



Railway Association  
of Canada

# *RAC QUARTERLY REPORT*

## *Q4-2023*



February 22, 2024

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## 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.<sup>1</sup> 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](#).

## Executive Summary

### Canadian Economy

#### **Cautious optimism for some improvement.**

Most key economic indicators, including employment, GDP, trade, and retail sales, improved between August and November 2023. Despite the recent improvements, 2023 has not been a strong year – the economy shrunk 1.1% in the third quarter meanwhile GDP shot up 5.0% for our southern neighbour.

Looking ahead, economic conditions in Canada are expected to gradually improve, as Canada's banks are calling for modest growth of between 0.5% and 1.0% (annualized) per quarter over the next several quarters.

### Freight Rail

#### **Carload traffic moved well, intermodal continued to face challenges. Supply chain performance in Canada improved, but risks from major global disruptions emerge.**

In Q4-23, Class 1 freight traffic (CN and CPKC, network-wide), measured using revenue-ton miles (RTMs), was up 3% compared to the same period last year, while carloads and freight revenues were flat. RTM growth was led by coal (+1,632 million, +16%) followed by energy, chemicals and plastics (+1,515 million, +7%); while automotive enjoyed the most significant increase in percentage terms, at +20%. Grain and fertilizers and metals and minerals also enjoyed small gains, while RTMs for forest products decreased by 296 million (-4%) and intermodal decreased by 1,076 million (-5%).

For the year, total RTMs were flat compared to 2022. An increase in grain and fertilizers was completely offset by a 10%, 8,829 million RTM, reduction in intermodal volumes. Intermodal traffic was impacted throughout the year by the July West Coast ports strike, a generally weak macroeconomic environment, lower retail volumes, and enhanced pricing pressure from the trucking sector.

In Q4-23, several important Class 1 freight performance metrics improved. Investment increased by 12% (bringing the total amount invested in 2023 to \$5.7B – a 32% increase compared to 2022) and employment increased by 3% to over 45,000 employees. With strong investment and workforce numbers, Canada's railways are well-positioned to respond as traffic volumes are expected to pick up throughout 2024. Train speeds increased 3%, fuel efficiency improved 2%, and dwell times were reduced by 8% to an average of just 8.1 hours.

A few of the Class 1 freight indicators compared unfavourably to Q4-22. Freight revenue per RTM decreased by 2%, in part due to lower fuel surcharges, and the average operating ratio increased by 3%. Average train weight and length edged down a single percent, and the number of cars on line decreased by 3% – but handled 3% more traffic than in Q4-22.

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<sup>1</sup> 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.



By the end of the year, five months after the West Coast ports strike, intermodal imports through the Port of Vancouver were back above 2022 levels. In Q4-23, global vessel performance improved and dwell times at the Port of Vancouver and Port of Montreal were much shorter than in previous years. Railways also played their part, reducing dwell times by 8% compared to Q4-22, averaging just 8.1 hours.

While one supply chain challenge is resolved, another emerges. 2024 kicks off with two significant global challenges. Drought is placing restrictions on the number of daily vessels travelling through the Panama Canal, and attacks in the Red Sea are limiting the usage of the Suez Canal – both these disruptions contribute to slowing down supply chains and increasing transportation costs.

## Passenger Rail

**Ridership surpassed pre-pandemic levels in some areas, while the recovery is proving more challenging in others.**

Several encouraging indicators show a return to pre-pandemic ridership levels. In Q4-23, more than half of RAC members reported an increase in ridership compared to Q4-19. For example, Amtrak's Q4 ridership for routes with segments in Canada surpassed Q4-19 by an impressive 10%. And in Q3-23 (latest available data), tourism expenditures on passenger rail in Canada were up 13% compared to Q3-19.

Intercity passenger rail ridership also continued to climb. In Q3-23,<sup>2</sup> VIA Rail ridership exceeded 1.1 million passengers, reaching just 17% below pre-pandemic levels.

In December 2023, urban transit ridership was 20% below pre-pandemic levels – showing no improvement since August 2023.

The most significant challenge remains for commuter rail. While ridership gains are being achieved each year, rail continues to be the commuting mode most deeply impacted by the COVID-19 pandemic (e.g., relative to commuting by personal vehicle, bus, active transport, etc.).

Despite some positive trends, following several years of lower-than-normal ridership, government support, at all levels, for passenger rail must remain a top priority.

## Rail Safety

**Fourth quarter safety performance was nothing short of exceptional.**

Safety is job one for every railway and every railroader. The improvement in the safety metrics for Q4-23 reflect this focus and commitment.

In the fourth quarter of 2023, the Canadian Class 1 [Federal Railroad Administration \(FRA\)](#) personal injuries rate was 20% below the 2020-2022 average<sup>3</sup> and the train accident rate was 21% below the 2020-2022 average.

According to Q4-23 [Transportation Safety Board \(TSB\)](#) data, the overall accident rate for Canada's federally regulated railways improved by an outstanding 29% compared to Q4-22 and was 19% below the 2018-2022 average. In addition, compared to 2022, accidents were down across all key accident categories: main-track derailments (-41%), crossing and trespassing accidents (-18%), and accidents involving dangerous goods (-17%).

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<sup>2</sup> Latest available data as of February 16, 2023.

<sup>3</sup> 2020 is the earliest year for which data are available.

## State of the Canadian Economy

Data for all key economic indicators are publicly available up to November 2023. When compared against August 2023 to analyze recent trends, most indicators showed improvement.

From August to November 2023, total employment (all industries) increased by 0.5% (99,000 jobs), from 20.22 million to 20.32 million.

Over the same three months, GDP increased by 0.3%, from \$2,206B to \$2,212B. GDP increased in 12 out of 20 sectors, led by (in absolute dollar terms) increases in health care and social assistance, retail trade, and agriculture. The transportation and warehousing sector's GDP increased by 0.7%.

From August to November 2023, trade (exports + imports) increased by 1.3%, from \$126.8 to \$128.5B.

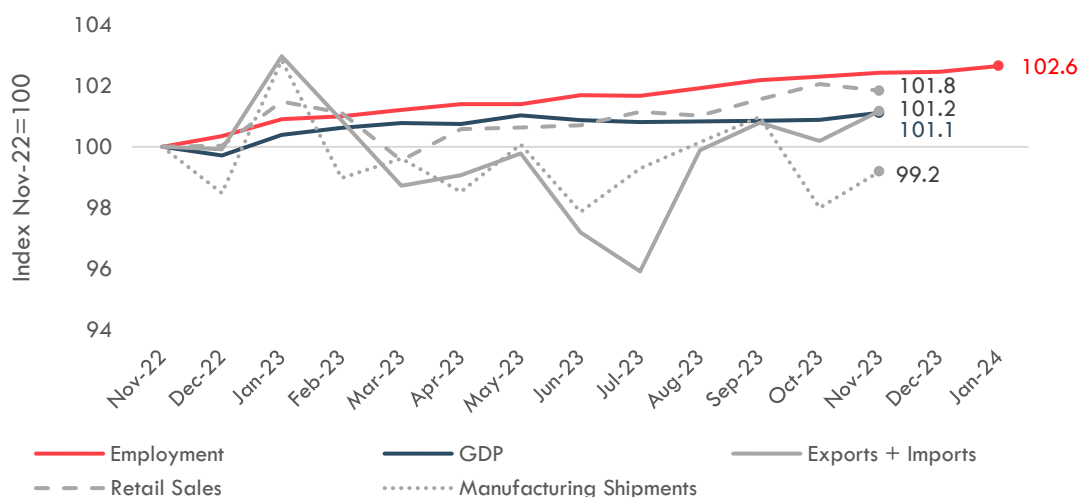
Domestic retail sales provide insight into household consumption, which is the largest contributor to Canada's GDP at over 50% of total GDP and a key driver of intermodal rail volumes. From August to November, retail sales (in current dollars) increased by 0.8%.

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% from August to November.

### Growth of Key Canadian Economic Indicators

	Employment (millions)	GDP (\$B, annualized)	Exports + Imports (\$B)	Retail Sales (\$B)	Manufacturing Shipments (\$B)
August 2023	20.22	2,206	126.8	66.1	72.4
November 2023	20.32	2,212	128.5	66.6	71.7
<b>3-month change</b>	<b>0.5%</b>	<b>0.3%</b>	<b>1.3%</b>	<b>0.8%</b>	<b>-1.0%</b>

### 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 (2017) dollars. The indices for trade, retail sales, and manufacturing shipments are in nominal dollars.

## Economic Outlook

The economic outlook presented in RAC’s Q3-2023 Report, based on the forecasts of Canadian banks, predicted 0.4% growth of the Canadian economy in Q3. Actual Q3 performance turned out to be much weaker. The quarter kicked off with a significant supply chain disruption – the West Coast ports strike – and the economy contracted by 1.1%. This contrasts with the impressive 5.0% growth of the U.S. economy, fueled by strong increases in both consumer and government spending.

Building from a weak Q3, Canadian GDP is forecasted to grow at a moderate pace, between 0.5% and 1.0% (annualized) per quarter, over the next several quarters.

