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**QUÉBEC/ONTARIO
HIGH SPEED RAIL PROJECT**

SOCIOECONOMIC VARIABLES

*FORECASTS FOR 2005 AND 2025
THREE SCENARIOS*

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December 1992

Preface

This document presents forecasts for the socioeconomic variables to be used in the High Speed Rail (HSR) Study. Most of the forecasts are based on information received from Informetrica Ltd., Employment and Immigration Canada and Statistics Canada. A first section presents a schematic table of the requested data. A second section concentrates on the general approach in designing scenarios and presents and discusses three macroeconomic scenarios; the base case with its assumptions and two other scenarios. Those are the same scenarios discussed later in the document but in this section they are presented in a more macroeconomic context. A third section presents the methodology used to estimate the variables to be forecast. Section four discusses the results obtained for each variable and under each scenario. Finally, section five presents the forecasts in a detailed tabular form.

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1- LIST OF DATA REQUESTED

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Listed in the table below are required and desired socioeconomic data. Zonal data refers to a geographic distribution as defined in the 1988 VIA rail study. While regional data would normally refer to the sum of all zones in each province, they, in fact, refer to provincial data. Our analysis has shown that the sum of the zones in each province is so close to the provincial number, that provincial numbers could easily be used to represent the sum of the zones in each province.

QUÉBEC/ONTARIO HIGH SPEED RAIL STUDY			
Required Socioeconomic Data			
	National	Regional	Zonal*
Population			X
Number of Households			X
Employment			X
Hhld Income (cur. \$)			X
GDP (cur. \$)		X	
Cars/Hhld		X	
English/French		X	
LF by Occup.		X	
Desired Socioeconomic Data			
Hourly Salary		X	
Cost Accident/mode	X		
Hhld Exp. on Transp.		X	
CPI		X	
CPI (Transport)		X	

* Geography defined according to the 1988 VIA Rail study

2- THE MACROECONOMIC SCENARIOS

1- THREE MACROECONOMIC SCENARIOS

If the future is a moving target, the motion of this target is becoming more uncertain. Over the last few years, it has become increasingly evident that the unfolding of economic activity is more than the mere extrapolation of historic trends or the result of stable socioeconomic relationships. This is basically due to important institutional, social and demographic changes, particularly affecting Canada. This condition as well as the long time horizon used in this study, reinforces the need for alternative economic scenarios.

Scenarios are socioeconomic narratives and they consist of interactions between hundreds of socioeconomic variables. The economic scenarios selected for this study tend to describe the possible future in three different ways: there is the "High" case scenario, the "Base" case scenario and the "Low" case scenario. Each scenario's name characteristically reflects the relative strength of the overall economic growth it portrays. In fact, growth in total GDP was the primary concern when choosing the scenarios. A major characteristic of scenarios is that each one is internally consistent, meaning that the value of each variable describes an economic system that is in equilibrium. For this HSR exercise we proceeded by deriving a Base case scenario and subsequently altered the basic assumptions in order to derive the two other scenarios.

These economic scenarios come from adaptations of results of large econometric model simulations. Based on information known today, they describe the possible evolution of events from now to year 2005 and to year 2025. Notwithstanding the numerous technical interrelationships many econometric models contain and which are more or less similar in many models, the "solution" of each model is also dependent on a user-defined (exogenous) set of assumptions. This is where scenarios take shape. To arrive at these forecasts, two basic sets of exogenous assumptions were altered, reflecting the different scenarios. These are grouped here in two major broad categories:

- a) External economic environment
- b) Domestic economic environment
 - i) Demographics
 - ii) Fiscal and monetary policy
 - iii) Industrial assumptions

A- THE BASE CASE

a) Assumptions

The External Environment: Canada is one of the world's most open economies and for that reason, the foreign economic environment plays an important role in any Canadian forecast. Assumptions regarding the external environment are on our trading partners' economic growth and exchange rate variations. In this base case macroeconomic forecast to year 2025, it is assumed that U.S. and rest of the world economic growth will average about 2.3 and 2.4 per cent a year respectively (all growth rates are corrected for inflation).

It is also assumed the Canadian dollar will remain in the neighbourhood of 85¢ U.S. On the other hand, energy prices will only increase modestly. On average, and until 2005, increases in crude oil prices will be slightly higher than increases in the general price level in the Canadian economy i.e. around 4.0 per cent a year. In this forecast, NAFTA (North American Free Trade Agreement) is implemented.

The Domestic Environment: i) *Demographic* assumptions are very important for long term projections of the Canadian economy. Demographics determine the level of demand for consumer goods and services and housing, which account for about two thirds of total economic activity. On the supply side, demographics determine the size of the labour force. In essence, when large productivity gains are not anticipated, it is demographic forces that determine long-term potential economic growth.

In this forecast, Canadian population is expected to increase by about 1.1 per cent a year on account of higher fertility rate and international immigration. There is still some room, albeit small, for the labour force's overall participation rate to increase and boost economic growth.

ii) *Fiscal and monetary policy* are assumed to remain restrictive over the foreseeable future. The size of the federal deficit and the government's determination to deal with it will restrict federal government expenditures and lower transfer payments to the provinces which will in turn limit fiscal stimulation by the provinces.

iii) *Industrial assumptions* relate mostly to government policies and private decisions with regard to investment projects and spending (i.e. hydro-electric projects, the federal government Green Plan, fish quotas, etc.).

b) Forecast

In the Base case scenario, the period 1992- 2025 is characterized by slow population and employment growth and modest expenditures by governments, reflecting fiscal restraint and, compared to the period 1984-1992, slower growth in the U.S. economy.

As globalization continues to take shape, economic growth will be increasingly dependent on exports. The FTA and the upcoming NAFTA will also help set the stage for continued gains in exports. However, given the relative size of exports, growth in that category would have to be very strong and sustained for a long period of time in order to yield a big effect on total demand. We do not expect the export boom alone will be sufficient to warrant higher economic growth rates. Increased investments and consumer expenditures are also expected to lead growth.

Over the period 1992-2025, GDP growth in Canada will average 2.5 per cent a year. This is lower than recent historical rates of growth. The major factor behind this slowdown is the deceleration in the growth rate of the labour force and employment. Inflation (Consumer Price Index) will average 3.1 per cent.

In the medium term to 2005, growth in household income is not expected to be commensurate with growth in total production on account of a slowing wage bill. This is the result of lower wage demands held back by a high unemployment rate and also a slowdown in employment gains, both of which will contribute to the erosion of household income. In fact, in that period, it is expected that investment and exports will be the major sources of growth, not consumption. As long as employment growth remains subpar, income growth and thus consumer expenditures on goods and services will not make any enduring gains.

Over the period 2005-2025, continued slower growth in the labour force will be a limiting factor on GDP. In the longer run, an improved price level performance may be hindered by higher wage demands following a demographically-induced tightness in the labour market. However, a slightly higher Canadian dollar will limit inflation to 3.5 per cent despite higher demand for consumer goods and services in Eastern Europe which will raise prices worldwide. Economic liberalization is assumed to follow political liberalization.

Over the forecast period 1992-2025, GDP growth in Ontario and Québec will average respectively 2.7 and 2.3 per cent.

B- THE MACRO HIGH AND LOW FORECASTS

The **High case scenario** assumes higher U.S. economic growth, lower interest rates and, most importantly, a surge in productivity. In this scenario, the government's "Productivity, Competitiveness and Prosperity" initiative through improved human resources, higher investment effort, adoption of new technologies and better infrastructure is highly successful and NAFTA is implemented. Canada reaps important benefits from the FTA and NAFTA. World economic growth is also higher. Also realized are important infrastructure investments and the PEI Fixed link. Commensurate with the higher economic growth, this scenario also assumes slightly higher immigration levels.

Higher economic growth and lower interest rates in Canada lead to an improvement of government balances and leave more room for stimulative fiscal policy when needed. Whereas GDP growth rate for the period 1992-2025 in the Base case scenario averaged 2.5 per cent per year, in the High scenario this rate increases to 3.2 per cent. Ontario and Québec growth rates reach 3.5 and 3.0 per cent respectively. Growth in household income is commensurate with economic growth.

The **Low case scenario** is characterized by lower productivity gains resulting from a series of adverse events. Unsuccessful GATT negotiations on agricultural products and for safeguards for the increasingly important information sector (software copyrights, etc) lead to increased worldwide protectionist measures on other sectors of the economy. Increased social unrest in the ex-USSR countries brings major delays in relative economic prosperity in those countries therefore restricting exports from Canada and the Western world. On the domestic front, the government's Prosperity initiative does not gather momentum due to a lack of cooperation between major economic players and results are disappointing. Along with the protectionist measures, immigration is restricted. Fertility rates drop faster than expected and the aging of the Canadian population accelerates, adding more pressure for the delivery of social programs.

The lower investment effort results in lower productivity gains and higher prices. In order to fend off any further price increases originating from the external sector and to maintain a reasonable inflow of capital, real interest rates are kept high, pushing up the value of the Canadian dollar. As a consequence, our exports growth diminishes. In an attempt to reduce the deficit increase triggered by higher interest rates and lower economic growth, government expenditures increase at a much slower rate. As a result, average annual growth rate for GDP in Canada over the period 1992-2025 is reduced to 1.9 per cent. Similarly, rates for Ontario and Québec drop to 2.0 and 1.7 per cent respectively. Real increases in household incomes become marginal.

3- METHODOLOGY FOR FORECASTING SOCIOECONOMIC VARIABLES

Introduction

As mentioned earlier, the forecasts presented here are based on scenarios that are the result of large econometric model simulations. There are forecasts for the national economy as well as for the provincial economies. However, forecasts of socioeconomic variables on a zonal basis are non-existent. In addition, forecasts of some variables are only available on a national basis and for the rest, no forecasts extend beyond year 2020. Moreover, in terms of the forecasting period they cover, provincial forecasts are shorter than national forecasts. For all our estimates, when required, we proceeded from the Canada level, to the provincial level and to the zonal level. Our main sources are TIM (The Informetrica Model) and results of the population and household forecast model of Statistics Canada.

A- Required Data

Population

To derive the population forecast for each zone we had to assume that, relative to the provincial population, the population in all zones, taken together, will increase. This is evident from the historical data and is likely to continue in the near future. Continued urbanization is probably the most important reason behind this phenomenon. To derive the relative size of the sum of all zones in 2005 we proceeded as follows.

$$(\Sigma \text{Pop}_j / \text{Pop})_{2005} = \{[(\Sigma \text{Pop}_j / \text{Pop})_{1992-1981}]\}^{(1/11)^{13}} (\Sigma \text{Pop}_j / \text{Pop})_{1992} \quad (1)$$

where $(\Sigma \text{Pop}_j / \text{Pop})_{2005}$ = Ratio, pop. total zones within prov. j to provincial pop. in 2005
 $\{[(\Sigma \text{Pop}_j / \text{Pop})_{1992-1981}]\}^{(1/11)^{13}}$ = Rate of growth to 2005 of ratio based on 1981-92 growth
 $(\Sigma \text{Pop}_j / \text{Pop})_{1992}$ = Ratio, pop. total zones within prov. j to provincial pop. in 1992

To derive the 2025 ratio, we proceeded in a similar fashion. We then proceeded to derive the total zonal population for year 2005.

$$\Sigma \text{Pop}_{ij2005} = (\text{Pop}_{j2005}) (\Sigma \text{Pop}_j / \text{Pop})_{2005} \quad (2)$$

where $\Sigma \text{Pop}_{ij2005}$ = Population in total zones in province j in 2005
 Pop_{j2005} = Population in province j in year 2005
 $(\Sigma \text{Pop}_j / \text{Pop})_{2005}$ = Ratio, population in total zones to provincial population j in 2005

To derive the 2025 total zonal population count, we proceeded in a similar fashion. We then proceeded to derive the population level in each individual zone for year 2005. For this, we have assumed that each zone will retain its 1992 relative weight to the total of all zones. Industrial restructuring continues to take place in Canada's two largest provinces but we assume that future changes will be slower. Although over the last decade we have witnessed relative drops in the shares in the two main urban centres and rapid, above average, growth elsewhere but mostly in suburbs, there is reason to believe that this movement will stabilize. Assuming that it does not, there is an equal chance that urban centres may regain some of their lost weight in the longer run. In other words, trend will reverse is as likely as that it will continue.

$$\text{Pop}_{ij2005} = (\text{Pop}_i / \Sigma \text{Pop})_{1992} (\Sigma \text{Pop}_{ij2005}) \quad (3)$$

where Pop_{ij2005} = Population in zone i and province j in 2005

$(Pop_{ij}/\sum Pop_{ij})_{1992}$ = Ratio of zone i relative to total zones in province j in 1992
 $(\sum Pop_{ij2005})$ = Population in all zones in province j in 2005

To derive the 2025 forecasts, we proceeded in a similar fashion.

Number of Households

The methodology for households is exactly the same as the one applied to population. To derive the household count forecast for each zone we had to assume that, relative to the provincial number of households, the number of households in all zones, taken together, will increase. This is evident from the historical data and is likely to continue in the near future. Continued urbanization is probably the most important reason behind this phenomenon. To derive the relative size of the sum of all zones in 2005 we proceeded as follows.

$$(\sum Hhld_{ij}/Hhld)_{2005} = \{[(\sum Hhld_{ij}/Hhld)_{1992-1981}]^{(1/11)}\}^{13} (\sum Hhld_{ij}/Hhld)_{1992} \quad (4)$$

where $(\sum Hhld_{ij}/Hhld)_{2005}$ = Ratio, households in total zones to provincial households j in 2005
 $\{[(\sum Hhld_{ij}/Hhld)_{1992-1981}]^{(1/11)}\}^{13}$ = Rate of growth to 2005 of ratio based on 1981-92 growth
 $(\sum Hhld_{ij}/Hhld)_{1992}$ = Ratio, hhlds in total zones to households in province j in 1992

To derive the 2025 ratio, we proceeded in a similar fashion. We then proceeded to derived the total zonal households count for year 2005.

$$\sum Hhld_{ij2005} = (Hhld_{j2005}) (\sum Hhld_{ij}/Hhld)_{2005} \quad (5)$$

where $Hhld_{j2005}$ = Households in total zones in province j in 2005
 $Hhld_{j2005}$ = Households in province j in year 2005
 $(\sum Hhld_{ij}/Hhld)_{2005}$ = Ratio, households in total zones to household in province j in 2005

To derive the 2025 total zonal household count, we proceeded in a similar fashion. We then proceeded to derive the number of households in each individual zone for year 2005. As for population, we have assumed that each zone will retain its 1992 relative weight to the total of all zones. As argued above, industrial restructuring continues to take place in Canada's two largest provinces but we assume that future changes will be slower. The same arguments we used for population are applicable to households.

$$Hhld_{ij2005} = (Hhld_{ij}/\sum Hhld_{ij})_{1992} (\sum Hhld_{ij2005}) \quad (6)$$

where $Hhld_{ij2005}$ = Households in zone i and province j in 2005
 $(Hhld_{ij}/\sum Hhld_{ij})_{1992}$ = Ratio of zone i relative to total zones in province j in 1992
 $(\sum Hhld_{ij2005})$ = Households in all zones in province j in 2005

To derive the 2025 individual zonal forecasts, we proceeded in a similar fashion.

Employment

The methodology for forecasting employment is also the same as that applied to population. To derive the employment count forecast for each zone we had to assume that, relative to provincial employment, employment in all zones, taken together, will increase. This is evident from the historical data and is likely to continue in the near future. Continued industrial restructuring is probably the most important reason behind this phenomenon. To derive the relative size of the sum of all zones in 2005 we proceeded as follows.

$$(\sum \text{Empl}_{ij} / \text{Empl}_j)_{2005} = \{[(\sum \text{Empl}_{ij} / \text{Empl}_j)_{1992-1981}]^{(1/11)}\}^{13} (\sum \text{Empl}_{ij} / \text{Empl}_j)_{1992} \quad (7)$$

where $(\sum \text{Empl}_{ij} / \text{Empl}_j)_{2005}$ = Ratio, employment in total zones to provincial employment j in 2005
 $\{[(\sum \text{Empl}_{ij} / \text{Empl}_j)_{1992-1981}]^{(1/11)}\}^{13}$ = Rate of growth to 2005 of ratio based on 1981-92 growth
 $(\sum \text{Empl}_{ij} / \text{Empl}_j)_{1992}$ = Ratio, employment in total zones to employment in prov. j in 1992

To derive the 2025 ratio, we proceeded in a similar fashion. We then proceeded to derive total zonal employment count for year 2005.

$$\sum \text{Empl}_{ij2005} = (\text{Empl}_{j2005}) (\sum \text{Empl}_{ij} / \text{Empl}_j)_{2005} \quad (8)$$

where Empl_{j2005} = Employment in total zones in province j in 2005
 Empl_{j2005} = Employment in province j in year 2005
 $(\sum \text{Empl}_{ij} / \text{Empl}_j)_{2005}$ = Ratio, employment in total zones to employment in province j in 2005

To derive the 2025 total zonal employment we proceeded in a similar fashion. We then proceeded to derive the employment level in each individual zone for year 2005. For this, we have assumed that each zone will retain its 1992 relative weight to the total of all zones. Industrial restructuring continues to take place in Canada's two largest provinces but we assume that future changes will be slower. This restructuring has affected the distribution of employment much more than it has affected population and households. Although some type of employment (automotive, steel milling) may be declining in some urban centres there is reason to believe that this movement will stabilize. Assuming that it does not, there is an equal chance that urban centres may gain employment in the service/information industries.

$$\text{Empl}_{ij2005} = (\text{Empl}_i / \sum \text{Empl}_i)_{1992} (\sum \text{Empl}_{ij2005}) \quad (9)$$

where Empl_{ij2005} = Employment in zone i and province j in 2005
 $(\text{Empl}_i / \sum \text{Empl}_i)_{1992}$ = Ratio of zone i relative to total zones in province j in 1992
 $(\sum \text{Empl}_{ij2005})$ = Employment in all zones in province j in 2005

To derive the 2025 employment zonal forecasts, we proceeded in a similar fashion.

