



2009 Transportation in Canada

An Overview



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Her Excellency the Right Honourable Michaëlle Jean, C.C., C.M.M., C.O.M., C.D.
Governor General of Canada
Rideau Hall
1 Sussex Drive
Ottawa, Ontario
K1A 0A1

Excellency:

It is with great pleasure that I submit to your attention the Overview report on the state of transportation in Canada. This report is produced in conformity with the statutory requirements outlined in Section 52 of the *Canada Transportation Act (CTA)*. Section 52 of the CTA, amended in June 2007, calls for a brief overview of the state of transportation in Canada and for an expanded comprehensive review every five years. This Overview report is thus the third of the former.

All sectors of the transportation industry were affected by the economic slowdown in 2009. Canada's trade suffered, and passenger travel and goods movement experienced notable declines as well. However, by mid-year, Canada was renewing with economic growth, and the transportation sector was also bouncing back. Furthermore, given the significant investments made by governments to renew and further modernize the transportation infrastructure, the transportation sector is poised to respond well to the freight and travel demand.

The report presents selected highlights and developments across the main four modes of transportation and across four key domains using the most recent information available. In conjunction with its companion statistical addendum, it also allows for a better understanding of the evolution of transportation demand and of the transportation system in response to changing needs and market conditions.

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This overview report on the state of the Canadian transportation system and its statistical addendum provide relevant information for policy development, planning and program management.

Sincerely,

A handwritten signature in black ink, appearing to read "John Baird". The signature is fluid and cursive, with the first name "John" and last name "Baird" clearly distinguishable.

John Baird, P.C., M.P.

The 2009 Overview report presents a brief overview of the state of transportation in Canada using the most current information available.

The Minister of Transport has a statutory responsibility to table in Parliament, each year, a brief overview of the state of transportation in Canada and every five years, an expanded and more comprehensive review. This responsibility derives from Section 52 of the *Canada Transportation Act* (1996), as amended in June 2007, with Section 52 (1) calling for an Industry Overview in the following terms:

“Each year before the end of May, the Minister shall, using the most current information available, prepare and lay before both Houses of Parliament a report providing a brief overview of the state of transportation in Canada.”

And Section 52(2) calling for an Industry Review every five years in the following manner:

“Every five years, the report referred to in subsection (1) shall be expanded to a comprehensive review of the state of transportation in Canada which shall include

- (a) the financial performance of each mode of transportation and its contribution to the Canadian economy;*
- (b) the extent to which carriers and modes of transportation were provided resources, facilities and services at public expense;*
- (c) the extent to which carriers and modes of transportation received compensation, indirectly and directly, for the resources, facilities and services that were required to be provided as an imposed public duty;*
 - (c.1) the long term outlook and trends in transportation in Canada; and*
- (d) any other transportation matters that the Minister considers appropriate.”*

This overview report is the third such report submitted by the Minister since the coming into force of the amended Section 52 of the *Canada Transportation Act*. In producing this overview report, Transport Canada used the most current data and information available. The most current data means the most recent year for which data were available, which was not always 2009. While the scope of the report goes beyond the federal transportation responsibilities, limited attention was paid to urban and intermodal transportation matters. The overview report with its companion addendum nevertheless offers a broad coverage of Canada's transportation system.

The brief overview of the state of transportation in Canada in 2009 presents in essence selected highlights from year 2009 for each of the four modes of transportation (road, rail, marine and air) and across four domains including: the place of transportation in the economy, government spending in and revenues from transportation, safety and security in transportation and, transportation and the environment. The overview, while offering a

glimpse of key events and noticeable trends taking place in 2009 is supplemented with its traditional companion addendum. The Addendum carries relevant detailed information on a large number of areas including: employment, trade and tourism, the energy consumed in transportation and, accident and incidents statistics by mode. Addendum tables and figures also cover transportation infrastructure, the industry structure, activity levels and, performance, making for a rather complete and informative picture. Readers interested in detailed and/or time series information are invited to consult this Addendum on Transport Canada's Web site at **www.tc.gc.ca**. In addition, earlier reports and addenda are also accessible at the same address.

In one way or another, transportation is a part of all social and economic activities. Transportation opens markets to natural resources, agricultural products and manufactured goods, and it supports service industries. It also overcomes the challenges delimited by topography and geography, linking communities and reducing the effects of distances separating people from each other. Such essential roles of transportation reflect its intertwined and interdependent relationships with the economic and social fabrics of our society. But transportation needs evolve over time as circumstances and conditions change.

Changes in economic activities affect transportation demand. The changes can take place at various levels, at the regional or sectoral levels, for example. We must keep in mind that demand for transportation services originates from all sectors of the economy – that is, transportation demand is a derived demand. Changes in trade patterns and activities also affect transportation demand and they force adjustments to the supply of transportation services and to transportation infrastructure to accommodate actual and foreseeable trade-driven changes.

Most of the data used and presented in this Overview report and in the Addendum came from organizations other than Transport Canada. Such external sources bear the onus for data validation. Transport Canada devoted proper care and attention to data quality and limitations when producing this report, and used footnotes where needed to flag issues. When issues were identified, they were flagged to the “source” of the information. Given the constraint of the statutory deadlines under which this report is produced, an issue was not pursued further if the validity of the information was confirmed. In this report, it is only exceptionally that attempts to circumvent data limitations by estimating were made. The final point to signal to the reader is that the report does not attempt to present a prospective view of Canada's transportation system.

