

CROSS-BORDER AND REGIONAL AIR TRANSPORT IN QUÉBEC (CANADA)

REGIONAL AIR TRANSPORT

THE CANADA-US OPEN SKIES AGREEMENT AND ITS IMPACTS



REGIONAL AIR TRANSPORT

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INTRODUCTION

In recent decades, air transport has experienced the convulsions brought about by the economic deregulation of this mode of transport in Canada and around the world. Deregulation has proven beneficial in Canadian markets, translating into increased competition on domestic and international route networks, resulting in a broader range of services and lower fares. Québec travellers also enjoy these benefits when they fly from Québec to other North American or international destinations.

But what about regional air transport within Québec? Travellers complain about exorbitant prices, infrequent flights, and inconvenient schedules, especially in the case of travel from the regions into the major urban centres. Who has never said or heard a comment like “It’s cheaper to fly from Montréal to Paris than from Montréal to Sept-Îles”? Is this myth or reality? What role does the Québec government play within the context of the Canadian regulatory environment in terms of ensuring that the regions have access to the air services that they require?

This article will shed some light on the reality of air transport in Québec. The first section outlines the main events that led to the restructuring of the air transport industry in Canada, and its repercussions on the provision of services in Québec. This is followed by an examination of the measures taken by the Québec government in order to maintain a satisfactory network of air transport services. Finally, the last section presents the factors that affect supply and demand in the area of air transport.

Toward a new air transport industry

The movement toward deregulation in the air transport industry was initiated in the United States, with the introduction of the Airline Deregulation Act of 1978, and it continued in Canada in the 1980s, most notable with the policy statement entitled *Freedom to Move: a Framework for Transportation Reform*, which was issued on July 15, 1985¹. The process was completed with the adoption of the Canada Transportation Act in July 1996. The Canadian government went from comprehensive regulation of domestic air transport to complete economic deregulation². Before the Canadian air transport industry came to be governed by market forces, it was the government who decided whether or not a given air carrier could serve a market, what links it could provide, and what fares were charged. Faced with the rapidly changing demands of travellers and the need for carriers to provide better services in these markets under a cumbersome and complicated government-run bureaucratic system, the government was led to give free rein to competition. However, allowing air transport to be governed by market forces does not necessarily result in better services and lower fares. Deregulation only facilitated the achievement of these objectives in areas where the markets were sufficiently large³.

1. <http://dsp-psd.pwgsc.gc.ca/Collection-R/LoPBdP/CIR/892-f.htm>.

2. The federal government has retained the authority to regulate technical and operational aspects, with particular concern for the safety of this mode of transport.

3. Debra WARD, *Airline Industry Restructuring in Canada*, Final Report, September 2002, 105 p.

The post-deregulation period was beneficial for Canada, because new airlines that offered lower fares were able to carve out a place in the market (e.g.: WestJet, CanJet, and Canada 3000). This period was also one of feverish activity in the airline industry, thanks to the development of domestic, cross-border, and international links and favourable economic conditions. A number of acquisitions, mergers, and partnership creations took place during this period, shaping and feeding the two emerging domestic and international networks: Canadian Airlines International (Canadian) and Air Canada. The stiff competition between these two carriers and their subsidiaries within Canada's relatively small market seriously hurt their profit margins. In an environment of excess supply, travellers were the big winners in this market war, benefiting from a broader range of services, more frequent flights, and a higher ratio of low-fare seats.

The various stresses and financial problems that Canadian suffered during these years of duopoly led the federal government to allow Air Canada to purchase Canadian on December 21, 1999. This triggered a restructuring of the air transport industry across Canada. In order to mitigate the impact of having a dominant carrier, and its consequences on the various markets, the government adopted Bill C-26⁴ in July 2000, providing a framework for the merger of the two carriers. One of the conditions imposed on Air Canada was that it had to maintain existing services to localities served by Canadian and Air Canada, as well as their regional subsidiaries, for a period of three years.

In Québec, the effect of the merger of the two domestic carriers was felt primarily in terms of service capacity. Before December 1999, Québec was served mainly by Air Nova⁵, a subsidiary of Air Canada, and by the partner airlines of Canadian and Air Canada. The table below contains a list of these carriers and the markets that they served prior to the merger.

Pre-merger organization of air transport in Québec		
	AIR CANADA	CANADIAN
Subsidiary	<ul style="list-style-type: none"> • Air Nova: All routes in the south of Québec 	
Partners	<ul style="list-style-type: none"> • Aviation Québec Labrador: Middle and Lower North Shore • Air Creebec: Québec North West • First Air and Air Inuit: Nord-du-Québec and Nunavik 	<ul style="list-style-type: none"> • InterCanadian⁶: All routes in the south of Québec • Régionnair: Middle and Lower North Shore • Air Alma: Saguenay–Lac-Saint-Jean

4. Bill C26 amended the Canada Transportation Act, the Competition Act, the Competition Tribunal Act, and the Air Canada Public Participation Act. In particular, it allowed the government of Canada to intervene with respect to prices, competition, and protection of the public interest.

5. Air Nova is now known as Air Canada Jazz.

6. InterCanadian (formerly Québecair) was a subsidiary of Canadian Regional, which belonged to Canadian. It was sold to a group of investors in Ontario in September 1998. InterCanadian had retained its business relationship with Canadian.

Other air carriers served Québec without benefiting from a business partnership. This was the case for Air Montréal, which served all regions in the south of Québec, while the other carriers operated in local markets. Facing bankruptcy, Air Montréal ceased flight operations in April 2000.

The stiff competition that the carriers engaged in over the same markets finally got the better of Canadian's partners. InterCanadian ceased operations in November 1999, Régionnair gradually abandoned its routes beginning in October 2000, until it shut down in June 2001, and Air Alma discontinued its services in November 2000. With no integrated reservation system, no frequent-flyer plan, and no code sharing on the network of long-haul routes that Canadian had provided, competing in the same markets as Air Canada was much more difficult.

The table entitled *Supply of Air Transport Services* provides an overview of the effects of the restructuring of the air transport industry in Québec. A compilation of the number of seats per day available in the main regions of Québec for the years 1999, 2000, and 2006⁷ reveals a significant reduction in the supply, especially after the merger of the two domestic carriers. The decrease in the total number of seats between 1999 and 2000 was 40.4%. In 2006, the number of seats per day had dropped to 392 seats, a reduction of 20.4%. This decrease is due to the elimination of flights from Québec City to Rouyn-Noranda, Val-d'Or, Baie-Comeau, and Mont-Joli. Other than these route cuts by Air Canada Jazz between 2000 and 2006, it is difficult to conclude that there were other reductions in the supply of seats, because Air Canada Jazz reconfigured its network in order to provide certain regions with direct or indirect service to Montréal and Québec City. On the whole, following the disappearance of Canadian's partners, Air Canada only increased capacity when supply fell short.

