



A Parliamentarian's Guide to CANADA'S RAILWAYS

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Railway Association
of Canada

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Executive Summary

Storied history, vital present

Railways revolutionized transportation in pre-Confederation Canada, and provided the foundation for the nation building that followed. The rail sector's modern-day contributions to the national economy are significant:

- Railways reinvest about 20 per cent of their annual revenues into developing and maintaining their infrastructure — more than \$20 billion since 1999;
- Railways continue to provide good jobs and an average annual wage of \$92,000 for the sector's close to 33,000 employees;
- Railways contribute more than \$1 billion in taxes each year; and
- Railways move \$280 billion worth of goods to North American markets each year.

Sustainable future

Rail is energy efficient, cost effective and a low emitter of greenhouse gases (GHGs):

- Railways can move one tonne of freight more than 200 kilometres on a single litre of fuel;
- Railways reduce congestion and wear-and-tear on public roadways by moving the equivalent of 300 truckloads on a single train;
- Railways move more than 75 million passengers annually, reducing pressure on urban roads and transit time for commuters;
- Railways account for less than four per cent of the transportation sector's total GHG emissions; and
- Railways have signed agreements with the Government of Canada to establish performance targets for further reductions to GHG emissions.

Productive partnerships with legislators and regulators

Since emerging from an era of constrictive regulation at the end of the 20th century, Canada's rail sector has thrived. Market freedoms introduced through successive regulatory reforms now assist the sector in meeting the mandate of Canada's National Transportation Policy, to "achieve a competitive, economic and efficient national transportation system by relying on competition and market forces."

Stakeholders, parliamentarians and regulators will soon be called upon to address the issues identified through the statutory review of the *Canada Transportation Act*. Challenges posed by the 2013-2014 grain crop prompted the federal government to prioritize grain transportation in this review. The review panel is also expected to consider whether the current legislative and policy frameworks for transportation in Canada are adequate and able to support our country's quest for competitiveness, improved trade and economic growth.

Canada's railways look forward to an open and transparent dialogue with the government and parliamentarians on these issues. Productive consultation provides a path to success for railways and the Canadian economy, and for Canadian society as a whole.



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A Brief History of Canada's Railways



A Brief History of Canada's Railways

i. Canada's First Railway

Canada's railway age began in earnest in 1836. That year saw the opening of the Champlain and Saint Lawrence Railroad — a 26-kilometre line that provided a link from Montreal to Lake Champlain via a railhead on the south shore of the St. Lawrence River.

Since then, Canada's railways have played an integral part in building the society and economy of our nation. What started back in 1836 has grown into a transportation industry that is safe, reliable and provides access to national and international markets, while supporting Canadian businesses as they grow and compete in the 21st century.

Today, Canada's railways move more than 75 million passengers and \$280 billion worth of goods each year. Canadian railways also employ more than 32,000 people, provide almost \$3 billion in wages, and support an additional 60,000 jobs in the railway supply sector.

From a public policy perspective, Canada's railway industry contributes more than \$1 billion in annual taxes, while at the same time investing nearly 20 per cent of its revenue back into the rail network. Unlike other modes of transportation, railways fund, maintain, and expand their own infrastructure. In 2014, they invested approximately \$1.8 billion of their capital into their networks in Canada alone, and more than \$4 billion system-wide.

To provide a sense of the size and scope of Canada's railways, one need look no further than the 335 million tonnes of goods moved by railways in 2014, which is an increase of more than eight per cent from the industry's five-year average. The industry did this while at the same time reducing emissions, spills and accidents.



The driving of the "Last Spike" in 1885 marked an engineering feat: the completion of Canada's first transcontinental railway. Today, Canada's railways move more than 75 million passengers and \$280 billion worth of goods each year.

ii. Class 1s

Railway construction in Canada intensified following Confederation in 1867; the promise of an intercolonial railway was a condition written into the *Constitution Act*. Completed in 1876, the Intercolonial Railway was owned and operated by the federal government, and linked the Maritime colonies with the Province of Canada.

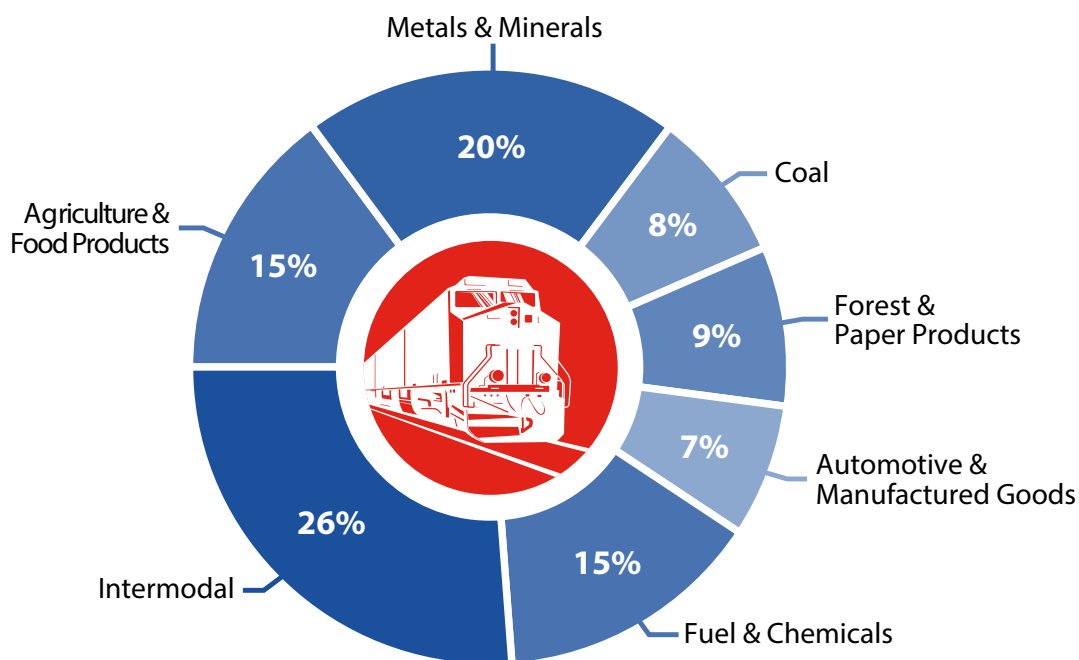
Meanwhile, British Columbia was enticed into Confederation in 1871 with the promise of a transcontinental railway that would be completed within 10 years. To that end, the federal government signed an agreement with the Canadian Pacific Railway Company (CP) in 1880, and construction of the railway began in 1881. The “Last Spike” was driven on November 7, 1885.

CP’s construction had a significant impact on the development of the Canadian West, as cities and towns were built along the railway line from Winnipeg to Vancouver.

However, continued expansion of Canada’s rail network proved too expensive and unwieldy, and ultimately it was deemed to be unsustainable. In 1917, a Royal Commission recommended the nationalization of all existing railways, with the exception of CP. This led to the creation of the Canadian National Railway Company (CN).

Today, CN and CP are among the most efficient and well-managed freight railways in the world, moving 70 per cent of Canada’s intercity freight and 50 per cent of our goods destined for export. Both CN and CP are classified as Class 1 railways, as their annual operating revenues have exceeded \$250 million for two consecutive years. These railways move a wide range of commodities, consumer and manufactured goods, and make markets everywhere accessible to Canada’s exporters, manufacturers, retailers and farmers (see Figure 1).

Figure 1: Canadian Railways – 2014 Traffic Mix



iii. Shortlines

The development of Canada's modern shortline freight rail industry can be traced back to changes brought about by the *Canada Transportation Act* of 1996. Key amendments in this Act allowed the Class 1 freight railways to manage their own networks and shed less profitable rail lines. This resulted in a dramatic growth in the shortline rail industry, which continues to thrive to this day.

Lower-cost operators were able to generate profit on lower-density lines by developing local relationships,

and diversifying their services to include freight transport, railcar storage and switching (the making or breaking up of trains of cars). Today's shortlines move more than 135 million tonnes of goods to and from Class 1 networks each year.

Currently, about 50 shortline railways are operating in Canada, employing 2,600 people and generating combined revenues of about \$923 million. Shortlines maintain about 20 per cent of the total track kilometres in Canada.

iv. Intercity and Tourist Railways

With mass access to the automobile beginning in the 1950s — and governments moving to build roads and highways across the continent — North Americans largely gave up on passenger rail in favour of personal vehicles. At the same time, air travel became more affordable and consumer demand drove exponential growth in the airline industry.

