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Passenger Traffic Forecast

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THE COUNTRY

Canada is the country chosen for this passenger traffic forecast.

Transport Canada updates its air traffic data annually, thus all the figures required to prepare a traffic forecast are easily accessible.

CANADA AVIATION FORECASTS 2002-2016

This report presents the 2001 - 2016 Canada passengers traffic forecasts.

The forecasts provide medium to long term outlook for enplaned and deplaned revenue passengers and revenue passenger kilometres (RPK).

Data provided by Transport Canada will be compared with the Econometric forecasting technique from Airline Business Module.

ECONOMIC OUTLOOK

CANADA National Outlook, Review of 2002

Growth in the year was surprisingly strong. The consensus at the beginning of the year anticipated an expansion of 1.3 per cent, with the most optimistic outlook being 2 per cent. Current indicators are that growth for the year will be in the range of 3.4 per cent, with employment having increased by 325,000 (2.2 per cent).

The driving force behind this was a sharp reduction in personal tax rates introduced by the federal and provincial governments early in the year.

Notwithstanding this favourable general picture there was weakness in areas that are key to air transport. Canadian consumers were cautious about spending on travel-related services as is indicated by spending on food and accommodation that in real terms was unchanged from that of 2001. And Canadian real spending on travel abroad appears to have declined by about 2 per cent, which for the travel industry, was matched by an even larger decline in travel of foreigners to Canada. Added to the mix of concerns about security and related costs of travel to explain this has been a general economic explanation. Reduced real business spending on investment in 2002 should be directly related to reduced, associated travel for business purposes.

Short Term

At the beginning of 2003, the consensus anticipates that the 2001 economic slow down (reinforced by the September attack that year) in the United States and subsequent sluggish recovery last year will end and be followed by an extended cyclical recovery to produce healthy growth into the late years of this decade.

In Canada in the first quarter of 2003, the economy grew at a modest 2.4 per cent annual rate. The current expectation is that the economy will grow on average at a 2-per-cent annual rate in the first half of 2003 and that this pace will accelerate to about 4 per cent in the second half.

Cyclical considerations suggest a high probability of steady strong growth into the late years of the decade in Canada as well as in the United States.

For the aviation industry, this picture suggests some continued initial caution about consumer spending on travel, but with prospects of strong growth, to be reinforced by strong business-related travel within Canada and between Canada and the United States as we move into 2004 and later years.

Medium to Long-Term (2006-2016)

The demographic picture for Canada during the forecasting horizon is that of a slower growth in population and labour force. Population growth is expected to decline because of a low fertility rate and decreasing immigration levels. The slower labour force growth is the result of a slower growth of the working-age population. Also, the maturing technology sector will limit productivity growth which will in turn further slow the GDP growth.

The combination of a falling participation rate and weaker growth in the source population will steadily lower labour force growth. It is expected that by 2007 the growing labour shortage will drive up wages, increase labour productivity and decrease the unemployment rate. The decreasing rate of labour force growth will have a negative effect on GDP growth.

In the context of the above discussion and its implications, Canadian gross domestic product for the two periods, 2006 to 2011, and 2011 to 2016, are expected to grow by 2.6 per cent and 2.1 per cent a year on average, respectively.

PRDI/cap is forecast to grow by 1.3 per cent a year on average from 2006 to 2011 and by 1.5 per cent a year thereafter to 2016. A stable and low inflationary environment, and rising wage rates due to productivity gains, are the main factors underlying the forecast growth of PRDI/cap for the medium term

A summary of the major socio-economic forecast assumptions is presented in the following table:

LONG-TERM FORECASTS OF INPUT VARIABLES FOR CANADA
(average annual growth rate, %)

Variable	1996-2001	2001-2006	2006-2011	2011-2016
Real GDP (1)	3.7%	3.3%	2.6%	2.1%
PRDI/Cap (2)	1.5%	2.1%	1.3%	1.5%
Adult Population (3)	1.3%	1.3%	1.1%	1.0%

1. Real gross domestic product at basic prices.
2. Personal real disposable income per capita.
3. 20 years of age and over.

