

Grain Monitoring Program Report for: January 2024 / Q2 2023-24 CY

Release Date: February 21, 2023

GMP Dashboard

Table M-1	DEC 2023	JAN 2024	2023-24 YTD	Var. from Last YTD	
Western Canadia	Western Canadian GHTS Performance (Days)				
Total Time in System	45.5	50.9	43.5	10.7%	
Average Days In Store – Country	28.1	30.1	25.4	6.7%	
Loaded Transit Time	5.9	7.0	6.0	4.8%	
Average Days In Store – Terminal	11.5	13.8	12.1	24.7%	
Total Traffic ('000	0 tonnes)				
Primary Elevator Shipments	3,474.8	4,042.2	24,631.8	-8.2%	
Railway Shipments (all Western Canada traffic)	4,446.2	3,887.4	27,072.7	-10.0%	
Western Port Terminal Shipments	3,411.5	2,378.8	18,853.5	-11.5%	
Railway Performa	ance				
Avg. Loads on Wheels (Cars)	8,371	8,303	8,479	-11.7%	
Total Western Port Car Cycle (days)	15.1	17.7	14.8	5.9%	
Port Performance	е				
Western Port Unloads (Number of Cars)	29,740	28,322	200,148	-9.4%	
Vessel Time in Port (days) Periodic revisions	6.6	11.0	9.0	-7.2%	

Periodic revisions and corrections to the data received by the Monitor may result in the restatement of previously calculated measurement values. Where such differences arise, the values presented here should be considered to supersede those found in previous reports.

Overview

Western Canadian railway grain shipments decreased by 12.6% in January 2024, to almost 3.9 MMT from 4.4 MMT in December 2023. This marked a further softening in 2023-24 crop year shipments, with total YTD tonnage falling by 10.0%, to 27.1 MMT from 30.1 MMT a year earlier. Port shipments for January totaled 2.4 MMT, a 30.3% decrease from December volumes, and an 34.5% decrease from those in January 2023. The crop-year-to-date decline in shipments registered 11.5% at the end of the first half. A month-over-month increase was seen in the average amount of time vessels spent in port, which grew to 11.0 days in January from 6.6 in December. The overall first-half-average vessel time in port measures 9.0 days.

Highlights for January 2024 and Second Quarter 2023-24 CY

Traffic and Movement (page 2)

- Primary-elevator shipments were 24.6 MMT in the first half of the 2023-24 crop year, 8.2% less than in the previous year.
- Total Western Canadian rail shipments to all destinations (from all primary/process elevators and producer-car sites) in the first six months of the 2023-24 crop year totaled 27.1 MMT, down 10.0% from the previous crop year.
- Bulk shipments from Western ports totaled 18.9 MMT in the first half of the crop year, down 11.5% from last crop year.

System Efficiency and Performance (page 4)

- Average weekly primary-elevator stocks decreased 4.5% from the same period last year, while average days-in-store grew 6.7%.
- Average weekly port-terminal stocks increased 7.8% from the same period last year, while average days-in-store grew 24.7%.
- The preliminary average car cycle for hopper-car movements to Western Canadian ports increased by 17.2% in January, to 17.7 days from 15.1 days in December. Still, the YTD average rose by a more modest 5.9%, to 14.8 days from the 14.0 days posted a year earlier. In comparison, the car cycles tied to movements into Eastern Canada decreased, with the YTD average falling by 5.9% to 23.3 days, while those into the US posted a 6.8% increase, rising to an average of 27.2 days.
- The average vessel time in port during the first half of the 2023-24 crop year was 9.0 days, a 7.2% decrease from that observed the previous crop year.
- Port-terminal out-of-car time climbed steadily through the second quarter, jumping to 18.1% in January from 12.3% in December. Increases were noted at all ports with west coast terminals spiking sharply in the face of an aggressive cold snap.

Commercial Relations (page 6)

- Average primary-elevation charges declined 0.1% in the first half of the 2023-24 crop year.
- Both CN and CPKC raised their single-car freight rates sharply in the first quarter, with CN's rates increasing by a factor of 40% while CPKC's rose by a lesser 30%. These remained unchanged until January 2024 when both carriers instituted reductions, trimming net increases to 24% for CN and to 19% for CPKC as at the close of the second quarter.
- Average terminal-elevation charges held constant in the first half of the 2023-24 crop year.

