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# CANADIAN TRANSPORTATION TRENDS – RAIL

**Allison Padova**
**Economics Division**

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## EXECUTIVE SUMMARY


- Rail is the most economical method of moving containers and bulk commodities great distances over land.
- As of August 2003, freight rail operations in Canada comprised five Class I freight railways and 61 shortline/regional freight railways. Passenger rail operations consisted of two Class I carriers, five commuter carriers and eight tourist trains. These numbers include non-Canadian carriers that operated limited track in Canada.
- Revenues in the Canadian rail sector amounted to over $8.1 billion in 2001. The Class I carriers earn nearly 90% of total revenues.
- Rail gross domestic product (GDP) grew from just over $4 billion in 1998 to approach $6 billion in 2001, accounting for 0.57% of total GDP from all industries. Among the transportation modes, trucking makes the greatest contribution to Canadian GDP of approximately 1%.
- Although rail-related employment is down over 40% from 1990, rail companies continue to support a significant amount of employment in Canada, with more than 40,000 employees in 2001. During the 1990s, wages in this segment of the rail industry grew faster than the average wage Canada-wide. By 2001, on average, employees of federally regulated railways were paid at least 50% more than Canadians earn on average per annum.
- Between 1990 and 2000, the length of the total track system operated by Canadian carriers declined by nearly 20%. As well, Class I carriers appear to have transferred some 9,500 kilometres of track to the increasing number of shortline operations. By 2000, Class I carriers operated 75% of the track and shortlines operated the remaining 25% of track used by carriers. Rail carriers that do not own or lease track, purchase running rights from other carriers.
- Between 1990 and 2000, freight locomotives, cars and other pieces of freight rail equipment in use in Canada declined by 20% and freight-related employment declined by even more; but freight industry output in terms of revenue-tonne kilometres (RTKs) grew at an average annual rate of 2.4%. As well, the average distance that each tonne was hauled increased. Productivity in freight rail improved 4.3% per annum on average between 1996 and 2001.
- The number of pieces of passenger rail equipment in use in Canada fell by 50% between 1990 and 2000. Between 1996 and 2001, passenger traffic on Class I and regional carriers, of which approximately 90% were VIA carriers, grew at an average annual rate of 1.7%. Growth in commuter rail traffic was much more rapid, at 8.5% per annum on average over the same period. VIA's productivity improved towards the end of the 1990s and in 2000, resulting in a 1.5% per annum average rate of growth between 1996 and 2001. Productivity declined in 2001, however, largely due to the first phase of a capital expansion program.
- During 1992-2002, the four commodities shipped in the greatest quantities by rail Canada-wide were coal, forest products, iron ore/concentrates and grain. Slightly more than half of this traffic originated in western Canada, with 53% of total tonnes loaded. Western Canada shipped the largest quantity of coal, while iron ore/concentrates was the most important commodity group loaded in eastern Canada.

## EXECUTIVE SUMMARY (cont'd)

- In addition to domestic trade, rail is used to transport goods to and from markets in the United States. Nearly one-fifth of Canada's total trade with the United States moves by rail, and Ontario is the origin and the province of clearance for the largest share of this traffic. Automotive products represent the largest share of the value of inbound and outbound trade flows. Rail exports to the United States comprise more than twice the value and tonnage of imports.
- Rail, in combination with marine shipping, is also used to transport goods to and from overseas markets. Although marine-rail imports grew by 27% during 1996-2002, there was a 17% overall decline in tonnage moved by both rail and marine modes. This is because rail-marine exports (which typically make up some 90% of the total tonnage moved by both modes) declined by 20% over the same period. Growth in imports and declines in exports may be attributed to the relative strength of the Canadian economy during this period and the relative weakness of our export market economies in 2001 and 2002.
- Municipal, provincial and federal governments all make expenditures on transportation. In 2001-2002, municipal governments provided the largest share (48%) of financing to the industry, while the federal share amounted to 12%. Federal dollars represent more than 90% of total government spending on rail, however, 95% of which consists of subsidies, grants or other contributions. Between 80 and 90% of the subsidy is allocated to VIA Rail.
- The transportation industry in Canada generates nearly $14 billion per annum in government revenues through excise taxes and cost-recovery initiatives. Over $10 billion is collected from road fuel excise taxes, while government revenues from excise taxes and cost recovery from rail alone were estimated at $178 million in 2002-2003.
- The Rail Association of Canada (RAC) suggests that federal transport policy does not treat all modes equitably, creating an unfair cost advantage to the trucking industry. Further, the RAC asserts that the imbalance has given rise to significant environmental and social costs in Canada.
- RAC analysis indicates that if the fiscal policies for rail and trucking were harmonized, and some freight traffic shifted from road to rail, the transportation industry could comply with Canada's commitments under the Kyoto Protocol. The Canadian Trucking Alliance, however, asserts that there would be little environmental benefit from a modal shift of freight from road to rail.

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# CANADIAN TRANSPORTATION TRENDS – RAIL

## INTRODUCTION

Rail transportation first emerged in Canada in the 1830s and experienced rapid growth during the 19th century. The period between 1850 and 1860 was particularly significant, as the length of operational rail track grew from some 100 kilometres to nearly 3,500 kilometres.(1) By this time, the Grand Trunk Railway, the Great Western Railway, the Northern Railway, the Buffalo & Lake Huron Railway and the St. Lawrence & Atlantic Railway, among others, offered rail services in central Canada. The rail network continued to grow after Confederation with the construction of three transcontinental railways.(2) In those days, rail transport was necessary in Canada to overcome the obstacles presented by the climate and topography; transport by other means was impossible at times.

Arguably, rail has been the most influential mode of transportation in Canada's economic development. Railways provided a fast, cheap and reliable method of transporting goods to new markets and hastened the establishment of commercial farming and trade. The resulting industrial development led to the creation of related service industries. New employment opportunities were widespread as jobs were created both in rail-dependent industries and in the construction and operation of new railroads. Rail also provided essential transportation to and from remote communities.

**Arguably, rail has been the most influential mode of transportation in Canada's economic development.**

(1) J. L. Finlay and D. N. Sprague, *The Structure of Canadian History*, Prentice Hall Allyn and Bacon Canada, Scarborough, 2000, p. 176.

(2) One transcontinental railway (the Canadian Pacific Railway) was a condition of British Columbia's entry into Confederation, and was completed in 1885. Two more transcontinental railways (the Canadian Northern Railway and the eastern and western extensions of the Grand Trunk Railway) were built during the economic boom spanning the turn of the 20th century.

Today, Canadian rail services are used predominantly for freight transportation across Canada and to the United States, because rail is the most economical method of moving containers and bulk commodities great distances over land. Businesses involved in bulk commodities or non-time-sensitive manufactures tend to use rail freight services to manage their inventories when their markets and/or suppliers are distant. (Businesses involved in time-sensitive products or goods with a high value per kilogram, such as legal documents or high-value fresh produce, might choose to move them by air or truck, depending on the distance to market.) The importance of bulk commodities and containerized manufactures to virtually all sectors of the domestic economy, as well as within the economies of our trading partners, ensures that the demand for rail services in Canada moves with the level of economic activity.

This paper provides an overview of the recent history of the rail sector in Canada. Topics covered include descriptions of the industry's structure, economic impact, infrastructure, traffic and government funding. The paper closes with a summary of the policy perspectives espoused by the rail industry, its competitors, government and government agents.

## INDUSTRY STRUCTURE

The rail industry in Canada comprises freight carriers and passenger carriers. Freight is the larger segment of the market for rail services; hence there are many more freight carriers than passenger carriers in Canada.

### A. Freight Rail Carriers

**As of August 2003, there were 5 Class I freight railways and 61 shortline or regional freight railways operating in Canada.**

Freight carriers are classified as Class I, shortline or regional carriers. Class I freight carriers are so designated if they earn more than $2 billion annually in revenue from freight activities. In Canada, there is no significant distinction between shortline and regional carriers; both operate on low-density branch lines, which may or may not cross provincial or international boundaries. Canada has two domestic Class I carriers: the Canadian National Railway Company (CN) and the Canadian Pacific Railway Company (CP), which both operate transcontinental networks. Three U.S. Class I railways also operate limited sections of their network in Canada. Table 1 shows the five freight carriers and their route distances.

**Table 1: Class I Freight Carriers Operating in Canada, 2003**

| Name | Route Miles / Kilometres | Region Served |
|---|---|---|
| Canadian National | 11,913 / 19,011 | Canada-wide |
| Canadian Pacific | 9,168 / 14,754 | Canada-wide |
| Burlington Northern Santa Fe Railway Company | 53 / 85 | BC |
| CSX Transportation Inc. | 120 / 193 | ON, QC |
| Norfolk Southern Railway Company | – | ON |

Note: Norfolk Southern leases track from another carrier in Canada.

Source: Railway Association of Canada, *Canadian Railway Atlas*, Ottawa, 2003, p. 3.

There was an explosion in shortline carriers in recent years as the *Canada Transportation Act, 1996* streamlined the process by which carriers could transfer less financially rewarding routes to other operators.(3) The number of rail carriers in Canada more than doubled in the 1990s as a result of the shift in operations. The number of shortline and regional carriers operating and the shortline route distances are presented by region in Table 2.

(3) Among other things, the *Canada Transportation Act, 1996* was intended to encourage the financial viability of railways by reducing the regulatory burden they face, and to facilitate railway rationalization and restructuring by significantly revising the rationalization process. The process is designed to maximize opportunities for line retention through transfer to other operators.

As well, on occasion, CN and CP transferred lines to “internal shortlines,” involving special agreements with labour to facilitate their development.

**Table 2: Canadian Shortline and Regional Freight Carriers, 2003**

| Region | Total Number (Federally Regulated) | Total Route Miles / Kilometres |
|---|---|---|
| Quebec | 20[(1)] (10) | 3,466 / 5,578[(2),(3)] |
| Ontario | 13[(1)] (4) | 1,831 / 2,947[(3)] |
| Saskatchewan | 8 | 834 / 1,342 |
| British Columbia | 7 (3) | 1,746 / 2,810[(2)] |
| Alberta | 5 | 1,280 / 2,060 |
| Manitoba | 5 (2) | 1,203 / 1,936 |
| New Brunswick | 4[(1)] (2) | 533 / 858 |
| Nova Scotia | 3 (1) | 309 / 497 |

Notes: (1) Some shortlines and regional carriers are provincially regulated, while others are federally regulated. Generally, railways in Canada fall under federal jurisdiction if their operations cross provincial or international borders. Accordingly, most shortline freight carriers are under provincial jurisdiction unless they opt to be incorporated federally.