7. Scheduled service offered from Monday to Friday. Compiled by Claude Gauthier, Air Transport Branch, 1999, 2000, 2006.

SUPPLY OF AIR TRANSPORT SERVICES				
	November 1999	November 2000	Change 1999-2000	January 2006
Market	Seats/day	Seats/day	%	Seats/day
ABITIBI				
Montréal–Rouyn-Noranda	307	198	- 35.5%	183
Québec City–Rouyn-Noranda	73	36	- 50.7%	0
Montréal–Val-d'Or	362	272	- 24.9%	146
Québec City–Val-d'Or	73	36	- 50.7%	0
SAGUENAY				
Montréal–Bagotville ⁸	366	259	- 29.2%	211
NORTH SHORE				
Montréal–Baie-Comeau	199	73	- 63.3%	96
Québec City–Baie-Comeau	103	55	- 46.6%	9
Montréal–Sept-Îles	482	217	- 55.0%	211
Québec City–Sept-Îles	415	217	- 47.7%	211
GASPÉSIE–ÎLES-DE-LA-MADELEINE				
Montréal–Mont-Joli	218	105	- 51.8%	87
Québec City–Mont-Joli	103	105	1.9%	9
Montréal–Gaspé	102	87	- 14.7%	87
Québec City–Gaspé	102	87	- 14.7%	87
Montréal–Îles-de-la-Madeleine	159	87	- 45.3%	96
Québec City–Îles-de-la-Madeleine	159	87	- 45.3%	96
TOTAL	3,223	1,921	- 40.4%	1,529

Source: OAG *Flight Guide North America*, November 1999, November 2000, and January 2006⁹.

Since 2001, other carriers have entered new markets: Air Labrador began serving the North Shore in December 2002, and Starlink Aviation offered seats in the Saguenay in October 2003. In April 2003, a new carrier, Québecair Express, also made its entry into the main regions of Québec. However, it came out of it a year later when it was forced into bankruptcy. Aviation Québec Labrador, which served the North Shore, met the

8. Including Roberval airport.

9. For 1999, the carriers InterCanadian, Air Nova, Air Montréal, Régionnair, and Air Creebec are included in the supply of seats. In 2000, the carriers Air Nova, Régionnair, and Air Creebec are included in the compilation. For January 2006, the compilation includes the carriers Air Canada Jazz, Pascan Aviation, Air Creebec, Air Labrador, and Starlink Aviation. Other carriers offered services in local markets, but their data were excluded for purposes of comparability.

same fate in March 2003. Since 2004, there have been no new entrants into the regional markets.

Finally, the terrorist attacks of September 11, 2001 had major repercussions throughout the air transport industry as a result of reduced passenger demand, the significant increase in the insurance costs, and skyrocketing fuel prices. The SARS (Severe Acute Respiratory Syndrome) outbreak also had a negative impact on air traffic. A number of well-established domestic airlines declared bankruptcy, while others were forced to seek protection under the Companies' Creditors Arrangement Act, including Air Canada on April 1, 2003, when it was in the middle of reorganizing its operations. The company came out of protection eighteen months later, but not without efforts and compromises on the part of unions, shareholders, and creditors.

For travellers, the merger of the two domestic carriers and the subsequent restructuring of the airline industry played a decisive role in the history of air transport in Québec. These events translated into less frequent flights and a decreased supply of low-fare seats throughout almost the entire Québec air network, because there were fewer carriers operating in the same markets. However, the reorganization also made it possible to improve load factors (passengers/seats) for the carriers who remained in these markets. In November 1999, load factors ranged from 21% (Bas-Saint-Laurent, Gaspésie, Îles-de-la-Madeleine) to 40% (Saguenay). In November 2000, the ratio ranged from 34% (Îles-de-la-Madeleine) to 58% (Saguenay)¹⁰. In 2008, Air Canada Jazz retains its dominant market position, and records load factors of approximately 75%, according to the traffic data that is published each month. A map showing all of the airline routes in Québec in January 2008 is provided in the appendix.

Intervention by the Québec government

The Québec government kept a close eye on the changes that took place after the restructuring of the air transport industry. Several measures were taken in order to forestall the elimination of any air transport routes in Québec and to improve the services available.

Consultations were held in the regions in the fall of 2001 within the framework of the Québec Air Transportation Policy. These consultations made it possible to measure the full extent of the general dissatisfaction among the public and its representatives with respect to the availability of air services and the seemingly exorbitant prices in a situation where Air Canada enjoyed a monopoly. The Policy, which was adopted in November 2002, highlighted the problems and issues in all areas of air transport, with a pronounced emphasis on regional air transport.

The agreement between the Québec government and Air Canada in December 2002 is linked to the main thrust of the Policy, which is to improve air transport services in Québec. It came about in the context of the elimination of regional routes following air carrier bankruptcies and the expiration of Air Canada's commitments to the Canadian government, which suggested that additional route cuts might be imminent in Québec. With an initial term of three years, this agreement made it possible to maintain services

10. Avia Marketing Consultants Inc. *Evaluation of the Effects of the Restructuring of the Air Transport Industry on Regional Transport*, Progress Report, January 2001, 52 pp.

for fifteen routes offered by Air Canada Jazz in Québec, to offer reduced fares, and to limit fare increases to 3% per year unless justification was provided.

In the fall of 2006, a Consultative Committee on Regional Air Transport, which brought together representatives from six regions of Québec¹¹ and which was chaired by the Minister for Transport, recommended the adoption of new air transport measures to replace the agreement with Air Canada that expired in July 2006. These measures include the Air Transportation Assistance Program (ATAP)¹² and the revised Airfare Reduction Program (ARP)¹³.

- The objectives of the ATAP are as follows: to ensure uninterrupted air service in the event of the elimination of an air route that is deemed to be important; to provide the regions with resources to develop and improve air service, and to conduct market research in the field of aviation. The ATAP has a budget of \$1 million per year for the next three years.
- In addition to its application to remote and isolated regions, the new terms and conditions of the ARP include very remote regions that are connected to the road network. They complement the existing measures in the health and social services network pertaining to accompanying a patient. In addition, the per-trip maximum has been eliminated, and the annual entitlement has been increased. The new program, with an annual budget of \$2.18 million, is aimed at reducing air travel costs for personal purposes.

These same regional representatives serve on the Air Transport Monitoring Committee, the purpose of which is to ensure the overall quality of the supply of air transport services in Québec and to raise specific problems encountered in their regions.