Transportation and the Economy

- In 2009, the Canadian economy recovered from a recession, which lasted three quarters starting in the last quarter of 2008. Production was lower in the first half of 2009, remained essentially unchanged during the summer months, and rose sharply in the final four months. For 2009 as a whole, the Canadian economy shrank by 2.6 per cent after growing by only 0.4 per cent in 2008.
- Growth in domestic demand slowed to 1.7 per cent, primarily due to a 17 per cent drop in investment spending. The demand for Canadian exports dropped 14 per cent following a 4.7 per cent decline in 2008.
- After starting 2009 at around U.S. \$0.83 the Canadian dollar declined against the U.S. dollar to reach a low of U.S. \$0.77 in March, rising to a high of U.S. \$0.98 in October and finally falling to around U.S. \$0.95 in December 2009. The average value of the Canadian dollar against the U.S. dollar in 2009 decreased 6.7 per cent to U.S. \$0.876.
- Overall, the consumer price index (CPI) increased by only 0.3 per cent in 2009, following a 2.3 per cent average increase in 2008. The low percentage increase in the CPI was the lowest since 1994 and reflects a 13.5 per cent decrease in energy prices in 2009. Transportation prices fell 5.4 per cent.
- Real personal disposable income per capita rose by only 0.1 per cent in 2009.
- Canada's average number of persons employed, decreased by 1.6 per cent in 2009.
- In 2009, all provinces/territories with the exception of Prince Edward Island experienced negative growth in real Gross Domestic Product (GDP). All provinces suffered due to falling exports. Newfoundland and Labrador, Saskatchewan and Alberta saw the steepest declines of over 5 per cent while Ontario and British Columbia witnessed moderate negative growth. Prince Edward Island saw a marginal economic increase and Nova Scotia, New Brunswick and Quebec had economic declines of less than or equal to one percent. Yukon had a small increase in real GDP while the Northwest Territories and Nunavut had sharp declines.
- In 2009, as a consequence of the global economic slowdown that had started in 2008, Canada's trade with the United States decreased from \$603 billion to \$456 billion, a drop of 24.4 per cent (due mainly to exports falling by 28 per cent), while trade with other countries also decreased by 15 per cent.
- Trucking accounts for carrying 59 per cent of the total value of all trade with the United States, followed by both rail and pipeline at 15 per cent each, air (6 per cent) and marine at 5 per cent.
- Close to 75 per cent of Canada-U.S. trade (by value) carried by trucks, took place at six border crossing points: Windsor/Ambassador Bridge, Fort Erie/Niagara Falls and Sarnia, in Ontario; Lacolle in Quebec; Emerson in Manitoba; and Pacific Highway in British Columbia. There were an estimated 9.8 million two-way truck movements at border points in 2009, down 15 per cent from 2008.

- In 2009, Canada had \$269 billion in trade with countries other than the United States. Of this total, \$178 billion, or 66 per cent, were imports, mostly from Asian and West European countries representing 42 and 28 per cent respectively, of Canadian imports.
- Of Canada's top 20 trade partners, in 2009 only three countries had greater trade values (both exports and imports) with Canada when compared to 2008.
- In 2009, China ranked second (\$39.7 billion) and third (\$11.2 billion), respectively, in terms of Canada's total imports and exports.
- Tourism expenditures, including those on transportation, fell 4.4 per cent in 2009. Transportation expenditures fell 9.4 per cent. In 2009, the number of Americans visiting Canada fell 9.2 per cent, the number of foreign visitors other than from the United States fell 12.5 per cent and the number of Canadians travelling outside the country fell 8.2 per cent. Overall, in 2009, total international travel to and from Canada fell 8.8 per cent.
- In 2008, transportation energy use (excluding pipelines) decreased by 0.1 per cent. The aviation sector used 2.4 per cent less energy than in 2007, rail used 4.7 per cent more and road used 0.4 per cent more. Sales of marine fuels in Canada decreased by 7.9 per cent in 2008. Pipeline energy use decreased by 21.3 per cent.
- In 2009, the annual average price of crude oil per barrel (in U.S. dollars) decreased by 37.6 per cent to \$62.55. The price of Canadian oil in Edmonton, however, decreased 35.8 per cent.
- The retail price of road gasoline and diesel decreased by 17.2 per cent and 28.4 per cent, respectively, in 2009. The price of jet fuel decreased by 44.9 per cent, marine bunker fuel by 25.5 per cent (estimated) and rail diesel by 42.0 per cent (estimated). The price decreases of road fuel were lower because a much larger proportion of those prices, compared to other fuels, is made up of fixed federal and provincial taxes that do not vary with the price of crude oil.
- In 2008, freight rail saw a decline in total factor productivity (TFP) of 3.8 per cent, reversing the trend of strong productivity gains. Air transport TFP managed a 4.3 per cent increase despite weak market conditions, particularly in the last quarter of 2008. Discounted fares and better load factors helped VIA Rail net a 6.6 per cent increase in TFP in 2008, while public transit TFP declined by 4.6 per cent in spite of increased passenger volumes. Transportation output prices were up for the most part (VIA Rail being the exception), mainly due to large increases in fuel unit costs.
- In 2009, commercial transportation services accounted for 4.1 per cent of Canada's value-added GDP. In Manitoba, Saskatchewan and British Columbia, commercial transportation represents about six per cent of the provincial GDP. Ontario accounts for 37 per cent of the total national commercial transportation activity, while Quebec and Alberta each account for close to 20 per cent and British Columbia accounts for another 18 per cent.
- Investment in transportation accounted for 2.4 per cent of Canada's GDP in 2009.
- Personal expenditures on transportation represented 8.0 per cent of final domestic demand in Canada in 2009.

Note: See tables and figures EC1 to EC76 in the Addendum for additional figures on trade, tourism, employment, energy, and performance in transportation.

Government Spending on Transportation

- In fiscal year 2008/09, all levels of government combined spent \$35.4 billion on transportation net of transfers, \$5.7 billion more than in 2007/08. Government of Canada expenditures increased by \$67 million to \$4.4 billion, provincial/territorial government expenditures rose by \$2.3 billion to \$16.2 billion and local government expenditures increased by \$3.4 billion to \$14.8 billion.
- In 2008/09, all levels of government collected \$16.2 billion in permit and licence fees, fuel taxes and other revenues from transport users, which is 2.7 per cent more than the previous year. Fuel taxes from transport rose 3.6 per cent to \$11.9 billion. Federal transport revenues other than from fuel taxes decreased 4.3 per cent to \$823 million. Provincial and territorial licences and fees increased 1.3 per cent to \$3.6 billion.
- In 2008/09, direct federal transport expenses increased by 5.5 per cent to \$2.3 billion. Expenditures relating to operations rose 7.8 per cent to \$1.1 billion. Expenditures relating to safety, security and policy activities rose 5.0 per cent to \$1.0 billion. Of the total direct transport expenses in 2008/09, Transport Canada accounted for 39.6 per cent, Fisheries and Oceans 30.8 per cent, and other federal departments and agencies 29.6 per cent.
- In 2008/09, total direct federal subsidies, grants and contributions fell 2.5 per cent to \$2.1 billion. Of this total, transit received \$731 million, followed by the highway mode at \$719 million, rail at \$308 million, marine at \$179 million, and air at \$78 million. Transport Canada accounted for \$889 million of the subsidies, grants and contributions paid in 2008/09, Infrastructure Canada accounted for \$947 million and other federal entities for \$275 million.
- Of the \$35.4 billion spent by all levels of government on transportation in 2008/09, \$25.1 billion was spent on roads, \$6.2 billion on public transit, \$1.5 billion on marine, \$919 million on air, \$387 million on rail and \$1.2 billion on multimodal and other expenses. Federal and provincial governments spent \$2.8 billion on air, marine and rail transportation.
- Provincial, territorial and local governments spent \$30.9 billion on transportation in 2008/09, 22.6 per cent more than in 2007/08. About 78 per cent of the amount was directed towards highways and roads.

