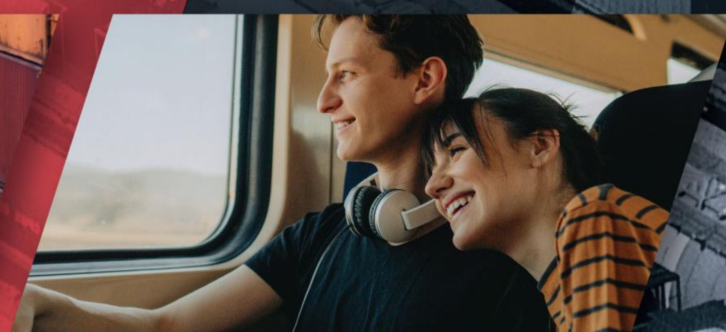
Railway Association of Canada

RAC QUARTERLY REPORT

Q3-2023

November 24, 2023

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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.[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.

Executive Summary

Canadian Economy

Weak economic growth in the forecast for Canada.

Canada's key economic indicators, from May to August 2023, show little improvement. Employment increased by 0.5% while GDP contracted. Furthermore, retail sales, international trade, and manufacturing shipments – which are all measured in current dollars and therefore don't consider inflation – only grew by 0.4%, 0.2%, and 0.0% (flat), respectively.

In recent months, the economic outlook for the Canadian economy has weakened. Canada's GDP contracted by 0.2% in 2023-Q2 and is forecasted to grow at only a very modest pace over the next several quarters – 0.4% in 2023-Q3, 0.2% in 2023-Q4, and 0.1% in 2024-Q1.

Freight Rail

A weak macroeconomic environment and a damaging strike at B.C. ports negatively impacting Canadian freight traffic.

The importance of supply chain stability and the need for pragmatic solutions that expand supply chain capacity and fluidity were again brought into clear focus in the third quarter of 2023.

Class 1 freight traffic (CN and CPKC, network-wide), measured using revenue-ton miles (RTMs), was down 4% compared to the same period last year. Carloads and freight revenues were also down by 8% and 9%, respectively. RTM growth in grain & fertilizers (7%, 2,110 million), as well as small gains (on an absolute RTM basis) in automotive (13%, 212 million), metals and minerals (1%, 114 million), and coal (0.3%, 34 million) were not enough to offset the significant decreases in intermodal (-18%, -4,285 million), forest products (-11%, -988 million), and energy, chemicals and plastics (-8%, -1,744 million).

On a year-to-date (YTD) basis, total RTMs were down 1% compared to 2022. Statistics Canada's carload data, which are specific to Canadian operations and include data from all freight railways, including shortlines, indicates that on a YTD basis (January-August) non-intermodal carload traffic was up 5% while intermodal traffic was down 12%.

In terms of performance, two out of ten key financial and operating metrics improved compared to the same period last year, two remained unchanged, and six worsened. Train weight and length were reduced to accommodate softer traffic volumes while maintaining scheduled train operations and service levels. The B.C. port strikes disrupted supply chains and likely contributed to the observed 6% increase in average rail terminal dwell. Despite the disruption, dwell remained below 10 hours each week and continued to improve throughout the quarter. On the financial side, low trucking rates and an unfavourable lag in the fuel surcharge contributed to a 5% reduction in freight revenue per RTM and a 9% increase in the average operating ratio. Undeterred by the macroeconomic challenges, Class 1 employment was up 4% and they invested nearly $1.7 billion into their assets – that's a $500 million (43%) increase compared to Q3-22.

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[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.

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With strong investment and workforce numbers, Canada's railways are well-positioned to respond as traffic volumes pick up.

Supply chain performance for international marine carriers improved significantly in Q3-23 compared to Q3-22, getting much closer to pre-pandemic performance levels. At major Canadian ports, dwell increased in Vancouver while it decreased in Montreal. Regardless of these quarterly performance metrics, Canada and Canadians must be very concerned with the reputation of its supply chains. Following the B.C. port strikes, some U.S. bound traffic, which used to enter through B.C. ports, continues to be diverted to U.S. ports. Poor international port rankings, the introduction of anti-replacement worker legislation, the recent B.C. port strike and St. Lawrence Seaway strike, and a possible strike at the Port of Montreal in January 2024, give cause for concern for Canadian supply chain players and policy makers at all levels of government.

Passenger Rail

Ridership improving across all segments of passenger rail service.

In Q2-23 (latest available data), tourism expenditures on passenger rail, which are a function of both ridership and pricing, were up 14% compared to Q2-19.

Urban transit ridership continued to improve, and in August 2023, was sitting 19% below pre-pandemic levels, from a pandemic trough of -84%.

Intercity passenger rail ridership also continued to climb. In Q2-23,[2] VIA Rail ridership increased by 31% year-over-year, reaching just 16% below pre-pandemic levels. In Q3-23, Amtrak ridership for routes with segments in Canada increased by 62% compared to last year and was within 6% of its Q3-19 (pre-pandemic) level.

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

Rail Safety

Many significant improvements but crossings and trespassing remain an issue.

Safety is job one for every railway and every railroader. The improvement in the safety metrics for Q3-23 reflect this focus and commitment.

The Canadian Class 1 *Federal Railroad Administration (FRA)* personal injuries rate was 25% below the 2020-2022 average[3] and the train accident rate was 15% below the 2020-2022 average.

Looking at *Transportation Safety Board (TSB)* data, in Q3-23, the overall accident rate showed improvement compared to the previous year and the 2018-2022 average. In addition, main-track derailments were 45% below the 2018-2022 average and accidents involving dangerous goods were 5% below the 2018-2022 average. On the other hand, crossing and trespassing accidents were up compared to previous years – reinforcing the need for continued support of Operation Lifesaver's rail safety 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.

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[2] Latest available data as of November 17, 2023.

[3] 2020 is the earliest year for which data are available.

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State of the Canadian Economy

September 2023 data are not yet publicly available for all the key economic indicators. As such, August data are compared against May to analyze recent trends.

From May to August 2023, total employment (all industries) increased by 0.5% (93,400 jobs), from 20.11 million to 20.21 million.

Over the same three months, GDP decreased by 0.1%, from $2,085B to $2,083B. GDP decreased in 11 of 20 sectors, led by (in absolute dollar terms) decreases in manufacturing, agriculture, and retail trade. Transportation and warehousing sector GDP was relatively flat, increasing by 0.1%.

From May to August 2023, trade (exports + imports) increased by 0.2%, from $126.3 to $126.5B.

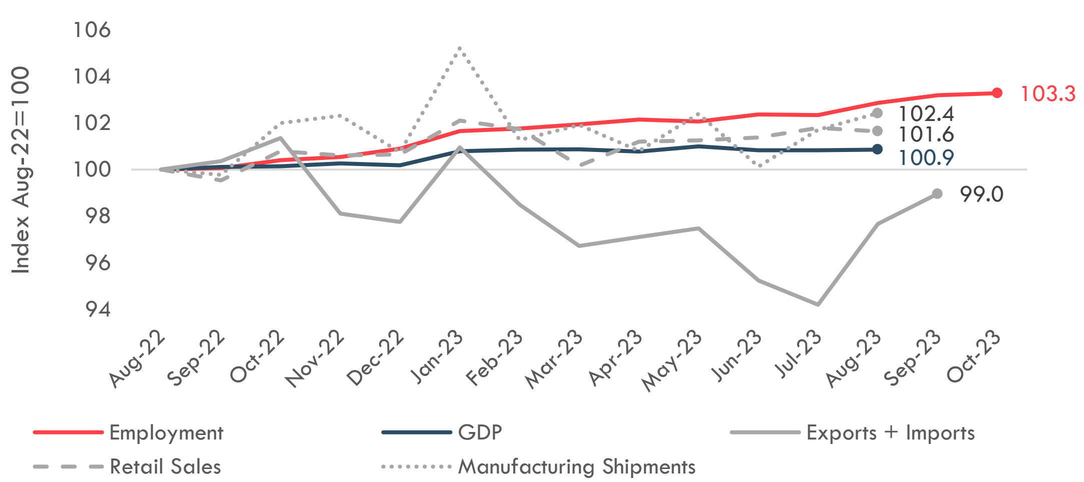
Domestic retail sales provide insight into household consumption, which is the largest contributor to Canada's GDP at over 50% of total GDP and a key driver of intermodal rail volumes. From May to August, retail sales (in current dollars) increased by 0.4%. However, over this same period, consumer prices for goods increased by 1.1%, suggesting that *real* retail sales likely declined as demand softened and GDP growth turned negative.

Manufacturing shipments provide an indication into the strength of Canada's manufacturing sector and the global demand for its outputs. Manufacturing shipments were flat from May to August.

Growth of Key Canadian Economic Indicators

	Employment (millions)	GDP ($B, annualized)	Exports + Imports ($B)	Retail Sales ($B)	Manufacturing Shipments ($B)
May 2023	20.11	2,085	126.3	65.8	72.3
August 2023	20.21	2,083	126.5	66.1	72.4
3-month change	**0.5%**	**-0.1%**	**0.2%**	**0.4%**	**0.0%**

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.