Household Income

Household income (HHI) is made up of all incomes earned and non-earned by the members of an average household. Earned income includes such things as wages and salaries and income from interests and dividends, these are also known as market incomes, i.e. those earned by factors of production. Non-earned

income or transfers (also referred to as non-market income) includes such things as UI payments, old age pensions and family allowances. Forecasts of HHI are not available on any geographical basis. However, forecasts of a somewhat similar income concept, personal income per household (PIH), exist on a provincial and a national level.

Therefore, estimating HHI for years 2005 and 2025 consisted in using the historical relationship that exists between HHI and PIH. Conceptual and definitional differences exist between HHI and PIH estimates. Used in the context of the national accounting system, PIH is a more inclusive concept and is not directly comparable to HHI. While HHI includes mostly cash receipts, PIH also includes imputed income (such as imputed rent), an employer's benefit payments on behalf of the employee (such as contributions to the pension fund) as well as self-produced and consumed goods. Therefore, rather than investigating the relationship that may exist between the *levels* of HHI and PIH, we examined the relationship between the two concepts in terms of *growth rates*. Analysis of recent history indicates that for Ontario and Québec, growth in PIH is comparable to growth in HHI. And if this is true for recent history, longer term growth rates should even be more comparable. For that reason we have approximated HHI growth by PIH growth over the sub periods 1992-2005 and 2005-2025.

$$\text{On that basis: } \text{HHI}_{1992-1985} \approx \text{PIH}_{1992-1985} \quad (10)$$

$$\text{and } \text{HHI}_{2005-1992} \approx \text{PIH}_{2005-1992} \quad (11)$$

$$\text{HHI}_{2025-2005} \approx \text{PIH}_{2025-2005} \quad (12)$$

From that point on, the methodology to derive zonal HHI for years 2005 and 2025 is similar to the one used to derive population estimates.

To derive the total zonal PIH forecast we assumed that, relative to provincial PIH, PIH in all zones, taken together, will increase. This is evident from the historical data and is likely to continue in the near future. Industrial restructuring, albeit slowing down, continues to be the most probable important reason behind this phenomenon. To derive the relative size of the sum of all zones to the province in 2005 we proceeded as follows.

$$(\sum \text{PIH}_j / \text{PIH})_{2005} = \{[(\sum \text{PIH}_j / \text{PIH})_{1992-1981}]\}^{(1/11)^{13}} (\sum \text{PIH}_j / \text{PIH})_{1992} \quad (13)$$

where $(\sum \text{PIH}_j / \text{PIH})_{2005}$ = Ratio, PIH in total zones to provincial PIH j in 2005

$\{[(\sum \text{PIH}_j / \text{PIH})_{1992-1981}]\}^{(1/11)^{13}}$ = Rate of growth to 2005 of ratio based on 1981-92 growth

$(\sum \text{PIH}_j / \text{PIH})_{1992}$ = Ratio, PIH in total zones to PIH in prov. j in 1992

To derive the 2025 ratio, we proceeded in a similar fashion. We then proceeded to derived total zonal PIH for year 2005.

$$\sum \text{PIH}_{j,2005} = (\text{PIH}_{j,2005}) (\sum \text{PIH}_j / \text{PIH})_{2005} \quad (14)$$

where $\text{PIH}_{j,2005}$ = PIH in total zones in province j in 2005

$\text{PIH}_{j,2005}$ = PIH in province j in year 2005

$$(\sum PIH_{ij}/PIH)_{2005} = \text{Ratio, PIH in total zones to PIH in province j in 2005}$$

To derive the 2025 total zonal PIH, we proceeded in a similar fashion. We then proceeded to derive the PIH level in each individual zone for year 2005. For this, we have assumed that each zone will retain its 1992 relative weight to the total of all zones. Industrial restructuring continues to take place in Canada's two largest provinces but we assume that future changes will be slower. This restructuring has affected the distribution of PIH, of which wages and salaries are a large component, much more than it has affected population and households. Although some industries may not command as high wages as in the recent past, (automotive, steel milling) there is reason to believe that this movement will stabilize. Assuming that it does not, there is an equal chance that urban centres might regain some highly paying employment in the service/information industries.

$$PIH_{ij2005} = (PIH_{ij}/\sum PIH_{ij})_{1992} (\sum PIH_{ij2005}) \quad (15)$$

where PIH_{ij2005} = PIH in zone i and province j in 2005

$(PIH_{ij}/\sum PIH_{ij})_{1992}$ = Ratio of zone i relative to total zones in province j in 1992

$(\sum PIH_{ij2005})$ = PIH in all zones in province j in 2005

To derive the 2025 PIH forecasts, we proceeded in a similar fashion.

Gross Domestic Product

Since forecasts for this variable are requested at the provincial level only and since they are also available at that level, the need to develop a methodology does not exist. Data was based on economic simulations by Informetrica Ltd.

Car Ownership per Household

This variable is requested at the provincial level only but no reasonable forecast is available. To derive provincial forecasts for years 2005 and 2025 we proceeded as follows. Estimates were based on results of simple time series analysis where time was the explanatory variable. Data extended from 1981 to 1992.

$$\text{Cars/Hhld} = a + b(\text{time}) \quad (16)$$

- For Québec, the results were as follows:

$$\text{Cars/Hhld} = 1.0807 + 0.005645(\text{Trend}) \quad (17)$$

(.0012) $R^2 = .69$

where "Trend" would equal 1 for 1981, 2 for 1982 etc.

For Ontario, the results were as follows:

$$\text{Cars/Hhld} = 1.2663 + 0.007378(\text{Trend}) \quad (17)$$

(.0007) $R^2 = .91$

where "Trend" would equal 1 for 1981, 2 for 1982 etc.

Investigative analysis using real growth in household incomes has yielded similar results.

3- METHODOLOGY

English/French Distribution

Based on work done by the (now disbanded) Demographic Secretariat shows that the percent change in Francophone and Anglophone regions in Canada are respectively 0.01 and 0.06 per cent. Successive application of these rates to the 1992 estimates yields estimates for 2005 and 2025. The percentage of the minority language was residual.

Labour Force Population by Occupation

Forecasts for years 2005 and 2025 were based on Canada Employment and Immigration "COPS" (Canadian Occupational Projection System) estimates. Since economic growth projections used in COPS appeared to be different than the ones used here, adjustments were made to account for the estimated employment levels in each province and for each of the forecast year. The different scenarios were built on the basis of the same labour force distribution but according to different labour force levels. Therefore, under all scenarios, the most important changes appear to be in the managerial group. Primary and processing occupations also showed important changes.

B- Desired Data

Hourly Salaries

Forecasts for this variable were requested at the provincial level only. Estimates for 2005 and 2025 were based on growth in labour income from simulations by Infrometrica Ltd. To bring the increase in labour income to correspond to the increase in hourly salaries, adjustments were made to account for employment increases and for the reduction of the number of hours worked as follows. First, we derived labour income (LI) per employee in year 1992 in province j.

$$(LI/Employee)_{1992j} \quad (16)$$

We then adjust that income to account for a reduced workweek. We used an asymptotic trend of the workweek reduction the Canadian economy has experienced over the recent past. This has yielded an adjusted labour income per employee defined as such:

$$(ALI/Employee)_{1992j} \quad (17)$$

In the following step we derive the deflated (using the CPI) labour income per employee.

$$\{(ALI/Employee)_{1992j}\}/CPI_{1992} \quad (18)$$

This methodology was also used on the 2005 and 2025 labour income estimates to derive 1992-2005 and 2005-2025 growth rates that were alternatively applied to corresponding base year estimates.

Cost of Accidents by Mode

Forecasts for this variable were requested on a national basis. This variable represents fatality rates by mode and an estimate for the value of a human life. Both are Transport Canada statistics. To reflect future safety improvements, we have assumed, that for all modes, fatality rates will drop by one per cent a year. To arrive at a value for human life in 2005 and 2025, we have inflated the 1992 estimate using the respective consumer price index, the assumption being that human life appreciates at the same rate as

inflation. Therefore the Value of a Human Life in 2005 becomes:

$$VHL_{2005} = (VHL_{1992}) (1+CPI)^{13} \quad (19)$$

A similar approach is used to arrive at the price of a human life in year 2025.

HHId Expenditures on Transport

Forecasts for household expenditures on transportation are not available at the provincial level. However, a national proxy exists. It is consumer expenditures on transportation. First we derived the following:

$$TE_{Canada}/GDP_{Canada} \quad (19)$$

which represents the proportion Canadian consumers spend on transportation relative to the GDP in a particular year i . We estimated that proportion for years 1992, 2005 and 2025 from which we derived growth rates for the periods 1992-2005 and 2005-2025.

Knowing the ratio of total household transportation expenditures to the GDP in each province in 1992, we then consecutively applied those growth rates to that ratio as follows, first for year 2005:

$$(TE/GDP)_j_{2005} = (TE_{Canada}/GDP_{Canada})_{1992-2005} (TE/GDP)_j_{1992} \quad (20)$$

then for year 2025

$$(TE/GDP)_j_{2025} = (TE_{Canada}/GDP_{Canada})_{2005-2025} (TE/GDP)_j_{2005} \quad (21)$$

where $(TE/GDP)_j_{2005}$ = Ratio of total household expenditures to provincial GDP in province j and in year 2005

$(TE_{Canada}/GDP_{Canada})_{1992-2005}$ = Growth rate of the ratio of consumer expenditures on transportation relative to GDP

$(TE/GDP)_j_{1992}$ = Represents the ratio of total household expenditures to provincial GDP in province j and in year 1992

Once these ratios were derived, we proceeded to calculate total household expenditures on transportation as follows.

$$TE_{j2005} = (GDP_{j2005}) (TE/GDP)_j_{2005}$$

where TE_{j2005} = Total household expenditures on transportation in province j in 2005.

(GDP_{j2005}) = Gross Domestic Product in province j in year 2005

$(TE/GDP)_j_{2005}$ = Ratio of total household expenditures to provincial GDP in province j and in year 2005

We repeat the same procedure to derive TE_{j2025}

Expenditures on transportation are commensurate with the size of the economy. Higher economic growth leads to higher family expenditures on transportation. Relative to the provincial GDP, this expenditure appears to drop. However, since under all scenarios, transportation prices are expected to increase at a slower rate than prices in the economy, in real terms, this drop is less apparent.

Consumer Price Index

Long term CPI forecasts are not available provincially, however, GDP deflators are. An analysis of the relationship between historical GDP deflators and CPI (excluding the period affected by the GST) reveals a similarity between the rate of change in both indexes. The analysis revealed that the rate of change in the CPI is some 10 per cent higher than the rate of change in the GDP deflator. In other words, if during a certain period time the GDP deflator increased, on average, by 5 per cent a year, the CPI would show a 5.5 per cent increase. We have applied this simple rule of thumb to forecasts of provincial CPIs.

CPI (Transportation)

During most of the seventies, even when oil prices started to escalate, transportation prices were, on average, 5 per cent lower than the general price index in Québec and some 7 per cent lower in Ontario, the reason being that the transportation sector was, during that period, witnessing large productivity increases that tended to slow down price increases. During the early eighties, however, oil prices skyrocketed and transportation prices were increasing at a higher rate than the general price level in the economy. Based on that evidence, we have assumed that, on average, in any one year, the level of transportation prices in Ontario, would be about 3.5 per cent lower than the general price level. In Québec, we have assumed that the comparative advantage of transportation prices vis-à-vis prices in the economy would be around 1 per cent.

4- DISCUSSION OF SCENARIO RESULTS

4- DISCUSSION OF SCENARIO RESULTS

Introduction

Comparisons between scenarios may be misleading when variables are expressed in current (not deflated) dollars. For instance, an evaluation of a change in the standard of living of a household can be effectively measured only if inflation is taken into account. Low growth scenarios are usually accompanied by higher inflation rates than in the base case scenario, making most of the increase in current dollar values illusory.

A- BASE CASE

In the Base case scenario, the period 1992-2025 is characterized by:

- slow population and employment growth;
- modest expenditures by governments, reflecting fiscal restraint;
- slower growth in the U.S. economy; and
- increased investments and consumer expenditures.

a) Required Data

Population

We expect the Canadian population to increase at the rate of 1.1 per cent a year from base year 1992 to year 2005 and at almost 1 per cent a year from 2005 to 2025. Based on these rates, in 2005, the Canadian population reaches 31.7 million and 37.5 million in 2025. We have assumed a 1.8 births per woman of child-bearing age, well below the long term equilibrium level of 2.1 births. Meanwhile, the net immigration flow reaches 188,000 persons in 2025. There are no significant changes in mortality rates.

Since the Canada forecast is essentially the result of provincial totals, it is expected that the Ontario population will reach 12.2 million in 2005 and 15.7 million in 2025. The respective numbers for Québec are 7.8 and 8.7 million. Over the period 1992-2025 population in Ontario grows by 1.2 per cent a year and by only 0.7 per cent in Québec.

Number of Households

During the period under study, growth in households is higher than population growth because household formation lags population growth by some 20-30 years. Household formation at present and in the near future reflect the contribution of the baby boom generation to household growth. On that account, the number of households in Canada will grow at about 1.6 per cent a year during the period 1992-2005 and at 1.1 per cent in the following twenty years to 2025. Based on these rates, Canada is expected to number 12.5 million households in 2005 and 15.7 million in 2025. In year 2025, Ontario and Québec will respectively have 6.5 million and 3.8 million households, representing average annual growth rates of about 1.7 and 1.0 per cent a year during the period 1992-2025.

Employment

Increases in the production of goods and services originate from two basic sources: increases in employment and/or increases in productivity (which is another way of saying "working more efficiently"). During the period 1992-2005, employment growth in Canada is expected to grow at the rate of 1.5 per cent a year. During the following twenty years to 2025, that rate will drop to 0.8 per cent. From 12.3 million persons in 1992, employment is expected to reach 17.3 million in year 2025, an average annual rate of increase of 1.0 per cent.

This performance mirrors demographic and institutional changes. An aging population goes hand in hand with a lower participation rate as older age groups have lower participation rates. In addition, changes in work habits (retirement age, education/work cycle) appear to favour lower participation rates, mostly among men. Given this behaviour, before we reach year 2015, population growth will start to exceed labour force growth. However, a vital question remains: will participation rates of women of different age groups converge towards those of men of the same age group? In this scenario, we think they will.

In year 2025, employment in Ontario and Québec will reach 7.5 and 3.9 million respectively. Hence, from 1992, Ontario's employment will grow by 1.4 per cent a year and Québec by 0.9 per cent.

Household Income

Over the period 1992-2025, we expect household income in Ontario and Québec to increase at the annual rate of 3.3 and 3.4 per cent respectively. From sub-period 1992-2005 to sub-period 2005-2025, in both provinces, rates are expected to slowdown. From \$56,583 in 1992 (current dollars), household income in Ontario will reach \$162,961 in 2025 while in Québec it will grow from \$42,573 to \$125,728. In this scenario we expect some convergence of incomes in Québec relative to Ontario to take place mostly during the sub-period 1992-2005.

Gross Domestic Product

Under this scenario, GDP growth in Canada will average 2.5 per cent a year to 2025. For Ontario and Québec, the rates are 2.7 and 2.5 per cent respectively. For the sub-period 1992-2005 the rates for Canada, Ontario and Québec are respectively 2.7, 2.9 and 2.6 per cent. Mainly for demographic reasons, sub-period 2005-2025 will witness a slowdown in those rates to 2.4 per cent for Canada, 2.5 per cent for Ontario and 2.4 per cent for Québec.

Car Ownership per Household

Under the Base case scenario, we have estimated that car ownership increases at the annual rate of slightly over 7/1000 in Ontario and close to 6/1000 in Québec. Using those rates, in Ontario, in years 2005 and 2025, this scenario yields 1.451 and 1.598 autos/Hhld respectively. For Québec, these ratios are 1.222 and 1.335 autos/Hhld.

English/French Distribution

For Ontario we expect that 96.4 per cent of its population in 2005 and 96.8 per cent in 2025 will be English speaking. For Québec, the respective French speaking numbers for those same years are 90.5 and 90.6 per cent. In other words, Québec is becoming more and more Francophone but at a much lower rate than Ontario is becoming more and more Anglophone.

Labour Force Population by Occupation

Under this scenario, over the period 1992-2025, total labour force grows by 1.0 per cent a year in Ontario and by 0.6 per cent in Québec. By 2025, total labour force reaches 7.6 million in Ontario and 4.2 in Québec.

b) Desired Data

Hourly Salaries

Under this scenario, hourly salaries in Ontario and Québec increase slightly faster than inflation. In Ontario they reach \$24.32 in 2005 and \$59.09 in year 2025. In Québec the progression is lower: \$22.18 in 2005 and \$49.85 in 2025.

Cost of Accidents by Mode

As mentioned in the section on methodology, fatality rates have been lowered for all scenarios. However, for our base case scenario, we start with a value of human life worth \$1.5 million and inflate it using the base case Consumer Price Index. Accordingly, the value is raised to \$2.3 million in 2005 and to \$4.1 million in 2025.