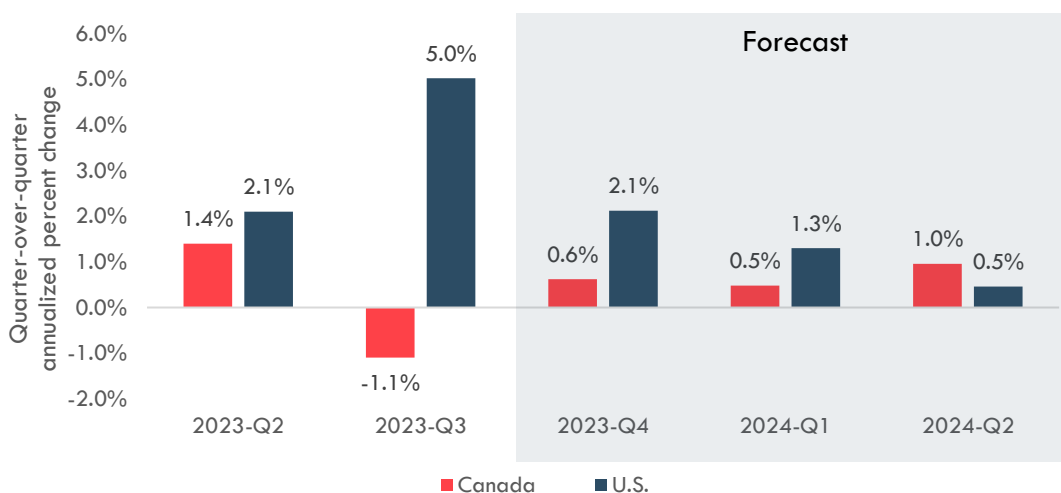
For rail, the forecast is cautiously optimistic moving into 2024. Continued improvements are expected as the year progresses, with interest rates stabilizing and modest growth in industrial production. Expectations are mildly positive across many lines of business, but there remains uncertainty regarding monetary policy, the overall macroeconomic environment, and geopolitical risks.

There is some optimism about interest rates coming down and construction picking up, which will support demand for forest products. Expectations for coal and most merchandise commodities (metals and minerals, energy, chemicals and plastics) are positive. Automotive enjoyed a strong 2023, and despite some planned shutdowns for EV retooling, the industry is well-positioned for another strong year heading into 2024.

Railways have recently launched premium, seamless intermodal services across the continent to gain share of the truck-competitive intermodal business. However, an uptick in this business is dependent on economic conditions improving and retail/consumer demand.

Expectations for grain are more neutral. Year-over-year weakness in grain is expected to persist until the next crop comes in. A normal crop is expected for 2024, which would be a welcome improvement compared to 2023.

### 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.

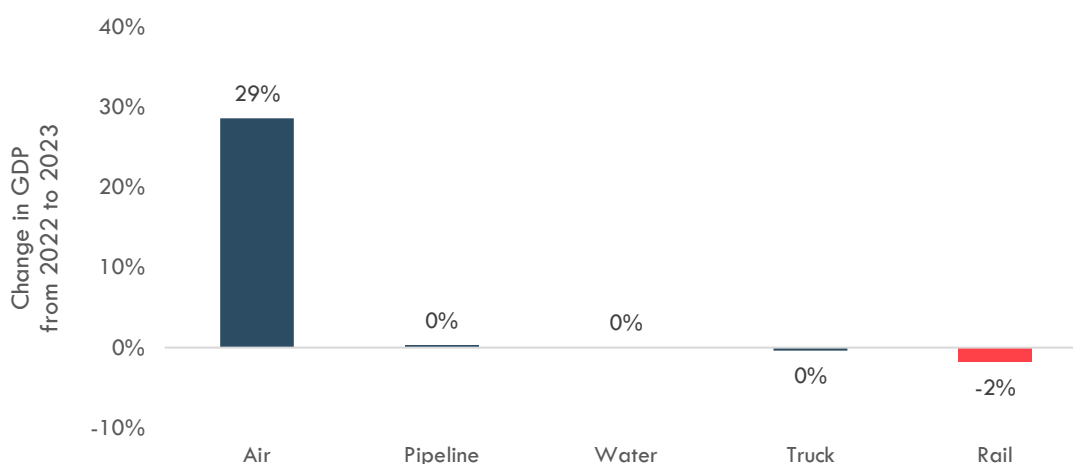
## Rail and Other Modes of Freight Transportation

Each transportation mode has been impacted differently since the onset of the pandemic. The adverse impacts on some sectors were significant, especially for those that are more oriented toward passenger services. This affects the initial values used in year-over-year trend analysis and, 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 29% increase on a year-to-date (YTD) basis. This brought the air transportation sector's GDP up to 65% of its pre-pandemic (2019) level.

YTD GDP was relatively flat compared to 2022 in every other transportation sector.

### Modal Comparison of GDP (YTD Jan-Nov)

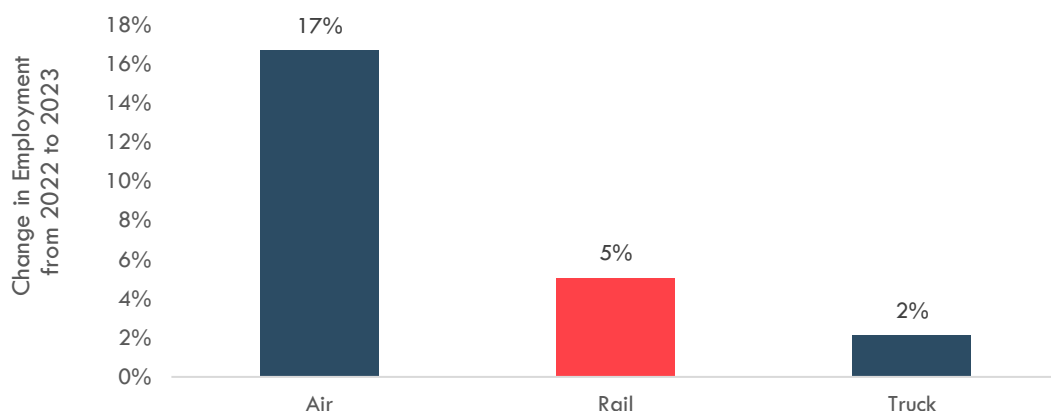


Source: Statistics Canada, [Gross Domestic Product by Industry](#)

Note: Data are seasonally adjusted.

YTD employment was up for all three transportation sectors for which data are available: air (+17%), rail (+5%), and truck (+2%).

### Modal Comparison of Employment (YTD Jan-Nov)



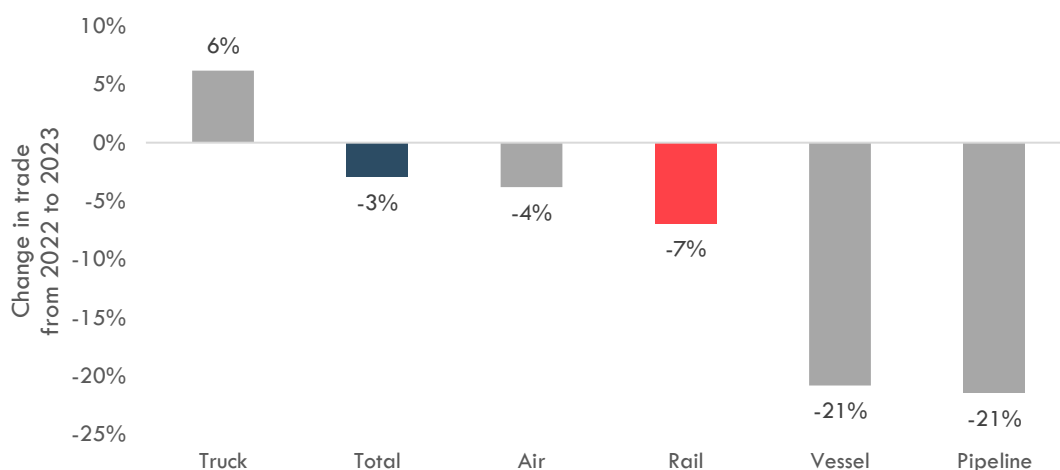
Source: Statistics Canada, [Survey of Employment, Payrolls and Hours](#)

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 between Canada and the U.S. were down 3% across the first eleven months of 2023 compared to the same period in 2022.<sup>4</sup> Trade by truck increased (6%), while every other mode experienced a decline: air (-4%), rail (-7%), marine vessel (-21%), and pipeline (-21%).

### Modal Comparison of Trade with the U.S. (YTD Jan-Nov)



Source: U.S. Bureau of Transportation Statistics, [News and Statistical Releases: North American Transborder Freight Data](#).

<sup>4</sup> Previous editions of the RAC Quarterly Report showed trade by mode data from Transport Canada. As of February 14<sup>th</sup>, 2024, the latest available data from *Transport Canada in Brief* cover September 2023. Therefore, this edition relies on data from the U.S. Bureau of Transportation Statistics (BTS), which cover the period up to November. Whereas the Transport Canada data that were previously shown covered Canada's trade with all trading partners, the BTS data showed here covers bilateral Canada-U.S. trade only.



## Network-wide Canadian Class 1 Freight Data

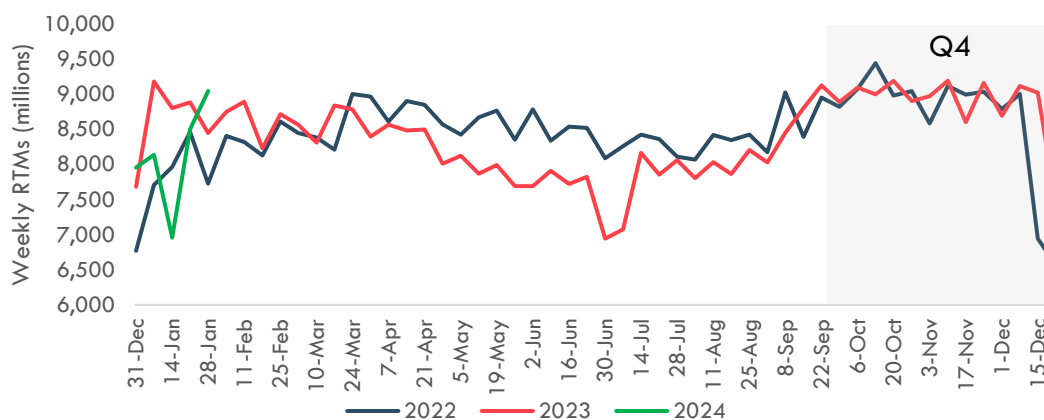
The Class 1 data cover CN and CPKC's network-wide operations across North America.

### Weekly Trend

Following two quarters of relatively low traffic volumes, Class 1 revenue ton-miles (RTMs) picked up and finished the quarter up 3% compared to Q4-22. Fourth quarter volumes were supported by year-over-year gains in most commodity categories, except intermodal and forest products.