Passenger rail declined through the 1960s as both CN and CP focused on freight transportation, while investments in passenger rail waned.

In 1977, the federal government created VIA Rail as a Crown corporation with the exclusive mission to organize and provide all intercity passenger train services in Canada — fulfilling the notion that passenger rail is an essential service.

Since 1977, VIA Rail has continued to grow both its service and its fleet. Today, VIA Rail operates more than 500 trains weekly on a 12,500-kilometre network that serves more than 450 Canadian communities. In 2014, VIA Rail carried a total of 3.8 million passengers.

VIA Rail's efforts to grow its business and increase its revenues have worked. However, despite recent success, on-time performance continues to deteriorate, largely due to increased freight traffic on third-party-owned railways. In order to address this challenge, VIA Rail has developed an innovative plan for a dedicated passenger rail network along its busiest Toronto-Ottawa-Montreal



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routes (see section 4.xi, *Modernizing VIA Rail through High-Frequency Intercity Passenger Service*).

This plan will allow for a greater number of train departures, shorter trips and a more sustainable and reliable intercity passenger rail service.

Canada is also home to the Rocky Mountaineer — the world's largest privately owned tourist train company. Created in 1990, Rocky Mountaineer has carried almost 2 million passengers on its train routes through Canada's Rocky Mountains. Other Canadian tourist railways include Alberta Prairie Railway Excursions and the South Simcoe Railway.

v. Commuter Rail

Urban growth in Canada over recent decades — and its associated traffic and increased air pollution — has prompted larger cities to consider commuter rail as a solution. Typically, commuter rail provides service between outlying municipalities and a downtown rail station, and is used primarily by passengers travelling to and from work.

Thirteen commuter rail lines now operate in Canada, serving the Vancouver, Toronto, Ottawa and Montreal metropolitan areas, among others. In 2014, commuter rail service moved more than 70 million passengers in those cities.

Quebec and Ontario have committed significant funds to expand their commuter rail networks over the coming years. In Ontario, for example, the government has earmarked more than \$11.5 billion to fund The Big Move — a plan to improve commuter transportation in the Greater Toronto and Hamilton Area. Similarly, Quebec has pledged more than \$500 million to upgrade Montreal's commuter rail infrastructure.



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The Evolution of Canada's Freight Railways



The Evolution of Canada's Freight Railways

i. Commitment to Safety

Regulators, railway operators and employees all share a commitment to ensuring rail safety in Canada. That's because every year 75 million passengers ride Canada's railways, and 70 per cent of all the country's intercity surface goods are moved by rail — including 50 per cent of all exports by volume.

As the fifth-largest rail network in the world, Canada's rail sector is governed by a robust external legislative and regulatory safety regime. The foundation for this is the *Railway Safety Act* and its many regulations, including the requirement — introduced in 1999 and updated most recently in 2015 — compelling each federally regulated railway to implement a Safety Management System (SMS).

SMS uses a performance-based approach to managing safety; it is designed to foster a safety culture throughout an organization through transparent goal-setting, planning, inspections and performance measurement. SMS is complementary to a strong regulatory regime, and has been shown to enhance railway safety. Since SMS was first introduced, Canada's freight and passenger rail accident rates have declined considerably. In fact, over the last 10 years, the freight rail accident rate has dropped by more than 40 per cent (see Figure 2).

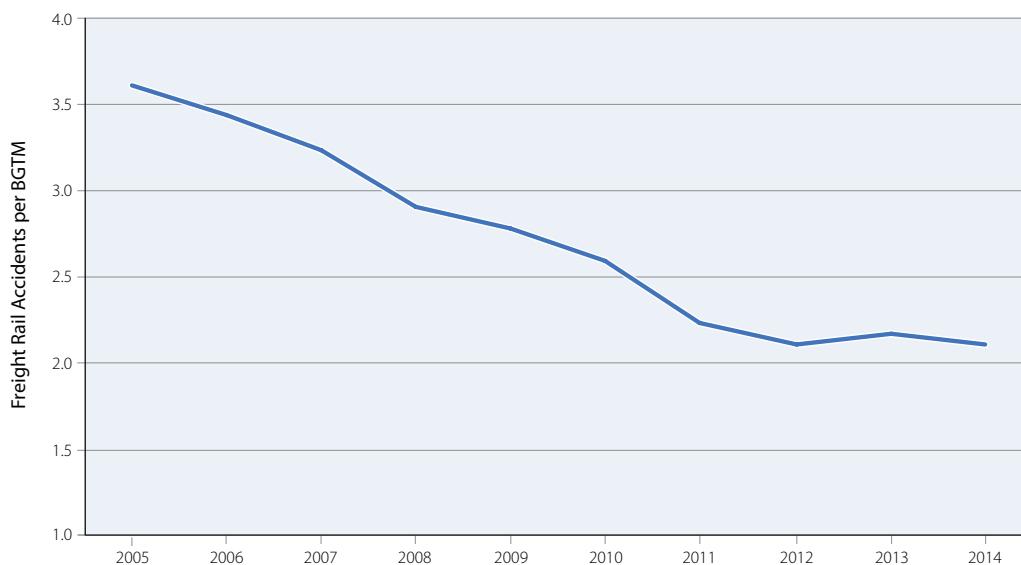
Despite that strong safety record, Canada's railways have suffered some high-profile incidents in recent years. The tragic accident in Lac-Mégantic, Que. in

July 2013 was a sober reminder of the importance of a strong safety culture, and safe railroading practices. Following the incident, the federal government introduced more stringent rules and regulations for railway operations, and responded to the industry's call for a more robust tank car standard for transporting flammable liquids. While CN and CP were at the time, and continue to be, the safest railways in North America, the industry as a whole still took considerable steps to enhance the safety of the goods it transports, and the people living in the communities where it operates (see section 4.ii, *The Transportation of Dangerous Goods in Canada*).

The Lac-Mégantic incident stood in sharp contrast to the railway industry's long history of safely transporting dangerous goods in this country (movements which are subject to the federal *Transportation of Dangerous Goods Act*). Canada's railways embrace the safety imperative to continuously improve, as well as their duty to:

1. Promote and provide for the safety of the public and their personnel, and the protection of property and the environment;
2. Encourage the collaboration and participation of interested parties in improving railway safety; and
3. Facilitate a modern, flexible and efficient regulatory regime that will ensure the continuous enhancement of railway safety.

Figure 2: Canadian Railways – Freight Accident Rate



As part of its commitment to safety, Canada's railway industry works with governments, municipalities, first responders and other stakeholders to promote and enhance safety performance. Two of its most notable initiatives include Operation Lifesaver®, and its dangerous goods outreach.

Operation Lifesaver®

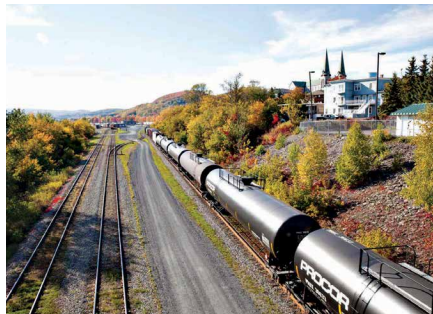
Jointly funded by Transport Canada and the Railway Association of Canada, Operation Lifesaver® works in cooperation with national and provincial safety organizations, police and other groups to provide public-safety education programs aimed at minimizing trespassing and other accidents at road-rail crossings and on railway property. The program relies on its more than 400 certified volunteers to carry its public-safety message to thousands of Canadians each year, and will be celebrating its 35th anniversary in 2016.

Dangerous Goods Outreach

Through the Transportation Community Awareness and Emergency Response initiative (TRANSCAER®), Canada's railways work with municipalities, emergency responders, and residents in communities along transportation routes to make sure they are informed about the products being moved through their area, and are prepared to respond to potential incidents involving dangerous goods.

In the last five years, Canada's railways have also trained more than 38,000 first responders, railway employees and industrial plant workers through programs on dangerous goods handling and emergency response at the Justice Institute of British Columbia and other facilities. More than 9,500 of those individuals were trained in 2014 alone.

Finally, CN and CP have both been verified as Responsible Care® Partners in recognition of their responsible stewardship of chemical products, and their ability to provide reliable transportation, equipment, environmental, and emergency management services to Canada's chemistry industry.



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ii. Productivity and Capital Investment in the Era of Privatization

Since their pre-Confederation beginnings, railways have consistently ranked among the most capital-intensive industries in Canada.

