



Railway Association
of Canada

RAC QUARTERLY REPORT Q1-2023



May 26, 2023

Contents

Introduction	3
Executive Summary.....	3
Freight Rail.....	3
Passenger Rail.....	4
Rail Safety	4
State of the Canadian Economy.....	5
Economic Outlook	6
Rail and Other Modes of Freight Transportation.....	7
Class 1 Data.....	9
Weekly Trend.....	9
Revenues, Revenue Ton-miles, and Carloads.....	9
Select Key Financial and Operating Metrics	11
Freight Industry Data	13
Carloads & Intermodal Units	13
Freight Rates.....	15
Exports.....	15
Supply Chains	18
Global.....	18
Canadian Ports.....	19
Canadian Railways	20
Passenger Rail Data.....	21
RAC Member Ridership	21
Urban Transportation	21
Tourism Rail	22
Intercity Passenger Rail	23
Rail Safety Data	25
Federal Railroad Administration Safety Data	25
Transportation Safety Board Data.....	26



Introduction

The Railway Association of Canada's (RAC) Quarterly Report compiles weekly, monthly, and quarterly data from railways and various statistical and regulatory agencies to provide a timely update on the state of the economy, the transportation sector, and freight and passenger rail operations.¹ Links to all data sources are included throughout the report. In addition, RAC's quarterly and annual reports can be accessed on the [RAC website](#).

Starting in this report and moving forward, the Class 1 freight data include CN and the combined CPKC data.² The combined CPKC data go back to Q1-20, which enables year-over-year comparisons. CPKC states that "The Selected Unaudited Combined Summary of Historical Data is provided on a voluntary basis for illustrative purposes only and does not purport to represent what the actual consolidated results of operations, revenue performance, or operating performance would have been had CPRL had control of KCS and consolidation actually had occurred for the periods presented."³

Executive Summary

Freight Rail

Strong traffic across all commodities, except intermodal.

In the first quarter of 2023, rail traffic in Canada was much stronger than in the U.S. The American Association of Railroads (AAR) reported that across the first 13 weeks of the year, U.S. traffic was down 5.6%, while Canadian traffic was up 2.0%. Statistics Canada noted that February 2023 marked the 6th consecutive month of year-over-year declines in freight traffic coming up from the U.S.

In the first quarter of 2023, Class 1 freight traffic (CN and CPKC, network-wide), measured using revenue-ton miles (RTMs), was up by 7% compared to the same period last year. Carloads, RTMs, and freight revenues were up for all commodities except intermodal. Two commodities experienced double-digit year-over-year RTM growth, including grain & fertilizers (+21%) and metals & minerals (+12%). In fact, in Q1-23, several records for grain shipments were achieved – the result of effective planning, collaboration, operational efficiency, and significant investments. In terms of performance, seven out of ten key financial and operating metrics improved compared to the same period last year.

After increasing more than seven-fold during the pandemic, global container prices have finally returned to pre-pandemic levels. Global marine vessel delays and on-time performance continued to improve – on-time performance in Q1-23 was 58.4%, compared to 33.5% a year earlier. However, container import dwell at the Port of Vancouver reached a high of 8.9 days in January 2023. Port of Vancouver Q1-23 dwell times averaged 7.5 days, which was 18% longer than dwell in Q1-22 and 81% longer than in Q1-21. Container import dwell at the Port of Montreal averaged 4.2 days, which was 26% shorter than Q1-22, but also 26% longer than Q1-21. Railway terminal (yard) dwell times averaged 9.0 hours in Q1-23, which is 9% shorter than in Q1-22 and 3% shorter than in Q1-21.

¹ Much of the data in this report are measured against the same period in previous years, for year-over-year comparisons' sake. However, in some cases, data are compared to earlier periods to provide context relative to pre-pandemic activity levels.

² [Canadian Pacific Kansas City Limited, Selected Unaudited Combined Summary of Historical Data](#).

³ Ibid., p.3



In 2022, high fuel costs contributed to overall inflation and impacted transportation costs; however, prices have eased, and most price indices were relatively flat over the past few months (December 2022 to March 2023). Rail freight rates, commodity prices, and industrial prices decreased by 1.9%, 1.2%, and 0.2%, respectively. The latest month of comparable data for rail and truck freight rates – December 2022 – indicates that, since the onset of the pandemic, trucking prices have increased at a more rapid pace than rail freight rates (30.2% vs 22.3%).

On a year-to-date (YTD) basis (January-February), the number of non-intermodal carloads originated by Canadian railways (including shortlines) was up 18% compared to 2022, while intermodal was down by 8%. Trade by rail has remained strong and was 14% above 2022 levels and 30% above 2021 levels on a YTD basis. Thanks to a good grain harvest and strong performance of the grain export supply chain, Canadian railways broke several grain shipment records and the number of covered hopper cars unloaded at Western ports was twice as high as the same time last year.

Passenger Rail

Passenger ridership recovering, unevenly.

The passenger rail sector continued to recover in Q1-23. In general, the tourism and intercity passenger transportation sectors are recovering at a more rapid pace than commuter rail, where ridership adjusts to structural shifts in commuting patterns. Only six RAC members reported ridership for Q1-23, as Q1 is the off-season for most tourism operators. Compared to Q1-19 (pre-pandemic), all six members reported a decrease in ridership, three reporting a decline of over 25% and three reporting between 0% and 25%.

Following strong growth from January through September 2022 – urban transit ridership has leveled off at around 29% below pre-pandemic levels (as of February 2022). Intercity passenger rail ridership continued to climb. On a YTD basis (January-February for VIA and January-March for Amtrak), ridership was higher than 2020, 2021 and 2022 levels, and just 25% (VIA) and 22% (Amtrak) below 2019 levels. In Q4-22, the overall tourism sector had recovered, with expenditures reaching 99% of their pre-pandemic (Q4-19) level. Tourism expenditures on passenger rail services were just 6% below pre-pandemic levels. For the year (2022), tourism expenditures were 9% (total tourism sector) and 13% (passenger rail) below 2019 levels.

Rail Safety

Outstanding safety performance this quarter.

Safety remains the industry's number one priority, and the data for Q1-23 reflect this. In Q1-23, the Canadian Class 1 [Federal Railroad Administration \(FRA\)](#) personal injuries rate improved by 18% compared to 2022 and by 28% compared to the 2020-2022 average;⁴ and the train accident rate was 47% below the 2022 level and 41% below the 2020-2022 average. Looking at [Transportation Safety Board \(TSB\)](#) data, in Q1-23, the overall accident rate improved by 18% compared to both 2022 and the 2018-2022 average. The number of main track derailments was 28% below the 2018-2022 average and the number of accidents involving dangerous goods was 46% below the 2022 level and 50% below the 2018-2022 average. The number of crossing and trespassing accidents was in-line with previous years.

⁴ 2020 is the earliest year for which data are available.

State of the Canadian Economy

March 2023 data are not yet publicly available for all the key economic indicators. As such, February 2023 data are compared against November 2022 to analyze recent trends.

From November 2022 to February 2023, overall employment increased by 1.2% (241,000 jobs), from 19.81 million to 20.05 million.

From November 2022 to February 2023, GDP increased by 0.6%, from \$2,070B to \$2,083B. GDP increased in 16 out of 20 sectors, including the transportation and warehousing sector, which grew by a modest 0.3%.

Trade (exports + imports) increased by 0.9%, from \$127.1B to \$128.3B. Despite a [forecasted downturn](#) in the North American economy in mid-2023, the most significant contributors to the growth in trade were motor vehicles & parts and consumer goods. The increases for these goods more than offset the reductions in trade of energy products and chemical, plastic and rubber products.

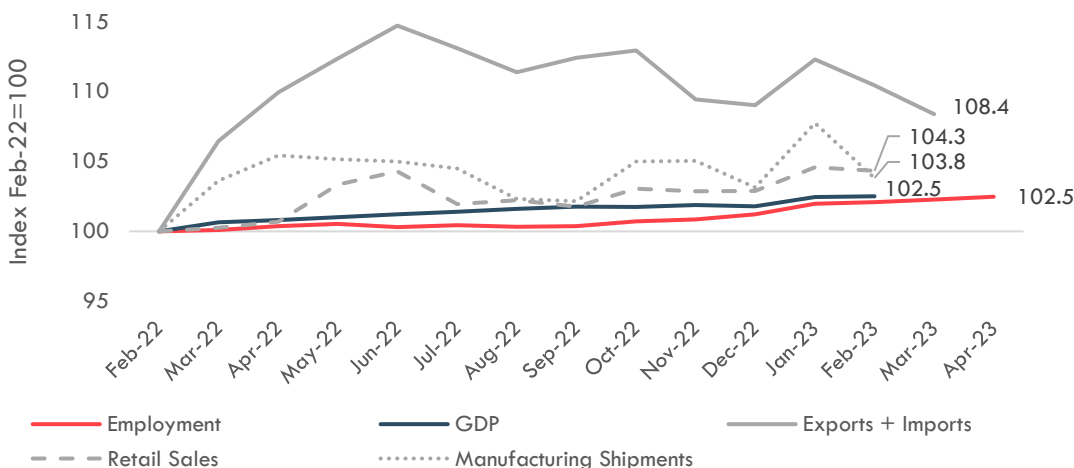
Domestic retail sales provide insight into household consumption, which is the largest contributor to Canada's GDP at over 50% of total GDP and a key driver of intermodal rail volumes. In February 2023, retail sales were 1.4% above November 2022 levels. However, over the past few months, [intermodal rail volumes](#) have been down, suggesting that retail sales may decline in the coming months.

Manufacturing shipments provide an indication into the strength of Canada's manufacturing sector and the global demand for its outputs. Manufacturing shipments decreased by 1.2% from November 2022 to February 2023.