Turning to the first five weeks of 2024, the adverse impacts of the extreme cold experienced in Western Canada is evident. Extreme cold weather caused supply chain slowdowns which contributed to an overall 6% reduction in RTMs compared to the same period in 2023. Energy, chemicals and plastics were up 3%, coal was down 18%, while traffic for all other commodity groups were down by between -3% and -9%. Fortunately, by week 5 (the week starting January 28<sup>th</sup>, 2024) the supply chain had recovered and traffic is returning back to *normal* levels.

### 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., "7-Apr" corresponds to the week of Apr 7-13). The week starting December 31, 2023 (for the 2024 series), is compared against the weeks starting January 1, 2023, and January 2, 2022.

### Revenues, Revenue Ton-miles, and Carloads

As shown in the figure and table below, compared to Q4-22, total RTMs were up 3% while carloads were flat.

While automotive experienced the most significant year-over-year increase in percentage terms, at 20%, total growth was driven primarily by significant gains for higher volume commodity categories, including coal (+1,632 million RTMs) and energy, chemicals and plastics (+1,515 million RTMs). Coal compared favourably relative to Q4-22, when there was an outage at a customer facility; and energy, chemicals and plastics enjoyed solid demand.

Soft demand for forest products persisted into Q4. On the intermodal side, RTMs were at or below 2022 levels in every week following the West Coast ports strike, until they jumped up 39% year-over-year the week of December 15<sup>th</sup>.

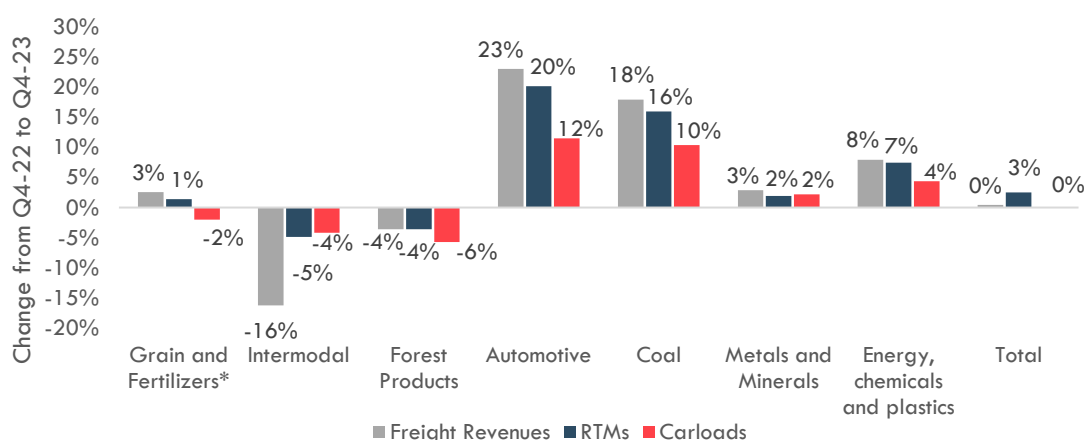
Canadian railways continue to provide service to customers at competitive rates. Total freight revenue per RTM, a proxy for freight rates, decreased by 2% compared to Q4-22. Most notably, intermodal freight revenue per RTM was down 12% (not shown). Freight rates for other commodities were either flat, or limited to increases of no more than 2%.



Intermodal revenue ton-miles were at or below 2022 levels in every week following the July West Coast ports strike, until the week of December 15<sup>th</sup>.

For the year, total RTMs were flat compared to 2022. Grain and fertilizers led in growth with a 6%, 8,331 million RTM increase compared to 2022 (shipments throughout the first eight months of 2022 were very low following a small carry over from the 2021 harvest, which was impacted by drought). However, this gain was completely offset by a 10%, 8,829 million RTMs reduction in intermodal volumes. Intermodal traffic was impacted by the July West Coast ports strike, a generally weak macroeconomic environment, lower retail volumes, and enhanced pricing pressure from the trucking sector.

### Class 1 Freight Revenues, RTMs, and Carloads by Commodity, Q4-23 vs Q4-22



### Q4: Canadian Class 1 RTMs (millions), by Commodity

	Q4-23	Q4-22	Change (%)	Change (#)
Grain and Fertilizers*	39,772	39,226	1%	546
Intermodal	20,823	21,899	-5%	-1,076
Forest Products	7,872	8,168	-4%	-296
Automotive	1,922	1,599	20%	323
Coal	11,843	10,211	16%	1,632
Metals and Minerals	11,891	11,664	2%	227
Energy, chemicals and plastics	21,744	20,229	7%	1,515
<b>Total</b>	<b>115,867</b>	<b>112,996</b>	<b>3%</b>	<b>2,871</b>

### Year (Q1-Q4): Canadian Class 1 RTMs (millions), by Commodity

	2023	2022	Change (%)	Change (#)
Grain and Fertilizers*	139,009	130,678	6%	8,331
Intermodal	82,453	91,282	-10%	-8,829
Forest Products	32,157	34,200	-6%	-2,043
Automotive	7,239	6,497	11%	742
Coal	46,731	44,960	4%	1,771
Metals and Minerals	49,051	47,530	3%	1,521
Energy, chemicals and plastics	80,646	83,453	-3%	-2,807
<b>Total</b>	<b>437,286</b>	<b>438,600</b>	<b>0%</b>	<b>-1,314</b>

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

\*Includes potash.



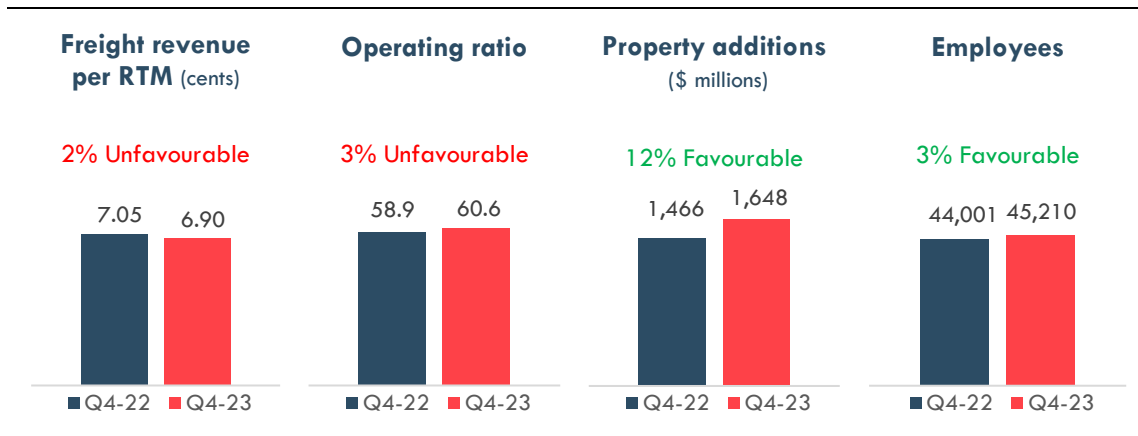
## Select Key Financial and Operating Metrics

In Q4-23, several important performance metrics, including train speed, fuel efficiency, and dwell, improved. In addition, investment and employee headcount increased to support future volume growth.

From Q4-22 to Q4-23, freight revenue per RTM decreased by 2% while the average Class 1 operating ratio increased by 3%. However, undeterred by the macroeconomic challenges and supply chain disruptions experienced throughout 2023, Canada's Class 1 railways made capital investments of more than \$1.6 billion in Q4-23 – a 12% increase compared to the same period last year. For the year, Canada's Class 1 railways invested a total of \$5.7 billion, a 32% increase compared to 2022.

*Canada's Class 1 railways made capital investments of more than \$1.6 billion in Q4-23, bringing the total amount invested in 2023 to \$5.7B – a 32% increase compared to 2022.*

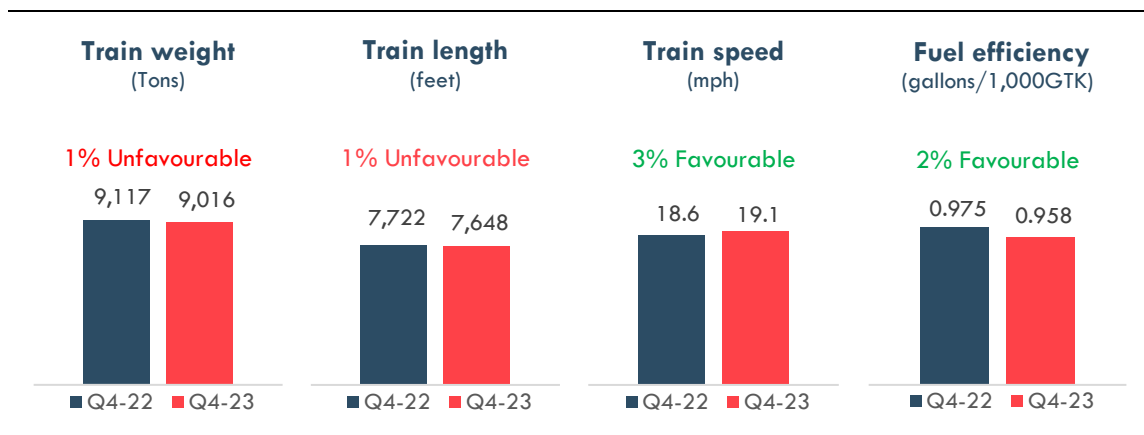
Employment increased by 3% to over 45,000 employees. Canada's railways are well-resourced to service future traffic growth through additional train starts and increasing train lengths.



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

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

In Q4-23, average train weight and length edged down 1% compared Q4-22. The other two train-related performance indicators, fuel efficiency and average train speed, moved in a positive direction by 2% and 3% respectively. The increase in train speed is especially impressive considering that intermodal traffic was down, and intermodal trains average much higher speeds than other train types (e.g., grain unit, coal unit, and manifest). Operating safely at higher speeds and reducing dwell times are key to improving end-to-end transit times and developing premium, seamless, truck-competitive intermodal rail service.