HHId Expenditures on Transport

From \$22.6 billion dollars expenditures on transportation in Ontario in 1992, households will spend \$43.6 billion in 2005 and \$90.2 billion in 2025. For Québec, the values are \$26.3 and \$52.2 billion.

Consumer Price Index

Inflation in Ontario is running a shade higher than in Québec. Over the whole period 1992-2025, Ontario's CPI is increasing at an average annual rate of 3.0 per cent against 2.9 per cent for Québec.

CPI (Transportation)

Under this scenario, the transportation component of the CPI reaches 332.50 in 2025 in both Ontario and Québec. In other words, and generally, if consumers paid \$100 for a particular transportation service in 1986, this same service will cost them \$332.50 in year 2025.

B- HIGH CASE

The High case scenario assumes:

- higher U.S. and World economic growth;
- lower interest rates;
- a surge in productivity through improved human resources and a higher investment effort;
- important infrastructure investments, and
- an improvement of government balances and leaves more room for stimulative fiscal policy.

a) Required Data

Population

Under this scenario, population growth is higher than in the base case not only because we have assumed a slightly higher fertility rate but we have assumed that improved economic conditions would lead to higher immigration levels and less emigration than in the base case. In years 2005 and 2025 Ontario's population reaches respectively 12.5 and 16.7 million. In Québec, the numbers are 8.0 and 9.3 million.

Number of Households

Under the high growth scenario, the number of households is commensurate with the population count. In other words, we have not increased nor lowered the number of persons per household. In 2025, Ontario has almost 7 million households while Québec has slightly over 4 million.

Employment

Higher economic growth partly results from higher employment (the other part being a higher productivity). Therefore, under this scenario, employment increases at a faster rate than under the base case. In 2025, there are almost 8 million workers in Ontario and 4.2 million in Québec.

Household Income

- Higher economic growth leads to higher prosperity that is reflected in higher household incomes. From \$56,583 in 1992, household income reaches \$222,467 in 2025 in Ontario. In Québec the progression is slightly smaller: from \$42,573 to \$154,105.

Gross Domestic Product

Under this scenario, there are not only more Canadians working, but they are working smarter. In 2025, GDP reaches \$1,508 billion in Ontario and \$729 billion in Québec.

Car Ownership per Household

Under the Base case scenario, we have estimated car ownership to increase at the annual rate of over 7/1000 in Ontario and close to 6/1000 in Québec. For the high growth scenario, we have assumed that

this rate would be 5 per cent higher per year. In 2025, an average Ontario household will have 1.764 automobiles; in Québec, that number is 1.432.

English/French Distribution

It was assumed that higher economic growth leads to higher cultural diversity and vice versa. Under this assumption, proportions of English and French regions grow at a slightly lower rate than under the base case scenario. In 2025, English speaking Ontario residents account for 97.1 per cent of the province's French and English population compared to 97.5 per cent in the base case. In Québec, the Francophones as a proportion of the French and English population reaches 90.5 per cent; it was 90.3 per cent in 1992.

Labour Force Population by Occupation

Under this scenario, over the period 1992-2025, total labour force grows by 1.3 per cent a year in Ontario and by 0.7 per cent in Québec. By 2025, total labour force reaches 8.3 million in Ontario and 4.4 in Québec.

b) Desired Data

Hourly Salaries

Although salaries under this scenario seem only slightly higher than under the base case scenario, real salaries (deflated by the CPI) are much higher. In 2025 and in current dollars in Ontario they reach \$60.28 and \$51.40 in Québec.

Cost of Accidents by Mode

For the high growth scenario, the value of a human life is \$2.5 million in 1992 and reaches \$3.5 and \$5.9 million in 2005 and 2025 respectively. We used the high growth scenario's CPI rates to inflate the 1992 value of the human life figure.

HHId Expenditures on Transport

Expenditures on transportation are commensurate with the size of the economy. Higher economic growth leads to higher family expenditures on transportation. However, this expenditure relative to the provincial GDP appears to drop. Since under all scenarios, transportation prices are expected to increase at a slower rate than prices in the economy, this drop is less abrupt in real terms. Under this scenario, in 2025, Ontario households spend \$98 billion on transportation compared to Québec's \$53.2 billion.

Consumer Price Index

Under the high growth scenario, inflation is lower. From 1992 to 2025, prices in Ontario, are expected to increase by 2.5 per cent a year (compared to 3.0 per cent in the base case). In Québec the increase is a shade lower.

CPI (Transportation)

Higher productivity gains that characterize this scenario also originate from the transportation sector. Since we have also assumed that higher productivity leads to lower prices, transportation prices slow down under this scenario. In 2025 in Ontario, the index reaches 283.1 (332.5 in the base case), and in Québec it reaches 273.9 (332.2 in the base case).

C- LOW CASE

This Low case scenario is characterized by:

- lower productivity gains resulting from a series of adverse events;
- increased worldwide protectionist measures;
- lower exports from Canada and the Western world;
- restricted immigration;
- faster than expected drops in fertility rates and the consequent aging of the Canadian population accelertes, adding more pressure for the delivery of social programs;
- high real interest rates, pushing up the value of the Canadian dollar; and
- a much slower rate of increase of government expenditures.

a) Required Data

Population

Under this scenario, population growth is lower than in the base case not only because we have assumed a slightly lower fertility rate but because we have also assumed that poor economic conditions would lead to lower immigration levels than in the base case. In years 2005 and 2025 Ontario's population reaches respectively 12.1 and 14.8 million. In Québec, the numbers are 7.5 and 8.1 million.

Number of Households

Under the low growth scenario, the number of households in 2025 reaches 6.2 million in Ontario and 3.5 million in Québec. We have not changed the number of persons per household.

Employment

Lower economic growth is partly the result of lower employment growth. Under this scenario, employment increases at a lower rate than under the base case. In 2025, there are 6.8 million workers in Ontario and 3.6 million in Québec.

Household Income

Lower economic growth leads to lower standard of living that is itself reflected in lower household incomes. From \$56,583 in 1992, household income reaches \$181,784 in 2025 in Ontario. In Québec the progression is similar: from \$42,573 to \$137,565.

Gross Domestic Product

Under this scenario, there are less Canadians at work, and they are less productive. In 2025, GDP reaches \$1,277 billion in Ontario and less than \$657 billion in Québec.

Car Ownership per Household

Under the Base case scenario, we have estimated the car ownership to increase at the annual rate of over 7/1000 in Ontario and close to 6/1000 in Québec. For the low growth scenario, we have assumed that this rate would be 5 per cent lower per year. In 2025, an average Ontario household will have 1.432 automobiles; in Québec, that number is 1.208.

English/French Distribution

It was assumed that lower economic growth leads to lower cultural diversity and vice versa. Under this assumption, proportions of English and French regions grow at a slightly higher rate than under the base case scenario. In 2025, English speaking Ontario residents account for 97.9 per cent of the province's French and English population (compared to 97.5 per cent in the base case). In Québec, the Francophones as a proportion of the French and English population reaches 90.7 per cent; it was 90.3 per cent in 1992.

Labour Force Population by Occupation

Under this scenario, over the period 1992-2025, total labour force grows by 0.9 per cent a year in Ontario and by 0.4 per cent in Québec. By 2025, total labour force reaches 7.3 million in Ontario (one million less than in the high case) and 4.0 million in Québec (400,000 less than in the high case).

b) Desired Data

Hourly Salaries

If on the face, salaries under this scenario seem slightly higher than under the base case scenario, real salaries (deflated by the CPI) are much lower. In 2025 and in current dollars in Ontario they reach \$61.44 and \$52.39 in Québec.

Cost of Accidents by Mode

For the low growth scenario, the human life is valued at \$.5 million in 1992 and reaches \$0.8 and \$1.6 million in 2005 and 2025 respectively. We used the low growth scenario's CPI rates to inflate the 1992 value of the human life figure.

HHId Expenditures on Transport

Expenditures on transportation are commensurate with the size of the economy. Lower economic growth leads to lower family expenditures on transportation. However, this expenditure relative to the provincial GDP appears to drop. Since under all scenarios, transportation prices are expected to increase at a slower rate than prices in the economy, in real terms, this drop is less abrupt. Under this scenario, in 2025, Ontario households spend \$83 billion on transportation compared to Québec's \$47.9 billion.

Consumer Price Index

Under the low growth scenario, inflation is higher. From 1992 to 2025, prices in Ontario and Québec are expected to increase by 3.5 per cent a year (compared to about 3.0 per cent in the base case).

CPI (Transportation)

The lower productivity gains that characterize this scenario also affect the transportation sector. Since we have also assumed that lower gains in productivity lead to higher prices, transportation prices increase under this scenario. In 2025 in Ontario, the index reaches 392.8 (332.5 in the base case), and in Québec it reaches 400.0 (332.2 in the base case).

5- STATISTICAL TABLES

This section contains all the base year (1992) and forecast years 2005 and 2025 statistical information requested for the HSR project. First the base case data is presented followed by the high case and low case scenarios.

A - BASE CASE

High Speed Rail Study

Socioeconomic Variables - Base Case

Forecast 2005, 2025

	POPULATION			HOUSEHOLDS		
	<u>1992</u>	<u>2005</u>	<u>2025</u>	<u>1992</u>	<u>2005</u>	<u>2025</u>
	-----thousands-----			-----thousands-----		
1. Windsor City	190.8	232.1	309.3	75.1	97.2	134.6
2. Essex County (less 1)	138.5	168.5	224.6	47.1	60.9	84.4
3. Chatham CA	43.8	53.3	71.1	16.6	21.5	29.7
4. Kent County (less 3)	66.6	81.0	108.0	24.0	31.1	43.0
5. Sarnia City	51.1	62.2	82.9	21.1	27.4	37.9
6. Lambton County (Less 5)	78.5	95.5	127.3	27.0	34.9	48.4
7. Elgin	76.1	92.5	123.3	27.1	35.1	48.6
8. Haldimand-Norfolk	100.3	121.9	162.5	35.5	45.9	63.6
9. Grimsby	18.8	22.9	30.5	6.5	8.4	11.6
10. Ste-Catherines City	130.3	158.4	211.2	50.8	65.7	91.0
11. Niagara-On-The-Lake City	13.0	15.8	21.0	4.6	6.0	8.2
12. Niagara Falls	75.9	92.4	123.1	28.7	37.1	51.4
13. Niagara R. M. (Less 9-12)	160.2	194.8	259.7	60.0	77.6	107.5
14. Middlesex County (Less 15-16)	37.1	45.2	60.2	12.6	16.3	22.6
15. London City	309.5	376.5	501.8	123.8	160.2	221.8
16. London CMA less Yarm., Southw., London, Co	33.0	40.1	53.4	10.9	14.1	19.5
17. Woodstock CA	30.8	37.5	50.0	12.0	15.5	21.5
18. Oxford County (less 17)	63.4	77.2	102.8	21.9	28.3	39.2
19. Brantford City	83.1	101.1	134.7	31.0	40.1	55.5
20. Brant County (less 19)	28.5	34.7	46.2	9.5	12.3	17.0
21. Stratford CA	27.9	33.9	45.2	11.3	14.6	20.2
22. Perth County (less 21)	42.7	51.9	69.2	14.1	18.2	25.3
23. Kitchener City	171.4	208.5	277.9	63.7	82.4	114.2
24. Waterloo City	73.7	89.7	119.5	28.1	36.4	50.4
25. Waterloo RM (less 23-24)	141.7	172.3	229.7	47.6	61.5	85.2
26. Guelph City	89.8	109.2	145.5	33.6	43.5	60.2
27. Wellington County (less 26)	73.6	89.5	119.3	24.5	31.7	43.9
28. Stoney Creek City	51.3	62.4	83.1	16.6	21.4	29.7
29. Hamilton City	320.3	389.5	519.2	126.0	163.0	225.8
30. Ancaster City and Glenbrook	32.7	39.8	53.0	11.2	14.5	20.0
31. Dundas City	22.2	27.0	36.0	7.9	10.2	14.2
32. Flamborough City	30.3	36.8	49.1	9.8	12.7	17.6
33. Burlington City	131.7	160.1	213.4	47.4	61.4	85.0
34. Oakville	120.6	146.6	195.5	40.1	51.9	71.8
35. Halton R. M. (less 33-34)	68.7	83.5	111.3	22.5	29.1	40.3
36. Mississauga City	480.8	584.8	779.5	154.4	199.8	276.6
37. Brampton City	243.4	296.0	394.6	73.6	95.3	131.9
38. Peel R. M. (less 36-37)	36.0	43.8	58.4	11.2	14.4	20.0
39. Etobicoke	311.1	378.4	504.3	116.4	150.6	208.5
40. Toronto City	639.4	777.7	1036.6	276.8	358.1	496.0
41. York	141.4	172.0	229.2	56.9	73.6	101.9
42. East York	102.9	125.2	166.8	44.9	58.0	80.4
43. North York	563.2	685.1	913.1	205.0	265.3	367.4

High Speed Rail Study

Socioeconomic Variables - Base Case

Forecast 2005, 2025

	POPULATION			HOUSEHOLDS		
	1992	2005	2025	1992	2005	2025
	thousands			thousands		
44. Scarborough	532.4	647.5	863.1	178.2	230.6	319.3
45. Vaughan	122.6	149.1	198.7	32.9	42.6	59.0
46. Markham City	161.2	196.0	261.3	45.8	59.2	82.0
47. Richmond Hill	88.1	107.2	142.9	28.2	36.5	50.5
48. Aurora	31.2	38.0	50.6	10.0	12.9	17.9
49. Newmarket and Stouffville	66.2	80.5	107.3	21.2	27.4	38.0
50. York R. M. (less 45-49)	68.6	83.4	111.2	22.8	29.5	40.9
51. Pickering	72.7	88.5	117.9	21.8	28.2	39.0
52. Ajax	62.3	75.7	100.9	19.6	25.3	35.1
53. Whitby	64.4	78.3	104.4	20.6	26.7	37.0
54. Oshawa	129.3	157.2	209.6	47.6	61.6	85.2
55. New Castle	52.9	64.3	85.7	17.7	22.9	31.7
56. Durham R. M. (less 51-55)	43.9	53.4	71.1	15.5	20.1	27.8
57. Huron and Bruce	126.1	153.4	204.4	46.8	60.6	83.9
58. Grey and Dufferin	127.1	154.6	206.1	46.0	59.5	82.4
59. Barrie City	65.7	79.9	106.5	24.0	31.0	42.9
60. Simcoe County (less 59)	232.7	283.0	377.2	83.3	107.8	149.3
61. Muskoka and Parry Sound	88.7	107.9	143.9	34.2	44.3	61.3
62. Hope and Port Hope	15.4	18.7	25.0	5.7	7.4	10.2
63. Hamilton and Cobourg	25.5	31.0	41.3	9.6	12.4	17.2
64. Northumberland County (less 62-63)	39.3	47.8	63.7	14.1	18.2	25.3
65. Prince Edward County	24.0	29.3	39.0	8.9	11.5	15.9
66. Peterborough City	69.7	84.8	113.0	27.5	35.6	49.3
67. Peterbor. and Victoria (less 66)	118.4	144.0	192.0	43.4	56.2	77.8
68. Trenton	17.2	20.9	27.9	6.8	8.8	12.2
69. Belleville City	37.4	45.5	60.6	15.6	20.2	28.0
70. Hasting County (less 68-69)	63.1	76.7	102.2	22.1	28.6	39.6
71. Kingston	56.7	69.0	92.0	26.4	34.2	47.3
72. Front. Cty, Len. & Addinct. (less 71)	112.6	137.0	182.6	38.5	49.8	69.0
73. Brockville	21.7	26.4	35.2	9.2	11.9	16.5
74. Leeds (less 73)	69.5	84.5	112.7	26.2	33.9	46.9
75. Cornwall	47.2	57.4	76.5	18.6	24.1	33.3
76. Stormont-Dundas (less 75)	61.6	74.9	99.9	21.9	28.3	39.2
77. Smith Falls	9.4	11.4	15.3	3.8	4.9	6.8
78. Lanark County (less 77)	46.3	56.4	75.1	17.0	22.0	30.5
79. Rideau, Osgoode	26.7	32.4	43.2	8.8	11.3	15.7
80. Ottawa-Carleton (less 79, 81-84)	73.5	89.4	119.2	23.7	30.7	42.5
81. Nepean	109.7	133.5	177.9	38.6	49.9	69.1
82. Ottawa	315.4	383.6	511.3	141.7	183.4	253.9
83. Vanier, Gloucester	122.0	148.4	197.8	42.4	54.9	76.0
84. Cumberland	44.0	53.5	71.3	13.5	17.5	24.2
85. Prescott and Russel County	69.0	83.9	111.9	23.9	30.9	42.8
Total Zones	9,377.1	11,405.4	15,202.5	3,413.4	4,416.7	6,116.2
Total ONTARIO	10,262.2	12,200.0	15,700.0	3,742.1	4,788.0	6,517.0
	91%	93%	97%	91%	92%	94%

