	152	152	152	152	152	152	152	152	152	152	152	152
	21	49	91	352	904	1,953	2,856	3,268	3,466	3,467	3,467	3,467	3,467	3,467	3,467	3,467	3,467	3,467	3,467	3,467	3,467	3,467	3,467	3,467	3,467	3,467	3,467	3,467	3,467	3,467	3,467
Capitalized interest	0	0	0	27	113	315	619	973	1,353	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	1,733	1,733	1,733	1,733	1,733	1,733	1,733	1,733
Construction period interest subsidy	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Inflation adjustment	1	3	9	51	156	399	636	767	840	842	842	842	842	842	842	842	842	842	842	842	842	842	842	842	842	842	842	842	842	842	842
	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	4,329	4,329	4,329	4,329	4,329	4,329	4,329
Accumulated depreciation	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Net infrastructure and civil works	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	4,329	4,329	4,329	4,329	4,329	4,329	4,329
Equipment and technology																															
Power distribution system	0	1	3	11	30	87	180	315	430	446	446	446	446	446	446	446	446	446	446	446	446	446	446	446	446	446	446	446	446	446	446
Signals	0	1	2	7	20	57	123	207	289	293	293	293	293	293	293	293	293	293	293	293	293	293	293	293	293	293	293	293	293	293	293
Communications	0	0	1	3	9	26	54	92	126	130	130	130	130	130	130	130	130	130	130	130	130	130	130	130	130	130	130	130	130	130	130
Lighting	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Rolling stock	0	1	6	20	56	165	351	594	910	940	940	940	940	940	940	940	940	940	940	940	940	940	940	940	940	940	940	940	940	940	940
Capital expenditures	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	3	13	42	114	305	714	1,208	1,649	1,649	1,649	1,649	1,649	1,649	1,649	1,649	1,649	1,649	1,649	1,649	1,649	1,649	1,649	1,649	1,649	1,649	1,649	1,649	1,649	1,649	1,649
Capitalized interest	0	0	0	0	52	130	298	418	672	962	962	962	962	962	962	962	962	962	962	962	962	962	962	962	962	962	962	962	962	962	962
Construction period interest subsidy	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Inflation adjustment	0	0	2	8	20	71	172	303	474	548	548	548	548	548	548	548	548	548	548	548	548	548	548	548	548	548	548	548	548	548	548
	0	3	14	48	176	495	1,028	1,732	2,391	2,730	2,730	2,730	2,730	2,730	2,730	2,730	2,730	2,730	2,730	2,730	2,730	2,730	2,730	2,730	2,730	2,730	2,730	2,730	2,730	2,730	2,730
Accumulated depreciation	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Net equipment and technology	0	3	14	48	176	495	1,028	1,732	2,391	2,730	2,730	2,730	2,730	2,730	2,730	2,730	2,730	2,730	2,730	2,730	2,730	2,730	2,730	2,730	2,730	2,730	2,730	2,730	2,730	2,730	2,730
Net fixed assets	22	50	115	450	1,226	2,847	4,499	5,767	6,714	7,059	6,960	6,956	6,752	6,946	6,722	6,805	6,486	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 assets	\$143	\$143	\$143	\$768	\$1,458	\$2,847	\$4,499	\$5,767	\$6,827	\$7,284	\$7,225	\$7,130	\$7,034	\$6,936	\$7,021	\$6,913	\$6,802	\$6,690	\$6,636	\$6,708	\$6,582	\$6,500	\$6,478	\$6,330	\$6,179	\$6,022	\$6,125	\$5,940	\$5,764	\$5,635	\$5,462
Liabilities and Owners' Equity																															
Current liabilities																															
Bank indebtedness																															

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)

	Pre-construction			Construction and Start-up								Full Operations																							
OPERATOR	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025				
Revenues	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$63	\$64	\$504	\$516	\$532	\$547	\$562	\$577	\$593	\$610	\$626	\$644	\$662	\$680	\$699	\$719	\$738	\$758	\$779	\$800	\$823	\$845	\$869				
Passenger revenues, constant dollars	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$63	\$64	\$504	\$516	\$532	\$547	\$562	\$577	\$593	\$610	\$626	\$644	\$662	\$680	\$699	\$719	\$738	\$758	\$779	\$800	\$823	\$845	\$869				
Lease Agency commissions	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
Less Call card discount	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
Net passenger revenue, constant dollars	0	0	0	0	0	0	0	0	59	59	471	484	499	512	526	540	555	570	586	602	619	636	654	672	690	709	729	749	770	791	813				
Net light freight revenue, constant dollars	0	0	0	0	0	0	0	0	0	0	16	17	18	19	20	20	20	21	22	23	23	24	25	26	27	28	29	30	31	32	34				
Inflation adjustment	0	0	0	0	0	0	0	0	20	23	206	235	264	296	329	365	404	446	491	536	586	643	701	763	829	900	976	1,056	1,142	1,234	1,333				
Net revenues	0	0	0	0	0	0	0	0	80	82	595	736	779	825	874	925	990	1,037	1,090	1,163	1,231	1,303	1,380	1,461	1,546	1,637	1,733	1,835	1,943	2,057	2,180				
Operating Costs, constant dollars																																			
Labor	0	0	0	0	0	0	0	0	17	17	71	72	73	73	74	75	76	76	77	78	79	80	81	82	83	84	85	86	87	88	89				
Electricity	0	0	0	0	0	0	0	0	2	2	17	17	17	17	18	18	18	19	19	19	20	20	21	21	22	22	23	24	25	26	27				
Advertising/promotion	0	0	0	0	0	0	0	0	5	5	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	11			
Infrastructure maintenance services	0	0	0	0	0	0	0	0	3	3	10	10	10	10	10	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9			
Infrastructure materials/supplies	0	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1			
Rolling stock materials/supplies	0	0	0	0	0	0	0	0	1	1	9	9	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10			
To telecommunications/computer services	0	0	0	0	0	0	0	0	2	2	9	9	9	9	9	9	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10			
Insurance services/franchise fees etc	0	0	0	0	0	0	0	0	2	2	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6			
Food/related sundries	0	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1			
Unscheduled materials/services	0	0	0	0	0	0	0	0	11	19	32	32	32	32	32	33	33	33	33	33	33	33	33	33	33	33	33	33	33	33	34	34			
Property taxes	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
Contingency	0	0	0	0	0	0	0	0	3	4	12	12	12	12	12	12	12	12	12	12	13	13	13	13	13	13	13	13	14	14	14	14			
Total operating costs, constant dollars	0	0	0	0	0	0	0	0	46	55	176	180	182	183	184	185	187	186	190	192	194	196	200	203	205	209	211	214	217	220	223				
Capital taxes	0	0	0	0	0	0	0	0	0	0	11	10	10	10	10	9	9	9	9	9	8	8	8	8	8	7	7	7	7	8	8				
Inflation adjustment	0	0	0	0	0	0	0	0	16	21	76	84	93	102	111	121	131	142	153	165	178	193	207	222	236	254	272	290	309	330	351				
Total operating costs	0	0	0	0	0	0	0	0	62	76	255	275	285	295	305	316	327	338	352	365	380	398	415	433	451	469	489	511	533	557	582				
Gross operating cash flow	0	0	0	0	0	0	0	0	18	6	430	462	495	531	569	609	653	699	746	797	851	904	964	1,026	1,086	1,168	1,244	1,324	1,409	1,499	1,597				
Large corporations taxes	0	0	0	0	0	0	0	0	0	0	5	5	5	5	5	5	5	5	5	4	4	4	4	4	4	3	3	4	4	4	4	4			
Income taxes	0	0	0	0	0	0	0	0	0	0	0	0	0	0	14	17	40	62	87	111	134	155	170	186	210	257	216	219	241	263	286				
Net operating cash flow	0	0	0	0	0	0	0	0	18	6	425	456	490	511	547	564	596	612	645	693	712	747	790	836	892	900	1,024	1,101	1,165	1,233	1,307				
Interest on secured bank debt	0	0	0	0	0	0	0	0	18	6	231	228	224	218	210	211	200	186	170	168	146	127	106	86	57	26	32	39	30	19	11				
Principal repayments on secured debt	0	0	0	0	0	0	0	0	0	0	15	31	46	62	77	93	106	124	139	155	170	186	201	217	232	0	0	0	0	0	0				
Cash flow available to debenture holders, lease payments and dividends	0	0	0	0	0	0	0	0	0	0	178	197	219	231	260	260	278	302	335	369	394	436	493	533	592	662	902	1,063	1,124	1,214	1,296				
Base interest on convertible debentures	0	0	0	0	0	0	0	0	0	0	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	61	0	0	0	0	0	0			
Excess cash flow available for lease payments, excess interest on convertible debentures and dividends	0	0	0	0	0	0	0	0	0	0	118	136	158	171	199	199	217	242	274	296	333	374	422	473	531	662	902	1,062	1,135	1,214	1,296				
Lease payments	0	0	0	0	0	0	0	0	0	0	66	76	86	95	111	111	121	135	153	167	186	209	236	264	297	430	554	593	634	678	724				
Excess interest on convertible debentures	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	13	23	33	45	0	0	0	0	0	0	0				
Dividends	0	0	0	0	0	0	0	0	0	0	29	39	36	41	48	49	52	58	66	72	75	77	79	81	83	213	230	256	274	293	313				
Residual cash flow for Operating Company	0	0	0	0	0	0	0	0	0	0	24	27	32	34	40	40	43	48	55	60	67	75	84	95	106	178	196	212	227	243	259				
Less: Equipment and technology depreciation	0	0	0	0	0	0	0	0	0	0	(109)	(109)	(109)	(109)	(117)	(117)	(117)	(117)	(129)	(129)	(129)	(130)	(136)	(136)	(136)	(136)	(136)	(136)	(146)	(146)	(146)				
Add: Principal repayments on secured debt	0	0	0	0	0	0	0	0	0	0	15	31	46	62	77	93	106	124	139	155	170	186	201	217	232	0	0	0	0	0	0				
Add: Dividends	0	0	0	0	0	0	0	0	0	0	28	33	30	41	48	49	52	58	66	72	75	77	79	81	83	213	230	256	274	293	313				
Net income (loss) for Operating Company	0	0	0	0	0	0	0	0	0	0	(42)	(10)	7	26	48	64	87	113	133	159	184	207	229	257	296	344	392	422	455	497	542				
PUBLIC FINANCE COMPANY																																			
Infrastructure and civil works interest subsidy	0	0	0	0	0	0	0	0	0	0	(407)	(407)	(407)	(407)	(407)	(407)	(407)	(407)	(407)	(407)	(407)	(407)	(407)	(407)	(407)	(407)	(407)	(407)	(407)	(407)	(407)				
Interest on Government guaranteed debt	0	0	0	0	0	0	0	0	0	0	367	395	393	381	379	376	373	370	367	364	360	355	351	346	340	334	328	321	313	304	295				
Lease payments	0	0	0	0	0	0	0	0	0	0	66	76	86	95	111	111	121	135	153	167	186	209	236	264	297	430	554	593	634	678	724				
Depreciation on infrastructure and civil works	0	0	0	0	0	0	0	0	0	0	20	22	24	26	28	31	33	36	40	43	47	51	56	61	67	73	79	86	94	102	112				
Net income and cash flow of Public Finance Company	0	0	0	0	0	0	0	0	0	0	66	76	88	95	111	111	121	135	153	167	186	209	236	264	297	430	554	593	634	678	724				