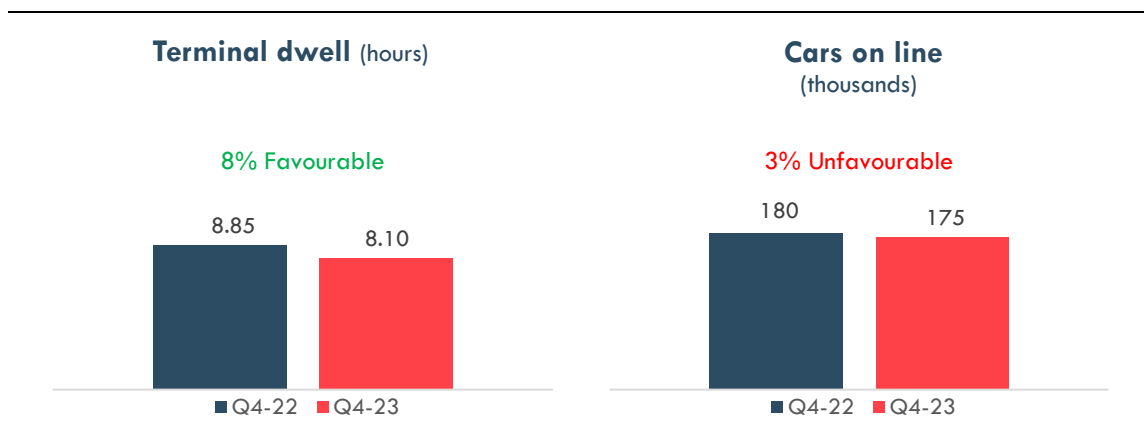


Source: [CN Quarterly Review](#); [CPKC Unaudited Combined Summary of Supplemental Data](#).

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

In Q4-23, railway terminal dwell times remained consistently below 9 hours throughout each week of the quarter. In each of the final 10 weeks of Q4-23, average terminal dwell times for both *Major Yards* and *All Yards* were shorter than they were in 2022. Overall, railway terminal dwell averaged 8.10 hours for the quarter – an 8% improvement year-over-year.

The average number of rail cars on line decreased by 3% compared to Q4-22. The number of multilevel cars on line increased significantly (+1,270 cars, 14%) to support the 20% increase in automotive RTMs, while cars on line across most other categories were reduced slightly.



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

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

## Canadian Freight Industry Data

The freight industry data in this section have some overlap with the Class 1 freight 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, some of the data are analyzed on either a YTD or monthly basis, rather than quarterly.

### Carloads & Intermodal Units

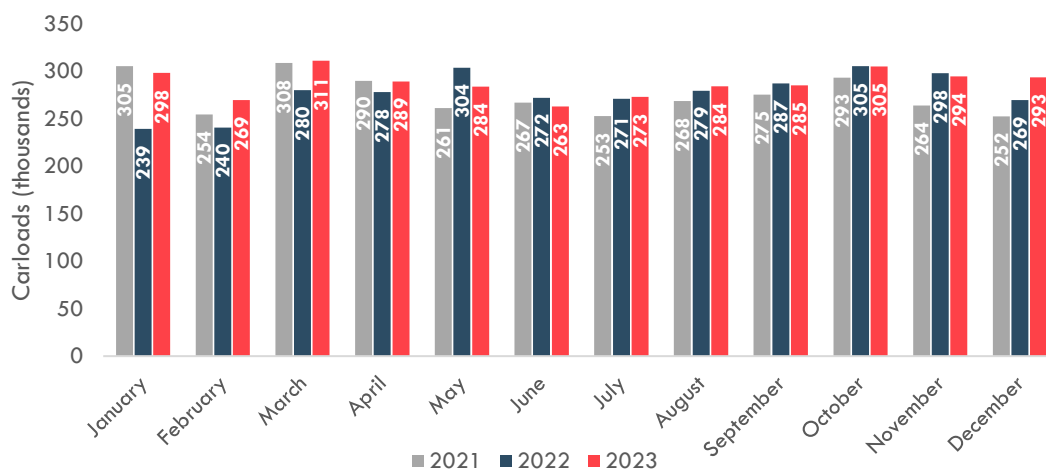
Statistics Canada reports monthly carloadings for over 60 commodities (which are categorized into 10 commodity groupings in this report), as well as intermodal units.

For the year, non-intermodal carloadings were up 4% compared to 2022. Carloads for four non-intermodal commodity groupings were up, led by a 21% increase in agriculture, followed by 20% growth in machinery and automotive and 16% growth in food products.

Eight months of strong year-over-year gains in agriculture carloadings came to an end in September, as the 2023 crop came in much smaller than the previous year. From September to December, carloadings of Canadian agriculture were down 13% compared to 2022. Year-over-year, shipments of canola have been particularly low, down 42% in the fourth quarter, as prices for Canadian canola were not globally competitive.<sup>5</sup> Carloadings for the remaining six non-intermodal commodity groupings were down in the single digits, with forest products (-6%) experiencing the most significant decline.

Total 2023 intermodal traffic was 9% below 2022. Following twelve months of consecutive year-over-year decline, intermodal traffic increased 10% (year-over-year) in December as the volume of imports through the Port of Vancouver recovered (see [Supply Chains](#)).

### Canadian Railways, Carloads



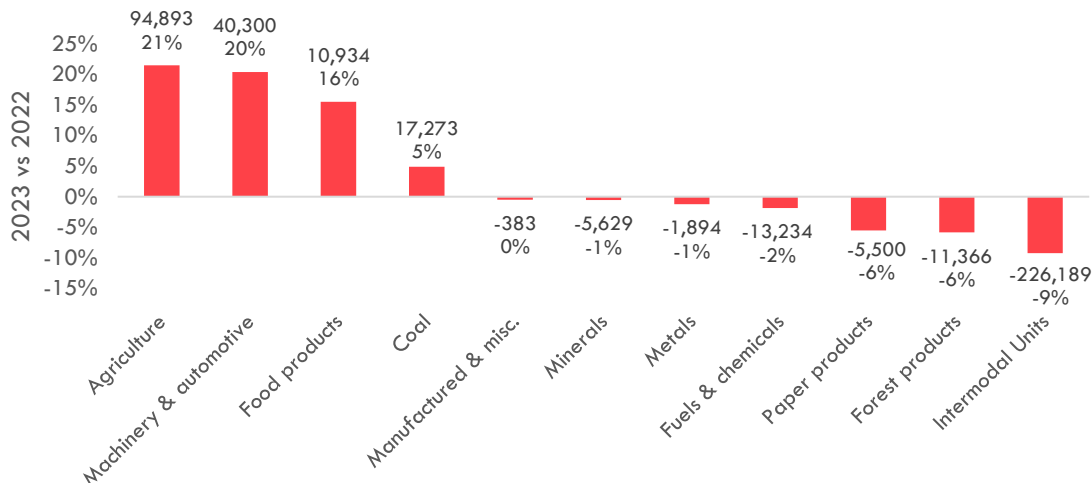
Source: Statistics Canada, [Monthly Railway Carloadings Survey](#)

<sup>5</sup> <https://www.producer.com/news/expensive-canola-results-in-imports/>



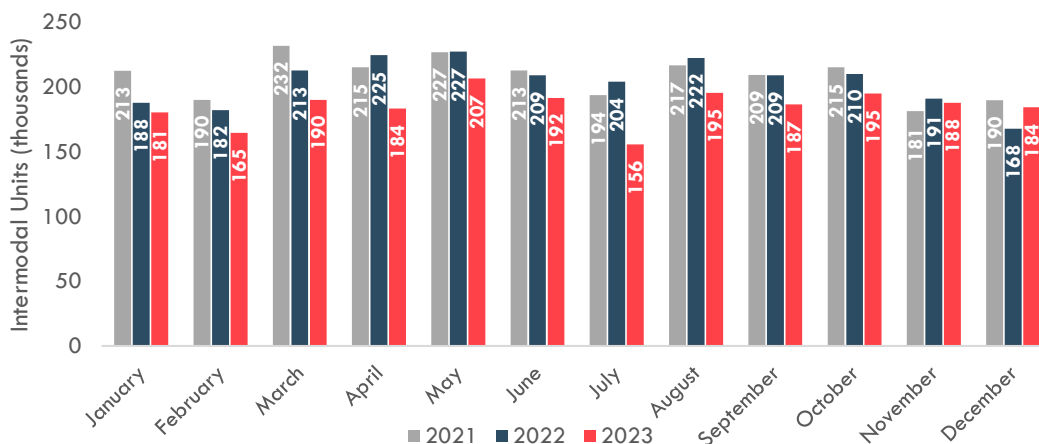


## Canadian Railways, Carloads by Commodity & Intermodal Units (Jan-Dec)



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

## Canadian Railways, Intermodal Units



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

In 2023, carloads were flat in Eastern Canada but were up 7% in Western Canada, while intermodal units were down 5% in Eastern Canada and 12% in Western Canada. The relatively stronger growth in carloads in Western Canada is largely the result of year-over-year growth in agricultural shipments. Carload traffic in the East is strongly concentrated in minerals (accounting for approximately half of all non-intermodal carloads), which experienced a small decrease in traffic.

