Transportation —a unifying link

A report in the series **WIVERSITE DE SHERBROOKS** Understanding Canada



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Transportation —a unifying link

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Preface

This study was prepared for the Federal-Provincial Relations Office under the direction of Paul H. MacNeil, with special contributions received from Transport Canada.

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Introduction

Transportation is a broad and encompassing subject, so much so that this study cannot cover all the related issues of concern to Canadians across the nation. Rather, the study is focussed on some transportation-related issues pertinent to the referendum promised by the Government of Quebec on the future status of Quebec within the Canadian Federation. While the report addresses questions of particular concern to Quebeckers, it is intended to contribute to a dialogue on national unity among all Canadians.

The Parti Québécois government has stated repeatedly that its goal for Quebec is "sovereignty-association." The "sovereignty" aspect of the proposal is quite clear; it calls for an independent Quebec which would have sole authority for tax and public expenditures, be admitted into the United Nations, have a separate constitution and a unique head of state. The "association" aspect of the proposal is less clear. It appears to include a customs and monetary union with Canada, enabling a sovereign Quebec to continue to benefit from certain trade and monetary arrangements.

The plans of the PQ government for the transportation system in a sovereign Quebec have not been fully articulated. Thus far, however, the PQ has indicated that an independent Quebec should assume full responsibility for the federal transportation network in Quebec including rail lines, the St. Lawrence Seaway, harbours, airports, related buildings and equipment, reorganize the network within Quebec and establish separate carriers.

These proposals would have far-reaching consequences for Quebec and, indeed, the rest of Canada. A number of questions, some of the more important of which are listed below, need to be addressed:

- These proposals have been motivated, at least in part, by the Quebec government's view that federalism has been unprofitable for Quebec. But what is the historical record and what have been the transportation achievements? Has Quebec, in fact, benefited less than other provinces and have national policies been to Quebec's detriment?
- What would be the effects of Quebec's sovereignty on the ability of Quebec and the rest of Canada to meet future transportation needs and challenges? Are there advantages to a collective effort? Could independent actions yield the same results and could they do so with the same effective-ness and efficiency?
- Do Quebeckers believe that the province has a strategic geographical position and that the transportation issue

would therefore constitute a strong factor in its favour if the PQ government were to try to negotiate full sovereignty and an economic association with the rest of Canada?

- Are Quebeckers confident that Montreal and other key transportation centres in the province would continue to serve and expand their continental and international transportation functions if Quebec was no longer part of the Canadian Federation?
- A number of head offices of federal agencies are located in Quebec (for example, Air Canada and CN) and this would be difficult to justify—given that they serve the whole of Canada—if Quebec were to declare full sovereignty. Are Quebeckers confident that alternative employment opportunities could be found to fill the vacuum caused by the relocation of these agencies?
- Would the proposals of the PQ government ensure the maintenance and advancement of Quebec's essential transportation and trade links with the rest of the world?
- Notwithstanding some inevitable disruptions, would the achievement of Quebec sovereignty result in any significant gains in the field of transportation, which would not be possible should Quebec continue to work within the Canadian Federation?

The transportation sector is of fundamental importance to Canada and the types of vital questions outlined above deserve the attention of Quebeckers and, indeed, all Canadians in the months ahead. It is hoped that this report will make a meaningful contribution to those deliberations.

Chapter 1

Canadian transportation in perspective

Transportation in Canada historically has given particular meaning to the country's motto: A mari usque ad mare — from sea to sea. In this regard, it has served a crucial role as a nation-building and unifying force, first linking the country together from east to west and subsequently opening up the more northerly and isolated areas for access to and from the south.

The historical challenge in Canadian transportation

The period prior to Confederation saw the existence of isolated and tiny colonies in British North America. They were distinctly separate and their ties with world markets—Britain and the United States in particular—were much stronger than those with each other. When four of the colonies decided to join together in Confederation in 1867, they realized that a new transportation system would be required to link them and to open up the whole of the Canadian market. As a result, the establishment of the Intercolonial Railway was one of the first undertakings of the new nation. In following years the rail system was extended to the Pacific coast, in fulfilment of a commitment to British Columbia and to expand further the Canadian market. Transportation services were an important element in the conditions for several provinces joining the Federation.

Development of the Canadian transportation system has proven to be an enormous challenge, one reason simply being the size of the country and the settlement pattern. Canada has the second largest land mass in the world, stretching more than 5,000 kilometres between the Atlantic and Pacific Oceans. While the population is concentrated in southern regions, vast distances separate the major population centres. Resources are plentiful but widely dispersed, many of them being found in remote areas. The shape and nature of our transportation system has had to respond to these circumstances.

Canada's harsh climate has been another major challenge for those who have developed and operated our transportation system. Construction and maintenance during winter months is very difficult, at times impossible.

Another challenge has been the rugged terrain. The Rocky Mountains have stood as a barrier between the west coast and the Prairies. The miles of bedrock and muskeg northeast of Lake Superior have tended to separate eastern Canada from the West. In the Far North, permafrost has presented a particularly difficult problem and special construction techniques have been required. In spite of these and other challenges, the public and private sectors have combined over time to build a highly developed, multi-modal transportation system in Canada—a system that is of immense and increasing importance to the well-being of the country.

Importance of transportation

Today, Canadians have a higher degree of dependence on their transportation system than do most other people in the Western world. For example:

- Canada is a major world trader with about one-fifth of domestic production being sold in foreign markets. We export large volumes of resource products (e.g., grains, potash, sulphur), processed goods (e.g., pulp, metals) and manufactured products (e.g., automobiles, newsprint, farm machinery) and import large amounts of foodstuffs and manufactured goods. To maintain and improve our trading position requires a modern and efficient transportation system.
- When expressed in terms of ton-kilometres per capita, Canada's transportation of produce is the highest in the Western world. This reflects, in part, the movement of our natural resource products to distant markets.
- Canadians are very mobile people. Canada ranks second in the world in terms of distance travelled per capita.

As a result of our heavy reliance on transportation, it is not surprising that Canada annually spends relatively more on transportation than do most if not all of the other industrialized countries. In recent years, it has been estimated that total transportation expenditures have accounted for about 12 per cent of our Gross National Product¹; for 1978, this would amount to an expenditure of about \$24 billion. Expenditures on this scale have naturally been a major economic stimulus as well as a heavy cost for the economy. The transportation equipment industries, for example, collectively employ 162,000 people and accounted for shipments in 1976 of \$13 billion. Cities such as Montreal, Winnipeg, Vancouver, Halifax and Saint John are dependent on the transportation sector for much of their economic vitality. Other communities, too many to name, are similarly dependent.

¹ Total transportation expenditures include all expenditures on the transportation service and equipment sectors.

Current transportation issues

It would be surprising if an industry sector of this size did not generate problems. At the individual level, there is the urban commuter who is troubled by the bumper-to-bumper traffic during rush hour and the manufacturer who is concerned with delays in trans-shipments.

Issues at the provincial or regional level tend to be more difficult to resolve, often because they stem from actions taken long ago, such as the National Policy of 1879. In the Prairies, for example, the issues of concern include freight rates, rail line abandonment, the availability of hopper cars for grain and the use of federal transportation policy as an instrument of regional development. In the Atlantic provinces there are a number of continuing issues related to transportation subsidies and the availability and level of service.

These are real issues. Solutions, however, may be very costly or entail substantial trade-offs of one sort or another. While not wishing to minimize the importance of these issues, it might be noted that they focus on the negative aspects of the transportation system. And it seems that it is quite commonplace, when analyzing our transportation system, to accentuate these issues—to focus on the problems.