Growth of Key Canadian Economic Indicators

	Employment (millions)	GDP (\$B, annualized)	Exports + Imports (\$B)	Retail Sales (\$B)	Manufacturing Shipments (\$B)
November 2022	19.81	2,070	127.1	65.4	72.4
February 2023	20.05	2,083	128.3	66.3	71.5
3-month change	1.2%	0.6%	0.9%	1.4%	-1.2%

Key Canadian Economic Indicators



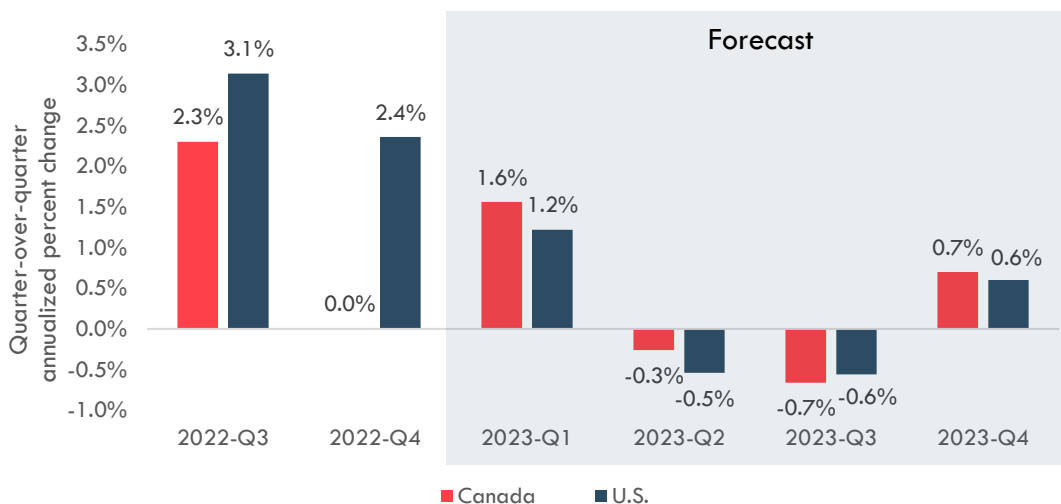
Source: Statistics Canada, [Labour Force Survey](#); [Gross domestic product at basic prices](#); [Canadian International Merchandise Trade](#); [Retail trade sales by industry](#); and [Monthly Survey of Manufacturing](#)
 Note: Data are seasonally adjusted. The GDP index is an index of Real GDP in chained (2012) dollars. The indices for trade, retail sales, and manufacturing shipments are in nominal dollars.

Economic Outlook

After a flat 2022-Q4 (in Canada), Canada’s major banks are forecasting modest growth for 2023-Q1 (1.6% in Canada and 1.2% in the U.S.), followed by a recession lasting the second and third quarters of 2023, for both Canada and the U.S.

The 2023 outlook for rail varies by commodity. Headwinds include a forecasted contraction in North American industrial production and softening consumer demand, which may affect consumer-driven traffic, including intermodal; lumber; and energy, chemicals and plastics. 2023 expectations remain relatively stronger for bulk commodities, including grain (with an anticipated average crop for the 2022-2023 crop year), potash and coal.

Canadian and U.S. Real GDP Forecast



Source: [TD](#), [Scotiabank](#), [CIBC](#), [RBC](#), and [BMO](#) forecasts. The figures presented are the average of the five banks’ latest forecasts.

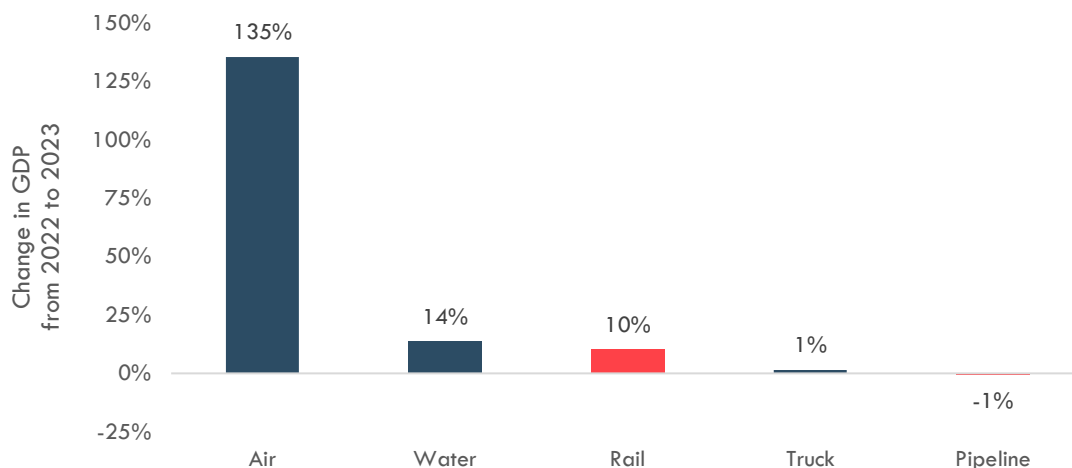
Rail and Other Modes of Freight Transportation

Each transportation mode has been impacted differently throughout the pandemic. The adverse impacts on some sectors were significant, especially for those that are more oriented toward passenger services, which affects the initial values used in year-over-year trend analysis. As such, the findings in this section should be interpreted with caution.

Compared to last year, the air transportation sector experienced the most significant growth in GDP, with a 135% increase on a year-to-date (YTD) basis. This brought the air transportation sector's GDP up to around 70% of its pre-pandemic level (71% of its January-February 2019 level, and 69% of its January-February 2020 level).

YTD GDP was up compared to 2022 in most of the other transportation sectors: water (or marine) (+14%), rail (+10%), truck (+1%), while pipeline was the only sector with a decrease (-1%).

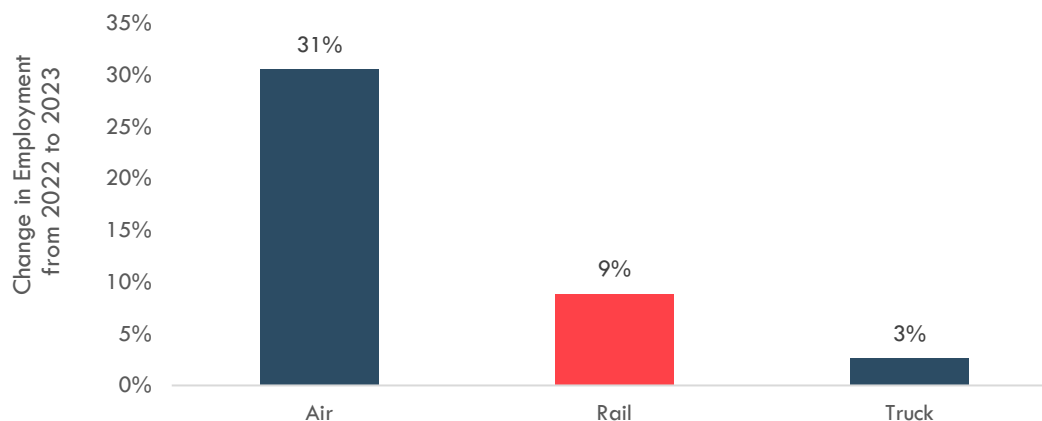
Modal Comparison of GDP (YTD Jan-Feb)



Source: Statistics Canada, [Gross Domestic Product by Industry](#)
Note: Data are seasonally adjusted.

YTD employment was up for all three transportation sectors for which data are available (air; rail; and truck).

Modal Comparison of Employment (YTD Jan-Feb)



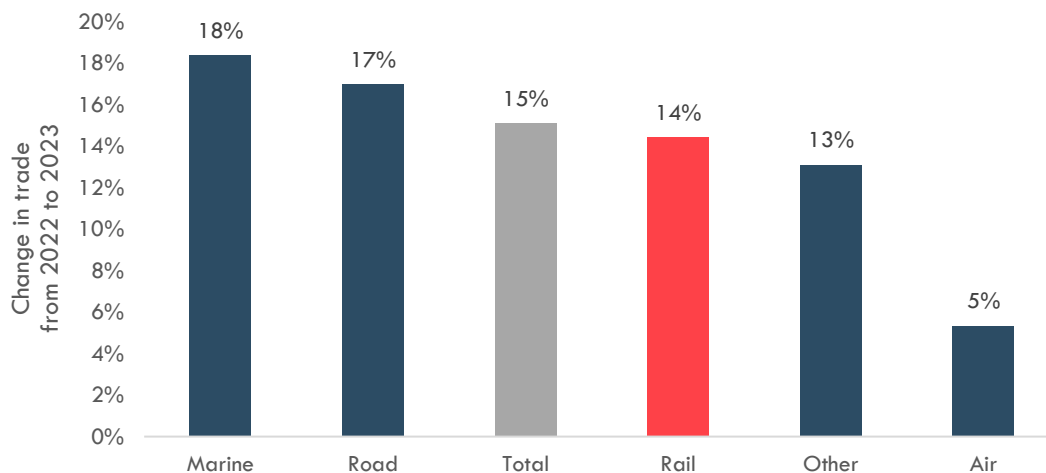
Source: Statistics Canada, [Survey of Employment, Payrolls and Hours](#)

Note: The Survey of Employment, Payrolls and Hours does not provide information on employment for the marine or pipeline sectors.

Note: Data are seasonally adjusted.

Trade volumes were high in the first two months of 2023, up 15% compared to the same period in 2022. Trade via the marine mode increased the most (18%), followed by road (17%), rail (14%), and air (5%).⁵

Modal Comparison of Trade (YTD Jan-Feb)



Source: Transport Canada, [Transport Canada in brief](#)

⁵ The data source does not provide a definition for "Other modes".