[illegible]

Montréal - Ottawa - Toronto 300 kph (via Dorval) (no connect air/no Pearson airport)
Government share of capital costs

In millions of inflated dollars

	Person Value	Pre-construction											Construction and Start-up											Full Operations																			
		1995	1996	1997	Total	1998	1999	2000	2001	2002	2003	2004	Total	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	Total								
Infrastructure and civil works																																											
Construction period interest subsidy	825	0	0	0	0	27	85	203	303	354	360	361	1,730	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0							
Equipment and technology																																											
Construction period interest subsidy	276	0	0	0	0	0	10	31	55	121	167	214	618	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0							
Initial sponsor																																											
Share capital	67	72	0	0	72	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0								
Annual subsidy	1,505	0	0	0	0	0	0	0	0	0	0	0	0	407	407	407	407	407	407	407	407	407	407	407	407	407	407	407	407	407	407	407	407	407	9,543								
Taxes	(369)	0	0	0	0	0	0	0	0	0	0	0	0	(16)	(16)	(16)	(29)	(31)	(55)	(76)	(96)	(111)	(129)	(147)	(165)	(182)	(200)	(222)	(247)	(227)	(230)	(252)	(274)	(296)	(3,032)								
Dividends	(26)	0	0	0	0	0	0	0	0	0	0	0	0	(14)	(16)	(16)	(21)	(24)	(24)	(26)	(29)	(33)	(36)	(37)	(38)	(39)	(40)	(40)	(19)	(21)	(22)	(24)	(26)	(27)	(576)								
Lease payments	(716)	0	0	0	0	0	0	0	0	0	0	0	0	(66)	(78)	(90)	(95)	(111)	(121)	(136)	(153)	(167)	(186)	(200)	(216)	(247)	(267)	(409)	(554)	(593)	(634)	(678)	(724)	(5,988)									
Total per annum		72	0	0	72	27	95	234	358	475	567	595	311	299	294	292	240	217	(63)	(47)	110	81	36	(5)	(51)	(67)	(153)	(372)	(395)	(439)	(503)	(571)	(643)	--									
Total cumulative	--	72	72	72	72	--	123	356	715	1,140	1,757	2,352	2,352	311	609	903	1,155	1,396	1,612	1,796	1,943	2,053	2,193	2,170	2,164	2,113	2,016	1,663	1,496	657	154	(418)	(1,065)	--									

Present value with taxes (cumulative)

Present value without taxes (cumulative)

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

Total net contribution with taxes

Total net contribution without taxes	5,769
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Present value of contribution with taxes

Present value of contribution without taxes	2,003
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In millions of 1993 constant dollars

	Present Value	Re-construction				Construction and Start-up								Full Operations																						
		1995	1996	1997	Total	1998	1999	2000	2001	2002	2003	2004	Total	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	Total	
Infrastructure and civil works	675	0	0	0	0	23	72	105	239	271	263	275	1,326	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Construction period interest subsidy	220	0	0	0	0	0	8	25	44	93	139	155	464	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Equipment and technology	52	67	0	0	67	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Annual subsidy	923	0	0	0	0	0	0	0	0	0	0	0	0	205	277	269	261	254	246	239	232	225	219	212	206	200	194	188	183	178	173	168	163	158	4,530	
Taxes	(194)	0	0	0	0	0	0	0	0	0	0	0	0	(11)	(11)	(10)	(16)	(19)	(33)	(45)	(55)	(61)	(66)	(72)	(76)	(80)	(85)	(89)	(93)	(98)	(104)	(110)	(116)	(123)		
Dividends	(50)	0	0	0	0	0	0	0	0	0	0	0	0	(10)	(11)	(13)	(13)	(15)	(15)	(15)	(17)	(18)	(19)	(20)	(19)	(19)	(19)	(19)	(19)	(19)	(19)	(19)	(19)	(19)		
Lease payments	(300)	0	0	0	0	0	0	0	0	0	0	0	0	(40)	(52)	(58)	(68)	(68)	(67)	(71)	(72)	(69)	(68)	(67)	(100)	(115)	(120)	(130)	(122)	(124)	(125)	(126)	(127)	(291)		
Total per annum	-	67	0	0	-	23	80	130	283	364	422	430	-	218	203	188	168	150	131	108	84	61	43	19	(3)	(25)	(45)	(71)	(107)	(173)	(106)	(207)	(228)	(253)	-	
Total cumulative	-	67	67	67	-	23	103	203	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	867	701	494	265	16	-	