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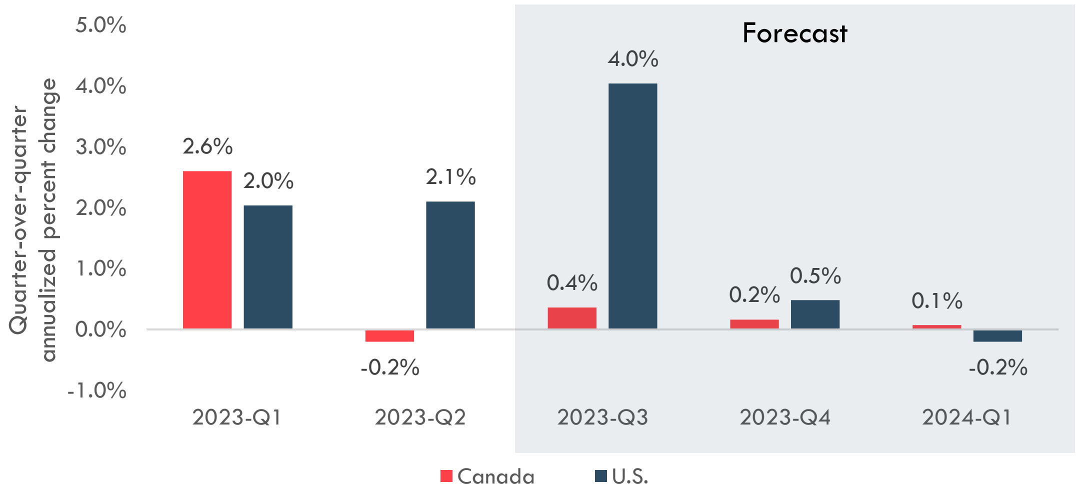
Economic Outlook

Compared to the economic outlook presented in RAC's 2023-Q2 Report, the historical performance and outlook for the Canadian economy has become more negative, while it has become more positive for the U.S.

Canada's 2023-Q1 GDP growth (actual) was revised down from 3.1% to 2.6%; 2023-Q2 GDP was previously forecasted to grow by 1.2%, while it has contracted by 0.2% (actual); and the forecast for 2023-Q3 has decreased from 0.5% to 0.4%. The U.S.'s 2023-Q1 GDP growth (actual) was revised up from 1.7% to 2.0%; 2023-Q2 GDP was previously forecasted to grow by 1.6%, while it has increased by 2.1% (actual); and the forecast for 2023-Q3 has improved significantly, from 0.4% to 4.0%. The West Coast Port strike likely contributed to some of these downward pressures on Canadian GDP.

For rail, the short term outlook is generally positive, being flat or positive across most commodities. Expectations remain positive for bulk commodities. Grain shipments are expected to remain strong until spring 2024, coal exports are being supported by high commodity prices and demand, and expectations for potash in Q4 are strong. Expectations for merchandise are generally positive (metals, minerals, energy, and chemicals), the exception being forest products due to a softer economy and slow housing starts. Automotive remains a bright spot where pent-up demand remains strong, and both Canadian Class 1s expect only a limited impact from the recently-concluded United Auto Workers' strike. Uncertainty remains on intermodal. While Canadian Class 1s are launching new North American intermodal services, challenges persist related to a weak macroeconomic environment, high inventory levels, low, competitive truck rates, and the lasting impacts of the B.C. port strikes. Traffic volumes were diverted to U.S. ports during the 13-day strike in July, but is slow to come back, as traffic continues to be diverted to U.S. ports. The strikes have had a lasting, damaging impact on Canada's supply chain reputation and work is being done to get that traffic back through Canadian ports.

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.

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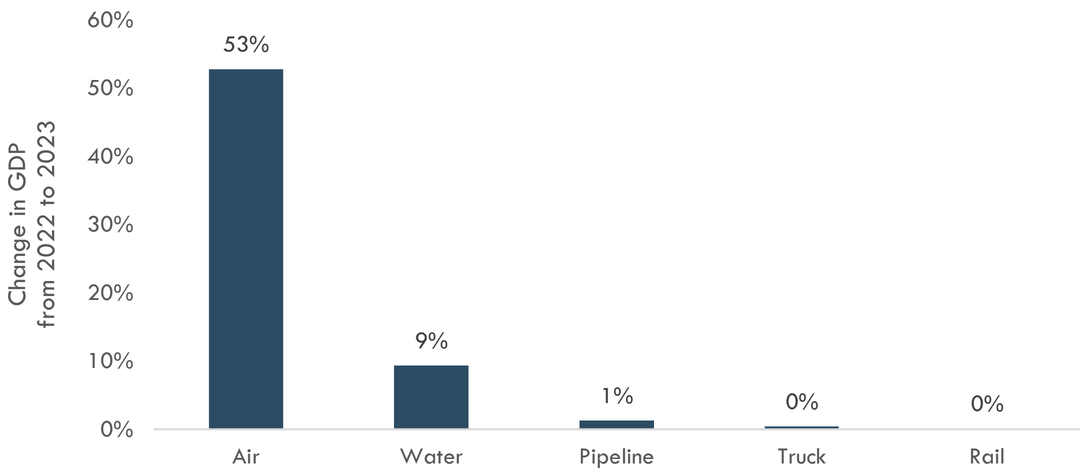
Rail and Other Modes of Freight Transportation

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 53% increase on a year-to-date (YTD) basis. This brought the air transportation sector's GDP up to 74% of its pre-pandemic (2019) level.

YTD GDP was flat or up compared to 2022 in every transportation sector: air (+53%), water (or marine) (+9%), pipeline (+1%), while truck and rail were flat.

Modal Comparison of GDP (YTD Jan-Aug)



Source: Statistics Canada, Gross Domestic Product by Industry
Note: Data are seasonally adjusted.

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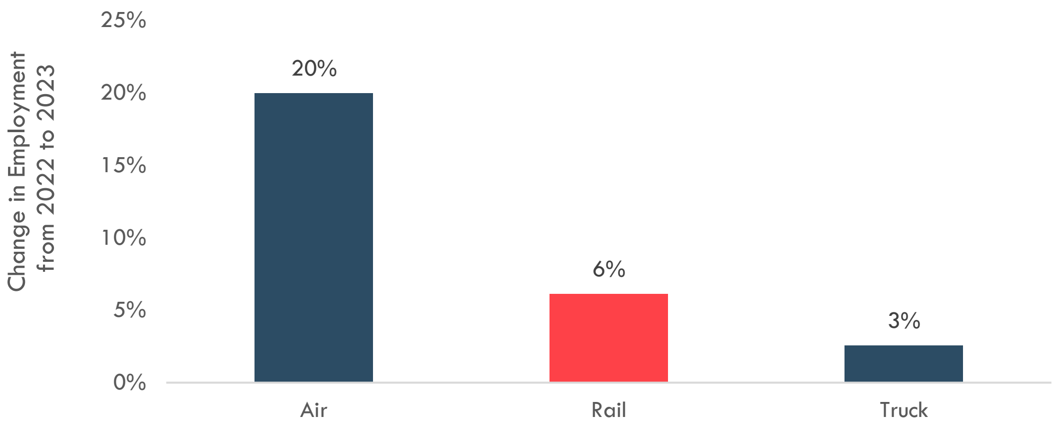
YTD employment was up for all three transportation sectors for which data are available (air, rail, and truck).

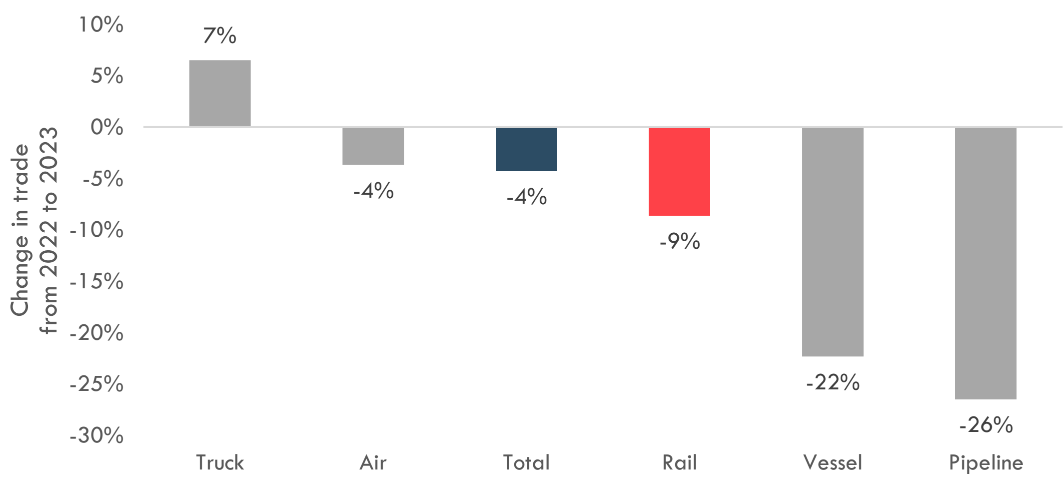
Modal Comparison of Employment (YTD Jan-Aug)



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 4% across the first eight months of 2023, compared to the same period in 2022.[4] Trade by truck increased (7%), while every other mode experienced a decline: air (-4%), rail (-9%), marine vessel (-22%), and pipeline (-26%).

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



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

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[4] Previous editions of the RAC Quarterly Report used trade by mode data from Transport Canada. As of November 17th, the latest available data from *Transport Canada in Brief* covered March. Therefore, this edition relies on data from the U.S. Bureau of Transportation Statistics (BTS), which cover the period up to August. Whereas the Transport Canada data that were previously used covered Canada's trade with all trading partners, the BTS data used here covers bilateral Canada-U.S. trade only.