Infrastructure (page 6)

- At the close of the second quarter the country-elevator network remained unchanged at 405 facilities, but storage had fallen by 0.9% to just under 9.5 MMT. The number of loop-track-equipped elevators rose to 51.
- Railway infrastructure was unchanged at 17,265.7 route-miles.
- The terminal elevator network also remained unchanged, with 17 facilities and almost 2.8 MMT of storage.
- The overall hopper-car fleet declined modestly through the first half of the crop year, to an average of 21,867 cars, 0.6% less than was recorded a year earlier.

Production and Supply

Statistics Canada's October-November producer-survey estimate for 2023 field-crop production in Western Canada stands at 67.3 MMT, a 10.1% decrease from 2022's 74.8 MMT harvest. This decline reflects the impact of deficient rainfall with intermittent coverage across the prairies throughout the 2023 growing season. This estimate represents a 5.4 MMT increase from the model-based estimate recorded at the end of August. Increases from the previous estimate were registered for all major crops with the exception of durum, which declined slightly.

When coupled with July's 5.3 MMT of carry-forward stocks, some 23.7% more than in 2022, the overall grain supply is estimated at 72.6 MMT. This stands 8.2% below the 2022-23 crop year's 79.2-MMT level, marking the return of relatively tight grain supplies available to meet domestic and export demands.

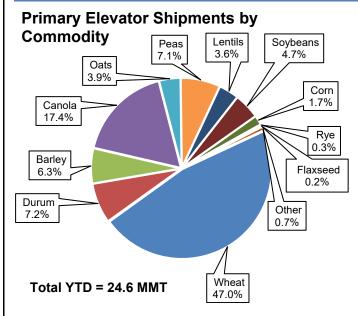
Table M-2	2023	2022	Var. from Last Yr.
Production & Carry Forward	(000's tonnes	s)	
Western Canada Total Production - Preliminary	67,299.1	74,839.5	-10.1%
Western Canada On-Farm & Primary Elevator Carry Forward Stock	5,334.4	4,311.8	23.7%
Total Grain Supply	72,633.5	79,151.3	-8.2%

Traffic and Movement

As the first half wrapped up, January deliveries fell to average just under 0.9 MMT per week. Weekly primary-elevator stocks held steady with those in the previous month averaging 3.6 MMT, with good space available in elevator facilities across the prairies.

Table M-3	JAN 2023	2023-24 YTD	Var. from Last YTD	
Primary Elevator Shipments	(000's tonnes	s)		
Manitoba	686.0	5,057.3	11.1%	
Saskatchewan	1,919.3	11,873.9	-14.0%	
Alberta	1,403.0	7,547.6	- 9.1%	
British Columbia	33.9	152.9	-17.3%	
Total	4,042.2	24,631.7	-8.2%	
Western Canada Railway Traffic (000's tonnes)				
Shipments to Western Ports	2,859.5	21,551.0	-10.8%	
Shipments to Eastern Canada	266.4	991.1	-24.1%	
Shipments to US & Mexico	685.0	4,017.3	-1.7%	
Shipments Western Domestic	76.5	513.3	-0.2%	
Total	3,887.4	27,072.7	-10.0%	
Western Port Unloads (Number of Cars)				
Vancouver	24,254	145,779	-7.0%	
Prince Rupert	3,958	14,067	-42.7%	
Churchill	0	0	n/a	
Thunder Bay	110	40,302	1.7%	
Total	28,322	200,148	-9.4%	

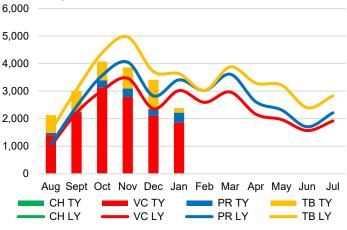
Table M-3	JAN 2023	2023-24 YTD	Var. from Last YTD	
Terminal Elevator Shipments (000's tonnes)				
Vancouver	1,868.5	13,481.0	-10.7%	
Prince Rupert	348.4	1,303.8	-42.3%	
Churchill	0.0	0.0	n/a	
Thunder Bay	161.9	4,068.7	2.9%	
Total	2,378.8	18,853.5	-11.5%	



GMP Data Table 2A-1

Crop-year to date grain shipments from primary elevators fell, registering 8.2% less than in the previous year. Wheat, including durum, and canola continue to constitute the largest proportion of the movement at 71.6%. Movement of peas and lentils contributed 10.7% of the balance.