Note: See tables G1 to G7 in the Addendum for additional government spending figures.

Transportation Safety

Aviation Safety:

- In 2009 there were 230 aviation accidents in Canada, 2 per cent fewer than in 2008. The accident rate (preliminary data) was 5.5 per cent per 100,000 hours flown, higher than the 2008 rate of 5.3, but below the 2004 – 2008 five-year average of 5.9 per cent. There were 64 air fatalities in 2009 compared with 46 in 2008.
- At the European Union-Canada Summit held in Prague, Czech Republic, in May, Prime Minister Stephen Harper and European Commission President José Manuel Barroso signed the Canada-European Union Agreement on Civil Aviation Safety. Under the agreement, the European Aviation Safety Agency (EASA) recognizes certification of Canadian aviation products and services, allowing Canada's aviation industry to be more competitive in the European market. Civil aviation safety will also be enhanced, as EASA and Transport Canada will work cooperatively to resolve unforeseen safety issues. A similar agreement was signed between Canada and the United States in 2000, which has had a positive impact on Canada's civil aviation industry, resulting in stronger harmonization of safety requirements. The Canada-European Union Agreement on Civil Aviation Safety has been signed by both parties and will be presented to Parliament for ratification.

Marine Safety:

- In 2009, a record low number of 323 Canadian vessel shipping accidents and accidents aboard ships were reported; down 20.5 per cent from the 2004 – 2008 average. In addition there were 66 foreign flag vessel accidents in 2009. There were 17.6 marine accidents per million vessel-kilometres (preliminary data for Canadian vessels, excluding fishing, over 15 gross tonnes), compared with the previous five-year average of 21.5 accidents per million vessel-kilometres. There were a total of 16 marine fatalities in 2009, 15 recorded by Canadian vessels. The previous five-year average for total marine fatalities was 20.8.
- The Canadian Red Cross reported 90 recreational boating fatalities in 2009. In September, Marine Safety's Office of Boating Safety commissioned the Red Cross to produce a 16-year trend report (1991 – 2006) describing the circumstances contributing to recreational boating fatalities in Canada. The report will be available in 2010. There are six million recreational boaters in Canada. In 2009, Service Canada issued over 50,000 pleasure craft licences.
- In September, it became mandatory for all operators of motorized pleasure craft to have their proof of competency in accordance with the *Competency of Operators of Pleasure Craft Regulations*.
- Funding of \$280,000 for six projects was announced under the Boating Safety Class Contribution Program. The program's goal is to promote boating safety by contributing financially to projects that advance boating safety awareness and focus on the importance of following safe boating practices.

- An advanced marine training simulator was transferred to Nova Scotia, along with federal funding to further enhance the simulator. Nova Scotia Community College is the recipient of the simulator, which will contribute to the continued regulatory training and certification of Canadian seafarers at the College's Nautical Institute in Port Hawkesbury. Nova Scotia is one of five provinces to receive federal funding under the \$7.2 million Marine Simulators Contribution Program.
- In May, Canada and 80 other International Maritime Organization (IMO) member States finalized the Hong Kong International Convention for the Safe and Environmentally Sound Recycling of Ships, 2009, which is now open for all countries to join and ratify.
- In April, proposed new *Small Vessel Regulations* were introduced to better regulate the safety of small vessels and improve public safety.
- A Ministerial Order outlining criteria for determining classes of minor works and minor waterways under the *Navigable Waters Protection Act* (NWPA) was published in the *Canada Gazette*, Part I on May 9, 2009. Changes to the *Act*, include enforcement and continuing-offence provisions, and new inspection powers. It also provides authority to establish fines from \$5,000 to \$50,000.
- To better protect Canadian Arctic waters from ship-source pollution, an *Act to amend the Arctic Waters Pollution Prevention Act* came into force in August. This extends Canada's Arctic waters and allows Canada to exercise greater control over these waters.
- Proposed amendments to the *Vessel Operation Restriction Regulations* published in the *Canada Gazette*, Part I on October 10, 2009 will improve safety and protect the environment by restricting vessel navigation on select waterways.
- The tabling in Parliament of nine International Conventions related to the well-being of individuals, safety and environmental issues in the marine sector was announced in October. These will reduce air and water pollution from ships, maintain biodiversity and ensure the safety of vessels, goods and workers on board.
- Proposed regulations to improve marine safety and security were announced. The *Long-Range Identification and Tracking of Vessels Regulations* will enable Canada to adopt an international shipping requirement that mandates tracking systems aboard certain classes of vessels.
- Proposed new *Fire and Boat Drills Regulations* published in the *Canada Gazette*, Part I on October 10, 2009 will enhance safety and better ensure that passengers and crew of vessels understand what to do during emergencies.
- In March, regulations amending the *Atlantic Pilotage Authority Regulations* came into force. These will help protect the waters surrounding Saint John, New Brunswick, and Placentia Bay, Newfoundland and Labrador.
- Regulatory amendments to enable the Great Lakes Pilotage Authority to adjust its tariff rates and maintain safe and efficient pilotage services in the Great Lakes were announced in October.

Rail Safety:

- There were 1,038 reported rail accidents and 71 rail fatalities for federally regulated railways in 2009, 13.8 and 4.2 per cent fewer, respectively, than in 2008.
- In *Budget 2009*, \$28 million was provided over the next five years to further enhance safety at grade crossings. Another \$3.8 million for the Grade Crossing Improvement Program was invested to support 35 additional crossing improvement projects.

- In *Budget 2009*, another \$43.4 million was provided over the next five years for new rail safety initiatives. A total of \$2.4 million was invested in 2009/10 alone to hire additional rail safety inspectors, purchase new track assessment vehicles and research new rail safety technologies.
- In December, the Minister announced more than \$1.7 million to renew support for Operation Lifesaver, a national program that reduces railway-related deaths and injuries and provides vital rail safety information to the public.