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Network-wide Canadian Class 1 Freight Data

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

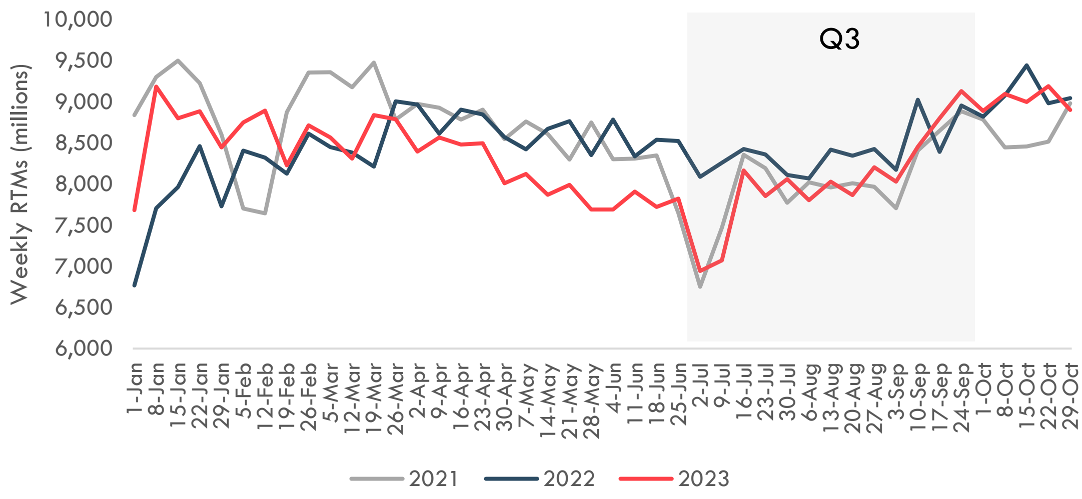
Weekly Trend

Class 1 Q3-23 revenue ton-miles (RTMs) were down 4% compared to Q3-22 but up 1% compared to Q3-21. RTMs were below 2022 levels in each of the first 11 weeks of the 13-week quarter.

The figure below shows the significant impact of the B.C. ports strike on rail traffic in early July. Compared to the first two weeks of Q3 in 2022, RTMs were down 14%. Thanks to relatively strong grain and automotive performance, RTMs continued to build throughout the latter half of the quarter, despite continued traffic diversions from B.C. ports to U.S. west coast ports.

Turning to the first five weeks of Q4-2023, RTMs were down just 1% compared to 2022. Traffic increased for five of seven commodities, led by coal (in absolute terms), but were not enough to offset the persisting weakness in intermodal (-12%) and forest products (-9%).

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, compared to Q3-22, total freight traffic (measured in either RTMs or carloads) and freight revenues were down.

Year-over-year growth in grain & fertilizers, as well as small gains (on an absolute RTM basis) in automotive, metals and minerals, and coal were not enough to offset the significant decreases in intermodal (-18%), forest products (11%), and energy, chemicals and plastics (8%).

Canadian railways provide service to customers at some of the lowest rates anywhere. Total freight revenue per RTM, a proxy for freight rates, decreased by 5% compared to Q3-22. Most notably, intermodal freight revenue per RTM was down 13% (not shown), driven by soft demand and enhanced pricing pressure from the trucking sector.

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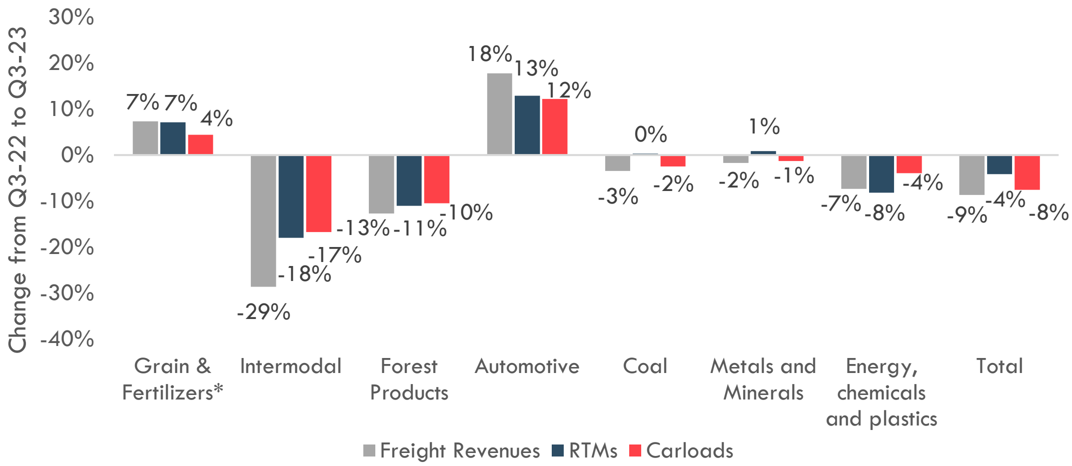
Class 1 Freight Revenues, RTMs, and Carloads by Commodity, Q3-23 vs Q3-22



Q3: Canadian Class 1 RTMs (millions), by Commodity

	Q3-23	Q3-22	Change (%)	Change (#)
Grain & Fertilizers*	31,699	29,589	7%	2,110
Intermodal	19,546	23,831	-18%	-4,285
Forest Products	7,975	8,963	-11%	-988
Automotive	1,853	1,641	13%	212
Coal	11,502	11,468	0%	34
Metals and Minerals	12,909	12,795	1%	114
Energy, chemicals and plastics	19,476	21,220	-8%	-1,744
Total	**104,960**	**109,507**	**-4%**	**-4,547**

YTD (Q1-Q3): Canadian Class 1 RTMs (millions), by Commodity

	YTD-23	YTD-22	Change (%)	Change (#)
Grain & Fertilizers*	99,237	91,452	9%	7,785
Intermodal	61,630	69,383	-11%	-7,753
Forest Products	24,285	26,032	-7%	-1,747
Automotive	5,317	4,898	9%	419
Coal	34,888	34,749	0%	139
Metals and Minerals	37,160	35,866	4%	1,294
Energy, chemicals and plastics	58,902	63,224	-7%	-4,322
Total	**321,419**	**325,604**	**-1%**	**-4,185**

Source: CN Quarterly Review; CPKC Unaudited Combined Summary of Supplemental Data.
**Includes potash.*

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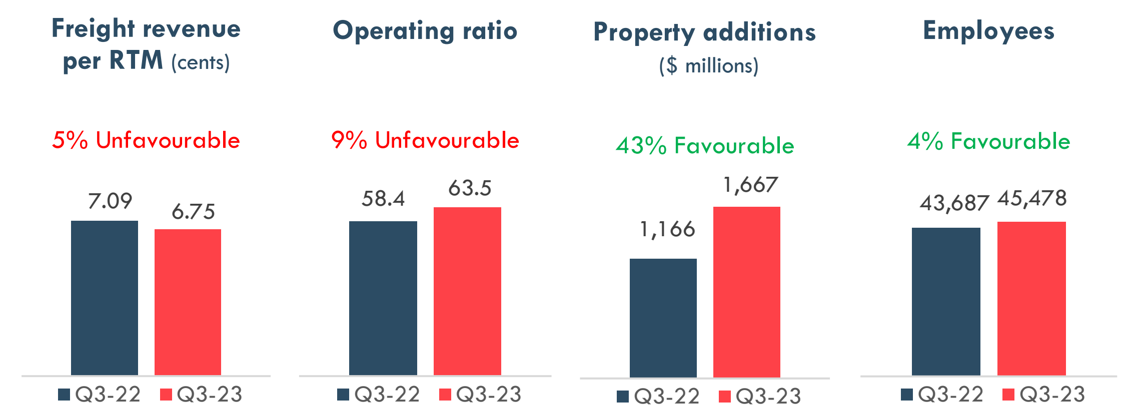
Select Key Financial and Operating Metrics

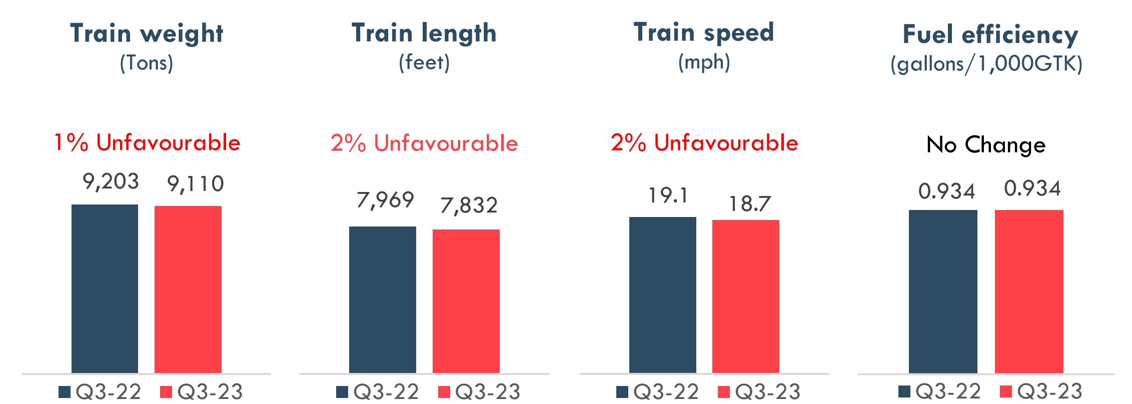
Factors including a weak macroeconomic environment and the B.C. port strikes contributed to a less-than-favourable financial performance. From Q3-22 to Q3-23, freight revenue per RTM decreased by 5% while the average Class 1 operating ratio increased significantly (+9%). Undeterred by the macroeconomic challenges, Canada's Class 1 railways invested nearly $1.7 billion into their assets in Q3-23 – that's a $500 million (43%) increase compared to the same period last year. Employment increased by 4% to over 45,000 employees. Hiring plans are now slowing as railways are well-resourced to service future traffic growth through incremental train starts and lengthening trains (which were a bit short in Q3).