## CDN Carloads and Intermodal Units by Region (Jan-Dec)

2023 vs 2022	
<b>Eastern Division</b>	
Carloads	0%
Intermodal Units	-5%
<b>Western Division</b>	
Carloads	7%
Intermodal Units	-12%
<b>Total</b>	
Carloads	4%
Intermodal Units	-9%

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

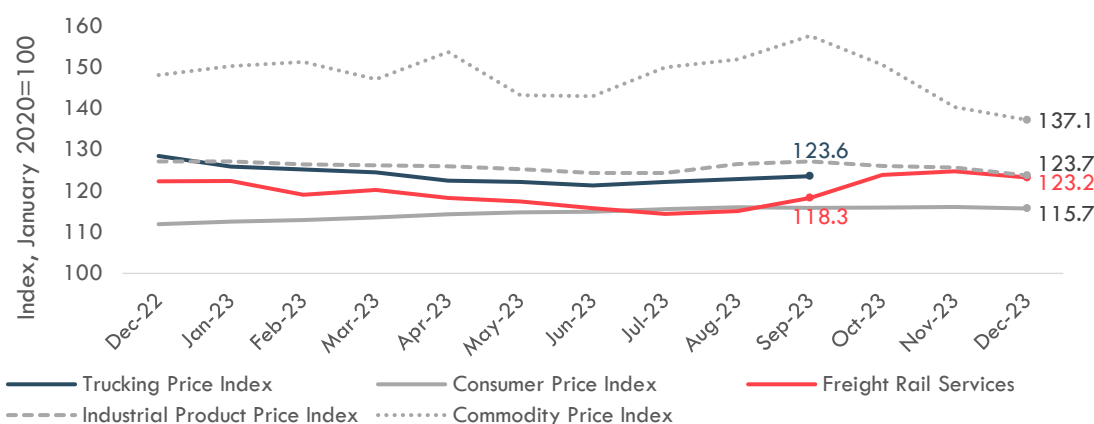


## Freight Rates

Over the past year, price indices have been much more stable compared to the first couple of years following the onset of the COVID-19 pandemic. Modest decreases in diesel prices (not shown) in the later part of 2023 supported a reduction in fuel surcharges and overall rail freight rates in December. In September 2023 (the latest month of available truck rate data), both trucking and rail freight rates were below where they started in the year. Compared to January 2020, the period before the onset of the COVID-19 pandemic, truck rates have increased by a total of 23.6%, while rail rates have increased by 18.3%.

Over the past three months, from September to December, the consumer price index has been flat (-0.1%), while industrial and commodity prices have come down by 2.7% and 12.9%, respectively.

### Price Index of Rail Services vs Other Price Indices

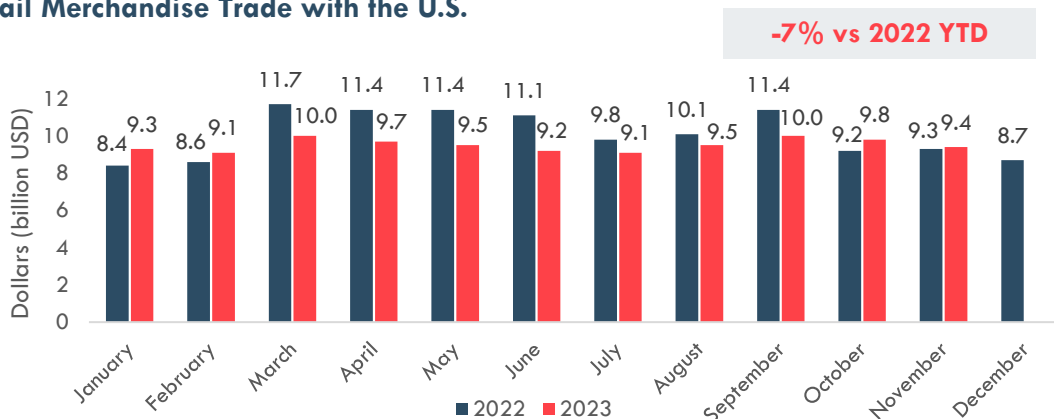


Source: Statistics Canada, [Freight Rail Services Price Index](#), [Industrial Product Price Index](#), [For-hire Motor Carrier Freight Services Price Index](#), and [Consumer Price Index](#). Bank of Canada, [Commodity Price Index](#)

## Exports

On a YTD basis (January-November),<sup>6</sup> trade by rail with the U.S. was 7% below 2022 levels.

### Rail Merchandise Trade with the U.S.



Source: U.S. Bureau of Transportation Statistics, [News and Statistical Releases: North American Transborder Freight Data](#).

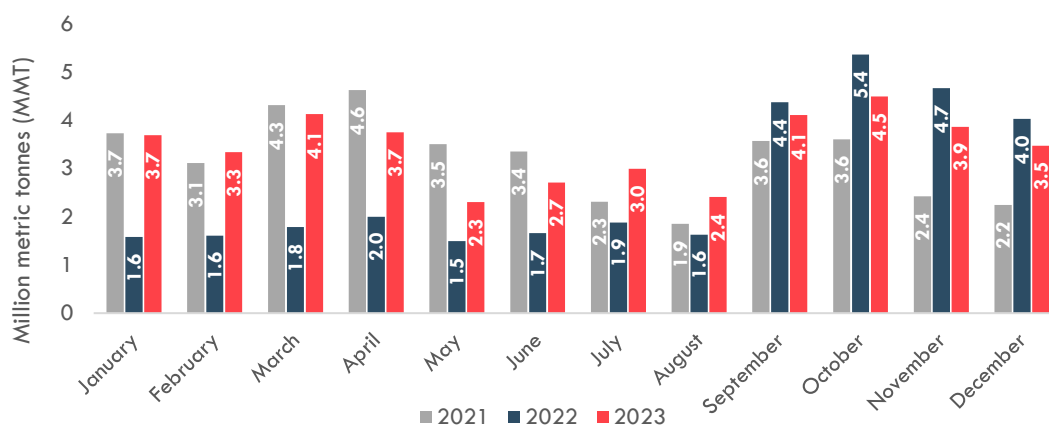
<sup>6</sup> Previous editions of the RAC Quarterly Report showed trade data from Transport Canada. As of February 14<sup>th</sup>, 2024, the latest available trade data from *Transport Canada in Brief* cover September 2023. Therefore, this edition relies on data from the U.S. Bureau of Transportation Statistics (BTS), which cover the period up to August. Note that the BTS source uses USD, not CAD.



Over the first 22 weeks of the 2023-2024 crop year (July 30 to December 30, 2023), more than 7.9 million metric tonnes, or 26%, of planned rail capacity went unused by grain shippers.

The 2022 grain crop was significantly larger than the crop in 2021.<sup>7</sup> Throughout the first eight months of 2023, shipments of grain (carried in from the 2022 harvest) to Western ports were up 86% compared to the same period in 2022. This all changed in September, as the 2023 crop came in much smaller than in the previous year. In addition, world grain prices have not been particularly attractive to Canadian grain growers, especially compared to the high prices earned in recent years. Compared to 2022, shipments were down 6% in September, 16% in October, 17% in November, and 14% in December. Over the first 22 weeks of the 2023-2024 crop year (July 30 to December 30, 2023), more than 7.9 million metric tonnes, or 26%, of planned rail capacity went unused by grain shippers.

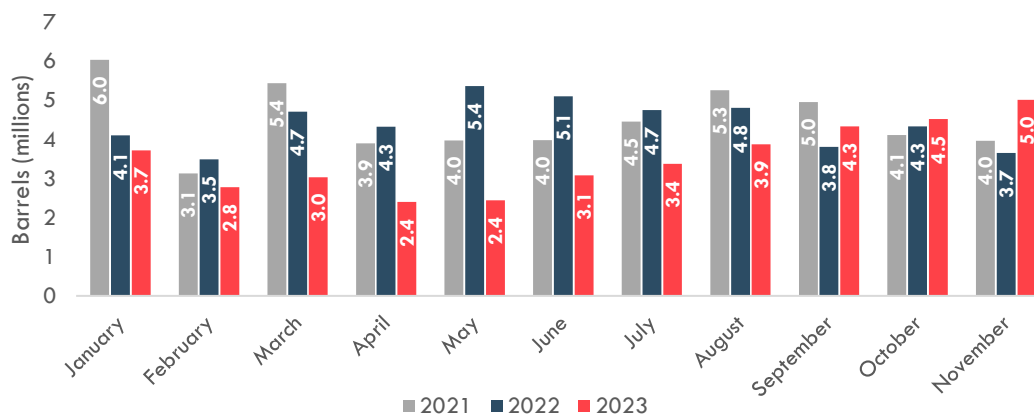
### Grain in Hopper Cars Destined for Western Ports



Source: Quorum Corporation, [Canadian Grain Monitor, Monthly Report](#), GMP Data Table 2B-1 M

In each of the first eight months of 2023, exports of crude oil by rail were down compared to both 2021 and 2022. Since April 2023, exports of crude by rail have increased every consecutive month, and exceeded 2021 and 2022 levels in recent months.

### Canadian Crude Oil Exports by Rail



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

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



## Supply Chains

Modern supply chains are complex and, when disruption occurs at one link, the impacts are felt widely and deeply across other transportation providers, shippers, suppliers, and consumers. Rail has remained among the most reliable and least variable supply chain partner in the face of enormous upheaval over the last few years.<sup>8</sup>

Supply chains were rocked at the outset of the third quarter, as dockworkers at B.C. ports went on strike. While the strike lasted for 13 days, the impacts on traffic through the Port of Vancouver were felt for months, as traffic was diverted to U.S. ports. Supply chain players worked to get the traffic back through Canada's West Coast ports.

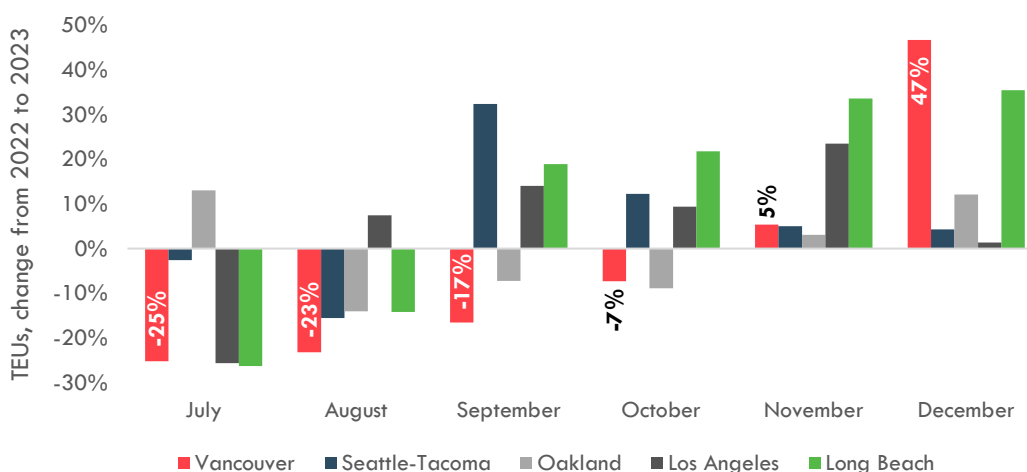
*From July through December, Vancouver container imports were down 7% while West Coast ports in the U.S., which benefitted from traffic diversions, performed much better (notably nearby Seattle-Tacoma, where container imports were up 6%).*

Container imports through the Port of Vancouver didn't rebound immediately following the return of workers; it wasn't until several months later, when imports increased by 5% in November and 47% in December (compared to the same month in 2022). Across the September to December 2023 period, container imports at Vancouver were down 7% compared to just -1% at Oakland, +3% at Los Angeles, +6% at nearby Seattle-Tacoma, and +8% at Long Beach.