Like other industries, railways require capital spending to build capacity, drive performance and attract investment. Railways own, operate, maintain, and pay for their infrastructure, to the level of roughly 20 per cent of their annual revenues. However, unlike most other industries, railways operate under a legacy of strict economic regulation. Regulations continue to affect the rates that railways charge, and mandate the services they must offer.

The history of railways in Canada shows that there is a clear link between the reach of economic regulation and the financial performance and productivity of railways.

Successive regulatory reforms — brought in under the *National Transportation Act* and the *Canada Transportation Act* — opened the door to market discipline and allowed a measure of commercial freedom in the railway industry. CN was fully privatized in 1995, and the railway industry has not looked back.

Productivity and financial performance improved following these regulatory reforms. With increased market freedom, the option for railways to enter into confidential contracts with shippers provided incentives for both parties to cut costs and create efficiencies.

Increased market freedom has also given railways the ability to innovate around their service offerings, which has translated into lower rates for shippers and contributed to strong railway financial performance. In turn, this new climate has encouraged substantial and consistent increases in capital investment.

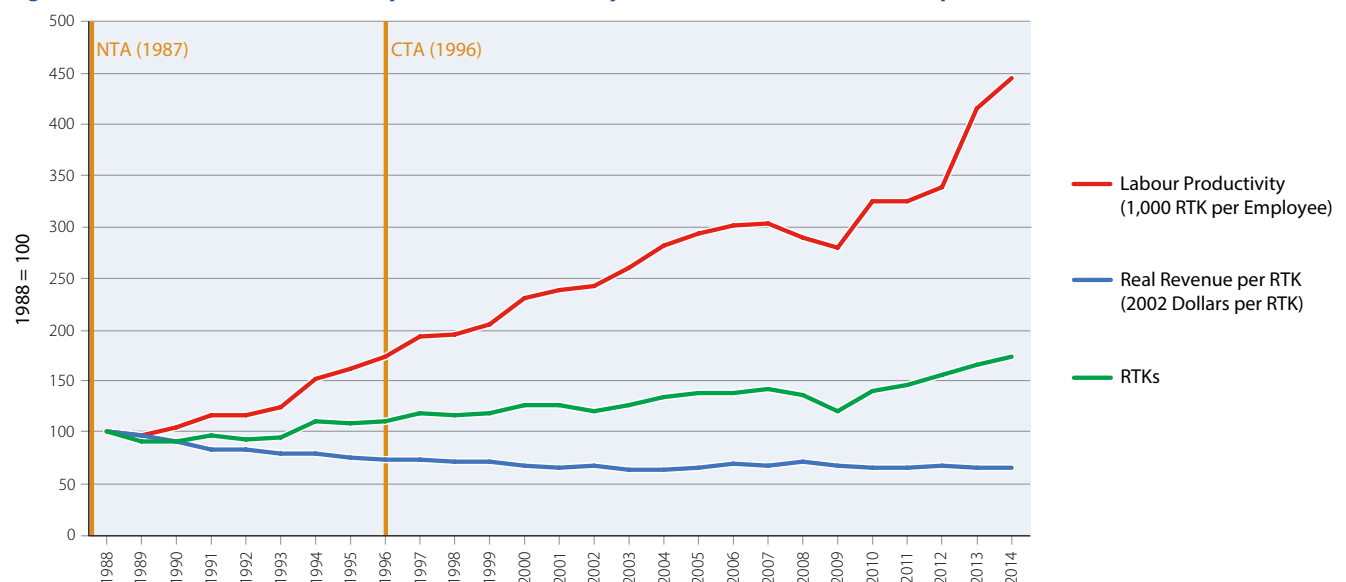
From a low of \$286 million in infrastructure and equipment investments in 1969, capital investments have grown substantially. Canada's railways now invest billions of dollars back into their networks each year. Since 1999, they have invested more than \$20 billion in their Canadian networks, and more than \$37.5 billion system-wide.

Key metrics from 1988 to 2014 show how the Canadian railway industry has thrived with more commercial freedoms granted under a modern regulatory regime (see Figure 3):

- Labour productivity has increased by more than 380 per cent;
- Railway revenue tonne-kilometres (or RTK — a measure of freight rail traffic) increased by 74 per cent; and
- Average freight rates have declined by 34 per cent.

Overall, Canadian rail traffic (RTK) has outperformed the growth of the Canadian economy, producing efficiencies, and benefiting shippers by allowing them to be more competitive in international markets.

Figure 3: Canadian Railways – Productivity Indices (Canadian Operations)



iii. The Network Nature of Railways

Canada's railway network is vast (see Appendix i, *Map of Canada's Railway Network*). With more than 43,000 route-kilometres, it is 15 per cent larger than the country's national highway system. Rail serves as a vital link in our economy and is responsible for connecting Canadian industries and our country's resource base with domestic, continental and global markets. At the same time, rail also moves offshore goods to Canadian and U.S. destinations.

Canada's railways serve more than 10,000 customers and move more than four million carloads each year. Because of the volume of goods and variety of customers served, the railway network is analogous to a suburban bus route: it attends to as many customers as it can, as efficiently as possible. Railways move single carloads, unit trains and intermodal (container-based) traffic, and work diligently to ensure that service is provided fairly to all customers.

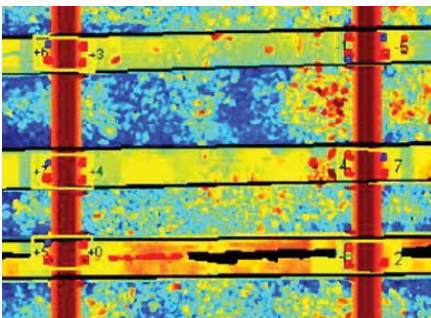
iv. Innovation

While railways are not often thought of as high-tech companies, innovation has played a major role in making them safer, more productive and environmentally sustainable.

For example, wayside technology now allows railways to monitor wheels, brakes and couplings on moving trains. Infrared imaging also provides railways with information on track and rail-bed integrity. Future safety enhancements may include in-train monitoring using voice and video recording technology, and the use of GPS — advances which would allow companies to monitor stress and fatigue on-board locomotives, and to track the movement of railway equipment in real time.

Railways also make use of customer service software to track goods from point of origin to destination, which contributes to better efficiency and productivity. Operational innovations have also led to improved service. In recent years, Canada's railways have developed a scheduling system to increase overall velocity and provide more predictable and reliable service, while lowering shippers' inventory costs.

Finally, CN is currently piloting a program to test the potential of liquefied natural gas as an alternative, low-emission fuel for locomotives. If successful, this pilot project would be the latest railway innovation to reduce emissions. Since 1990, Canada's railways have cut their greenhouse gas emissions by more than a third, thanks to locomotive innovations and operational improvements.



Innovations such as infrared imaging (left) and wayside detection technology (centre) have played a major role in making railways safer, more productive and environmentally sustainable.

Rail's Contribution to the Canadian Economy



Rail's Contribution to the Canadian Economy

i. Economic Impacts

Canada's railways play a vital role in our nation's economy by enabling Canadian businesses to compete across North America and the globe. In 2014, Canada's railways helped move more than \$280 billion worth of Canadian goods to markets in our country, the U.S. and internationally, through the continent's extensive port system. Railways move approximately 50 per cent of Canadian goods destined for export, and 70 per cent of the country's intercity freight traffic each year.

Canadian railways also paid more than \$1 billion in taxes in 2014, including \$430 million in annual fuel, property and sales taxes, and \$460 million in income taxes. Railway workers are also among the highest-paid of any industry — the average annual wage in 2014 was \$92,000 for the sector's close to 33,000 employees.