Canada's Class 1 railways invested nearly $1.7 billion into their assets in Q3-23 – that's a $500 million (43%) increase compared to the same period last year.



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.

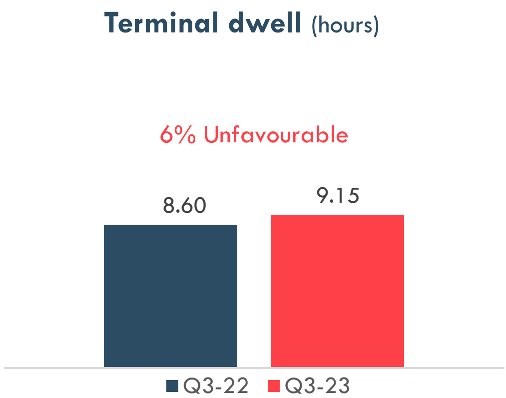
In Q3-23, average train weight and length decreased by 1% and 2%, respectively, to accommodate softer traffic volumes while maintaining scheduled train operations and service levels. Average train speed decreased by 2%. The significant reduction in intermodal volumes is likely a strong contributor to the reduction in train speeds, as intermodal trains average much higher speeds than other train types (e.g., grain unit, coal unit, and manifest).

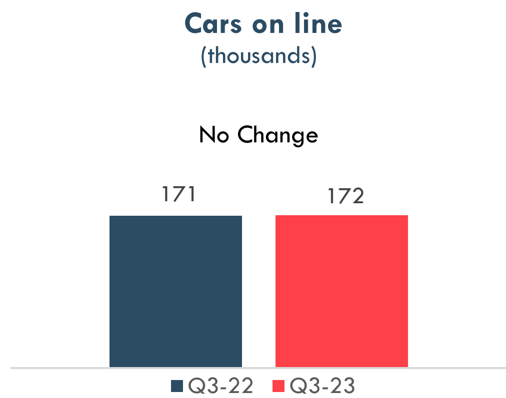


Source: [CN Quarterly Review](); [CPKC Unaudited Combined Summary of Supplemental Data]().
Note: All four metrics are calculated using the simple average of CN and CPKC.

In Q3-23, railway terminal dwell times consistently remained below 10 hours throughout each week of the quarter. Overall, railway terminal dwell averaged 9.15 hours for the quarter. Early in the quarter, the B.C. port strike disrupted supply chains and is likely to have contributed to increased dwell, which continued to improve throughout the quarter. In addition, terminal dwell at major yards continued to improve throughout the quarter, averaging an 8% reduction compared to Q3-22.

The average numbers of rail cars on line remained flat compared to Q3-22. Similar to changes in traffic volumes by commodity, increases in covered hoppers and multilevel cars (for grain and automotive) were offset by reductions in tank cars and intermodal equipment.





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.

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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, most of the freight data are analyzed on either a YTD or monthly basis, rather than quarterly.

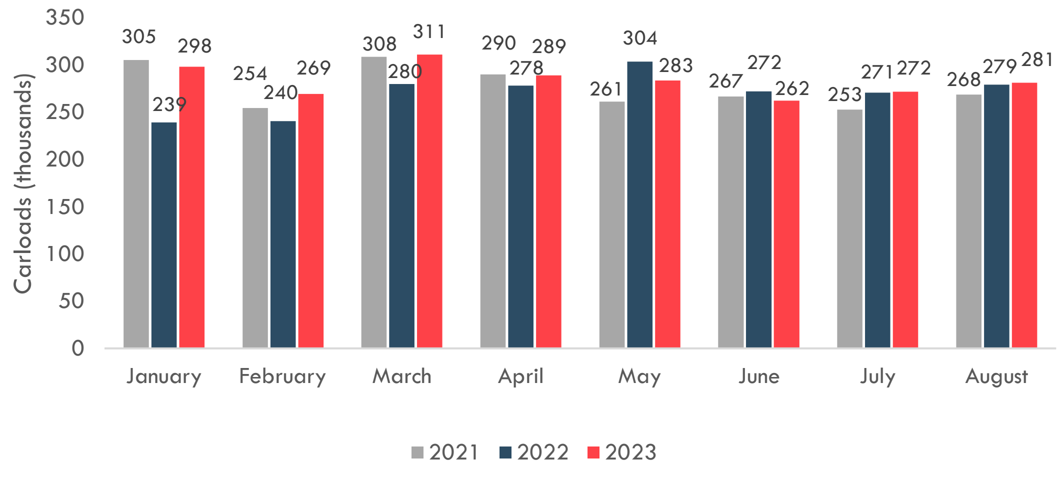
Carloads & Intermodal Units

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

Non-intermodal carloadings were up 5% on a YTD basis (January-August). Carloads were up for four non-intermodal commodity groupings, led by a 59% increase in agriculture, followed by 20% growth in machinery & automotive and 19% growth in food products. Carry-over from the 2022 bumper crop supported the agricultural gains, as August marked the 11th month of consecutive year-over-year increases in shipments of canola and the 12th month of consecutive increases in shipments of wheat. Carloadings for the remaining six non-intermodal commodity groupings were down in the single digits, with forest products (-7%) experiencing the most significant decline.

On a YTD basis (January-August), total 2023 intermodal traffic loaded was 12% below 2022 levels. August 2023 marked the ninth consecutive month of year-over-year declines in intermodal traffic.

Canadian Railways, Carloads



Source: Statistics Canada, Monthly Railway Carloadings Survey

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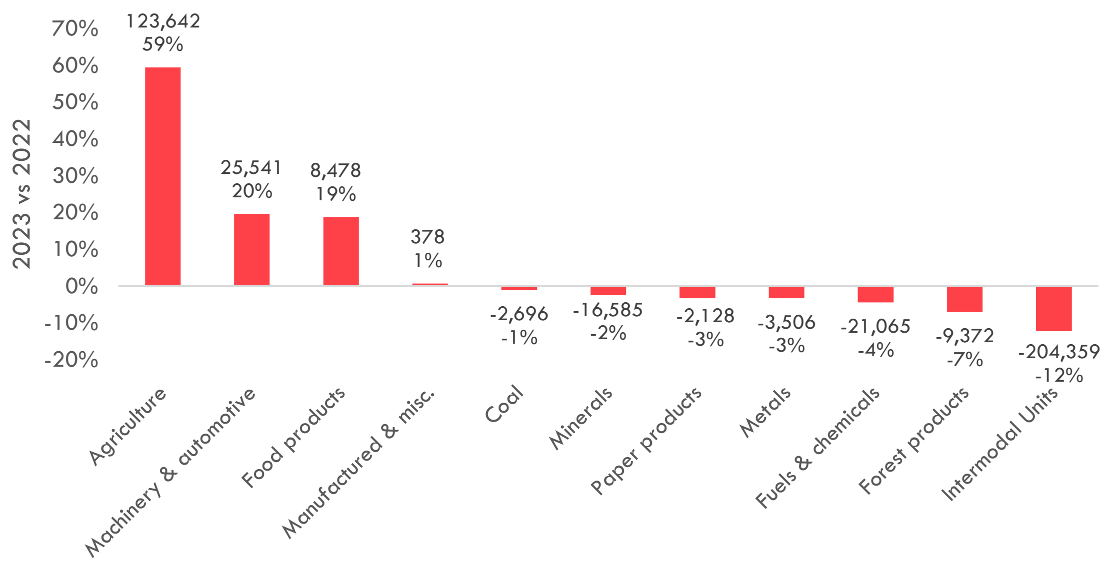
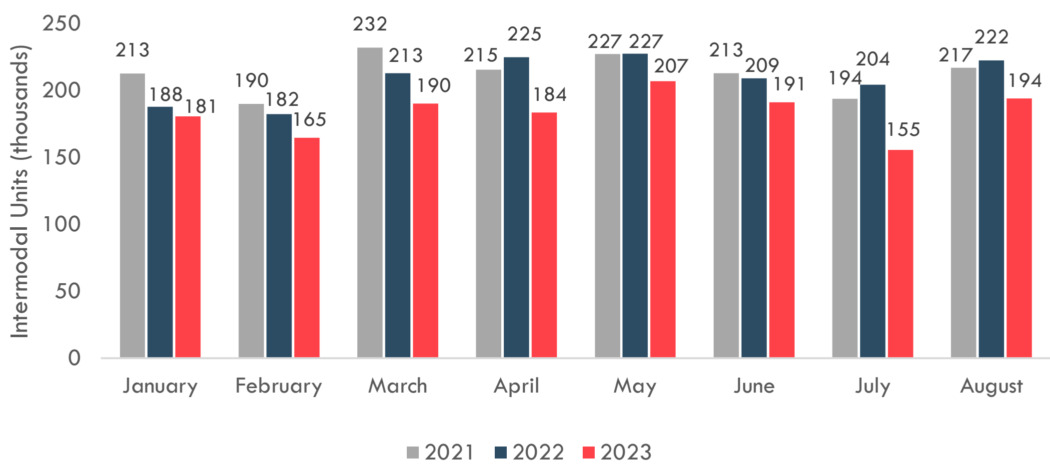
Canadian Railways, Carloads by Commodity & Intermodal Units (Jan-Aug)



Source: Statistics Canada, [Monthly Railway Carloadings Survey]

Canadian Railways, Intermodal Units



Source: Statistics Canada, [Monthly Railway Carloadings Survey]

On a YTD basis (January-August), carloads were flat in Eastern Canada and up by 8% in Western Canada, while intermodal units were down by 6% in Eastern Canada and 14% 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 relatively concentrated in machinery & automotive (which experienced increases in traffic) and metals & minerals (which experienced decreases in traffic), roughly offsetting one another.