### Container Imports July-December 2023 vs 2022

Vancouver	-7%
Oakland	-1%
Los Angeles	3%
Seattle-Tacoma	6%
Long Beach	8%

### Recovery of Container Imports at Major West Coast Ports



Note: Container volumes are measured in TEUs and include imports of empty and laden containers.

Source: Railway Association of Canada analysis based on data from port websites.

<sup>8</sup> Railway Association of Canada, [Strengthening all Links: Building More Resilient, Fluid Supply Chains in Canada](#), May 2023.

Global supply chains began 2024 with at least two significant challenges. In the Americas, operation of the Panama Canal is being affected by drought, and the number of transits per day have been cut by about a third.<sup>9</sup> The restrictions will remain until April 2024,<sup>10</sup> after which the amount of rainfall could change things. And in the Middle East, traffic through the globally important Suez Canal is being disrupted by attacks in the Red Sea. By late January 2024, the number of container ships transiting the Suez Canal fell by 67%.<sup>11</sup> This disruption is causing vessels to be re-directed around the southern tip of Africa, significantly increasing both transit times and costs. These disruptions are causing shipping rates to increase rapidly from the low rates enjoyed in September-November 2023, when the Global Container Freight Index<sup>12</sup> was as low as \$1,048. The index jumped suddenly to \$2,500 in the first week of 2024 and in late January and early February was around \$3,400.

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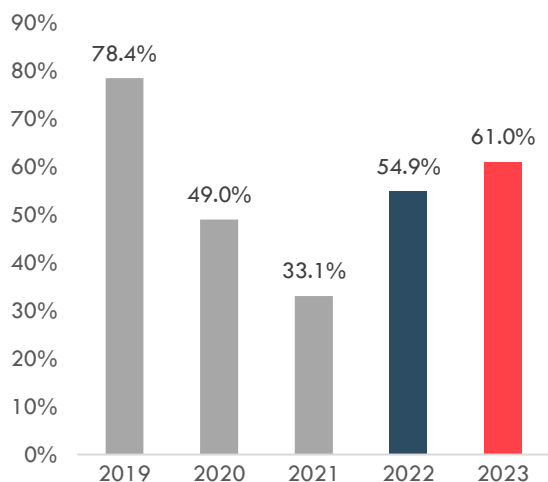
*Global supply chains began 2024 with significant challenges impacting transits through the Panama and Suez canals.*

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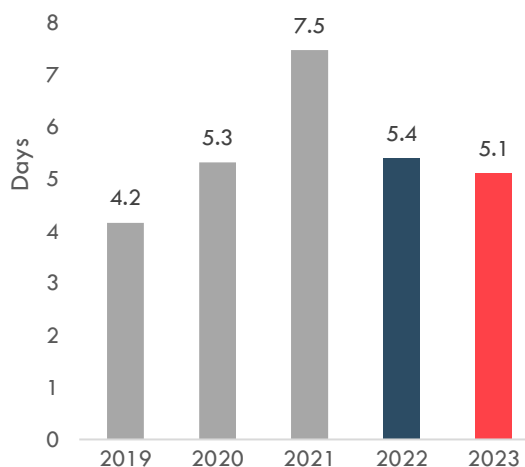
## Global

In Q4-2023, global marine vessel delays and on-time performance improved slightly. According to Sea-Intelligence's *Global Liner Performance report*, *Global Schedule Reliability* increased from 54.9% in Q4-22 to 61.0% in Q4-23. However, this is still below pre-pandemic reliability, as shown in the figure below. The *Global Average Delays for Late Vessel Arrivals* decreased from an average of 5.4 days in Q4-22 to 5.1 days in Q4-23 – remaining nearly 1 day longer than in the pre-pandemic (Q4-19) period.

**Global Schedule Reliability, Q4**



**Global Average Delays for Late Vessel Arrivals, Q4**



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

<sup>9</sup> [McKinsey, How could Panama Canal restrictions affect supply chains? January 19, 2024.](#)

<sup>10</sup> [Port Technology International, Panama Canal delays transit restrictions until spring, February 13, 2024.](#)

<sup>11</sup> [ShareAmerica, Harm ripples from Red Sea shipping attacks, February 12, 2024.](#)

<sup>12</sup> [Freightos Baltic Index \(FBX\): Global Container Pricing Index.](#)



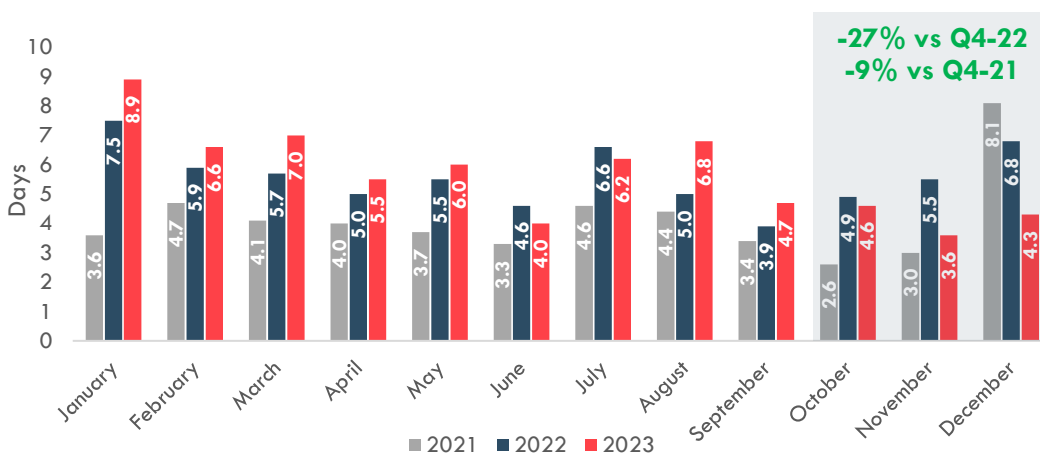


## Canadian Ports

Dwell at the Port of Vancouver averaged 4.2 days in Q4-23, which was a 27% improvement compared to Q4-22 and 9% shorter than Q4-21.

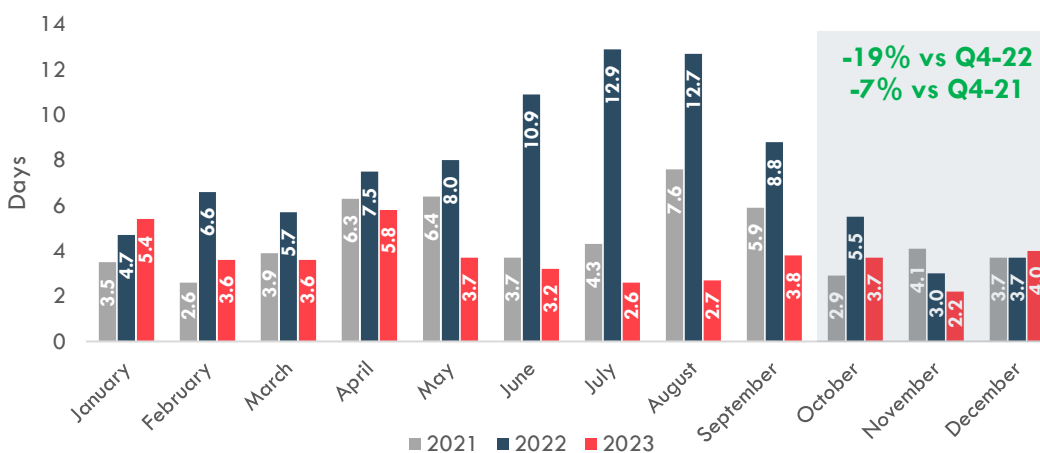
Dwell at the Port of Montreal also improved, averaging 3.3 days, which was a 19% improvement compared to Q4-22 and 7% shorter than Q4-21.

### Vancouver - Gateway terminal rail dwell performance by month



Source: Port of Vancouver, [Supply chain performance, Container terminal rail performance](#)

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

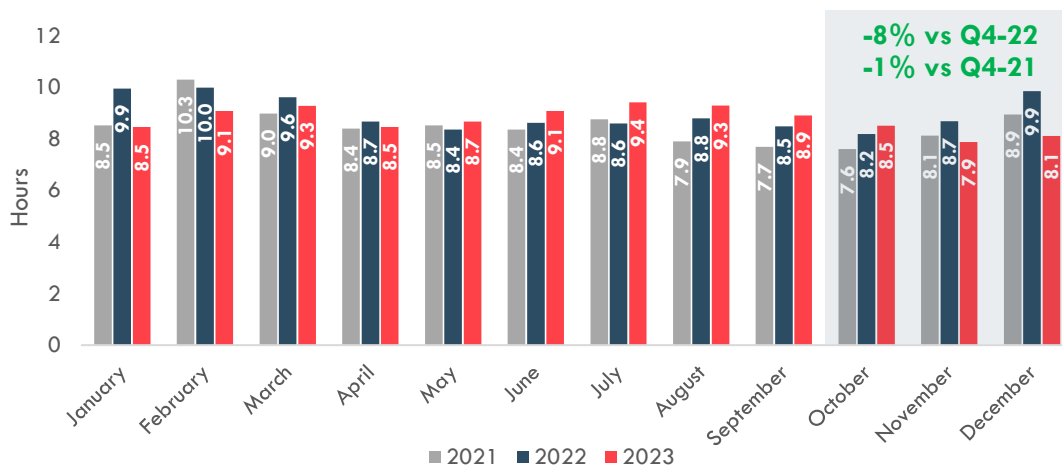


Source: Port of Montreal, [Performance Reports, Monthly Intermodal Scorecard](#)

## Canadian Railways

In Q4-23, railway dwell times averaged just 8.1 hours. Average dwell times were 8% shorter than Q4-22 and 1% shorter than Q4-21.