Class 1 Data

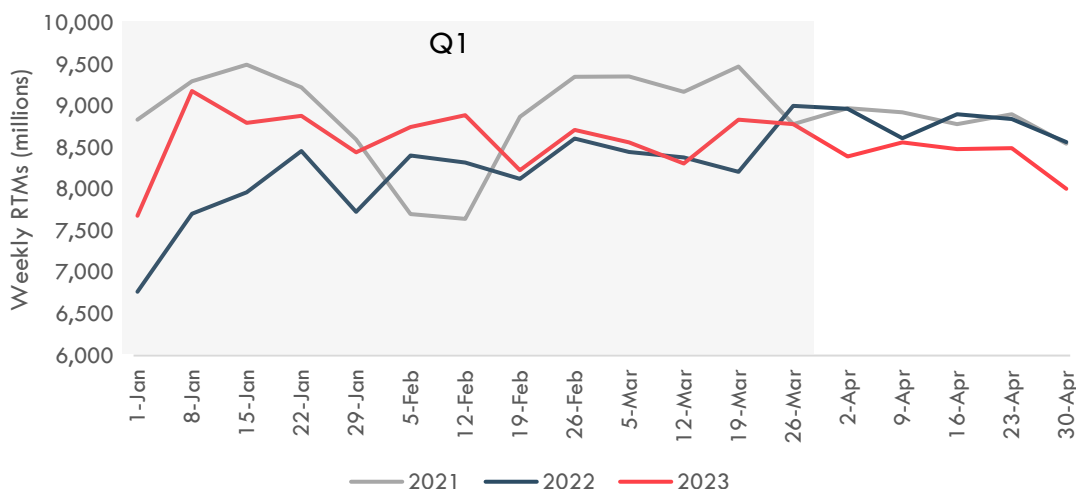
The Class 1 data cover CN and CPKC’s network-wide operations across North America (see [Introduction](#)). Since CPKC data are being used, the historical data in this quarterly report and future reports are not comparable to past RAC Quarterly Reports.

Weekly Trend

Class 1 Q1-23 revenue ton-miles (RTMs) were 7% above Q1-22 levels. RTMs were higher than 2022 levels in 11 of the 13 weeks. 2023-Q1 started off strong, with high volumes owing to record grain shipments. For the quarter, RTMs were up for all commodities except intermodal.

Data from the first five weeks of Q2-23 (weeks beginning April 2 through April 30) indicate economic headwinds appear to be strengthening. Total RTMs were down 4%, led by a 15% decrease in intermodal and 11% decrease in energy, chemicals and plastics.

Canadian Class 1 Revenue Ton-miles



Source: [CN Key Weekly Metrics](#); [CPKC Weekly Key Metrics](#)

Note: The dates indicate the first day of the week (e.g., “1-Jan” corresponds to the week of Jan 1-8). The week starting January 1, 2023, is compared against the weeks starting January 2, 2022, and January 3, 2021.

Revenues, Revenue Ton-miles, and Carloads

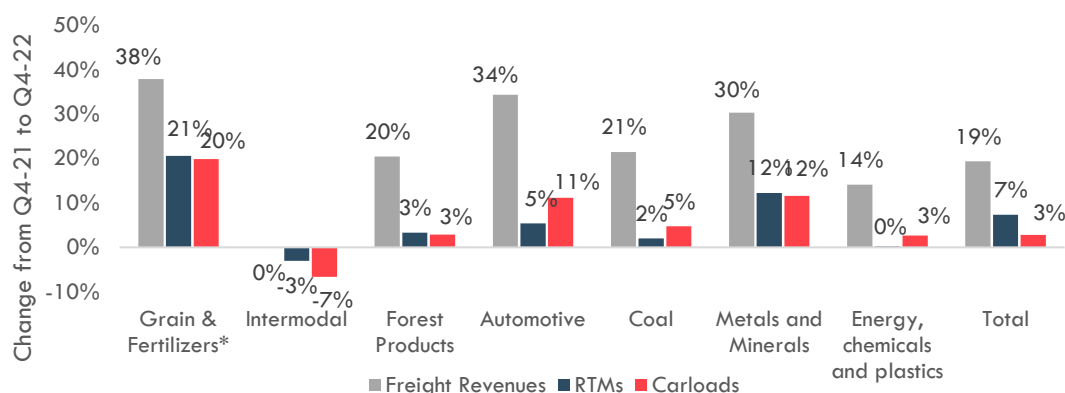
As shown in the figure and table below, in Q1-23, Carloads, RTMs, and freight revenues were up for all commodities except intermodal.

In Q1-23, revenue-ton miles for grain & fertilizers were up 21% and carloads were up 20%. In Q1-23, several records for grain shipments were achieved. CPKC set a record for the month of January and enjoyed its second-best February on record. CN set a record for the month of February and enjoyed its second-best January and March. In addition, several weekly records were achieved by both railways. The strong performance is attributed to effective planning, collaboration, operational efficiency, and significant investments.

Both RTMs and carloads for metals and minerals were up 12%. Automotive carloads were up 11%. In their quarterly investor calls, both Canadian Class 1 railways reported that automotive demand remains strong.

Freight revenues increased to a greater extent than the increase in traffic volumes; however, operating expenses also increased. Despite a reduction in average fuel prices paid compared to Q4-22, fuel prices remained higher than they were in Q1-22 (not shown). Overall, total Canadian Class 1 Q1-23 operating expenses were 10% above Q1-22 levels (not shown). Since the onset of the pandemic, increases in rail freight rates have been lower than the increases in trucking, industrial, and commodity prices (see [Freight Rates](#)). In fact, a recent study found that, in 2021, Canadian rail freight rates were amongst the lowest in the world, and 11% lower than U.S. rail freight rates.⁶

Class 1 Freight Revenues, RTMs, and Carloads by Commodity, Q1-23 vs Q1-22



Q1: Canadian Class 1 RTMs (millions), by Commodity

	Q1-23	Q1-22	Change (%)	Change (#)
Grain & Fertilizers*	36,831	30,548	21%	6,283
Intermodal	20,524	21,160	-3%	-636
Forest Products	8,300	8,035	3%	265
Automotive	1,600	1,518	5%	82
Coal	11,499	11,271	2%	228
Metals and Minerals	12,048	10,734	12%	1,314
Energy, chemicals and plastics	20,535	20,495	0%	40
Total	111,337	103,761	7%	7,576

Source: [CN Quarterly Review](#); [CPKC Selected Unaudited Combined Summary of Historical Data](#).

*Includes potash and sulphur.

⁶ [CPCS, International Comparison of Railway Freight Rates, January 2023](#).

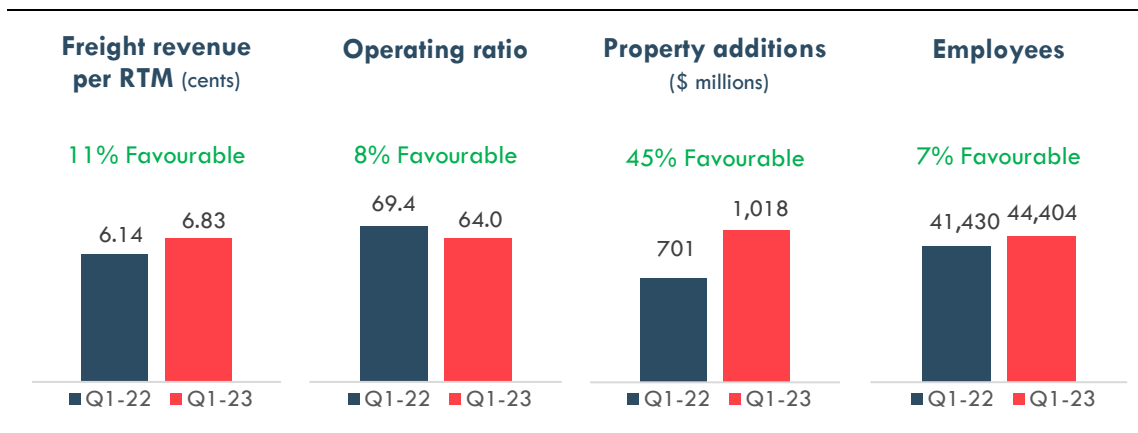


Select Key Financial and Operating Metrics

From Q1-22 to Q1-23, freight revenue per RTM increased by 11%. Revenue per RTM increased the most for automotive (+27%), which is a relatively low-volume commodity representing just under 5% of total carloads. While revenue per RTM increased the least for intermodal (+3%), which is the highest-volume commodity for Class 1 railways, representing 38% of total carloads in Q1-23. Stronger pricing contributed to improving the average Class 1 operating ratio by 8%.

During the first quarter of 2023, Canadian Class 1s invested over \$1 billion dollars in their networks, representing a 45% increase compared to Q1-22.

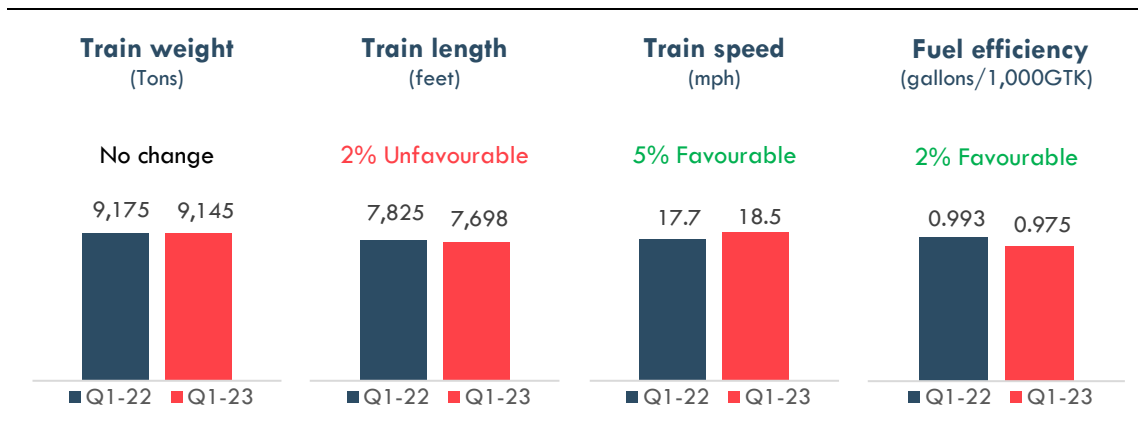
In the first quarter of 2023, Canadian Class 1 employment increased by 7%, or nearly 3,000 jobs compared to Q1-22.



Source: [CN Quarterly Review](#); [CPKC Selected Unaudited Combined Summary of Historical Data](#).

Note: The operating ratio is calculated as the simple average of CN and CPKC.

In Q1-23, average train length decreased by 2%, however, average train weight remained unchanged. Rail operations were efficient in Q1-23, from both an economic and environmental consideration, as average train speeds increased by 5% while also achieving a 2% improvement in fuel efficiency.