Source: Informetrica Ltd., and the Conference Board of Canada.

ENPLANED AND DEPLANED REVENUE PASSENGERS

Historical Data

During the second half of last decade (1995-2000) passenger traffic in Canada experienced above average growth stimulated by strong economic growth and the impact of domestic low-cost air carriers such as WestJet Airlines. However since 2000 passenger traffic up to and including 2002 has declined by some 7 per cent. Some of the major factors that have contributed to the drop in passenger traffic have been the fallout from the terrorist attacks in the U.S on September 11th 2001 and the major economic slowdown in the United States which preceded the terrorist attacks in 2001 and rapidly spread to the rest of the world including Canada. Immediately after the September tragedy in New York and Washington, travelers' perception of the safety of flying eroded the traveling public's confidence and passenger travel dropped significantly in all markets.

The fallout from the terrorist attacks in the U.S. on September 11th, 2001 was felt throughout the world and particularly in the United States. When combined with the economic slowdown during 2001, the impact was a significant drop in passenger traffic at all Canadian airports and in particular at airports with significant transborder traffic. At the end of 2001, total E&D passenger traffic fell back 2.2 percent. A slightly higher drop in air carrier aircraft movements of 2.6 percent accompanied this drop in passenger demand.

Forecast

The passenger forecast developed by Transport Canada is presented in the following table:

ENPLANED & DEPLANED REVENUE PASSENGERS
ALL REPORTING AIRPORTS MAJOR
REGIONAL/LOCAL AND CHARTER CARRIERS

YEAR	TOT.PAX	%CHANGE
1996	73,906,004	
1997	79,524,572	
1998	82,769,861	
1999	85,204,735	
2000	86,003,003	
2001	84,123,796	
2002	79,923,300	-5.0%
2003	78,900,000	-1.3%
2004	83,339,400	5.6%
2005	87,846,500	5.4%
2006	92,244,900	5.0%
		% 2006/2011
2011	113,545,300	4.2%
		% 2011/2016
2016	131,639,800	3.0%

Source: Transport Canada

Revenue Passenger-Kilometres

A passenger-kilometre is defined as a unit of measure of the carriage of one passenger through a distance of one kilometre. A total of passenger-kilometres flown is obtained by summing the number of kilometres flown by each passenger.

Revenue passenger-kilometres are directly linked to enplaned and deplaned passenger and air-carrier itinerant aircraft movement forecasts. The number of passenger-kilometres depends on the number of passengers in each traffic sector and the distances they travel. The distances the passengers travel, in turn, depend on the composition and utilization of the airlines' aircraft fleet and their air route network.

For the period 1992 to 2002, RPKs sustained an average annual growth rate of 7.1 percent for Canadian scheduled air carriers, having grown from 42.5 billion in 1992 to 84 billion in 2002.

The expected average annual growth rate of RPKs from 2002 to 2011 is 4.2 per cent and 3.9 per cent from 2002 to 2016.

REVENUE PASSENGER KILOMETERS
SCHEDULE SERVICES
(Billions)

YEAR	RPKs
1996	60.0
1997	66.4
1998	71.2
1999	73.6
2000	86.9
2001	80.5
2002	84.0
2003	83.2
2004	88.1
2005	93.1
2006	98.1
2011	122.2
2016	143.7

Average Annual Growth Rates (%)

1992-2002	7.1%
2002-2006	3.9%
2002-2011	4.2%
2002-2016	3.9%

ECONOMETRIC FORECASTING METHOD

We are now going to apply the econometric forecasting method as seen in the Airline Business Module and compare the results with the more accurate Transport Canada traffic forecast for the period 2006-2011

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The parameters and the assumptions used for our forecast are the follows:

- PER CAPITA ECONOMIC GROWTH%

The data provided by Conference Board of Canada for the period 2006-2011 as reported above are:

Real gross domestic product at basic prices: 2.6%

Personal real disposable income per capita: 1.3%

We will use an average 2.0% as per capita economic growth.