Present value with taxes (cumulative)

Present Value without taxes (cumulative)

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

Total net contribution with taxes

Total net contribution without taxes	2,005
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Present value of contribution with taxes

Present value of contribution without taxes

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

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
Ridership (in millions)	6.6	6.7	6.9	7.1	7.2	7.4	7.6	7.8	8.0	8.2	8.4	8.6	8.8	9.0	9.2	9.4	9.7	9.9	10.1	10.4	10.6
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%	2.43%	2.43%	2.43%	2.43%	2.43%	2.43%
Total operating revenues	\$695	\$736	\$779	\$825	\$874	\$925	\$980	\$1,037	\$1,098	\$1,163	\$1,231	\$1,303	\$1,380	\$1,461	\$1,546	\$1,637	\$1,733	\$1,835	\$1,943	\$2,057	\$2,180
Growth of revenues in percentage	N/A	5.88%	5.88%	5.88%	5.88%	5.88%	5.88%	5.88%	5.88%	5.87%	5.87%	5.87%	5.87%	5.87%	5.87%	5.87%	5.87%	5.87%	5.87%	5.87%	5.98%
Total operating expenses	\$265	\$275	\$285	\$295	\$305	\$316	\$327	\$338	\$352	\$365	\$380	\$399	\$415	\$433	\$451	\$469	\$489	\$511	\$533	\$557	\$583
Growth of expenses in percentage	N/A	3.71%	3.73%	3.46%	3.49%	3.51%	3.53%	3.55%	3.87%	3.88%	3.98%	5.08%	4.11%	4.15%	4.20%	4.02%	4.34%	4.38%	4.43%	4.48%	4.53%
Government funding	(\$407)	(\$407)	(\$407)	(\$407)	(\$407)	(\$407)	(\$407)	(\$407)	(\$407)	(\$407)	(\$407)	(\$407)	(\$407)	(\$407)	(\$407)	(\$407)	(\$407)	(\$407)	(\$407)	(\$407)	(\$407)
Lease payment to Government	\$66	\$76	\$88	\$95	\$111	\$111	\$121	\$135	\$153	\$167	\$186	\$206	\$236	\$264	\$297	\$493	\$554	\$593	\$634	\$678	\$724
Debt service	\$308	\$320	\$331	\$341	\$348	\$365	\$369	\$371	\$370	\$384	\$385	\$387	\$391	\$397	\$395	\$26	\$32	\$30	\$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%	30.62%	30.11%	29.62%	29.18%	28.65%	28.23%	27.84%	27.48%	27.10%	26.72%
Revenues per passenger (A)	\$106	\$109	\$113	\$117	\$121	\$125	\$129	\$133	\$138	\$142	\$147	\$152	\$157	\$163	\$168	\$174	\$179	\$185	\$192	\$198	\$205
Government funding (return) per passenger (B)	\$52	\$49	\$48	\$44	\$41	\$40	\$38	\$35	\$32	\$29	\$26	\$23	\$19	\$16	\$12	(\$9)	(\$19)	(\$19)	(\$22)	(\$26)	(\$30)
B/A	49.09%	44.92%	40.86%	37.78%	33.82%	31.94%	29.18%	26.21%	23.08%	20.65%	17.93%	15.20%	12.38%	9.77%	7.11%	-5.24%	-8.51%	-10.18%	-11.71%	-13.20%	-14.58%

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 infrastructure notes	59.87%	60.39%	60.91%	61.44%	60.32%	60.88%	61.41%	61.95%	60.09%	60.65%	61.18%	61.22%	60.65%	61.17%	61.69%	62.20%	59.90%	60.42%	60.87%	60.61%	60.66%
Percentage of capital assigned to equipment notes	29.69%	29.78%	29.53%	29.08%	30.30%	29.38%	28.18%	26.61%	27.74%	25.64%	23.22%	20.92%	19.11%	15.29%	10.87%	8.95%	10.81%	8.35%	5.48%	3.29%	0.00%
Percentage of capital assigned to debenture holders	9.43%	9.56%	9.69%	9.83%	9.71%	9.88%	10.02%	10.19%	9.97%	10.17%	10.36%	10.50%	10.53%	10.78%	11.05%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Percentage of capital assigned to shareholders	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%	12.76%	16.39%	26.85%	26.23%	31.23%	33.65%	36.13%	39.34%
Debt to equity ratio for operating company																					
Actual	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	0.87	0.42	0.33	0.40	0.30	0.20	0.13	0.04
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																					
Senior debt	1.75	1.78	1.83	1.90	1.98	2.00	2.12	2.26	2.41	2.47	2.57	2.69	3.14	3.39	3.79	N/A	N/A	N/A	N/A	N/A	N/A
Percentage payout ratio (including lease payments)	36.45%	37.24%	38.28%	38.59%	40.24%	39.03%	40.02%	41.53%	43.61%	43.91%	45.95%	48.18%	50.48%	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%	67.38%	67.98%	68.59%	69.15%	69.38%	69.89%	70.38%	70.84%	71.35%	71.77%	72.18%	72.54%	72.90%	73.28%
Net return on invested capital	6.58%	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%	30.00%	32.50%
Pre-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%	9.80%	10.99%	12.42%	13.90%	15.63%	N/A	N/A	N/A	N/A	N/A	N/A
Pre-tax return on share capital	19.83%	22.99%	26.60%	28.76%	33.59%	33.60%	36.58%	40.75%	46.30%	50.38%	52.42%	53.61%	55.04%	56.52%	58.24%	25.94%	29.18%	31.23%	33.39%	35.71%	38.13%
After-tax return on equity (operating company)	-6.59%	-2.00%	1.03%	4.26%	7.37%	9.51%	12.34%	14.91%	18.04%	17.37%	17.98%	17.98%	17.60%	17.37%	17.04%	14.74%	15.43%	17.51%	18.46%	19.19%	19.90%
Cash flow/total debt outstanding (operating company)	4.49%	5.88%	7.47%	8.90%	10.09%	11.34%	13.47%	16.32%	17.34%	20.99%	25.49%	30.66%	36.08%	49.25%	75.78%	N/A	N/A	N/A	N/A	N/A	N/A

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

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 aforementioned 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.

Price Waterhouse

Chartered Accountants

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.