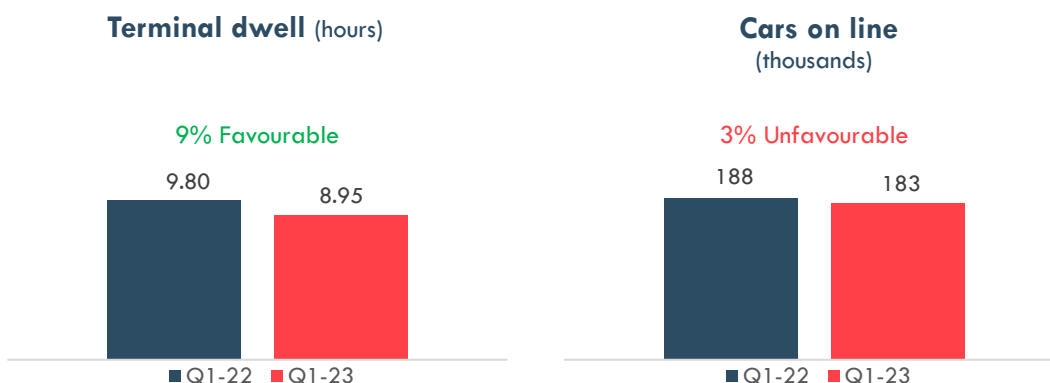


Source: [CN Quarterly Review](#); [CPKC Selected Unaudited Combined Summary of Historical Data](#).

Note: All four metrics are calculated using the simple average of CN and CPKC.

In the first quarter of 2023, railway supply chain performance was strong. Q1-23 railway terminal dwell times consistently remained below 10 hours throughout each week of the quarter. Overall, railway terminal dwell averaged 8.95 hours for the quarter, which is a 9% improvement compared to Q1-22. In addition, for every week throughout Q1-23, the average terminal dwell time at major yards was shorter than in the previous year, averaging 17% shorter (not shown).

The average numbers of rail cars on line decreased by 3% (5,244 cars) compared to Q1-22. However, despite a reduction in the number of cars on line, Canadian Class 1s moved more traffic than in Q1-22 – achieved by higher train speeds and car velocity (while still achieving an outstanding safety performance).



Source: [CN Quarterly Review](#); [CPKC Selected Unaudited Combined Summary of Historical Data](#); [CN Key Weekly Metrics](#); [CPKC Weekly Key Metrics](#)

Note: Terminal dwell is calculated using the simple average of CN and CPKC.

Freight Industry Data

The freight industry data in this section of the report have some overlap with the Class 1 data reported above. The Class 1 data cover CN and CPKC's operations across North America, whereas this section is specific to Canadian operations and include data from all freight railways, including shortlines.

The data from the various statistical agencies included in this section have a slightly longer lag time than the Class 1 data, and as a result, the data are not always available for all months of the most recent quarter. As such, most of the freight data are analyzed on either a YTD or monthly basis, rather than quarterly.

Carloads & Intermodal Units

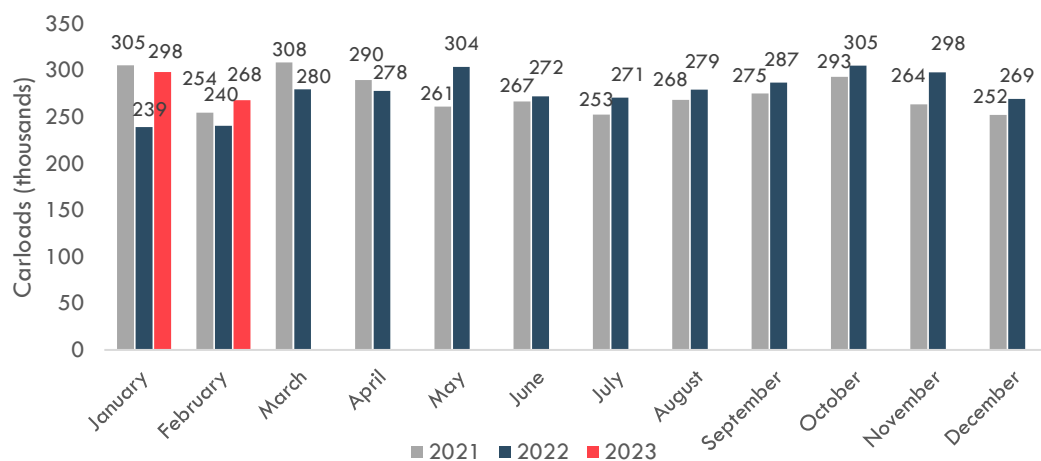
In the first quarter of 2023, rail traffic in Canada was much stronger than in the U.S. The American Association of Railroads (AAR) reported that across the first 13 weeks of the year, U.S. traffic was down 5.6%, while Canadian traffic was up 2.0%. Statistics Canada noted that February 2023 marked the 10th straight month of year-over-year growth in Canadian tonnage hauled, as well as an all-time record for February.

Statistics Canada reports monthly carloadings for over 60 commodities (which are categorized into 10 commodity groupings in this report), as well as intermodal units.

On a YTD basis (January-February), non-intermodal carloadings were 18% above 2022 levels. Carloads were up for all 10 non-intermodal commodity groupings, led by an 86% increase in agriculture, followed by double-digit growth in machinery & automotive; manufactured & miscellaneous; food products; paper products; and minerals. Growth in agricultural traffic was driven by significant increases (in some cases more than doubling the previous year) of wheat, canola, other cereal grains, and vegetables.

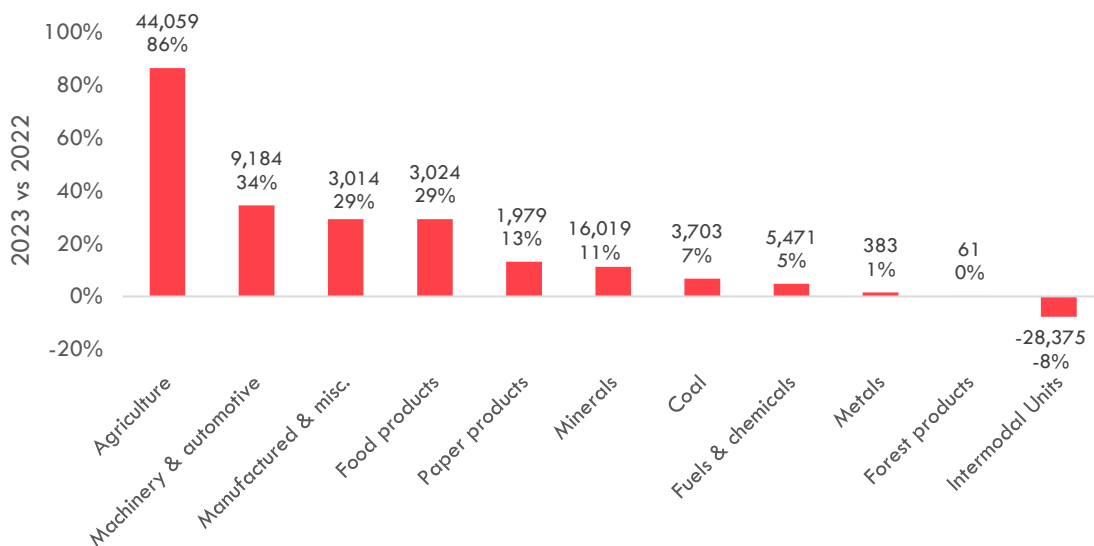
On a YTD basis (January-February), total 2023 intermodal traffic loaded was 8% below 2022 levels. February 2023 marked a third consecutive month of year-over-year declines in intermodal traffic.

Canadian Railways, Carloads



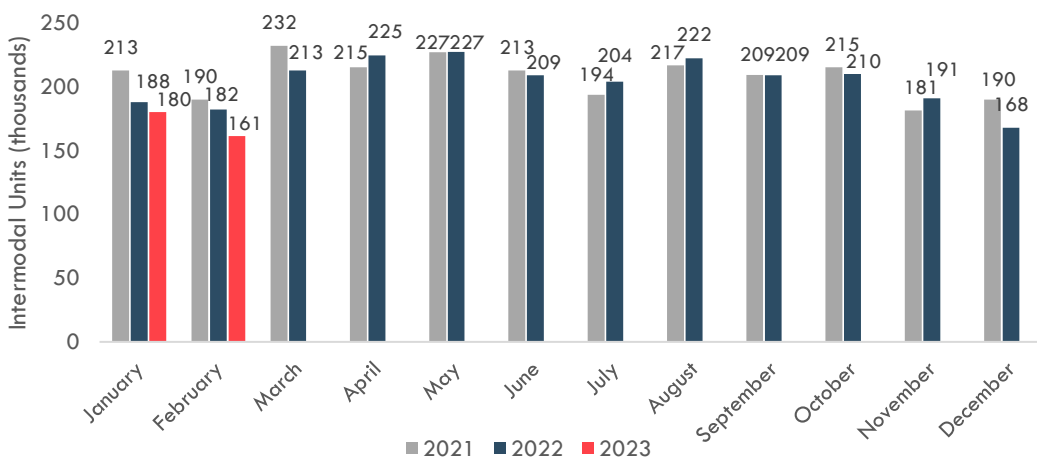
Source: Statistics Canada, [Monthly Railway Carloadings Survey](#)

Canadian Railways, Carloads by Commodity & Intermodal Units (Jan-Feb)



Source: Statistics Canada, [Monthly Railway Carloadings Survey](#)

Canadian Railways, Intermodal Units



Source: Statistics Canada, [Monthly Railway Carloadings Survey](#)

On a YTD basis (January-February), carloads were up in both Eastern Canada (+14%) and Western Canada (+21%), while intermodal units were down by 4% in Eastern Canada and 10% in Western Canada. The surge in agricultural shipments supported the relatively stronger growth in carloads in Western Canada, where agriculture is more concentrated.