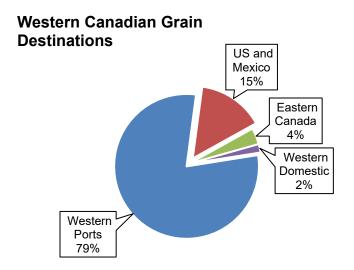
Terminal Elevator Shipments (000's tonnes)



GMP Data Table 2C-1

Bulk shipments from western ports fell in the first half of the 2023-24 crop year, registering an 11.5% decrease on a year-over-year basis. While Vancouver shipments registered an 10.7% decline, those at Prince Rupert fell by 42.3%. Thunder Bay saw a small, 2.9% increase from the first half last year.



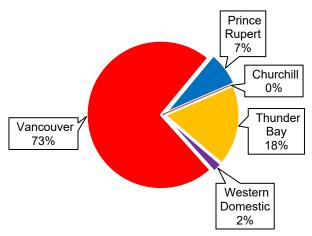


Total YTD = 27.1 MMT

GMP Data Tables 2B-1, 2B-8 & 2B-15

Railway grain shipments from Western Canada totaled just under 27.1 MMT in the first six months of the 2023-24 crop year, 10.0% less than the 30.1 MMT handled a year earlier. The majority, about 21.6 MMT, or 79%, was directed to Western Canadian ports in support of offshore sales; 10.8% less than what had been handled a year earlier. Movements into Eastern Canada fell by a more substantive 24.1% while shipments to the US and Mexico, as well as Western Domestic destinations, declined by 1.7% and 0.2% respectively.

Western Canadian Destined Hopper Car Traffic



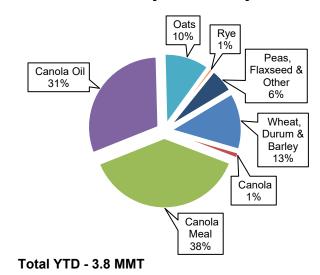
Total YTD - 21.6 MMT

GMP Data Tables 2B-3 to 2B-7

Over 95% of the tonnage directed to destinations within Western Canada moves in covered hopper cars. During the first half of the 2023-24 crop year this amounted to about 21.6 MMT, down 10.9% from the 24.2 MMT handled a year earlier. Seventy-three percent of these hopper cars were destined to Vancouver, which remains the port of choice for exporting grain, given its ready access to Asia-Pacific markets and the concentration of export terminal

facilities. An 8.5% decrease in hopper-car shipments to Vancouver was largely responsible for shaping the broader decline in traffic. This was amplified by reduced shipments to Prince Rupert and Thunder Bay, which fell by 38.5% and 4.1% respectively. Western Domestic destinations also saw a decline, falling by 4.2%.

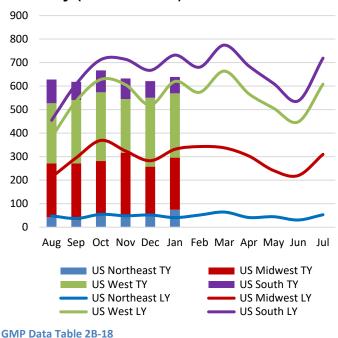
US Destined Grain by Commodity



GMP Data Table 2B-18

Total railway shipments into the US reached just over 3.8 MMT in the first six months of the 2023-24 crop year, down 2.2% from the nearly 3.9 MMT handled a year earlier. Just under 79% of these shipments were directed into the Midwestern and Western US, with canola and canola products dominating.

US Destined Grain by Destination Territory (000's tonnes)



System Efficiency and Performance

As winter progressed, primary-elevator stocks eased to average 3.6 MMT in January, down marginally from those in December. The overall average for the crop year is 3.5 MMT. Country space was good throughout the period. Country stocks utilized 65% of the working capacity of the network in January. Stocks ranged from 63% in Saskatchewan and 66% in Manitoba, to 69% in Alberta and British Columbia.