Factors that affect supply and demand in air transport

For many years, air transport was considered to be a luxury, but it has become democratized in recent decades, and now provides services that better meet the needs of consumers. Low-fare carriers, such as WestJet in Canada, JetBlue in the United States, and Ryanair in Europe, are able to offer the lowest fares in some major markets by slashing their operating costs. Closer to home, Air Canada has also reviewed its services and simplified its fare structure across its entire network in order to be more competitive with discount carriers. Despite all of these efforts, travellers often get the impression that they are paying too much for plane tickets, whether with Air Canada Jazz or with other regional carriers.

Prices for air travel depend on the carrier's operating environment. The more favourable the conditions, the lower the prices. In this section, we will examine the evolution of air traffic in Québec in recent years, as well as the strategies that carriers have adopted in order to capture markets.

11. This Committee was set up in January 2006, arising out of regional consultations. It brings together representatives from Abitibi-Témiscamingue, Nord-du-Québec-Baie-James, Saguenay-Lac-Saint-Jean, the North Shore, Bas-Saint-Laurent, and Gaspésie-Îles-de-la-Madeleine.

12. www.mtq.gouv.qc.ca/portal/page/portal/partenaires_en/municipalites/programmes_aide/transport_aerien/prog_aide_transport_aerien.

13. www.mtq.gouv.qc.ca/portal/page/portal/grand_public_en/transport_collectif/transport_aerien/prog_reduction_tarifs_aeriens.

Main factors affecting the evolution of air traffic in Québec

Over the years, the regions have experienced a reduction in air traffic at airports. The study entitled *Profil de la demande de transport aérien régional de passagers au Québec et tendances*¹⁴ [Demand for Regional Air Passenger Transportation in Québec – Profile and Trends] examines this phenomenon more closely for the main regional airports in Québec.

According to this study, air traffic in the main airports in the Bas-Saint-Laurent, Saguenay–Lac-Saint-Jean, Abitibi-Témiscamingue, North Shore, and Gaspésie–Îles-de-la-Madeleine regions totalled 423,808 passengers¹⁵ in 2004, which represents less than 4% of the total traffic of 11,611,821 passengers in Québec's main airports (including Montréal and Québec City). Between 1995 and 2000, the average annual growth rate (AAGR) of traffic was – 3.7% in the regions under study, whereas Québec as a whole recorded an AAGR of 3.5%. Between 1995 and 2004, the regions in question experienced a drop of 120,861 passengers. This decline would have been even more pronounced without the upturn in demand that occurred in 2003-2004. The regions covered by the study closely follow the upward trend of traffic in Québec: 13.1% compared to 17.2%.

The terrorist attacks of September 11, 2001 and their international consequences (e.g.: the war in Iraq) also contributed to the reduction in air traffic. Travellers saw their ticket prices increase as a result of fuel surcharges, higher insurance costs, and the new security tax. These fare increases, combined with all of the security-related restrictions at airports, have curtailed demand for air travel here and around the world.

In addition, demographics and the economy play an important role in determining the demand for air travel. In recent decades, the main regions of Québec¹⁶ have seen their populations decline by 3% between 1971 and 2005, but by 6% between 1996 and 2005. These regions lose population due to significant out-migration, mainly of young people aged 15 to 29, and this trend is accelerating (4,524 people in 2004-2005 compared to 2,999 people in 1994-1995). On the one hand, this trend will have a direct effect on renewal of the labour force over the medium term, and possibly on the economy in general. On the other hand, the regions under study recorded a 3.8% increase in gross domestic product (GDP) between 1998 and 2005, compared to 5% for Québec as a whole¹⁷. The resource regions account for 15% of Québec's estimated total population of 7,600,000.

14. Isabelle DOSTALER, Lalla SABBANE, Cyril STEIN, and Jerry TOMBERLIN, *Profil de demande de transport aérien régional de passagers au Québec et tendances* [Demand for Regional Air Passenger Transportation in Québec – Profile and Trends], Transportation Studies and Research, Bibliothèque nationale du Québec, 2008, 333 pp.

15. This is the total number of passengers arriving at and departing from an airport. Therefore, each passenger is counted twice.

16. The regions include Bas-Saint-Laurent, Saguenay–Lac-Saint-Jean, Abitibi-Témiscamingue, the North Shore, and Gaspésie–Îles-de-la-Madeleine.

17. Data taken from the study entitled *Profil de demande de transport aérien régional de passagers au Québec et tendances* [Demand for Regional Air Passenger Transportation in Québec – Profile and Trends].

All of these contextual factors, including the repercussions of the September 11 attacks, declining population in the regions, and fluctuations in the business cycle, have a definite impact on air traffic in the region's airports. As a result, it is much less attractive for new competitors to enter into regional markets that are served by an established carrier.

Corporate strategies that affect prices

In the air travel industry, pricing strategies that are practiced by carriers often give rise to feelings of incomprehension among consumers, who get the impression that prices are exorbitant. Comparisons are often made between the prices charged for scheduled regional flights in Québec and those for charter flights to vacation destinations or those charged by low-fare carriers. Jacques Roy, an air travel specialist, has identified the factors that allow charter and low-fare airlines to offer attractive prices to travellers ¹⁸:

- Size of the aircraft: closer to 300 seats;
- Load factors: in the neighbourhood of 95%;
- Long-haul routes: more than 1,000 miles;
- Higher aircraft uptime: daytime and nighttime flights;
- Higher staff productivity;
- Lower distribution costs: vertical integration.

In addition to operational considerations, scheduled airlines must take into account the volume of demand at certain times of the day, week, and year, as well as the size of the market they serve. They also engage in market segmentation by offering prices that are subject to restrictions, in order to meet the needs of the greatest number of travellers. For example, business travellers who book only one day in advance or who want the option of cancelling a reservation without penalty will pay more for their plane ticket and pay less attention to the price than individuals who are travelling for personal reasons.

In short, the prices that are charged for plane tickets in the regions, both in Québec and elsewhere in Canada, cannot readily be compared to those in high-volume tourist or business markets, because the carriers operate under different conditions. In addition, the plane ticket that a traveller buys is subject to restrictions. The fewer the restrictions, the higher the fare. According to Jacques Roy, the high prices for regional air travel are due to the small size of the markets, the absence of competition, and low traffic volumes compared to domestic and international routes ¹⁹.

CONCLUSION

For many travellers, the day is past when air travel in Québec was easier and less expensive due to market competition. If they want to get a good price for a seat, they must be flexible in terms of flight times and dates, and they must make reservations in advance. In the span of less than a decade, the regions have lost almost half of their capacity, and have ended up with a dominant carrier in most markets. Long-haul travellers are forced to rely on Air Canada for its intra-Québec, domestic, and international network. This monopoly eliminates freedom of choice, which is so highly

18. Presentation by Jacques Roy, École des hautes études commerciales (HEC) Montréal; source: Williams, G.W., *Aerogram*, Vol. 9, no. 5, June 2000.