A mature system

The positive side of the transportation system, which is often taken for granted, is that we have a highly developed, multi-modal network that fully links the country from east to west, provides access to many northern and previously isolated communities, and contributes very significantly to national unity in both economic and political terms. The system facilitates our position as a major world trader, enables Canada to rank highest in terms of freight transportation and supports a high level of passenger service under adverse conditions of climate, population density and long distances. Chapter 2

The Canadian Federation and transportation development

To advance its case for a sovereign Quebec, the Parti Québécois has drawn attention to the weaknesses it perceives in the Canadian Federation. Overlooked, however, are the remarkable accomplishments that have been made possible by the union of 10 provinces and by the functioning of our federal-provincial system of government.

Even a cursory review of the history of transportation in Canada provides an impressive list of undertakings. Many of these have required the co-ordination, planning and financial backing of all regions, a role that has been facilitated by the federal government. Examples are early canal construction, the building of the CPR and the CNR, and the establishment of Air Canada, the Trans-Canada Highway and the St. Lawrence Seaway. The following sub-sections give a brief description of some of these accomplishments.

Canadian National

The Canadian government has been instrumental in building many of the major railway lines in this country, such as the Intercolonial, the Canadian Pacific, the Hudson Bay Railway and the Great Slave Lake Railway. The federal government's participation has ranged from construction and operation (the Intercolonial) to providing the investment capital (the Great Slave Lake Railway). Also it has subsidized a number of lines to realize certain national objectives, such as regional development and northern access.

Largely because of this federal participation, Canada now possesses two of the largest railway systems in the world—the Canadian Pacific, a privatelyowned corporation which completed its transcontinental line in 1885, and the Canadian National.

The Canadian National Railways, established by the federal government as a Crown corporation in 1922, amalgamated several separate and financially troubled rail systems into one integrated, transcontinental system. When Newfoundland joined the Federation in 1949, the Newfoundland Railway also became part of the CN system. Currently the longest trackage in Canada is operated by CN, with approximately 10,720 kilometres of mainline track, serving all 10 provinces plus the Great Slave Lake region in the Northwest Territories. Canadian National is the country's largest public utility with total book assets in 1977 of \$4.7 billion, operating revenues of \$2.7 billion and employment in excess of 78,600. Aside from its domestic railway operation, CN has interests in trucking companies, hotels, real estate, telecommunications, marine facilities and a US railway subsidiary. The head office is in Montreal.

With its vast network of rail lines in all provinces, CN has served to fulfil one of the fundamental objectives of the Fathers of Confederation—the expansion and consolidation of the Canadian common market. While other modes of transport have, in more modern times, created difficulties for the CN and other rail companies, few would question the railways' contribution to the integrated east-west system of transportation that binds the country together.

Air Canada

The federal government was the first to establish and maintain a coast-tocoast air service. Established in 1937 as a Crown corporation, the Trans-Canada Air Lines (TCA) was directed to operate inter-urban air mail and passenger services to meet both domestic and international requirements. The post-war years brought about a rapid expansion in TCA, renamed Air Canada in 1964.

At present, Air Canada maintains passenger, mail and commodity services over a network extending to at least 64 destinations in Canada, the United States, Europe, Bermuda and the Caribbean. Air Canada ranks ninth in size among the world's major airlines. The net assets of the company are \$956 million; employment in 1977 amounted to over 20,400. Its headquarters are in Montreal.

While a company such as Air Canada could have eventually developed from private initiatives, the actions of the public sector resulted in its development at an earlier date, thus providing the country with another means of strengthening the Canadian common market.

Trans-Canada Highway

In the first half of the 20th century, the federal government provided financial assistance for the construction of a number of provincial roads, which could later be joined into an interprovincial trunk system. During the Second World War, the need for a Trans-Canada Highway became obvious.

Begun in 1950, this enormous undertaking was eventually completed at a total cost of \$1.4 billion. The federal government contributed \$900 million.

Across the country, final costs of the project were much higher than originally anticipated. This was equally true in Quebec where, "when the province finally decided to participate in the venture, it shrewdly ran the highway through the heart of Montreal," resulting in expensive land purchases, a wider highway, a complex bridge-tunnel across the St. Lawrence River and, of course, increased federal assistance.' In Quebec the Trans-Canada Highway program entailed the construction of more than 600 kilometres of an essential transportation artery, linking major areas of commerce. Federal contributions to that province amounted to \$175 million.

The Trans-Canada Highway is testimony to what can be achieved by pooling the wealth and energy of the nation. Without this sort of co-operative federalism, the development of the Canadian common market would have been severely hampered and the east-west links imperfectly welded.

St. Lawrence Seaway

The building of the St. Lawrence Seaway into a modern canal system during the 1950s has produced major gains for the national economy. Over the period 1959 to 1976, the annual tonnage handled along the system increased by more than 250 per cent to a level of almost 65.5 million metric tons. Many new jobs have been created, exports of Canadian goods have been greatly facilitated and a number of industries have expanded considerably.

These developments have produced positive benefits for all regions of Canada. There are a number of PQ spokesmen, however, who argue that the Seaway is an example of a federal policy initiative that has worked to the detriment of Quebec's economy, encouraging new manufacturing to locate in Ontario and contributing to the stagnation or decline of Quebec's marine activities, particularly for the port of Montreal. It seems incredible that such an enormous financial and engineering achievement as the St. Lawrence Seaway involving five governments² would be cited as an example of unprofitable for Quebec? It would be pretentious to offer a balance sheet evaluation, but the following facts certainly cast serious doubt on the PQ point of view:

• When the Seaway was constructed, the respective industrial bases of the Ontario and Quebec economies were already cleary established; the subsequent growth was essentially an extension of the established pattern; drawing cause and effect relationships between Quebec's slower population and industrial growth with the St. Lawrence Seaway could, with equal validity, be turned around to argue that the Seaway helped link Quebec with a rapidly growing region.

¹ John T. Saywell, Across Mountain and Muskeg: Building the Canadian Transportation System (Ottawa: Economic Council of Canada, February 1975) pp. 160-161.

² The governments of Canada, the United States, Ontario, Quebec and the State of New York.

- The manufacturing industries of central Canada have relied upon modes, i.e., truck and rail, other than the Seaway to fulfil their principal transportation needs. In 1976, for example, only some seven per cent of the cargo handled on the Seaway was in the form of manufactured goods.
- While the port of Montreal recorded losses in tonnage handled over the 1957 to 1975 period, activity at the port of Toronto declined more dramatically, by over 40 per cent. In contrast to these two situations, activity in the ports along Quebec's North Shore increased spectacularly. While the Seaway was not the sole cause of this latter development, it certainly played a supportive role. A strong and prosperous economy has since developed along Quebec's North Shore.
- Over the 1957 to 1975 period, total activity at Ontario ports increased by 38 per cent compared to 112 per cent for Quebec ports.
- International traffic in the Quebec ports increased by 155 per cent over the same period.
- Quebec ports along the St. Lawrence today have a considerably increased participation in the storage and export of Canadian grains.
- Quebec ports have also been able to account for one-half of the total traffic moving through the Seaway.
- Finally, the opening of the Seaway provided support for Quebec's shipbuilding industry, helping to create a demand for the construction of some 35 new "lakers" with contracts in Quebec of some \$250 million.

These preliminary data and observations suggest that the Seaway has provided some very positive benefits and stimulus to the whole of the Quebec economy.

Pipelines

The history of pipelines in Canada is a relatively short one, covering a period of some 30 years. In spite of this, Canada now has more kilometres of oil and gas pipelines than it has of railway track.