Road Safety:

- The estimated statistics for road casualty collisions (2008) show a decrease of 9.1 per cent from 2007, with the number of fatalities decreasing 12.2 per cent and the number of injuries dropping 7.9 per cent.
- Of the estimated 2,425 fatalities in 2008, speeding was cited as a contributing factor in 23 per cent. To help reduce this number, several jurisdictions have introduced serious penalties (including heavy fines and vehicle impoundment for street racing or traveling 50 kilometers per hour or more above the speed limit).
- A new safety regulation was proposed, requiring that Electronic Stability Control (ESC) be installed as standard equipment on all light-duty vehicles sold in Canada, beginning September 2011. ESC technology helps drivers maintain control of their vehicle in emergency manoeuvres (swerving or braking to avoid an obstacle) and cornering on slippery surfaces.
- In *Budget 2009*, the Government committed to an accelerated investment program to provide \$250 million, over two years, to modernize federal laboratories including the vehicle test centre in Blainville, Québec.

Transportation of Dangerous Goods:

- There are 30 million shipments of dangerous goods each year — more than half by road. In 2009 there were 396 accidents involving the transportation of dangerous goods, one per cent less than in 2008. Twelve injuries or death were directly attributable to the dangerous goods themselves. Accidents occurred more than twice as often during loading or unloading as during transport.

Transportation Security

- *Budget 2009* announced new funding of \$355 million to strengthen aviation security, including measures to improve Canadian Air Transport Security Authority operations; new advanced and internationally-compatible screening equipment and other technology; and training for the screening workforce to increase levels of security and efficiency. Also included was \$2.9 million to support the initiation of airport security plans.
- Following an attempted terrorist attack on a Delta Airlines flight from Amsterdam to Detroit on December 25, 2009, the Government of Canada announced that full-body screening technology will be installed at major Canadian airports. The Government also issued a Request for Proposal for passenger-behaviour observation for passenger screening at major airports.

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- In *Budget 2009*, Transport Canada received \$11.4 million to implement priority initiatives to enhance the Air Cargo Security Program through the development of an enhanced regulatory regime, the assessment and introduction of new screening technology and the strengthening of our relationship with the United States and key international partners.
 - An *Act to Amend the Transportation of Dangerous Goods Act, 1992*, received royal assent and came into force in June. The *Act* introduces security provisions for the transportation of dangerous goods, including reinforcing the Emergency Response Assistance Program to equally address responses to security incidents and accidents involving transportation of dangerous goods. The amendment enables development of a program to require transportation security clearances for dangerous goods, and adding a requirement for security plans and security training.
 - The *Transit Secure Contribution Program* ended in March. The program enhanced the security of rail and transit operations through \$64 million in funding for 117 projects including investment in: surveillance technologies, access control measures, communications equipment, security plans, a security coordination centre, training, public awareness and signage. Security plans and risk assessments of operator facilities accounted for over \$3 million.
 - The Coastal Marine Security Operations Centres started operating in the fall, further enhancing Canada's ability to detect, assess and support a response to any threat to marine security. Implementation of the Great Lakes Marine Security Operations Centre continues as planned.
 - The Marine Event Response Protocol was developed and adopted as an Annex to the Federal Emergency Response Plan. The protocol is a means of coordinating a whole of Government response to an emerging or occurring significant marine event.
 - The *Domestic Ferries Security Regulations* were registered in December, and brought into force. These regulations are designed to increase the level of protection for 18 domestic ferry routes and 29 ferry facilities across the country.
 - Transport Canada continued to develop its Maritime Commerce Resumption strategy, including a pilot project with Port Metro Vancouver and maritime partners in British Columbia. This has helped prepare the maritime community and Government officials to coordinate and execute a swift, effective recovery in the event of a man-made or natural disaster involving significant disruptions to maritime commerce.

Note: See tables and figures S1 to S24 in the Addendum for additional transportation safety and security figures.

Transportation and the Environment

- The transportation sector is the second largest source of greenhouse gas (GHG) emissions in Canada, trailing only stationary sources, with a share of 27 per cent of total emissions in 2007. Between 2000 and 2007, transportation emissions grew at an average of 1.6 per cent per year (from 178 megatonnes (Mt) to 200 Mt), while total GHG emissions grew at a rate of 0.6 per cent per year, from 717 Mt to 747 Mt.
- The growth in transportation GHG emissions can be attributed to: increased passenger and freight activity; a shift of activity towards more GHG intensive modes of transportation; and a continuing predominance of carbon intensive fuels.
- Passenger and freight activity (as measured by passenger and tonne kilometres) increased on average by 2.1 and 2.7 per cent per year, respectively, from 2000 to 2007. However, improvements in efficiency for both passenger and freight transportation have helped mitigate the impact of this growth on GHG emissions. As a result, passenger and freight related emissions grew by only 1.2 and 2.4 per cent on average respectively during the same period.
- While GHG emissions from the transportation sector continue to increase, air pollution emissions, such as fine particulate matter, sulphur oxides, nitrogen oxides and volatile organic compounds, have shown a steady decline due to regulatory initiatives and vehicle fleet renewal. There can be some trade-offs between reducing GHG emissions and reducing or keeping other air pollution emissions low.
- In April 2009, the government committed to developing regulations to limit GHG emissions from new cars and light trucks beginning with the 2011 model year under the *Canadian Environmental Protection Act, 1999* to align with U.S. national standards. On December 7, 2009, Environment Canada released a consultation draft of the GHG regulations for input from provinces, territories and stakeholders.
- In 2009, Transport Canada continued its research and development (R&D) work with key partners in industry, academia and government for the advancement of electric drive transportation and urban transportation vehicle technology. The urban transportation R&D program includes surface transportation such as transit and shuttle buses, medium and heavy-duty fleet vehicles, as well as passenger fleet vehicles.
- The Government of Canada has continued to support the current Memorandum of Understanding (MOU) with the Railway Association of Canada (RAC) to reduce emissions. In February 2009, the *2007 Annual Report on the Locomotive Emissions Monitoring Program* was released, summarizing the progress made under the MOU.
- Pursuant to a 2006 Notice of Intent, Transport Canada will “develop and implement new regulations, under the *Railway Safety Act*”. In 2009, this development process continued. Transport Canada intends to develop regulations that will take effect in 2011 after the current voluntary agreement with RAC expires in 2010.
- Transport Canada continued its collaboration with the aviation sector through the 2005 voluntary MOU to limit or reduce GHG emissions from aviation in Canada. The MOU sets out a fuel efficiency improvement goal of 1.1 per cent per year, with a cumulative improvement of 24 per cent by 2012, compared to the 1990 base case scenario. In summer 2009, the *2007 Annual Report on the Reduction of Greenhouse Gas Emissions* was released, summarizing the progress made under the MOU.