### Canadian Class 1 Railways - Average Terminal Dwell



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

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. The year-over-year comparisons for the quarter as a whole use data from CN and CPKC's quarterly reports and may not align precisely with the constructed monthly data presented in the figure.

## 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.<sup>13</sup>

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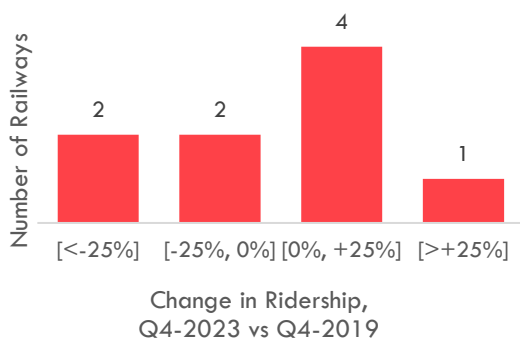
*In the fourth quarter of 2023, more than half of RAC members reported an increase in ridership relative to the pre-pandemic period.*

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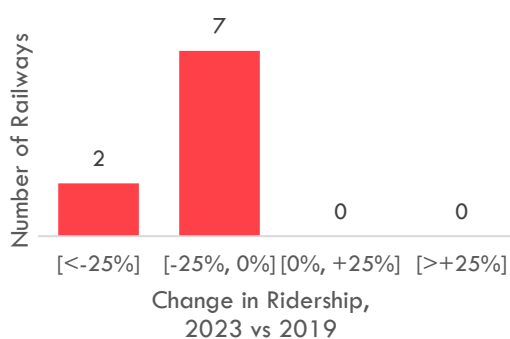
In the fourth quarter of 2023, more than half of reporting members indicated an increase in ridership relative to the Q4-19 (pre-pandemic) period. In Q4-23, nine RAC members reported ridership data. One member reported an increase in ridership of over 25%, four reported an increase between 0% and 25%, two reported a decline of less than 25%, and two reported a decline greater than 25%.

Despite the encouraging fourth quarter numbers, for the year, ridership remained below pre-pandemic levels for all reporting members. Seven members reported a decrease in ridership of less than 25% and two reported a decline greater than 25%.

**RAC Members, Ridership, Q4**



**RAC Members, Ridership, Annual**



### Public Transit and Commuter Rail

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.

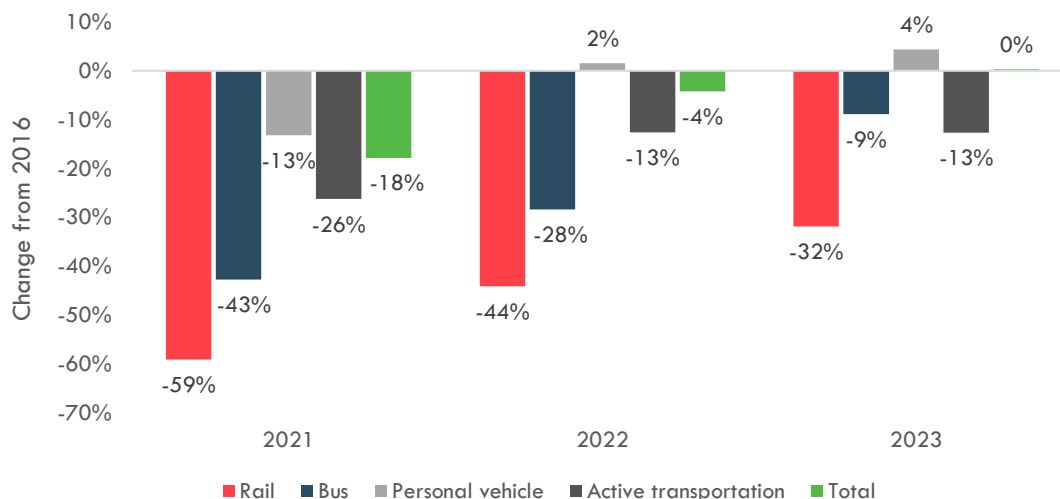
Using Statistics Canada data, we observe the recovery in nation-wide commuting numbers by mode (data covers the month of May in each year).<sup>14</sup> In 2023, compared to a 2016 baseline, the total number of Canadians commuting to work remained unchanged at 15.9 million. Commuting by personal vehicle was the only category that experienced an increase (+4%). Commuting by bus remained 9% below 2016 levels and active transportation (walking and

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

<sup>14</sup> Source: Statistics Canada, Census of Population for May 2016 and May 2021 and supplements to the Labour Force Survey for May 2022 and May 2023. A more recent baseline (2017, 2018, or 2019) is not available.

cycling) was down 13%. Passenger rail ridership was strongly impacted early on in the pandemic, and while its ridership numbers are increasing, the number of commuters by rail in 2023 remained 32% below 2016 levels. Those commuting by rail are generally more likely to work in office environments, where remote or hybrid work arrangements are more common, thereby slowing the ridership recovery.

### Commuting to work by mode

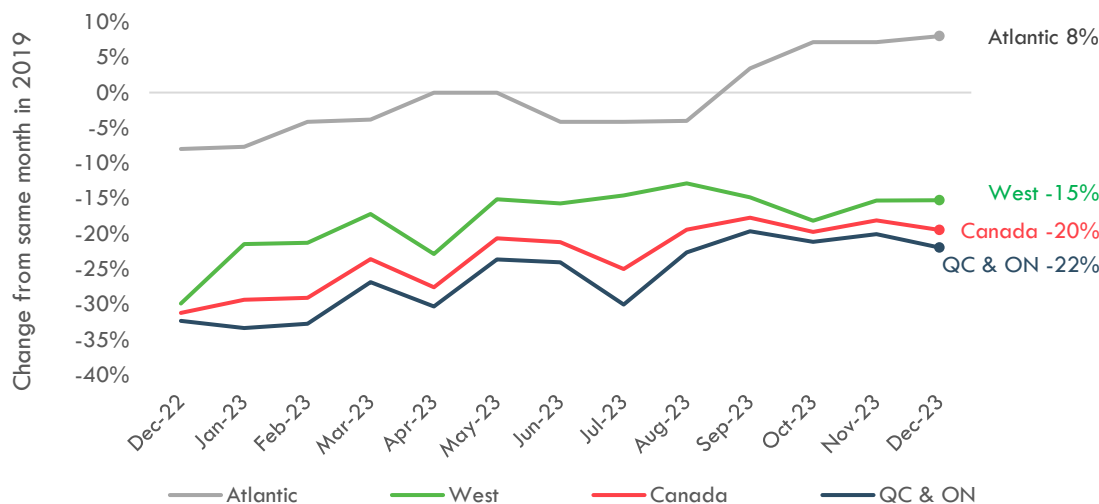


Source: Statistics Canada, [Commuting to work by car and public transit grows in 2023](#)

**Note:** Data is for the month of May for all years. Personal vehicle includes commuting by car, truck or van, as either a driver or passenger; rail includes subway, elevated rail, light rail, streetcar, and commuter trains; active transportation includes walking and cycling. Not included in the analysis is an “other” category, consisting of motorcycle, scooter or moped; passenger ferry; and other methods. The “other” category accounts for just over 1% of total commuters.

The urban transit ridership data presented below accounts for seasonality, by comparing ridership in each month to the corresponding month in 2019. In December 2023, ridership was sitting 20% below pre-pandemic levels – relatively unchanged since August 2023. The differences in the modal shares of urban transit (bus, subway, train, etc.) by region is likely a very strong, contributing factor to the uneven ridership recovery witnessed across regions. The pandemic had a relatively smaller negative impact on bus ridership. Atlantic Canada, which relies significantly on bus service, recovered the quickest.

### Urban Transit Systems Ridership by Region



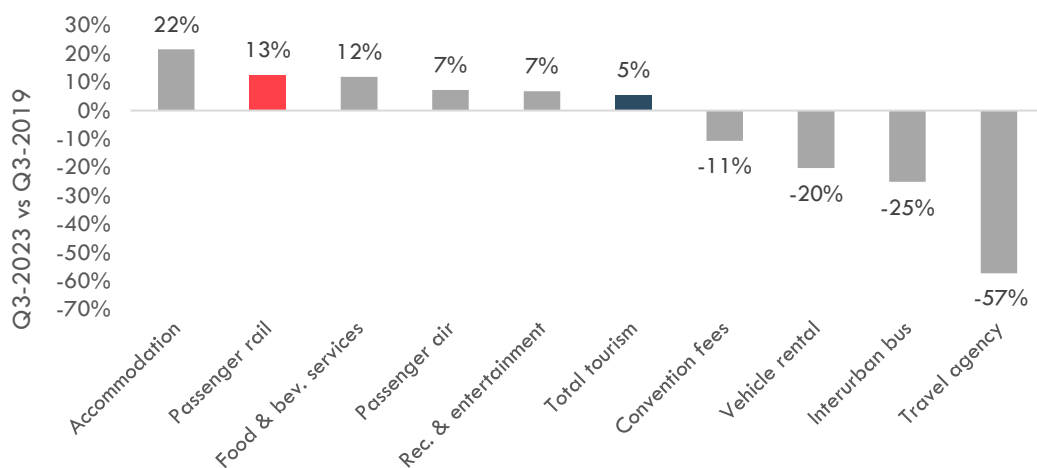
Source: Statistics Canada, [Monthly Passenger Bus and Urban Transit Survey](#)

## Tourism Rail

There is a considerable lag in data on tourism expenditures. The latest available data cover Q3-23. 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 Q3-23, the overall tourism sector had recovered, with expenditures reaching 5% above their pre-pandemic (Q3-19) level. Tourism expenditures on passenger rail services were 13% above pre-pandemic levels.