YTD (Jan-Feb): CDN Carloads and Intermodal Units by Region

	2023 vs 2022
Eastern Division	
Carloads	14%
Intermodal Units	-4%
Western Division	
Carloads	21%
Intermodal Units	-10%
Total	
Carloads	18%
Intermodal Units	-8%

Source: Statistics Canada, [Monthly Railway Carloadings Survey](#)

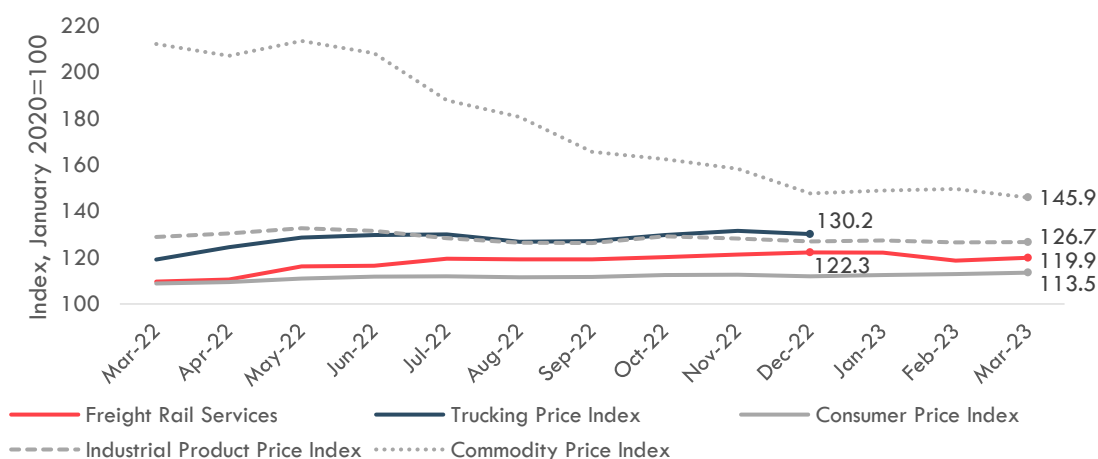


Freight Rates

From the onset of the pandemic until around January 2022, Statistics Canada’s measurement of rail freight rates, trucking rates, and consumer prices were all following a similar inflationary path. However, relative to consumer prices, trucking prices began to rise more rapidly starting in January 2022, and rail freight rates began to rise more rapidly starting in May 2022, albeit to a lesser extent. Higher fuel prices are likely the most significant contributing factor to this recent, short-term trend.

In 2022, high fuel costs contributed to inflation and impacted transportation costs; however, prices have begun to come down, and most price indices were relatively flat over the past few months (December 2022 to March 2023). Rail freight rates, commodity prices, and industrial prices decreased by 1.9%, 1.2%, and 0.2%, respectively. The latest month of comparable data for rail and truck freight rates – December 2022 – indicates that, since the onset of the pandemic, trucking prices have increased at a more rapid pace than rail freight rates (30.2% vs 22.3%).

Price Index of Rail Services vs Other Price Indices

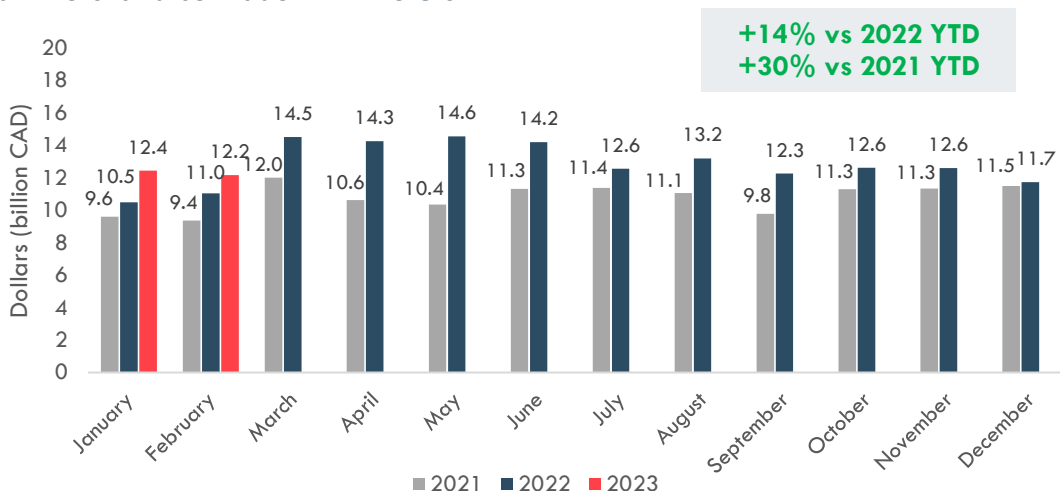


Source: Statistics Canada, [Freight Rail Services Price Index](#), [Industrial Product Price Index](#), [For-hire Motor Carrier Freight Services Price Index](#), and [Consumer Price Index](#). Bank of Canada, [Commodity Price Index](#)

Exports

Year-over-year trade by rail has grown in 23 of the past 24 months, and consecutively for the past 17 months (October 2021 through February 2023). On a YTD basis (January-February), trade by rail was 14% above 2022 levels and 30% above 2021 levels.

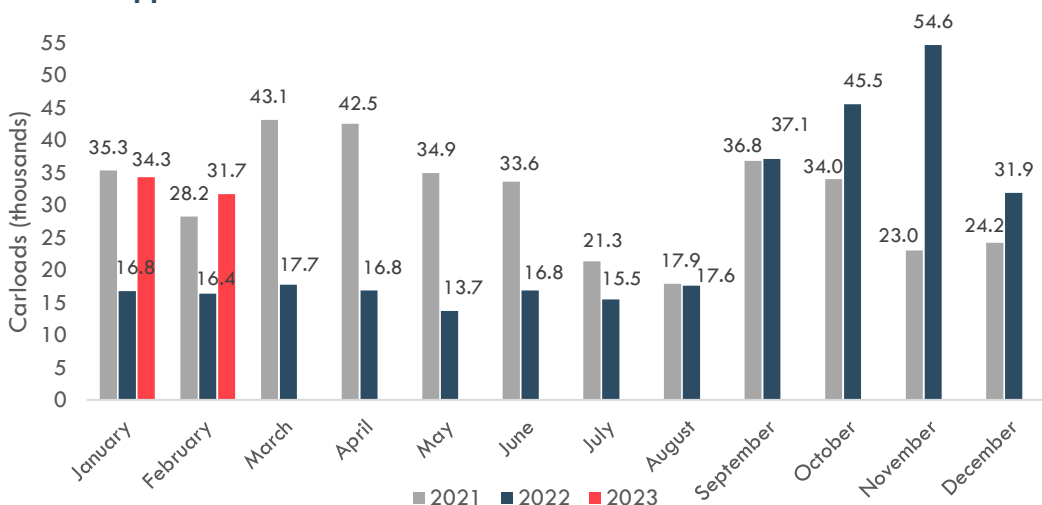
Rail Merchandise Trade with the U.S.



Source: Transport Canada, [Transportation activity indicators](#)

The 2022 grain crop was significantly larger than the crop in the previous year.⁷ Thanks to the good grain harvest and strong performance of the grain export supply chain, in Fall 2022, grain shipments and unloads at Western ports increased significantly. This momentum carried into early 2023. On a YTD basis (January-February), the number of covered hopper cars unloaded at Western ports was twice as high as the same time last year.

Covered Hopper Cars Unloaded at Western Ports

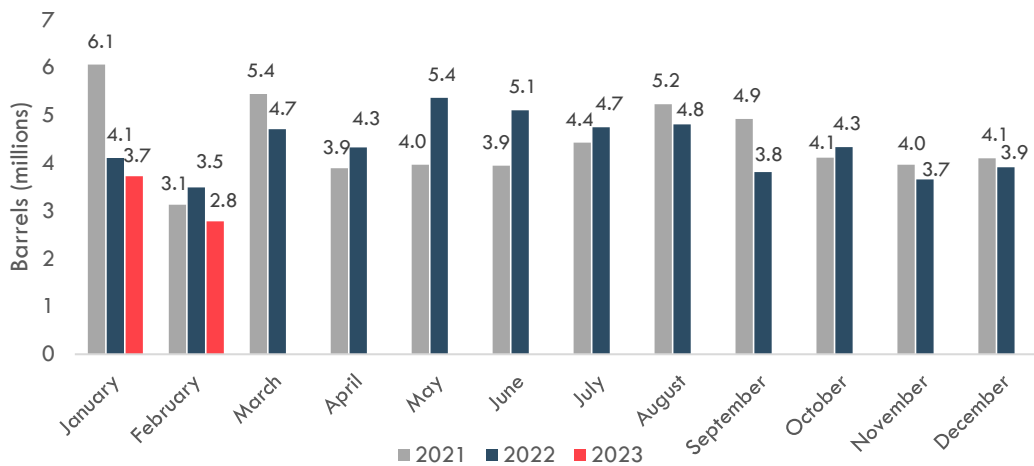


Source: Transport Canada, [Transportation system utilization and performance](#)

Over the first two months of 2023, exports of crude oil by rail were down 14% compared to 2022 and 29% compared to 2021.

⁷ <https://www150.statcan.gc.ca/n1/daily-quotidien/221202/dq221202b-eng.htm>

Canadian Crude Oil Exports by Rail



Source: Canada Energy Regulator, [Canadian Crude Oil Exports by Rail](#)

Supply Chains

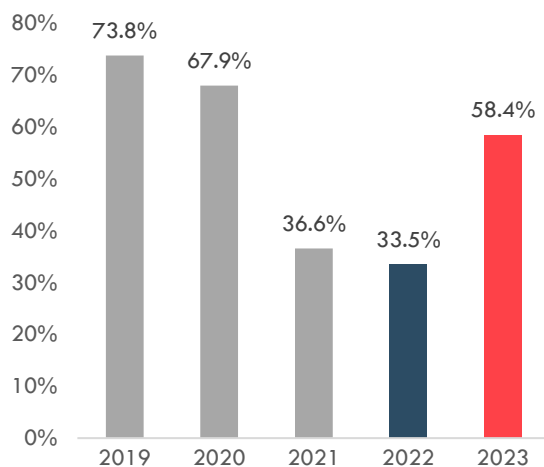
Modern supply chains are complex and, when they fall out of synchronization, the effects on transportation providers, shippers, suppliers, and consumers are felt widely and deeply. Rail has remained among the most reliable and least variable supply chain link during the last few years of enormous upheaval. And, while several factors continue to impact supply chains, other modes' conditions and performance are starting to show signs of recovery and improvement, which will benefit all supply chain players.