- Internationally, air pollutants from ships are regulated under Annex VI to the International Convention for the Prevention of Pollution From Ships (MARPOL) administered through the International Maritime Organization (IMO). In October 2008, Annex VI was revised to bring in tighter controls on global air emissions from marine shipping. These controls are expected to come into force in July 2010. Canada is not yet a Party to Annex VI, however the government is working towards ratification, with completion of Parliamentary consultations in November 2009.
- On April 9, 2009, Transport Canada and Environment Canada announced support for a joint Canada-U.S. proposal to the IMO to establish an Emission Control Area (ECA) in North American coastal waters requiring ships to use low sulphur distillate fuel (of 1 per cent sulphur by 2012 and 0.1 per cent by 2015) when they are within 200 nautical miles of the coast. This proposed ECA Control Area was joined by France, for the waters of St. Pierre and Miquelon, and is expected to be approved by the Parties to Annex VI in March 2010. Canadian regulations to implement the revised Annex VI and the ECA are under development through 2010 and 2011. The regulations are expected to help reduce air pollution, smog and acid rain and benefit human health in coastal areas and further inland.
- Concerning greenhouse gases from marine shipping, the Government of Canada will be working domestically and through IMO to implement new technical measures, requiring reductions in GHG emissions from ships and improving energy efficiency. In July 2009, the IMO developed interim technical standards that provide a uniform measure of ships' energy efficiency and GHG emissions. Canadian regulations to implement these measures will be developed through 2010 and 2011.
- Throughout 2009, Canada worked through the International Civil Aviation Organization (ICAO) to develop a Program of Action for GHG reductions for international aviation. An ICAO high-level meeting endorsed the Program of Action in October. The program includes a global goal of 2 per cent annual fuel-efficiency improvement to 2050, the development of emission standards for new aircraft types, and the development of a basket of measures that could be used by states to reduce GHG emissions, including technology development, improved air-traffic management and infrastructure use, more efficient operations and economic/market-based measures.
- Transport Canada has continued to lead the update and expansion of the ICAO's *Circular 303 on Operational Opportunities to Minimize Fuel Use and Reduce Emissions* into a new ICAO manual. Four of the original chapters of the *ICAO Circular* have been updated, including extensive revisions to the chapters dealing with air-traffic management and airport operations. Transport Canada will continue to work with ICAO in the development of the new manual, expected to be published in 2011.
- Transport Canada continued to work collaboratively with the Canadian Airports Council to develop and refine a tool and methodology to establish Airport Emissions Management Plans at Canadian airports. GHG emissions inventories have been compiled for most of the major airports. Transport Canada will work with the Canadian Airports Council to identify and implement opportunities for emissions reductions at airports.

Note: See figures EN1 to EN6 in the Addendum for additional information.

Rail Transportation

- In 2008, the Canadian railways carried a total of 331.4 million tonnes of freight. Historically, this is the worst year since 1998 in terms of volume.
- Rail intermodal traffic, in spite of a sharp decline in 2008, continued to show strong growth with an average annual growth rate (AAGR) of 4.33 per cent from 1999 – 2008. Marine imports drove this growth with an AAGR of 6.47 per cent.
- In 2009, Canadian National (CN) and Canadian Pacific Railway (CPR) combined, spent over \$2.1 billion on capital programs for track, signals, sidings, locomotives and railcars.
- In 2009, VIA Rail experienced a 10 per cent decrease in passenger-miles and a 3.6 per cent decrease in the average fare, resulting in a 12 per cent decrease in passenger revenues.
- The 13 commuter rail lines operating in Montreal, Toronto and Vancouver handled 64.9 million passengers in 2008, an increase of 6 per cent over the 2007 level.
- Based on a two-phase approach, the Rail Freight Service Review, launched in 2008, intends to identify ways to improve the efficiency, effectiveness, and reliability of the rail-based logistics system in Canada. As part of phase I, analytical work continued in 2009 to achieve a better understanding of the nature and extent of service-related problems within the logistics chain, with a focus on railway performance. On September 23, 2009, as part of phase II of the Review, the Minister of State (Transport) announced the appointment of a panel of three eminent persons that, in consultation with interested stakeholders, will produce recommendations to address problems and issues with respect to service within the rail-based logistics system. The Panel is aiming to submit its report in the fall of 2010.
- On January 30, 2009, the Canadian Transportation Agency announced that it would issue a certificate of fitness to the Great Sandhills Terminal Ltd., allowing it to operate a federally-regulated shortline railway from Burstall, Saskatchewan to McNeill, Alberta. The Great Sandhill Terminal Ltd. purchased the line from Canadian Pacific Railway to assist in the operation of its terminal facilities.
- On February 1, 2009, Canadian National (CN) announced that it had completed the acquisition of the principal lines of the Elgin, Joliet and Eastern Railway Company. It is expected that this purchase will streamline CN's rail operations around the city of Chicago.
- In July 2009, Transport Canada, the rail industry and academic partners reconstituted the Railway Research Advisory Board to optimize collaboration and create synergy in railway research and development (R&D) programs. Strategic priority areas that have been identified include: grade crossings, harsh and changing environments, infrastructure, emerging technologies, energy and environment, and outreach and technology transfer.