19. Jacques ROY, *Étude sur le transport aérien intérieur au Québec*, May 2006, 25 pp.

prized by consumers. For other travellers, the alternative will be travel by automobile in many cases, which will further reduce air traffic and supply.

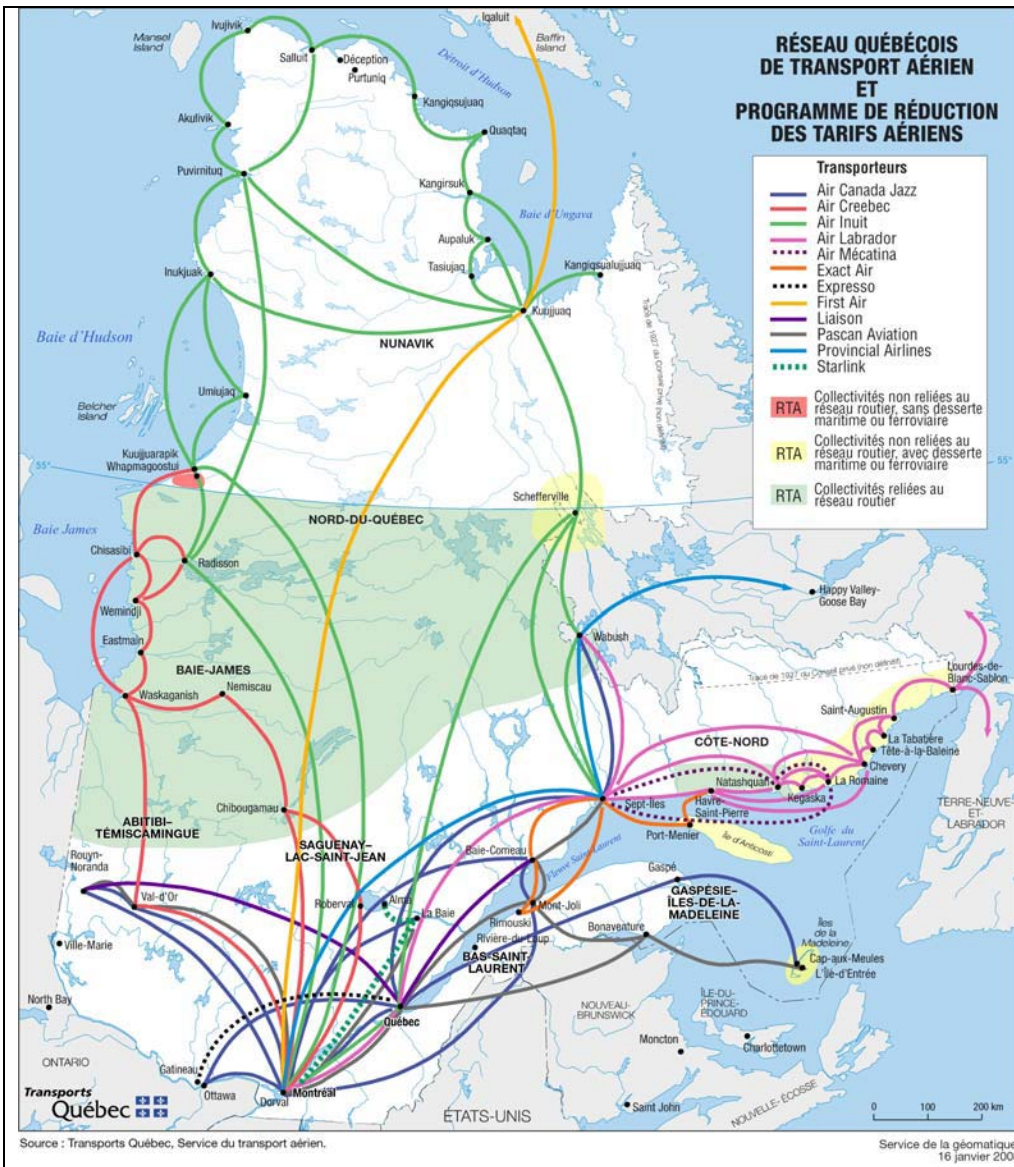
On the one hand, the aim of the economic deregulation of this mode of transport was to achieve increased competition, and consequently, better prices. The demographic and economic data for the regions reveal that it is difficult to ensure the viability of more than one carrier of the same size in the same market, both now and in the future.

On the other hand, would better fares promote higher demand, and consequently greater market competition? Although this principle is valid, it does not seem to apply in the regions of Québec! The traffic data for the main regional airports reveal a reduction in volumes over the last decade, even while there was stiff competition in the markets before the restructuring of the industry. According to the experts, load factors for the carriers were very low. The arrival on the scene in 2003 of Québecair Express as a direct competitor to Jazz for the same markets proved to be beneficial to travellers, but hardly profitable for the new carrier, which operated at a loss. Despite very low fares, traffic volume was too low to ensure its viability. The economic dynamism, population size, and remoteness or isolation of a region are factors that generate a greater need for air travel for professional or personal reasons.

In this context, providing service to the regions at competitive prices represents a daunting challenge for Québec. The agreement with Air Canada, the Air Transportation Assistance Program, and the Airfare Reduction Program constitute measures that have been implemented by the Québec government in recent years with a view to stimulating supply and demand. However, maintaining essential air services for remote regions requires the joint action and commitment of all of the actors concerned: government, regional representatives, and representatives of the air carriers and airports.

Over the coming years, these actors will have to pay more attention to bringing in new carriers that are capable of stepping in to take over any routes that may be abandoned. It will also be necessary to find imaginative solutions for small markets that depend on air transport, in order to ensure the long-term survival of their institutions, as well as their economic development.

APPENDIX



QUÉBEC AIR TRANSPORT NETWORK AND THE AIRFARE REDUCTION PROGRAM

Carriers

Air Canada Jazz
[...]
Starlink

ARP Communities not linked to the road network and without water or rail links

ARP Communities not linked to the road network but with water or rail links

ARP Communities linked to the road network

Source: Transports Québec, Air Transport Branch

Geomatics Branch,
January 16, 2008

The Canada-US Open Skies Agreement and its Impacts

By Augustin Raharolahy, Transport Advisor, Air Transport Branch, MTQ

Introduction

On February 24, 1995, political leaders from Canada and United States signed a new air services agreement known as the Canada-US Open Skies Agreement. This agreement replaced an earlier agreement that was negotiated in 1966, and most recently revised in 1974.