Western Canadian oil moves to domestic markets through a complex of pipelines, the major ones being the Trans Mountain Oil Pipe Line Company line, which runs west through British Columbia, and the Interprovincial Pipe Lines system from Edmonton through to southern Ontario. Subsequent to the oil crisis of 1973, the federal government introduced a new oil policy, part of which called for an extension of approximately 836 kilometres of Interprovincial's line from Sarnia into Montreal; this project was completed in 1977.

Natural gas was discovered in Alberta in 1883, but it was not until 1956 that construction began on an interprovincial pipeline for gas. The first such pipeline, owned by Trans-Canada Pipelines Ltd., runs east from Edmonton to Winnipeg where it branches into two lines, both of which move gas into southern Ontario. There, one branch line has been extended to Montreal and beyond to Philipsburg, Quebec, on the international border. In keeping with federal policy, additional supplies of domestic gas are to be made available to Quebec; toward this end, two new proposals for pipeline extensions in Quebec have recently been submitted for the consideration of the government.

While the construction of all interprovincial and international pipelines in Canada has been financed by the private sector, the federal government has been active on the policy, regulatory and licensing side, ensuring that the required pipelines are built at such a time and in such a manner as to meet the general needs of the country. Thus far the federal government has ensured an east-west development of the pipelines and the provision of domestic fossil fuels to most regions of the country. Had such policy initiatives not been pursued through the co-operative arrangements of the Canadian Federation, Quebec today would be fully reliant on foreign countries for its supply of fossil fuels.

Summary

Since the time of Confederation, the federal government has been instrumental in building and financing essential components of our pan-Canadian transportation system, so that today we have a highly developed, multi-modal system which contributes significantly to the east-west economic and political unity of the country. The Canadian National Railways, Air Canada, the network of pipelines, the Trans-Canada Highway and the St. Lawrence Seaway stand as symbols of achievement of one of the fundamental objectives of the Fathers of Confederation—the extension and consolidation of the Canadian common market from coast to coast. A number of other examples could similarly have been described, including:

- the Canadian Coast Guard, with its fleet of 160 ships and 2,000 officers and men, providing a range of essential services to marine transportation in coastal waters and the St. Lawrence River;
- development and maintenance by the federal government of several hundred harbours and ports;

• development by the federal government of almost all the airport infrastructure, which includes runways, terminals, and navigational aids across the country.

The nature of the Canadian Federation made it possible for these programs or projects of national and regional interest to be undertaken and to be realized. One can only wonder what sort of transportation system there would be from St. John's and Halifax through to Vancouver and Victoria if we had not had a unified country over the past 100 years or so but, instead, "separate" independent political entities planning and building to meet their own interests. Similarly, what sort of transportation system(s) would have emerged in the United States if the American federation had not existed, but rather some loose grouping(s) of 50 "independent" states? In both Canada and the United States, each with extremely flexible federal systems of government, the accomplishments of the unified countries have been remarkable.

Chapter 3

Future challenges in Canadian transportation

The previous chapter described how the Canadian Federation has historically supported the development of a highly advanced transportation system in this country. Implicit in the sovereignty proposition for Quebec is that, even if the Federation served a useful purpose in this regard in the past, the Federation will not be so required in the future. Presumably advocates of this viewpoint have either identified few future challenges in transportation and/or they assume that Quebec could, independently, address any transportation challenges that might arise. There are a number of emerging transportation challenges, however, which call into question the desirability of such a choice.

Future investment requirements of the transportation system

No radical shifts are expected in passenger transportation modes over the next decade in Canada. Air travel is expected to record the most rapid rate of growth in trips, followed by rail, bus, and automobile. The private automobile will continue to dominate intercity travel and this will exert heavy pressures on the demand for new roads and highways.

Over the next decade, however, there will be a very heavy demand for additional investment in the transportation system. Recent estimates indicate that the investment requirements over the 1978 to 1990 period may exceed \$30 billion, or almost \$3 billion per year. This figure is exclusive of the amounts required for new and extended pipelines.

This is a formidable investment outlay. Moreover, during the next five to 10 years capital markets may be very tight and, if so, major projects in Canada will have to compete for scarce funds. Also, the transportation sector may not attract significant private investment because of its historically low profitability, high risks and the prospect of better profit opportunities elsewhere. As a result of these factors, government participation on an intensive scale may be required to ensure the transportation system keeps pace with national and regional growth. Extensive co-ordination and co-operation among governments, such as is facilitated by the federal system, will be necessary to ensure that these investments make the maximum contribution possible to the integrated and unified character of the transportation system. This is important for Quebec, which is more heavily dependent upon Canada as a market for its industrial output than any other province. In this context, therefore, it is highly doubtful that independence or sovereignty would serve the interests of Quebec.

Intermodal activities

While considerable advances have been made in past decades in expediting the movement of passengers and freight throughout Canada, there is still a great deal to be accomplished in integrating the various modes of transportation and, thereby, improving the overall effectiveness of the system. One example, clearly, is the Mirabel Airport both in terms of integrating domestic flights with international flights and with facilitating access to the Montreal urban area. While major improvements have been made in this regard, the full potential of Mirabel will require further policy initiatives by the federal and provincial governments. There is no question that a sovereign Quebec would address the issue, but it must be recognized that this would still involve working with the federal government and other governments. Given the economic interdependency, the geographic location and the purpose of the Mirabel Airport, intergovernmental consultation and co-operation are essential; there is no reason to believe that a move to sovereignty would simplify the process for Quebec.

Arctic transportation

The Arctic region is viewed as Canada's last frontier, being distant from major population centres, rich in resources, sparsely settled and underdeveloped. In the coming decades, many new economic activities will be generated in the Canadian north, each of them creating benefits for northerners and people resident elsewhere in Canada.

For example, production of natural gas in the High Arctic, coupled with the use of liquefied natural gas (LNG) tankers, will provide opportunities and benefits for Canadians living in the Atlantic provinces and Quebec. Before the Arctic region and its resource potential can be developed, a number of transportation challenges will have to be successfully met. In this regard, the federal government is intensifying its effort to improve the road, air, marine and rail networks. Being considered, for example, is a \$300 million class 10 icebreaker, which would be used by the Canadian Coast Guard (CCG) to keep northern waters open to shipping.

It would appear to make sense for each province to join with the rest of Canada in this challenge of the Arctic, rather than to contemplate the related transportation investments independently.

Rail passenger services

Another transportation challenge is to improve and upgrade rail passenger service across the country. To this end, the federal government recently created Via Rail Ltd. as a Crown corporation and directed it to assume responsibility for all passenger rail services. In Quebec, this challenge represents a real opportunity in terms of improved passenger service, investment and job creation. Priority is being given by Via Rail to the Quebec City-Windsor corridor, because this is the most densely populated part of the country. Some \$13 million has already been allocated for the upgrading of the mainline rail within the corridor. As new rolling stock is acquired, the transportation equipment industry will receive a very positive stimulus. The first 10 train sets (22 locomotives and 50 coach cars) were recently contracted from MLW-Bombardier, a Quebec-based firm, for a price of \$90 million. The rail passenger challenge across the country, therefore, will produce a number of benefits for Quebec, as well as other provinces.

Transportation equipment industries

The transportation equipment industries contribute substantially to the country's performance in several ways. For example, in 1976 they accounted for \$13 billion in shipments and 162,000 jobs.

In Quebec, their contribution is also very significant. Several of the components of that Quebec industry—which together employ some 30,800 workers—have been highly dependent on the federal government for their existence and vitality.