- On November 28, 2009, 1,700 CN locomotive engineers, represented by the Teamsters Canada Rail Conference, went on a five-day strike. Given the concerns about the serious impact that the strike could have had on Canada's economic recovery, the Minister of Labour introduced legislation on November 30, 2009, to end the strike and establish a neutral arbitration process to finalize the terms of a new collective agreement. On December 2, 2009, the Teamsters Canada Rail Conference and CN agreed to binding arbitration to resolve outstanding issues, and the locomotive engineers returned to work.
- As part of Budget 2009 — Canada's Economic Action Plan, the Government of Canada provided VIA Rail with \$407 million in stimulus funding that has been made available for three years and will be spent largely on infrastructure, stations and equipment. A major portion of this funding will be used to install sections of a third main-line track between Toronto and Montreal. By creating sections of separate freight and passenger tracks, VIA trains will be able to pass slower-moving CN freight trains, which will ultimately lead to a decrease in travel times within the Quebec City-Windsor Corridor and help ensure the long-term financial sustainability of inter-city passenger rail services in Canada.
- In 2007, the Government of Canada provided VIA Rail with \$516 million in new capital funding over five years. The funding will be spent on equipment and infrastructure projects designed to sustain existing services by improving on-time performance, reducing travel times and adding frequencies. In 2009, VIA Rail began upgrading its tracks, signalling systems and crossing protection between Ottawa and Brockville and Chatham and Windsor. The corporation also undertook improvements to certain stations across the network and received the first eight of 53 F-40 locomotives to be rebuilt.
- In 2008, the governments of Ontario, Quebec and Canada jointly agreed to provide \$1 million each to update studies completed between 1992 and 1995 on the technical and economic feasibility of high-speed rail service in the Quebec City-Windsor Corridor.
- In 2008, the railway industry in Canada employed 34,392 people, a slight increase of 0.3 per cent compared to 2007, though approximately 11,000 less than 10 years previously.
- Over 40 shortline and regional railways operate in Canada. In 2008, they accounted for 22 per cent of the total kilometres of track and \$619 million in revenues.
- From 1999 – 2008, rail-sector revenues grew at an average yearly rate of 4 per cent with Class I railway companies experiencing an AAGR of about 4.75 per cent during the same period. A decline in shortline revenue growth was due largely to the transfer of some major shortlines and regional railways to Class I control in recent years. Class I railways now account for 94.37 per cent of rail sector revenues.

Note: See tables RA1 to RA31 in the Addendum for additional figures in rail transportation.

Road Transportation

- In 2009, the value of Canada-U.S. trade (inbound and outbound) decreased more than 24 per cent. Close to 60 per cent of this trade was shipped by trucks (\$270 billion) and near 80 per cent of Canada-U.S. total road-based trade passed through Ontario and Quebec border crossings with the United States.
- In 2009, traffic (both cars and trucks) crossing the Canada-U.S. border decreased by 9.2 per cent and 15.4 per cent, respectively.
- In 2009, both the value of the trade and the level of truck activity at the Windsor-Ambassador Bridge decreased 21 per cent. Eighteen of the 20 largest border crossings recorded lower truck traffic from the previous year.
- The average cost of road diesel for commercial users decreased by 28 per cent in 2009. The number of trucking bankruptcies decreased by more than 30 per cent compared to 2008.
- All four of the large Canadian publicly-traded, for-hire trucking companies (TransForce, Mullen, Vitran and Contrans) reported significant declines in revenues in 2009 as compared with 2008, ranging from 13 per cent to 26 per cent.
- The quarterly reports for these four carriers demonstrate some of the strategies used to contain costs to compensate for declining revenues. For example, one carrier reduced its contractor (owner-operator) expenses by over 37 per cent in the first three quarters of 2009 as compared with 2008. Another reported a reduction of 14 per cent in employees and owner-operators, and 9 per cent in tractors and trailers.
- In 2008, the operating revenues of for-hire motor carriers of freight with annual revenues of \$30,000 or more, were estimated at \$33.8 billion, an increase of 5.2 per cent. Carriers with annual revenues of \$25 million or more accounted for approximately 25 per cent of these revenues.
- In 2008, Canadian for-hire carriers drove 221.7 billion tonne-kilometres, down 1.4 per cent from 2007. Roughly 129.6 billion tonne-kilometres (59 per cent) were carried in the domestic sector and 92.1 billion tonne-kilometres in the international sector.
- In August 2009, turnpike-double configuration trucks began to operate in Ontario under the one-year pilot program for long combination vehicles (LCVs) that was announced by the Ontario Government in April 2009. The turnpike-double, a single truck tractor hauling two regular 53-foot trailers, is perceived to be efficient for hauling low-density freight. The only jurisdictions not yet allowing LCVs on parts of their road network are Prince Edward Island and, Newfoundland and Labrador and Nunavut.
- At the beginning of September 2009, Greyhound Canada, the largest intercity bus operator in Canada, announced that it would cease all service in Manitoba in 30 days, and all service between Sault Ste. Marie and the Manitoba border in 90 days. Subsequently, Greyhound delayed implementation, pending discussions with the two provinces and the outcome of discussions among jurisdictions.

- In November 2009, Acadian Lines (part of Groupe Orléans) applied to the regulatory bodies in Nova Scotia and New Brunswick to make service changes that included both service reductions and abandonments and increased services on main interurban routes in both provinces.
- Responding to concerns about the future of intercity bus service, the Council of Ministers Responsible for Transportation and Highway Safety established a national Task Force on Intercity Bus Services to report to transportation ministers in the fall of 2010.
- Canada-U.S. bus travel accounted for 1.6 million passengers in 2009, down 22 per cent from 2008. Canada-U.S. bus travel by Canadian residents was particularly affected, declining 26 per cent.
- In 2008, bus industry revenues (including government contributions) were estimated at \$11.4 billion, an increase of 11.2 per cent. Urban transit sector accounted for 72 per cent of total bus industry revenues, including government contributions.
- The motor vehicle fleet (as of 2008) was divided between 19.4 million cars, light trucks and vans; and 730,000 heavy trucks (gross weight of at least 4.5 tonnes). The light vehicle fleet drove 295 billion kilometres, a decline of about 2 per cent from 2007, while the heavy truck fleet completed 31 billion kilometres (down 2.5 per cent from 2007).
- In 2008/09, governments collectively invested nearly \$3.3 billion in the National Highway System, a highway network of over 38,000 kilometres.
- The governments of Canada, the United States, Ontario and Michigan have moved forward with the Detroit River International Crossing project. The modern, secure and efficient border crossing will consist of a new six-lane bridge, providing three Canada-bound lanes and three U.S.-bound lanes across the Detroit River, modern border inspection plazas and direct freeway access in both Ontario and Michigan. The crossing proposal at Windsor-Detroit has received all necessary environmental clearances from agencies on both sides of the border, including the Record of Decision under the *U.S. National Environmental Policy Act (NEPA)*, approval under the *Ontario Environmental Assessment Act (OEAA)* and approval under the *Canadian Environmental Assessment Act (CEAA)*.
- Budget 2008 announced that the Gas Tax Fund (GTF) would become a permanent measure, at \$2 billion per year beyond 2013/14. A significant proportion of the GTF has been spent on transit in many provinces, amounting to 31 per cent overall in 2007/08 and approximately 29 per cent (or \$228 million) in 2008/09. Some major areas, notably Toronto, Calgary, Edmonton and Vancouver, apply virtually all of their GTF allotments to improve public transit infrastructure.
- Federal funding for transit infrastructure has increased significantly in recent years reaching \$730 million in 2008/09.
- More Canadians are using urban transit transportation. In 2008 ridership increased by 3.6 per cent. Urban transit operators reported 1.83 billion trips in 2008 compared to 1.77 billion in 2007.