The assumption is that traffic growth is equal per capita economic growth multiplied by factor of 1.5.

- POPULATION GROWTH%

The data provided by Conference Board of Canada for the period 2006-2011 as reported above is 1.1%

The assumption is that traffic growth is equal population growth multiplied by factor of 1.0.

- PRICE OF AIR TRAVEL%

The introduction of low fares airline, in particular WestJet airlines for Canada, suggest an overall reduction of air fares.

The following table is available from Transport Canada:

	BASED ON 1,000 MILE TRIP			4,000 M.T.
	DOMESTIC			INT'L
	FIRST/BUSS	COACH	ALL	ALL
SEPT 2001	-15.3%	-18.7%	-18.2%	-9.9%
OCT	-15.4%	-20.4%	-19.2%	-10.4%
NOV	-16.7%	-16.5%	-16.3%	-11.1%
DEC	-13.5%	-14.9%	-14.6%	-13.8%
JAN 2002	-15.2%	-16.4%	-16.1%	-14.0%
FEB	-11.4%	-14.3%	-13.6%	-12.4%
MAR	-14.3%	-13.0%	-13.2%	-8.5%
APR	-13.9%	-12.1%	-11.9%	-2.1%
MAY	-10.2%	-9.6%	-9.5%	-3.8%
JUNE	-11.5%	-9.6%	-9.8%	0.2%
JULY	-10.7%	-9.2%	-9.1%	-1.3%
YTD 2002	-12.6%	-11.6%	-11.6%	-4.8%

Considering that the above figures reflect the introduction of low-cost airlines, the period 2006-11 will not probably show the same fares reduction, thus the total value considered will be: -3.5%.

The assumption is that traffic growth is equal price of air travel growth multiplied by a negative factor of -0.75.

AMOUNT OF LEISURE TIME%

These parameter is guessed to be 1.0% for the period 2006-11.

The assumption is that traffic growth is equal to the amount of leisure travel multiplied by a factor of 0.5%.

RESULTS

PARAMETERS	2006-11	FACTOR	TRAFFIC GROWTH
PER CAPITA ECON GROWTH	2.0%	1.5%	3.0%
POPULTATION GROWTH	1.1.%	1.0%	1.1%
PRICE OF AIR TRAVEL	-3.5%	-0.75%	2.625%
AMOUNT OF LEISURE TIME	1.0%	0.5%	0.5%
TOTAL GROWTH			7.225%

The result is obviously much more optimistic than the Transport Canada one of 4.2% and the reason is quite simple: the analysis of Transport Canada is much more complex and uses a higher number of parameters.

FORECASTING

Forecasting future air transport activity is a complex process as there are many forces at work some promoting, others constraining growth of the air travel market. In the process of developing the aviation forecasts, assumptions have to be developed regarding these forces, which will in turn influence air travel demand.

More specifically, the results of the Transport Canada forecast consider 12 majors socio-economic supply and strategic factors as follows:

SOCIO-ECONOMIC, SUPPLY AND STRATEGIC FACTORS

1. Gross Domestic Product
2. Personal Disposable Income
3. Adult Population
4. U.S. Economic Outlook
5. Airline Yield
6. Fleet/route Structure/Average Aircraft Size
7. Passenger Load Factors
8. Labour Cost and Productivity

9. Fuel Cost/Fuel Efficiency
10. Airline Costs Other than Fuel and Labour
11. Passenger Traffic Allocation Assumptions
12. New Technology

Factors 1 to 5 are related to the demand component of air forecasts. **Factors 6 through 10** are related to the operating strategies of the Canadian airline industry and represent the supply component of the air forecasts.

Factors 10 and 11 represent potential structural changes, which could stimulate and/or decrease future air demand.

With those considerations the results are, of course, more reliable.