Some of these transportation equipment industries are currently confronted by severe marketing problems. Joint participation by the private and public sectors across Canada is required to ensure the resolution of their problems and an expansion of their markets.

Revitalization of the transportation function of Montreal

The historical underpinning of the Montreal economy has been its role as a transportation hub, servicing much of the provincial economy and operating as a centre for interprovincial and international freight and passenger movements. For this reason, many transportation companies located their head offices in Montreal; some examples are CP, CN and Air Canada, major corporations with country-wide operations. Gradually over past decades, however, the city's transportation advantages have been eroded by changing technology and the shifting pattern of trade in North America.

Montreal no longer dominates port activity, as it once did in eastern Canada although this has been more than offset by gains elsewhere in the province, as Quebec's ports increased their share of total port activity in Canada from 32 per cent to 38 per cent over the 1956 to 1976 period. Among the major causes for the decline in activity at the Montreal port was the fact that the size of ships has been increasing dramatically and, unfortunately, the limited draught (9.7 metres) of the port cannot accommodate the larger vessels. Much traffic has therefore gravitated to eastern ports which, unlike Montreal, can offer ice-free shipping, deeper draughts, and a quicker turnaround for North Atlantic trade. Perhaps even more important than this technological factor has been the strengthening of trade ties with the United States and the general shift in the centre of economic activity in North America to the southwest.

A real challenge in the years ahead will be to revitalize the transportation function of Montreal, thereby providing a renewed growth stimulus for the economy of the city and its environs. This process of revitalization is already underway. The federal government's investment in Mirabel was one of the first steps. Currently, the federal and provincial governments are co-operating in the development of an industrial park at Mirabel in order to complement and extend the air traffic activity there.

As already noted, much of the transportation function of Montreal has been related to its trade and service ties with the rest of the country. As a result, it would appear that the opportunities for revitalizing that function would be advanced if Montreal and the rest of Quebec continued to operate within the framework of a unified country.

Summary

1

While the Canadian transportation system is highly developed, the dynamics of economic growth continue to pose new challenges. Successful pursuit of these challenges is of vital importance to the Quebec economy. A recent publication by the C. D. Howe Research Institute has shown that, of all Quebec's "known exports," 56 per cent go to the rest of Canada.¹ In 1974 shipments to the rest of Canada of manufactured goods alone amounted to \$6.7 billion, exceeding the total of Quebec's exports outside Canada. Output and employment are both heavily dependent on markets outside Quebec. Quebec is the only region for which the Canadian market occupies a more important position than the international market.

In sum, Quebec is a highly open economy, critically dependent upon an efficient and fully integrated transcontinental transportation network. It is difficult to see how sovereignty for Quebec would advance its role in ensuring the transportation interests of Quebeckers. Is it reasonable to consider a sovereign Quebec would continue to serve as a major transport terminal for Canada? Is it reasonable to consider that the transcontinental transportation network would continue to evolve in a manner highly supportive of Quebec? If not, what would the consequences be for Quebec's ports and other trade-related centres, for employment dependent upon markets outside Quebec and for its shipbuilding, aerospace and other transportation equipment industries?

¹ C. Nappi, The Structure of Quebec's Exports, C. D. Howe Research Institute, October 1978.

The issue of sovereignty for Quebec has many dimensions, but so does participation in a larger union. Opting out of the Federation cannot be considered to be without cost. Serious consideration of the cost is required and a sharper view required of the supposed benefits. The transportation dimensions reviewed in this chapter would appear to weigh significantly against the argument for full sovereignty.

Chapter 4

The transportation system in Quebec and the federal contribution

A basic tenet of the current Quebec government is that Quebec has not derived significant or adequate benefit from the operation of the Canadian Federation. More precisely, the "balance sheet" of federal taxes and expenditures is claimed as being negative for Quebec. Confederation, of course, is much more than a "balance sheet." Many of the benefits of a unified country cannot be quantified in any meaningful manner. This is equally true in the case of transportation. It may be useful, however, to focus more precisely on the federal contribution to Quebec and to examine—from the perspective of the transportation sector—the validity of the Parti Québécois point of view. The following, therefore, reviews the federal contribution to transportation infrastructure, operations, manpower, head offices and the transportation equipment industry in Quebec.

Infrastructure

Marine

History and geography have made ports an important element of the transportation infrastructure in Quebec. Over time, most of the port infrastructure has been established due to investments by the federal government. With few exceptions, such as the largely privately-financed facilities at Port Cartier and the provincially-financed facilities at Bécancour, the major ports in Quebec have been financed, operated, maintained and administered by the federal government.

At present, the National Harbours Board is responsible for 15 major ports across the country; six of these—Montreal, Quebec City, Trois-Rivières, Sept-Îles, Chicoutimi and Baie des Ha! Ha!—are within the Province of Quebec. Some other federal ports in Quebec, which have an important function in serving a regional population and/or industries, are those of Matane, Sorel, Baie Comeau, Rimouski, Rivière-au-Renard, Cap-aux-Meules, Paspébiac, Grande-Rivière and Pointe-au-Pic.

In total, the federal government has been responsible, through the National Harbours Board and Transport Canada, for 82 ports and harbours in Quebec. These facilities have contributed immensely to Quebec's economic development, trade and employment. Transport Canada also administers other assets, which are used by, for example, the Coast Guard, the ferry service, and the St. Lawrence Pilotage Authority. Most of the assets of the Montreal-Lake Ontario section of the St. Lawrence Seaway also lie within Quebec.

The federal government has simultaneously pursued the development of Atlantic, St. Lawrence and Pacific ports in the interest of the various regions. In this process, it appears that Quebec has not been unfairly treated as its ports have received about one-third of federal port investments over time. This share approximates Quebec's share of the total port activity, measured in terms of cargo tonnage handled, in Canada.

Assets in the marine mode in Quebec had an estimated book value of \$945 million at the end of 1975. National ports in Quebec and the Quebec portion of the St. Lawrence Seaway accounted for \$890 million or 94 per cent of the province's marine assets. The real value of these assets is, of course, far in excess of the book value.

Rail

Quebec has a rail system that links all the major centres of population, both within the province and with other parts of Canada. Because of the heavy volumes of freight handled in the province and the location of the head offices of both major railways in Montreal, there is very considerable activity which cannot be measured simply by the number of kilometres of track within the province. These include a number of rail yards, major repair facilities and related head office activities.

Members of the PQ government, however, have cited as an example of unprofitable federalism Quebec's 11 per cent share of total Canadian rail trackage. Before proceeding further in this report, it may be useful to respond to this criticism.

- One reason that Quebec appears to have a small share of railway trackage is simply that the province is heavily dependent on the marine mode of transportation. Unlike land-locked Alberta and Saskatchewan—which have to depend heavily on the rail mode—Quebec has other alternatives.
- While Quebec has only 11 per cent of the track in the country, most of the railway trackage in Quebec is relatively under-utilized as the density of traffic on CN and CP lines is below the national average including the levels in Ontario and British Columbia. On that basis, it appears that other provinces might make a more legitimate request for additional trackage.

- The rail system in Quebec was not developed by the federal government alone. It is a product of both public and private investment. The CN, a federal Crown corporation, however, has accounted for close to 60 per cent of the track laid in the province---by no means a small share.
- In any event, the 11 per cent figure understates the contributions of the railways to the Quebec transportation system. For example, more than 20 per cent of the rail employment of CN and CP is located in Quebec.