Global

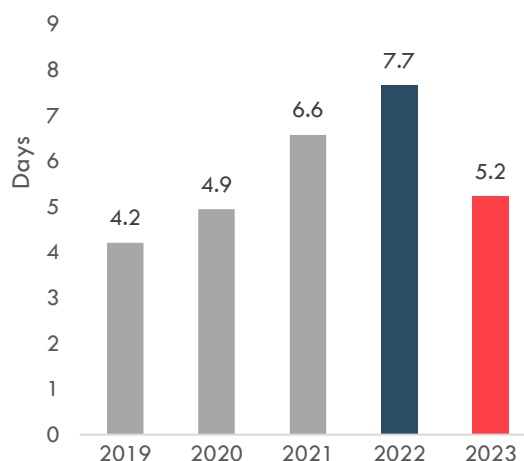
Freightos' *Global Container Freight Index*⁸ indicates that, after increasing more than seven-fold during the pandemic, global container prices have finally returned to pre-pandemic levels.

Global marine vessel delays and on-time performance continued to improve but remain unfavourable compared to pre-pandemic levels.⁹ According to Sea-Intelligence's *Global Liner Performance report*,¹⁰ *Global Schedule Reliability* increased from 33.5% in Q1-22 to 58.4% in Q1-23. However, this is still below pre-pandemic reliability, as shown below. The *Global Average Delays for Late Vessel Arrivals* also made significant improvements. Average delays decreased from an average of 7.7 days in Q1-22 to 5.2 days in Q1-23. Nevertheless, delays of this significance continue to produce negative impacts throughout supply chains, causing bottlenecks and inefficiencies well-beyond the marine link in the chain.

Global Schedule Reliability, Q1



Global Average Delays for Late Vessel Arrivals, Q1



Source: Sea-Intelligence, [Global Liner Performance \(GLP\) report, issue 140](#).

⁸ <https://fbx.freightos.com/freight-index/FBX>

⁹ Sea-Intelligence, [Global Liner Performance \(GLP\) report, issue 140](#).

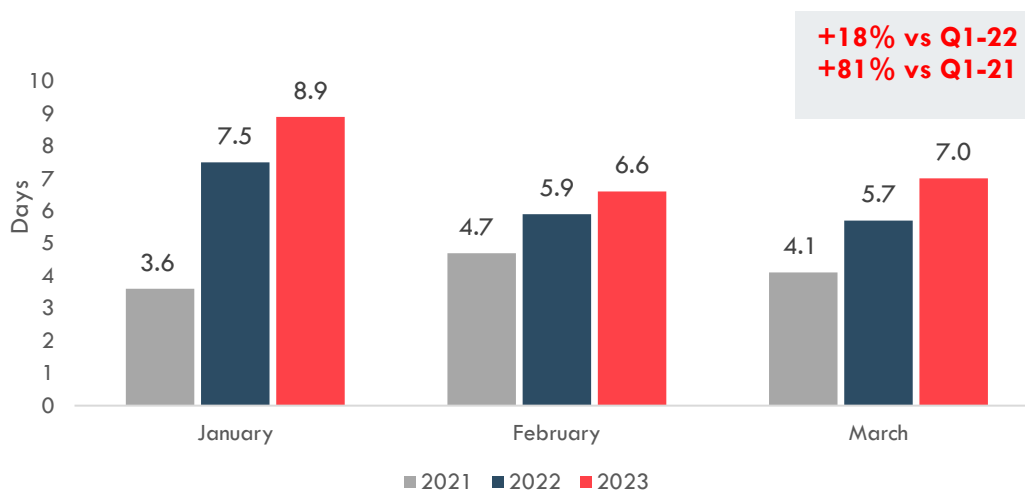
¹⁰ Ibid.

Canadian Ports

Dwell at the Port of Vancouver reached a high of 8.9 days in January 2023. Q1-23 dwell times averaged 7.5 days, which was 18% longer than dwell in Q1-22 and 81% longer than in Q1-21. Dwell at the Port of Montreal averaged 4.2 days, which was 26% shorter than Q1-22, but also 26% longer than Q1-21.

Investments at Canadian ports have not kept pace with the increase in overseas trade over recent decades. In January, Maersk North America noted that Canada's west coast ports were among the most congested, and at one port, utilization was over 100%.¹¹ According to the Government of Canada, major west coast ports will reach maximum capacity in the coming years.¹² The impacts of that to Canada, as a trading nation, would be enormous and deeply negative. The April 2023 approval of the Roberts bank Terminal 2 Project (a three-berth marine container terminal located at Roberts Bank in Delta, B.C.) would provide the port with a much-needed boost in capacity. The RAC believes it to be imperative that the project advances swiftly, while meeting its 370 legally binding conditions, to keep Canada's supply chains moving. Additional port improvements and capacity-increasing investments are needed. The RAC has already suggested several practical solutions to the federal government to optimize existing port capacity; we continue to encourage the government to pursue these.

Vancouver - Gateway terminal rail dwell performance by month

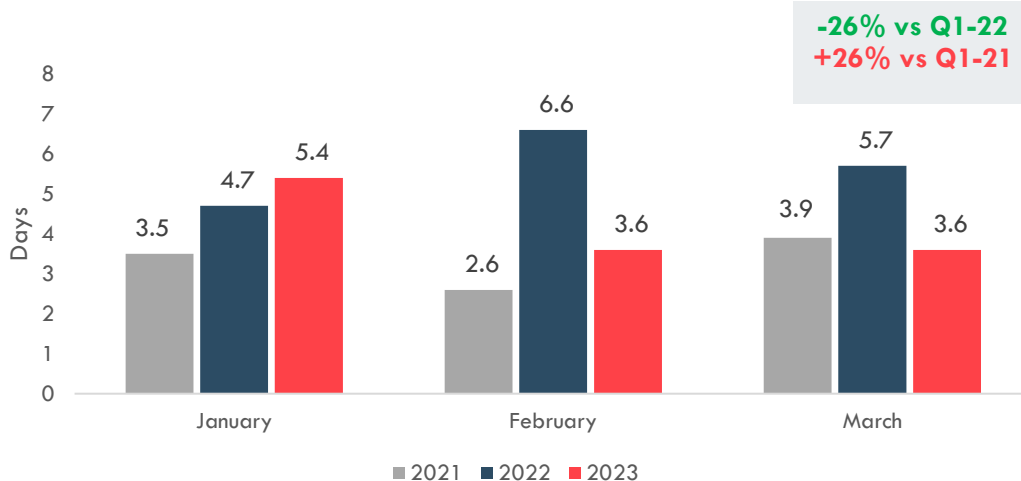


Source: Port of Vancouver, <https://www.portvancouver.com/port-dashboard/supply-chain-performance/>

¹¹ <https://www.insidelogistics.ca/port-operations/maersk-reports-canadas-west-coast-ports-still-slow-184284/>

¹² <https://www.canada.ca/en/impact-assessment-agency/news/2023/04/government-of-canada-approves-key-roberts-bank-terminal-2-project-in-british-columbia-subject-to-strict-conditions-to-protect-the-local-environment.html>

Montreal - Average terminal dwell of containers (import-rail)

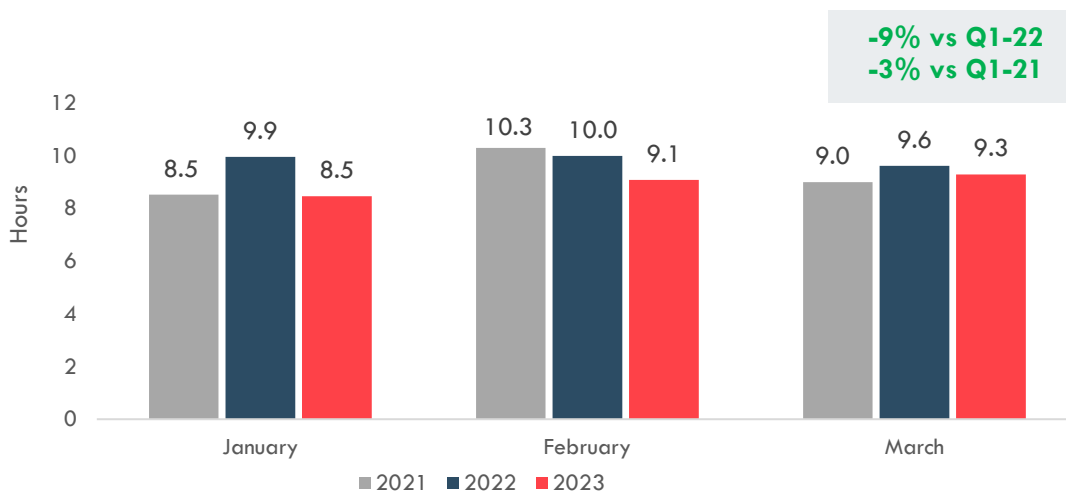


Source: Port of Montreal, <https://www.port-montreal.com/en/the-port-of-montreal/about-the-port/documentation-centre/performance-reports>

Canadian Railways

Despite the enormous challenges over the past three years, railway dwell times have been much shorter and more consistent compared to other modes. In Q1-23, average dwell times were 9% shorter than Q1-22, and 3% shorter than Q1-21.

Canadian Class 1 Railways - Average Terminal Dwell



Source: [CN Key Weekly Metrics](#); [CPKC Weekly Key Metrics](#)

Note: The average terminal dwell time is calculated as the simple average of CN and CPKC. Weekly data have been converted into monthly data. The conversion is not exact as some months are allocated 4 weeks of data and others are allocated 5 weeks of data, and the start dates of the weeks vary across years.

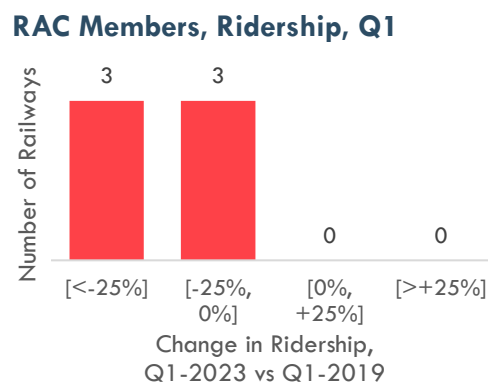
Passenger Rail Data

There are fewer monthly and quarterly datapoints available for passenger rail operations compared to freight rail operations, and in some cases, there may be a longer lag period. This section looks at both in-year passenger volumes and comparisons to pre-pandemic ridership levels.