High Speed Rail Study

Socioeconomic Variables - Base Case

Forecast 2005, 2025

	POPULATION			HOUSEHOLDS		
	<u>1992</u>	<u>2005</u>	<u>2025</u>	<u>1992</u>	<u>2005</u>	<u>2025</u>
	-----thousands-----			-----thousands-----		
86. Hull	161.1	186.4	216.2	62.1	73.6	88.8
87. Gatineau-Papineau-Labelle	144.9	167.7	194.4	53.6	63.6	76.7
88. Joliette-Montcalm	105.0	121.5	140.8	40.7	48.3	58.3
89. Deux Montagnes-Argenteuil	131.3	151.9	176.2	48.6	57.6	69.5
90. Six cities of Terrebonne	90.4	104.6	121.3	45.4	53.8	64.9
91. Terrebonne less (90)	178.9	207.0	240.0	54.9	65.1	78.5
92. Laval Ouest	159.2	184.2	213.6	58.0	68.7	82.9
93. Laval Est	162.3	187.8	217.7	59.0	69.9	84.4
94. Montreal - Zone A	400.8	463.8	537.7	172.2	204.2	246.4
95. Montreal - Zone B	378.6	438.0	507.9	164.5	195.1	235.4
96. Montreal - Zone C	160.1	185.2	214.7	69.6	82.6	99.6
97. Montreal - Zone D	53.0	61.3	71.1	23.0	27.3	32.9
98. Montreal - Zone E	289.9	335.4	388.9	126.1	149.5	180.4
100. Montreal - Zone F1	222.4	257.3	298.3	96.8	114.8	138.5
100. Montreal - Zone F2	271.2	313.8	363.8	118.1	140.1	169.0
101. Beauharnois-Soulanges	74.9	86.6	100.4	29.0	34.4	41.5
102. Laprairie	139.1	161.0	186.7	47.3	56.1	67.7
103. St. Hubert City	75.7	87.6	101.5	25.5	30.3	36.5
104. Longueuil City	130.9	151.5	175.7	53.9	63.9	77.1
106. Chambly less (103-104)	134.7	155.9	180.7	50.0	59.2	71.5
106. L'Assomption	163.6	189.3	219.5	55.6	65.9	79.5
107. Vaudreuil	68.4	79.1	91.7	24.4	28.9	34.8
108. Huntingdon-Napierville-						
St. Jean less (110)	28.6	33.1	38.4	10.2	12.1	14.6
109. Chateauguay	65.7	76.0	88.1	23.1	27.4	33.0
110. St. Jean CA	70.2	81.2	94.2	27.3	32.3	39.0
111. Iberville	26.4	30.6	35.4	9.5	11.2	13.5
112. Gransby CA	61.2	70.8	82.1	24.1	28.6	34.5
113. Missisquoi-Brome-		0.0	0.0			
Shefford less (112)	78.3	90.6	105.0	29.6	35.1	42.3
114. Trois-Rivieres City	49.3	57.0	66.1	22.9	27.1	32.7
115. Berthier-Maskinonge-						
St. Maurice less (114)	121.7	140.8	163.3	47.1	55.8	67.3
116. Champlain	123.6	143.0	165.8	48.0	56.9	68.7
117. Portneuf	68.2	79.0	91.5	24.8	29.5	35.5
118. Ste-Foy City	71.4	82.6	95.8	32.4	38.4	46.3
119. Quebec City	168.1	194.5	225.5	80.9	96.0	115.8
120. Charlesbourg City	71.4	82.6	95.8	27.4	32.5	39.2
121. Beauport City	70.5	81.6	94.6	25.4	30.1	36.3
122. Quebec less (118-121)	113.1	130.9	151.8	39.8	47.2	56.9
123. Montmorency No. 1, 2 &	44.9	51.9	60.2	15.8	18.8	22.6
Charlevoix-Ouest						
124. Sherbrooke City	76.8	88.8	103.0	34.7	41.2	49.7

High Speed Rail Study
Socioeconomic Variables - Base Case
Forecast 2005, 2025

	POPULATION			HOUSEHOLDS		
	<u>1992</u>	<u>2005</u>	<u>2025</u>	<u>1992</u>	<u>2005</u>	<u>2025</u>
	<hr/> thousands <hr/>			<hr/> thousands <hr/>		
125. Richmond-Sherbrooke and Stanstead less (124)	133.9	154.9	179.6	49.5	58.7	70.8
126. Vercheres-Richelieu	134.4	155.5	180.3	48.3	57.3	69.1
127. Ste-Hyacinthe CA	50.6	58.5	67.9	20.4	24.2	29.2
128. Ste-Hyacinthe-Rouville-Bagot less (127)	90.7	105.0	121.7	32.1	38.1	46.0
129. Drummondville CA	60.9	70.5	81.7	24.1	28.6	34.5
130. Drummond-Arthabaska- Wolfe-Compton less (129)	114.6	132.6	153.8	41.7	49.4	59.6
131. Yamaska-Nicolet-Lotbiniere	78.5	90.8	105.3	27.4	32.5	39.2
132. Megantic-Frontenac-Beauce	157.8	182.6	211.7	56.6	67.1	80.9
133. Levis	119.5	138.2	160.3	43.2	51.2	61.8
134. Bellechasse-Dorchester	57.0	66.0	76.5	19.2	22.8	27.5
135. Montmagny-L'Islet-Kamouraska	69.7	80.7	93.5	25.1	29.7	35.9
136. Chicoutimi-Lac St. Jean	286.4	331.4	384.3	100.5	119.1	143.7
 Total Zones	 6359.7	 7358.8	 8531.9	 2490.2	 2952.9	 3562.5
Total of Quebec	6925.5	7800.0	8700.0	2707.8	3182.0	3786.0
Percent of Quebec	92%	94%	98%	92%	93%	94%

	EMPLOYMENT			AVERAGE HOUSEHOLD INCOME		
	1992	2005	2025	1992	2005	2025
	-----thousands-----			-----thousands-----		
1. Windsor City	90.0	116.3	139.0	\$46,801	\$73,132	\$135,903
2. Essex County (less 1)	60.1	77.6	92.7	\$53,710	\$83,928	\$155,965
3. Chatham CA	18.8	24.3	29.0	\$45,579	\$71,223	\$132,354
4. Kent County (less 3)	29.7	38.3	45.8	\$46,256	\$72,281	\$134,320
5. Sarnia City	21.9	28.2	33.8	\$49,147	\$76,797	\$142,714
6. Lambton County (Less 5)	34.0	43.9	52.4	\$52,949	\$82,740	\$153,756
7. Elgin	33.8	43.6	52.1	\$46,688	\$72,955	\$135,574
8. Haldimand-Norfolk	44.3	57.2	68.4	\$47,929	\$74,895	\$139,178
9. Grimsby	8.8	11.3	13.6	\$61,776	\$96,532	\$179,386
10. Ste-Catherines City	59.7	77.0	92.1	\$51,842	\$81,009	\$150,539
11. Niagara-On-The-Lake City	6.7	8.6	10.3	\$63,375	\$99,030	\$184,029
12. Niagara Falls	35.5	45.9	54.9	\$49,055	\$76,654	\$142,448
13. Niagara R. M. (Less 9-12)	68.8	88.8	106.2	\$50,395	\$78,749	\$146,340
14. Middlesex County (Less 15-16)	17.2	22.2	26.5	\$49,837	\$77,876	\$144,718
15. London City	146.7	189.4	226.5	\$51,832	\$80,994	\$150,512
16. London CMA less Yarm., Southw., London, Cor	16.0	20.6	24.7	\$63,155	\$98,687	\$183,391
17. Woodstock CA	13.4	17.3	20.6	\$47,147	\$73,673	\$136,907
18. Oxford County (less 17)	28.5	36.8	44.0	\$47,970	\$74,959	\$139,296
19. Brantford City	35.0	45.2	54.0	\$46,464	\$72,606	\$134,924
20. Brant County (less 19)	12.0	15.6	18.6	\$49,372	\$77,149	\$143,367
21. Stratford CA	13.1	17.0	20.3	\$46,894	\$73,278	\$136,173
22. Perth County (less 21)	19.6	25.3	30.2	\$46,848	\$73,206	\$136,039
23. Kitchener City	91.6	118.2	141.4	\$55,377	\$86,534	\$160,807
24. Waterloo City	36.4	47.1	56.3	\$66,632	\$104,121	\$193,489
25. Waterloo RM (less 23-24)	69.4	89.6	107.2	\$56,969	\$89,021	\$165,429
26. Guelph City	42.9	55.4	66.3	\$52,961	\$82,757	\$153,789
27. Wellington County (less 26)	33.6	43.3	51.8	\$55,398	\$86,566	\$160,867
28. Stoney Creek City	22.9	29.5	35.3	\$60,059	\$93,849	\$174,401
29. Hamilton City	153.3	198.0	236.7	\$46,161	\$72,133	\$134,045
30. Ancaster City and Glenbrook	14.9	19.2	22.9	\$74,953	\$117,123	\$217,651
31. Dundas City	10.5	13.5	16.2	\$62,091	\$97,025	\$180,303
32. Flamborough City	14.9	19.2	22.9	\$64,523	\$100,825	\$187,364
33. Burlington City	66.1	85.3	102.0	\$69,614	\$108,780	\$202,148
34. Oakville	60.2	77.8	93.0	\$82,542	\$128,981	\$239,688
35. Halton R. M. (less 33-34)	34.2	44.1	52.7	\$67,903	\$106,107	\$197,179
36. Mississauga City	249.2	321.7	384.6	\$69,447	\$108,519	\$201,661
37. Brampton City	123.9	160.0	191.3	\$67,274	\$105,124	\$195,353
38. Peel R. M. (less 36-37)	18.2	23.5	28.1	\$78,146	\$122,112	\$226,922
39. Etobicoke	168.0	216.9	259.3	\$64,549	\$100,865	\$187,438
40. Toronto City	342.9	442.7	529.3	\$57,311	\$89,555	\$166,422
41. York	70.6	91.2	109.0	\$47,495	\$74,217	\$137,918
42. East York	55.0	71.0	84.9	\$51,024	\$79,732	\$148,166
43. North York	300.2	387.6	463.4	\$63,377	\$99,033	\$184,035

High Speed Rail Study

Socioeconomic Variables - Base Case

Forecast 2005, 2025

	EMPLOYMENT			AVERAGE HOUSEHOLD INCOME		
	1992	2005	2025	1992	2005	2025
	-----thousands-----			-----thousands-----		
44. Scarborough	261.3	337.4	403.3	\$60,083	\$93,887	\$174,471
45. Vaughan	60.2	77.7	92.9	\$91,718	\$143,319	\$266,332
46. Markham City	80.3	103.7	123.9	\$96,441	\$150,700	\$280,048
47. Richmond Hill	46.0	59.3	70.9	\$83,269	\$130,118	\$241,800
48. Aurora	15.9	20.5	24.5	\$77,414	\$120,968	\$224,797
49. Newmarket and Stouffville	31.3	40.4	48.3	\$71,353	\$111,497	\$207,196
50. York R. M. (less 45-49)	31.7	40.9	48.9	\$68,132	\$106,463	\$197,842
51. Pickering	31.1	40.1	48.0	\$79,792	\$124,684	\$231,702
52. Ajax	22.8	29.5	35.2	\$70,149	\$109,616	\$203,701
53. Whitby	27.4	35.3	42.2	\$72,017	\$112,536	\$209,126
54. Oshawa	72.0	92.9	111.1	\$60,484	\$94,514	\$175,637
55. New Castle	19.2	24.8	29.7	\$64,720	\$101,133	\$187,937
56. Durham R. M. (less 51-55)	20.9	26.9	32.2	\$59,700	\$93,288	\$173,357
57. Huron and Bruce	53.0	68.5	81.9	\$42,511	\$66,428	\$123,443
58. Grey and Dufferin	55.8	72.0	86.1	\$46,335	\$72,404	\$134,548
59. Barrie City	31.3	40.4	48.3	\$55,362	\$86,509	\$160,761
60. Simcoe County (less 59)	100.4	129.6	155.0	\$50,089	\$78,269	\$145,449
61. Muskoka and Parry Sound	35.0	45.2	54.0	\$41,877	\$65,437	\$121,603
62. Hope and Port Hope	6.6	8.5	10.1	\$46,883	\$73,260	\$136,140
63. Hamilton and Cobourg	11.4	14.7	17.6	\$48,973	\$76,526	\$142,210
64. Northumberland County (less 62-63)	15.8	20.5	24.5	\$41,961	\$65,569	\$121,848
65. Prince Edward County	10.1	13.1	15.6	\$43,327	\$67,703	\$125,813
66. Peterborough City	29.5	38.1	45.6	\$45,967	\$71,828	\$133,480
67. Peterbor. and Victoria (less 66)	48.3	62.4	74.6	\$45,806	\$71,577	\$133,013
68. Trenton	7.5	9.6	11.5	\$43,854	\$68,526	\$127,344
69. Belleville City	16.3	21.0	25.1	\$35,600	\$55,629	\$103,376
70. Hasting County (less 68-69)	24.9	32.1	38.4	\$52,440	\$81,944	\$152,278
71. Kingston	25.0	32.3	38.6	\$41,457	\$64,782	\$120,385
72. Front. Cty. Len. & Addinct. (less 71)	50.3	64.9	77.6	\$52,719	\$82,379	\$153,086
73. Brockville	9.7	12.5	15.0	\$44,481	\$69,506	\$129,165
74. Leeds (less 73)	30.6	39.6	47.3	\$46,752	\$73,056	\$135,760
75. Cornwall	19.1	24.6	29.4	\$52,468	\$81,988	\$152,359
76. Stormont-Dundas (less 75)	26.2	33.8	40.4	\$58,053	\$90,715	\$168,577
77. Smith Falls	3.7	4.8	5.7	\$38,939	\$60,846	\$113,071
78. Lanark County (less 77)	20.6	26.5	31.7	\$46,494	\$72,653	\$135,011
79. Rideau, Osgoode	12.1	15.6	18.7	\$71,863	\$112,295	\$208,679
80. Ottawa-Carleton (less 79, 81-84)	30.7	39.7	47.4	\$82,890	\$129,525	\$240,698
81. Nepean	58.6	75.6	90.4	\$73,655	\$115,095	\$213,883
82. Ottawa	173.7	224.3	268.1	\$55,581	\$86,852	\$161,399
83. Vanier, Gloucester	64.0	82.7	98.9	\$66,324	\$103,639	\$192,593
84. Cumberland	15.5	20.0	23.9	\$73,272	\$114,497	\$212,770
85. Prescott and Russel County	28.9	37.3	44.6	\$46,835	\$73,186	\$136,002
Total Zones	4,526.6	5,844.2	6,987.4	\$57,531	\$90,510	\$168,195
Total ONTARIO	4,712.0	6,036.0	7,130.0	\$56,583	\$88,493	\$162,961
Percent of Ontario	96%	97%	98%	102%	102%	103%

High Speed Rail Study

Socioeconomic Variables - Base Case

Forecast 2005, 2025

	EMPLOYMENT			AVERAGE HOUSEHOLD INCOME		
	1992	2005	2025	1992	2005	2025
	-----thousands-----			-----thousands-----		
86. Hull	75.6	93.2	107.9	\$47,752	\$78,737	\$148,924
87. Gatineau-Papineau-Labelle	57.2	70.5	81.6	\$42,043	\$69,323	\$131,118
88. Joliette-Montcalm	41.8	51.5	59.6	\$37,012	\$61,028	\$115,429
89. Deux Montagnes-Argenteuil	46.3	57.1	66.1	\$40,563	\$66,882	\$126,502
90. Six cities of Terrebonne	39.8	49.0	56.7	\$44,684	\$73,678	\$139,354
91. Terrebonne less (90)	53.0	65.3	75.6	\$44,574	\$73,496	\$139,012
92. Laval Ouest	70.2	86.5	100.1	\$49,391	\$81,439	\$154,035
93. Laval Est	71.7	88.4	102.3	\$49,348	\$81,369	\$153,901
94. Montreal - Zone A	179.2	220.8	255.7	\$42,961	\$70,838	\$133,983
95. Montreal - Zone B	181.3	223.4	258.7	\$42,962	\$70,838	\$133,984
96. Montreal - Zone C	76.6	94.4	109.3	\$42,980	\$70,868	\$134,041
97. Montreal - Zone D	25.4	31.3	36.2	\$42,954	\$70,825	\$133,959
98. Montreal - Zone E	138.8	171.0	198.1	\$42,956	\$70,830	\$133,968
100. Montreal - Zone F1	107.7	132.7	153.7	\$42,988	\$70,882	\$134,066
100. Montreal - Zone F2	131.3	161.8	187.3	\$42,704	\$70,413	\$133,180
101. Beauharnois-Soulanges	31.3	38.5	44.6	\$41,535	\$68,486	\$129,535
102. Laprairie	54.3	66.8	77.4	\$54,866	\$90,466	\$171,109
103. St. Hubert City	30.6	37.7	43.7	\$46,223	\$76,215	\$144,154
104. Longueuil City	59.6	73.4	85.0	\$39,878	\$65,754	\$124,367
105. Chambly less (103-104)	61.8	76.1	88.1	\$58,420	\$96,328	\$182,195
106. L'Assomption	72.3	89.1	103.2	\$50,548	\$83,347	\$157,644
107. Vaudreuil	25.4	31.3	36.2	\$50,549	\$83,348	\$157,646
108. Huntingdon-Napierville- St. Jean less (110)	12.3	15.1	17.5	\$37,774	\$62,284	\$117,805
109. Chateaugay	29.1	35.9	41.5	\$49,495	\$81,611	\$154,361
110. St. Jean CA	31.0	38.2	44.2	\$41,410	\$68,279	\$129,144
111. Iberville	11.2	13.8	16.0	\$40,022	\$65,991	\$124,817
112. Gransby CA	26.0	32.0	37.1	\$44,354	\$73,133	\$138,325
113. Missisquoi-Brome- Shefford less (112)	30.9	38.0	44.0	\$35,462	\$58,472	\$110,594
114. Trois-Rivieres City	19.2	23.6	27.4	\$36,642	\$60,418	\$114,275
115. Berthier-Maskinonge- St. Maurice less (114)	44.8	55.2	63.9	\$37,094	\$61,163	\$115,685
116. Champlain	46.7	57.6	66.7	\$38,638	\$63,709	\$120,499
117. Portneuf	26.6	32.7	37.9	\$42,312	\$69,768	\$131,959
118. Ste-Foy City	37.3	46.0	53.3	\$46,371	\$76,459	\$144,616
119. Quebec City	72.0	88.7	102.7	\$35,753	\$58,953	\$111,504
120. Charlesbourg City	33.3	41.1	47.6	\$49,111	\$80,978	\$153,163
121. Beauport City	27.8	34.2	39.7	\$43,345	\$71,471	\$135,180
122. Quebec less (118-121)	45.8	56.4	65.3	\$54,055	\$89,130	\$168,581
123. Montmorency No. 1, 2 & Charlevoix-Ouest	16.8	20.6	23.9	\$42,542	\$70,146	\$132,675
124. Sherbrooke City	33.6	41.4	47.9	\$38,211	\$63,005	\$119,168