The province has approximately 7,360 kilometres of main and branchline rail track. Some 4,180 kilometres of this is accounted for by CN, which is also responsible for 15 major railway yards, 35 smaller yards, 13 shops and repair facilities and a research facility in Montreal.

The second major railway in the province is CP, which accounts for about 2,250 kilometres of track, or 30 per cent of the provincial total. A number of regional rail lines—such as the Quebec North Shore and Labrador, Quebec Cartier, Arnaud, Romaine River, Roberval and Saguenay, Alma and Jonquière—have more than 880 kilometres of track in Quebec and assets of about \$270 million.

Together, all the railway companies have assets with a gross book value of more than \$1 billion in Quebec. Through its ownership of Canadian National, the federal government was directly responsible for some \$569 million of railroad assets in Quebec in 1976—an amount equal to 53 per cent of the total fixed assets in the province's railway system.

Roads

During the period 1956 to 1973, the cost of construction of public roads in Quebec was about \$4.7 billion. Even though this is primarily a provincial responsibility, the federal government contributed an estimated \$431 million, or 9.3 per cent of the total. Most of the federal assistance was provided under the Trans-Canada Highway program; in later years additional highway assistance has been provided under the government's regional development activities through the federal Department of Regional Economic Expansion (DREE).

For the period 1974 to 1982, for example, DREE is committed to contributing \$175 million to the Government of Quebec for the development of some key highway networks and another \$34 million for the construction of forestry access roads.

Civil aviation

Quebec has an extensive and well-developed network of airports, telecommunication stations, control towers, administrative offices and other facilities. The federal government has been directly responsible for the development and operation of almost all of this infrastructure.

Indeed, 30 of the most important airports including Mirabel, Dorval and Ouebec City have been financed and are owned by the federal government; of this number, 13 are operated by the federal government while the rest are operated by either the provincial government or municipalities.

As of 1975/76, the book value of federal civil aviation assets in Quebec was estimated to be more than \$715 million. This amount represents some 36 per cent of the total federal assets in civil aviation facilities across the country.

Infrastructure summary

The gross book value of transportation infrastructure in Quebec for all modes was approximately \$7.4 billion in 1976, or about 25 per cent of the \$30 billion total for Canada. Table 1 shows the federal contribution for each mode in Quebec and in Canada.

Table 1

Federal contribution to fixed assets¹ in transport, Quebec and Canada

	Quebec			Canada		
	Estimate of total asse		Federal share	Estimate of total assets	Federal ² contribution	Federal share
	\$ Millions		%	\$ Millions		%
Air ³	716	716	1004	1,969	1,969	1004
Rail ⁵	1,074	569	53	6,712	3,846	57
Roads ⁶	4,656	431	9	18,131	2,344	13
Marine ⁷	945	890	94	2,837	2,596	92
Total	7,391	2,606	35	29,648	10,755	36

¹ source: Transport Canada

² excludes headquarters' capitalized expenditures. ³ undepreciated book value as of March 31, 1976.

⁴ Due to data limitations with respect to private assets, this figure of 100 should be closer to 95 per cent. ⁵ capitalized fixed assets at end of 1976. Federal contributions measured by CN assets. ⁶ Construction expenditures over the period 1956 to 1973 and the federal contributions are assumed to apply only

to capital expenditures

7 fixed assets, at undepreciated book value.

The federal contribution to transportation infrastructure in Ouebec has been very considerable. According to the estimates indicated, the book value

¹ While the "book value" was estimated at \$2.6 billion, the replacement value would be much higher.

of the federal contribution was about \$2.6 billion² by 1976, an amount equal to some 35 per cent of the total investment in the province's transportation infrastructure. In each of three modes, the federal government accounted for over one-half of the infrastructure investment and ownership; air, 95 per cent or more; marine, 94 per cent, and rail, 53 per cent. While roads are primarily a provincial responsibility, the federal government nonetheless contributed about nine per cent of the investment.

It is evident from the data that Quebec has received a fair share of the federal investments in Canadian transportation. In Quebec, the federal government has accounted for about 35 per cent of the total investment in transportation infrastructure, which is almost identical to the average of all provinces.

Operation and maintenance of the transportation system

Not only has the federal government made an immense contribution to the development of the transportation infrastructure in Quebec, but it is also making a considerable ongoing contribution to the operation and maintenance of the transportation system in that province, as well as in other provinces. In 1977/78, annual expenditures for that purpose in Quebec were in excess of \$135 million.

Head offices of Crown corporations

As Montreal has always played a key role in Canadian transportation, that city has been chosen as the location for the head offices of many private and public transportation-related companies.

Three federal Crown corporations engaged in transportation activities maintain their head offices in Montreal. In 1976, the head office of CN employed 3,020 people and the head office of Air Canada employed another 1,106. Via Rail has also established its head office in Montreal and it will employ a sizeable number of personnel.

Establishing these head offices in Quebec has clearly been of significant benefit to the province. It sustains directly some 4,100 jobs in Montreal and creates many additional jobs in associated activities.

Reference could also be made to Canadair Ltd. In 1976, the federal government purchased this Quebec-based aerospace manufacturing firm, which employs about 4,300 throughout the whole of its operation in Montreal.

Federal manpower

In 1976, some 5,500 people were working in Quebec as federal public servants, employed by the Canadian Transport Commission, Transport Canada

² Data for roads include only construction costs from 1956 to 1973.

and its agencies, such as the St. Lawrence Seaway Authority, regional pilotage authorities and the National Harbours Board. When CN and Air Canada employees are included, total federal employment in Ouebec transportation accounted for 31,700 jobs-about 37 per cent of all the workers directly engaged in the transportation system throughout Ouebec.

As shown in Table 2, wages and salaries of federal employees in the transportation sector in Quebec were more than \$500 million in 1976. This presence, of course, gives rise to a range of services and other related jobs. It is estimated that the total federal impact on the provincial economy was something in the order of 72,800 jobs and \$1 billion in wages and salaries.

The benefits that flow to the province from this direct and indirect job creation are clearly very significant.

Table 2

Impact of federal employment in transportation services in Quebec, 1976¹

		Employmer	nt in Quebec	Wages and salaries in Quebec
1.	Direct impact	actual	as % of agency's Canadian total	(\$ millions)
	Transport Canada and Canadian Transporta-			
	tion Commission	3,813	16.7	52.5
	St. Lawrence Seaway Authority	400	33.6	7.2
	National Harbours Board ²	1,319	67.4	20.5
	Air Canada	8,700	42.3	165.6
	Canadian National	17,418	21.8	264.4
2.	Sub-total Indirect impact • employment in other activities in Quebec resulting from federal presence in transpor-	31,6501	25.3	510.2
	tation system ³	41,150		453.0
3.	Total	72,800		\$963.2

¹ excluding 4,300 workers in Canadair which is owned by the federal government.

² employment at ports and grain elevators. ³ assuming conservative job multiplier of 1.3 and an average income per indirect employee of \$11,000.

Transportation equipment industries

In view of Quebec's historic role as a hub of transport, several major transportation equipment industries have located in that province. In 1976, they generated employment for some 30,800 people. A brief description of some of these industries is given below.

Shipbuilding

This industry has two major characteristics. First, it depends heavily on the federal government for contracts, subsidies, export financing and other assistance. Second, the industry is located for the most part in the slow-growth regions, particularly Quebec and the Atlantic provinces. In 1976, Quebec accounted for 44 per cent of the industry's value of production and 37 per cent of its employment.

More than \$368 million was spent by the federal government between 1966 and 1976 in subsidies to the Canadian shipbuilding industry. Quebec firms received \$123 million, or 33 per cent of the total.