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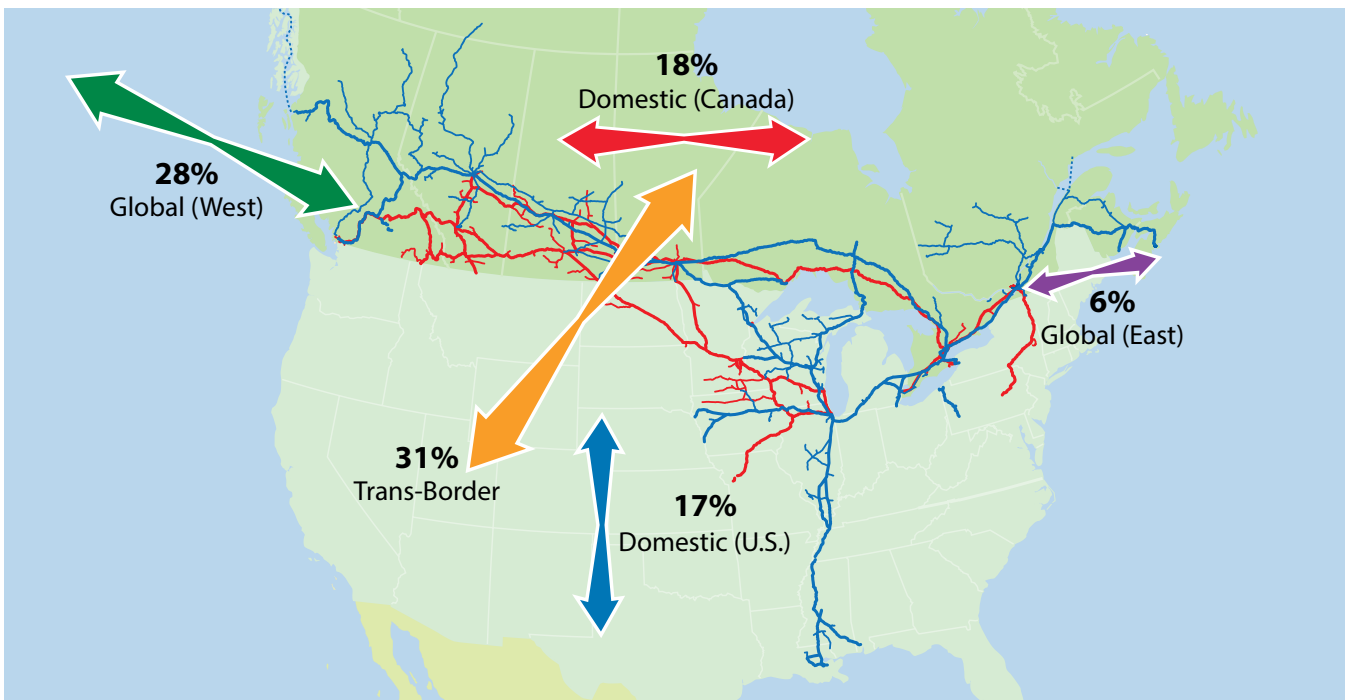
ii. The Cost Advantage of Rail

Railways provide one of the most efficient and economical ways for shippers to transport their goods. One railcar can hold as much as three to four conventional truckloads of goods, and a single train can easily haul the equivalent of 300 trucks. Railways accomplish such hauls with extraordinary efficiency; a train can move one tonne of freight more than 200 kilometres on a single litre of fuel.

Over time, this efficiency has translated into affordable rail rates. Since 1988, railway rates have

dropped more than 30 per cent, and Canadian shippers currently benefit from the lowest freight rates in the world. In fact, Canadian railways now move one tonne of freight one kilometre for less than three cents, providing shippers with an affordable, world-class, highly efficient and safe railway system that enables market opportunities both domestically and internationally. Figure 4 highlights the market reach of Canadian Class 1s in 2014.

Figure 4: Canadian Class 1s – Market Reach



The commercial freedoms introduced in the *National Transportation Act* and the *Canada Transportation Act* allowed Canada's railways to bring their cost advantages to the marketplace, and to offer discounts to shippers. Previously, the federal government had compelled railways to charge a rigid price-per-carload, but allowing the market to influence rates has benefited both shippers and railways. This change has resulted in greater productivity for the railways and lower prices for shippers; railway productivity has grown five-fold, with virtually all productivity gains being passed on to rail customers.

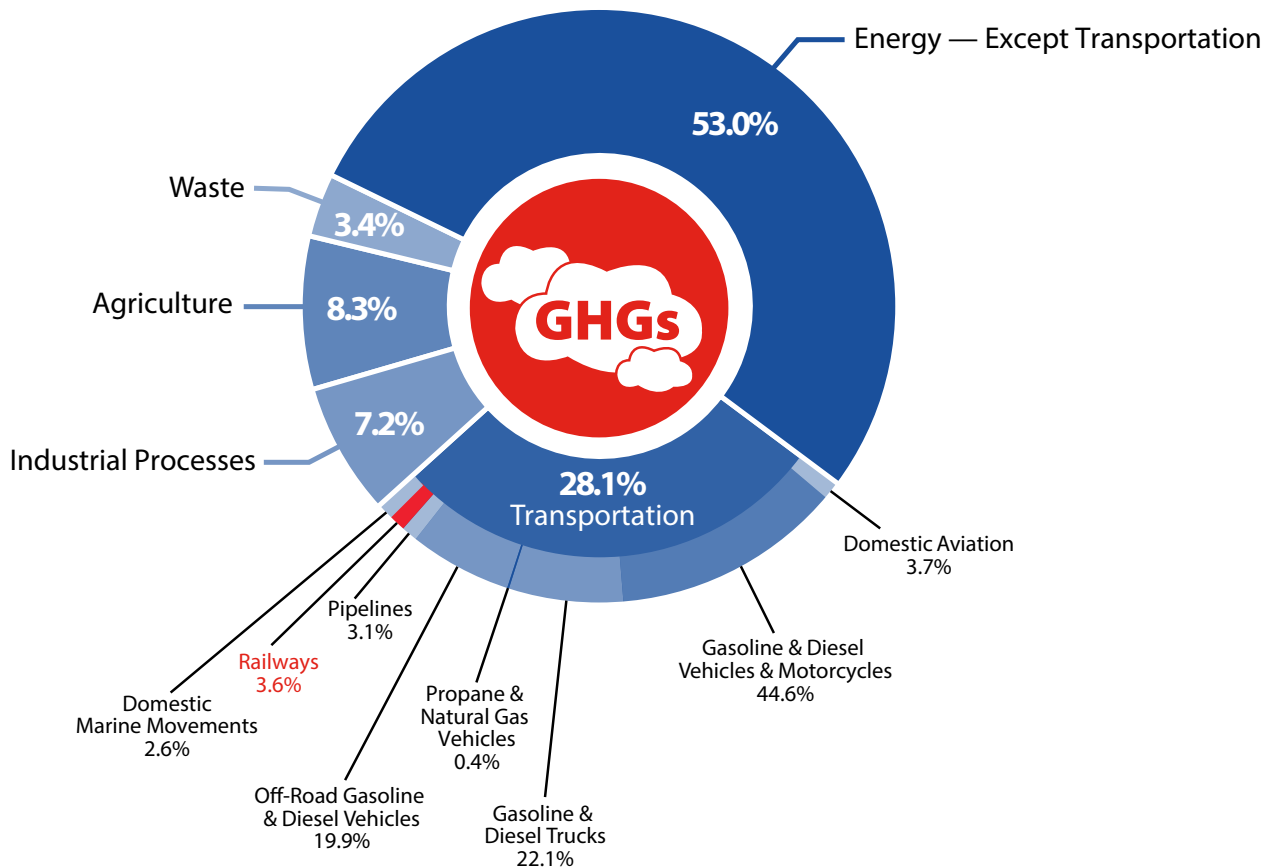
Prior to 1995, the pivotal year that saw the full privatization of Canada's railway sector, Class 1 railways' average operating ratios (the ratio of a company's operating expenses to its revenues, where a smaller number is better) routinely exceeded 90 per cent. Presently, both of Canada's Class 1 freight railways are financially stable, and maintain operating ratios in the low 60s — a remarkable feat considering that they have also invested more than \$20 billion worth of capital back into their Canadian networks since 1999.

iii. Environmental and Other Socio-Economic Advantages for Canadians

Canada's railways play a vital role in our nation's economy and in our society in general, thanks in large part to the environmental sustainability of rail. In 2013, the transportation sector accounted for 28.1 per cent of Canada's greenhouse gas emissions

(GHGs) (see Figure 5). Road transportation contributed nearly 72 per cent of all surface transportation emissions, while the railway industry accounted for less than four per cent, despite carrying more people and goods than ever before.

Figure 5: GHG Emissions in Canada



RAC and its members have been working with the Government of Canada for more than 15 years to achieve voluntary performance targets for reducing GHGs and other emissions produced by locomotives. To date, RAC and its members have signed three memoranda of understanding (MOUs) with the federal government. The most recent MOU establishes performance targets until the end of 2016.

This voluntary approach has proven to be very successful. Since 1990, Canada's freight and passenger railways have reduced their GHG emissions intensity by more than a third. At the same time, our railways have increased their fuel efficiency — through continuous technical and operational innovations — and provided cleaner air, reduced road congestion, and an overall more efficient and productive transportation system for Canadians.

Public Policy Issues



Public Policy Issues

i. Common Carrier Obligations

As publicly regulated services, railways are subject to the “common carrier” obligations defined in sections 113 to 115 of the *Canada Transportation Act*. Under those provisions, railways must accept to carry any goods or any person, charge a reasonable rate, and are liable for all loss or damage to goods in the course of transit.