High Speed Rail Study
Socioeconomic Variables - Base Case
Forecast 2005, 2025

	EMPLOYMENT			AVERAGE HOUSEHOLD INCOME		
	<u>1992</u>	<u>2005</u>	<u>2025</u>	<u>1992</u>	<u>2005</u>	<u>2025</u>
	-----thousands-----			-----thousands-----		
125. Richmond-Sherbrooke and Stanstead less (124)	54.9	67.7	78.4	\$40,298	\$66,447	\$125,679
126. Vercheres-Richelieu	56.2	69.2	80.1	\$51,647	\$85,159	\$161,070
127. Ste-Hyacinthe CA	22.5	27.8	32.2	\$47,263	\$77,931	\$147,399
128. Ste-Hyacinthe-Rouville-Bagot less (127)	40.1	49.3	57.1	\$42,307	\$69,759	\$131,942
129. Drummondville CA	25.2	31.1	36.0	\$39,418	\$64,995	\$122,933
130. Drummond-Arthabaska- Wolfe-Compton less (129)	36.9	45.4	52.6	\$35,920	\$59,227	\$112,023
131. Yamaska-Nicolet-Lotbiniere	30.9	38.0	44.1	\$38,609	\$63,662	\$120,410
132. Megantic-Frontenac-Beauce	62.5	77.0	89.2	\$36,686	\$60,490	\$114,412
133. Levis	52.1	64.1	74.3	\$46,656	\$76,930	\$145,507
134. Bellechasse-Dorchester	21.8	26.9	31.1	\$37,277	\$61,466	\$116,257
135. Montmagny-L'Islet-Kamouraska	24.9	30.7	35.5	\$35,036	\$57,770	\$109,268
136. Chicoutimi-Lac St. Jean	100.1	123.3	142.8	\$42,109	\$69,433	\$131,326
 Total Zones	 2,703.6	 3,330.8	 3,857.3	 \$43,816	 \$71,499	 \$135,234
Total of Quebec	2,945.0	3,536.0	3,936.0	\$42,573	\$68,274	\$125,728
Percent of Quebec	92%	94%	98%	103%	105%	108%

GROSS DOMESTIC PRODUCT					
(at factor cost, billion of current \$)					
Ontario			Quebec		
1992	2005	2025	1992	2005	2025
\$244.2	\$507.1	\$1,388.3	\$137.6	\$271.6	\$715.2

CAR OWNERSHIP PER HOUSEHOLD					
Ontario			Quebec		
1992	2005	2025	1992	2005	2025
1.37	1.49	1.67	1.19	1.22	1.34

ENGLISH/FRENCH BREAKDOWN						
	Ontario			Quebec		
	1992	2005	2025	1992	2005	2025
English	95.6%	96.4%	97.5%	9.7%	9.5%	9.4%
French	4.4%	3.6%	2.5%	90.3%	90.5%	90.6%

LABOUR FORCE POPULATION BY OCCUPATION						
(000)						
	Ontario			Quebec		
	1992	2005	2025	1992	2005	2025
Managerial & Other Profess.	1670	2,228	2,989	1,047	1,379	1,682
Clerical	883	1,237	1,410	577	736	846
Sales	528	568	549	330	301	265
Service	719	855	986	473	488	550
Primary Occupations	185	142	121	137	90	78
Processing, Machining & Fab.	695	800	683	483	513	423
Construction	312	355	405	184	183	178
Transport Equipment Operating	178	200	210	115	123	85
Material Handling & Other Craft	203	168	156	130	100	97
Unclassified	52	66	76	58	31	29
TOTAL	5425	6619	7585	3534	3944	4232

High Speed Rail Study

Socioeconomic Variables - Base Case

Forecast 2005, 2025

HOURLY SALARIES					
(employees paid by the hour)					
Ontario			Quebec		
1992	2005	2025	1992	2005	2025
\$14.01	\$24.32	\$59.09	\$13.39	\$22.18	\$49.85

FATALITY RATE IN PASSENGER OPERATIONS, PER BILLION PASSENGER KMS (NATIONAL)			
	1992	2005	2025
Air - Level 1 Carriers	0.050	0.044	0.036
Rail	13.800	12.110	9.900
Intercity Bus	2.000	1.750	1.440
Ferry	0.500	0.440	0.360
Private Car/Light Truck	13.000	11.410	9.360
VALUE OF A SINGLE FATALITY AVOIDED	\$1.5	\$2.3	\$4.1
(millions of dollars)			

HOUSEHOLD EXPENDITURES ON TRANSPORT					
(billions of current \$)					
Ontario			Quebec		
1992	2005	2025	1992	2005	2025
\$22.6	\$43.6	\$90.2	\$14.3	\$26.3	\$52.2

CONSUMER PRICE INDEX - ALL ITEMS					
(1986=100.0)					
	Ontario			Quebec	
1992	2005	2025	1992	2005	2025
129.4	192.4	340.9	129.0	189.4	335.5

TRANSPORT PRICE INDEX					
(1986=100.0)					
	Ontario			Quebec	
1992	2005	2025	1992	2005	2025
124.9	187.7	332.5	118.0	187.6	332.2

B- HIGH CASE

High Speed Rail Study
Socioeconomic Variables - High Case
Forecast 2005, 2025

	POPULATION			HOUSEHOLDS		
	<u>1992</u>	<u>2005</u>	<u>2025</u>	<u>1992</u>	<u>2005</u>	<u>2025</u>
	-----thousands-----			-----thousands-----		
1. Windsor City	190.8	237.8	329.1	75.1	99.7	143.6
2. Essex County (less 1)	138.5	172.6	238.9	47.1	62.5	90.1
3. Chatham CA	43.8	54.6	75.6	16.6	22.0	31.7
4. Kent County (less 3)	66.6	83.0	114.9	24.0	31.9	45.9
5. Sarnia City	51.1	63.7	88.2	21.1	28.1	40.4
6. Lambton County (Less 5)	78.5	97.9	135.4	27.0	35.8	51.6
7. Elgin	76.1	94.8	131.2	27.1	36.0	51.8
8. Haldimand-Norfolk	100.3	124.9	172.9	35.5	47.1	67.9
9. Grimsby	18.8	23.4	32.4	6.5	8.6	12.4
10. Ste-Catherines City	130.3	162.3	224.7	50.8	67.4	97.1
11. Niagara-On-The-Lake City	13.0	16.2	22.4	4.6	6.1	8.8
12. Niagara Falls	75.9	94.6	131.0	28.7	38.1	54.9
13. Niagara R. M. (Less 9-12)	160.2	199.6	276.3	60.0	79.6	114.7
14. Middlesex County (Less 15-16)	37.1	46.3	64.0	12.6	16.7	24.1
15. London City	309.5	385.7	533.8	123.8	164.3	236.7
16. London CMA less Yarm., Southw., London, Co	33.0	41.1	56.8	10.9	14.5	20.8
17. Woodstock CA	30.8	38.4	53.2	12.0	15.9	22.9
18. Oxford County (less 17)	63.4	79.0	109.4	21.9	29.1	41.9
19. Brantford City	83.1	103.6	143.3	31.0	41.1	59.3
20. Brant County (less 19)	28.5	35.5	49.1	9.5	12.6	18.2
21. Stratford CA	27.9	34.8	48.1	11.3	15.0	21.6
22. Perth County (less 21)	42.7	53.2	73.6	14.1	18.7	27.0
23. Kitchener City	171.4	213.6	295.6	63.7	84.6	121.8
24. Waterloo City	73.7	91.9	127.1	28.1	37.3	53.8
25. Waterloo RM (less 23-24)	141.7	176.6	244.4	47.6	63.1	91.0
26. Guelph City	89.8	111.9	154.8	33.6	44.6	64.3
27. Wellington County (less 26)	73.6	91.7	126.9	24.5	32.5	46.8
28. Stoney Creek City	51.3	63.9	88.4	16.6	22.0	31.7
29. Hamilton City	320.3	399.1	552.3	126.0	167.3	241.0
30. Ancaster City and Glenbrook	32.7	40.8	56.4	11.2	14.8	21.4
31. Dundas City	22.2	27.7	38.3	7.9	10.5	15.1
32. Flamborough City	30.3	37.7	52.2	9.8	13.1	18.8
33. Burlington City	131.7	164.1	227.1	47.4	62.9	90.7
34. Oakville	120.6	150.2	207.9	40.1	53.2	76.7
35. Halton R. M. (less 33-34)	68.7	85.6	118.5	22.5	29.8	43.0
36. Mississauga City	480.8	599.2	829.3	154.4	204.9	295.2
37. Brampton City	243.4	303.3	419.8	73.6	97.7	140.8
38. Peel R. M. (less 36-37)	36.0	44.9	62.1	11.2	14.8	21.3
39. Etobicoke	311.1	387.7	536.5	116.4	154.5	222.6
40. Toronto City	639.4	796.8	1102.8	276.8	367.4	529.3
41. York	141.4	176.2	243.8	56.9	75.5	108.8
42. East York	102.9	128.2	177.5	44.9	59.6	85.8
43. North York	563.2	701.9	971.4	205.0	272.2	392.1

High Speed Rail Study
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	POPULATION			HOUSEHOLDS		
	<u>1992</u>	<u>2005</u>	<u>2025</u>	<u>1992</u>	<u>2005</u>	<u>2025</u>
	thousands			thousands		
44. Scarborough	532.4	663.4	918.2	178.2	236.6	340.8
45. Vaughan	122.6	152.7	211.4	32.9	43.7	63.0
46. Markham City	161.2	200.8	278.0	45.8	60.8	87.6
47. Richmond Hill	88.1	109.8	152.0	28.2	37.4	53.9
48. Aurora	31.2	38.9	53.9	10.0	13.2	19.1
49. Newmarket and Stouffville	66.2	82.5	114.1	21.2	28.1	40.5
50. York R. M. (less 45-49)	68.6	85.5	118.3	22.8	30.3	43.7
51. Pickering	72.7	90.6	125.4	21.8	28.9	41.7
52. Ajax	62.3	77.6	107.4	19.6	26.0	37.4
53. Whitby	64.4	80.2	111.0	20.6	27.4	39.5
54. Oshawa	129.3	161.1	223.0	47.6	63.1	91.0
55. New Castle	52.9	65.9	91.2	17.7	23.5	33.8
56. Durham R. M. (less 51-55)	43.9	54.7	75.7	15.5	20.6	29.6
57. Huron and Bruce	126.1	157.1	217.5	46.8	62.1	89.5
58. Grey and Dufferin	127.1	158.4	219.2	46.0	61.1	88.0
59. Barrie City	65.7	81.9	113.3	24.0	31.8	45.8
60. Simcoe County (less 59)	232.7	290.0	401.3	83.3	110.6	159.3
61. Muskoka and Parry Sound	88.7	110.6	153.0	34.2	45.4	65.4
62. Hope and Port Hope	15.4	19.2	26.6	5.7	7.6	10.9
63. Hamilton and Cobourg	25.5	31.7	43.9	9.6	12.7	18.4
64. Northumberland County (less 62-63)	39.3	49.0	67.8	14.1	18.7	27.0
65. Prince Edward County	24.0	30.0	41.5	8.9	11.8	17.0
66. Peterborough City	69.7	86.8	120.2	27.5	36.5	52.6
67. Peterbor. and Victoria (less 66)	118.4	147.6	204.2	43.4	57.6	83.0
68. Trenton	17.2	21.4	29.7	6.8	9.0	13.0
69. Belleville City	37.4	46.6	64.5	15.6	20.7	29.8
70. Hasting County (less 68-69)	63.1	78.6	108.8	22.1	29.3	42.3
71. Kingston	56.7	70.7	97.8	26.4	35.0	50.5
72. Front. Cty, Len. & Addinct. (less 71)	112.6	140.4	194.3	38.5	51.1	73.6
73. Brockville	21.7	27.0	37.4	9.2	12.2	17.6
74. Leeds (less 73)	69.5	86.6	119.9	26.2	34.8	50.1
75. Cornwall	47.2	58.8	81.3	18.6	24.7	35.6
76. Stormont-Dundas (less 75)	61.6	76.8	106.3	21.9	29.1	41.9
77. Smith Falls	9.4	11.7	16.2	3.8	5.0	7.3
78. Lanark County (less 77)	46.3	57.7	79.9	17.0	22.6	32.5
79. Rideau, Osgoode	26.7	33.2	46.0	8.8	11.6	16.7
80. Ottawa-Carleton (less 79, 81-84)	73.5	91.6	126.8	23.7	31.5	45.4
81. Nepean	109.7	136.7	189.2	38.6	51.2	73.7
82. Ottawa	315.4	393.0	543.9	141.7	188.1	271.0
83. Vanier, Gloucester	122.0	152.0	210.4	42.4	56.3	81.1
84. Cumberland	44.0	54.8	75.9	13.5	17.9	25.9
85. Prescott and Russel County	69.0	86.0	119.0	23.9	31.7	45.7
Total Zones	9,377.1	11,685.9	16,172.8	3,413.4	4,531.0	6,527.2
Total ONTARIO	10,262.2	12,500.0	16,702.0	3,742.1	4,912.0	6,955.0
Percent of Ontario	91%	93%	97%	91%	92%	94%

High Speed Rail Study
Socioeconomic Variables - High Case
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	POPULATION			HOUSEHOLDS		
	1992	2005	2025	1992	2005	2025
	thousands			thousands		
86. Hull	161.1	189.6	231.0	62.1	75.6	94.9
87. Gatineau-Papineau-Labelle	144.9	170.5	207.7	53.6	65.2	81.9
88. Joliette-Montcalm	105.0	123.5	150.5	40.7	49.6	62.3
89. Deux Montagnes-Argenteuil	131.3	154.5	188.2	48.6	59.1	74.3
90. Six cities of Terrebonne	90.4	106.4	129.6	45.4	55.2	69.4
91. Terrebonne less (90)	178.9	210.5	256.4	54.9	66.8	83.9
92. Laval Ouest	159.2	187.3	228.2	58.0	70.6	88.6
93. Laval Est	162.3	190.9	232.6	59.0	71.8	90.1
94. Montreal - Zone A	400.8	471.6	574.6	172.2	209.6	263.2
95. Montreal - Zone B	378.6	445.4	542.7	164.5	200.3	251.5
96. Montreal - Zone C	160.1	188.3	229.5	69.6	84.7	106.4
97. Montreal - Zone D	53.0	62.3	76.0	23.0	28.0	35.1
98. Montreal - Zone E	289.9	341.1	415.5	126.1	153.5	192.8
100. Montreal - Zone F1	222.4	261.7	318.8	96.8	117.9	148.0
100. Montreal - Zone F2	271.2	319.1	388.8	118.1	143.8	180.6
101. Beauharnois-Soulanges	74.9	88.1	107.3	29.0	35.3	44.3
102. Laprairie	139.1	163.7	199.5	47.3	57.6	72.3
103. St. Hubert City	75.7	89.0	108.5	25.5	31.1	39.0
104. Longueuil City	130.9	154.1	187.7	53.9	65.6	82.4
105. Chambly less (103-104)	134.7	158.5	193.1	50.0	60.8	76.3
106. L'Assomption	163.6	192.5	234.5	55.6	67.6	84.9
107. Vaudreuil	68.4	80.4	98.0	24.4	29.6	37.2
108. Huntingdon-Napierville-						
St. Jean less (110)	28.6	33.7	41.1	10.2	12.4	15.6
109. Chateaugay	65.7	77.3	94.2	23.1	28.1	35.3
110. St. Jean CA	70.2	82.6	100.7	27.3	33.2	41.7
111. Iberville	26.4	31.1	37.9	9.5	11.5	14.5
112. Gransby CA	61.2	72.0	87.7	24.1	29.4	36.9
113. Missisquoi-Brome-			0.0			
Shefford less (112)	78.3	92.1	112.3	29.6	36.0	45.2
114. Trois-Rivieres City	49.3	58.0	70.6	22.9	27.8	35.0
115. Berthier-Maskinonge-						
St. Maurice less (114)	121.7	143.2	174.5	47.1	57.3	71.9
116. Champlain	123.6	145.4	177.1	48.0	58.4	73.4
117. Portneuf	68.2	80.3	97.8	24.8	30.2	38.0
118. Ste-Foy City	71.4	84.0	102.4	32.4	39.4	49.5
119. Quebec City	168.1	197.8	241.0	80.9	98.5	123.7
120. Charlesbourg City	71.4	84.0	102.4	27.4	33.4	41.9
121. Beauport City	70.5	83.0	101.1	25.4	30.9	38.8
122. Quebec less (118-121)	113.1	133.1	162.2	39.8	48.4	60.8
123. Montmorency No. 1, 2 &	44.9	52.8	64.3	15.8	19.3	24.2
Charlevoix-Ouest						
124. Sherbrooke City	76.8	90.4	110.1	34.7	42.3	53.1