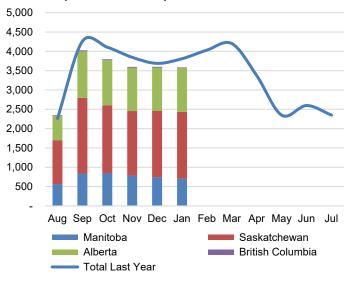
The average days-in-store in the primary-elevator system for the first half increased from last year, growing 6.7% to 25.4 days.

Table M-4	JAN 2023	2023-24 YTD	Var. from Last YTD
Primary Elevator			
Average Weekly Stocks (000's tonnes)	3,584.3	3,452.4	-4.5%
Average Days in Store	30.1	25.4	6.7%
Railway Operations (days)			
Cycle Time to Western Ports	17.7	14.8	5.9%
Cycle Time to Eastern Canada	19.9	23.3	-5.9%
Cycle Time to US	27.1	27.2	6.8%
Loaded Transit to Western Ports	7.0	6.0	4.8%
Loaded Transit to Eastern Canada	8.2	11.1	-0.7%
Loaded Transit to US	10.7	10.7	5.2%
Rail Fleet in Grain Service	16,238	17,725	-5.6%
Western Canada Terminal Elevator			
Average Weekly Stocks (000's tonnes)	1,102.5	1,233.0	7.8%
Average Days in Store	13.8	12.1	24.7%
Port Unloads (hopper cars)	28,322	200,148	-9.4%
Terminal Out-of-Car Time	18.1%	14.1%	21.2%
Western Canada Port Operations			
Average Vessel Time in Port (days)	11.0	9.0	-7.2%

Car order and order fulfillment data is not complete from both railways and will not be reported until further notice.



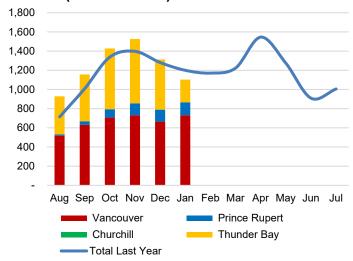
Average Weekly Primary Elevator Stocks (000's tonnes)



GMP Data Table 5A-2

Primary elevator stocks ended the last crop year averaging 2.35 MMT in-store. They held constant at 2.35 MMT in August and grew rapidly to 4.0 MMT in September with new-crop deliveries, before easing to 3.6 MMT by January. Wheat, including durum, and canola, comprise 58% of the total stock. At 26% of the stock, barley, oats and peas made up over half of the balance.

Average Weekly Terminal Elevator Stocks (000's tonnes)

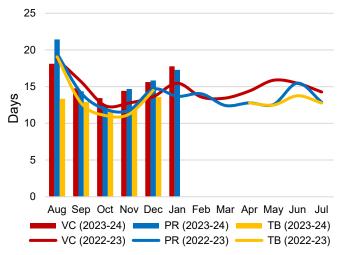


GMP Data Table 5C-2

Overall terminal-elevator stocks averaged 1.1 MMT in January, down from the 1.3 MMT in-store during December. While stocks grew month-over-month at Vancouver and Prince Rupert, they fell markedly at Thunder Bay as the pending close of Seaway navigation pulled grain from the terminals. Wheat, including durum, and canola, comprise nearly 73% of the total stock. In January, western ports utilized just 57% of their overall working capacity.



Railway Cycle Times to Western Ports (days)

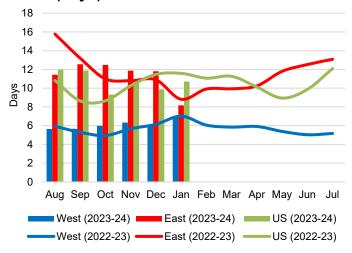


GMP Data Table 5B-1

The railway car cycle to Western Canadian ports averaged 14.8 days in the first six months of the 2023-24 crop year, up 5.9% from the 13.9-day average posted a year earlier. This result largely reflected increases in the Vancouver and Prince Rupert corridors, which rose by 7.6% and 14.4% respectively. The average in the Thunder Bay corridor fell by 4.4%.

Similarly, the average car cycle on movements into Eastern Canada also declined, falling by 5.9%, to 23.3 days from 24.2 days a year earlier. Conversely, the car cycle on movements into the United States rose by 6.8%, to an average of 27.2 days from 25.5 days the previous crop year.

