

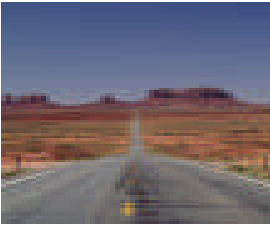
Transportation by Road

- Canada's Trucking & Bus Industry (Moving Freight, Moving People)
- Running the System (Trucks, Roads, Regulatory Setting)
- Key Indicators



Canada's Trucking & Bus Industry

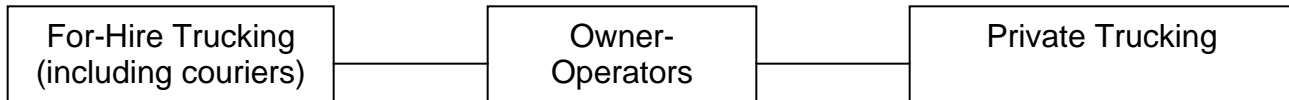
Transportation by road may occur within an urban area, between urban locations, or across regions, nations, or continents, carrying either goods, passengers, or both. Transportation by road may be used for commercial reasons, for private business, or for personal reasons. Infrastructure, however, is the one common element which is used by both freight and passenger transportation. Joint use of the road system affects the design standards and the costs. Only one-third of all roads in Canada are paved; the rest are gravel, oil-treated, or earth surfaces.



Trucking is a dynamic, fast-paced business and a major segment of the Canadian economy. Thousands of trucks and specialized equipment carry almost everything we use. Door-to-door capability allows trucks to provide the local pick up and delivery leg for freight that is shipped by other modes.

Buses carry passengers by road within and between cities. The bus industry includes: urban transit, school buses, charter buses, and inter-city scheduled services.

Moving Freight



Canada's trucking industry consists of:

- **For-hire trucking** companies (including couriers) which carry freight for a fee; and
- **Private carriers** which use their own "in-house" fleet as a company's distribution system (e.g. Molson, Safeway). Private carriers are common in short-distance (local) trucking.
- **Owner-operators** generally own their vehicles and either drives the truck themselves, or arranges for a driver to operate the tractor for them. They provide hauling services under contract to for-hire or private carriers.

According to Transport Canada, there are approximately 10,600 for-hire carriers with annual revenues exceeding \$30,000, 450 private carriers with annual operating expenses exceeding \$1 million, and 2,400 courier companies. There are also 40,000 owner operators with annual revenues greater than \$30,000, who sell their services to for-hire and private carriers.

	Revenues (\$billions)
For-hire	16.5
Private (estimate)	18.8
Courier	3.2
Owner-operators	N/A

Transport Canada Annual Report 1998.

Trucking companies can be further differentiated according to the;

- Freight carried (truck load (TL) or less-than-truckload (LTL), general freight, liquid or dry bulk, forest products, small parcels, mail);
- Equipment used (logging-trucks, hopper-bottom grain trailers, general purpose vans, flat-deck trailers, etc.);
- Jurisdiction (intra-provincial, extra-provincial, domestic, international); and
- Services provided (inter-line, intermodal).

Ontario is the centre of the industry: 28% of all for-hire carriers and one half of the 100 largest carriers in Canada are domiciled there; 37% of all trucking revenues in the country are earned in Ontario. The Prairie region accounts for only 17% of Canada's population but 43% of the country's truck fleet is registered in these provinces. 18% of all for-hire carriers and 27% of the top 100 Canadian carriers are based in the Prairies.

Moving People

Buses carry passengers by road within and between cities. The bus industry includes: urban transit, school buses, charter buses, and inter-city scheduled services.

Urban transit is the largest part of the industry, employing 84,000 people and carrying 1.36 billion passengers each year in Canada. In 1996, urban transit fares covered just 50% of the cost of providing the services.

Of the 77 urban transit companies in Canada earning at least \$200,000 in operating revenues each year:

- 56 are in Ontario and Quebec,
- six are in Atlantic Canada, and
- 15 are in the West.

Bus Industry Revenues, 1996*

	(millions)
Urban transit buses	\$3,676
School buses	1,032
Scheduled inter-city bus services	342
Charter buses	270
Total	\$5,320

*Includes \$2.1 billion in subsidies.