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

	2023 vs 2022
Eastern Division	
Carloads	0%
Intermodal Units	-6%
Western Division	
Carloads	8%
Intermodal Units	-17%
Total	
Carloads	5%
Intermodal Units	-12%

Source: Statistics Canada, [Monthly Railway Carloadings Survey]

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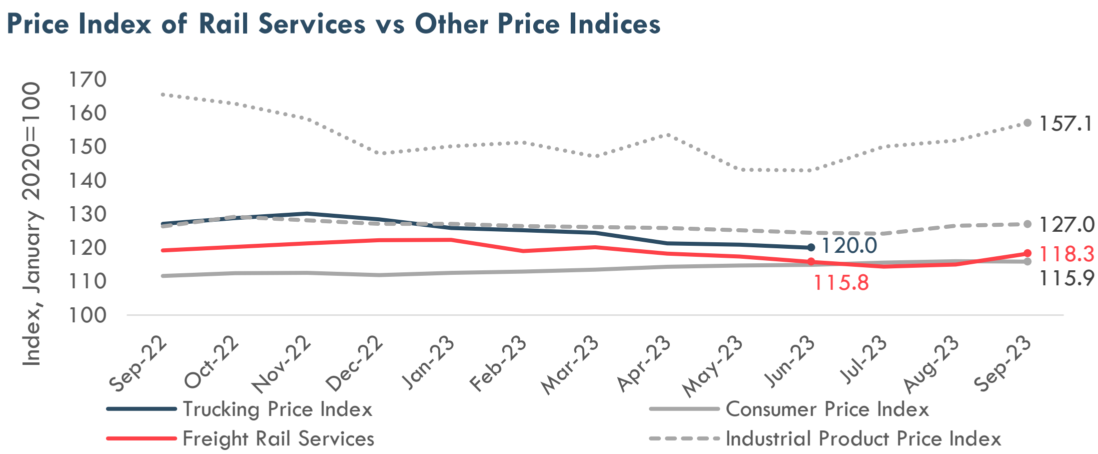
Freight Rates

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. Decreases in diesel prices (not shown) from late 2022 through summer 2023 supported reductions in both trucking and rail freight rates. In June 2023 (the latest month of available truck rate data), both trucking and rail freight rates were below where they started in the year. However, an increase in diesel prices starting in summer 2023 has begun to reverse this trend.

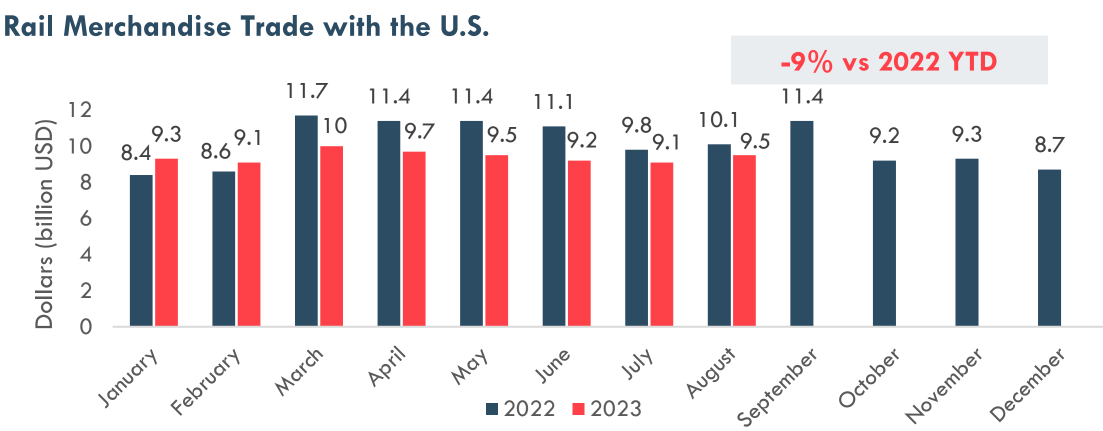
Since January 2023, the consumer price index has increased by 3.0% and commodity prices have increased by 4.6%, while industrial prices have remained relatively flat (-0.1%) and rail freight rates have decreased by 3.3%.



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-August),[5] trade by rail with the U.S. was 9% below 2022 levels. Monthly trade levels have remained below 2022 levels in each of the past six months.



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

[5] Previous editions of the RAC Quarterly Report used trade data from Transport Canada. As of November 17th, 2023, the latest available trade data from *Transport Canada in brief* cover March 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.

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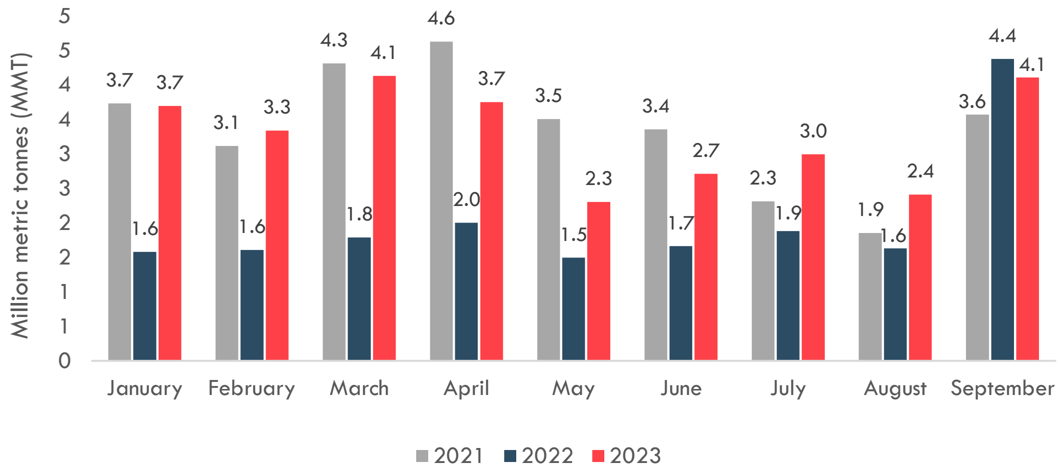
The 2022-2023 grain crop was significantly larger than the crop in the previous crop year.[6] Throughout the first eight months of 2023, shipments of grain (carried in from the 2022 harvest) to western ports were up 86% compared to the same period in 2022. Shipments in September 2023 were slightly lower than in 2022, and weekly data from the Class 1 railways (not shown) indicate that shipments in October and early November have also been lower than in the previous year.

Over the first 15 weeks of the 2023-2024 crop year (July 30 to November 11), more than 5.8 million metric tonnes, or 27%, of planned rail grain capacity went unused by shippers.

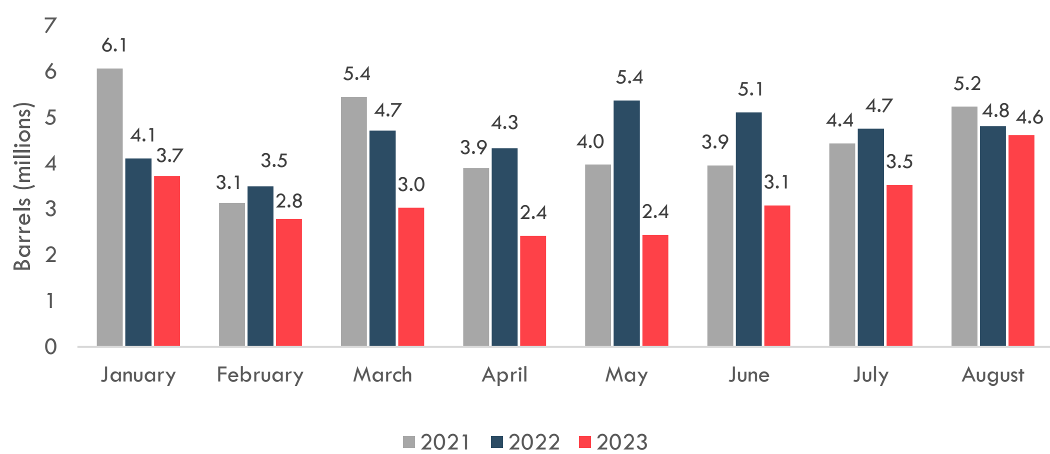
Grain in Hopper Cars Destined for Western Ports



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

Over the first eight months of 2023, exports of crude oil by rail were down 30% compared to 2022 and 35% compared to 2021.

Canadian Crude Oil Exports by Rail



Source: Canada Energy Regulator, Canadian Crude Oil Exports by Rail

[6] https://www150.statcan.gc.ca/n1/daily-quotidien/221202/dq221202b-eng.htm

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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 during the last few years of enormous upheaval.[7]

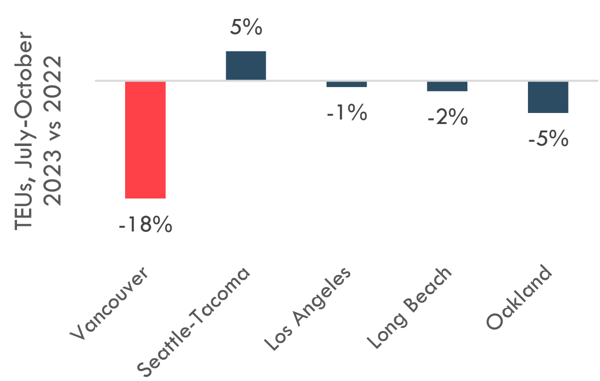
Supply chains were rocked at the outset of the third quarter, as dockworkers at B.C. ports went on strike. While the strike lasted for 13 days, the impacts are still being felt today. These disruptions have negative impacts on entire supply chain performance, worker earnings, tax revenues, and overall economic growth and well-being.