Average Loaded Transit Times (days)

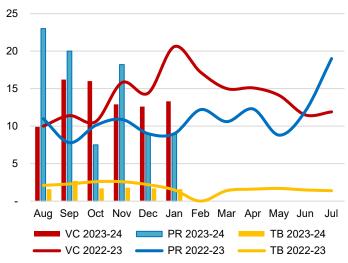


GMP Data Tables 5B-4, 5B-8, 5B-12

The loaded transit time for traffic destined to Western Canadian ports averaged 6.0 days in the first half of the 2023-24 crop year, up 4.8% from the 5.8-day average posted a year earlier. This was the product of increases in all three primary corridors, with the Vancouver average rising by 5.0%, Prince Rupert's by 5.7%, and

Thunder Bay's by 2.3%. A 0.7% decrease was observed on movements into Eastern Canada, with the average loaded transit time falling to 11.1 days from 11.2 days twelve months earlier. The average on movements into the United States increased by 5.2%, to 10.7 days from 10.2 days.

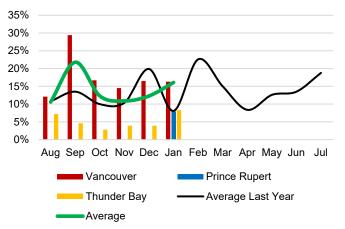
Average Days in Port per Vessel



GMP Data Table 5D-1

In January, the overall average time vessels were in port waiting and loading grain grew to 11.0 days from 6.6 days the month before. The first-half average stands at 9.0 days, 7.2% less than that registered in the first half of the previous crop year. While Vancouver experienced a month-over-month increase, Prince Rupert held steady. Thunder Bay saw the average fall marginally from December levels. For January, days in port stood at 13.3 for Vancouver, 9.0 for Prince Rupert and 1.6 for Thunder Bay.

Port Terminal Out-of-Car Time (% of total operating hours)



GMP Data Table 5C-5

The port terminal out-of-car time measure represents the total number of hours terminal elevator facilities are open and staffed (including overtime hours) and the corresponding number of hours that terminals have no rail cars available to unload. The

measure is expressed as a percentage (hours without cars to the total number of hours working).

An aggressive cold snap in mid-January contributed to a rise in the aggregate measure for all ports to 18.1% in January, from December's 12.3%. Terminal out-of-car time rose at each port, reaching 18.0% at Vancouver, 22.2% at Prince Rupert, and 8.3% at Thunder Bay. An extended shipping season in the St. Lawrence Seaway System allowed Thunder Bay to continue operating through the first week of January.

Commercial Relations

Table M-5 Rates: \$CDN per tonne	Q2 2023-24	Index (1999=100)	% Change YTD
Avg. Primary Elevation	16.54	137.9	-0.1%
Rail to Vancouver			
CN	69.73	189.9	24.0%
СРКС	72.64	197.4	15.6%
Rail to Pr. Rupert			
CN	69.73	167.8	26.5%
Rail to Thunder Bay			
CN	61.24	189.5	24.0%
СРКС	56.82	188.9	19.3%
Average Terminal Elevation	15.64	171.5	0.0%

Note: Commercial rates are measured on a quarterly basis, the above table refers to rates at the close of the first half of the 2023-24 crop year (as at 31 January 2024). Railway freight rates reflect average published single-car rates, and do not include multi-car incentives (\$8/tonne for 100+ car blocks).

Both CN and CPKC increased their single-car freight rates substantially in the opening months of the 2023-24 crop year. By the end of October 2023 CN had effectively escalated its rates by a factor of 40%. These remained unchanged until the beginning of January 2024, when CN then applied reductions ranging from 11% to 15%. At the close of the second quarter these pricing actions effectively left rates that stood about 24% higher than at the end of the previous crop year. CPKC followed a similar course, raising its rates by a factor of 30% through October before instituting cuts of up to 10% in January. This produced net increases of about 16% in CPKC's Vancouver rates, and 19% in its Thunder Bay rates.