Note: See tables and figures RO1 to RO28 in the Addendum for additional figures in road transportation.

Marine Transportation

- On June 23, 2009, Bill C-7 an *Act to Amend the Marine Liability Act* received Royal Assent. The amendments enhanced various aspects of the *Marine Liability Act*'s liability and compensation regimes for maritime transport incidents; clarified rules governing the liability of owners and operators in the marine adventure tourism sector; and made other enhancements to Canadian maritime law, including the creation of a new maritime lien for Canadian businesses that supply foreign registered ships.
- On October 2, 2009, Canada ratified the *Supplementary Fund Protocol of 2003 to the 1992 International Oil Pollution Compensation Fund and the International Convention on Civil Liability for Bunker Oil Pollution Damage, 2001* (Bunkers Convention), which came into force on January 2, 2010. These conventions, which were implemented by Bill C-7, significantly enhanced the existing liability and compensation regimes for pollution damages from ships.
- The 1997 Canada-China Agreement on Maritime Transport was updated by a protocol that was ratified and entered into force on December 12, 2009. This new protocol updates provisions of the 1997 agreement dealing with maritime security and the transport of dangerous goods. The protocol also encourages cooperation between the maritime authorities, industries and maritime services providers of Canada and China.
- The Gateway Performance Table was launched in 2008 to systematically examine the ongoing and future competitiveness of the Asia-Pacific Gateway as a supply chain portal linking North America and Asia. Table participants comprise a cross-section of major transportation, shipping and labour interests operating in the Lower Mainland of British Columbia. The report of the Gateway Performance Table will be finalized in early 2010.
- As a result of a mandatory review clause contained in federal regulations passed in 2007, a review of the *Vancouver Container Trucking Regulations* (section 31.1 of the *Port Authorities Operations Regulations*) was conducted in 2009. The Minister approved the *Report of the Regulatory Review* in September 2009, at which time it was made public. While the review recommended no change to the existing regulation, it did recommend a number of actions to increase monitoring, data collection and reporting, as well as enhanced communications among the key players in the regulatory regime.
- In its second full year of operation, the Prince Rupert Port Authority's Fairview Container Terminal handled 265,259 twenty-foot equivalent units (TEUs) in 2009, up 46 per cent from 2008. This utilization for 2009 represents approximately 55 per cent of the annual throughput capacity of the Fairview Terminal. The Prince Rupert Port Authority is currently conducting an environmental assessment for the second phase of the terminal.
- In 2009, Ridley Terminals Inc. (RTI), a Crown corporation operating bulk commodity facilities at the Port of Prince Rupert, handled approximately 3.95 million tonnes of cargo, down from 4.8 million tonnes in 2008. RTI reported an operating profit for the third consecutive year.
- The Minister of Transport, Infrastructure and Communities issued supplementary letters patent to the Belledune Port Authority, increasing its borrowing limit to \$32 million in order to pursue four capital expansion projects at the M.D. Young Terminal facilities.

These projects will allow the Port to increase current capacity and diversify operations to generate new revenue streams. Additional funding in the amount of \$26 million was received under the Infrastructure Stimulus Fund for this purpose.

- Marine Atlantic Inc. saw its revenues increase in 2008/09 to \$83 million. Commercial traffic is largely responsible for this increase with a growth of three per cent in commercially-related traffic with 92,612 vehicles. On the other hand, passengers and passenger-related traffic declined by eight per cent. Marine Atlantic Inc.'s cost recovery performance was approximately 58 per cent.
- Marine Atlantic's new vessel, MV Atlantic Vision, began its service on March 31, 2009. This vessel, the largest in Marine Atlantic's fleet, allowed the corporation to improve its on-time performance during the high peak summer season. The Government recently dedicated \$12.5 million in funding to Marine Atlantic Inc. for shore-based priority projects under the Infrastructure Stimulus Fund.
- In 2009, the St. Lawrence Seaway handled an estimated 30.5 million tonnes of cargo, representing a 25.3 per cent decrease in volume compared to 2008. While traffic in grain increased in 2009, other cargo types experienced significant decreases. In 2008/09, the St. Lawrence Seaway generated \$71.0 million in revenues from tolls and other sources and had operating expenses of \$65.2 million. Expenditures for asset renewal totalled \$48.2 million.
- With the assistance of federal funding for shortsea shipping announced in 2008, Southern Railway of British Columbia constructed a rail barge ramp on Annacis Island in Delta. This new marine-rail terminal, which is capable of handling railcars and truck trailers, will help alleviate traffic congestion, reduce greenhouse gas emissions and increase overall transportation efficiency in British Columbia.
- Throughout 2009, Transport Canada maintained its support for shortsea shipping through initiatives to feature marine transportation in the Ontario-Quebec and Atlantic gateway and trade corridor initiatives; through ongoing participation in the Quebec Shortsea Shipping Roundtable; and by establishing a Trilateral Working Group on Shortsea Shipping with the United States and Mexico to discuss potential opportunities to jointly address impediments to shortsea shipping.
- In 2008, the 17 Canadian Port Authorities (CPAs) handled 54 per cent of Canada's total port traffic (246 million tonnes). Operating revenues were \$386 million (up 6.7 per cent from 2007). Operating expenses were \$227 million (up 7 per cent) for an average operating expenditures to operating revenues ratio of 58.8 per cent. Vancouver and Montreal accounted for 59.3 per cent of CPA revenues. Gross revenue charges paid by CPAs to the Government totaled \$13 million. Their aggregate net income was \$70 million in 2008, a 4 per cent decline from 2007. The CPAs spent \$196 million on capital projects in 2008 and overall return on assets was 3.1 per cent.
- In 2008, marine freight traffic was estimated at 391.4 million tonnes, including 66 million tonnes in domestic flows, 120.4 million tonnes in transborder traffic and 205 million tonnes in other international traffic. Marine transportation services handled \$195.2 billion in international trade in 2008: \$99.0 billion in imports and \$96.2 billion in exports.