In principle, the common carrier obligations mean that railways are obliged to accommodate all traffic offered to them, and must operate a network that meets the needs of all shippers. In practice, they mean that railways must carry a full range of freight — from bulk commodities to dangerous goods, and everything in between.

Railways and regulators have explored different approaches for sharing the increased liability

associated with transporting dangerous goods. In 2015, the federal government mandated minimum insurance requirements for railways, and imposed a strict liability on rail carriers for accidents involving crude oil. At the same time, the government created a \$250-million fund to reimburse victims of accidents involving crude oil for damages in excess of the mandated minimum rail insurance coverage. Crude oil shippers will contribute to this fund through a levy of \$1.65 per metric tonne of transported crude oil.

Railways take the view that additional means may be available to enhance the safe transportation of dangerous goods. One such measure would be to source products — such as chemicals — locally, reducing the need to transport them over long distances by rail, or by other means.

ii. The Transportation of Dangerous Goods in Canada

Dangerous goods are essential to our economy and to our everyday lives. Whether it’s chlorine to sanitize our municipal drinking water, jet fuel to power airplanes, or propane to run our barbecues, railways provide a safe means of transporting these essential goods from Point A to Point B.

By law, the railways’ “common carrier obligations” require them to transport all goods, including dangerous goods. In Canada, the transportation of dangerous goods is regulated by the *Transportation of Dangerous Goods Act*.

Stewardship of dangerous goods throughout their life cycle — from their manufacture through to their transport, use and disposal — is a shared responsibility. It is strictly regulated, professionally managed, and monitored by governments, industry and supply chain partners, including the rail industry. Canada’s railways are continuously working to improve the safe handling and transportation of dangerous goods. The railway sector maintains a team of highly qualified Dangerous Goods Specialists to consult with supply chain partners and the public, and provide expertise on best practices and regulatory compliance.



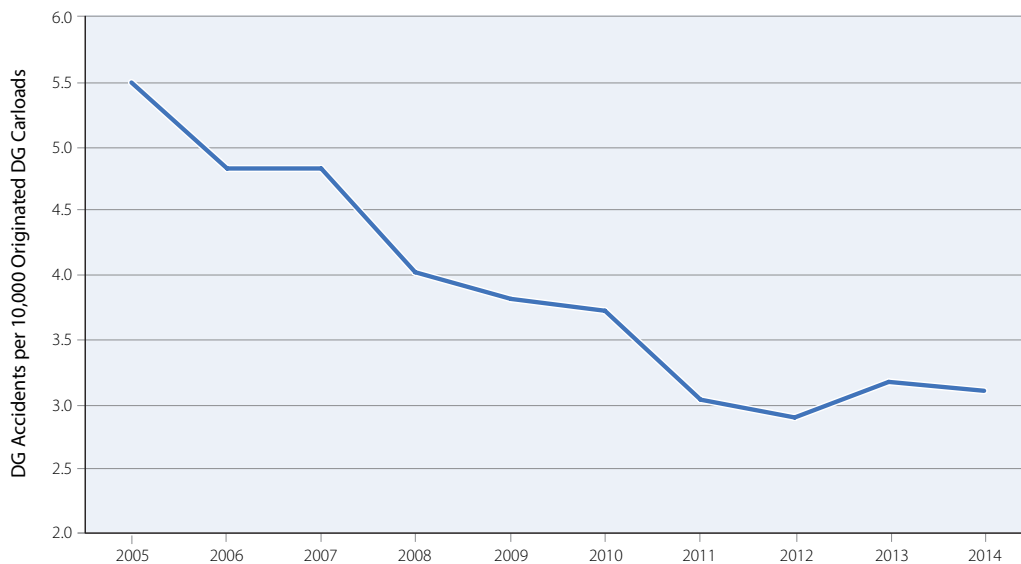
Dangerous goods are essential to our everyday lives, and railways provide a safe means of transporting these goods from Point A to Point B.

Train derailments understandably attract attention. However, the larger picture shows that railways have a very good record of safely transporting dangerous goods (see Figure 6). Of the hundreds of thousands of carloads of dangerous goods that move by train each year, more than 99.998 per cent arrive safely. In addition, most dangerous-goods releases do not occur during the transportation of these goods by rail. In fact, rail is the safest mode of ground transportation for dangerous goods.

But the 2013 rail disaster in Lac-Mégantic, Que. — which caused 47 deaths and significant property damage — was a sober reminder of the importance of safe railroading practices. The rail industry responded by strengthening a number of safety procedures, and enhancing emergency preparedness and response standards. Some of the measures taken to improve safety include:

- **Operational Improvements** — The rail industry worked with Transport Canada to enhance train securement and operating practices. Trains carrying tank cars loaded with dangerous goods must now have at least two crew members. Enhanced procedures for securing locomotives from unauthorized entry were also introduced, as were new measures to confirm that trains have been immobilized with air and hand brakes according to Transport Canada specifications.
- **Transparency and Emergency Preparedness** — Railways are working to improve access to information about the movement of dangerous goods through communities. They provide yearly aggregated dangerous goods data to any municipality that requests it. Railways are also working with community first-responders on emergency preparedness, and facilitating access to real-time information about railcar contents in the event of an emergency through their recently launched AskRail™ mobile application.
- **Training and Outreach** — The rail industry has beefed up its training programs. Railways trained more than 9,500 first responders, railway employees and industrial plant workers on dangerous goods handling and emergency response in 2014.
- **Enhanced and Harmonized Tank Car Standards** — The federal government responded to the railway industry’s calls by introducing a safer and more robust standard for tank car construction, and harmonized industry standards for tank car usage in 2015.
- **Investments** — The rail industry continues to upgrade its network with billions in annual investments in infrastructure, rolling stock and new safety technologies.
- **Industry Partnerships** — The rail industry is collaborating with other industries to ensure the safe transportation of dangerous goods. The Railway Association of Canada is working with the Canadian Association of Petroleum Producers, the Canadian Fuels Association and the Chemistry Industry Association of Canada to coordinate expertise and facilitate ready access to necessary equipment in the event of an incident involving dangerous goods.

Figure 6: Canadian Railways – Accidents per 10,000 Originated DG Carloads



iii. Service Issues and Rates

Questions about the value and quality of service are a normal feature of any marketplace where there is an ongoing dialogue between customers and service providers. The rail industry is no exception. However, in light of the history and scope of the enterprise, the vital economic interests of stakeholders, and the complexity of the regulatory environment, service issues in the railway industry take on particular heft.

But railways are just one part of a larger supply chain. Service issues can often be traced to backlogs elsewhere — such as at ports or grain elevators. Railways must operate within the confines of their larger supply chain, and that chain's ability to move commodities smoothly from one end to the other.

Often, questions about service result in debates over whether customers are better served by industry practices guided by market forces and commercial freedom, or by controls exercised by regulatory authorities. The search for the appropriate balance is ongoing.

Despite the many changes to the regulatory and statutory regime over the years — changes that were designed to introduce market freedoms to the rail sector — a key legacy provision remains virtually unchanged from the *Railway Act* of 1906. The “common carrier obligations” (spelled out in Sections 113 to 115 of the *Canada Transportation Act*) require railways to provide “adequate and suitable accommodation” for the carriage of traffic.

In practical terms, this allows shippers to seek redress from the Canadian Transportation Agency if they believe that a railway has not met its service obligations. The Agency or an arbitrator may then compel the railway to provide a certain level of service.

Naturally, shippers want service that is competitively priced and as customized to their particular needs as possible. For their part, rail carriers seek to move as much as they can as efficiently as they can. The metaphor commonly used to differentiate this gulf between shippers' service expectations and the railways' ability to meet them is a desire for a taxi service where only bus service is available.

Canada's railways have argued that this gulf can be distorted by inappropriate interventions. In particular,



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railways are disadvantaged when they are compelled to provide tailored service to an individual shipper, or when arbitrators order cars, crews and locomotives to be at the disposal of a shipper, irrespective of a railway's needs to manage its network operations. This imbalance is made worse by the fact that arbitrators are unable to impose reciprocal obligations on shippers, to provide railways with such things as forecasts or meaningful commitments to shipping volumes.

In the end, it is imperative to recognize that level of service is directly related to price. A more customized and tailored service request will come with a corresponding price. A taxi service cannot be offered for the price of a bus fare.