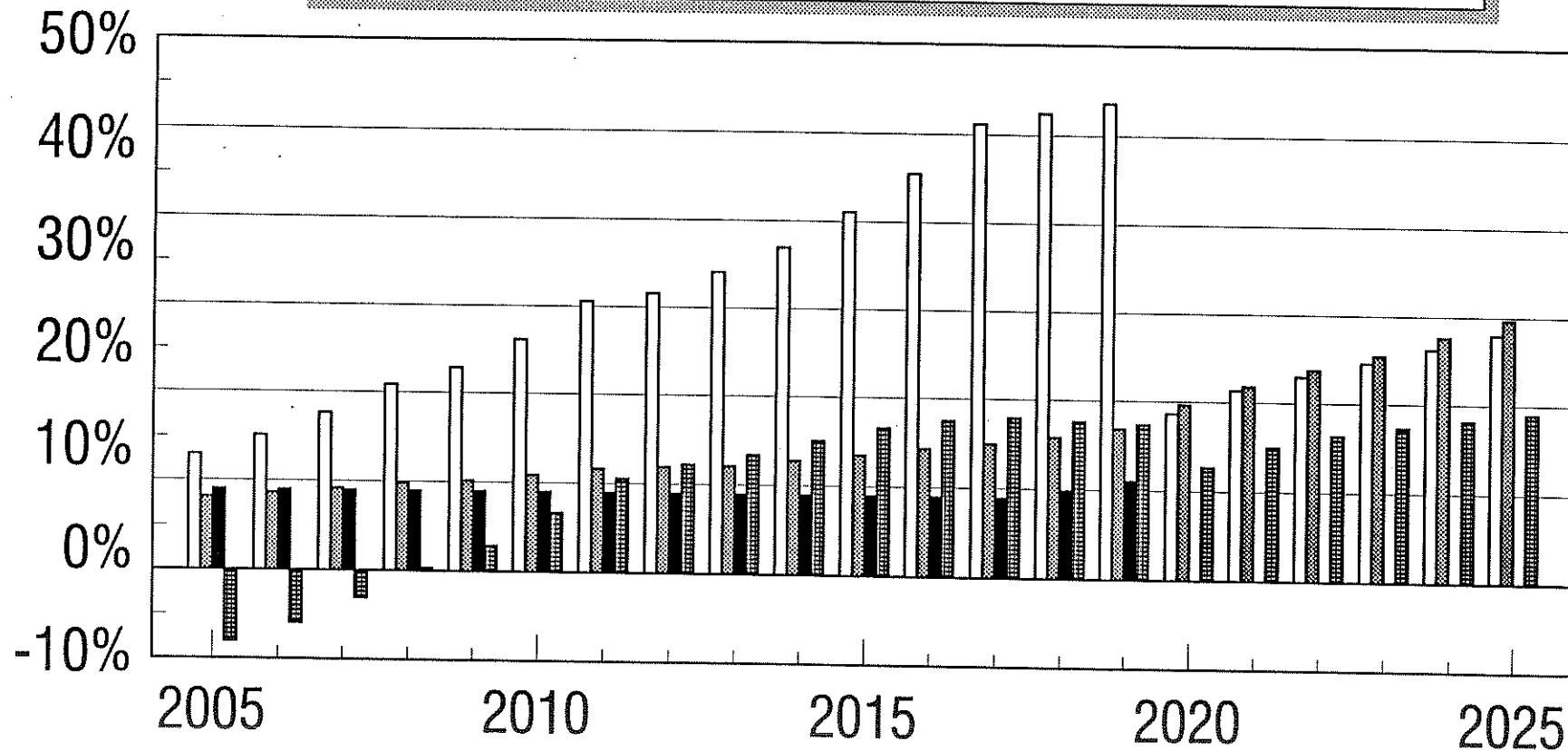
14. Other Assumptions and Hypotheses

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



Dividend yield



Net return on invested capital



Yield on convertible
unsecured debentures



After-tax return on equity
(operating company)

Quebec-Ontario High Speed Rail Project

Quebec-Toronto 300 kph (via Mirabel)

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
Quebec - Toronto 300 kph (via Mirabel)
Balance Sheet
(In millions of inflated dollars)