There is some double-counting of carriers, since some operate in more than one province.

(2) One carrier is a ferry, and no route distance is attributed.

(3) There is some double-counting of route distances attributed to these provinces, since the carriers' networks span more than one province.

Source: Railway Association of Canada, *Canadian Railway Atlas*, p. 3.

Some shortline carriers in Canada are jointly owned. Eight corporations own 29, or just over 50%, of the 57 shortlines operating in Canada today.[(4)] See the Appendix for a detailed list of shortline and regional carriers, their route miles, service area and regulatory jurisdiction.

(4) These companies, and the number of railways they own, are: Cando Contracting Inc. (4), RailAmerica Inc. (8), OmniTRAX (3), Société des Chemins de fer du Québec (6), Genesee Rail-One Inc. (2), Trillium Rail Company Ltd. (2), Wabush Mines (2) and Iron Ore Company of Canada (2).

## B. Passenger Rail Carriers

Passenger rail carriers in operating in Canada include Class I, regional, commuter and tourist carriers. These are listed with the region in which they operate and route distances in Table 3.

**As of August 2003, there were 2 Class I passenger carriers, 5 commuter carriers, and 8 tourist trains operating in Canada.**

The domestic Class I passenger carrier offering intercity service within Canada is VIA Rail Canada (VIA). VIA is a Crown corporation that was formed in 1978 to serve the combined passenger traffic of CP and CN. Today, VIA operates over 460 trains per week, covering a 14,000-kilometre network, linking more than 450 localities in Canada year-round. Amtrak, a U.S. Class I passenger carrier, provides limited services between Vancouver, Toronto and Montréal and its U.S. network.

Ontario Northland Railway and the Quebec North Shore & Labrador Railway are regional carriers that also offer intercity passenger services. These passenger services are on mixed trains, including both freight and passenger cars, and are not the railways' primary business. BC Rail was a regional passenger carrier until it discontinued its passenger operations in 2002.

Commuter rail services are offered in Canada's largest cities – Toronto, Montréal and Vancouver – as well as in Ottawa, the national capital.

**Table 3: Passenger Rail Carriers in Canada, 2003**

| Carrier Type | Names | Total Route Miles / Kilometres* | Region Served |
|---|---|---|---|
| Class I | VIA Rail | 140 / 225 | Canada-wide |
| | Amtrak | – | BC, ON, QC |
| Commuter | Agence métropolitaine de transport | 124 / 200 | Greater Montréal |
| | West Coast Express | 42 / 68 | Greater Vancouver |
| | Go Transit | 225 / 362 | Greater Toronto |
| | Toronto Terminals Railway | – | Toronto |
| | Capital Railway | 5 / 8 | Ottawa |
| Tourist | Alberta Prairie Railway Excursions | 21 / 34 | AB |
| | Chemin de fer de l'Outaouais | 20 / 32 | QC |
| | Great Canadian Railtour Company | – | BC, AB |
| | Port Stanley Terminal Rail | 7 / 11 | ON |
| | South Simcoe Railway | 5 / 8 | ON |
| | York-Durham Heritage Railway | 12 / 19 | ON |
| | White Pass & Yukon Route | 110 / 177 | BC |
| | Algoma Central Railway | – | ON |
| Regional | Ontario Northland Railway | 675 / 1,086 | ON, QC |
| | Quebec North Shore & Labrador Railway | 353 / 568 | QC |

* Total route distances refer to the length of track owned or leased by the carrier. The carrier's operating network may be much larger, as running rights may be purchased on other carriers' track.

Source: Railway Association of Canada, *Canadian Railway Atlas*, p. 3, and Transport Canada.

Tourist passenger rail services may be characterized by the fact that transportation is not their users' primary motive. Tourist services tend to be scenic (e.g., the Great Canadian Railtour Company) or historical (e.g., the York-Durham Heritage Railway) in nature. Others offer themed excursions (e.g., the Alberta Prairie Railway Excursions) or services catering specifically to tourist or recreational traffic (Chemin de fer de l'Outaouais). Some offer transport by vintage steam train and/or commentary en route. Some of these services are seasonal while others operate year-round.

## ECONOMIC IMPACT

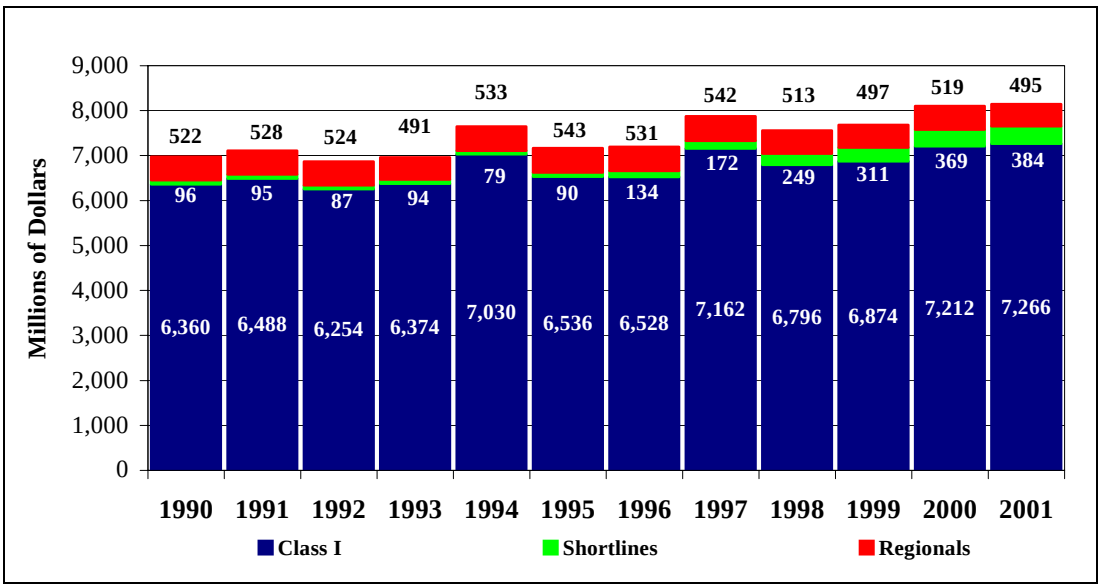
The economic impact of commercial rail in Canada can be described in terms of the value of production and the level of employment associated with this sector of the economy. This section presents the industry revenues, contribution to GDP, employment and wages generated as indicators of the economic impact of the rail operators in Canada. It is important to note that this discussion of economic impact relates to rail operations only. If the sector were defined to include Canadian businesses that supply rail operations (e.g., rail equipment or parts manufacturers) or downstream industries that depend on rail services (e.g., intermodal facilities), the economic impact would clearly be greater. The focus of this analysis is on rail operations, however, and the scope of the economic impact analysis has been thus limited.

**Revenues in the Canadian rail sector amounted to over $8.1 billion in 2001.**

### A. Revenues

Revenues in the Canadian rail sector, presented in Figure 1, amounted to over $8.1 billion in 2001. Over the last decade they fluctuated somewhat from year to year, but grew overall at an average rate of just under 1.5% per annum.

**Figure 1: Canadian Rail Sector Revenues, 1990-2001**




Source: Transport Canada Web site statistics.

Class I railways, including CN, CP and VIA, typically accounted for approximately 90% of total rail revenues between 1990 and 2001. Their share has fallen slightly in recent years, however: from just over 90% of total industry revenues between 1990 and 1997 to just under 90% since. This subtle shift in market share is likely attributable to the emergence of federally regulated shortline operators in the latter half of the 1990s. The new shortline carriers took over existing traffic on some routes, increasing their share of total revenues.

### B. Gross Domestic Product

**Rail GDP has grown from just over $4 billion in 1998 to approach $6 billion in 2002.**

Nearly two-thirds of the industry revenues represent value-added production, otherwise known as gross domestic product (GDP). Rail GDP has grown from just over $4 billion in 1998 to over $5.6 billion in 2002 (in 1997 constant dollars; see Table 4). With this growth, rail has increased its share of national GDP from 0.49% in 1998 to 0.57% of GDP generated by all industries in 2002. Among the transportation modes, commercial rail operations are second only to commercial trucking in this regard. Over the same years, trucking generated over 1% of Canadian GDP, more than twice that of rail.

**Table 4: Rail Transportation Contribution to National GDP**

| | 1998 | 1999 | 2000 | 2001 | 2002 |
|---|---|---|---|---|---|
| **Rail GDP** ($ billions)[1] | $4.18 | $4.50 | $5.13 | $5.26 | $5.61 |
| **All Industry GDP** ($ billions)[1] | $848.96 | $896.49 | $945.78 | $961.52 | $992.32 |
| **Rail Share of GDP**[2] | 0.49% | 0.50% | 0.54% | 0.55% | 0.57% |

Notes: (1) 1997 constant dollars.
(2) GDP at basic prices.

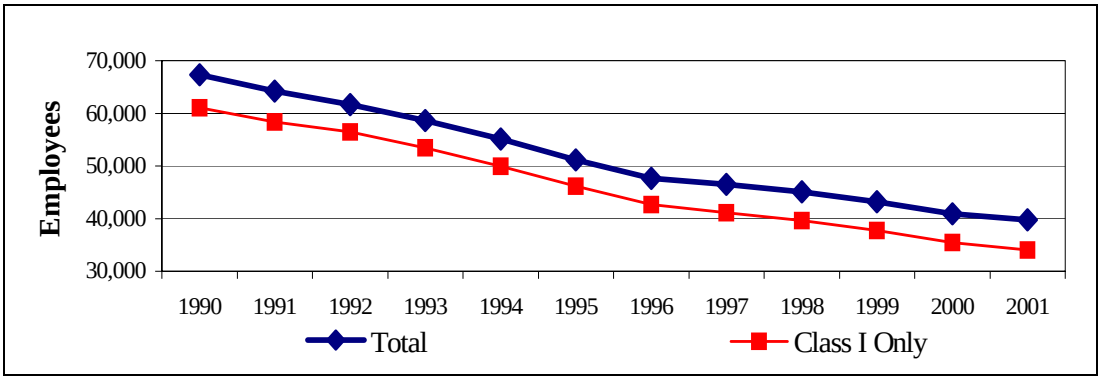
Source: Statistics Canada, CANSIM Table 379-0017, Gross Domestic Product at basic prices.