Domestic shipbuilding contracts awarded by federal departments totalled \$515 million between 1967 and 1977. Quebec firms were the principal beneficiaries; they accounted for 44 per cent of the value of contracts awarded.

As a combined result of the shipbuilding subsidies and the purchase orders, federal support to the Quebec shipbuilding industry amounted to about 31.5 per cent of the industry's value of production over the 1967 to 1977 period.

The Quebec shipbuilding industry also has derived considerable benefit from the federal Export Development Corporation (EDC), which provides a range of financial services to assist Canadian firms in exporting their products. In the period 1971 to 1977, shipbuilding firms in Quebec received loans amounting to \$401 million from the EDC—a figure that represents three-quarters of the EDC assistance to the nation's shipbuilding industry over that period.

There are several other federal agencies with programs that benefit the Quebec shipbuilding industry. One is the National Research Council with its test facilities, laboratories and industrial research incentives. Another is the Department of Regional Economic Expansion which, for example, is providing direct financial assistance for the construction of a drydock at Les Méchins in Quebec.

The three major shipbuilding and repair yards in Quebec are indicated below:

Company	Location	Employment May 1977	Employment June 1978
Marine Industries	Sorel	2,475	1,826
Davie Shipbuilding	Quebec	2,060	1,406
Canadian Vickers	Montreal	685	322

In the past, these three yards have been very successful in securing US Navy subcontracts under the Canada-United States Defence Production Sharing Agreement. Due to a general excess capacity world-wide, Canada's shipbuilding industry has suffered severe setbacks in recent years. Quebec's major yards have experienced serious layoffs, as shown in the preceding table.

Nevertheless, the federal government has a number of marine-oriented requirements that will give rise to additional opportunities for Canada's shipyards. These relate to Coast Guard vessels, fisheries research vessels, patrol craft and Arctic icebreakers. Canadian naval warships must be replaced in the near future and this could mean up to 20 new vessels costing \$3.5 billion, with the construction of each vessel generating about 2,950 man-years of work. Additional subcontracts under the defence production sharing agreement with the United States are also probable.

To maintain its productive capacity and to realize new opportunities in the years ahead, the shipbuilding industry in Quebec will continue to look to the federal government for ongoing and further assistance in the form of subsidies, contracts, EDC financing and export promotion. In the past, federal assistance in these areas has proven to be vital to the industry's viability.

Railway rolling stock

In the period 1970 to 1977, Canadian railways purchased \$394 million worth of locomotives, freight cars and components from the Quebec-based industry. In addition, that industry exported another \$159 million worth of locomotives, with 95 per cent of the financing being provided by federal agencies.

The federal government's purchase of hopper cars for grain shipment also has generated significant benefits for many regions, including Quebec. From 1974 through 1977, about 8,000 hopper cars were ordered, representing purchases of \$260 million. Approximately 35 per cent of these were from plants in Quebec.

Federal procurement of intercity passenger trains will yield further benefit to Quebec; contracts valued at more than \$90 million have been awarded to MLW-Bombardier Limited for the supply of 10 LRC (light, rapid and comfortable) trains, comprising 22 locomotives and 50 passenger coaches. Further, this Montreal-based company has received federal assistance for its export contract of two LRC train sets to Amtrak, the United States rail passenger agency. Major additional export sales are expected to be generated from this initial contract.

Aircraft and parts

This is a high-technology industry, particularly in view of the proportion of its employees engaged in scientific activities, the complexity of the product and the high quality control standards. The industry is also strongly linked to the federal government, because of the latter's role in the certification of aircraft, support of research and development, purchases of equipment and such things as production sharing agreements between countries. In addition, the federal government now manages 26 per cent of the industry since taking control of de Havilland in Toronto and Canadair Limited (CL) in Montreal.

In Canada, there are three major aerospace companies with an integrated capability to design, develop, manufacture and market aircraft and aeroengines. Two of these companies, Canadair and Pratt and Whitney Aircraft of Canada (PWC), are based in Quebec. There are many smaller firms in the province and total direct employment in the aerospace industry in Quebec now is about 12,400. Production in the province accounts for 46 per cent of the Canadian total.

PWC employs some 5,600 people and is based at Longueuil, Quebec. With continuing support from the federal government, the company has designed and developed a series of aircraft gas turbine engines. At present PWC is the leading exporter and employer in the Canadian aerospace industry.

CL is a growing enterprise owned by the federal government. Employing 4,300 people, its operations are based at Ville St. Laurent, Montreal. Canadair has developed a new business aircraft known as *The Challenger* which, given the international response so far, promises to generate a major employment opportunity for the Montreal region.

In addition to its direct involvement in the aerospace industry, the federal government has made very important contributions through defence procurement and support of scientific reseach. The federal government contributed about \$140 million to the Quebec-based aerospace industry for research over the 1967 to 1976 period; this amount was equal to 48 per cent of the total federal contribution to the Canadian industry. Purchases in Quebec of national defence-related aerospace equipment amounted to about \$555 million over the same period; this accounted for almost 50 per cent of the federal expenditures in Canada for this purpose. It should be noted that the Department of National Defence is in the process of reviewing tenders for new fighter aircraft that will involve outlays of more than \$2 billion. While the aircraft will be of foreign design, it is expected that a substantial portion of the expenditures will be offset by negotiating industrial benefits for Canadian-based aerospace companies.

During the period 1967 to 1976, federal government assistance, including contracts, for the Quebec-based aerospace industry has been about \$64 million per year. This has accounted for more than one-quarter of the production costs of that industry, obviously a very significant and vital source of support.

Summary

The evidence reviewed above demonstrates that the Canadian Federation has been very supportive of the development of the transportation sector in Quebec.

- The federal government has contributed more than \$2.6 billion measured in terms of book value to the transportation infrastructure of the province; this accounts for almost all of the air infrastructure, 94 per cent of the marine infrastructure and 53 per cent of rail infrastructure; the federal government has accounted for over nine per cent of investment in roads, which are a provincial responsibility.
- The Parti Québécois view that the "balance sheet" of federal expenditures and taxes has been negative for Quebec is not supported by evidence on the transportation sector; the degree of support from the federal government for the provision of transportation infrastructure in Quebec has been almost identical to the average for all provinces.
- The federal government contributes significantly to the operation and maintenance of the transportation system in Quebec. For example, the gross expenditures for this purpose were more than \$135 million in 1977/78.
- Three major federal Crown corporations, which are responsible for transcontinental transportation services, have located their head offices in Montreal. As a result, CN, Air Canada and Via Rail are making a sizeable contribution to the Quebec economy.
- In 1976, some 31,700 people were employed by the federal government in providing transportation services in Quebec; this number accounted for 37 per cent of the total so engaged in the province. Accounting for associated employment, it is estimated that the federal presence in transportation is responsible for some 72,800 jobs in Quebec and associated wages and salaries of approximately \$1 billion.
- Several of the transportation equipment industries in Quebec have been vitally dependent on the federal government.
- Federal subsidies and contracts have been accounting for about one-third of the annual value of production in the Quebec shipbuilding industry and about one-quarter of the production costs in the province's aerospace industry. The

Chapter 5

Quebec sovereignty and implications for the transportation sector

The Government of Quebec says it will seek a mandate to negotiate simultaneously sovereignty for Quebec and an economic association with the rest of Canada. These negotiations would entail, among other things, the division of federal assets and liabilities. In the field of transportation, this would result in negotiations over a host of Quebec-based assets including those of CN, Air Canada, the St. Lawrence Seaway, and all federally-owned harbours, airports, railway lines and related facilities.