High Speed Rail Study

Socioeconomic Variables - High Case

Forecast 2006, 2025

	POPULATION			HOUSEHOLDS		
	1992	2006	2025	1992	2006	2025
	thousands			thousands		
125. Richmond-Sherbrooke and Stanstead less (124)	133.9	157.5	191.9	49.5	60.2	75.6
126. Vercheres-Richelieu	134.4	158.1	192.7	48.3	58.8	73.9
127. Ste-Hyacinthe CA	50.6	59.5	72.5	20.4	24.9	31.2
128. Ste-Hyacinthe-Rouville-Bagot less (127)	90.7	106.8	130.1	32.1	39.1	49.1
129. Drummondville CA	60.9	71.6	87.3	24.1	29.3	36.8
130. Drummond-Arthabaska- Wolfe-Compton less (129)	114.6	134.9	164.3	41.7	50.7	63.7
131. Yamaska-Nicolet-Lotbiniere	78.5	92.3	112.5	27.4	33.4	41.9
132. Megantic-Frontenac-Beauce	157.8	185.7	226.2	56.6	68.9	86.5
133. Levis	119.5	140.6	171.2	43.2	52.6	66.0
134. Bellechasse-Dorchester	57.0	67.1	81.7	19.2	23.4	29.4
135. Montmagny-L'Islet-Kamouraska	69.7	82.0	100.0	25.1	30.5	38.3
136. Chicoutimi-Lac St. Jean	286.4	337.0	410.6	100.5	122.3	153.6
 Total Zones	 6359.7	 7483.3	 9116.9	 2490.2	 3030.8	 3806.2
Total of Quebec	6925.5	7964.0	9303.0	2707.8	3266.0	4045.0
Percent of Quebec	92%	94%	98%	92%	93%	94%

High Speed Rail Study

Socioeconomic Variables - High Case

Forecast 2005, 2025

	EMPLOYMENT			AVERAGE HOUSEHOLD INCOME		
	1992	2005	2025	1992	2005	2025
	thousands			thousands		
1. Windsor City	90.0	119.3	155.0	\$46,801	\$83,907	\$185,529
2. Essex County (less 1)	60.1	79.6	103.4	\$53,710	\$96,294	\$212,916
3. Chatham CA	18.8	24.9	32.4	\$45,579	\$81,716	\$180,684
4. Kent County (less 3)	29.7	39.3	51.1	\$46,256	\$82,930	\$183,368
6. Sarnia City	21.9	29.0	37.7	\$49,147	\$88,112	\$194,826
6. Lambton County (Less 5)	34.0	45.0	58.5	\$52,949	\$94,930	\$209,901
7. Elgin	33.8	44.7	58.1	\$46,688	\$83,704	\$185,080
8. Haldimand-Norfolk	44.3	58.7	76.2	\$47,929	\$85,929	\$190,000
9. Grimsby	8.8	11.6	15.1	\$61,776	\$110,754	\$244,890
10. Ste-Catherines City	59.7	79.1	102.7	\$51,842	\$92,944	\$205,510
11. Niagara-On-The-Lake City	6.7	8.9	11.5	\$63,375	\$113,621	\$251,228
12. Niagara Falls	35.5	47.1	61.2	\$49,055	\$87,948	\$194,464
13. Niagara R. M. (Less 9-12)	68.8	91.1	118.4	\$50,395	\$90,351	\$199,777
14. Middlesex County (Less 15-16)	17.2	22.7	29.5	\$49,837	\$89,350	\$197,563
15. London City	146.7	194.3	252.5	\$51,832	\$92,927	\$205,472
16. London CMA less Yarm., Southw., London, Cor	16.0	21.2	27.5	\$63,155	\$113,227	\$250,357
17. Woodstock CA	13.4	17.7	23.0	\$47,147	\$84,527	\$186,899
18. Oxford County (less 17)	28.5	37.8	49.1	\$47,970	\$86,002	\$190,161
19. Brantford City	35.0	46.3	60.2	\$46,464	\$83,303	\$184,192
20. Brant County (less 19)	12.0	16.0	20.7	\$49,372	\$88,516	\$195,719
21. Stratford CA	13.1	17.4	22.6	\$46,894	\$84,074	\$185,897
22. Perth County (less 21)	19.6	25.9	33.7	\$46,848	\$83,991	\$185,714
23. Kitchener City	91.6	121.3	157.6	\$55,377	\$99,283	\$219,526
24. Waterloo City	36.4	48.3	62.7	\$66,632	\$119,461	\$264,142
25. Waterloo RM (less 23-24)	69.4	92.0	119.5	\$56,969	\$102,137	\$225,837
26. Guelph City	42.9	56.9	73.9	\$52,961	\$94,950	\$209,946
27. Wellington County (less 26)	33.6	44.4	57.8	\$55,398	\$99,320	\$219,608
28. Stoney Creek City	22.9	30.3	39.4	\$60,059	\$107,676	\$238,085
29. Hamilton City	153.3	203.1	264.0	\$46,161	\$82,760	\$182,992
30. Ancaster City and Glenbrook	14.9	19.7	25.6	\$74,953	\$134,379	\$297,127
31. Dundas City	10.5	13.9	18.0	\$62,091	\$111,320	\$246,141
32. Flamborough City	14.9	19.7	25.6	\$64,523	\$115,680	\$255,781
33. Burlington City	66.1	87.5	113.7	\$69,614	\$124,807	\$275,963
34. Oakville	60.2	79.8	103.7	\$82,542	\$147,985	\$327,211
35. Halton R. M. (less 33-34)	34.2	45.3	58.8	\$67,903	\$121,740	\$269,180
36. Mississauga City	249.2	330.1	428.9	\$69,447	\$124,507	\$275,299
37. Brampton City	123.9	164.2	213.3	\$67,274	\$120,612	\$266,686
38. Peel R. M. (less 36-37)	18.2	24.1	31.4	\$78,146	\$140,103	\$309,784
39. Etobicoke	168.0	222.5	289.2	\$64,549	\$115,725	\$255,882
40. Toronto City	342.9	454.2	590.3	\$57,311	\$102,750	\$227,191
41. York	70.6	93.5	121.5	\$47,495	\$85,151	\$188,279
42. East York	55.0	72.9	94.7	\$51,024	\$91,479	\$202,270
43. North York	300.2	397.7	516.8	\$63,377	\$113,624	\$251,236

High Speed Rail Study

Socioeconomic Variables - High Case

Forecast 2005, 2025

	EMPLOYMENT			AVERAGE HOUSEHOLD INCOME		
	1992	2005	2025	1992	2005	2025
	—thousands—			—thousands—		
44. Scarborough	261.3	346.1	449.8	\$60,083	\$107,719	\$238,180
45. Vaughan	60.2	79.8	103.6	\$91,718	\$164,435	\$363,585
46. Markham City	80.3	106.4	138.2	\$96,441	\$172,904	\$382,310
47. Richmond Hill	46.0	60.9	79.1	\$83,269	\$149,289	\$330,095
48. Aurora	15.9	21.0	27.3	\$77,414	\$138,791	\$306,883
49. Newmarket and Stouffville	31.3	41.4	53.8	\$71,353	\$127,924	\$282,854
50. York R. M. (less 45-49)	31.7	41.9	54.5	\$68,132	\$122,149	\$270,085
51. Pickering	31.1	41.1	53.5	\$79,792	\$143,054	\$316,309
52. Ajax	22.8	30.2	39.3	\$70,149	\$125,766	\$278,084
53. Whitby	27.4	36.2	47.1	\$72,017	\$129,116	\$285,490
54. Oshawa	72.0	95.3	123.9	\$60,484	\$108,439	\$239,771
55. New Castle	19.2	25.5	33.1	\$64,720	\$116,033	\$256,563
56. Durham R. M. (less 51-55)	20.9	27.6	35.9	\$59,700	\$107,032	\$236,660
57. Huron and Bruce	53.0	70.3	91.3	\$42,511	\$76,215	\$168,519
58. Grey and Dufferin	55.8	73.9	96.0	\$46,335	\$83,071	\$183,680
59. Barrie City	31.3	41.4	53.9	\$55,362	\$99,255	\$219,463
60. Simcoe County (less 59)	100.4	133.0	172.8	\$50,089	\$89,801	\$198,561
61. Muskoka and Parry Sound	35.0	46.4	60.3	\$41,877	\$75,079	\$166,007
62. Hope and Port Hope	6.6	8.7	11.3	\$46,883	\$84,054	\$185,853
63. Hamilton and Cobourg	11.4	15.1	19.7	\$48,973	\$87,801	\$194,139
64. Northumberland County (less 62-63)	15.8	21.0	27.3	\$41,961	\$75,230	\$166,341
65. Prince Edward County	10.1	13.4	17.4	\$43,327	\$77,678	\$171,754
66. Peterborough City	29.5	39.1	50.9	\$45,967	\$82,411	\$182,220
67. Peterbor. and Victoria (less 66)	48.3	64.0	83.2	\$45,806	\$82,123	\$181,583
68. Trenton	7.5	9.9	12.8	\$43,854	\$78,623	\$173,844
69. Belleville City	16.3	21.6	28.0	\$35,600	\$63,825	\$141,124
70. Hasting County (less 68-69)	24.9	32.9	42.8	\$52,440	\$94,017	\$207,883
71. Kingston	25.0	33.2	43.1	\$41,457	\$74,327	\$164,344
72. Front. Cty. Len. & Addinct. (less 71)	50.3	66.6	86.6	\$52,719	\$94,516	\$208,986
73. Brockville	9.7	12.8	16.7	\$44,481	\$79,747	\$176,330
74. Leeds (less 73)	30.6	40.6	52.7	\$46,752	\$83,819	\$185,334
75. Cornwall	19.1	25.3	32.8	\$52,468	\$94,067	\$207,994
76. Stormont-Dundas (less 75)	26.2	34.7	45.0	\$58,053	\$104,080	\$230,133
77. Smith Falls	3.7	4.9	6.3	\$38,939	\$69,811	\$154,360
78. Lanark County (less 77)	20.6	27.2	35.4	\$46,494	\$83,357	\$184,311
79. Rideau, Osgoode	12.1	16.0	20.8	\$71,863	\$128,840	\$284,880
80. Ottawa-Carleton (less 79, 81-84)	30.7	40.7	52.9	\$82,890	\$148,608	\$328,590
81. Nepean	58.6	77.6	100.9	\$73,655	\$132,053	\$291,983
82. Ottawa	173.7	230.1	299.0	\$55,581	\$99,649	\$220,335
83. Vanier, Gloucester	64.0	84.8	110.2	\$66,324	\$118,908	\$262,920
84. Cumberland	15.5	20.5	26.6	\$73,272	\$131,366	\$290,465
85. Prescott and Russel County	28.9	38.3	49.7	\$46,835	\$83,969	\$185,664
Total Zones	4,526.6	5,996.3	7,792.0	\$57,531	\$103,845	\$229,613
Total ONTARIO	4,712.0	6,193.0	7,951.0	\$56,583	\$101,531	\$222,467
Percent of Ontario	96%	97%	98%	102%	102%	103%

	EMPLOYMENT			AVERAGE HOUSEHOLD INCOME		
	1992	2005	2025	1992	2005	2025
	-----thousands-----			-----thousands-----		
86. Hull	75.6	95.6	115.3	\$47,752	\$87,087	\$182,537
87. Gatineau-Papineau-Labelle	57.2	72.3	87.2	\$42,043	\$76,674	\$160,712
88. Joliette-Montcalm	41.8	52.8	63.7	\$37,012	\$67,499	\$141,481
89. Deux Montagnes-Argenteuil	46.3	58.6	70.7	\$40,563	\$73,975	\$155,054
90. Six cities of Terrebonne	39.8	50.3	60.6	\$44,684	\$81,491	\$170,807
91. Terrebonne less (90)	53.0	67.0	80.8	\$44,574	\$81,290	\$170,387
92. Laval Ouest	70.2	88.7	107.0	\$49,391	\$90,076	\$188,801
93. Laval Est	71.7	90.7	109.4	\$49,348	\$89,997	\$188,637
94. Montreal - Zone A	179.2	226.6	273.2	\$42,961	\$78,349	\$164,223
95. Montreal - Zone B	181.3	229.3	276.4	\$42,962	\$78,350	\$164,224
96. Montreal - Zone C	76.6	96.9	116.8	\$42,980	\$78,383	\$164,294
97. Montreal - Zone D	25.4	32.1	38.7	\$42,954	\$78,335	\$164,194
98. Montreal - Zone E	138.8	175.5	211.7	\$42,956	\$78,340	\$164,204
100. Montreal - Zone F1	107.7	136.2	164.2	\$42,988	\$78,398	\$164,325
100. Montreal - Zone F2	131.3	166.0	200.2	\$42,704	\$77,880	\$163,239
101. Beauharnois-Soulanges	31.3	39.5	47.7	\$41,535	\$75,749	\$158,771
102. Laprairie	54.3	68.6	82.7	\$54,866	\$100,060	\$209,729
103. St. Hubert City	30.6	38.7	46.7	\$46,223	\$84,297	\$176,690
104. Longueuil City	59.6	75.4	90.9	\$39,878	\$72,727	\$152,437
105. Chambly less (103-104)	61.8	78.1	94.2	\$58,420	\$106,543	\$223,317
106. L'Assomption	72.3	91.5	110.3	\$50,548	\$92,186	\$193,224
107. Vaudreuil	25.4	32.1	38.7	\$50,549	\$92,187	\$193,227
108. Huntingdon-Napierville- St. Jean less (110)	12.3	15.5	18.7	\$37,774	\$68,889	\$144,393
109. Chateauguay	29.1	36.8	44.4	\$49,495	\$90,266	\$189,200
110. St. Jean CA	31.0	39.2	47.3	\$41,410	\$75,519	\$158,291
111. Iberville	11.2	14.2	17.1	\$40,022	\$72,989	\$152,988
112. Gransby CA	26.0	32.9	39.6	\$44,354	\$80,889	\$169,545
113. Missisquoi-Brome- Shefford less (112)	30.9	39.0	47.0	\$35,462	\$64,672	\$135,555
114. Trois-Rivieres City	19.2	24.3	29.3	\$36,642	\$66,825	\$140,067
115. Berthier-Maskinonge- St. Maurice less (114)	44.8	56.6	68.3	\$37,094	\$67,649	\$141,795
116. Champlain	46.7	59.1	71.2	\$38,638	\$70,464	\$147,696
117. Portneuf	26.6	33.6	40.5	\$42,312	\$77,166	\$161,742
118. Ste-Foy City	37.3	47.2	56.9	\$46,371	\$84,567	\$177,255
119. Quebec City	72.0	91.0	109.8	\$35,753	\$65,204	\$136,670
120. Charlesbourg City	33.3	42.1	50.8	\$49,111	\$89,565	\$187,732
121. Beauport City	27.8	35.1	42.4	\$43,345	\$79,049	\$165,690
122. Quebec less (118-121)	45.8	57.9	69.8	\$54,055	\$98,581	\$206,630
123. Montmorency No. 1, 2 & Charlevoix-Ouest	16.8	21.2	25.5	\$42,542	\$77,585	\$162,620
124. Sherbrooke City	33.6	42.4	51.2	\$38,211	\$69,686	\$146,065

High Speed Rail Study

Socioeconomic Variables - High Case

Forecast 2006, 2025

	EMPLOYMENT			AVERAGE HOUSEHOLD INCOME		
	1992	2005	2025	1992	2005	2025
	-----thousands-----			-----thousands-----		
125. Richmond-Sherbrooke and Stanstead less (124)	54.9	69.4	83.7	\$40,298	\$73,493	\$154,044
126. Vercheres-Richelieu	56.2	71.0	85.6	\$51,647	\$94,189	\$197,423
127. Ste-Hyacinthe CA	22.5	28.5	34.4	\$47,263	\$86,195	\$180,667
128. Ste-Hyacinthe-Rouville-Bagot less (127)	40.1	50.6	61.1	\$42,307	\$77,156	\$161,722
129. Drummondville CA	25.2	31.9	38.4	\$39,418	\$71,888	\$150,679
130. Drummond-Arthabaska- Wolfe-Compton less (129)	36.9	46.6	56.2	\$35,920	\$65,508	\$137,307
131. Yamaska-Nicolet-Lotbiniere	30.9	39.0	47.1	\$38,609	\$70,412	\$147,587
132. Megantic-Frontenac-Beauce	62.5	79.0	95.3	\$36,686	\$66,905	\$140,235
133. Levis	52.1	65.8	79.4	\$46,656	\$85,088	\$178,348
134. Bellechasse-Dorchester	21.8	27.6	33.3	\$37,277	\$67,984	\$142,496
135. Montmagny-L'Islet-Kamouraska	24.9	31.5	37.9	\$35,036	\$63,897	\$133,929
136. Chicoutimi-Lac St. Jean	100.1	126.5	152.6	\$42,109	\$76,796	\$160,967
 Total Zones	 2,703.6	 3,418.4	 4,121.9	 \$43,816	 \$79,081	 \$165,756
Total of Quebec	2,945.0	3,629.0	4,206.0	\$42,573	\$75,514	\$154,105
Percent of Quebec	92%	94%	98%	103%	105%	108%