RAC Member Ridership

Passenger rail ridership was significantly impacted by the COVID-19 pandemic and evolving restrictions; and variable rates of employees returning to office work continue to affect ridership. This section looks at the recovery of passenger rail ridership among RAC members.

In Q1-23, only six RAC members reported ridership, as Q1 is the off-season for most tourism operators. Compared to Q1-19 (pre-pandemic), all six members reported a decrease in ridership, three reporting a decline of over 25% and three reporting between 0% and 25%.¹³



Urban Transportation

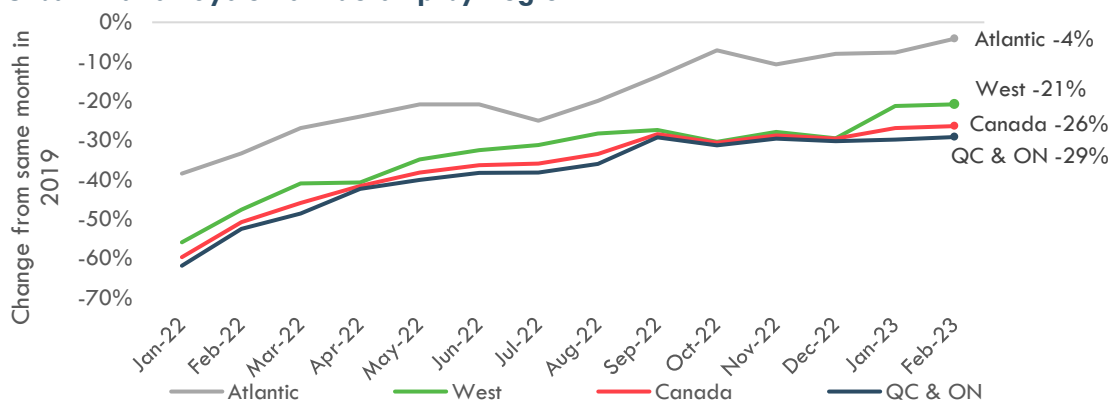
Urban transit ridership, and commuter rail ridership in particular, is adjusting to fundamental structural shifts in commuting patterns and the proliferation of remote and hybrid office work arrangements. Statistics Canada data from May 2022 that break down the number of commuters by mode (driving, bus, subway, train, walk, bike, motorcycle) indicate that ridership recovery is proving especially difficult for commuter rail.¹⁴

The urban transit ridership data presented below corrects for seasonality, by comparing ridership in each month to the corresponding month in 2019. Following strong growth from January through September 2022, urban transit ridership leveled off at around 29% below pre-pandemic levels. Over the past three months (November 2022 to February 2023), ridership relative to pre-pandemic levels increased by 3.3%.

¹³ <https://www.railcan.ca/membership/member-railways/>

¹⁴ [Statistics Canada, Number of commuters remains below May 2016 levels in May 2022, except for driving to work, November 2022.](#)

Urban Transit Systems Ridership by Region



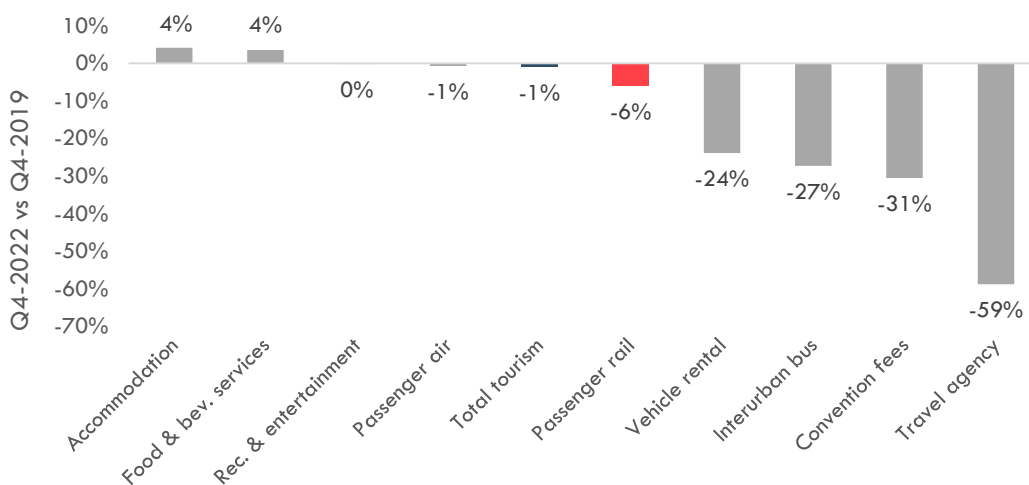
Source: Statistics Canada, [Monthly Passenger Bus and Urban Transit Survey](#)

Tourism Rail

There is a considerable lag in data on tourism expenditures. The latest available data cover Q4-22. Tourism expenditures are analyzed compared to their pre-pandemic (2019) levels, in order to deliver a clear picture of the extent of the recovery.

In Q4-22, the overall tourism sector had essentially recovered, with expenditures reaching 99% of their pre-pandemic (Q4-19) level. Tourism expenditures on passenger rail services were just 6% below pre-pandemic levels.

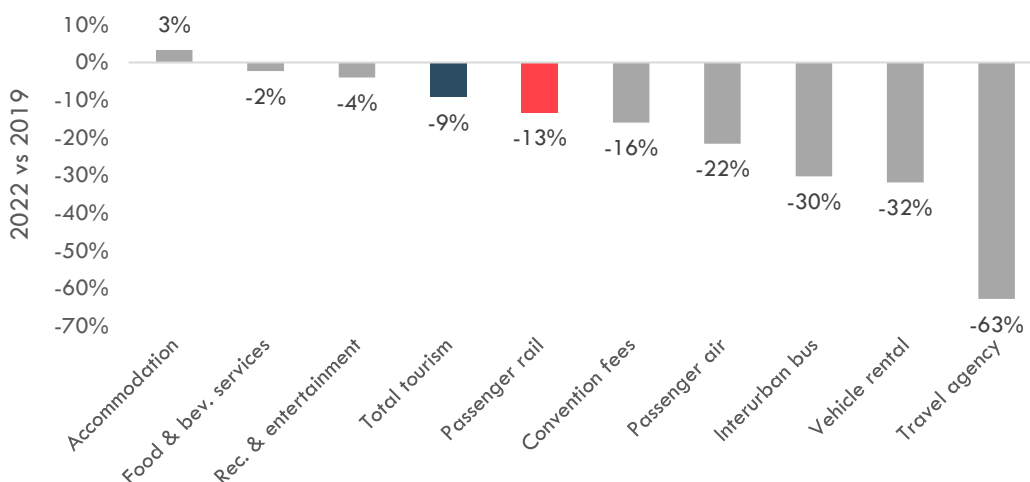
Tourism Expenditures, Q4



Source: Statistics Canada, [National Tourism Indicators](#)

For the year (2022), tourism expenditures were 9% (total tourism sector) and 13% (passenger rail) below 2019 levels. Expenditures on passenger air, interurban bus, vehicle rental, and travel agencies remained more than 20% below pre-pandemic levels.

Tourism Expenditures, Annual



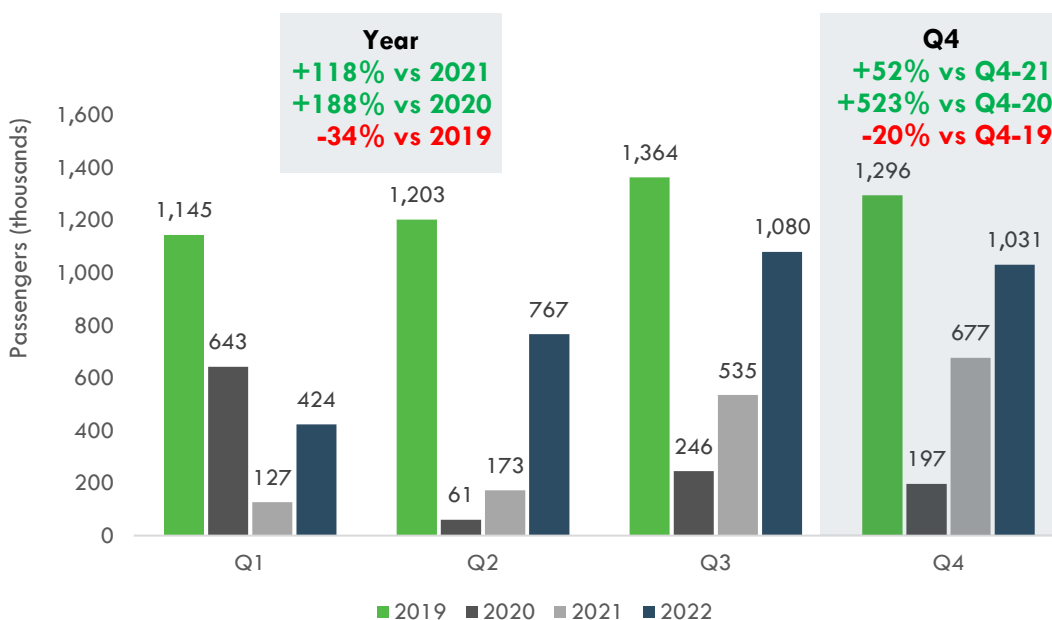
Source: Statistics Canada, [National Tourism Indicators](#)

Intercity Passenger Rail

The latest quarterly ridership data available for VIA Rail covers Q4-22, while monthly data are available up to February 2023.

In Q4-22, VIA Rail ridership exceeded one million passengers – just 20% off the Q4-19 (pre-pandemic) level of 1.296 million passengers. On an annual basis, ridership more than doubled from 2021 to 2022, and in 2022, was 34% below the 2019 level.