Broadly speaking, the concerns that railways have with the current process is that it undermines, rather than encourages, commercial outcomes. Canada's regulatory regime often attributes problems in the supply chain exclusively to railways, and disregards the roles played by others within that supply chain. The net result is that inefficiencies are introduced into the rail system, privileging the desires of a single shipper over the needs and requirements of the entire network. This clearly runs counter to the goals expressed in Canada's National Transportation Policy, to “achieve a competitive, economic and efficient national transportation system by relying on competition and market forces.”

iv. Capacity

Rail capacity is more than a sum of kilometres of track, quantity of rolling stock, tonnes of freight and numbers of passengers moved. Certainly, these measures count towards an estimate of rail capacity; however, other elements also contribute to a railway's ability to move a given number of containers per week, or carloads of a particular commodity per month. These include:

- operational practices;
- system velocity;
- investments;
- capital expenditures;
- regulatory stability;
- performance of supply chain partners; and
- a well-trained workforce.

v. Grain Transportation

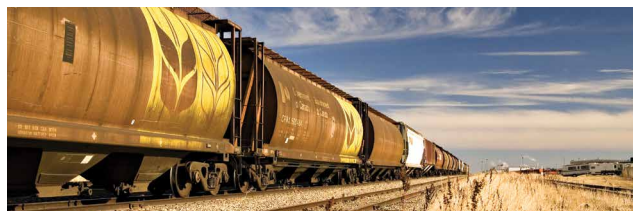
The federal government began regulating railway rates for grain transportation in the 1890s, through what was known as the Crow Rate. Initially, the main aim was to garner political support for a federal subsidy for CP to construct a rail line through the Rocky Mountains. But by the 1970s, with regulated rates still in place, growing revenue shortfalls prompted railways to reduce shipments and investments in the grain handling and transportation system.

In 1983, the federal government enacted the *Western Grain Transportation Act* (WGTA). This Act maintained the legislated rate regime, but shifted the burden of cost shortfalls from the railways to the federal government. The WGTA was repealed in 1995, and replaced with a new maximum rate regime a year later. That regime lasted until 2000, when the current Maximum Revenue Entitlement (MRE) system was put in place. The MRE caps the total annual revenues that railways can earn from moving grain. When it was initially introduced, the MRE was intended to be a temporary and transitional measure to move Canada's grain transportation system to a more commercial footing. Its continued existence has depressed railway revenues, providing a disincentive to investment in grain transportation.

An example of this is Canada's aging hopper-car fleet. Of the approximately 8,300 hopper cars currently in service, nearly 45 per cent were purchased by the

Rail capacity may also be affected by weather events, labour disruptions, regulatory requirements, and bottlenecks at border crossings, ports, and in urban areas.

Federal investments in transportation infrastructure, such as in the Asia-Pacific Gateway and Corridor Initiative (APGCI), continue to provide leadership and enhance rail capacity. Undertaken as part of that initiative, the successful, multi-partner Roberts Bank Rail Corridor project combined \$300 million in funding from governments, railway companies and ports to upgrade road, rail and port capacity. Overall, Canada's railways have contributed more than \$1 billion to the APGCI.



The Maximum Revenue Entitlement provides a disincentive to railway investment in the grain transportation supply chain.

federal government between 1975 and 1979. Newer hopper cars have the ability to carry 20 to 30 per cent more grain, which would assist railways in moving this commodity more efficiently during bumper crop years, such as the one experienced in 2013-2014. However, with the revenue cap in place, it is difficult for railways to justify an investment in new hopper cars, which cost approximately \$115,000 each.

Legislation continues to provide CN and CP with the flexibility to set specific western grain freight rates, based on the overall revenue cap (which is adjusted each year through a statutory formula). However, evidence is accumulating to suggest that — like the Crow Rate before it — the revenue cap is discouraging investment, and distorting proper market responses to peak demands.

vi. Investments in Canada's Shortline Railway Sector

Canada's shortline sector grew out of regulatory changes introduced in the *Canada Transportation Act* in 1996, allowing Class 1 railways to divest themselves of less profitable rail lines.

While shortlines collectively move more than 135 million tonnes of goods in Canada each year, the small size of these railways — and the razor-thin margins in which they operate — makes their continued success and viability tenuous. The capital they need to upgrade track, grow their networks, and purchase new locomotives and other rolling stock, is often difficult for them to secure. Moreover, shortline railways must compete directly with the trucking sector, which operates on publicly subsidized infrastructure: highways and roads.

In recent years, the cost of complying with new environmental, safety and insurance-related regulations has been prohibitively expensive for many of these companies. As a result, the Railway Association of Canada has approached various levels of government to explore funding options to ensure the continued success of the sector. Currently, few direct funding programs are available. For example, while shortline railway projects are eligible to receive funding from the new Building Canada Fund and its predecessor, only 0.07 per cent of available funds have been directed towards shortline projects to date.



Government funding would help to ensure the competitiveness and sustainability of Canada's shortline rail sector.

The value of the shortline sector to Canada is clear, not only from an economic perspective, but also based on the societal benefits accrued from rail. These can be measured in terms of reduced air pollution and GHG emissions, lower accident rates, as well as decreased road congestion and wear-and-tear on public highways.

Going forward, it is in our collective best interest for governments to create funding programs that are easily accessible to shortline railways — programs that will leverage their competitiveness and ensure their sustainability. Such efforts will ultimately benefit the Canadian economy, and our society as a whole.

vii. Developments in Proximity to Railway Corridors

Most Canadian municipalities have grown up around railway tracks. Proximity to commuter transportation, and the economic activity generated by railways, generally benefits these communities.

However, proximity also presents challenges. Ready access to rail service also raises concerns about noise, vibration, rail crossing safety, and congestion. Working together through their joint Proximity Initiative, the Railway Association of Canada and the Federation of Canadian Municipalities have developed *Guidelines for New Development in Proximity to Railway Operations*. Looking to the future, Canada's railways hope to protect railway corridors, to ensure that passengers and shippers can continue to move efficiently and safely through the thousands of Canadian communities that have been built around railway tracks.

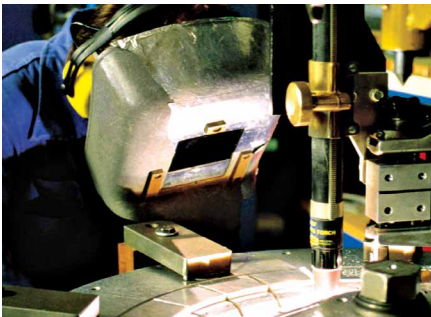


Railway corridors need to be protected to ensure that passengers and shippers can continue to move efficiently and safely through Canadian communities.

viii. The Railway Supply Sector

Canada's railway supply sector employs more than 60,000 Canadians and generates domestic and international sales of more than \$9 billion each year. Rail is among the most capital-intensive industries in North America, and suppliers depend on large annual capital investments made by railways. But given the relatively small number of large buyers in the marketplace, and the leverage they enjoy, suppliers' sales margins are typically thin.

From a public policy perspective, aligning Canada's capital cost allowances and depreciation rates with those of the U.S., and ensuring the availability of a trained and dependable workforce, could help to grow the Canadian railway supply sector.



Canada's railway supply sector employs more than 60,000 Canadians and generates domestic and international sales of more than \$9 billion each year.

ix. Railway Data

Canada's railway supply chain operates most efficiently when all of its players have the data they need to make informed decisions. Railways provide governments, regulators and their customers with more data about their operations than any other transportation sector in Canada. The information provided is required by law under the *Statistics Act*.

Railway data is also shared voluntarily with government organizations such as the Minister of

Transport's Commodity Supply Chain Table, and the Canadian Transportation Agency, where it is used to assess performance and inform planning for future investments. Railways also share information with their customers, and other supply chain partners such as ports and terminal operators, with the goal of developing solutions to identified service problems. Canada's railways are committed to making this data available, in the interest of developing a more productive supply chain for all stakeholders.

x. Railway Crossings

Canada's railways believe there is a pressing need to address the administration of Canadian railway crossings. Currently, Transport Canada has the authority to close an existing railway crossing after completing a public-safety risk assessment. Meanwhile, the Canadian Transportation Agency has the authority to open new railway crossings without conducting any risk-based assessment.

In light of the fact that most safety incidents take place at rail crossings, Canada's railways believe that the authority to open new crossings should be transferred to Transport Canada. In addition, new railway crossings should only be opened after a full public-safety assessment, and only when no alternative exists.