Source: *Transportation in Canada 1997*

Transit ridership for all Canadian urban centres grew in the 1980s but declined more than 11% between 1990 and 1995. An estimated 10% of the population travelling to and from work in cities uses public transit for all or part of the trip.

School buses represent a large share of industry operators and earn a large share of bus industry revenues, although school bus operations are not strictly commercial services competing for riders.

Charter buses serve groups of travellers all embarking and disembarking at the same point. Services range from a half-day school trip to a three-week excursion, and they can be one way or return and include local sightseeing tours.

Inter-city services carry passengers on scheduled trips between cities. The number of passengers opting to take the bus between urban centres has declined as air travel and the use of private cars has grown:

1949	129.7 million bus passengers (peak year)
1980	32.5 million bus passengers
1996	10.3 million bus passengers

The number of inter-city bus passengers between 1980 and 1996 declined 68%, while vehicle-kilometres travelled declined just 35% in the same period. This meant that, on average, fewer seats were filled on each bus trip.

Motor coaches are luxury buses that have changed with the times. Many new models provide a range of amenities and are equipped with the same seats found in the business class sections of airplanes and trains. New motor coaches may even offer workstations with fax machines and laptop computer hookups.

Running the System

Trucks

- There are over 700,000 trucks* in Canada - about 420,000 of them carry freight commercially; the other 280,000 are used occasionally to haul goods commercially. These are owned by governments, utility companies, service companies or farmers.

* A truck is defined as a motor vehicle with a registered weight of 4,500 kgs or more. If trucks under 4,500 kgs are included, there are some 3.7 million trucks in Canada.



- Tractor and semi-trailer units cost between \$100,000 and \$150,000; specialized trailer equipment, including dry vans, flat decks, tankers, auto carriers, dump trailers, and livestock carriers, can cost as much as \$200,000

Roads

The Canadian road network consists of 902,000 kilometres under the following jurisdictions:

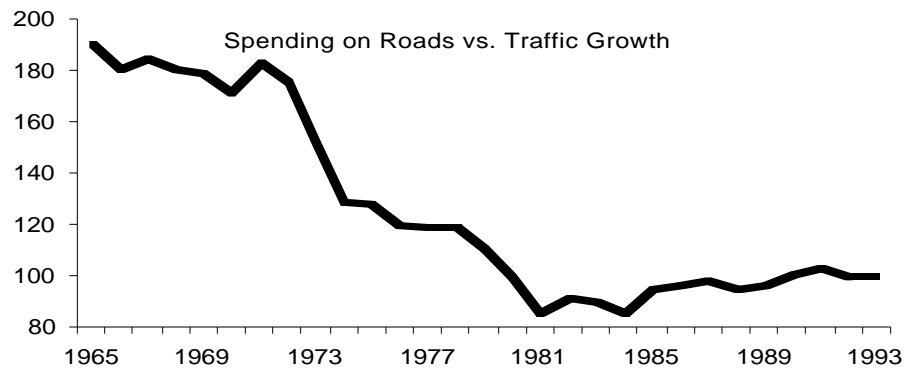
Municipal: 656,000 kms (73%)
Provincial: 231,000 kms (25.5%)
Federal: 15,000 kms (1.5%).

Roads in Canada (000 kilometres)		
		%
Saskatchewan	201.9	22.4
Alberta	181.4	20.1
Ontario	167.9	18.6
Quebec	119.9	13.3
Manitoba	87.9	9.7
British Columbia	65.7	7.3
Nova Scotia	26.0	2.9
New Brunswick	21.9	2.4
Newfoundland	13.1	1.5
PEI	5.7	0.6
NWT	5.5	0.6
Yukon	5.1	0.6
Total	901.9	100.0

Source: Transport Canada, 1998 data; two-lane equivalents.

The 7,306-km TransCanada Highway is a part of the 25,000-km National Highway System (NHS) that connects Canada from coast to coast. The NHS provides interprovincial and international links, and almost 40% of it is four or more lanes wide. Although the NHS accounts for less than 3% of the total road network, more than one-quarter of all highway travel takes place on that network.