From July through October, Vancouver container imports were down 18% while west coast ports in the U.S., which benefitted from traffic diversions, performed much better (most notably nearby Seattle-Tacoma, where container imports were up 5%).

Despite being months past the strike and the backlogs cleared, diversions of traffic to U.S. ports, that formerly went through B.C. ports, continue.

Now that four months of data is available, it is evident that lost volumes over the 13-day strike will not be fully recoverable. Compared to the July to October period last year, Vancouver container imports were down 18% while west coast ports in the U.S., which benefitted from traffic diversions, performed much better (most notably nearby Seattle-Tacoma, where container imports were up 5%). Railways are working to get that traffic back through Canadian ports.

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.

Canada's supply chain reputation is at risk. The World Bank's two most recent Container Port Performance Index reports ranked the Port of Vancouver as 3rd worst (368/370, 2021 report) and 2nd worst-performing (347/348, 2022 report), while the Port of Montreal ranked 311 or 313/370 in 2021 and 292/348 in 2022.[8] Combined with the introduction of anti-replacement worker legislation, the recent B.C. ports strike, the recent St. Lawrence Seaway strike, and a possible strike at the Port of Montreal in January 2024, conditions are not looking favourable for a positive turnaround.

Canada's port capacity must increase to support the future growth of the Canadian economy. Projects in Prince Rupert and the recent announcement of the Port of Montreal's Contrecoeur

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[7] Railway Association of Canada, Strengthening all Links: Building More Resilient, Fluid Supply Chains in Canada, May 2023.

[8] The 2021 report used two approaches, an "administrative approach" and a "statistical approach". Vancouver was ranked the same in 2021 under both approaches, while Montreal ranked 311th using the administrative approach and 313th using the statistical approach. The 2022 report aggregates the two approaches for a single ranking. https://thedocs.worldbank.org/en/doc/66e3aa5c3be4647addd01845ce353992-0190062022/original/Container-Port-Performance-Index-2021.pdf;

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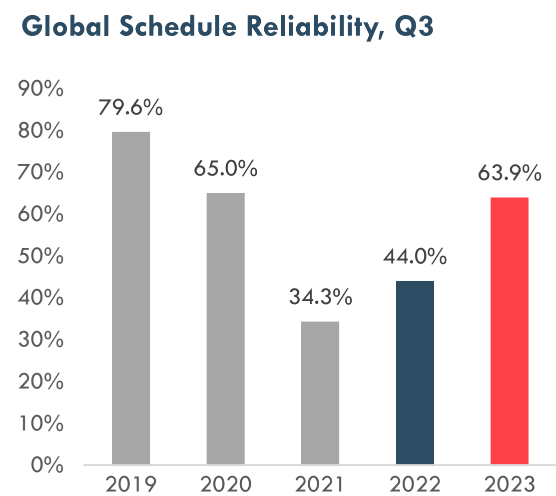
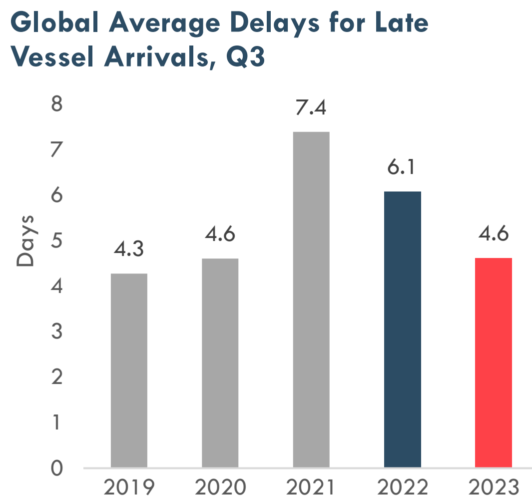
expansion project, which will increase the port's capacity by 55%, are positive developments. Canada needs more strategic infrastructure investments like these to enhance supply chain capacity and fluidity.

Global

In Q3-2023, global marine vessel delays and on-time performance continued to improve. According to Sea-Intelligence's *Global Liner Performance report, Global Schedule Reliability* increased from 44.0% in Q3-22 to 63.9% in Q3-23. However, this is still below pre-pandemic reliability, as shown below. The *Global Average Delays for Late Vessel Arrivals* made significant improvements. Delays decreased from an average of 6.1 days in Q3-22 to 4.6 days in Q3-23 – just 0.3 days longer than in the pre-pandemic (Q3-19) period.





Source: Sea-Intelligence, Global Liner Performance (GLP) report

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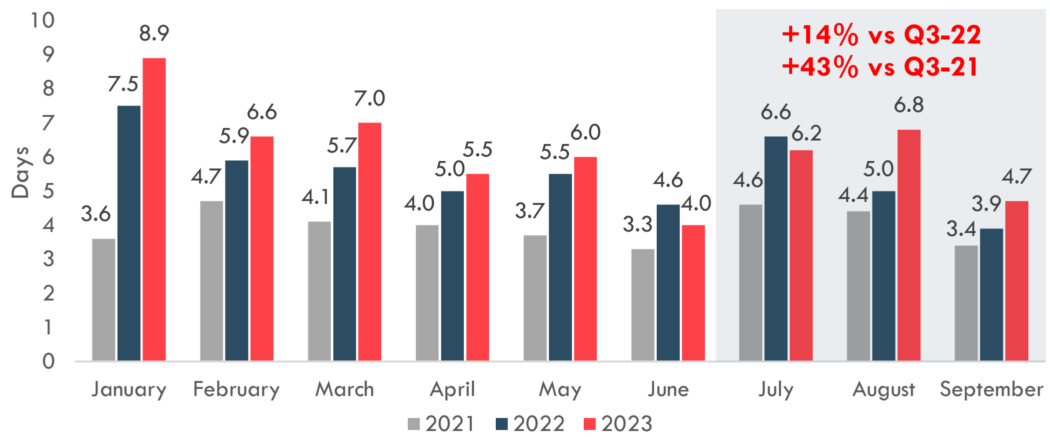
Canadian Ports

Dwell at the Port of Vancouver averaged 5.9 days in Q3-23, which was 14% longer than dwell in Q3-22 and 43% longer than in Q3-21.

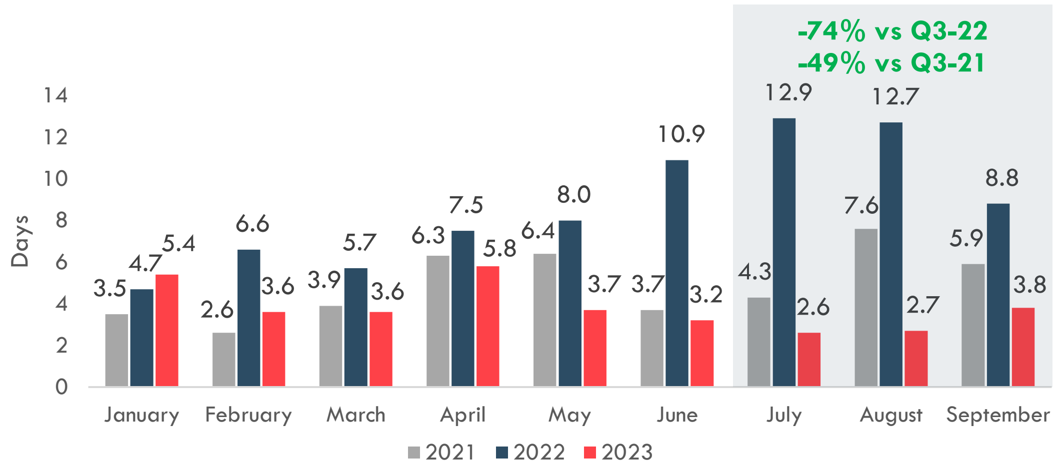
Dwell at the Port of Montreal improved significantly, averaging 3.0 days, which was 74% shorter than Q3-22 and 49% shorter than Q3-21.

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

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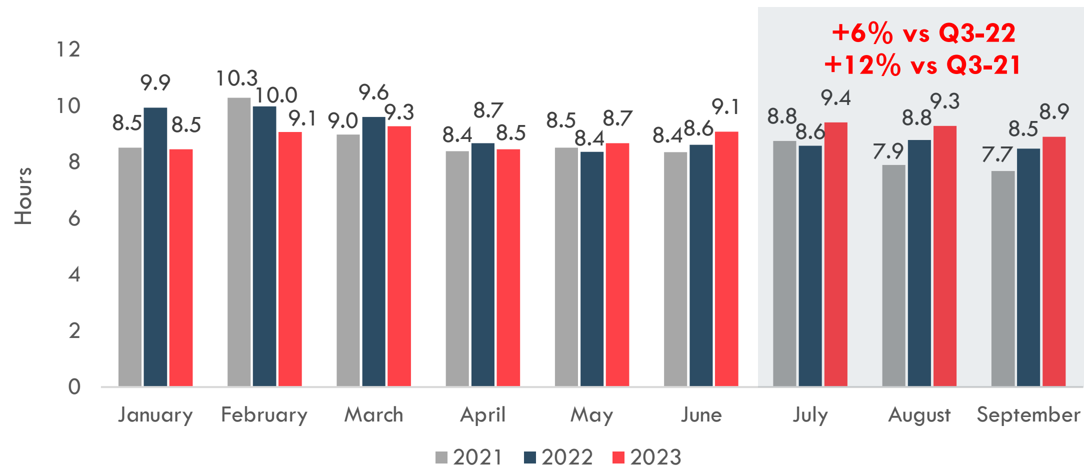
Canadian Railways

In Q3-23, railway dwell times were slightly longer than in previous years. In Q3-23, average dwell times were 6% longer than Q3-22 and 12% longer than Q3-21. Following the disruptions caused by the B.C. port strike, railway dwell times continued to improve throughout the quarter.