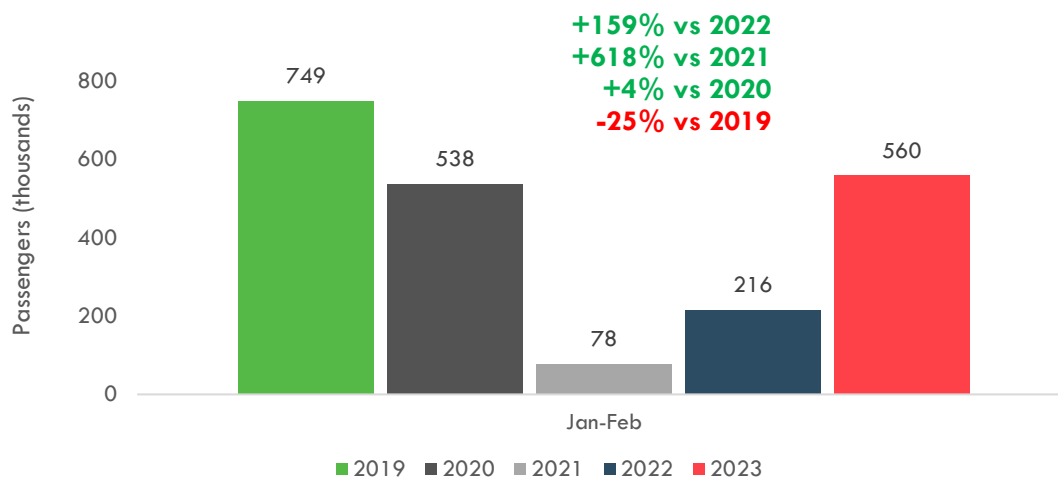
VIA Rail Ridership, Quarterly



Source: VIA Rail, [Quarterly and Annual Reports](#)

On a YTD basis (January-February 2023), ridership was higher than 2020, 2021 and 2022 levels, and just 25% below the 2019 level.

VIA Rail Ridership

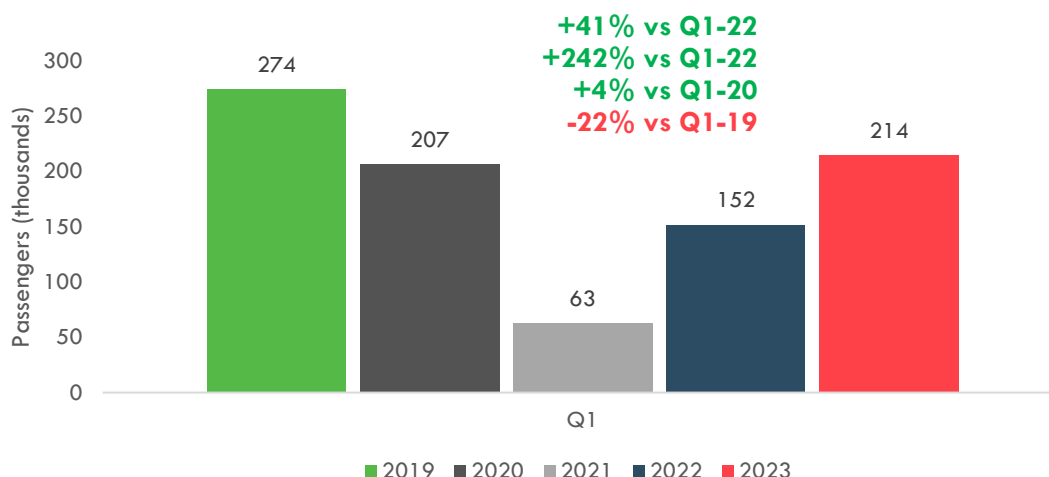


Source: Transport Canada, [Transport Canada in brief](#)

Amtrak has many routes throughout the U.S., and three routes that include a Canadian segment. Ridership on these three routes does not imply that passengers crossed the border, as they may have travelled a particular segment on either side of the border.¹⁵

Q1-23 data for Amtrak's routes with segments in Canada indicate that ridership continued to recover. Q1-23 ridership of 214,000 passengers was higher than 2020, 2021 and 2022 levels, and just 22% below the 2019 level.

Amtrak Ridership on Routes with Segments in Canada, Quarterly



Source: Amtrak, [Monthly Performance Reports](#)

Note: Includes three routes (Maple Leaf; Cascades; Adirondack).

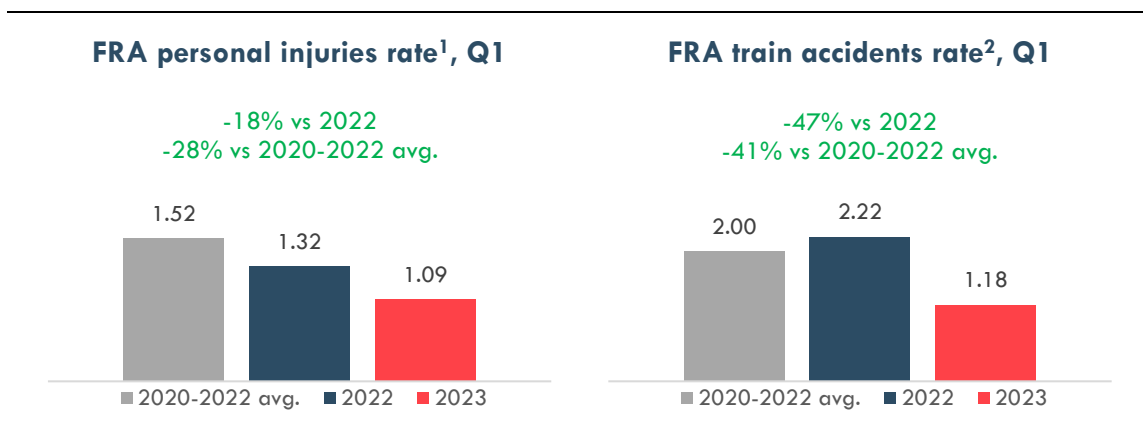
¹⁵ For example, the Maple Leaf route extends from New York City to Toronto; Cascades extends from Eugene Oregon to Vancouver; and Adirondack extends from New York City to Montreal.

Rail Safety Data

The RAC tracks Canadian rail safety performance data from the Federal Railroad Administration (FRA) and the Transportation Safety Board (TSB). Safety remains the industry's number one priority, and the data for Q1-23 reflect this.

Federal Railroad Administration Safety Data

In Q1-23, the Canadian Class 1 FRA personal injuries rate improved by 18% compared to 2022 and by 28% compared to the 2020-2022 average;¹⁶ and the train accident rate was 47% below the 2022 level and 41% below the 2020-2022 average.



Source: [CN Quarterly Review](#); [CPKC Selected Unaudited Combined Summary of Historical Data](#).

Note: The rates are calculated using the simple average of CN and CPKC.

¹ Injuries per 200,000 employee hours

² Accidents per million train-miles

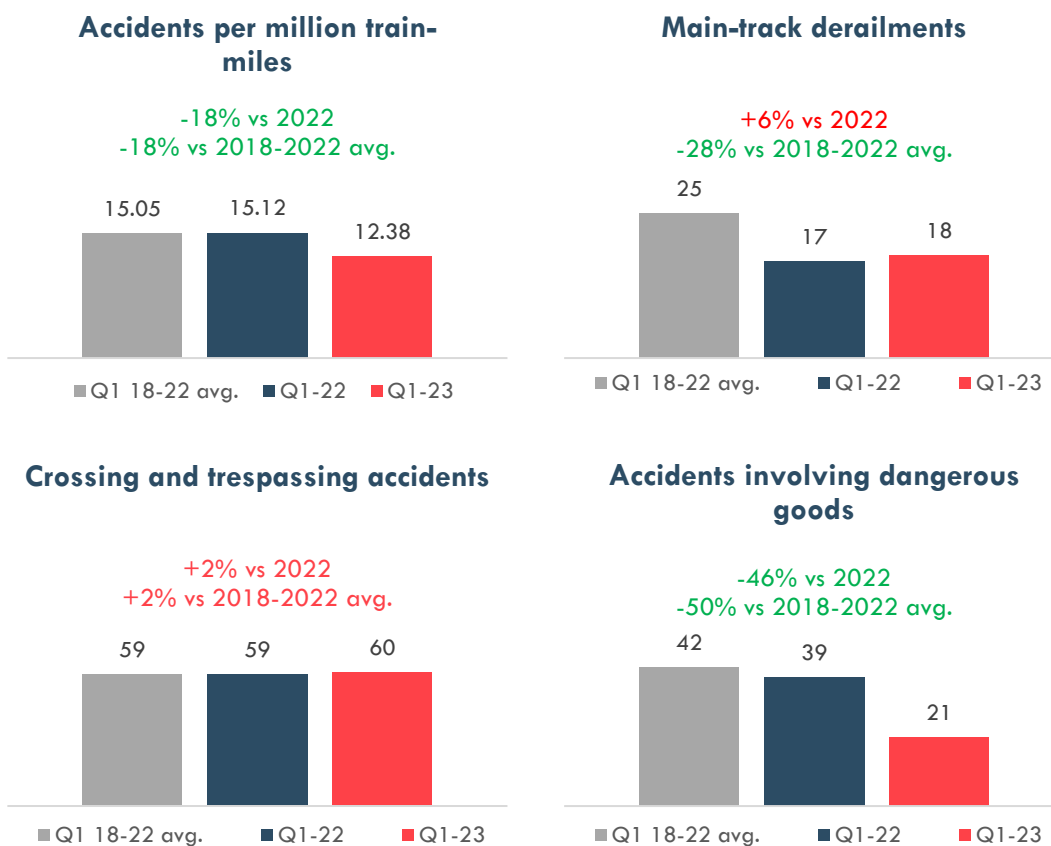
¹⁶ 2020 is the earliest year for which data are available.



Transportation Safety Board Data

This section analyzes the most recent data from the Transportation Safety Board, which provides railway occurrence statistics of all federally regulated railways in Canada.

In Q1-23, the overall accident rate improved by 18% compared to both 2022 and the 2018-2022 average. The number of main track derailments was 28% below the 2018-2022 average and the number of accidents involving dangerous goods was 46% below the 2022 level and 50% below the 2018-2022 average. The number of crossing and trespassing accidents was in-line with previous years – a reflection of the continued need for vigilance on the shared aspects of railway safety and for continued awareness-building initiatives, like Operation Lifesaver.



Source: Transportation Safety Board, [Monthly rail transportation occurrence statistics](#)

Note: The TSB data are preliminary and subject to year-end validation and reconciliation.



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