More than \$12 billion is spent each year to build and maintain roads in Canada. Most of this is funded by provincial and municipal governments. The federal government, through Transport Canada, provides funding support to the provinces and territories through various programs.



Source: Transport Canada. Road expenditures/vehicle-km by the three levels of government index 1980=100

Regulatory Setting

The federal government involvement in roads includes: ownership of a small amount of infrastructure, mainly in National Parks; financial contributions to other levels of government for highway construction; regulation of international crossings; and research and development.

The federal government also regulates many sectors relating to safety in the trucking industry, from traffic laws to equipment regulations:

- The *Motor Safety Act* controls how trucks are built (e.g., anti-lock brakes, and reflective white and red stripes on trailers).
- The *National Safety Code* is an interprovincial agreement (not legally binding) covering 15 trucking standards such as drivers' license requirements, medical testing, vehicle maintenance and inspections, and hours of service. Some parts of the code are still being implemented.
- The transportation and handling of dangerous goods is regulated through cooperative agreements of federal and provincial governments. Special regulations are also in place in each province.

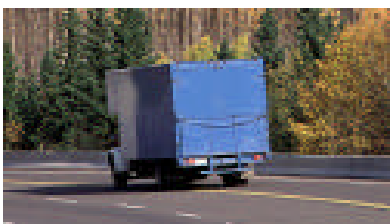


Apart from Canadian regulations, a number of US regulations also apply to companies/operators carrying goods across the border (e.g., gross vehicle weight allowances, alcohol and drug testing and safety ratings).

The building and maintenance of infrastructure falls mainly under municipal / provincial responsibility, and the municipal responsibilities are increasing.

Key Indicators

Trucks carry 75% of all Canadian manufactured goods (based on value).



The availability of consumer goods is an important factor in our quality of life in Canada, and most of what is available is made possible by trucks

"Truck driver" is the most common male occupation in Canada, according to the Government of Canada Census.

North-South vs. East-West Traffic

- Traffic is concentrated in the most populated provinces (Ontario and Quebec). Together, they account for about one-third of the National Highway System's route-kilometres, but over 60% of all vehicle-kilometres driven.

- The busiest corridor is the Highway 401 – Highway 20 corridor from Quebec City to Windsor. Outside central Canada, the busiest corridor is the Trans-Canada Highway in the Lower Mainland of BC (between Chilliwack and Vancouver).
- In 1997, around 223 million tonnes of freight was hauled by for-hire carriers with revenues exceeding \$1 million. Domestic shipments accounted for 75% of the total tonnage hauled and 59% of the revenues earned by the large for-hire carriers.
- Most domestic freight revenues are earned by hauling fabricated materials (lumber, automobile parts, etc.) and end products (furniture, clothes, books, etc.).
- In 1996, extra-provincial carriers generated over \$12 billion in revenues, which accounts for about 81% of total for-hire trucking revenues. The remaining 19% of revenues were generated by intra-provincial carriers (\$2.8 billion).
- According to Transport Canada, productivity in the trucking industry increased by 31% between 1981 and 1994, averaging 2.1% per year.

On a tonne-km basis, north-south trucking across the US border is increasing (% of all for-hire traffic):

	1990	1996
Traffic across US border	30%	41%
Traffic within Canada	70%	59%

This reflects changing trade patterns. In 1981, trade between the provinces accounted for 27% of Canadian Gross Domestic Product (GDP), on a par with international trade. By 1997, interprovincial trade had dropped to 20%, while international exports rose.

- Trade between Canada and the US depends heavily on the trucking industry. In 1997 Canada exported \$229 billion worth of goods to the US and imported \$184 billion. Of the total \$413 billion of goods that Canada traded with the US, \$278 billion (67%) was moved by truck.
- Transborder shipments carried by for-hire trucking companies with revenues greater than \$1 million accounted for only 25%, although generated 41% of their total revenues in 1997. The average revenue earned per transborder shipment was close to three times greater than that earned from domestic shipments but the average distance of transborder shipments was only one and a half times further.