Railways believe that Transport Canada should have the sole authority for opening and closing rail crossings in Canada.

xi. Modernizing VIA Rail through High-Frequency Intercity Passenger Service

Canadians are increasingly looking for sustainable alternatives to their personal vehicles — a transportation trend that will only grow as cities such as Montreal, Ottawa and Toronto continue to densify.

To choose the train over their cars, travellers need reliable, frequent, fast and cost-effective passenger-rail service. This is particularly true in the Quebec-Windsor corridor where more than half of Canada's population lives.

At present, VIA Rail only owns two per cent of the tracks that it uses for its operations — the rest is owned by Canada's freight railways. Increased congestion on these tracks often results in speed constraints, and a lack of flexibility in scheduling trains or adding frequencies — hurdles that prevent VIA Rail from effectively fulfilling its mandate to Canadians. This situation is also far from ideal for the freight railways, as VIA occupies time slots during the day that impede freight movements, and requires a higher-quality track than would otherwise be needed for freight transportation.

Given these challenges, VIA Rail has proposed a High-Frequency Rail (HFR) project which, in its first phase, would rely on the development of a new dedicated passenger rail network between Montreal, Ottawa and Toronto. The HFR would be built using abandoned or available railway rights-of-way — the

Montreal-Ottawa-Toronto segments of which could be developed in less than four years.

Having a dedicated passenger network would allow VIA Rail to run its trains at their full potential speed of 160 km/h, and to increase its ridership from two million to seven million passengers a year. The expected financial returns would cover the project's \$3-billion costs, in addition to subsidizing VIA's less profitable routes outside the Quebec-Windsor corridor. This cost-effective solution would also reduce the environmental and productivity costs associated with traffic congestion in large urban centres, by removing five million cars off our highways each year. Finally, it would lay the groundwork for future improvements in speed and technology, potentially leading to the co-existence of dedicated passenger rail infrastructure for both conventional-speed and high-speed trains.

The engineering, demand and financial studies and analysis for VIA Rail's HFR project were developed with the support of both Canadian and international experts. The results have been verified through peer-review. VIA Rail has also conducted a financial market sounding about the project, and has confirmed the interest of some of Canada's largest public pension funds.

Looking to the Future



Looking to the Future

i. The Statutory Review of the *Canada Transportation Act*

A statutory review of the *Canada Transportation Act* (CTA) was announced by the Minister of Transport on June 25, 2014. Section 53 of the CTA requires a regular, comprehensive review of the economic regulation of Canada's transportation sector.

The current review is being led by the Hon. David Emerson, with the support of five advisors. As always, the review is being conducted at arm's length from the government.

Given the concerns over the grain backlog during the 2013-2014 crop year, Mr. Emerson is expected to give grain transportation priority consideration in his report. He is also expected to consider whether current legislative and policy frameworks for transportation are adequate and able to support

Canada's quest for competitiveness, improved trade and economic growth. Mr. Emerson will also likely reflect on how current transportation gateways, corridors and supply chains can be better utilized.

RAC and its members provided Mr. Emerson and his advisors with a number of submissions to assist them in completing their work. Mr. Emerson's final report was submitted to the Minister of Transport within the 18-month time frame set out at the beginning of the review. In the coming months, the government and parliamentarians will consider his many recommendations, and the railway sector looks forward to being an active participant in those deliberations.

ii. Keeping Rail Legislation Relevant

Over the past decade, RAC and its members have been actively engaged with the federal legislative process, and have participated through submissions, committee appearances and consultations on a variety of proposals, including: Bill C-11 (2007), C-8 (2008), S-4 (2012), C-52 (2013) and C-30 (2014).

While much of the legislative agenda in recent years has been fully supported by the railway sector — particularly those proposals aimed at strengthening safety — other legislation has turned back the clock on economic gains made in the latter half of the 20th century. For instance, a number of recent legislative measures have modified the balance of the shipper-railway relationship decidedly in favour of shippers. These changes will limit the railways' ability to manage their networks efficiently, and will hamper efforts to improve the overall rail supply chain.

As the government considers the Hon. David Emerson's report on the *Canada Transportation Act*, it should focus its efforts on ensuring that Canadian transportation policy continues to reflect the commercial frameworks and market-based solutions necessary for our country's continued success. Furthermore, it is imperative that future rail policy decisions recognize the network nature of the railway business, and its place within our country's transportation supply chains.



Meaningful consultation on legislation will result in success for railways, our economy, and for Canadian society as a whole.

Canada's railways move more than 380 million tonnes of goods each year — a value of more than \$280 billion to the Canadian economy. To be successful, an open and transparent dialogue between railways, governments and parliamentarians must be the order of the day. Meaningful consultation will result in success for railways, our economy, and for Canadian society as a whole.

iii. Recognizing Rail as Part of Canada's Climate Change Solution

With their exceptional fuel economy and longstanding commitment to lowering greenhouse gas emissions, Canada's freight and passenger railways can be an integral part of our country's climate change solution.

In general, rail is five times more efficient than trucking; one unit train of freight can remove more than 300 trucks from our congested highways. Similarly, a commuter train can take hundreds of cars off our busy roads, while reducing emissions and air pollution.

To date, few national or provincial programs have provided incentives to encourage the transportation of goods and people by rail. Canada's railways look forward to working with all levels of government to reduce transportation emissions, and support Canada's low-carbon strategy.



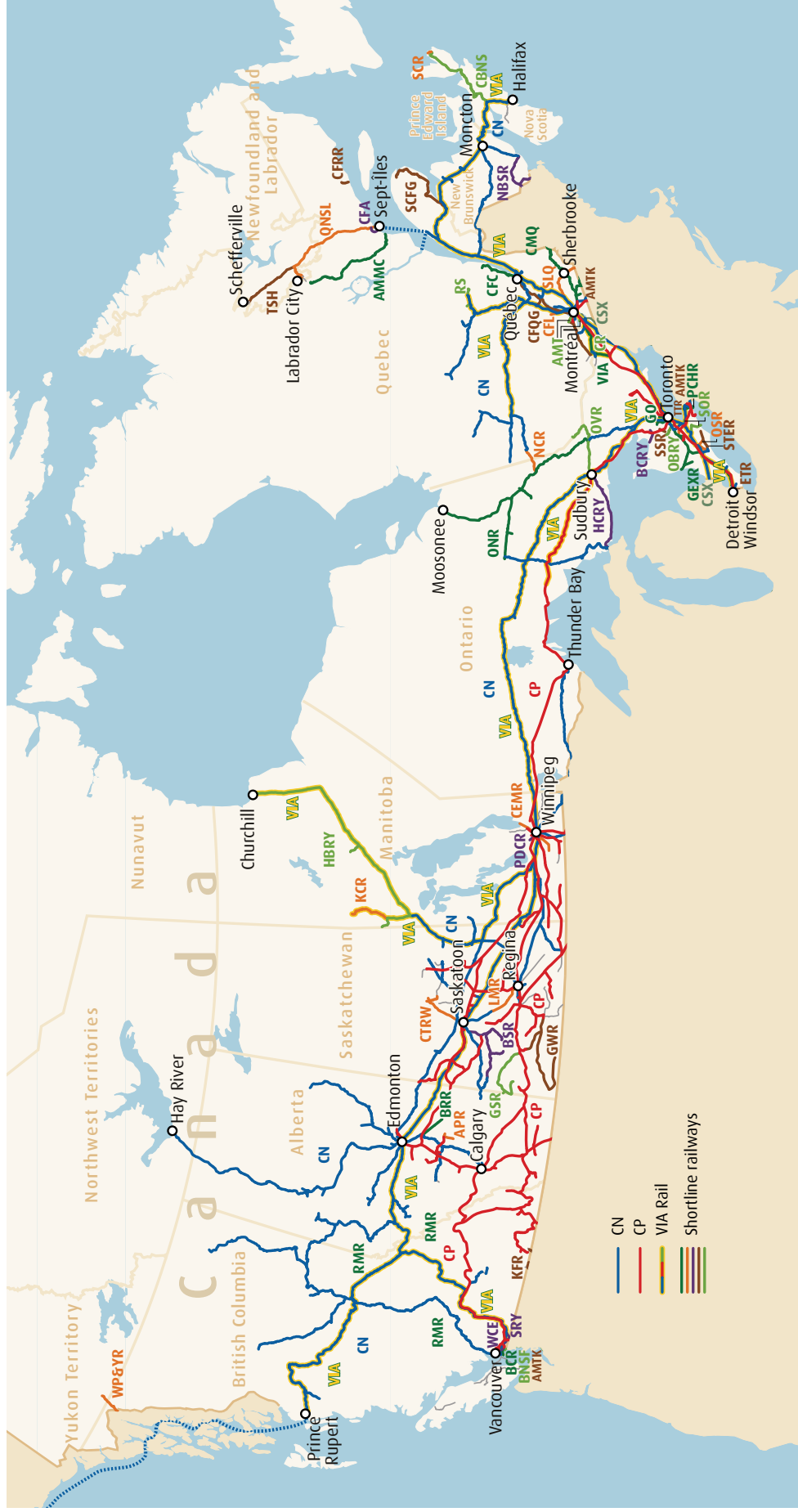
With their exceptional fuel economy and longstanding commitment to lowering greenhouse gas emissions, Canada's freight and passenger railways can be an integral part of our country's climate change solution.