	Pre-construction			Construction and Start-up								Full Operations																				
	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	
Assets																																
Current assets																																
Cash	\$192	\$143	\$13	\$361	\$292	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
Accounts receivable	0	0	0	0	0	0	0	0	0	4	13	50	52	59	55	56	59	61	62	64	66	66	69	71	73	75	77	79	81	84	86	
Supplies and other inventories	0	0	0	0	0	0	0	0	0	100	200	206	212	219	225	232	239	246	253	261	269	277	285	294	303	312	321	330	340	351	362	
Prepaid expenses	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Fixed Assets at cost	182	143	13	361	292	0	0	0	0	111	223	277	295	254	302	311	320	330	340	350	360	370	381	393	404	416	428	441	454	467	481	506
Infrastructure and civil works																																
Land and Right-of-way	1	2	22	99	191	242	249	249	249	249	249	249	249	249	249	249	249	249	249	249	249	249	249	249	249	249	249	249	249	249	249	
Earthwork/upgrade	13	25	57	185	500	996	1,377	1,401	1,401	1,401	1,401	1,401	1,401	1,401	1,401	1,401	1,401	1,401	1,401	1,401	1,401	1,401	1,401	1,401	1,401	1,401	1,401	1,401	1,401	1,401	1,401	
Stations	3	6	9	9	11	35	90	159	361	361	361	361	361	361	361	361	361	361	361	361	361	361	361	361	361	361	361	361	361	361	361	
Maintenance facilities	2	5	7	8	10	32	80	178	320	320	320	320	320	320	320	320	320	320	320	320	320	320	320	320	320	320	320	320	320	320	320	
Other accommodations	1	1	2	10	45	96	115	115	115	115	115	115	115	115	115	115	115	115	115	115	115	115	115	115	115	115	115	115	115	115	115	
Bridges	4	7	14	36	115	306	525	594	594	594	594	594	594	594	594	594	594	594	594	594	594	594	594	594	594	594	594	594	594	594	594	
Class separations	7	14	32	82	267	666	998	1,067	1,067	1,067	1,067	1,067	1,067	1,067	1,067	1,067	1,067	1,067	1,067	1,067	1,067	1,067	1,067	1,067	1,067	1,067	1,067	1,067	1,067	1,067	1,067	
Track	1	1	7	20	52	170	420	873	800	804	804	804	804	804	804	804	804	804	804	804	804	804	804	804	804	804	804	804	804	804	804	
Deliver of start-up and other costs	2	3	7	23	52																											
Capitalized interest	30	65	157	404	1,251	2,704	4,027	4,744	5,197	5,197	5,197	5,197	5,197	5,197	5,197	5,197	5,197	5,197	5,197	5,197	5,197	5,197	5,197	5,197	5,197	5,197	5,197	5,197	5,197	5,197		
Construction period interest subsidy	0	0	0	0	34	151	409	656	1,069	2,502	2,502	2,502	2,502	2,502	2,502	2,502	2,502	2,502	2,502	2,502	2,502	2,502	2,502	2,502	2,502	2,502	2,502	2,502	2,502	2,502		
Inflation adjustment	2	5	17	89	217	(142)	(895)	(1,369)	(1,935)	(2,502)	(2,502)	(2,502)	(2,502)	(2,502)	(2,502)	(2,502)	(2,502)	(2,502)	(2,502)	(2,502)	(2,502)	(2,502)	(2,502)	(2,502)	(2,502)	(2,502)	(2,502)	(2,502)	(2,502)	(2,502)		
Accumulated depreciation	35	70	174	552	1,469	3,256	4,931	5,987	6,476	6,476	6,476	6,476	6,476	6,476	6,476	6,476	6,476	6,476	6,476	6,476	6,476	6,476	6,476	6,476	6,476	6,476	6,476	6,476	6,476	6,476		
Net infrastructure and civil works	35	70	174	552	1,469	3,256	4,931	5,987	6,476	6,476	6,476	6,476	6,476	6,476	6,476	6,476	6,476	6,476	6,476	6,476	6,476	6,476	6,476	6,476	6,476	6,476	6,476	6,476	6,476	6,476		
Equipment and technology																																
Power distribution system	0	1	7	19	43	131	315	524	661	678	678	678	678	678	678	678	678	678	678	678	678	678	678	678	678	678	678	678	678	678	678	
Signals	0	1	5	14	31	94	226	370	474	496	496	496	496	496	496	496	496	496	496	496	496	496	496	496	496	496	496	496	496	496	496	
Communications	0	0	0	6	14	41	100	166	209	214	214	214	214	214	214	214	214	214	214	214	214	214	214	214	214	214	214	214	214	214	214	
Lighting	0	0	0	0	0	0	0	0	0	191	191	191	191	191	191	191	191	191	191	191	191	191	191	191	191	191	191	191	191	191	191	
Rolling stock	0	2	13	35	79	237	571	961	1,200	1,200	1,200	1,200	1,200	1,200	1,200	1,200	1,200	1,200	1,200	1,200	1,200	1,200	1,200	1,200	1,200	1,200	1,200	1,200	1,200	1,200	1,200	
Capital expenditures	0	0	0	0	0	0	0	0	0	51	104	181	222	296	354	426	502	589	680	776	876	981	1,090	1,202	1,316	1,433	1,552	1,673	1,797	1,924	2,054	
Capitalized interest	0	4	27	74	165	503	1,212	2,016	2,545	2,799	2,850	2,903	2,960	3,021	3,175	3,343	3,516	3,693	3,876	4,063	4,254	4,450	4,650	4,854	5,062	5,274	5,490	5,709	5,932	6,159	6,390	
Construction period interest subsidy	0	0	0	0	7	195	378	655	1,024	1,420	1,420	1,420	1,420	1,420	1,420	1,420	1,420	1,420	1,420	1,420	1,420	1,420	1,420	1,420	1,420	1,420	1,420	1,420	1,420	1,420		
Inflation adjustment	0	0	0	0	(12)	(63)	(164)	(361)	(618)	(901)	(901)	(901)	(901)	(901)	(901)	(901)	(901)	(901)	(901)	(901)	(901)	(901)	(901)	(901)	(901)	(901)	(901)	(901)	(901)	(901)		
Accumulated depreciation	0	0	4	30	95	256	743	1,721	2,661	3,673	4,136	4,136	4,136	4,136	4,136	4,136	4,136	4,136	4,136	4,136	4,136	4,136	4,136	4,136	4,136	4,136	4,136	4,136	4,136	4,136		
Net equipment and technology	0	4	30	95	256	743	1,721	2,661	3,673	4,136	4,136	4,136	4,136	4,136	4,136	4,136	4,136	4,136	4,136	4,136	4,136	4,136	4,136	4,136	4,136	4,136	4,136	4,136	4,136	4,136		
Net fixed assets	35	74	204	637	1,724	3,999	6,652	8,726	10,143	10,615	10,470	10,320	10,167	10,012	9,993	9,927	9,859	9,787	9,709	9,625	9,537	9,445	9,349	9,248	9,143	9,034	8,920	8,801	8,677	8,548	8,414	
Totals assets	\$217	\$217	\$217	\$1,016	\$2,016	\$3,999	\$6,652	\$8,726	\$10,254	\$10,846	\$10,747	\$10,605	\$10,461	\$10,315	\$10,305	\$10,148	\$9,988	\$9,867	\$9,789	\$9,775	\$9,597	\$9,405	\$9,383	\$9,226	\$9,007	\$8,780	\$8,744	\$8,493	\$8,291	\$8,016	\$7,822	
Liabilities and Owners' Equity																																
Current liabilities																																
Bank indebtedness	\$0	\$0	\$0	\$0	\$0	\$49	\$121	\$121	\$220	\$327	\$311	\$314	\$313	\$305	\$439	\$424	\$399	\$419	\$690	\$626	\$595	\$565	\$563	\$556	\$578	\$736	\$756	\$555	\$399	\$164	\$0	
Accounts payable and accruals	0	0	0	0	0	0	0	0	12	27	60	61	62	62	62	63	63	64	65	65	67	69	69	70	71	72	73	73	73	76		
Current portion of long-term debt	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Long-term liabilities																																
Equipment and technology notes	0	0	0	0	0	665	1,525	2,106	2,397	2,377	2,397	2,377	2,377	2,197	2,097	1,977	1,897	1,789	1,496	1,298	1,078	899	779	600	400	200	0	0	0	0		
Infrastructure and civil works notes	0	0	0	295	1,230	3,093	4,994	6,055	6,789	6,855	6,789	6,789	6,789	6,789	6,565	6,516	6,563	6,505	6,441	6,372	6,297	6,216	6,129	6,036	5,937	5,832	5,719	5,600	5,479	5,353		
Owners' Equity																																
Convertible unsecured debenture	0	0	0	506	569	640	720	811	912	1,026	1,026	1,026	1,026	1,026	1,026	1,026	1,026	1,026	1,026	1,026	1,026	1,026	1,026	1,026	1,026	1,026	1,026	1,026	1,026	1,026	1,026	
Share capital	217	217	217	217	217	217	217	217	217	217	217	217	217	217	217	217	217	217	217	217	217	217	217	217	217	217	217	217	217	217	217	
Retained earnings (deficit)	0	0	0	0	0	0	0	0	0	(119)	(212)	(309)	(409)	(511)	(613)	(715)	(817)	(919)	(1,021)	(1,123)	(1,225)	(1,327)	(1,429)	(1,531)	(1,633)	(1,735)	(1,837)	(1,939)	(2,041)	(2,143)		
Totals liabilities and owners' equity	\$217	\$217	\$217	\$1,016	\$2,016	\$3,999	\$6,652	\$8,726	\$10,254	\$10,846	\$10,747	\$10,605	\$10,461	\$10,315	\$10,305	\$10,148	\$9,988	\$9,867	\$9,789	\$9,775	\$9,597	\$9,405	\$9,383	\$9,226	\$9,007	\$8,780	\$8,744	\$8,493	\$8,291	\$8,016	\$7,822	
Debt to equity ratio																																

Quebec—Ontario High Speed Rail Project
Quebec — Toronto 300 kph (via Mirabel)
Statements of Operations
(In millions of inflated dollars)