## C. Employment

Railway companies directly employed nearly 40,000 individuals in 2001, as shown in Figure 2. Compared to the level of rail employment industry-wide in 1990, this represents a decline of just over 40%. The decline in employment was seen mostly in the Class I and regional carriers, which respectively experienced 44% and 34% labour reductions. The privatization of CN in 1995 was a key factor in the decline in employment in this segment of the industry. Conversely, employment at shortline carriers in Canada grew by over 250% in the same period, from roughly 560 individuals to 2,060.

**Rail employed nearly 40,000 in Canada in 2001 – down 40% from 1990.**

**Figure 2: Rail Employment in Canada, 1990-2001**



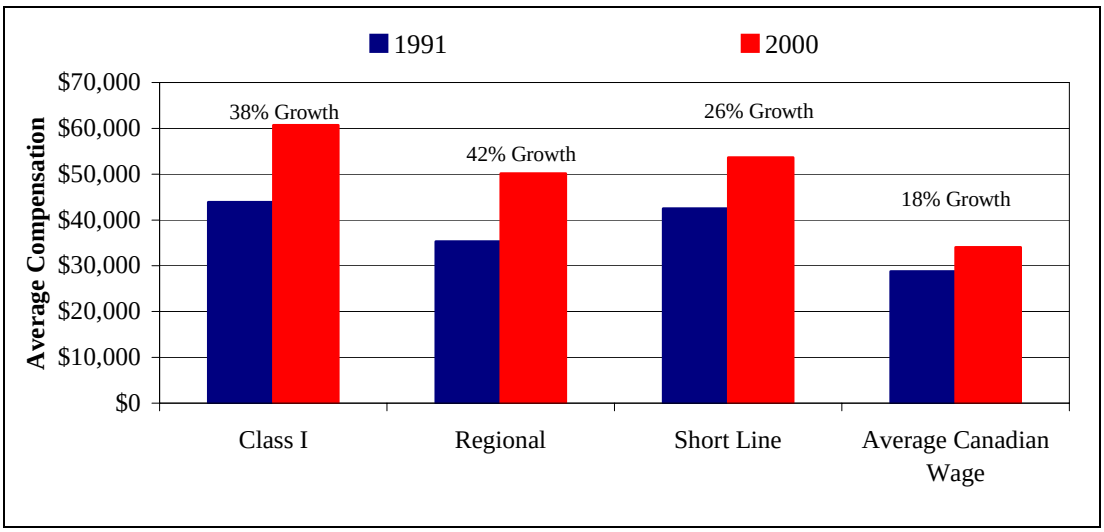

Note: Includes only Class I, regional and shortline carriers.
Source: Transport Canada Web site statistics.

## D. Wages

Total wages in the rail industry amounted to $2.4 billion in 2001, yielding higher compensation on average per employee in each segment of the industry than in the overall economy (see Figure 3). The differential between rail and overall average wages in 2001 ranged between 50% for the regional carriers and 75% for the Class I carriers. Moreover, growth in average compensation per employee in rail outstripped that of the overall economy between 1991 and 2000. This trend reflects the shift towards higher-skilled employees in the rail industry.

**Average wages increased notably as the rail industry shifted to higher-skilled labour.**

**Figure 3: Average Wages per Employee in Rail Compared With National Average**




Source: Transport Canada Web site statistics and Statistics Canada, *Annual Estimate of Employment, Earnings and Hours, 1991-2000*.

## INFRASTRUCTURE AND EQUIPMENT

The provision of commercial rail services is an expensive undertaking. In addition to purchasing the equipment (locomotives and rail cars), the rail carrier must also pay to build and maintain its infrastructure (track and terminals).

### A. Infrastructure

**Total track has declined since the *Canada Transportation Act, 1996* facilitated track rationalization through transfer and abandonment.**

Track or *road* is the infrastructure of the rail industry. Track is classified in different ways: first main track, second main track and other track. First main track is also referred to as road operated, and is equivalent to the distance between terminals over which railway transportation service is conducted. Second main track is equivalent to the length of track in a second line running parallel to the first main track on the same road-bed. Other types of track include yard, siding and industrial track.

As of 31 December 2000, Canadian carriers operated a total of 72,201 kilometres of track. The vast majority of these are located in the central and western provinces of Canada, with 30% in Ontario alone, as shown in Table 5. At this time, CN operated (owned or leased) 44% of the total track kilometres operated by Canadian carriers. CP operated approximately 30%, and shortline freight carriers operated another 25%. VIA operated less than 1% of the total track operated; instead, it purchased running rights on other carriers' tracks to serve its network, as it does today.

**Shares of track operated in 2000:**

- **CN – 44%**
- **CP – 30%**
- **shortlines – 25%**
- **VIA < 1%**

**Table 5: Length of Track Operated by Region**

| Region | Kilometres in 1990 | | Kilometres in 2000 | |
|---|---|---|---|---|
| | First Main | Total | First Main* | Total* |
| Ontario | 13,500 | N/A | 11,983 | 20,941 |
| Saskatchewan | 3,715 | | 9,041 | 11,550 |
| British Columbia | 6,573 | | 6,974 | 10,419 |
| Alberta | 4,455 | | 7,067 | 9,889 |
| Quebec | 4,601 | | 5,594 | 8,742 |
| Manitoba | 2,873 | | 5,223 | 7,149 |
| New Brunswick | 1,097 | | 869 | 1,409 |
| Nova Scotia | 705 | | 758 | 1,209 |
| Newfoundland | 449 | | 455 | 513 |
| United States | 577 | | 268 | 314 |
| Northwest Territories | 0 | | 66 | 66 |
| Prince Edward Island | 0 | | 0 | 0 |
| Yukon | 0 | | 0 | 0 |
| *Total* | *38,547* | *86,880* | *48,119* | *72,201* |

* For reasons of confidentiality, these data do not include the length of track operated by one carrier whose predominant source of revenues was passenger transportation.

Note: Components may not add to totals due to rounding.

Source: Statistics Canada, *Rail in Canada, 1990*, Ottawa, 1992, pp. 46-47; Statistics Canada, *Rail in Canada, 2000*, Ottawa, 2002, p. 27.

System changes in the late 1990s were dramatic in terms of track abandonment and change of ownership. As seen in Table 5, approximately 14,500 kilometres of track were discontinued and some 9,500 kilometres of track may have been transferred between carriers between 1990 and 2000 (roughly indicated by growth in first main track). More than half of the discontinued kilometres were in Ontario, Saskatchewan and Alberta, and nearly all of the transferred lines were from CN and CP to newly formed shortline carriers.

### B. Equipment

**There was half as much passenger rail equipment in Canada in 2000 as in 1990. Freight rail equipment declined by 20%.**

Rail carriers deploy locomotives and *rolling stock* such as passenger and freight cars to run over their track. Locomotives are rolling stock with engines; one or more may be used to propel a train, but they do not carry passengers or freight. Freight cars are built in different configurations for different cargos; they include box cars, hopper cars, flat cars, refrigerator cars and gondola cars, among others. The most common type of freight car in Canada is the hopper car, which is used for dry bulk commodities and is unloaded through vents in the underside. Styles of passenger cars include head-end, meal, sleeping and conventional rail cars; the most common type in Canada is the conventional car, which is fitted out only with seats for passengers.

As can be seen in Table 6, the stock of passenger rail equipment declined by roughly one-half between 1990 and 2000. The stock of freight equipment fell by approximately 20% during the same period.

**Table 6: Rail Equipment in Canada, 1990 and 2000**

| Item | 1990 Inventory | 2000 Inventory | Percent Change |
|---|---|---|---|
| Freight Locomotives | 2,833 | 2,297 | -19% |
| Passenger Locomotives | 211 | 107 | -49% |
| Other Locomotives/ Associated Equipment | 675 | 552 | -18% |
| Freight Cars | 123,137 | 102,200 | -17% |
| Passenger Cars | 1,088 | 464 | -57% |

Source: Statistics Canada, *Rail in Canada, 1990*, p. 41; Statistics Canada, *Rail in Canada, 2000*, p. 35.

## FREIGHT AND PASSENGER TRAFFIC

Today, Class I carriers are dedicated to freight or passenger services, but not both. This was not always the case; CP and CN carried both freight and passenger rail traffic until 1978. In 1978, their passenger services were consolidated and allocated to the new dedicated passenger carrier and Crown corporation, VIA. Some shortline and regional operators continue to offer both services. Generally speaking, there is much greater demand for freight services than passenger rail services in Canada.

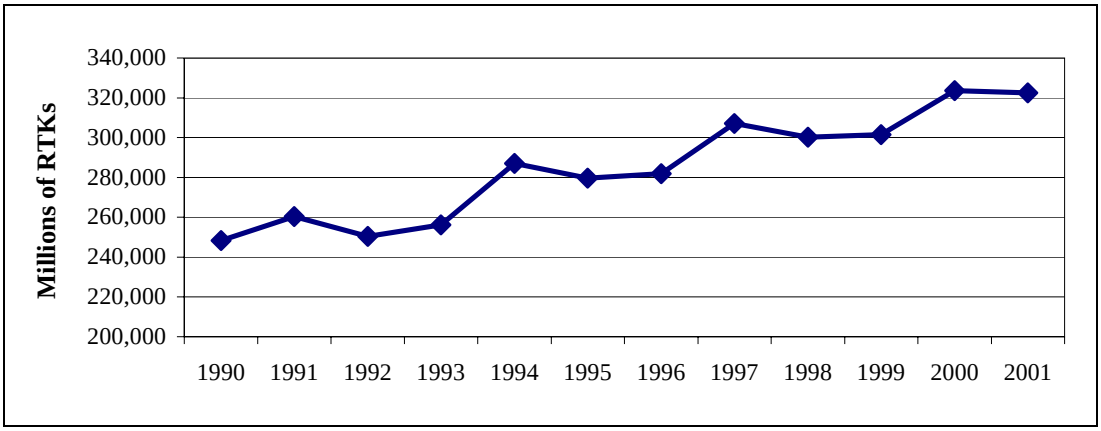
## A. Freight Traffic

Rail freight traffic can be measured in a number of ways, but for simplicity only two measures are presented here. These are tonnage, which is purely a weight-based measure, and revenue-tonne kilometres (RTKs), which is a measure that incorporates both payload and distance hauled.(5) In terms of RTKs, rail freight traffic in Canada grew by 30% (from 248 billion to 322 billion RTKs) between 1990 and 2001 (see Figure 4).