Note: See tables M1 to M29 in the Addendum for additional figures in marine transportation.

Air Transportation

- Demand for air services stayed soft in 2009 due to the recession. Air carriers responded with cost and service reductions and realignments, and frequent seat-sales for passengers that generated revenue but reduced overall profitability. Receding world oil prices and a stronger Canadian dollar combined to provide some relief from U.S.-dollar-denominated expenses, notably fuel. A failed Christmas Day airliner-bombing attempt¹ resulted in heightened security measures, undermining a fragile recovery in demand conditions that had started at year-end.
- Impacts from the recession compelled Air Canada to draw a \$600 million collateral-backed loan in order to address financial liquidity issues. The loan was provided only after Air Canada renegotiated lower cash float requirements from its credit card processors, and secured (until April 2011) labour-cost stability and a pension-funding moratorium on past deficit-servicing obligations. Despite the benefit of lower operating expenses on the strength of the Canadian dollar and lower fuel prices, lower average fares and revenue resulted in Air Canada reporting a net loss for 2009.
- The recession also impacted WestJet, which renegotiated its receipt of 16 previously ordered aircraft, while committing to take delivery of an additional 14. WestJet also replaced its reservations system with SABRE, one of three global distribution systems. Despite the recession, WestJet was profitable, albeit marginally, throughout 2009 due also to lower average fares and revenue.
- Porter Airlines grew substantially serving 12 cities in total. Porter has introduced new services to St. John's, Thunder Bay and Boston; and expanded services to Halifax and Ottawa; with a fleet that more than doubled in number (15 Canadian-made Bombardier 70-seat Q400 aircraft in 2009, compared to six in 2008) and staff numbering 800 in 2009 compared to 400 in 2008.
- Eleven air carriers² competed in Canada's North, including WestJet, which began daily scheduled service in May between Edmonton and Yellowknife; and Yellowknife-based Canadian North, which in response to the weak economy, low pricing climate and overcapacity, adjusted its service level to and from Edmonton, and withdrew from serving Hay River and Calgary.
- Foreign air carriers that ceased operating to and from Canada in 2009 included Flyglobespan, Olympic Airways, Czech Airlines, Aeroflot and Singapore Airlines.
- In April, Conquest Vacations, founded in 1972, ceased operating, citing overcapacity and the recession, affecting charter air carriers such as CanJet and Skyservice. In September, Sunwing Travel Group, the corporate parent of Sunwing Airlines, and TUI Travel PLC, proposed to amalgamate their respective Canadian tour operations, including Sunwing Vacations, Signature Vacations and its retail division, SellOffVacations. (This transaction was completed in early 2010.)

1 The new security measures, including stricter security checks, carry-on baggage limitations and new on-board rules, were introduced after a failed attempt by a Nigerian to ignite a concealed explosive in an apparent al-Qaida linked terrorist attack aboard Northwest Airlines' flight 253 on final approach to Detroit on December 25, 2009.

2 First Air, Canadian North, Air North, Jazz, Aklak Air, Kenn Borek Air, Buffalo Airways, Arctic Sunwest, Air Tindi, North-Wright Airways, WestJet.

- Passenger traffic at Canadian airports decreased 5.3 per cent in 2009, to a total in excess of 101,000,000 enplaned and deplaned passengers. An estimated 102,417,166 passengers were enplaned and deplaned during 2009. Domestic, Canada-U.S. and other international traffic decreased year-over-year by 6.9 per cent, 5.5 per cent and 0.9 per cent, respectively.
- Canada's trade in air cargo services decreased with other countries by 7.8 per cent. On a value basis, gold, aircraft and medicine were the three most important commodities moved by air.
- In terms of efforts to liberalize its international air services, Canada concluded Open Skies-type agreements with South Korea and Costa Rica; expanded agreements with Japan, Cuba, and Morocco; and new "first-time" agreements with Turkey and South Africa. An historic comprehensive air transport agreement with the European Union and its 27 Member States was signed in December 2009, effectively representing 27 "open" bilateral agreements and including Cyprus, Estonia, Latvia, Lithuania, Luxembourg, Malta, Slovakia and Slovenia, countries with which Canada did not previously have air agreements.
- Pursuant to Canada's bilateral air services agreements, several air carriers announced new or expanded international air services, including a new service by Turkish Airlines to Toronto, new and expanded services by WestJet to Bahamas, Turks and Caicos, Mexico, and the United States, and a new Air Canada Calgary-Tokyo service.
- The 93 Canadian airports with a NAV Canada tower or flight service station reported 6.0 million movements in 2009, a 5 per cent decrease over the previous year. Itinerant movements were down 4 per cent while local movements were down 7 per cent.
- Itinerant general aviation movements decreased 6 per cent at airports with a NAV Canada tower or flight service station, accounting for 19.4 per cent of all movements at these airports, compared to 19.6 per cent a year earlier.
- In 2009, airports across Canada received an estimated \$21.8M to fund 38 new projects under the federal Airports Capital Assistance Program (ACAP).
- In 2008, the National Airports System (NAS) airport authorities' earned revenues of \$2.7 billion, a 4 per cent increase from 2007. The airport authorities in Toronto, Montreal and Vancouver accounted for 71 per cent of these revenues. Revenues from Airport Improvement Fees (for airport infrastructure) yielded \$713 million in 2008, up nearly 6 per cent from 2007 (they are estimated at \$706 million for 2009).
- Airport operating expenses and amortization increased 4.7 per cent to \$1.6 billion and interest charges on airport authorities' debt rose 3 per cent to \$637 million. Airport rent paid to the Government of Canada decreased by 4 per cent to \$275 million.
- The aggregate net income for all airport authorities increased 12 per cent to \$204 million in 2008.
- Total capital expenditures by NAS airport authorities in 2008 amounted to \$1.3 billion, up eighteen per cent from 2007.

Note: See tables A1 to A25 in the Addendum for additional figures in air transportation.

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