OPERATOR	Pre-construction			Construction and Start-up							Full Operations																					
	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	
Revenue	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$49	\$166	\$646	\$665	\$893	\$1,021	\$1,200	\$1,400	\$1,600	\$1,800	\$2,000	\$2,200	\$2,400	\$2,600	\$2,800	\$3,000	\$3,200	\$3,400	\$3,600	\$3,800	\$4,000	\$4,200	\$4,400	
Less Agency commissions	0	0	0	0	0	0	0	0	(3)	(9)	(36)	(37)	(36)	(39)	(40)	(41)	(42)	(43)	(44)	(45)	(46)	(48)	(49)	(50)	(52)	(53)	(54)	(56)	(57)	(59)	(61)	
Less Credit card discount	0	0	0	0	0	0	0	0	(6)	(12)	(5)	(8)	(6)	(7)	(7)	(7)	(7)	(7)	(8)	(8)	(8)	(9)	(9)	(9)	(9)	(9)	(9)	(10)	(10)	(10)	(10)	
Net passenger revenue, constant dollars	0	0	0	0	0	0	0	0	46	155	606	622	859	955	1,113	1,257	1,413	1,571	1,730	1,890	2,050	2,210	2,370	2,530	2,690	2,850	3,010	3,170	3,330	3,490	3,650	
Net freight revenue, constant dollars	0	0	0	0	0	0	0	0	0	31	32	33	34	35	36	36	39	39	40	41	43	44	46	47	49	50	52	53	55	57	59	
Inflation adjustment	0	0	0	0	0	0	0	0	16	60	271	307	344	395	429	475	526	579	637	698	763	833	906	986	1,073	1,164	1,261	1,364	1,474	1,591	1,717	
Net revenue	0	0	0	0	0	0	0	0	62	215	908	961	1,016	1,076	1,139	1,204	1,274	1,348	1,426	1,509	1,597	1,689	1,787	1,891	2,001	2,117	2,239	2,369	2,507	2,652	2,806	
Operating Costs, constant dollars																																
Labour	0	0	0	0	0	0	0	0	17	39	97	99	99	100	101	102	103	104	105	106	107	108	109	110	112	113	114	115	116	117	118	
Electricity	0	0	0	0	0	0	0	0	2	4	22	22	22	23	23	24	24	24	25	25	26	26	27	27	28	29	30	30	30	30	30	
Advertising/promotion	0	0	0	0	0	0	0	0	5	8	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	
Infrastructure maintenance services	0	0	0	0	0	0	0	0	9	16	16	16	16	15	14	13	13	12	12	12	12	12	12	12	12	12	12	12	12	12	12	
Infrastructure materials/supplies	0	0	0	0	0	0	0	0	1	2	2	2	2	2	2	2	2	3	3	3	3	4	7	6	9	10	11	12	13	14	16	
Rolling stock materials/supplies	0	0	0	0	0	0	0	0	1	4	12	13	13	13	13	14	14	14	14	15	15	15	15	16	16	17	17	17	18	19	19	
Telecommunications/computer services	0	0	0	0	0	0	0	0	2	4	9	9	9	9	9	9	9	9	9	9	9	10	10	10	10	10	10	10	10	10	11	
Insurance services/franchise fees etc.	0	0	0	0	0	0	0	0	2	4	9	9	9	9	9	9	9	9	9	9	9	10	10	10	10	10	10	10	10	10	11	
Food/related sundries	0	0	0	0	0	0	0	0	0	1	1	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	
Unscheduled materials/services	0	0	0	0	0	0	0	0	11	26	40	41	41	41	41	41	41	41	41	41	41	42	42	42	42	42	42	42	42	42	42	
Property taxes	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Contingency	0	0	0	0	0	0	0	0	3	7	16	17	17	17	17	17	17	17	17	17	17	17	18	18	19	19	19	19	19	20	20	
Total operating costs, constant dollars	0	0	0	0	0	0	0	0	47	107	249	249	245	247	248	250	252	253	256	258	261	268	271	274	278	282	285	290	294	296	303	303
Capital taxes	0	0	0	0	0	0	0	0	0	0	15	14	14	13	13	12	12	12	11	11	11	10	10	10	10	8	8	8	9	9	10	
Inflation adjustment	0	0	0	0	0	0	0	0	16	41	102	114	126	136	150	163	177	191	205	222	239	261	280	300	321	344	368	393	419	447	477	
Total operating costs	0	0	0	0	0	0	0	0	64	148	357	371	369	367	411	425	440	456	473	482	511	538	561	584	609	634	661	691	722	754	793	833
Gross operating cash flow	0	0	0	0	0	0	0	0	(2)	67	550	590	632	678	727	779	804	892	953	1,017	1,065	1,151	1,227	1,307	1,392	1,483	1,579	1,679	1,785	1,898	2,017	
Large corporations taxes	0	0	0	0	0	0	0	0	0	0	7	7	7	7	6	6	6	6	6	5	5	5	5	5	5	4	4	4	4	5	5	
Income taxes	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Net operating cash flow	0	0	0	0	0	0	0	0	(2)	67	543	583	625	671	723	775	804	892	953	1,017	1,065	1,151	1,227	1,307	1,392	1,483	1,579	1,679	1,785	1,898	2,017	
Interest on secured and bank debt	0	0	0	0	0	0	0	0	(2)	67	295	292	296	291	271	268	253	235	218	212	187	160	129	107	74	35	44	45	33	24	10	
Principal repayments on secured debt	0	0	0	0	0	0	0	0	0	0	20	40	60	80	100	120	140	160	180	200	220	240	260	280	300	0	0	0	0	0	0	
Cash flow available to debenture holders, lease payments and dividends	0	0	0	0	0	0	0	0	0	0	228	251	278	311	332	367	412	422	449	479	529	569	629	685	755	1,156	1,304	1,366	1,478	1,574	1,678	
Less interest on convertible debentures	0	0	0	0	0	0	0	0	0	0	92	92	92	92	92	92	92	92	92	92	92	92	92	92	92	92	92	92	92	92	92	
Excess cash flow available for lease payments, excess interest on convertible debentures and dividends	0	0	0	0	0	0	0	0	0	0	136	159	186	219	240	275	319	330	357	387	430	476	535	593	662	1,004	1,304	1,366	1,478	1,574	1,678	
Lease payments	0	0	0	0	0	0	0	0	0	0	80	94	110	130	142	163	189	195	212	229	255	282	317	352	393	630	773	821	876	933	995	
Excess interest on convertible debentures	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Dividends	0	0	0	0	0	0	0	0	0	0	29	33	39	45	50	57	66	74	80	89	99	111	114	116	131	270	297	306	326	348	369	
Residual cash flow for Operating Company	0	0	0	0	0	0	0	0	0	0	27	32	37	44	49	55	64	66	71	77	86	95	107	119	132	219	251	277	296	315	336	
Less: Equipment and technology depreciation	0	0	0	0	0	0	0	0	0	0	(166)	(166)	(166)	(166)	(171)	(171)	(171)	(173)	(184)	(184)	(184)	(184)	(184)	(184)	(184)	(184)	(184)	(184)	(184)	(184)	(184)	
Add: Principal repayments on secured debt	0	0	0	0	0	0	0	0	0	0	20	40	60	80	100	120	140	160	180	200	220	240	260	280	300	0	0	0	0	0	0	
Add: Dividends	0	0	0	0	0	0	0	0	0	0	29	33	39	45	50	57	66	74	80	89	99	111	114	116	131	270	297	306	326	348	369	
Net income (loss) for Operating Company	0	0	0	0	0	0	0	0	0	0	(60)	(61)	(60)	(59)	(58)	(57)	(56)	(55)	(54)	(53)	(52)	(51)	(50)	(49)	(48)	(47)	(46)	(45)	(44)	(43)	(42)	
PUBLIC FINANCE COMPANY																																
Infrastructure and civilworks interest subsidy	0	0	0	0	0	0	0	0	0	0	(649)	(649)	(649)	(649)	(649)	(649)	(649)	(649)	(649)	(649)	(649)	(649)	(649)	(649)	(649)	(649)	(649)	(649)	(649)	(649)	(649)	
Interest on Government guaranteed debt	0	0	0	0	0	0	0	0	0	0	617	614	611	608	604	600	595	591	585	580	574	567	559	551	543	533	523	511	499	485	471	
Lease payments	0	0	0	0	0	0	0	0	0	0	80	94	110	130	142	163	189	195	21													

In millions of inflated dollars

In millions of 1993 constant dollars[illegible]