GROSS DOMESTIC PRODUCT					
(at factor cost, billions of current \$)					
Ontario			Quebec		
1992	2005	2025	1992	2005	2025
244.20	519.57	1507.50	137.60	271.55	728.90

CAR OWNERSHIP PER HOUSEHOLD					
Ontario			Quebec		
1992	2005	2025	1992	2005	2025
1.37	1.54	1.76	1.19	1.25	1.39

ENGLISH/FRENCH BREAKDOWN						
	Ontario			Quebec		
	1992	2005	2025	1992	2005	2025
English	95.6%	96.2%	97.1%	9.7%	9.6%	9.5%
French	4.4%	3.8%	2.9%	90.3%	90.4%	90.5%

LABOUR FORCE POPULATION BY OCCUPATION						
(000)						
	Ontario			Quebec		
	1992	2005	2025	1992	2005	2025
Managerial & Other Profess.	1670	2,262	3,259	1,047	1,386	1,761
Clerical	883	1,252	1,532	577	740	884
Sales	528	573	580	330	302	277
Service	719	866	1,077	473	490	576
Primary Occupations	185	143	132	137	91	81
Processing, Machining & Fab.	695	806	745	483	515	443
Construction	312	360	442	184	184	186
Transport Equipment Operating	178	202	229	115	124	89
Material Handling & Other Craft	203	169	170	130	101	101
Unclassified	52	67	83	58	31	31
TOTAL	5425	6659	8282	3534	3962	4427

HOURLY SALARIES					
(employees paid by the hour)					
Ontario			Quebec		
1992	2005	2025	1992	2005	2025
\$14.01	\$24.52	\$60.28	\$13.39	\$22.57	\$51.40

FATALITY RATE IN PASSENGER OPERATIONS, PER BILLION PASSENGER KMS (NATIONAL)			
	1992	2005	2025
Air - Level 1 Carriers	0.050	0.044	0.036
Rail	13.800	12.110	9.900
Intercity Bus	2.000	1.750	1.440
Ferry	0.500	0.440	0.360
Private Car/Light Truck	13.000	11.410	9.360
VALUE OF A SINGLE FATALITY AVOIDED: (millions of dollars)	\$2.5	\$3.5	\$5.9

HOUSEHOLD EXPENDITURE ON TRANSPORT						
(billions of current \$)						
	Ontario			Quebec		
1992	2005	2025	1992	2005	2025	
\$22.6	\$44.7	\$98.0	\$14.3	\$26.3	\$53.2	

CONSUMER PRICE INDEX - ALL ITEMS (1986=100.0)						
	Ontario			Quebec		
1992	2005	2025	1992	2005	2025	
129.4	180.7	290.3	129.0	175.6	276.7	

TRANSPORT PRICE INDEX (1986=100.0)					
	Ontario			Quebec	
1992	2005	2025	1992	2005	2025
124.9	176.2	283.1	118.0	173.9	273.9

C- LOW CASE

High Speed Rail Study
Socioeconomic Variables - Low Case
Forecast 2006, 2026

	POPULATION			HOUSEHOLDS		
	<u>1992</u>	<u>2005</u>	<u>2025</u>	<u>1992</u>	<u>2005</u>	<u>2025</u>
	—thousands—			—thousands—		
1. Windsor City	190.8	230.9	291.3	75.1	95.4	127.1
2. Essex County (less 1)	138.5	167.7	211.4	47.1	59.8	79.7
3. Chatham CA	43.8	53.1	66.9	16.6	21.1	28.1
4. Kent County (less 3)	66.6	80.6	101.7	24.0	30.5	40.6
5. Sarnia City	51.1	61.9	78.0	21.1	26.9	35.8
6. Lambton County (Less 5)	78.5	95.1	119.9	27.0	34.3	45.7
7. Elgin	76.1	92.1	116.1	27.1	34.4	45.9
8. Haldimand-Norfolk	100.3	121.3	153.0	35.5	45.1	60.1
9. Grimsby	18.8	22.7	28.7	6.5	8.3	11.0
10. Ste-Catherines City	130.3	157.7	198.8	50.8	64.5	86.0
11. Niagara-On-The-Lake City	13.0	15.7	19.8	4.6	5.8	7.8
12. Niagara Falls	75.9	91.9	115.9	28.7	36.5	48.6
13. Niagara R. M. (Less 9-12)	160.2	193.9	244.5	60.0	76.2	101.6
14. Middlesex County (Less 15-16)	37.1	44.9	56.7	12.6	16.0	21.3
15. London City	309.5	374.6	472.5	123.8	157.3	209.5
16. London CMA less Yarm., Southw., London, Co	33.0	39.9	50.3	10.9	13.8	18.4
17. Woodstock CA	30.8	37.3	47.0	12.0	15.2	20.3
18. Oxford County (less 17)	63.4	76.8	96.8	21.9	27.8	37.1
19. Brantford City	83.1	100.6	126.8	31.0	39.4	52.5
20. Brant County (less 19)	28.5	34.5	43.5	9.5	12.1	16.1
21. Stratford CA	27.9	33.8	42.6	11.3	14.4	19.1
22. Perth County (less 21)	42.7	51.7	65.2	14.1	17.9	23.9
23. Kitchener City	171.4	207.5	261.6	63.7	80.9	107.8
24. Waterloo City	73.7	89.2	112.5	28.1	35.7	47.6
25. Waterloo RM (less 23-24)	141.7	171.5	216.3	47.6	60.4	80.5
26. Guelph City	89.8	108.6	137.0	33.6	42.7	56.9
27. Wellington County (less 26)	73.6	89.1	112.3	24.5	31.1	41.4
28. Stoney Creek City	51.3	62.1	78.3	16.6	21.0	28.0
29. Hamilton City	320.3	387.6	488.8	126.0	160.1	213.3
30. Ancaster City and Glenbrook	32.7	39.6	49.9	11.2	14.2	18.9
31. Dundas City	22.2	26.9	33.9	7.9	10.1	13.4
32. Fiamborough City	30.3	36.7	46.2	9.8	12.5	16.6
33. Burlington City	131.7	159.3	201.0	47.4	60.2	80.3
34. Oakville	120.6	145.9	184.0	40.1	50.9	67.9
35. Halton R. M. (less 33-34)	68.7	83.1	104.8	22.5	28.5	38.0
36. Mississauga City	480.8	582.0	734.0	154.4	196.1	261.3
37. Brampton City	243.4	294.6	371.5	73.6	93.5	124.6
38. Peel R. M. (less 36-37)	36.0	43.6	55.0	11.2	14.2	18.9
39. Etobicoke	311.1	376.5	474.8	116.4	147.9	197.0
40. Toronto City	639.4	773.9	976.0	276.8	351.6	468.5
41. York	141.4	171.1	215.8	56.9	72.3	96.3
42. East York	102.9	124.6	157.1	44.9	57.0	75.9
43. North York	563.2	681.7	859.7	205.0	260.5	347.1

	POPULATION			HOUSEHOLDS		
	1992	2006	2026	1992	2006	2026
	thousands			thousands		
44. Scarborough	532.4	644.3	812.6	178.2	226.4	301.6
45. Vaughan	122.6	148.3	187.1	32.9	41.8	55.8
46. Markham City	161.2	195.1	246.0	45.8	58.2	77.5
47. Richmond Hill	88.1	106.7	134.5	28.2	35.8	47.7
48. Aurora	31.2	37.8	47.7	10.0	12.7	16.9
49. Newmarket and Stouffville	66.2	80.1	101.0	21.2	26.9	35.9
50. York R. M. (less 45-49)	68.6	83.0	104.7	22.8	29.0	38.6
51. Pickering	72.7	88.0	111.0	21.8	27.7	36.9
52. Ajax	62.3	75.3	95.0	19.6	24.9	33.1
53. Whitby	64.4	77.9	98.3	20.6	26.2	34.9
54. Oshawa	129.3	156.5	197.3	47.6	60.4	80.5
55. New Castle	52.9	64.0	80.7	17.7	22.4	29.9
56. Durham R. M. (less 51-55)	43.9	53.1	67.0	15.5	19.7	26.2
57. Huron and Bruce	126.1	152.6	192.5	46.8	59.5	79.2
58. Grey and Dufferin	127.1	153.8	194.0	46.0	58.4	77.9
59. Barrie City	65.7	79.5	100.3	24.0	30.4	40.6
60. Simcoe County (less 59)	232.7	281.6	355.2	83.3	105.8	141.0
61. Muskoka and Parry Sound	88.7	107.4	135.4	34.2	43.4	57.9
62. Hope and Port Hope	15.4	18.7	23.5	5.7	7.2	9.6
63. Hamilton and Cobourg	25.5	30.8	38.9	9.6	12.2	16.2
64. Northumberland County (less 62-63)	39.3	47.6	60.0	14.1	17.9	23.9
65. Prince Edward County	24.0	29.1	36.7	8.9	11.3	15.1
66. Peterborough City	69.7	84.3	106.4	27.5	34.9	46.5
67. Peterbor. and Victoria (less 66)	118.4	143.3	180.8	43.4	55.1	73.5
68. Trenton	17.2	20.8	26.3	6.8	8.6	11.5
69. Belleville City	37.4	45.2	57.0	15.6	19.8	26.4
70. Hastings County (less 68-69)	63.1	76.3	96.3	22.1	28.1	37.4
71. Kingston	56.7	68.7	86.6	26.4	33.5	44.7
72. Front. Cty, Len. & Addinct. (less 71)	112.6	136.3	171.9	38.5	48.9	65.2
73. Brockville	21.7	26.3	33.1	9.2	11.7	15.6
74. Leeds (less 73)	69.5	84.1	106.1	26.2	33.3	44.3
75. Cornwall	47.2	57.1	72.0	18.6	23.6	31.5
76. Stormont-Dundas (less 75)	61.6	74.6	94.0	21.9	27.8	37.1
77. Smith Falls	9.4	11.4	14.4	3.8	4.8	6.4
78. Lanark County (less 77)	46.3	56.1	70.7	17.0	21.6	28.8
79. Rideau, Osgoode	26.7	32.3	40.7	8.8	11.1	14.8
80. Ottawa-Carleton (less 79, 81-84)	73.5	89.0	112.2	23.7	30.2	40.2
81. Nepean	109.7	132.8	167.5	38.6	49.0	65.3
82. Ottawa	315.4	381.7	481.4	141.7	180.1	239.9
83. Vanier, Gloucester	122.0	147.6	186.2	42.4	53.9	71.8
84. Cumberland	44.0	53.2	67.2	13.5	17.2	22.9
85. Prescott and Russel County	69.0	83.5	105.3	23.9	30.4	40.5
Total Zones	9,377.1	11,349.3	14,313.6	3,413.4	4,336.4	5,777.4
Total ONTARIO	10,262.2	12,140.0	14,782.0	3,742.1	4,701.0	6,156.0
Percent of Ontario	91%	93%	97%	91%	92%	94%

High Speed Rail Study

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Forecast 2006, 2026

	POPULATION			HOUSEHOLDS		
	1992	2006	2026	1992	2006	2026
	thousands			thousands		
86. Hull	161.1	179.3	201.1	62.1	71.5	82.9
87. Gatineau-Papineau-Labelle	144.9	161.3	180.8	53.6	61.7	71.6
88. Joliette-Montcalm	105.0	116.8	131.0	40.7	46.9	54.4
89. Deux Montagnes-Argenteuil	131.3	146.1	163.9	48.6	55.9	64.9
90. Six cities of Terrebonne	90.4	100.6	112.8	45.4	52.2	60.6
91. Terrebonne less (90)	178.9	199.1	223.2	54.9	63.2	73.3
92. Laval Ouest	159.2	177.2	198.6	58.0	66.7	77.4
93. Laval Est	162.3	180.6	202.5	59.0	67.9	78.7
94. Montreal - Zone A	400.8	446.0	500.1	172.2	196.2	229.9
95. Montreal - Zone B	378.6	421.3	472.4	164.5	189.4	219.7
96. Montreal - Zone C	160.1	178.1	199.7	69.6	80.1	92.9
97. Montreal - Zone D	53.0	59.0	66.1	23.0	26.5	30.7
98. Montreal - Zone E	289.9	322.6	361.7	126.1	145.2	168.4
100. Montreal - Zone F1	222.4	247.5	277.5	96.8	111.5	129.3
100. Montreal - Zone F2	271.2	301.8	338.4	118.1	136.0	157.7
101. Beauharnois-Soulanges	74.9	83.3	93.4	29.0	33.4	38.7
102. Laprairie	139.1	154.8	173.6	47.3	54.5	63.2
103. St. Hubert City	75.7	84.2	94.4	25.5	29.4	34.1
104. Longueuil City	130.9	145.7	163.4	53.9	62.1	72.0
106. Chambly less (103-104)	134.7	149.9	168.1	50.0	57.5	66.7
106. L'Assomption	163.6	182.1	204.1	55.6	63.9	74.2
107. Vaudreuil	68.4	76.1	85.3	24.4	28.0	32.5
108. Huntingdon-Napierville- St. Jean less (110)	28.6	31.9	35.7	10.2	11.7	13.6
109. Chateauguay	65.7	73.1	82.0	23.1	26.6	30.8
110. St. Jean CA	70.2	78.1	87.6	27.3	31.4	36.4
111. Iberville	26.4	29.4	33.0	9.5	10.9	12.6
112. Gransby CA	61.2	68.1	76.4	24.1	27.8	32.2
113. Missisquoi-Brome- Shefford less (112)	78.3	87.1	97.7	29.6	34.1	39.5
114. Trois-Rivieres City	49.3	54.8	61.5	22.9	26.3	30.5
115. Berthier-Maskinonge- St. Maurice less (114)	121.7	135.4	151.9	47.1	54.2	62.8
116. Champlain	123.6	137.5	154.2	48.0	55.3	64.1
117. Portneuf	68.2	75.9	85.1	24.8	28.6	33.2
118. Ste-Foy City	71.4	79.5	89.1	32.4	37.3	43.2
119. Quebec City	168.1	187.1	209.7	80.9	93.2	108.0
120. Charlesbourg City	71.4	79.5	89.1	27.4	31.6	36.6
121. Beauport City	70.5	78.5	88.0	25.4	29.2	33.9
122. Quebec less (118-121)	113.1	125.9	141.2	39.8	45.8	53.1
123. Montmorency No. 1, 2 & Charlevoix-Ouest	44.9	49.9	56.0	15.8	18.2	21.1
124. Sherbrooke City	76.8	85.5	95.8	34.7	40.0	46.4

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	POPULATION			HOUSEHOLDS		
	<u>1992</u>	<u>2005</u>	<u>2025</u>	<u>1992</u>	<u>2005</u>	<u>2025</u>
	—thousands—			—thousands—		
125. Richmond-Sherbrooke and Stanstead less (124)	133.9	149.0	167.1	49.5	57.0	66.1
126. Vercheres-Richelieu	134.4	149.6	167.7	48.3	55.6	64.5
127. Ste-Hyacinthe CA	50.6	56.3	63.1	20.4	23.5	27.3
128. Ste-Hyacinthe-Rouville-Bagot less (127)	90.7	101.0	113.2	32.1	37.0	42.9
129. Drummondville CA	60.9	67.8	76.0	24.1	27.7	32.2
130. Drummond-Arthabaska- Wolfe-Compton less (129)	114.6	127.6	143.0	41.7	48.0	55.6
131. Yamaska-Nicolet-Lotbiniere	78.5	87.3	97.9	27.4	31.6	36.6
132. Megantic-Frontenac-Beauce	157.8	175.6	196.9	56.6	65.1	75.5
133. Levis	119.5	132.9	149.1	43.2	49.7	57.7
134. Bellechasse-Dorchester	57.0	63.4	71.1	19.2	22.2	25.7
135. Montmagny-L'Islet-Kamouraska	69.7	77.6	87.0	25.1	28.9	33.5
136. Chicoutimi-Lac St. Jean	286.4	318.7	357.4	100.5	115.6	134.1
 Total Zones	 6,360	 7,077	 7,936	 2,490	 2,867	 3,324
Total of Quebec	6,926	7,532	8,125	2,708	3,089	3,533
Percent of Quebec	92%	94%	98%	92%	93%	94%