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.

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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.

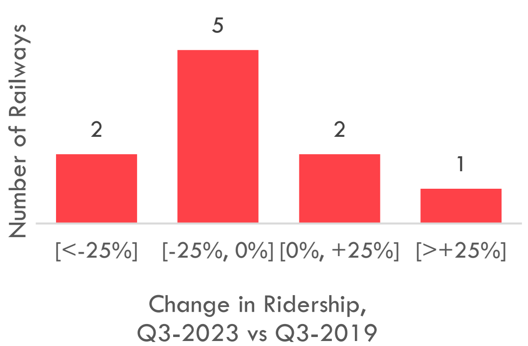
RAC Member Ridership

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.[9]

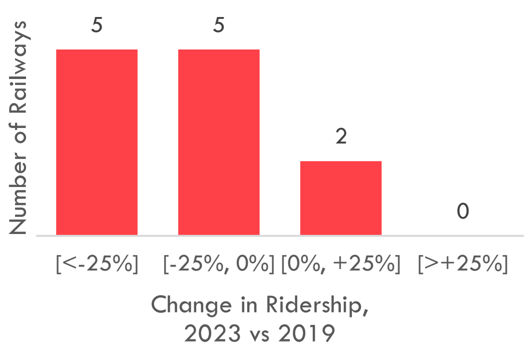
Despite continued increases since the lows of the pandemic, ridership remains below pre-pandemic levels for most operators. In Q3-23, ten RAC members reported ridership. The YTD data below include data from the ten members that reported Q3-23 ridership, as well as Q1-Q2 YTD data for two additional members for which Q3 data was not yet available.

In Q3, seven members reported a decrease in ridership compared to the same period in 2019 – five of them reporting a decline of less than 25% and two reporting a decline greater than 25%. Three members reported an increase in ridership. On a YTD-basis, 10 members reported a decrease in ridership (half reporting a decline greater than 25% and half reporting a decline of less than 25%) while two members reported an increase of less than 25%.

RAC Members, Ridership, Q3



RAC Members, Ridership, YTD



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. In August 2023, Statistics Canada released an analysis on commuting patterns, including data on nation-wide commuting by mode vehicle, public transit, and active transportation (the data covers the month of May in each year).[10] Compared to a 2016 baseline,[11] the total number of Canadians commuting to work has increased by 3%. The number of commuters using a personal vehicle was up 7% while the number of those using public transit was down 17%.

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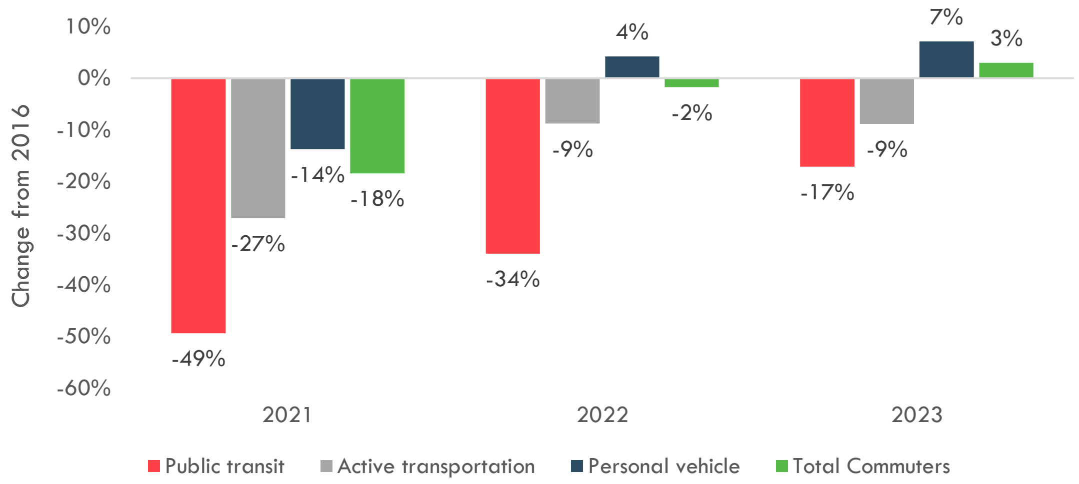
[9] https://www.railcan.ca/membership/member-railways/
[10] Statistics Canada, Commuting to work by car and public transit grows in 2023
[11] May 2016 is the only pre-pandemic data used in the article. "This article draws on data from the Census of Population for May 2016 and May 2021 and from supplements to the Labour Force Survey for May 2022 and May 2023."

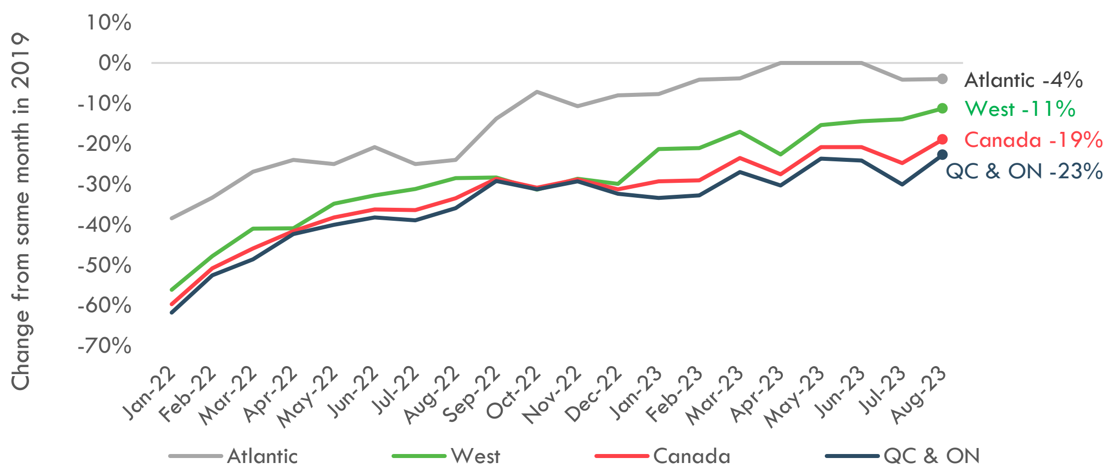
Commuting to work by mode



Source: Statistics Canada, Commuting to work by car and public transit grows in 2023

The urban transit ridership data presented below accounts for seasonality, by comparing ridership in each month to the corresponding month in 2019. In August 2023, ridership was sitting 19% below pre-pandemic levels. 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, relying 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 Q2-23. 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 Q2-23, the overall tourism sector had recovered, with expenditures reaching 9% above their pre-pandemic (Q2-19) level. Tourism expenditures on passenger rail services were 14% above pre-pandemic levels.

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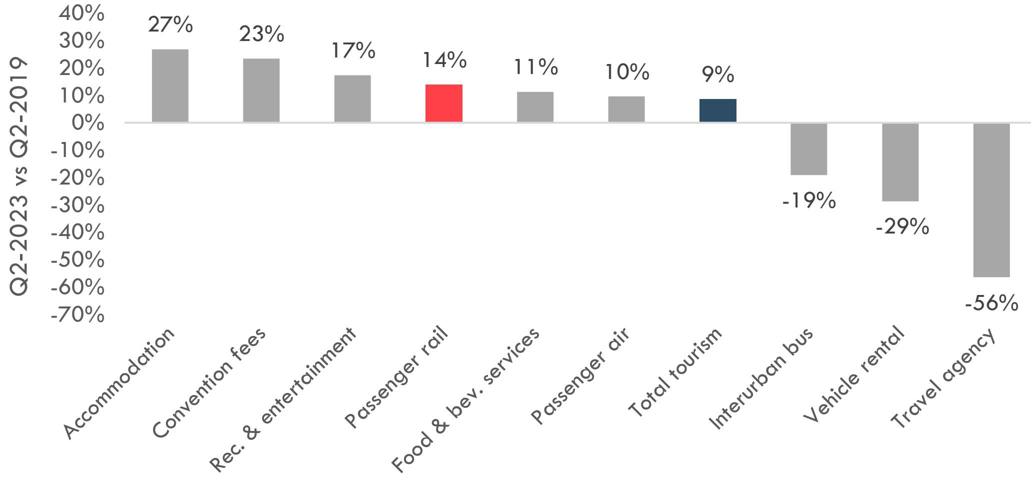
Tourism Expenditures, Q2