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

Statistics and general information																					
	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
Ridership (in millions)	8.8	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	12.1	12.4	12.7	13.0	13.3	13.6	13.9
Growth of ridership in percentage	N/A	2.34%	2.34%	2.34%	2.34%	2.34%	2.34%	2.34%	2.34%	2.34%	2.34%	2.34%	2.34%	2.34%	2.34%	2.34%	2.34%	2.34%	2.34%	2.34%	2.34%
Total operating revenues	\$908	\$961	\$1,016	\$1,076	\$1,138	\$1,204	\$1,274	\$1,348	\$1,426	\$1,509	\$1,597	\$1,689	\$1,787	\$1,891	\$2,001	\$2,117	\$2,239	\$2,369	\$2,507	\$2,652	\$2,806
Growth of revenues in percentage	N/A	5.81%	5.81%	5.81%	5.81%	5.81%	5.81%	5.81%	5.81%	5.80%	5.80%	5.80%	5.80%	5.80%	5.80%	5.80%	5.80%	5.80%	5.80%	5.80%	5.82%
Total operating expenses	\$357	\$371	\$384	\$397	\$411	\$425	\$440	\$456	\$473	\$492	\$511	\$538	\$561	\$584	\$609	\$634	\$661	\$691	\$722	\$754	\$789
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%	3.90%	5.29%	4.14%	4.18%	4.23%	4.07%	4.37%	4.44%	4.49%	4.54%	4.60%
Government funding	(\$649)	(\$649)	(\$649)	(\$649)	(\$649)	(\$649)	(\$649)	(\$649)	(\$649)	(\$649)	(\$649)	(\$649)	(\$649)	(\$649)	(\$649)	(\$649)	(\$649)	(\$649)	(\$649)	(\$649)	(\$649)
Lease payment to Government	\$80	\$94	\$110	\$130	\$142	\$163	\$189	\$195	\$212	\$229	\$255	\$282	\$317	\$352	\$393	\$430	\$773	\$821	\$876	\$933	\$995
Debt service	\$407	\$424	\$440	\$453	\$463	\$480	\$495	\$487	\$490	\$504	\$499	\$492	\$481	\$488	\$487	\$218	\$44	\$45	\$33	\$24	\$10
Operating expenses to revenues ratio	39.37%	36.58%	37.81%	36.98%	36.13%	35.30%	34.58%	33.82%	33.19%	32.59%	32.03%	31.87%	31.37%	30.89%	30.43%	29.94%	29.53%	29.16%	28.79%	28.45%	28.12%
Revenues per passenger (A)	\$104	\$107	\$111	\$114	\$118	\$122	\$127	\$131	\$135	\$140	\$145	\$149	\$154	\$160	\$165	\$171	\$176	\$182	\$189	\$195	\$202
Government funding (feet) per passenger (B)	\$65	\$62	\$59	\$55	\$53	\$49	\$46	\$44	\$41	\$39	\$38	\$32	\$29	\$25	\$21	\$1	(\$19)	(\$13)	(\$17)	(\$21)	(\$25)
B/A	62.80%	57.74%	53.00%	48.27%	44.51%	40.35%	36.08%	33.63%	30.64%	27.80%	24.66%	21.69%	18.54%	15.72%	12.80%	0.80%	-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	2023	2024	2025
Capital structure ratios																					
Percentage of capital assigned to infrastructure notes	64.16%	64.71%	65.28%	65.85%	66.51%	66.09%	66.66%	66.94%	66.74%	66.34%	66.89%	67.44%	66.72%	66.90%	67.45%	67.09%	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%	25.74%	24.99%	23.94%	23.01%	23.63%	21.87%	19.98%	17.39%	16.19%	13.49%	9.80%	8.45%	8.71%	6.59%	4.85%	2.08%	0.00%
Percentage of capital assigned to debenture holders	9.80%	9.73%	9.86%	10.01%	10.02%	10.17%	10.34%	10.48%	10.37%	10.58%	10.78%	10.99%	11.01%	11.20%	11.48%	11.78%	0.00%	0.00%	0.00%	0.00%	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%	6.08%	8.41%	11.28%	11.79%	24.34%	25.98%	27.70%	30.04%	32.49%
Debt to equity ratio for operating company																					
Actual	2.77	3.01	3.19	3.20	3.41	3.28	3.01	2.73	2.64	2.25	1.85	1.47	1.24	0.95	0.67	0.60	0.60	0.49	0.41	0.30	0.22
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																					
Senior debt	1.75	1.78	1.82	1.88	1.96	2.01	2.12	2.26	2.40	2.47	2.67	2.88	3.15	3.38	3.73	N/A	N/A	N/A	N/A	N/A	N/A
Percentage payout ratio (including lease payments)	36.98%	37.62%	38.50%	39.80%	40.44%	41.37%	43.25%	43.58%	44.52%	45.10%	45.98%	48.90%	51.22%	52.88%	55.16%	79.23%	77.38%	77.47%	78.24%	78.80%	79.53%
Gross margin	60.63%	61.42%	62.19%	63.04%	63.87%	64.67%	65.44%	66.18%	66.81%	67.41%	67.97%	68.13%	68.63%	69.11%	69.57%	70.00%	70.47%	70.85%	71.21%	71.55%	71.88%
Net return on invested capital	8.12%	8.84%	9.20%	9.85%	10.15%	10.87%	11.65%	11.95%	12.11%	12.82%	13.59%	14.44%	15.10%	15.94%	16.98%	18.07%	22.14%	23.89%	25.53%	27.64%	29.66%
Pre-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%	9.00%	9.00%	9.00%	9.89%	11.04%	17.73%	N/A	N/A	N/A	N/A	N/A
Pre-tax return on share capital	12.95%	15.10%	17.72%	20.88%	22.92%	26.24%	30.51%	31.49%	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%
After-tax return on equity (operating company)	-8.04%	-6.92%	-3.13%	0.30%	2.92%	6.71%	10.57%	12.27%	13.42%	15.12%	16.62%	17.59%	17.98%	17.70%	17.42%	7.28%	15.56%	16.50%	17.44%	18.28%	19.01%
Cash flow/ total debt outstanding (operating company)	3.82%	5.11%	6.58%	8.30%	9.38%	11.45%	14.14%	16.06%	17.06%	20.59%	25.57%	32.79%	39.04%	50.66%	75.92%	N/A	N/A	N/A	N/A	N/A	N/A

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 feasibility 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 incorporated 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.

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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 leaves 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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1. 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 EUROTUNNEL 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 :

- 1) Evidently 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 risk", 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 EUROTUNNEL.

(1) B.N.P. was closely involved in both project. The Texas HSR was officially abandoned in August 1994, due to lack of sufficient public support.

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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 resources 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 EUROTUNNEL, and are well known to the financial community. All efforts should be made to reduce this risk by 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 risk.

II. 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 mentioned 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). Propective 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 11 above, it is our conclusion that the option most likely to attract a substantial amount of private capital is a public/private partnership.

III. 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.

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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.

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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 creation 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.