Commercial Developments

Panama Canal restrictions tighten: Traffic through the Panama Canal continues to be restricted owing to the record low water level in the rainfall-fed Gatun Lake, the freshwater reservoir used to refill the locks after each vessel's passage to prevent the mixing of Atlantic and Pacific waters. The number of daily vessel transits is currently limited to 24, versus about 40 normally. This has meant substantial delays for a mounting backlog of ships waiting to transit the canal. Although not disruptive to Canadian grain shipments, these delays are having a broader impact on international trade, forcing many shipowners into paying exorbitant passage fees or diverting their vessels around South America, and increasing global shipping rates in the process. Bulk carriers have faced wait

times of up to three weeks to pass through the canal while container vessels and others on more regular schedules, which often book passage months in advance, are given preference. The canal authority also offers slots that become available to its best customers first, none of which are bulk carriers. Any scheduled slots that do become available are also being auctioned off, with some slots going for US \$1 million or more. Wait times for bulk grain vessels ballooned from around five days in October to around 20 days by late November. The Baltic Dry Index, considered the benchmark for bulk grain freight, spiked to an 18-month high in early December, more than doubling the value observed just a month earlier. Similarly, some container lines, such as Maersk, have started to employ the "land bridging" option inherent in using the Panama Canal Railway (in which CPKC has a 50% interest) to traverse the isthmus and bypass these problems.

Red Sea chaos impacts trade: In mid December 2023, Houthi rebels based in Yemen began attacking cargo ships traversing the Red Sea. Although the Iranian-backed Houthis had sporadically targeted ships in the corridor before, they were ramping up their attacks in the wake of the Israeli war on Hamas in the Gaza Strip, supposedly to thwart ships from serving Israeli ports. As these attacks increased in number, the conflict threatened to widen, and began to disrupt shipping through the Suez Canal. The route handles more than 10 percent of total ocean shipments and nearly one-third of the world's container trade. Against this backdrop many shipping companies began to reroute traffic away from the conflict area and over a much longer route around the Cape of Good Hope in southern Africa. This resulted in a 50% reduction in Suez Canal tanker traffic and still further increases in ocean freight rates, all of which is expected to translate into higher prices for consumers of multiple goods.

Viterra avoids strike action: Following the rejection of a final offer made in mid-December 2023, the Grain and General Services Union, representing some 436 Viterra employees across Saskatchewan and at its head office in Regina, issued a 72-hour strike notice with a work stoppage set to begin on 5 January 2024. With the help of a federally appointed mediator, a new offer was tabled just one day before the deadline. This offer was sent for a membership vote, and ultimately accepted two weeks later, heading off a possible strike. The four-year agreement provides for wage increases of 4.5% retroactive to the start of 2023, 3.75% in 2024 and 2.5% in each of the final two years. An annual bonus payment under the company's pay-for-performance plan, which Viterra had threatened to withdraw, was retained.

Seaway's winter closing date extended: In mid-November 2023 the St. Lawrence Seaway announced that it was extending the closing date for its 2023 navigation season, with the Montreal-Lake Ontario section to close on 5 January 2024, and the Welland Canal section two days later. The extension was aimed at compensating for the impact of an eight-day strike that disrupted traffic and prevented over 100 vessels from transiting the seaway in October. It also denoted the latest scheduled closing of the Seaway since its opening in 1959.



Infrastructure

Apart from the railways' car fleet, GMP measures relating to infrastructure are reported on a quarterly basis. The 2023-24 crop year has thus far produced several modest, although noteworthy, changes in the GHTS's physical infrastructure.

Although the total number of country elevators remained unchanged at 405, storage capacity fell by 0.9%, to just under 9.5 MMT. Among the more notable changes was an increase in the number of loop-track facilities, which rose to 51 from the 46 recorded at the end of the previous crop-year.

There were no changes recorded against the railway network in the first half of the 2023-24 crop year. Total mileage remained unaltered at 17,265.7 route-miles, with 84.5% of this being operated by CN and CPKC.

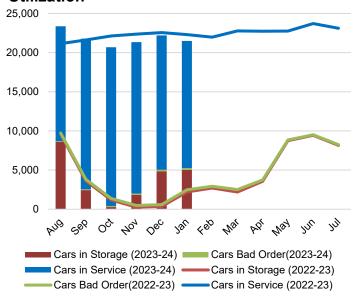
Neither were there any changes to the terminal elevator network in the first six months of the 2023-24 crop year. The network comprises 17 facilities with 2.8 MMT of storage capacity.