Source: Statistics Canada, National Tourism Indicators

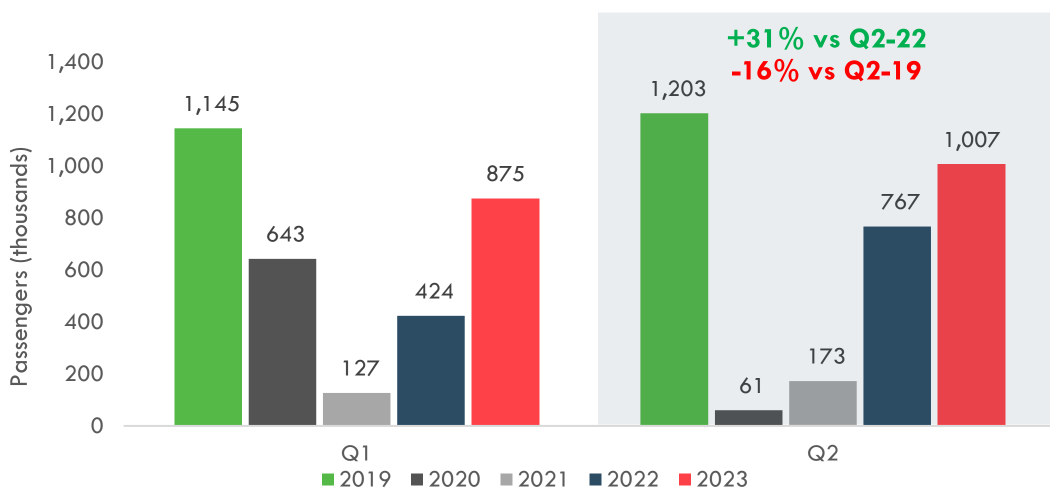
Intercity Passenger Rail

The most recent quarterly data available show that VIA Rail ridership increased by 31% year-over-year, reaching just 16% below pre-pandemic levels; while Amtrak's ridership on routes with segments in Canada increased 62% year-over-year, reaching just 6% below pre-pandemic levels.

The latest quarterly ridership data available for VIA Rail covers Q2-23.

In Q2-23, VIA Rail ridership exceeded one million passengers – reaching just 16% below the Q2-19 (pre-pandemic) level of 1.203 million passengers.

VIA Rail Ridership, Quarterly

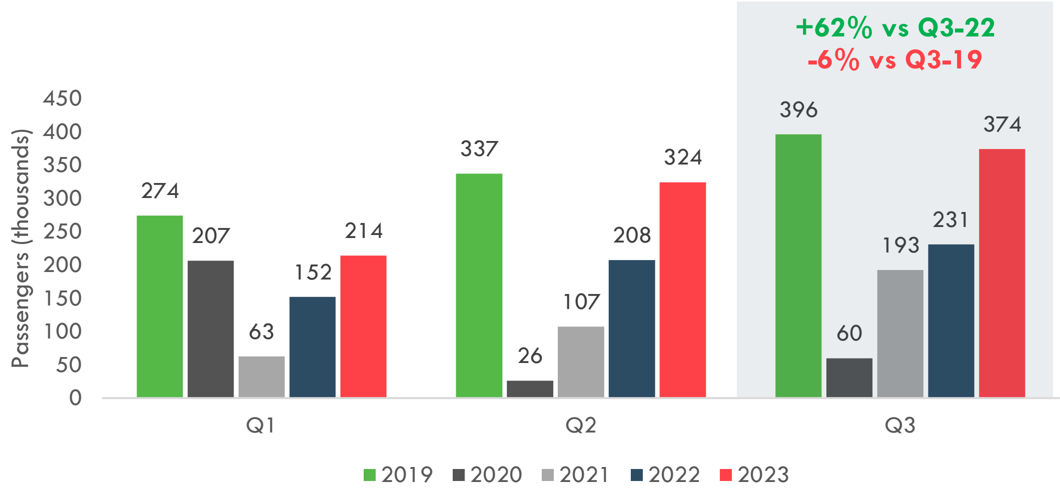


Source: VIA Rail, Quarterly and Annual Reports

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.[12]

Q3-23 data for Amtrak's routes with segments in Canada indicate that ridership continued to recover strongly. In Q3-23, ridership increased 62% year-over-year and was just 6% below the Q3-19 (pre-pandemic) level of 396 thousand passengers.

Amtrak Ridership on Routes with Segments in Canada, Quarterly



Source: Amtrak, Monthly Performance Reports
Note: Includes three routes (Maple Leaf; Cascades; Adirondack).

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12 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.

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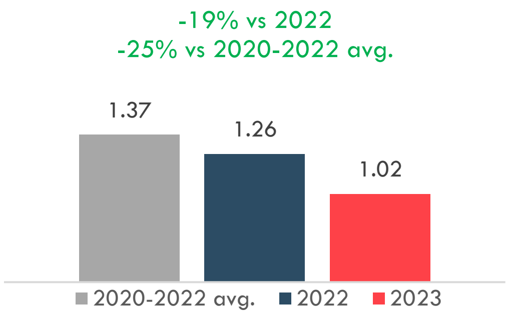
Rail Safety Data

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 Q3-23 reflect this.

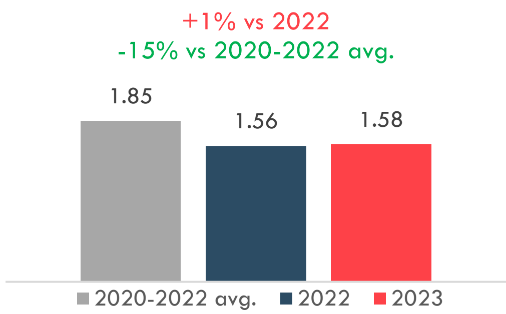
Federal Railroad Administration Safety Data

In Q3-23, the Canadian Class 1 FRA personal injuries rate improved by 19% year-over-year and was 25% below the 2020-2022 average.[13] The Q3-23 train accident rate was nearly identical to the rate in 2022, and sitting 15% below the 2020-2022 average.

FRA personal injuries rate[1], Q3



FRA train accidents rate[2], Q3



Source: CN Quarterly Review; CPKC Unaudited Combined Summary of Supplemental 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

[13] 2020 is the earliest year for which data are available.

Transportation Safety Board Data

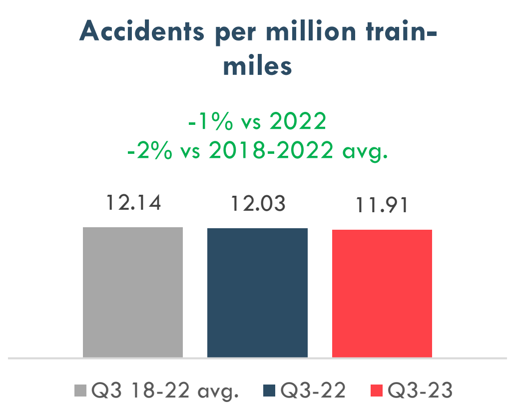
This section analyzes the most recent data from the Transportation Safety Board, which provides railway occurrence statistics of all federally regulated railways in Canada.

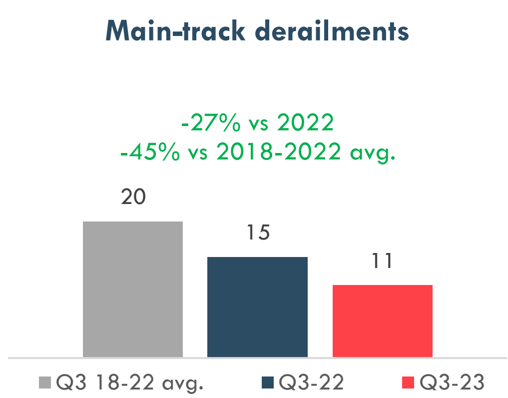
In Q3-23, railways made significant progress in reducing the number of main-track derailments, which decreased by 27% compared to 2022 and 45% compared to the 2018-2022 average.

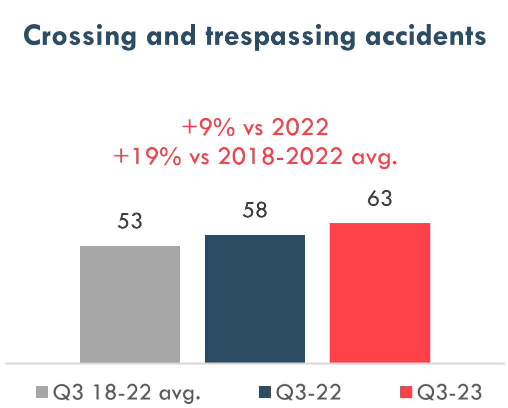
In Q3-23, the accident rate showed a small improvement compared to the rate in the previous year and the 2018-2022 average. Railways made significant progress in reducing the number of main-track derailments, which decreased by 27% compared to 2022 and 45% compared to the 2018-2022 average.

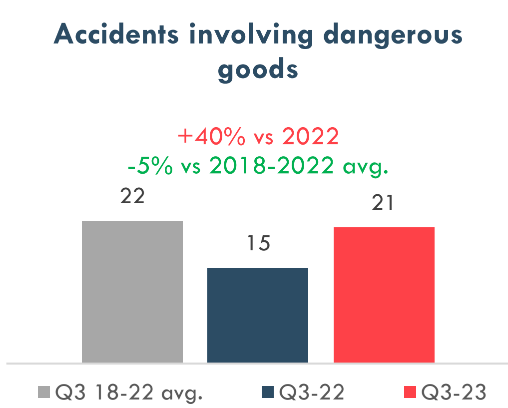
Crossing and trespassing accidents are up compared to previous years – reinforcing the need for continued support of Operation Lifesaver's education and awareness activities, as well as continued advocacy for the adoption of the RAC/FCM Proximity Guidelines to enhance safety and livability near railway infrastructure.

The number of accidents involving dangerous goods showed a 5% improvement compared to the 2018-2022 average, but was up from last year. On a YTD basis things are looking more positive, were 2023 YTD accidents involving dangerous goods were 22% below 2022 levels and 29% below the 2018-2022 average (not shown).









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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