Analysis of the shorter period (1990-1998) for which tonnage data are also available reveals slightly lower growth compared to RTKs. That RTKs grew by 21% between 1990 and 1998 while tonnage grew by 18% signifies that the average distance each tonne was hauled increased over this period. There are many possible explanations for this; for example, there may have been a change in the mix of commodities, and hence the average distance, hauled. Another explanation might be that rail has become a more competitive surface mode and thus attracted more long-distance business.

**RTKs grew at an average annual rate of 2.4% from 1990-2001, and the average distance each tonne is hauled has increased.**

**Figure 4: Rail Freight Traffic in Revenue-Tonne Kilometres (RTKs), 1990-2001**

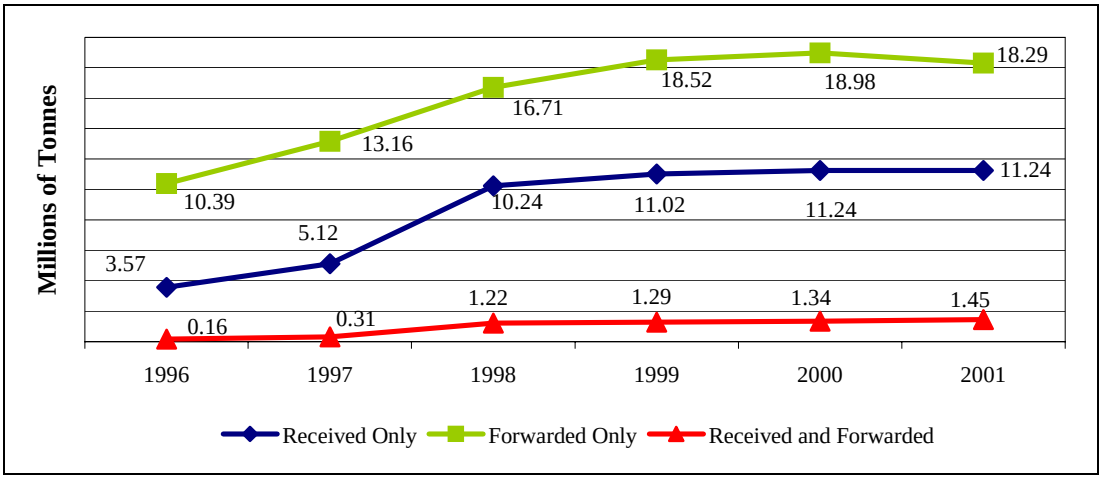



Source: Transport Canada Web site statistics.

(5) Tonne-kilometres handled are calculated as the sum of the distance each revenue tonne is carried. It excludes the tonne-kilometres involved in the movement of railway materials or any other non-revenue movement.

Class I carriers maintained a 90% share of RTKs between 1990 and 2001; hence, Class I traffic growth of 30% drove the overall traffic trend. Regional carrier RTKs declined by 5% between 1990 and 2001, but shortline RTKs more than quintupled, from 1.6 million to 8.7 million RTKs by 2001. Recent growth in shortline traffic is evident in Figure 5, which shows that Class I carriers increasingly use the services of shortline carriers to complete and/or begin long-haul movements. Traffic received *and* forwarded by shortline carriers grew by more than 800% between 1996 and 2001, but on a small base. It was followed by traffic received only, with 215% growth, and traffic forwarded only, which grew by 76% from 1996 through 2001.

**Figure 5: Class I Traffic Received and Forwarded by Shortline Carriers, 1996-2001**




Source: Transport Canada Web site statistics.

**Top four commodities loaded in Canada during 1992-2001:**

1. **coal**
2. **forest products**
3. **iron ore/ concentrates**
4. **grain**

From 1992 to 2001, the top four commodities loaded onto rail cars in Canada consistently were coal, forest products, iron ore and concentrates, and grain. Over this period these commodities shifted in rank, but they remained the four highest-tonnage commodities loaded in each year. In 2002, however, grain volumes loaded declined and fertilizers took fourth place. The total volume of commodities loaded onto rail cars during this period became more diverse, as the top four commodities' share of the total volume fell from 60% in 1990 to 53% in 2002.

Intermodal (containerized) traffic loaded in Canada grew by 128% between 1992 and 2002, or at an average annual rate of nearly 9%. Expansion was more rapid in the west, with 186% growth, or at a rate of just over 11% per annum on average. Between 1996 and 2001, import traffic grew much more rapidly than export traffic,

at 7.7% per annum and 1.7% per annum respectively. Domestic volumes grew even faster, at 11% per annum during this period. Intermodal traffic is quite sensitive to economic conditions; levels were down in 1998 from 1997, and grew between 2000 and 2001 at a significantly lower rate (2.5%) than the decade average.(6) Another trend with respect to intermodal containers is that they increasingly have been loaded directly onto flat cars instead of being placed on truck trailers that are then loaded onto flat cars. By 2001, containers on flat cars (COFC) represented 92% of intermodal volumes, up from 77% in 1996.

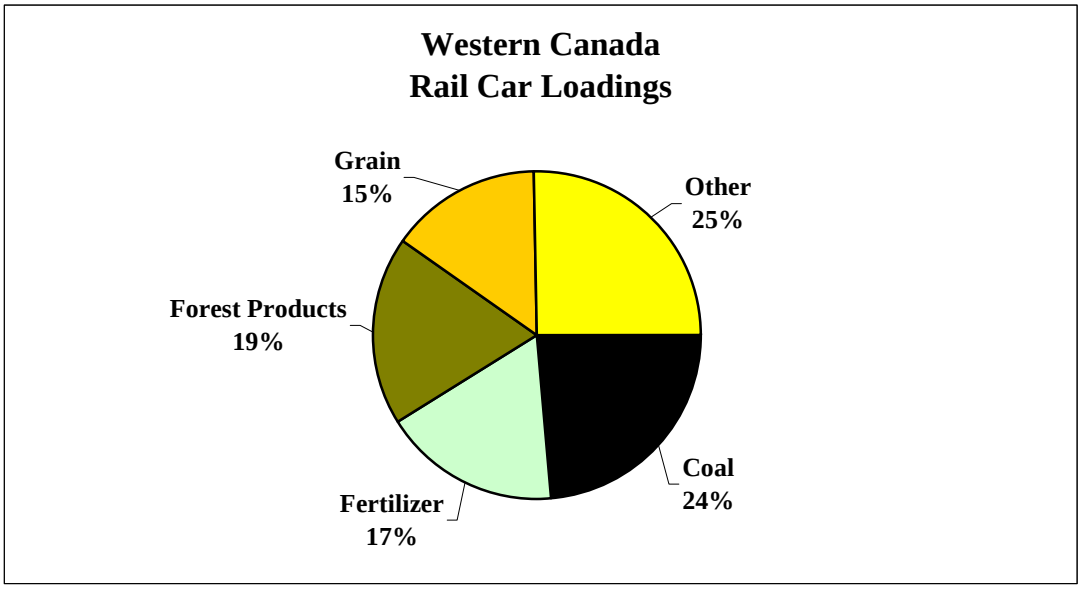
Tonnes loaded in western Canada comprised just over half of the total tonnes loaded per annum during this period, although the share declined from 57% in 1992 to 53% in 2002. The top three commodities loaded in western Canada in most years between 1992 and 2002 were coal, grain and forest products. In a few years, including 2002, fertilizer was third in the ranking, having surpassed grain. In eastern Canada, the top three commodities loaded between 1992 and 2002 were iron ore and concentrates, other ores and mining products, and forest products, respectively. The breakdowns of eastern and western Canada car loadings in 2002 are presented in Figure 6.

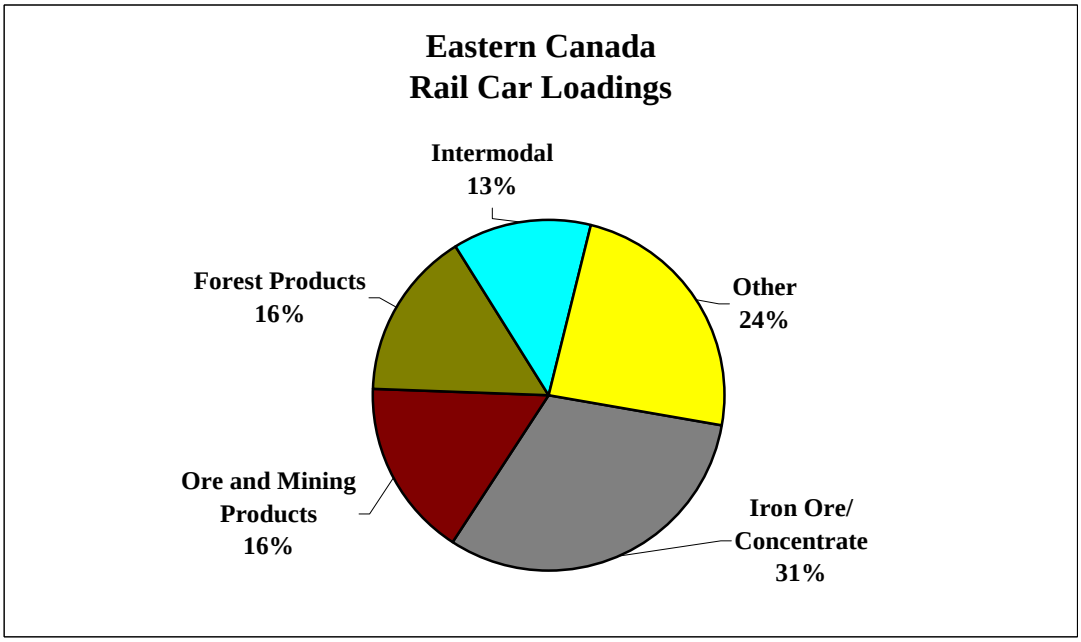
**Of total tonnes loaded in Canada in 2002:**

- **53% in western Canada**
- **47% in eastern Canada**

(6) The year 1997 marked the onset of the Asian economic crisis, and 2000 saw the emerging symptoms of the 2001 global recession.