Under the old agreement, US and Canadian carriers were forced to serve only those few routes that were specified therein, and it limited service for most city pairs to a single carrier from each country.

Started on the day after the new agreement came into effect in 1995, Canadian carriers could take advantage of free access to all cross-border markets. The same applied to US carriers, with the exception of Montréal, Toronto, and Vancouver. The new cross-border services were to be gradually introduced over a three-year period in order to allow Canadian airlines to adjust to the new market conditions, and to avoid excessively rapid growth in supply by US carriers in these three major markets.

Against this background of liberalization and the opening up of air travel markets, the structure of the cross-border markets was becoming more favorable to competition, with the possible arrival of competitors, declining air fares, and improved service between the two countries on cross-border routes.

The purpose of this article is to highlight the changes in the structure of the cross-border markets and the variety of strategies employed by Canadian and US airlines that underlie these changes.

In this context, this article will address the following points:

- Restrictions in the 1966 and 1974 agreement, and their effect on the supply of cross-border air transport services prior to 1995;
- The strategies employed by Canadian and US airlines following liberalization, and their effect on the supply of cross-border air transport services;
- The diversification of markets for cross-border air travel, and the evolution of passenger traffic in Québec City and Montréal.

I) Consequences of the restrictive regulations of the 1966 and 1974 agreement

The Canada-US Air Agreement, which was signed in 1966, designated twenty-five cross-border routes – fourteen for Canadian airlines and eleven for US airlines. The two parties to the agreement determined the restrictions pertaining to capacity, frequency, and type of aircraft. The fares set by the airlines had to be approved by both Canada and the United States. Some improvements were made in 1974, most notably with the addition of eighty-three new routes – thirty-eight for US airlines, twenty-six for Canadian airlines, and nineteen that were left open to competition among the airlines. The designation of more than one carrier on any route required authorization by the other country. However, decisions concerning capacity were left to the carriers.

These regulatory restrictions forced the carriers to serve a limited number of markets. In the case of the US airlines that were authorized to serve Montréal, the routes provided connections to certain major airports, such as Chicago (American), Cincinnati (Delta), Detroit (Northwest), Miami (American), New York/La Guardia (Delta), and Philadelphia and Pittsburgh (US Airways).

Appendix A lists the US airports that were served before and after the 1995 liberalization agreement. One can see that only a limited number of US airports were served from Calgary, Ottawa, and Vancouver before 1995. This situation changed after liberalization.

II) Canadian and US airline strategies after the 1995 liberalization

In 1997, two years after liberalization, the number of cross-border routes continued to increase. Thirty-two markets were added, bringing the total number of scheduled routes introduced since the signing of the open skies agreement to 107. The number of occupied seats on cross-border routes increased by 36% compared to the period prior to the signing of the agreement. The two main Canadian carriers contributed to the increased capacity on cross-border routes. Canadian Airlines International reassigned part of its domestic fleet to cross-border routes, while Air Canada built up its cross-border services using the CRJ (Regional Jet) aircraft and larger aircraft. For their part, US airlines developed cross-border routes from their US hubs.

In the summer of 2005, 107 routes were being served by Canadian airlines (80 of them by Air Canada), while 104 routes were being served by US airlines.

The influence of supply played a major role following the elimination of restrictions on market access. Increased flight frequency and reduced fares stimulated a level of demand for air travel that was not being adequately met in a restrictive regulatory environment.

With this new competition in air services between Canada and the United States, airlines in both countries had to adopt different strategies in their attempt to position themselves in the various markets.

A) Air Canada's strategies

Air Canada adopted three types of strategies. The first was to add direct flights to certain US airports in order to compete with US airlines. However, Air Canada's chances of succeeding in positioning itself on a cross-border route depended on several factors:

- The existence of a potential demand;
- Adaptation of a type of aircraft to a medium- or long-haul route;
- Whether or not a US airline had a dominant position at a US hub;
- The presence of an affiliated US airline, such as United, at a US hub for purposes of connections, code sharing, and reducing fixed costs.

In this context, after an attempt in the wake of liberalization, Air Canada abandoned the Montréal-Atlanta route because of Delta's dominant position in Atlanta. On the other hand, Air Canada was able to develop a number of direct links, including:

- Montréal-Las Vegas;
- Montréal-Washington;
- Toronto-Detroit, in competition with Northwest;
- Ottawa-Washington;
- Calgary-Houston, in competition with American.

In 1997, Air Canada and its regional partners inaugurated non-stop flights to more than twenty US destinations from Toronto. More than 19% of total cross-border traffic was generated by Toronto, compared to 7.6% for Montréal. This differential resulted from Toronto's geographical location as the main hub in Canada and the demographic and economic significance of this metropolitan area. Air Canada had greater assurance of success in competing against certain US airlines with their headquarters from Toronto than from Montréal. Air Canada set up the following routes to link to these hubs:

- Toronto-Atlanta (Delta);
- Toronto-Houston (Continental);
- Toronto-Miami (American);
- Toronto-Minneapolis (Northwest);
- Toronto-Philadelphia (US Airways);
- Toronto-Raleigh (US Airways);
- Toronto-Denver (United);
- Toronto-Pittsburgh (US Airways).

Air Canada's second strategy was to add links between Canadian hubs (Toronto, Vancouver, and Calgary) and certain smaller airports such as Nashville, Saint-Louis, and Kansas City, in order to develop transit operations into Asia and Europe.

Finally, Air Canada's third strategy was to strengthen its position at certain US hubs through a strategic alliance with US airlines as part of the Star Alliance. It is important to note that United belongs to this group, along with US Airways and America West, which joined quite recently. On the other hand, Continental has withdrawn from the alliance. Therefore, in terms of code sharing and reducing fixed costs, commercial cooperation between Air Canada and United plays an important role at certain US airports, such as Denver, Chicago, San Francisco, and Washington. Looking ahead, there is a possibility that Air Canada will also establish a commercial relationship with US Airways and America West at certain airports (Phoenix, Philadelphia, Pittsburgh, and Baltimore).

B) Strategies employed by US airlines

After the deregulation of the US internal market in 1978, the structure of the domestic networks in the United States changed, as hub and spoke systems became widespread. A hub is a passenger traffic node where aircraft arriving from various points of origin arrive, exchange transfer passengers, and continue on toward various destinations. In other words, a hub is characterized by a high ratio of connecting traffic to total traffic. Some hubs with a high percentage of connecting traffic relative to total traffic serve to illustrate these points:

Atlanta	=	71% ²⁰
Dallas/Fort Worth	=	67%
Charlotte	=	82%
Chicago (O'Hare)	=	56%
Minneapolis	=	62%
Pittsburgh	=	74%
Houston	=	65%
Cincinnati	=	76%
Salt Lake City	=	66%
Memphis	=	72%

The 1995 liberalization prompted US airlines to eliminate the short hauls imposed by the 1966 and 1974 agreement, and to strengthen their cross-border links from their hubs in the US. As a result, the US airline Delta, which was required to serve Salt Lake City before liberalization, was forced to pass through this city, coming in from Calgary, before going on to other US cities. Similarly, prior to 1995, airlines could not provide direct service to the Denver and Minneapolis hubs without going through Chicago. From Montréal, Delta had to go through Boston in order to get to Atlanta.