### Tourism Expenditures, Q3



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

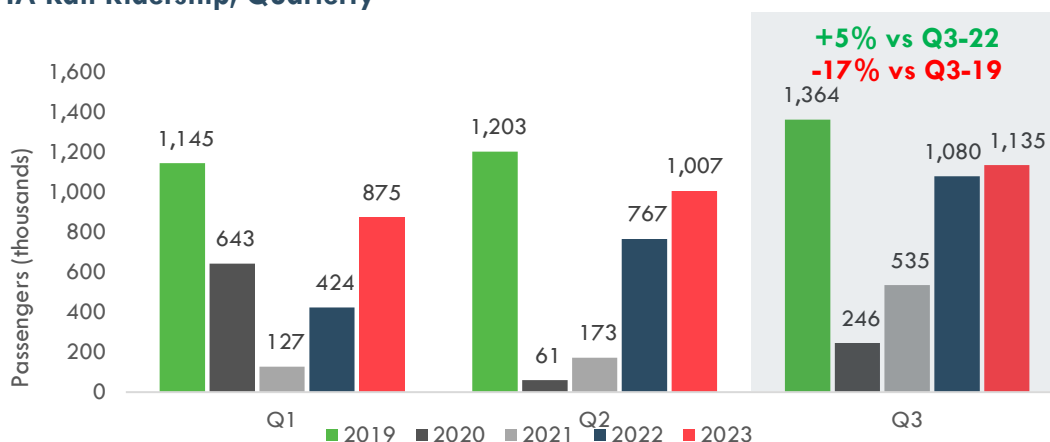
## Intercity Passenger Rail

The latest quarterly ridership data available for VIA Rail cover Q3-23.

In Q3-23, VIA Rail ridership exceeded 1.1 million passengers – reaching just 17% below the Q3-19 (pre-pandemic) level of 1.364 million passengers.

On a YTD basis, across the first three quarters of 2023, VIA Rail ridership increased 58% compared to 2022, but remained 20% below 2019 levels.

### VIA Rail Ridership, Quarterly



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



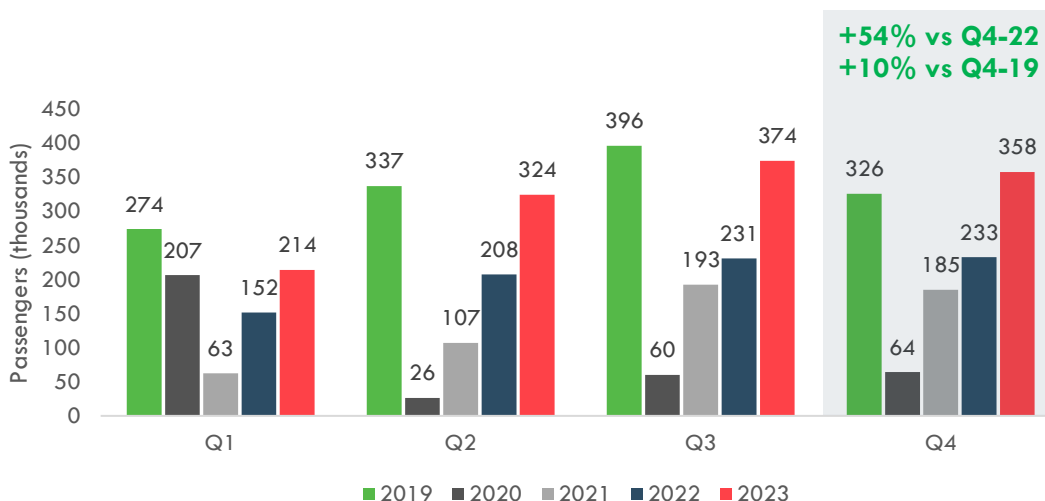


Amtrak has many routes throughout the U.S., and three routes that include a Canadian segment. Ridership on these three routes does not imply that passengers crossed the border, as they may have travelled a particular segment on either side of the border.<sup>15</sup>

Q4-23 data indicate that ridership has fully recovered for Amtrak's routes with segments in Canada. In Q4-23, ridership increased 54% year-over-year and exceeded pre-pandemic (Q4-19) levels by an impressive 10%.

For 2023, annual ridership was down just 5% compared to 2019.

### Amtrak Ridership on Routes with Segments in Canada, Quarterly



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

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

<sup>15</sup> 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 Q4-23 reflect this.

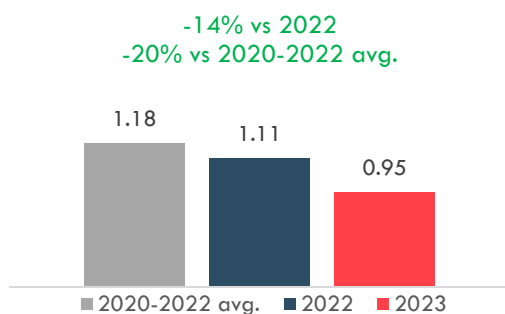
### Federal Railroad Administration Safety Data

In Q4-23, the Canadian Class 1 FRA personal injuries rate improved by 14% year-over-year and was 20% below the 2020-2022 average.<sup>16</sup>

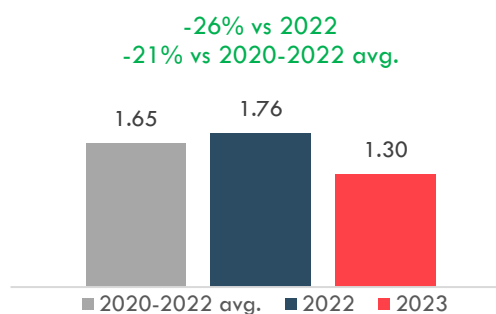
The Q4-23, the train accident rate improved by 26% compared to 2022 and was 21% below the 2020-2022 average.

For the year, compared to the 2020-2022 average, the personal injury rate was down 18% and the train accident rate was down 22%.

**FRA personal injuries rate<sup>1</sup>, Q4**



**FRA train accidents rate<sup>2</sup>, Q4**



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

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

<sup>1</sup> Injuries per 200,000 employee hours

<sup>2</sup> Accidents per million train-miles

<sup>16</sup> 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.

*Rail safety performance in the fourth quarter of 2023 was exceptional. The accident rate improved by 29% compared to Q4-22.*

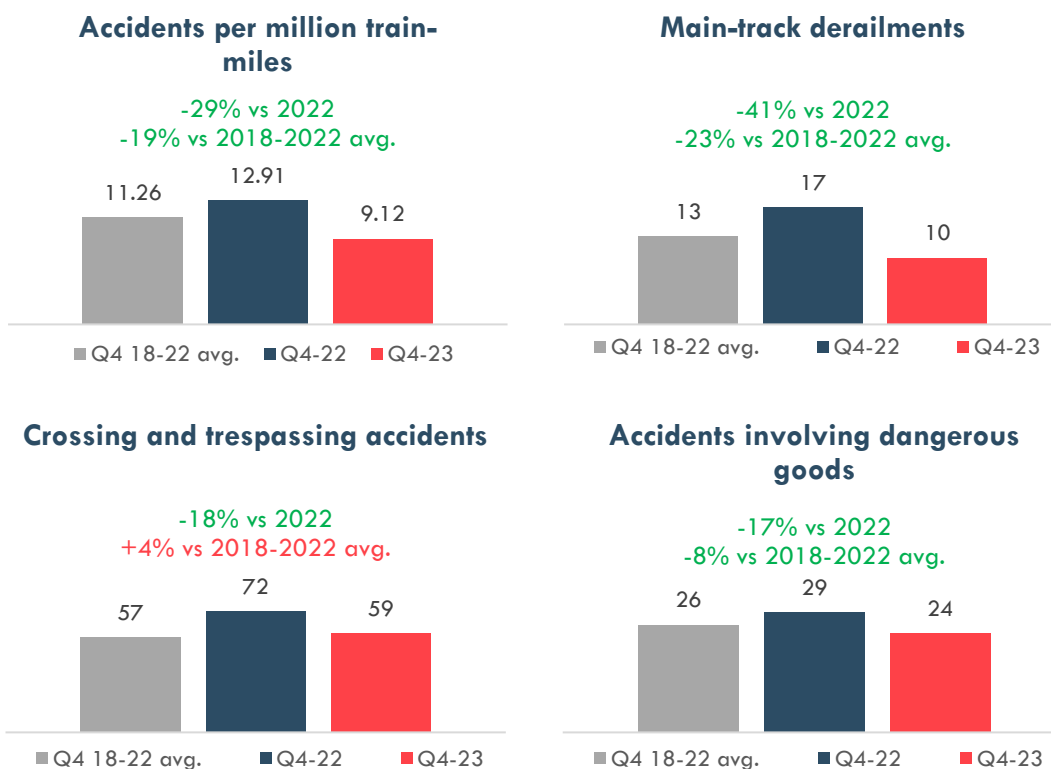
Rail safety performance in the fourth quarter of 2023 was nothing short of exceptional.

In Q4-23, the accident rate improved by an outstanding 29% compared to Q4-22, and was 19% below the 2018-2022 average. Railways made significant progress in reducing the number of main-track derailments, which decreased by 41% compared to 2022 and 23% compared to the 2018-2022 average.

Crossing and trespassing accidents were down 18% compared to last year but were close to the 2018-2022 average – reinforcing the need for continued support of Operation Lifesaver’s education and awareness activities, as well as continued advocacy for the adoption of the RAC/FCM Proximity Guidelines to enhance safety and livability near railway infrastructure.

The number of accidents involving dangerous goods showed a strong, 17% improvement compared to last year, and was 8% below the 2018-2022 average.

For the year, compared to the 2018-2022 average, the accident rate improved by 13%, main-track derailments were down 30%, crossing and trespassing accidents were up 5%, and accidents involving dangerous goods were down 24%.



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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