**Figure 6: Breakdown of Rail Car Loadings in Western and Eastern Canada, 2002**



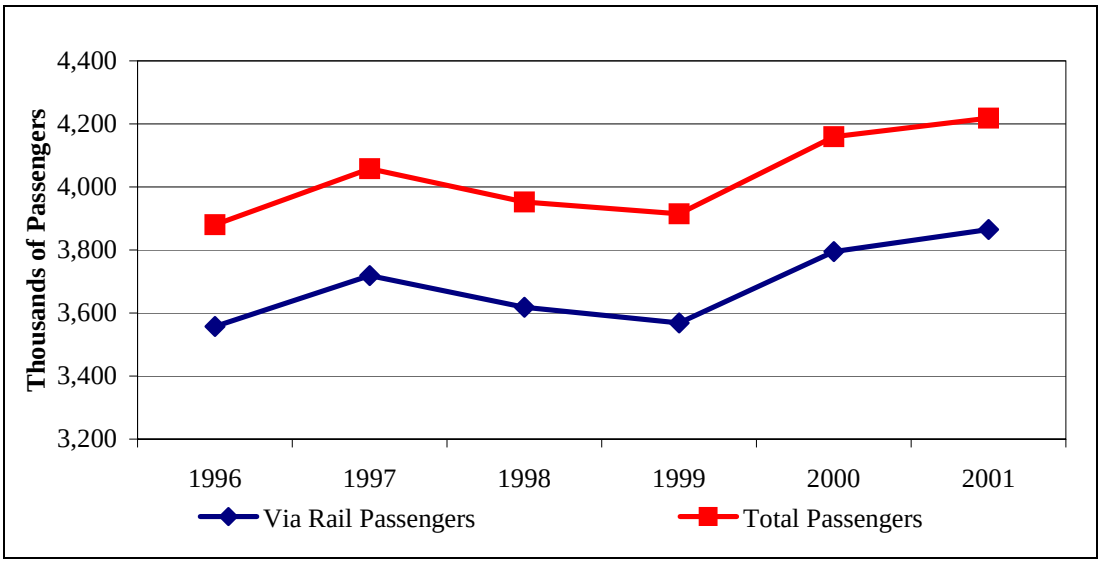

Source: Transport Canada Web site statistics.

## B. Passenger Traffic

The number of passengers using Class I and regional passenger carriers grew 9% between 1996 and 2001, from 3.9 million to 4.2 million passengers (see Figure 7). This yields an average growth rate of 1.7% per annum over that period, 1% lower than average annual growth in freight traffic for the same period. During those years, VIA maintained its position of carrying just over 90% of the Class I and regional passenger traffic.

**VIA carries approximately 90% of Class I and regional carrier passenger traffic.**

**Figure 7: Passenger Traffic on Class I and Regional Carriers, 1996-2001**



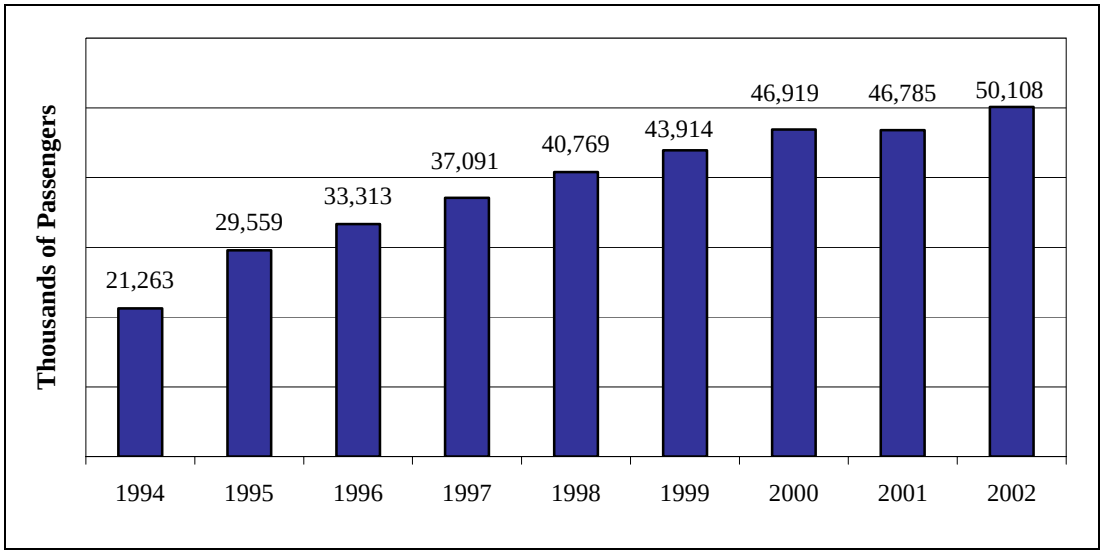

Note: These figures do not include passengers using commuter or tourist services.
Source: Transport Canada Web site statistics.

The average distance travelled by a passenger on the Class I carrier (VIA) held steady at just under 400 kilometres over this period. This might have been expected, since the greatest demand for VIA service exists between points on the Windsor-Québec corridor. The average distance travelled by passengers on regional carriers was shorter, at approximately 250 kilometres over this period.

More significant growth occurred in the number of commuter rail passengers in Canada, as shown in Figure 8. Between 1994 and 2002, passenger numbers more than doubled, from 21.3 million to 50.1 million, averaging 11.3% growth per annum. These passengers are primarily customers of GO Transit in Toronto, West Coast Express in Vancouver and Agence métropolitaine de transport (AMT) in Montréal.

**Between 1994 and 2002, the number of commuter rail passengers more than doubled.**

**Figure 8: Passenger Traffic on Commuter Rail, 1994-2002**




Source: Transport Canada Web site statistics.

## INTERNATIONAL TRADE BY RAIL

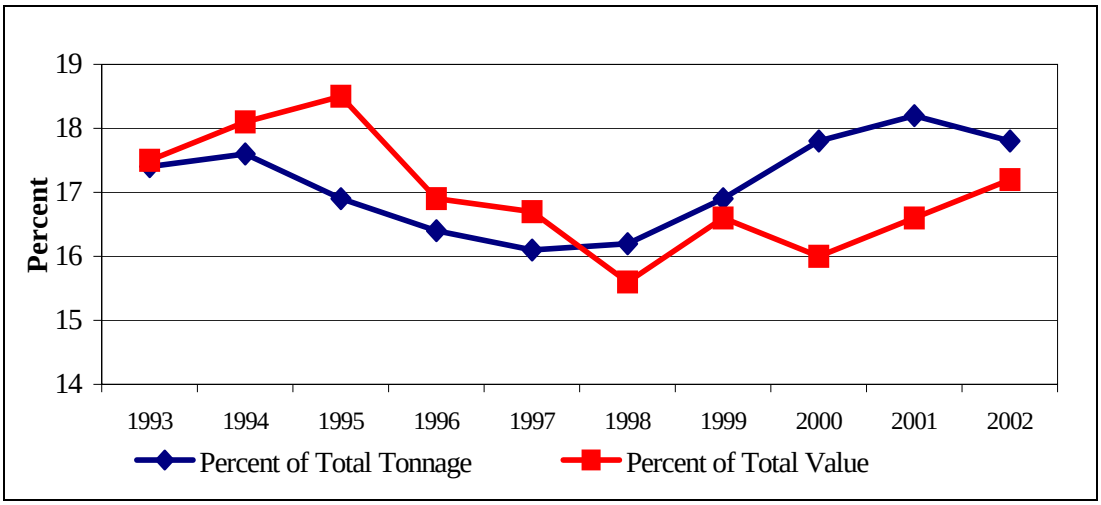
Rail is the most economical method of moving containers and bulk commodities over great distances over land. Rail services carry goods from Canada to export markets in the United States and vice versa. Rail is also used in combination with marine transport to trade with overseas markets.

### A. Trade With the United States by Rail

**Nearly one-fifth of total trade with the United States moves by rail.**

Over the last several years, nearly one-fifth of Canada's total trade in goods with the United States was transported by rail (see Figure 9). Rail carried just under 18% of the 479 million tonnes traded with the United States in 2002, representing just over 17% of the $564 billion in total trade value.

**Figure 9: Rail Share of Trade With the United States, 1993-2002**

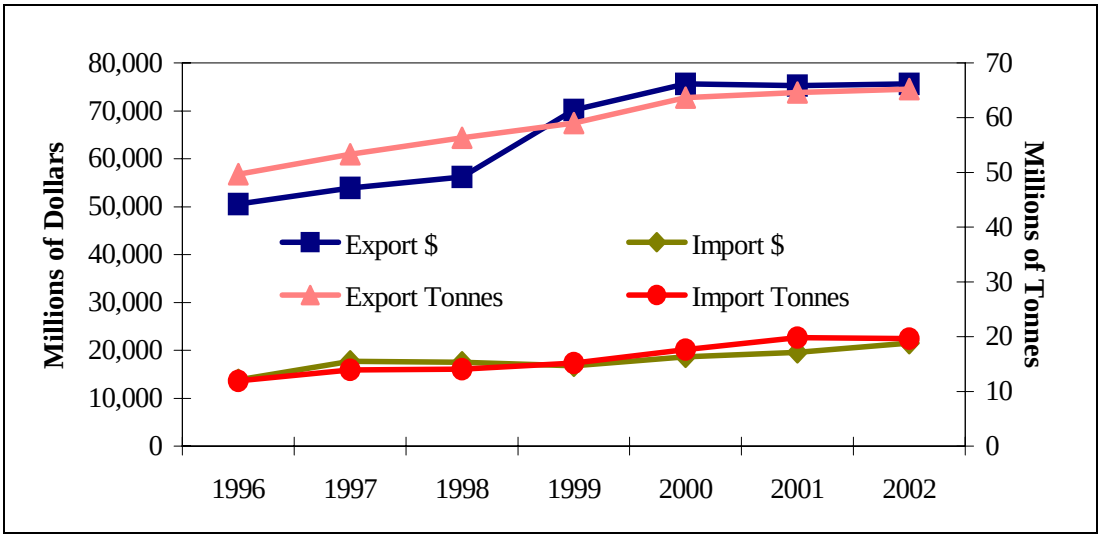



Source: Transport Canada Web site statistics.