	EMPLOYMENT			AVERAGE HOUSEHOLD INCOME		
	1992	2005	2025	1992	2005	2025
	—thousands—			—thousands—		
1. Windsor City	90.0	113.9	132.6	\$46,801	\$74,056	\$151,601
2. Essex County (less 1)	60.1	76.0	88.5	\$53,710	\$84,988	\$173,980
3. Chatham CA	18.8	23.8	27.7	\$45,579	\$72,123	\$147,642
4. Kent County (less 3)	29.7	37.5	43.7	\$46,256	\$73,194	\$149,835
5. Sarnia City	21.9	27.7	32.2	\$49,147	\$77,768	\$159,198
6. Lambton County (Less 5)	34.0	43.0	50.0	\$52,949	\$83,785	\$171,516
7. Elgin	33.8	42.7	49.7	\$46,688	\$73,877	\$151,234
8. Haldimand-Norfolk	44.3	56.0	65.2	\$47,929	\$75,841	\$155,254
9. Grimsby	8.8	11.1	12.9	\$61,776	\$97,751	\$200,106
10. Ste-Catherines City	59.7	75.5	87.9	\$51,842	\$82,032	\$167,928
11. Niagara-On-The-Lake City	6.7	8.5	9.8	\$63,375	\$100,281	\$205,286
12. Niagara Falls	35.5	44.9	52.3	\$49,055	\$77,623	\$158,902
13. Niagara R. M. (Less 9-12)	68.8	87.0	101.3	\$50,395	\$79,744	\$163,243
14. Middlesex County (Less 15-16)	17.2	21.7	25.3	\$49,837	\$78,860	\$161,434
15. London City	146.7	185.6	216.0	\$51,832	\$82,017	\$167,897
16. London CMA less Yarm., Southw., London, Cor	16.0	20.2	23.6	\$63,155	\$99,934	\$204,574
17. Woodstock CA	13.4	16.9	19.7	\$47,147	\$74,603	\$152,720
18. Oxford County (less 17)	28.5	36.1	42.0	\$47,970	\$75,906	\$155,386
19. Brantford City	35.0	44.3	51.5	\$46,464	\$73,523	\$150,509
20. Brant County (less 19)	12.0	15.2	17.7	\$49,372	\$78,124	\$159,927
21. Stratford CA	13.1	16.6	19.3	\$46,894	\$74,203	\$151,901
22. Perth County (less 21)	19.6	24.8	28.8	\$46,848	\$74,130	\$151,752
23. Kitchener City	91.6	115.8	134.9	\$55,377	\$87,627	\$179,381
24. Waterloo City	36.4	46.1	53.7	\$66,632	\$105,436	\$215,838
25. Waterloo RM (less 23-24)	69.4	87.8	102.2	\$56,969	\$90,146	\$184,537
26. Guelph City	42.9	54.3	63.2	\$52,961	\$83,803	\$171,553
27. Wellington County (less 26)	33.6	42.4	49.4	\$55,398	\$87,660	\$179,448
28. Stoney Creek City	22.9	28.9	33.7	\$60,059	\$95,035	\$194,546
29. Hamilton City	153.3	194.0	225.8	\$46,161	\$73,044	\$149,528
30. Ancaster City and Glenbrook	14.9	18.8	21.9	\$74,953	\$118,602	\$242,791
31. Dundas City	10.5	13.2	15.4	\$62,091	\$98,251	\$201,129
32. Fiamborough City	14.9	18.8	21.9	\$64,523	\$102,099	\$209,006
33. Burlington City	66.1	83.6	97.3	\$69,614	\$110,155	\$225,497
34. Oakville	60.2	76.2	88.7	\$82,542	\$130,611	\$267,373
35. Halton R. M. (less 33-34)	34.2	43.2	50.3	\$67,903	\$107,447	\$219,955
36. Mississauga City	249.2	315.2	366.9	\$69,447	\$109,890	\$224,955
37. Brampton City	123.9	156.8	182.5	\$67,274	\$106,452	\$217,917
38. Peel R. M. (less 36-37)	18.2	23.1	26.8	\$78,146	\$123,655	\$253,133
39. Etobicoke	168.0	212.5	247.4	\$64,549	\$102,139	\$209,089
40. Toronto City	342.9	433.8	505.0	\$57,311	\$90,687	\$185,645
41. York	70.6	89.3	104.0	\$47,495	\$75,154	\$153,848
42. East York	55.0	69.6	81.0	\$51,024	\$80,739	\$165,280
43. North York	300.2	379.7	442.1	\$63,377	\$100,284	\$205,292

High Speed Rail Study
Socioeconomic Variables - Low Case
Forecast 2005, 2025

	EMPLOYMENT			AVERAGE HOUSEHOLD INCOME		
	1992	2005	2025	1992	2005	2025
	-----thousands-----			-----thousands-----		
44. Scarborough	261.3	330.5	384.8	\$60,083	\$95,073	\$194,623
45. Vaughan	60.2	76.2	88.7	\$91,718	\$145,130	\$297,095
46. Markham City	80.3	101.6	118.2	\$96,441	\$152,604	\$312,396
47. Richmond Hill	46.0	58.1	67.7	\$83,269	\$131,762	\$269,730
48. Aurora	15.9	20.1	23.4	\$77,414	\$122,497	\$250,762
49. Newmarket and Stouffville	31.3	39.5	46.0	\$71,353	\$112,905	\$231,128
50. York R. M. (less 45-49)	31.7	40.1	46.6	\$68,132	\$107,808	\$220,694
51. Pickering	31.1	39.3	45.7	\$79,792	\$126,259	\$258,465
52. Ajax	22.8	28.9	33.6	\$70,149	\$111,001	\$227,230
53. Whitby	27.4	34.6	40.3	\$72,017	\$113,957	\$233,282
54. Oshawa	72.0	91.1	106.0	\$60,484	\$95,708	\$195,924
55. New Castle	19.2	24.3	28.3	\$64,720	\$102,411	\$209,644
56. Durham R. M. (less 51-55)	20.9	26.4	30.7	\$59,700	\$94,466	\$193,381
57. Huron and Bruce	53.0	67.1	78.1	\$42,511	\$67,267	\$137,702
58. Grey and Dufferin	55.8	70.6	82.1	\$46,335	\$73,318	\$150,090
59. Barrie City	31.3	39.6	46.1	\$55,362	\$87,602	\$179,329
60. Simcoe County (less 59)	100.4	127.0	147.9	\$50,089	\$79,258	\$162,249
61. Muskoka and Parry Sound	35.0	44.3	51.5	\$41,877	\$66,264	\$135,649
62. Hope and Port Hope	6.6	8.3	9.7	\$46,883	\$74,186	\$151,865
63. Hamilton and Cobourg	11.4	14.4	16.8	\$48,973	\$77,493	\$158,636
64. Northumberland County (less 62-63)	15.8	20.0	23.3	\$41,961	\$66,397	\$135,922
65. Prince Edward County	10.1	12.8	14.9	\$43,327	\$68,558	\$140,345
66. Peterborough City	29.5	37.4	43.5	\$45,967	\$72,736	\$148,897
67. Peterbor. and Victoria (less 66)	48.3	61.1	71.1	\$45,806	\$72,482	\$148,377
68. Trenton	7.5	9.4	11.0	\$43,854	\$69,392	\$142,052
69. Belleville City	16.3	20.6	24.0	\$35,600	\$56,332	\$115,317
70. Hasting County (less 68-69)	24.9	31.4	36.6	\$52,440	\$82,979	\$169,867
71. Kingston	25.0	31.7	36.9	\$41,457	\$65,600	\$134,290
72. Front. Cty. Len. & Addinct. (less 71)	50.3	63.6	74.1	\$52,719	\$83,420	\$170,768
73. Brockville	9.7	12.3	14.3	\$44,481	\$70,385	\$144,084
74. Leeds (less 73)	30.6	38.8	45.1	\$46,752	\$73,979	\$151,441
75. Cornwall	19.1	24.1	28.1	\$52,468	\$83,024	\$169,958
76. Stormont-Dundas (less 75)	26.2	33.1	38.5	\$58,053	\$91,861	\$188,048
77. Smith Falls	3.7	4.7	5.4	\$38,939	\$61,615	\$126,132
78. Lanark County (less 77)	20.6	26.0	30.3	\$46,494	\$73,570	\$150,606
79. Rideau, Osgoode	12.1	15.3	17.8	\$71,863	\$113,714	\$232,783
80. Ottawa-Carleton (less 79, 81-84)	30.7	38.9	45.2	\$82,890	\$131,161	\$268,500
81. Nepean	58.6	74.1	86.3	\$73,655	\$116,549	\$238,588
82. Ottawa	173.7	219.7	255.8	\$55,581	\$87,950	\$180,041
83. Vanier, Gloucester	64.0	81.0	94.3	\$66,324	\$104,948	\$214,839
84. Cumberland	15.5	19.6	22.8	\$73,272	\$115,943	\$237,347
85. Prescott and Russel County	28.9	36.5	42.5	\$46,835	\$74,110	\$151,711
Total Zones	4,526.6	5,726.1	6,666.0	\$57,531	\$91,653	\$187,623
Total ONTARIO	4,712.0	5,914.0	6,802.0	\$56,583	\$89,611	\$181,784
Percent of Ontario	96%	97%	98%	102%	102%	103%

High Speed Rail Study

Socioeconomic Variables - Low Case

Forecast 2005, 2025

	EMPLOYMENT			AVERAGE HOUSEHOLD INCOME		
	1992	2005	2025	1992	2005	2025
	thousands			thousands		
86. Hull	75.6	90.4	100.7	\$47,752	\$79,730	\$162,945
87. Gatineau-Papineau-Labelle	57.2	68.4	76.1	\$42,043	\$70,197	\$143,463
88. Joliette-Montcalm	41.8	50.0	55.6	\$37,012	\$61,797	\$126,296
89. Deux Montagnes-Argenteuil	46.3	55.4	61.7	\$40,563	\$67,726	\$138,412
90. Six cities of Terrebonne	39.8	47.6	52.9	\$44,684	\$74,607	\$152,474
91. Terrebonne less (90)	53.0	63.4	70.6	\$44,574	\$74,423	\$152,100
92. Laval Ouest	70.2	83.9	93.4	\$49,391	\$82,466	\$168,537
93. Laval Est	71.7	85.8	95.5	\$49,348	\$82,395	\$168,391
94. Montreal - Zone A	179.2	214.3	238.6	\$42,961	\$71,731	\$146,597
95. Montreal - Zone B	181.3	216.9	241.4	\$42,962	\$71,731	\$146,598
96. Montreal - Zone C	76.6	91.6	102.0	\$42,980	\$71,762	\$146,660
97. Montreal - Zone D	25.4	30.4	33.8	\$42,954	\$71,718	\$146,571
98. Montreal - Zone E	138.8	166.1	184.8	\$42,956	\$71,723	\$146,580
100. Montreal - Zone F1	107.7	128.9	143.4	\$42,988	\$71,775	\$146,688
100. Montreal - Zone F2	131.3	157.1	174.8	\$42,704	\$71,301	\$145,718
101. Beauharnois-Soulanges	31.3	37.4	41.6	\$41,535	\$69,350	\$141,731
102. Laprairie	54.3	64.9	72.2	\$54,866	\$91,607	\$187,219
103. St. Hubert City	30.6	36.6	40.8	\$46,223	\$77,176	\$157,726
104. Longueuil City	59.6	71.3	79.4	\$39,878	\$66,583	\$136,076
105. Chambly less (103-104)	61.8	73.9	82.2	\$58,420	\$97,542	\$199,348
106. L'Assomption	72.3	86.5	96.3	\$50,548	\$84,398	\$172,485
107. Vaudreuil	25.4	30.4	33.8	\$50,549	\$84,400	\$172,488
108. Huntingdon-Napierville- St. Jean less (110)	12.3	14.7	16.3	\$37,774	\$63,070	\$128,896
109. Chateaugay	29.1	34.8	38.8	\$49,495	\$82,641	\$168,893
110. St. Jean CA	31.0	37.1	41.3	\$41,410	\$69,140	\$141,302
- 111. Iberville	11.2	13.4	14.9	\$40,022	\$66,824	\$136,568
- 112. Gransby CA	26.0	31.1	34.6	\$44,354	\$74,056	\$151,348
113. Missisquoi-Brome- Shefford less (112)	30.9	36.9	41.1	\$35,462	\$59,209	\$121,006
114. Trois-Rivieres City	19.2	23.0	25.6	\$36,642	\$61,180	\$125,033
115. Berthier-Maskinonge- St. Maurice less (114)	44.8	53.6	59.6	\$37,094	\$61,935	\$126,576
116. Champlain	46.7	55.9	62.2	\$38,638	\$64,512	\$131,844
117. Portneuf	26.6	31.8	35.4	\$42,312	\$70,647	\$144,383
118. Ste-Foy City	37.3	44.6	49.7	\$46,371	\$77,423	\$158,231
119. Quebec City	72.0	86.1	95.9	\$35,753	\$59,696	\$122,001
120. Charlesbourg City	33.3	39.9	44.4	\$49,111	\$81,999	\$167,583
121. Beauport City	27.8	33.2	37.0	\$43,345	\$72,372	\$147,907
122. Quebec less (118-121)	45.8	54.8	61.0	\$54,055	\$90,254	\$184,452
123. Montmorency No. 1, 2 & Charlevoix-Ouest	16.8	20.0	22.3	\$42,542	\$71,031	\$145,166
124. Sherbrooke City	33.6	40.2	44.7	\$38,211	\$63,800	\$130,388

*High Speed Rail Study**Socioeconomic Variables - Low Case**Forecast 2006, 2025*

	EMPLOYMENT			AVERAGE HOUSEHOLD INCOME		
	<u>1992</u>	<u>2005</u>	<u>2025</u>	<u>1992</u>	<u>2005</u>	<u>2025</u>
	—thousands—			—thousands—		
125. Richmond-Sherbrooke and Stanstead less (124)	54.9	65.7	73.1	\$40,298	\$67,285	\$137,511
126. Vercheres-Richelieu	56.2	67.2	74.8	\$51,647	\$86,233	\$176,234
127. Ste-Hyacinthe CA	22.5	27.0	30.0	\$47,263	\$78,913	\$161,276
128. Ste-Hyacinthe-Rouville-Bagot less (127)	40.1	47.9	53.3	\$42,307	\$70,639	\$144,365
129. Drummondville CA	25.2	30.2	33.6	\$39,418	\$65,815	\$134,506
130. Drummond-Arthabaska- Wolfe-Compton less (129)	36.9	44.1	49.1	\$35,920	\$59,974	\$122,570
131. Yamaska-Nicolet-Lotbiniere	30.9	36.9	41.1	\$38,609	\$64,464	\$131,746
132. Megantic-Frontenac-Beauce	62.5	74.8	83.2	\$36,686	\$61,253	\$125,184
133. Levis	52.1	62.3	69.3	\$46,656	\$77,901	\$159,206
134. Bellechasse-Dorchester	21.8	26.1	29.0	\$37,277	\$62,241	\$127,202
135. Montmagny-L'Islet-Kamouraska	24.9	29.8	33.1	\$35,036	\$58,499	\$119,555
136. Chicoutimi-Lac St. Jean	100.1	119.7	133.2	\$42,109	\$70,309	\$143,690
 Total Zones	 2,704	 3,234	 3,600	 \$43,816	 \$72,401	 \$147,966
Total of Quebec	2,945	3,433	3,673	\$42,573	\$69,135	\$137,565
Percent of Quebec	92%	94%	98%	103%	105%	108%

High Speed Rail Study

Socioeconomic Variables - Low Case

Forecast 2025, 2025

GROSS DOMESTIC PRODUCT					
(at factor cost, billions of current \$)					
Ontario			Quebec		
1992	2005	2025	1992	2005	2025
\$244.2	\$475.8	\$1,276.7	\$137.6	\$264.6	\$656.5

CAR OWNERSHIP PER HOUSEHOLD					
Ontario			Quebec		
1992	2005	2025	1992	2005	2025
1.37	1.41	1.53	1.19	1.19	1.28

ENGLISH/FRENCH BREAKDOWN						
	Ontario			Quebec		
	1992	2005	2025	1992	2005	2025
English	95.6%	96.5%	97.9%	9.7%	9.6%	9.3%
French	4.4%	3.5%	2.1%	90.3%	90.4%	90.7%

LABOUR FORCE POPULATION BY OCCUPATION						
('000)						
	Ontario			Quebec		
	1992	2005	2025	1992	2005	2025
Managerial & Other Profess.	1670	2,221	2,885	1,047	1,349	1,593
Clerical	883	1,230	1,362	577	720	796
Sales	528	562	512	330	294	249
Service	719	849	959	473	477	518
Primary Occupations	185	141	121	137	88	73
Processing, Machining & Fab.	695	786	658	483	502	398
Construction	312	351	391	184	179	167
Transport Equipment Operating	178	199	202	115	121	80
Material Handling & Other Craft	203	166	150	130	98	91
Unclassified	52	66	73	58	30	27
TOTAL	5425	6571	7314	3,534	3,857	3,992

High Speed Rail Study

Socioeconomic Variables - Low Case

Forecast 2005, 2025

HOURLY SALARIES						
(employees paid by the hour)						
	Ontario			Quebec		
	1992	2005	2025	1992	2005	2025
	\$14.01	\$24.52	\$61.44	\$13.39	\$22.57	\$52.39

FATALITY RATE IN PASSENGER OPERATIONS, PER BILLION PASSENGER KMS (NATIONAL)			
	1992	2005	2025
Air - Level 1 Carriers	0.050	0.044	0.036
Rail	13.800	12.110	9.900
Intercity Bus	2.000	1.750	1.440
Ferry	0.500	0.440	0.360
Private Car/Light Truck	13.000	11.410	9.360
VALUE OF A SINGLE FATALITY AVOIDED:	\$0.5	\$0.8	\$1.6
(millions of dollars)			

HOUSEHOLD EXPENDITURES ON TRANSPORT						
(billions of current \$))						
	Ontario			Quebec		
1992	2005	2025	1992	2005	2025	
\$22.6	\$40.9	\$83.0	\$14.3	\$25.7	\$47.9	

CONSUMER PRICE INDEX - ALL ITEMS						
(1986=100.0)						
	Ontario			Quebec		
1992	2005	2025	1992	2005	2025	
129.4	202.4	402.7	129.0	206.9	403.8	

TRANSPORT PRICE INDEX						
(1986=100.0)						
	Ontario			Quebec		
1992	2005	2025	1992	2005	2025	
124.9	197.4	392.8	118.0	204.8	400.0	