A study conducted by Claude Brunet and Associates²¹ revealed that, immediately following the 1995 liberalization, Canada's main airports were connected to certain hubs in the United States by US airlines, in addition to the US hubs that already had service before liberalization, such as Chicago, Cincinnati, Dallas, and Philadelphia.

²⁰. Source: *OAG Flight Guide – North America*, OAG Worldwide Inc., June 2005.

²¹. Source: Claude Brunet et al., *Évaluation des conséquences pour le Québec de l'accord canado-américain sur les services aériens* [Evaluation of the Impacts of the Canada-US Air Agreement on Québec], Edwards and Kelcy Inc., February 2000.

US hubs linked to Canadian airports through US airlines in 1995

Canadian airport	US hub	US airline
Calgary	Denver Houston Minneapolis San Francisco	United Continental Northwest United
Montréal	Atlanta Cleveland Miami Minneapolis New York / J. F. Kennedy	Delta Continental American Northwest American
Toronto	Atlanta Cleveland Houston Minneapolis Pittsburgh	Delta Continental Continental Northwest US Airways

With the integration of the cross-border routes to US airports, the share of capacity offered at these airports by Canadian airlines depends on whether or not US airlines occupy a dominant position at the cities in question.

Percentage of total capacity offered by Air Canada in the summer of 2005 at various US airports (point-to-point traffic)

Chicago	= 18% ²²
Los Angeles	= 63%
New York/La Guardia	= 74%
Minneapolis/Saint-Paul	= 3%
San Francisco	= 53%
New York/Newark	= 32%
Detroit	= 3%
Boston	= 68%
Dallas/Fort Worth	= 11%
Philadelphia	= 23%
Houston	= 23%
Atlanta	= 19%
Denver	= 27%
Miami	= 43%
Las Vegas	= 45%
Fort Lauderdale	= 100%
Orlando	= 100%
Phoenix	= 25%
Washington/Dulles	= 44%
Cincinnati	= 0%
Washington/Reagan	= 78%
Salt Lake City	= 0%
Charlotte	= 23%
Cleveland	= 27%

²². Source: *OAG Flight Guide – North America*, OAG Worldwide Inc., June 2005.

One can see that Air Canada has a limited share of capacity at US hubs that are dominated by a US airline with a high ratio of connecting traffic (Philadelphia, Dallas, Fort Worth, Houston, Atlanta, Cincinnati, Salt Lake City, Charlotte, and Denver). On the other hand, at US airports that are not hubs, such as New York/La Guardia, Boston, and "sun" destinations like Orlando and Fort Lauderdale, Air Canada occupies a prominent position.

In addition, in terms of the number of seats offered to US destinations, the share held by Canadian airlines at the main Canadian airports in the summer of 2005 was as follows:

Toronto	= 55% ²³
Vancouver	= 29%
Montréal	= 42%
Calgary	= 32%
Ottawa	= 35%
Edmonton	= 2%
Winnipeg	= 1%
Halifax	= 22%
Québec City	= 17%
Victoria	= 3%

Supply by Canadian airlines is high in Toronto and Montréal, two airports that generate a large proportion of the cross-border traffic.

In light of these various strategies used by airlines to position themselves on new cross-border routes, we can conclude that these types of strategies have stimulated demand. Therefore, we have been able to determine that "origin/destination" traffic between Montréal and certain US cities increased significantly from 1990 to 2000:

- Montréal-Las Vegas = 548% (direct flights with a tourism market in Las Vegas);
- Montréal-Washington = 110% (transportation market with poor service prior to liberalization);
- Montréal-San Francisco = 125% (direct flights with economic development in San Francisco);
- Montréal-Denver = 252% (market with no service prior to 1995, and economic development in Denver; Air Canada inaugurated service from Montréal to Denver in 2006).

III) Diversification of cross-border air travel markets

After reviewing the strategies employed by the airlines and the changes in the structure of their networks, it is appropriate to consider trends in passenger traffic as well as the diversification of markets by city and province in Canada following the 1995 liberalization. More specifically, we will highlight the position of Québec and Montréal relative to the rest of Canada.

²³. Source: *Flight Guide – North America*, OAG Worldwide Inc., June 2005.

The following factors have an effect on determining the volume of air passenger traffic between two countries:

- a) The average fare paid by passengers in an air travel market;
- b) The characteristics of the air services, including flight frequency and other criteria that affect the quality of service;
- c) The amount of competition in an air travel market, which reflects the capacity of the airlines to meet demand.

In order to obtain information pertaining to trends in passenger traffic between the United States and Canada before and after 1995, we consulted a number of studies, including the study conducted by Claude Brunet and Associates²⁴, special studies conducted by Statistics Canada²⁵, and the study conducted by InterVISTAS²⁶.

A) Québec's position in cross-border traffic trends

According to the study conducted by Claude Brunet and associates, total air passenger traffic between Canada and the United States (scheduled and charter flights) experienced growth of 27.8% between 1994 and 1997, while an increase of only 12.5% was recorded for the same cross-border traffic between Montréal and the United States. The study concludes that the low growth for Montréal can be attributed to the relatively high quality of service that is already enjoyed by Montréal, even before the 1995 liberalization; the large number of connections that already existed between Montréal and certain US cities; and the large number of cross-border routes authorized for Montréal under the 1966 and 1974 bilateral agreement, despite its somewhat restrictive character.

In 1991, Québec ranked second with 1.7 million passengers,²⁷ which represented less than half the number of passengers reported by Ontario (3,884,300). British Columbia ranked third, with 1,230,700 passengers. In 1997, two years after liberalization, British Columbia surpassed Québec for the first time.

In addition, the proportion of air trips originating in Ontario or British Columbia relative to the total number of air trips between Canada and the United States is higher than the proportion of residents of these two provinces relative to the total population of Canada²⁸.

²⁴. Source: *Évaluation des conséquences pour le Québec de l'accord canado-américain sur les services aériens* [Evaluation of the Consequences for Québec of the Canada-US Air Agreement], Claude Brunet and Associates, Edwards and Kelcy Inc., February 2000.