Inbound and outbound tonnage moved by rail between Canada and the United States grew by two-thirds between 1993 and 2002, from 51 to 85 million tonnes. Between 1996 and 2002, the value and tonnage of exports by rail to the United States consistently have been more than twice those of imports. The gap between the values of exports and imports by rail became wider after 1998, as shown in Figure 10. This is largely attributable to the fact that the value of automobile product exports increased by 45% in 1999 over 1998 and held steady at this new level through 2002.

**Rail exports to the United States are more than twice as great in value and tonnage as imports.**

**Figure 10: Value and Tonnage of Trade With the United States by Rail, 1996-2002**




Source: Transport Canada Web site statistics.

**Ontario is the origin and the province of clearance for the largest share of rail trade with the United States.**

Ontario was the greatest contributor to rail exports to the United States in terms of both tonnage and value from 1996 to 2002. Over this period, Ontario's share of export tonnage was stable at just below 30% of the total, but its share of total export value increased from 62% to 68%. Saskatchewan and British Columbia rounded out the top three provinces of origin for export tonnages in most years between 1996 and 2002, altogether producing just less than two-thirds of the total tonnage.(7) Quebec and British Columbia ranked second and third respectively in terms of generating export values. Ontario, Quebec and British Columbia collectively produced nearly 90% of the total value of rail exports to the United States every year.

Sarnia, in Ontario, may have been the most important border crossing for rail exports between 1996 and 2002. By the end of this period, nearly 20% of total export tonnes and some 40% of the value of rail exports cleared U.S. Customs at this crossing.(8) Automotive products, forest products and metal commodities were consistently the top three rail exports by value every year over this period Canada-wide, representing over 80% of the total value exported by rail in 2002. A high proportion of rail exports to the United States that cross the border at Sarnia are automotive products.

**Top three rail exports to the United States by value:**

1. **automotive products**
2. **forest products**
3. **metals**

**Top three rail imports from the United States by value:**

1. **automotive products**
2. **chemicals**
3. **metals**

Ontario also maintained the largest share of rail imports from the United States cleared through Canada Customs between 1996 and 2002, in terms of both value and weight.(9) Approximately 50% of the total import tonnage and 70% of the total import value were processed in Ontario each year. Quebec and British Columbia rounded out the top three provinces of clearance for import tonnages in most years between 1996 and 2002, except in 2002 when Alberta moved up the ranks to number two. Altogether, the top three provinces cleared approximately three-quarters of the total import tonnage during this period. Quebec and Alberta ranked second and third respectively in terms of province of clearance of import values from the United States from 1997 through 2002. Ontario, Quebec and Alberta collectively cleared just under 90% of the total value of U.S. imports every year. The shares of the top three provinces with respect to rail trade with the United States in 2002 are presented in Table 7.

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(7) Note that Saskatchewan ranked second for four years out of seven during the period, but British Columbia ranked second in 2002. In three out of the seven years, Alberta ranked third.

(8) Sarnia was a close second to Fort Francis (also in Ontario) in terms of rail export tonnage over these years, but processed far greater value.

(9) Note that the province of clearance is not necessarily the province of destination.

**Table 7: Rail Trade With the United States by Province, 2002**

| Rank | Origin of Rail Exports | | Clearance of Rail Imports | |
|---|---|---|---|---|
| | Tonnes | Value | Tonnes | Value |
| First | Ontario (27%) | Ontario (68%) | Ontario (47%) | Ontario (71%) |
| Second | British Columbia (19%) | Quebec (12%) | Alberta (15%) | Quebec (9%) |
| Third | Saskatchewan (16%) | British Columbia (7%) | British Columbia (13%) | Alberta (9%) |
| Canada-wide Total | 65.2 million | $75.6 billion | 19.6 million | $21.5 billion |

Source: Transport Canada Web site statistics.

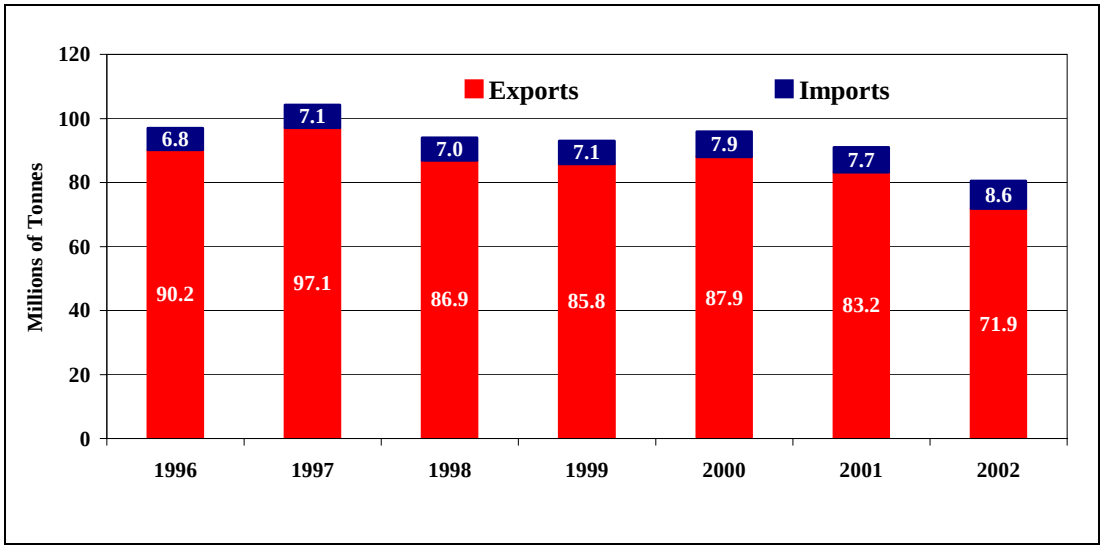
Sarnia was also the point at which the largest share of rail import tonnes cleared Canada Customs between 1996 and 2002. The share of total rail imports from the United States cleared through Sarnia grew from 13% of total tonnes in 1996 to 15% of total tonnes in 2002. Montréal was in second position throughout most of the period examined; however, Huntington (B.C.) made it to second twice, and Vancouver was ranked second in 2002. The third-largest share of rail import tonnage was cleared in Toronto five years out of the seven examined. Windsor saw the largest share of the total value of rail imports cross from the United States every year between 1997 and 2002, followed by Toronto in most years. In 2002, however, Oshawa was ranked second as a border crossing in terms of the value of rail imports, with Toronto coming in third. Sarnia cleared the third-largest share of the value of rail imports five years out of seven during this period. Automotive products, chemicals and metals were the top three rail imports to Canada from the United States by value over this period, representing over 80% of the total value imported by rail in 2002.

## B. Other International Trade by Combined Rail and Ship Movements

**There was a 17% decline in total export and import tonnage carried by combined rail and ship movements during 1996-2002.**

Rail plays an important role in moving goods to marine ports for forwarding overseas (rail-marine movements) and forwarding goods received from overseas on to domestic destinations (marine-rail movements). However, those combined movements saw a 17% decline in total export and import tonnage figures during 1996-2002. Figure 11 shows that significant year-over-year declines took place in 1998 and 2002, the years following the onsets of the Asian economic crisis and the global economic slowdown, respectively.

**Figure 11: Imports and Exports by Combined Rail and Ship Movements, 1996-2002**




Source: Transport Canada Web site statistics.

**The top two destinations for marine-rail imports between 1996 and 2002 were Ontario and the United States.**

In 1996, 93% of total tonnes traded by rail and ship were exports, or rail-marine movements. This percentage declined slightly to 89% by 2002, due to a 20% decline in overall annual export tonnage. The decline in export tonnage was at least partly attributable to the downturn in a number of Asian economies, beginning in 1997 and worsening in 1998, and the global economic slowdown that persisted through 2002, which dampened demand for Canadian exports. Over the same period, import tonnes moved from port to rail grew by 27%, but on a small base. The relative strength of the Canadian economy throughout this period can be credited with growth in demand for imports.

In 2002, nearly 90% of marine-rail imports were intermodal shipments in containers, up from 68% in 1996. Commodities that have comprised large shares of marine-rail imports in recent years are ores and mine products, fertilizer materials and chemicals. The top two destinations for marine-rail imports between 1996 and 2002 were Ontario and the United States. Transhipments to the United States made up 30% of the weight of marine-rail imports throughout the period.(10) Quebec rounded out the top three in the four most recent years, which altogether received 90% of total marine-rail imports in 2002, up from 77% in 1996.

Between 1996 and 2002, British Columbia, Alberta and Saskatchewan were the origin of over 80% of Canada's rail-marine export tonnage. British Columbia generated the largest proportion between 1997 and 2002; during those years, its share grew from 29% to 35% of the total tonnage exported. The commodities exported in the greatest physical quantities by a combination of rail and marine modes remained coal, grain and fertilizer materials between 1996 and 2002. These top three commodities comprised approximately three-quarters of the total rail-marine export tonnage during the period. Intermodal containers were used to transport 6% of the export tonnes by a combination of rail and marine modes in 2002, a proportion virtually unchanged from the 5% in 1996.

**The top two provinces of origin for rail-marine exports between 1996 and 2002 were British Columbia and Alberta.**

## GOVERNMENT SPENDING AND REVENUES

Spending by all levels of government on all transportation modes ranged between $17 billion and $18 billion in the final years of the 1990s. However spending increased by more than 6% in 2001-2002 over the previous year, in part due to the impact of the September 11, 2001 terrorist attacks on transportation security costs. Municipal and provincial governments together are responsible for the majority of the spending on all modes, with the federal contribution ranging between 11% and 13% of the total, as seen in Table 8. By 2001-2002, municipal governments had become the greatest source of funds for the transportation industry, contributing 48% of the total spending that year.

**Government expenditure on transportation in 2001-2002:**

- **48% municipal**
- **40% provincial**
- **12% federal**

(10) This may be taken as a sign that Canadian ports offer services that are very competitive with U.S. ports.

**Table 8: Government Spending on Transportation, 1998-1999 to 2002-2003 ($ millions)**

| | 1998-1999 | 1999-2000 | 2000-2001 | 2001-2002 | 2002-2003 |
|---|---|---|---|---|---|
| Municipal | $7,008 | $7,740 | $8,481 | $9,207 | N/A |
| Percent | 40% | 42% | 47% | 48% | – |
| Provincial | $7,995 | $8,838 | $7,489 | $7,684 | N/A |
| Percent | 46% | 48% | 42% | 40% | – |
| Federal | $2,307 | $1,995 | $2,007 | $2,324 | $2,537 |
| Percent | 13% | 11% | 11% | 12% | – |
| *Total* | *$17,310* | *$18,572* | *$17,977* | *$19,215* | *N/A* |

Source: Transport Canada, *Transportation in Canada 2002: Annual Report*, Ottawa, 2002.