(1) 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 Eurotunnel 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 "privatibility" like :

- . Legislative work
- . Environmental studies
- . Permitting
- . Land acquisition
- . Earthworks
- . Grade separation
- . Stations
- . Ballast
- . Track
- . Electrification
- . Signalling
- . Control and maintenance centers
- . Rolling Stock
- . Engineering

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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 Ballast or even Stations downward (representing conceivably above 50 % of the Project, including Project Management) if the project returns prove sufficient 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

Each of these two shares of the Project will be financed by two separate entities *under a joint management structure* (see 3 below) :

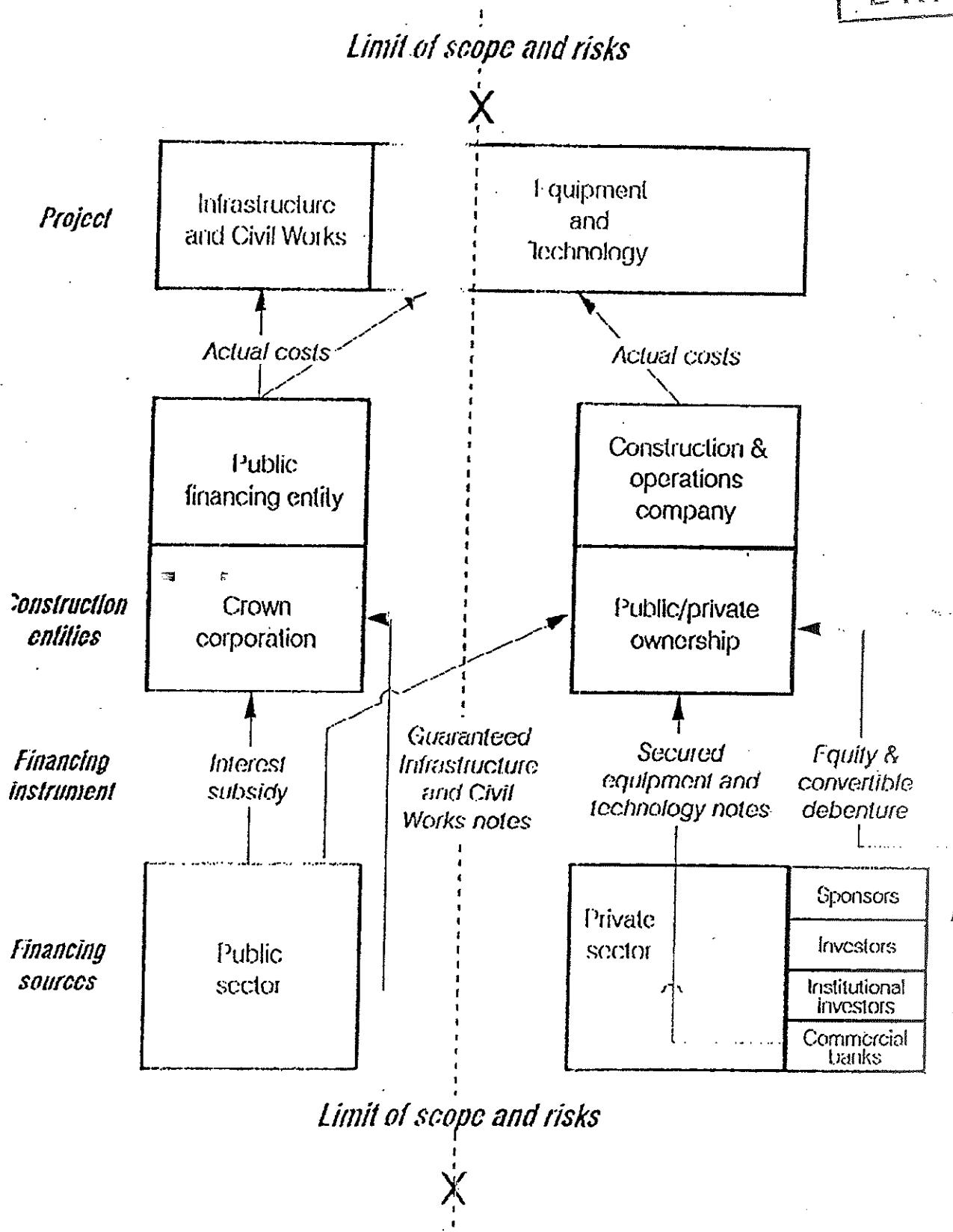
- (i) A Public Financing Entity (PFE), presumably a crown corporation will take charge of the financing of the public share (described by simplification as "Infrastructure and Civil Works"), including all the risks and contingencies associated to it.

CHART 1

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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 PFI 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 PFI 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

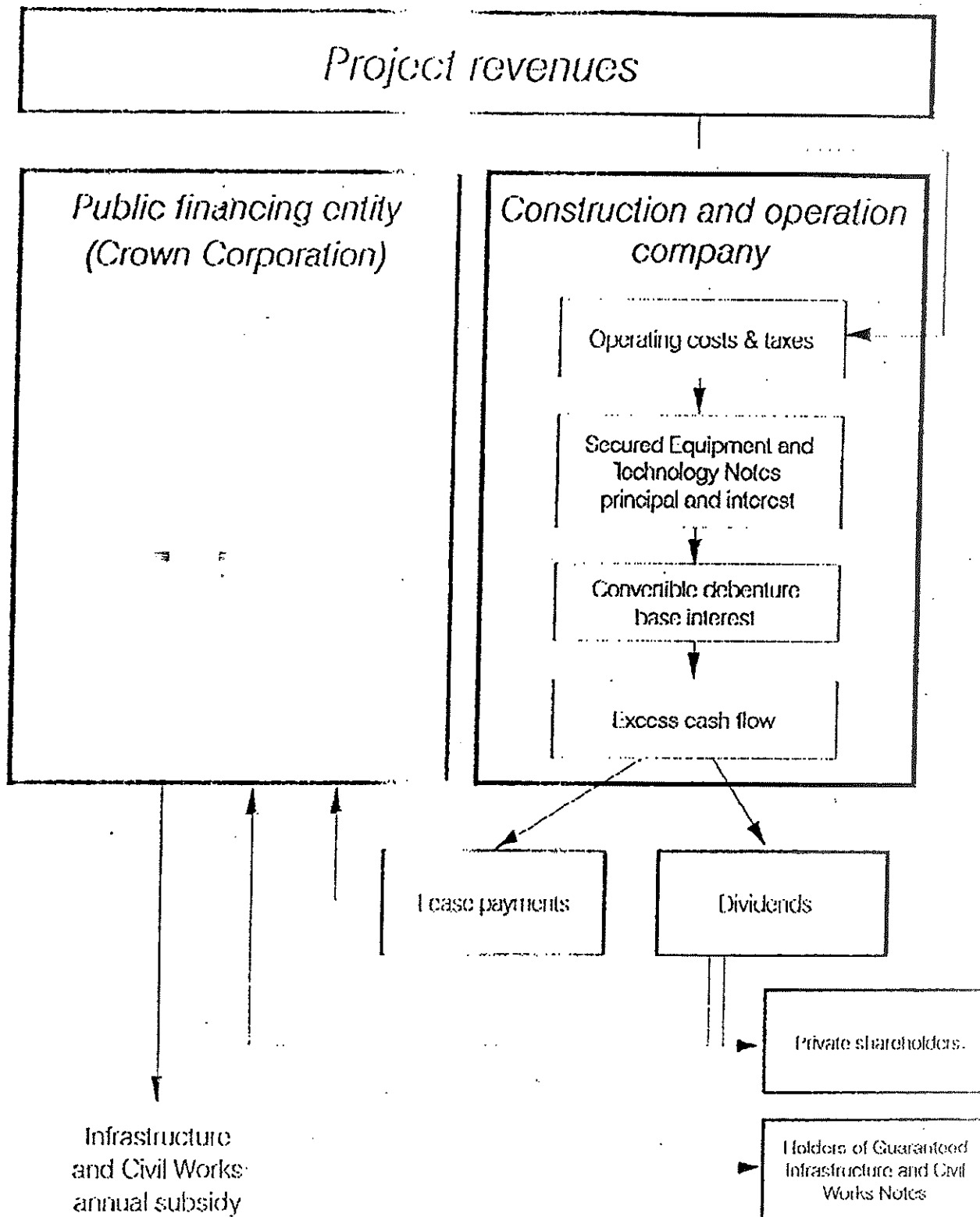
Although contractual arrangements for the project implementation are not specifically part of the Financial Analysis brief, they are briefly discussed below to the extent they have a significant bearing on the financial structure.

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.

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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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Option 3 (Discussion) - Tentative Contractual Scheme

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