Appendices



Appendices

i. Map of Canada's Railway Network



ii. List of Railway Association of Canada Member-Railways

GSR 6970184 Canada	KRC Keewatin Railway
AMT Agence métropolitaine de transport	KFR Kettle Falls International Railway
APR Alberta Prairie Railway Excursions	LMR Last Mountain Railway
AMTK Amtrak	NBSR New Brunswick Southern Railway
AMMC ArcelorMittal Infrastructure Canada	NCR Nipissing Central Railway
CFA Arnaud Railway	NS Norfolk Southern Railway
BCRY Barrie-Collingwood Railway	ONR Ontario Northland Transportation Commission
BRR Battle River Railway	OSR Ontario Southland Railway
BCR BCR Properties	OBRY Orangeville Brampton Railway
BSR Big Sky Rail	OVR Ottawa Valley Railway
BNSF BNSF Railway	PDCR Prairie Dog Central Railway
CP CP	CFQG Québec Gatineau Railway
CBNS Cape Breton & Central Nova Scotia Railway	QNSL Québec North Shore and Labrador Railway
CR Capital Railway	RS Roberval and Saguenay Railway
CTRW Carlton Trail Railway	CFRR Romaine River Railway
CMQ Central Maine & Québec Railway	SCFG Société du chemin de fer de la Gaspésie
CEMR Central Manitoba Railway	SSR South Simcoe Railway
CN CN	SOR Southern Ontario Railway
CFL Compagnie du chemin de fer Lanaudière	SRY Southern Railway of British Columbia
CSX CSX Transportation	SLQ St. Lawrence & Atlantic Railroad (Québec)
EMRY Eastern Maine Railway	SSRY Stewart Southern Railway
ETR Essex Terminal Railway	SCR Sydney Coal Railway
GO GO Transit	TTR Toronto Terminals Railway
GEXR Goderich-Exeter Railway	CFC Train Touristique de Charlevoix
RMR Great Canadian Railtour Company	PCHR Trillium Railway
GSR Great Sandhills Railway	TSH Tshuétin Rail Transportation
GWR Great Western Railway	VIA VIA Rail Canada
HBRY Hudson Bay Railway	WCE West Coast Express
HCRY Huron Central Railway	WP&YR White Pass and Yukon Route Railroad

iii. List of Railway-Specific Legislation and Regulations

Canada Labour Code

- Canada Industrial Relations Board Regulations
- Canada Industrial Relations Regulations
- Canada Labour Standards Regulations
- Canada Occupational Safety and Health Regulations
- On Board Trains Occupational Safety and Health Regulations
- Railway Running-Trades Employees Hours of Work Regulations
- Safety and Health Committees and Representatives Regulations

Canada Transportation Act

- Algoma Central Railway Traffic Rules and Regulations
- Ammonium Nitrate Storage Facilities Regulations
- Anhydrous Ammonia Bulk Storage Regulations
- By-Laws No. 6 and 8 of VIA Rail Canada Inc.
- Canadian National Railway Passenger Train Travel Rules and Regulations
- Canadian Pacific Railway Traffic Rules and Regulations
- Chlorine Tank Car Unloading Facilities Regulations
- Details of Maps, Plans, Profiles, Drawings, Specifications and Books of Reference Regulations
- Discontinuance and Continuance of Proceedings Order
- Dominion Atlantic Railway Traffic Rules and Regulations
- Flammable Liquids Bulk Storage Regulations
- Grand River Railway Traffic Rules and Regulations
- Handling of Carloads of Explosives on Railway Trackage Regulations
- Heating and Power Boilers Regulations
- Height of Wires of Telegraph and Telephone Lines Regulations
- Highway Crossings Protective Devices Regulations
- Joint Use of Poles Regulations
- Lake Erie and Northern Railway Traffic Rules and Regulations
- Liquefied Petroleum Gases Bulk Storage Regulations
- Order Authorizing Certain Persons to Be a Party to Certain Commercial Arrangements and Providing Specific Directives to the Vancouver Port Authority and the Fraser River Port Authority
- Order Authorizing Negotiations for the Settlement of the Dispute Causing the Extraordinary Disruption of the National Transportation System in Relation to Container Movements into and out of Certain Ports in British Columbia
- Order Authorizing Persons Specified Therein to Be Parties to Certain Commercial Arrangements and Providing Specific Directives to the Vancouver Port Authority and the Fraser River Port Authority
- Order Varying Certain National Transportation Agency Orders Respecting Railway Companies
- Order Varying CTC Abandonment Orders Respecting the Avonlea Subdivision Between Parry and Avonlea
- Personnel Training for the Assistance of Persons with Disabilities Regulations
- Quebec Central Railway Traffic Rules and Regulations
- Railway Abandonment Regulations
- Railway Company Pay Out of Excess Revenue for the Movement of Grain Regulations
- Railway Costing Regulations
- Railway Employee Qualification Standards Regulations
- Railway Hygiene Regulations
- Railway Interswitching Regulations
- Railway Prevention of Electric Sparks Regulations
- Railway Safety Appliance Standards Regulations
- Railway Third Party Liability Insurance Coverage Regulations
- Railway Traffic and Passenger Tariffs Regulations
- Railway Traffic Liability Regulations
- Service Equipment Cars Regulations
- Specifications 112 and 114 Tank Cars Regulations
- Transportation Information Regulations
- Wire Crossings and Proximities Regulations

Canadian Environmental Assessment Act

- Regulations Designating Physical Activities

Canadian Environmental Protection Act

- Chlorobiphenyls Regulations
- Export and Import of Hazardous Waste and Hazardous Recyclable Material Regulations
- Export Control List Notification Regulations
- Federal Mobile PCB Treatment and Destruction Regulations
- List of Hazardous Waste Authorities
- PCB Waste Export Regulations
- Storage of PCB Material Regulations
- Storage Tank Systems for Petroleum Products and Allied Petroleum Products Regulations

Canadian Transportation Accident Investigation and Safety Board Act

- Transportation Safety Board Regulations

Heritage Railway Stations Protection Act

- Heritage Railway Stations Regulations

National Energy Board Act

- National Energy Board Pipeline Crossing Regulations, Part I
- National Energy Board Pipeline Crossing Regulations, Part II

Navigation Protection Act

- Navigable Waters Bridges Regulations
- Navigable Waters Works Regulations

Railway Safety Act

- Grade Crossings Regulations
- Grade Crossings Standards
- Mining Near Lines of Railways Regulations
- Notice of Railway Works Regulations
- Railway Operating Certificate Regulations
- Railway Safety Management System Regulations
- Railway Safety Administrative Monetary Penalties Regulations

Transportation Appeal Tribunal of Canada Act

- Transportation Appeal Tribunal of Canada Rules

Transportation of Dangerous Goods Act

- Transportation of Dangerous Goods Regulations

iv. List of Railway Operating Rules

- Canadian Railway Operating Rules (CROR)
- Railway Equipment Reflectorization Rules
- Railway Freight Car Inspection and Safety Rules
- Railway Freight and Passenger Train Brake Inspection and Safety Rules
- Railway Locomotive Inspection and Safety Rules
- Railway Medical Rules for Positions Critical to Safe Railway Operations
- Railway Passenger Car Inspection and Safety Rules
- Railway Passenger Handling Safety Rules
- Railway Rules Governing Safety Critical Positions
- Railway Signal and Traffic Control Systems Standards
- Rules for the Control and Prevention of Fires on Railway Rights-Of-Way
- Rules for the Installation, Inspection and Testing of Air Reservoirs (Other than on Locomotives)
- Rules Respecting Track Safety
- Rules Respecting Minimum Qualification Standards for Railway Employees
- Standard for LED Signal Modules at Highway/ Railway Grade Crossings
- Standards Respecting Pipeline Crossings under Railways
- Standard Respecting Railway Clearances
- Work/Rest Rules for Rail Operating Employees