**Among the transportation modes, governments spend the most on roads and the least on rail.**

Spending by all levels of government by mode of transportation in Canada between 1998-1999 and 2001-2002 is presented in Table 9. In most years, rail accounted for the lowest proportion of total government spending, receiving between 1% and 2% of the total. Road benefited the most from government expenditure on transportation during this period, receiving between 69% and 72% of the total.

**Table 9: Government Spending on Transportation, by Mode, 1998-1999 to 2001-2002 ($ millions)**

| | 1998-1999 | 1999-2000 | 2000-2001 | 2001-2002 |
|---|---|---|---|---|
| Air | $669 | $423 | $437 | $541 |
| Marine | $812 | $2,059 | $980 | $975 |
| Rail | $254 | $226 | $302 | $387 |
| Road | $11,934 | $12,687 | $12,922 | $13,720 |
| Transit | $3,085 | $2,554 | $2,591 | $2,747 |
| Other/Overhead | $556 | $623 | $745 | $845 |
| *Total* | *$17,310* | *$18,572* | *$17,977* | *$19,215* |

Source: Transport Canada, *Transportation in Canada 2002: Annual Report.*

While the federal government contributes less than the provincial and municipal governments to transportation in general, the opposite is true with respect to rail alone. In 1998-1999, the federal government contributed 99% of the total government spending on rail. This share fell to 93% by 2001-2002 as the municipal and provincial governments' absolute contributions grew more than ten-fold during the period. At the provincial level, public spending on rail is often linked to ownership and operation of a provincial railway. At the municipal level, public spending on rail is likely related to either commuter rail operations or public safety investments.

**Federal dollars make up more than 90% of total government spending on rail.**

At the federal level, government spending on rail transport comprises operating, maintenance and capital expenditures as well as direct grants, subsidies and other contributions. Examples of operating, maintenance and capital expenditures include funding for research and development, safety, policy and Transport Canada corporate services. As shown in Table 10 and Table 11, direct federal government subsidies, grants and contributions have made up nearly 95% of federal government spending on the rail industry since 1998-1999. In 2002-2003, rail received the second-largest direct federal assistance, after highways, compared to other transportation industries. The payments to VIA are the largest component of the subsidy, representing more than 80% of federal government spending in most years.

**95% of federal government spending on rail is subsidy, of which 80-90% goes to VIA.**

**Table 10: Direct Federal Subsides, Grants and Contributions to Transportation, 1998-1999 to 2002-2003 ($ millions)**

| | 1998-1999 | 1999-2000 | 2000-2001 | 2001-2002 | 2002-2003[e] |
|---|---|---|---|---|---|
| VIA Rail | $200.5 | $170.3 | $231.6 | $310.2 | $255.7 |
| Hopper Cars | $21.0 | $20.0 | $18.2 | $16.4 | $16.0 |
| Grade Crossings | $7.2 | $7.4 | $7.5 | $7.5 | $7.5 |
| Other | $8.6 | $8.2 | $8.4 | $8.5 | $9.0 |
| *Rail Total Subsidy* | *$237.2* | *$206.0* | *$265.7* | *$342.2* | *$288.3* |
| *Air Total Subsidy* | *$263.8* | *$40.5* | *$48.3* | *$177.0* | *$67.5* |
| *Highway Total Subsidy* | *$355.2* | *$229.4* | *$145.4* | *$168.5* | *$321.7* |
| *Marine Total Subsidy* | *$80.3* | *$172.5* | *$153.1* | *$111.1* | *$109.8* |
| *Other Subsidy* | *$0.4* | *$0.2* | *$0.5* | *$1.1* | *$1.6* |
| *Total Subsidy* | *$936.5* | *$648.5* | *$612.9* | *$800.3* | *$788.9* |

Note: [e] = estimated.

Source: *Transportation in Canada 2002: Annual Report*.

**Table 11: Federal Operating, Maintenance and Capital Expenditures on Rail, 1998-1999 to 2002-2003**

| | 1998-1999 | 1999-2000 | 2000-2001 | 2001-2002 | 2002-2003 |
|---|---|---|---|---|---|
| Rail | $15 million | $15 million | $16 million | $18 million | $21 million |

Source: *Transportation in Canada 2002: Annual Report*.

**The transportation industry generates nearly $14 billion per annum in government revenues.**

**Government revenues from rail are estimated at $178 million in 2002-2003.**

The transportation industry generated nearly $14 billion per annum in government revenues through excise taxes and cost-recovery initiatives between 1998-1999 and 2001-2002. Revenues generated through cost-recovery initiatives go back to the department that provided the facilities and services. Other revenues, such as those from excise fuel taxes and airport rents, contribute to the Consolidated Revenue Fund. Federal and provincial road fuel tax revenues are by far the largest component of government revenues from transportation, generating nearly three-quarters (over $10 billion) of total revenues per annum on average. Other significant contributors to government revenues from transport include provincial and territorial licences and fees (nearly $3 billion), airport rents ($316 million) and the air security fee ($375 million). The only direct sources of government revenue through excise taxes or cost-recovery initiatives from the rail industry are fuel taxes (estimated at $168 million in 2002),[11] and the leasing of hopper cars. Leases generated $10 million in government revenue in 2002-2003 that was credited to the Consolidated Revenue Fund.

## POLICY PERSPECTIVES

The broad theme commonly debated among industry and government sources of rail policy is the impact of fiscal policy on modal efficiency and the related environmental and social concerns. The rail industry and its competitors agree that a fiscal imbalance exists between surface modes of freight transport; they disagree, however, on which mode has the advantage. The opinions expressed by the Department of Transport and the Canada Transportation Act Review Panel seemed to reflect the perspective of the rail industry, which claims to be unfairly burdened with taxes.

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(11) Estimate of fuel excise tax revenues from the Railway Association of Canada, *Railway Trends 2003*, Ottawa, 2003.

## A. Rail Association of Canada

The Rail Association of Canada (RAC) represents some 60 Canadian freight, passenger, commuter, and tourist railways. In its publication *Policy Directions 2002-2003*, the association identified a number of issues concerning the industry today and set out the recommendations of the carriers it represents. While the industry has many concerns, the overarching theme is that federal policy is not modally neutral. The industry suggests that the policy imbalance results in an unfair cost advantage to the trucking industry, the rail industry's main competitor for freight traffic. As a result, the allocation of freight traffic between the two modes is inefficient, with too much of it moving by highway.

**The rail industry suggests that federal transport policy is modally imbalanced, creating an unfair cost advantage to the trucking industry.**

The industry's claim is supported by the following points:

- Rail pays 29% more tax (as a percentage of revenue) than Canadian trucking, and 108% more than U.S. railways.(12)
- Trucking is not a fully user-pay industry; other consumers that pay fuel taxes subsidize it.(13)

Furthermore, the RAC suggests that there are significant environmental and social costs associated with too much freight moving by highway in Canada. This claim is supported by the following evidence:

- Trucking produces more than 10 times more greenhouse gas emissions (GHGs) per freight tonne-kilometre than rail.
- Trucking consumes more fuel and land than rail.
- Trucking is less safe and generates more ambient noise than rail.

Over the years, rail operators in Canada have voluntarily achieved significant improvements in environmental performance. The industry has accomplished this by introducing new locomotives and better train-handling practices, as well as lowering resistance between the wheels and track with improved wheel treads, new freight car trucks and lubricating rail gauge. The industry has also been increasing the average load per car.

**RAC analysis suggests that if the "playing field" between rail and trucking were levelled, and some freight traffic shifted from road to rail, the transportation industry could comply with Canada's commitments under the Kyoto Protocol.**

(12) KPMG, *The Tax Burden of Canadian Railways: A Comparison with Other Modes and Industries*, 7 June 2001.

(13) RAC, *Heavy Goods Vehicles: Infrastructure Costs and Revenue*, Research Paper, July 2002.

Some of the policy recommendations published in the RAC's *Policy Directions 2002-2003* found expression in Bill C-26, An Act to amend the Canada Transportation Act and the Railway Safety Act, to enact the VIA Rail Canada Act and to make consequential amendments to other Acts, which was tabled in the second session of the 37th Parliament. These included:

- provisions to remove the commercial harm test from the *Canada Transportation Act*;
- provisions for a government option to purchase discontinued rail track at a fair market price in urban areas; and
- no provisions for competitive access to guests on host railways.

This bill died on the *Order Paper*, however, when Parliament was prorogued in November 2003.

Other key recommendations from the industry focus on reducing taxes to make rail more competitive and the use of transportation in Canada more efficient. The RAC strongly advocates harmonizing taxes on the inputs to the Canadian rail industry with those on the U.S. rail industry and the Canadian trucking industry. Specifically, the RAC recommends that the federal government focus on reducing capital, income (including capital cost allowance), fuel and property taxes imposed on rail carriers in Canada. RAC analysis suggests that if the "playing field" between rail and trucking were levelled, and some freight traffic shifted from road to rail, the freight transportation industry could comply with Canada's commitments under the Kyoto Protocol.(14)

### B. Canadian Trucking Alliance

**Truck fuels and engines are regulated with respect to emissions, but rail fuels and engines are not.**

The Canadian Trucking Alliance (CTA) considers that trucking is at a disadvantage to rail from a federal policy perspective. The CTA supports this claim by pointing out that truck fuels and engines are regulated in both Canada and the United States with respect to emissions, but rail fuels and engines are not. Instead, the rail industry self-regulates with respect to smog-causing emissions through a memorandum of understanding (MOU) between the Rail Association of Canada and Environment Canada. The CTA questions the effectiveness of the MOU, which is due to expire in 2005. Conversely, smog-causing emissions will be virtually eliminated from new truck models under Environment Canada regulations in upcoming years.

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(14) To be compliant with the Kyoto Protocol, the transportation industry would need to reduce GHG emissions to 6% below 1990 levels by 2010.

The CTA asserts that fuel efficiencies achieved in the rail industry that have helped reduce its GHG emissions have actually lead to an increase in smog-causing emissions per unit of fuel consumed. The CTA cites research conducted for Environment Canada showing that the new locomotives produce more health-related emissions than earlier models. Accordingly, the CTA alleges that shifting usage from trucking to other modes of transport would have little beneficial impact on the environment.