²⁵. Source: *La modification de l'industrie du transport aérien entre le Canada et les États-Unis dans le contexte de l'accord ciel ouvert* [Changes in the Air Transport Industry between Canada and the United States under the Open Skies Agreement], Jimmy Ruel, 1999.

²⁶. Source: *Transborder Air Services since 1994*, InterVISTAS, June 30, 2005.

²⁷. Source: Statistics Canada no. 51 – 205 – 1991.

²⁸. Source: Statistics Canada no. 51 – 205 – 1997.

**Scheduled flights between the United States and Canadian provinces
(1997)**

Province	Number of passengers	Percentage of total traffic	Percentage of Canadian population
British Columbia	2,618,380	20.0%	12.9%
Alberta	1,607,900	12.3%	9.3%
Saskatchewan	189,570	1.5%	3.4%
Manitoba	353,570	2.7%	3.8%
Ontario	5,813,280	44.5%	37.6%
Québec	2,092,770	16.0%	24.7%
New-Brunswick	57,410	0.4%	2.5%
Nova Scotia	228,960	1.8%	3.1%

The table above shows that the shares of cross-border traffic held by British Columbia, Alberta, and Ontario in 1997 were higher than their respective shares of the total population of Canada. The opposite was true for Québec, with only a 16% share of Canada's total cross-border traffic compared to a 24.7% share of the Canadian population. Explanations can be sought in terms of the post-liberalization opening of new air services and markets that were not served in the past, the presence of unmet demand, and strategies employed by the airlines aimed at taking advantage of the new opportunities. One study²⁹ concluded that the 1995 liberalization, which removed restrictions in the air travel industry between Canada and the United States, allowed carriers to offer additional cross-border links.

The conclusions of the study can be summarized as follows³⁰:

- Liberalization not only increased passenger numbers, but it also altered the distribution of traffic among the markets.
- The increases in supply and in the number of passengers in small markets had an immediate impact on the number of medium-sized markets, which increased from 54 in 1994 to 84 in 1998. Small markets were became medium-sized markets.
- Markets of less than 100,000 passengers benefited more from liberalization than well-established main markets. Prior to liberalization, certain Canadian provinces only had low-volume connections, and therefore, carriers that wanted to offer more routes and attract travellers tended to focus on these provinces, where there was greater freedom of action.
- The distribution of new connections by province reveals that the most populous provinces have been obtaining only a small share of the new routes since 1995. Therefore, the routes that were already offered in Ontario and Québec in 1995 meant that there was no justification for adding numerous new connections to the United States.

²⁹. Source: *La modification de l'industrie du transport aérien entre le Canada et les États-Unis dans le contexte de l'accord ciel ouvert [Changes in the Air Transport Industry between Canada and the United States under the Open Skies Agreement]*, Jimmy Ruel, Transportation Division, Statistics Canada, 1999.

³⁰. Small markets: less than 25,000 passengers per year; medium-sized markets: between 25,000 and 99,999 passengers per year; main markets: more than 100,000 passengers per year.

As mentioned earlier, the 1995 liberalization resulted in a consolidation of the routes offered by US carriers in Montréal, as they eliminated short-haul flights to non-hub destinations while strengthening their connections to their principal hubs. For its part, Air Canada adopted a more conservative approach in Montréal immediately following liberalization³¹, focusing more on Toronto, with its higher traffic. As for Québec City, which is a major source of winter traffic, the volume of connecting traffic through Montréal and Toronto experienced fairly high growth (51% between 1994 and 1997), while traffic to Montréal increased 12.5%, compared to the Canadian average of 27.8%.

However, Montréal experienced growth in medium-sized markets for cross-border traffic, some of which showed rapid growth between 1990 and 2000.

It is important to note that these medium-sized markets are now served by Canadian or US airlines³².

**Number of cross-border passengers between Montréal and the United States
(medium-sized markets in 2000)**

Destination	Number of passengers		
	1990	2000	Change
Fort Lauderdale	85,580	78,690	- 8.1%
Atlanta	40,320	77,450	92.1%
Philadelphia	51,160	71,970	40.7%
Las Vegas	9,270	60,150	548.9%
Orlando	38,610	59,980	55.3%
Dallas	23,710	58,880	148.3%
Tampa	83,310	47,090	- 43.5%
Detroit	41,400	40,530	- 2.1%
Minneapolis	18,170	36,790	102.5%
Denver	9,920	34,930	252.1%
Houston	15,420	32,080	108.0%
Phoenix	10,980	27,710	152.4%
Raleigh	6,700	27,460	309.9%
San Diego	10,650	25,810	142.3%
Pittsburgh	17,540	25,700	46.5%
Cleveland	20,620	24,650	19.5%
Seattle	15,970	22,520	41.0%
Hartford	2,150	20,780	866.5%
Cincinnati	7,990	20,580	157.6%

Given the fact that the strategies employed by the airlines were aimed at developing new routes and building up traffic on existing links, medium-sized markets that had been poorly served before benefited from liberalization, as seen in the table above for Montréal and its connections with Las Vegas, Dallas, Minneapolis, Denver, Hartford, Phoenix, and Cincinnati.

³¹. Source: *La modification de l'industrie du transport aérien entre le Canada et les États-Unis dans le contexte de l'accord ciel ouvert* [Changes in the Air Transport Industry between Canada and the United States under the Open Skies Agreement], Jimmy Ruel, Transportation Division, Statistics Canada, 1999.

³². Source: Statistics Canada no. 51-205.

However, in terms of the evolution of cross-border traffic, Québec still lagged behind Ontario, British Columbia, and Alberta in 1997 in a comparison based on the following two variables: the respective rankings in total cross-border traffic and the percentage of the total Canadian population the their residents represent.

B) Position of Montréal relative to other Canadian cities

The strategies employed by US and Canadian airlines can affect the growth of passenger traffic between the United States and Canadian cities. As mentioned earlier, these repercussions can differ from one market to the next.

In fact, it is interesting to note that, during the period from 1995 to 1998, six of the eight Canadian cities with the highest traffic experienced growth rates that exceeded the growth rate for total trips between Canada and the United States. Only Toronto and Montréal did not show increases in excess of the national average. The cities that recorded the strongest growth were Vancouver (71.1%), Halifax (65.9%), Ottawa (61.2%), and Calgary (45.9%). Montréal recorded the smallest increase (12.5%), while Toronto experienced growth of 29.5%³³. These sharp increases can be attributed to the development of new routes following liberalization. The Canadian cities that experienced lower levels of service under the 1966 and 1974 Canada-US agreement enjoyed the highest growth rates.

Nevertheless, Toronto generates more passenger traffic than any other Canadian city. Almost 3,092,000 passengers flew out of Toronto to a US city in 1999, compared to 1,190,000 for Montréal.