Table M-6	Q2 2023-24	Index (1999=100)	% Change YTD
Country Elevator			
Primary and Process Elevators (Count)	405	40.3	0.0%
Storage Capacity (000's tonnes)	9,480.4	134.9	-0.9%
Railway			
Route Miles - Major Carriers	14,596.1	98.4	0.0%
Route Miles - Shortline Carriers	2,669.6	57.5	0.0%
Route Miles - Total	17,265.7	88.7	0.0%
Average Weekly Total Hopper Car Fleet Size*	21,672	n/a	-0.6%
Terminal Elevator			
Terminal Facilities (Count)	17	121.4	0.0%
Storage Capacity (000's tonnes)	2,752.5	107.6	0.0%

^{*} Hopper Car Fleet Size represents all cars in all statuses for the second quarter of the 2023-24 crop year.

The average number of cars in service declined throughout the second quarter. November saw 91% of the fleet in service moving Western Canadian grain, while December's share fell to 77% and January's to 76%, or 16,238 cars of the 21,490-car fleet. Overall, the second quarter saw 81% of the car fleet being pressed into service every week, down from the 95% average posted a year earlier. The seasonal closure of the Port of Thunder Bay in the first week of January contributed to the decrease as car orders were reduced accordingly. It is normal practice for railways to move their fleet of hopper cars in and out of storage throughout the year as required to service demand or to complete repairs.

Railway Grain Fleet Size and Utilization



GMP Data Table 3B-2

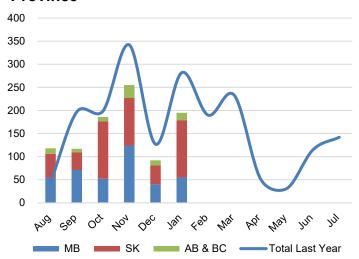
Producer Cars

A minor change was registered in the number of producer-car loading sites in the second quarter of the 2023-24 crop year as one Class 1 site in Saskatchewan was removed from the list. The total number of available producer-car loading locations at the end of January stands at 271.

Table M-7 Producer Car Loading Sites	Q2 2023-24	Index (1999=100)	% Change YTD
Class 1 Carriers	141	21.9	1.0%
Shortline Carriers	130	200.0	0.0%
All Carriers	271	38.2	0.4%
Table M-8 Producer Cars Scheduled	Q2 2023-24	2023-24 YTD	Var. from Last YTD
Manitoba	189	396	20.7%
Saskatchewan	268	482	-35.4%
Alberta & B.C.	55	85	-27.4%
Total	512	963	-19.1%

Producer cars scheduled for January 2024 were 30.9% less than in January 2023. Consistent with the month-over-month decrease, the overall crop year to date saw a decline of 19.1% from the previous year. Saskatchewan continues to be the leader in producer car shipments, registering 50.1% of the total. Manitoba followed up with 41.1% of the scheduled cars, while Alberta and British Columbia saw only 8.8% of the total. Once again, the United States is the largest destination for producer cars, accounting for 59% of the total, including all of the oats and durum shipments.

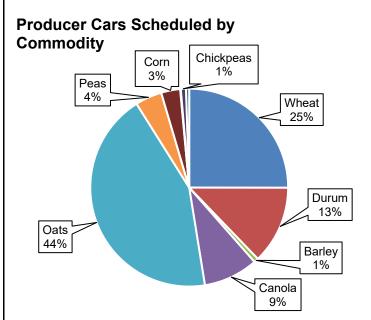
Producer Cars Scheduled by Province



GMP Data Table 6B-2

Recent years has seen the proportion of producer-car shipments devoted to oats grow while a decrease has been registered in the number of cars carrying other cereal grains. Shipments through the first half of the 2023-24 crop year saw this trend weakening, with oats comprising 44% of the total, while wheat, durum and

barley combined comprise 39%. Canola contributed 9%, while combined peas, chickpeas and buckwheat rounded out the final 8% of the total volume.



GMP Data Table 6B-2





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This report provides a summary of the data developed under the Grain Monitoring Program. Detailed monthly Data Tables can be found in Excel format on Quorum's website at: www.grainmonitor.ca

Quorum welcomes questions and comments on the reports and data. Please contact us at our address by either phone or email.