**The CTA alleges that shifting usage from trucking to other modes of transport would have little beneficial impact on the environment.**

### C. Canada Transportation Act Review Panel, 2001

The Canada Transportation Act Review Panel (hereafter, the Panel) was constituted under Section 53 of the *Canada Transportation Act* in June 2000. The Panel conducted a comprehensive examination of the operation of the Act and related legislation. In July 2001, it submitted a final report containing observations and specific recommendations.

The Panel stated that prices inclusive of all costs, including social costs, are important in determining what constitutes an efficient transportation system. Subsequently, the Panel noted that charges for government-funded services and infrastructure, such as roads, often do not reflect the costs generated by different users. As part of a broader recommendation that Canada adopt the concept of "road management" as practised in New Zealand, the Panel recommended that charges for roads be differentiated as far as practical by nature of vehicle, type of road and amount of congestion. If followed, this recommendation would lead to an increase in costs for truck users, as other vehicles currently subsidize trucks using the road system.

The Panel recognized that railways in Canada have a greater tax burden than their competitors. For example, rail cars and equipment are depreciated more slowly for tax purposes in Canada than in the United States. Also, railways are subject to property taxes whereas trucking firms, which use publicly provided roads, are not. The Panel agreed that the competitiveness and profitability of railways in Canada could be enhanced by a more level playing field with respect to taxation.

**The Panel agreed that the competitiveness and profitability of railways in Canada could be enhanced by a more level playing field with respect to taxation.**

The Panel also noted that taxes on rail, marine or aviation fuel could not be rationalized as user charges for the road network. They considered this misplaced tax incidence as discrimination against businesses that use fuels intensively, to the advantage of those that do not.

### D. Transport Canada

On 25 February 2003, former Transport Minister David Collenette launched *Straight Ahead – A Vision for Transportation in Canada*. The document set out a policy framework, vision and principles to guide the next decade of government decisions with respect to the transportation system. Although *Straight Ahead* may no longer serve to provide a context for future transport policy debates, due to the change in minister, the following points were relevant to the rail industry and its competitors:

**The Department was interested in developing appropriate charging mechanisms for roads ...**

**however, the public should not expect changes to the policy of taxing fuels used by rail.**

- Although the Department planned to look at alternative road management models, the public should not infer that there would be changes in its policy with regard to excise taxation of fuels used by rail, shipping and aviation. Federal fuel taxes are an instrument of fiscal, not transportation, policy and are an important source of general revenue used to finance many federal spending priorities, including health care, social security and national defence.
- The Department recognized that rail and marine transportation offer affordable alternatives to other modes of transportation in some areas of the country while contributing to environmental and safety objectives.
- The Department planned to promote the use of intermodal freight opportunities and to increase the use of lower-emissions vehicles and modes. This would be done through identifying and removing barriers to intermodal freight and harmonizing national and international standards.
- The Department planned to continue to work on the full cost pricing issue and was interested in collaborating with industry and other governments in developing appropriate charging mechanisms for roads. The initial goal would be to price in real infrastructure costs, and eventually prices might include environmental and social costs for all modes.

## CONCLUSIONS

Output and revenues in the Canadian rail industry grew overall between 1990 and 2001, despite fluctuations during that period. Given forecasts for the domestic economy and the U.S. economy – Canada's largest external rail freight market – growth in the long term can be expected to continue.

The rail industry in Canada has undergone significant structural change in recent years. The *Canada Transportation Act* of 1986 streamlined the process of transferring rail lines, and a great number of shortline carriers emerged as a result. Eight companies owned just over 50% of the shortlines operating as of August 2003.

Common ownership of shortline carriers, however, may help reduce financial vulnerability if it results in companies being less reliant on single commodities. Regulatory inconsistencies between jurisdictions may become a policy issue in the future, as some shortlines are federally regulated while others are regulated at the provincial level.

Rail trade with the United States has grown by two-thirds in the last decade in terms of tonnage, largely keeping pace with the growth in total trade across the border. Exports flows are much greater than imports, but their values per tonne are comparable. The largest share of the value and tonnage of traffic in each direction comprises automotive products to and from Ontario.

With respect to trade with the rest of the world, rail is often the mode used to transport goods and commodities to and from ports. Ninety percent of Canada's international imports by rail were shipped in intermodal containers in 2002, compared to just 6% of Canada's international exports by rail. Three-quarters of Canada's exports to international markets that currently travel by rail are bulk commodities (coal, grain, fertilizers) that are poured directly into the bulk holds of commodity-specific vessels at the ports.

Rail employed 40% fewer people in 2001 compared to 1990. The significant differential between the average wage Canada-wide and the above-average growth in rail wages suggests that this smaller workforce is significantly more skilled.

Rail is the transportation mode that depends least on spending by all levels of government. Whereas major airports, marine ports and highways are government-owned, railways own and maintain their own infrastructure.(15) In recent years, more than 80% of federal government spending on rail was in the form of a subsidy to VIA.

The collective voice of the rail industry, embodied by the RAC, is strongly in favour of harmonizing the fiscal treatment of Canadian rail carriers with that of its main competitors – the Canadian trucking industry and the U.S. rail industry. The RAC makes its case by highlighting the environmental and social advantages of shipping freight by rail instead of over highways.

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(15) Pipelines are also privately owned, but government spending data are not readily available for this mode.

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# APPENDIX

## Shortline and Regional Rail Carriers

| Names | Route Miles | Region Served | Regulator |
|---|---|---|---|
| La compagnie du chemin de fer Roberval-Saguenay | 29 | QC | Provincial |
| Algoma Central Railway[(1)] | N/A | ON | Provincial |
| Arnprior-Nepean Railway Co. Inc. | 26 | ON | Provincial |
| Athabasca Northern Railway Ltd. | 202 | AB | Provincial |
| BC Rail | 1,431 | BC | Provincial |
| Barrie-Collingwood Railway | 71 | ON | Provincial |
| Burlington Northern (Manitoba) Inc. | 4 | MB | Federal |
| Central Manitoba Railway Inc. | 130 | MB | Provincial |
| Orangeville Brampton Railway | 34 | ON | Provincial |
| Chemin de fer de Lanaudière | 10 | QC | Provincial |
| Compagnie chemin de fer Cartier | 281 | QC | Provincial |
| Corporation des chemins de fer de la Gaspésie | 70 | QC | Provincial |
| Essex Terminal Railway Company | 20 | ON | Federal |
| Huron Central Railway Inc. | 176 | ON | Provincial |
| Les chemins de fer Québec-Gatineau inc. | 355 | QC | Provincial |
| Chemin de fer Saint-Laurent & Atlantique (Québec) inc. | 95 | QC | Federal |
| Greater Winnipeg Water District | 93 | MB | Provincial |
| Great Western Railway Ltd. | 308 | SK | Provincial |
| ST Rail System | 5 | NB | Federal |
| International Rail Road Systems Inc. | 8 | BC | Provincial |
| Northern Lands Co. Railway | 37 | QC | Federal |
| Chemin de fer Q.N.S. & L. [Quebec North Shore & Lbrdr.] | 353 | QC | Federal |
| Kelowna Pacific Railway Ltd. | 104 | BC | Federal |
| Poplar River Mine Railway | 15 | SK | Provincial |
| Millar Western Pulp Ltd. | 2 | SK | Provincial |
| New Brunswick Southern Railway Co. Ltd. | 122 | NB | Provincial |
| Alberta RailNet Inc. | 340 | AB | Provincial |
| Carlton Trail Railway Company | 328 | SK | Provincial |
| Hudson Bay Railway Company | 832 | MB | Federal |
| Okanagan Valley Railway Company | 46 | BC | Federal |
| Ontario Northland Railway | 675 | ON, QC | Provincial |
| Ontario Southland Railway Inc. | 42 | ON | Provincial |
| Port of Montréal | 60 | QC | Federal |
| Prairie Malt Ltd. | 3 | SK | Provincial |
| Chemin de fer de la Rivière Romaine | 26 | QC | Provincial |
| Quebec Central Railway | 236 | QC | Provincial |
| Cape Breton & Central Nova Scotia Railway | 235 | NS | Provincial |
| Central Western Railway Corporation | 21 | AB | Provincial |
| E & N Railway (1998) Ltd. | 94 | BC | Provincial |

| Names | Route Miles | Region Served | Regulator |
|---|---|---|---|
| Goderich-Exeter Railway Company Limited | 181 | ON | Federal |
| Lakeland & Waterways Railway | 115 | AB | Provincial |
| Mackenzie Northern Railway | 602 | AB | Provincial |
| Ottawa Valley Railway | 343 | ON, QC | Federal |
| Southern Ontario Railway | 45 | ON | Provincial |
| Montréal, Maine & Atlantic Railway Canada Co. | 233 | QC, NB | Federal |
| Red Coat Road & Rail Ltd. | 74 | SK | Provincial |
| Chemin de fer de Charlevoix Inc. | 92 | QC | Provincial |
| Chemin de fer de la Matapédia et du Golfe Inc. | 371 | QC | Federal |
| Compagnie de gestion de Matane | Ferry | QC | Provincial |
| New Brunswick East Coast Railway Inc. | 173 | NB | Provincial |
| Ottawa Central Railway Inc. | 139 | ON, QC | Federal |
| Sydney Coal Railway Inc. | 14 | NS | Federal |
| Southern Manitoba Railway | 144 | MB | Provincial |
| Southern Rails Cooperative Ltd. | 58 | SK | Provincial |
| Southern Railway of British Columbia Ltd. | 63 | BC | Provincial |
| Port Colbourne Harbour Railway | 45 | ON | Provincial |
| St. Thomas & Eastern Railway Company Ltd. | 34 | ON | Provincial |
| Compagnie de chemin de fer Arnaud | 23 | QC | Federal |
| Wabush Lake Railway Company, Limited | 38 | QC | Federal |
| Seaspan Coastal Intermodal Company | Ferry | BC | Federal |
| Wheatland Rails Cooperative Ltd. | 46 | SK | Provincial |
| Windsor & Hantsport Railway | 60 | NS | Provincial |

(1) Algoma Central operates on CN track.

Source: Railway Association of Canada, *Canadian Railway Atlas*, p. 3.