In 1978, the Parti Québécois produced a 64-page official program in which it gave some attention to "transportation" under the heading of "public services." That part of the program made it clear that a fully sovereign Quebec would completely reorganize its transportation sector, unify each of the rail, air and marine systems, and place them under the control of provincially-owned carriers. These statements of intent, however, beg a great number of questions. For example, if the transportation policy were to be implemented, what would be its impact on established trade and transportation flows? What about the CPR and its diversified activities; the St. Lawrence Seaway and its international control and operation; the trucking industry? The list would go on and on. Some of these issues are addressed in this section.

The integrated east-west system

The Canadian Federation has developed an integrated and multi-modal, east-west system of transportation. This supports an east-west flow of trade, making the provinces—particularly Quebec—generally more dependent on one another rather than on the US or other countries for their major markets.

Should the Government of Quebec proceed with its proposal to negotiate sovereignty and an economic association with the rest of Canada—a proposition already rejected by the federal government and provincial premiers—it is unlikely that these negotiations would yield satisfactory results. Sovereignty for Quebec would undoubtedly cause a reassessment of economic interests by all provinces and a realignment of trade flows between Quebec and the rest of Canada.¹ If Quebec's market activities with the rest of Canada were to decline, so would the activity and vitality in its transportation sector.

¹ For example, a previous study in this series showed that Quebec is four times more dependent on the rest of Canada for the marketing of its manufactured goods than is the rest of Canada dependent on Quebec.

The challenges ahead

As indicated earlier in this report, many challenges remain in Canadian transportation. Dividing Canada would jeopardize the co-operative framework for dealing with these, and Quebec could be left to deal alone with its own problems and needs. For example, the co-operative revitalization of Montreal's transportation function would become most difficult, if not impossible. The continental role of Montreal could become much more limited. In 1975 Montreal airports served as the country's principal transatlantic "gateway," handling 48 per cent of the passengers coming into Canada. If Quebec were to become independent, it is inevitable that much of this function would shift to airports elsewhere in Canada.

Issues for negotiation

If Quebec were to seek full sovereignty, a wide range of transportation issues would have to be negotiated with the federal government. Spokesmen of the PQ government are on public record as recognizing this fact. Such negotiations, however, would be very difficult—given the likelihood of an unfavorable atmosphere and given the complex, technical problems that would have to be sorted out in the field of transportation.

The Parti Québécois has assumed that Quebec would be entitled to all federal transportation assets in that province. This remains a hypothetical proposition and one that is not quite as straightforward as its proponents suggest. For example, CN and Via Rail have many of their assets in the form of locomotives, railway cars and other rolling stock that move interprovincially. Air Canada has much of its assets tied up in airplanes that fly interprovincially and internationally. How would the PQ propose to deal with such assets?

The Canadian Coast Guard provides marine transportation with a variety of essential services, for example, ice breaking, dredging, search and rescue, and navigational aids. Would a sovereign Quebec establish similar services or would it try to negotiate for CCG services to continue to be applied for Quebec's benefit?

The St. Lawrence Seaway is jointly owned, operated and maintained by Canada and the United States. Should Quebec seek full sovereignty, what negotiations would it undertake in respect of the Seaway with both Canada and the United States? What would be the responses and counter-positions of these two countries?

In short, sovereignty for Quebec would give rise to a great number of very difficult, technical and perhaps intractable issues in the field of transportation. Numerous treaties and agreements would have to be negotiated — simply to replace arrangements that already exist. There is no reason to believe that Quebec would, in balance, improve its economic position in those negotiations.

Federal employment

As noted in this report, the federal government directly accounts for about 31,700 employees in the Quebec transportation system (37 percent of the total) and some \$500 million in wages and salaries paid to them. When account is taken of associated employment, the wage impact approximates \$1 billion a year. How would Quebec independence affect this very important source of employment creation? Could all these jobs somehow be absorbed by the government of a sovereign Quebec or would a sizeable number be lost to the province?

Head offices

In 1974, there were 134 corporations with head offices in Quebec, each with assets of \$1 million or more, engaged in transportation service activities. It is estimated that these firms accounted for three-quarters of the total assets in the transportation service sector in Canada. Given that a large number of these have their major operations or markets outside of Quebec and are set up to serve the Canadian nation, is it reasonable to assume that they would all remain in a sovereign or independent Quebec, Yet it maintains its head office in Montreal, employing more than 1,100 people. Similarly, CN and Air Canada have the majority of their economic activities outside the province, yet their head offices employ another 4,100 people in Montreal. How would a sovereign Quebec replace the jobs and incomes that would be lost if these head offices were to relocate?

Transportation equipment industries

As noted in this report, three of Quebec's major transportation equipment industries — shipbuilding, railway rolling stock, and aircraft and parts manufacturing — have developed a vital dependence on the federal government for a wide range of assistance. In 1974, some \$280-300 million of the sector's output was marketed in other provinces. In the event of sovereignty for Quebec, what would happen to this sector and its 30,800 jobs? Is it realistic to assume that these industries could continue to make their very important contribution to the Quebec economy? The Parti Québécois platform indicates that government procurement policies would be used in support of Quebec industry. Would, then, the rest of Canada not also introduce similar self-serving policies?

Business as usual?

The proponents of sovereignty for Quebec argue that this can and must be accompanied by an economic association with the rest of Canada. In this way it is thought that independence for Quebec could be achieved, but at the same time "business as usual" would prevail. Is this a likely scenario?

As already noted, the concept of a Federation of only nine provinces could cause a fundamental reassessment of trade and transportation interests. As well, negotiations on transportation issues would surely be protracted and very difficult. Each party to the negotiations would endeavour to safeguard and extend its own best interests.

Thus far the PQ has set out preliminary objectives for a fully sovereign Quebec in the field of transportation. Among other things, it would assume responsibility for federal transportation assets in Quebec and reorganize and unify air, marine and rail services. It could be expected that, if Quebec were to seek full sovereignty and an economic association with the rest of Canada, the nine remaining provinces would consider their options and bargaining strengths. While a matter of conjecture, we can identify some factors and elements that might be considered:

- At present, Quebec may appear to have a strategic geographic position for traffic moving between the Atlantic region and the provinces west of Quebec. However, the importance of that traffic is not as significant as might be expected. Through traffic for the rail mode in 1974 accounted for almost 5.5 million metric tons, a very small amount of the total rail traffic. Similarly, the through traffic for the truck mode—at 453,500 metric tons—did not represent a significant share.
- Even from a purely geographic perspective Quebec's position is not, in many cases, critical to linking Ontario and the Atlantic region. Indeed, road and rail corridors through the United States would reduce the distance between parts of the Atlantic region and Ontario—by some 300 kilometres.
- The importance of Quebec as a corridor or trans-shipment point for marine traffic is obvious (more than 36 million metric tons in 1974). Even in this case, however, the bargaining strength of Quebec is open to question. It should be noted that the trans-shipment activity along the St. Lawrence provides a number of benefits to Quebec which could be jeopardized by opting out of the Federation. For example, it has been estimated that it would be necessary to increase St. Lawrence shipping costs of Quebec iron ore by 40 per cent if grain shipments from the west were to be lost as backhaul to Seaway shipping. (If iron ore shipments were

lost as backhaul, grain shipping rates would only have to be increased by 22 per cent.)