A comparison between Montréal and Toronto for the New York and Washington/Baltimore markets reveals the trends in traffic volumes between 1994 and 2002³⁴.

Comparisons between Toronto and Montréal for two markets: New York and Washington (number of passengers in thousands)

<i>City pair</i>	1994	1995	1996	1997	1998	1999	2000	2001	2002
Toronto-New York	734.7	802.4	969.1	971.3	1,007.6	1,047.6	1,088.4	902.7	927.8
Montréal-New York	305.3	346.7	360.6	297.6	356.6	385.5	414.6	352.5	343.3
Toronto-Washington/Baltimore ³⁵	64.5	105.1	164.4	181.7	228.5	238.0	242.4	218.4	225.0
Montréal-Washington/Baltimore	52.8	81.1	88.5	90.4	102.1	118.6	120.3	111.7	113.9

Certain observations can be made based on the table above:

- 1) The medium-sized market represented by Toronto-Washington/Baltimore in 1994 expanded by 62.9% from 1994 to 1995, immediately following liberalization. Similarly, the medium-sized Montréal-Washington/Baltimore market experienced fairly strong growth (53.5%) over the same period. Based on the Statistics Canada classification, these two medium-sized markets then became main markets due to

³³. Source: Statistics Canada – 1998, catalogue no. 51 – 205.

³⁴. Source: Statistics Canada – no. 51 – 205.

³⁵. For statistical purposes, Statistics Canada includes the three airports that serve the US capital (Dulles International Airport, Reagan National Airport, and Baltimore-Washington International Airport).

their respective growth rates. Toronto-Washington/Baltimore traffic almost quadrupled, increasing from 64,500 passengers in 1994 to 242,400 passengers in 2000, while the Montréal-Washington/Baltimore market more than doubled over the same period, increasing from 52,800 to 120,300 passengers. Trends like these can be ascribed to the regulatory restrictions of the bilateral agreement that preceded the 1995 liberalization.

- 2) On the other hand, traffic in the two main markets, Toronto-New York and Montréal-New York, which were already well served before liberalization, increased more slowly, with Montréal-New York traffic experiencing growth of 13.5% from 1994 to 1995, compared to 9.2% for Toronto. One can also observe that these two main markets contracted significantly after the events of September 11, 2001, with respective traffic volumes returning to the levels that existed at the time of the 1995 liberalization.

Following liberalization, city pairs that had lower traffic volumes experienced substantial traffic increases. Air Canada established new links between Toronto and medium-sized US cities, such as Nashville, and to US hubs. The expansion of air passenger traffic in medium-sized markets (e.g.: Montréal-Cleveland, which had traffic of 20,620 passengers in 1990 and 24,650 in 2000, for a 19.5% increase over this period) was facilitated by increased use of regional aircraft³⁶, which stimulated demand on medium-haul routes where the volume of traffic made them profitable to operate³⁷. Larger aircraft were used more for long-haul transcontinental flights³⁸.

Conclusion

We have provided an overview of the changes that have been observed in the structure of cross-border markets. The strategies employed by Canadian and US airlines had an impact on these changes. The open skies agreement that was signed in 1995 represented a major step in opening up markets by creating more competition, even though there are some hubs in the United States where the dominant position of the US airlines may limit Air Canada's penetration into the market. In light of this, Air Canada's success will depend on its commercial relationships with its Star Alliance partners, including new member US Airways. With respect to diversification of cross-border markets by city and province in Canada, it will be necessary to work toward strengthening Montréal's competitive position as an international gateway to eastern Canada. We have deliberately not dealt with the eventual impact of the 2005 US-Canada Agreement, which supplements the 1995 open skies agreement and covers fifth freedom traffic rights. We were of the opinion that it was too early to assess the repercussions of this agreement, but we may revisit the topic in a future article.

³⁶. Example: Bombardier's 50-seat CRJ200.

³⁷. Source: "Regional Jet Services: Supply and demand", Martin Dresner and Robert Windle, *Journal of Air Transport*, no. 8, 2002.

³⁸. Air Canada opted to use the 112-passenger A-319 aircraft to link Montréal to Los Angeles and San Francisco.

APPENDIX A

Overview of cross-border air routes in August 1999

Canadian Airport	Air Routes before 1995	Air Routes after 1995
Calgary	Chicago (Air Canada) Dallas (American) Los Angeles (Air Canada) Salt Lake City (Delta) San Francisco (Air Canada)	Chicago (American) Chicago (Canadian) Denver (United) Houston (Air Canada) Houston (Canadian) Los Angeles (Canadian) Minneapolis (Northwest) San Francisco (United) Seattle (Alaska Airlines) Spokane (Air Canada)
Montréal/Dorval	Boston (Air Canada) Boston (Delta) Chicago (Air Canada) Chicago (American) Cincinnati (Delta) Detroit (Northwest) Los Angeles (Air Canada) Miami (Air Canada) New York/La Guardia (Air Canada) New York/La Guardia (Delta) New York (Air Canada) Philadelphia (US Airways) Pittsburgh (US Airways) Tampa (Air Canada)	Atlanta (Delta) Cleveland (Continental) Dallas (American) Fort Lauderdale (Air Canada) Hartford (Air Canada) Miami (American) Minneapolis (Northwest) New York/J. F. Kennedy (American) New York/Newark (Continental) Orlando (Air Canada) Portland (Air Canada) San Francisco (Air Canada) Washington/Dulles (Air Canada) Washington/National (Air Canada)
Ottawa	Boston (Delta) New York/Newark (Air Canada) Pittsburgh (US Airways)	Boston (Air Canada) Chicago (Air Canada) Chicago (American) Detroit (Northwest) New York/La Guardia (Air Canada) New York/Newark (Continental) Philadelphia (US Airways) Raleigh (Canadian) Washington/Dulles (Air Canada) Washington/National (Air Canada)
Vancouver	Chicago (United) Honolulu (Canadian) Los Angeles (Canadian) Portland (Air Canada) Portland (Alaska Airlines) Portland (Delta) San Francisco (Canadian) Seattle (Air Canada) Seattle (Alaska Airlines) Seattle (United)	Boston (Canadian) Chicago (Canadian) Dallas (American) Dallas (Canadian) Denver (United) Detroit (Northwest) Honolulu (Air Canada) Las Vegas (Alaska Airlines) Los Angeles (Alaska Airlines) Los Angeles (United) Minneapolis (Northwest) New York/J. F. Kennedy (American) New York/Newark (Continental) Salt Lake City (Delta) San Francisco (Air Canada) San Francisco (Alaska Airlines) San Francisco (United)