- Some of Quebec's harbours, particularly Montreal and Quebec City, at present have a national function. If Quebec were to seek full sovereignty, it might well be that the rest of Canada would endeavour to enter into stronger competition with Quebec's harbour facilities by further developing Pacific coast ports to handle exports from the Prairies and developing Atlantic coast ports. To a lesser extent, Fort Churchill and Ontario ports along the Great Lakes might be further developed.
- Mirabel Airport, with about 3,500 workers, serves a national as opposed to a provincial function. If the province were to separate, it seems inevitable that Canada would choose to establish alternative air gateways to and from the country, as nearly one-half of incoming passengers are now routed through Montreal.
- On balance, Quebec's geographic position would appear to give it limited leverage to negotiate an economic association with the rest of Canada. Indeed, any exercise of that leverage might be more harmful than beneficial, pushing the rest of Canada to search for alternative transportation routes which could thereby adversely affect Quebec's economic position.
- The rest of Canada could also move to favour its own transportation equipment industries, rather than continuing to extend subsidies and contracts to Quebec-based industry.

These are just a few random examples of what might be considered. In any event, they indicate that the rest of Canada does have transportation options for serving Canadian interests first and foremost. It is therefore highly unlikely that "business as usual" would prevail should Quebec opt for independence.

Summary and conclusion

The Government of Quebec and the Parti Québécois are advocating a fully sovereign status for the province together with an economic association with the rest of Canada. This concept has been rejected by the federal government and provincial premiers in the other provinces. The alternative to outright independence, then, would be continued participation in a renewed Canadian Federation. Before Quebeckers make a decision, a number of issues will have to be carefully considered.

The purpose of this report is to explore some of the interrelationships between national unity and transportation, to determine what sorts of transportation issues might be involved in the PQ's prescription of independence or sovereignty for Quebec. In the introduction to this report, a number of questions were raised, which are worth repeating here:

- It is the view of the Parti Québécois that federalism has been unprofitable for Quebec. But what is the historical record and what have been the transportation achievements? Has Quebec, in fact, benefited less than other provinces and have national policies been to Quebec's detriment?
- What would be the effects of Quebec's sovereignty on the ability of Quebec and the rest of Canada to meet future transportation needs and challenges? Are there advantages to a collective effort? Could independent actions yield the same results and could they do so with the same effective-ness and efficiency?
- Do Quebeckers believe that the province has a strategic geographical position and that the transportation issue would therefore constitute a strong factor in its favour if the PQ government were to try to negotiate full sovereignty and an economic association with the rest of Canada?
- Are Quebeckers confident that Montreal and other key transportation centres in the province would continue to serve and expand their continental and international transportation functions if Quebec was no longer part of the Canadian Federation?
- A number of head offices of federal agencies are located in Quebec (for example, Air Canada and CN) and it would be difficult to justify them staying there—given that they serve the whole of Canada—if Quebec were to declare full sover-

eignty. Are Quebeckers confident that alternative employment opportunities could be found to fill the vacuum that would be caused by the relocation of these agencies?

- Would the proposals of the Parti Québécois ensure the maintenance and advancement of Quebec's essential transportation and trade links with the rest of the world?
- Notwithstanding some inevitable disruptions, would the achievement of sovereignty result in any significant gains in the field of transportation that would not be possible should Quebec continue to work within the Canadian Federation?

These are crucial questions. While full answers are beyond the scope of this report, it has attempted to provide some of the factual evidence and to draw the apparent conclusions.

It has been shown that the transportation system has played a unique and vital role in the history of Canada. At the time of Confederation, the transportation and commercial ties between Ontario, Quebec, Nova Scotia, New Brunswick and the other regions that subsequently joined the Federation were relatively weak and poorly developed. The Canadian Federation, over the past 111 years, has devoted considerable resources and energy to building a strong common market. The development of the integrated, east-west Canadian transportation system has been a means to that end.

The transportation system in Canada is multi-modal in character and highly developed; it makes a vital contribution to the country's economic well-being and to interprovincial and foreign trade. In fact, as a major world trader and having highly mobile people, Canada is far more dependent on its transportation system than are most, if not all, countries in the world.

Canadians rely heavily on their transportation system not only to move goods, but also to create and sustain jobs. This is particularly the case for Quebec, where some 115,000 people find direct employment in the service and manufacturing sides of the transportation industry (about 84,000 in the service sector and about 31,000 in manufacturing).

While our transportation system is highly developed today, the dynamics of economic development continue to pose additional challenges. For example, enormous infrastructure investment will be required in the future and the transportation function of Montreal must be revitalized. In the past, the Canadian Federation has dealt successfully with similar challenges in our transportation sector and there is no reason to believe it could not do so in the future. In fact, if the integrated nature of the transportation system is to be maintained, it would appear that our federal-provincial system of government is much better suited for dealing with future challenges than an independent Quebec and a new Canada of only nine provinces. The Parti Québécois has argued that Quebec has not benefited as much as it should have from the Canadian federal system. This line of argument is difficult to contest without appearing to support the status quo; more benefits are always to be encouraged. What has to be recognized, however, is that, as documented in this report, Quebec has been a full participant in the development of the Canadian transportation network and that it has benefited measurably from federal investments. For example, the federal government accounts for over \$2.6 billion of the investment in Quebec's transportation infrastructure, 35 per cent of the Quebec total, which is almost identical to the level of federal participation for all provinces.

In the air mode, the federal share in Quebec infrastructure has been 95 per cent or more, in marine 94 per cent and in rail about 53 per cent. The federal government directly accounts for approximately 31,700 jobs in Quebec's transportation system, or 37 per cent of the total; the direct and indirect impact of this employment results in some \$1 billion of annual wages and salaries in the Province of Quebec. The head offices of CN, Air Canada and Via Rail make a special contribution to the prosperity of Montreal.

As a result of federal policies, pipelines are being increasingly extended into Quebec, thereby reducing the dependence of the province on off-shore sources of oil and gas. Quebec's transportation equipment industries—primarily those of shipbuilding, railway rolling stock, and aircraft and parts manufacture—are heavily dependent upon the federal government for contracts, subsidies, export marketing assistance and the like. Employing 30,800 people, this sector is extremely important to the province's growth performance and potential.

In short, the evidence is available in abundance to show that Quebec's transportation system and economy have derived substantial benefit from investments and other support made possible by the Canadian Federation and through the federal government. Other provinces have similarly benefited as the investment pattern has been rather well balanced across the country.

The PQ has presented a very different view of federalism. Its prescription for Quebec is full sovereignty and an economic association with the rest of Canada. It might appear to some observers that Quebec has a strategic geographical position with respect to transportation, as many of the east-west arteries in the pan-Canadian network pass through the province. If so, such a position could serve as a strong factor favouring realization of the Parti Québécois' objectives. On closer examination, however, it appears that Quebec does not have this advantage.

Truck and rail traffic between Ontario and the Atlantic region via Quebec is not substantial. Indeed if Quebec were sovereign, it might be in the interests of the rest of Canada to seek road and rail corridors through the United States, thereby reducing the travel distance between Ontario and the Atlantic region by some 300 kilometres. As for the air mode, Quebec does not have a strategic geographical position; in fact, it may be at a disadvantage. As for pipeline transportation, Quebec is clearly at a disadvantage, being entirely dependent on other provinces or foreign countries for its supply of oil and gas. Only with respect to the marine mode would a sovereign Quebec appear to have a favoured position—because of the St. Lawrence Seaway—but even there the advantage, if it is one, requires considerable qualification.

Throughout the history of Canada, transportation has served as an essential unifying force, helping to pull the country together into a political and economic unit. The established and integrated transportation system now represents a strong argument for Quebec continuing within the Canadian Federation, sharing in both the benefits and the challenges of the future.