

GMP Dashboard

Table M-1	MAR 2021	APR 2022	2021-22 YTD	Var. from Last YTD
Western Canadian GHTS Performance (Days)				
Total Time in System	76.4	68.6	62.0	47.6%
Average Days In Store – Country	52.9	39.0	39.5	55.0%
Loaded Transit Time	7.0	6.3	7.1	1.1%
Average Days In Store – Terminal	16.5	23.3	15.4	62.1%
Total Traffic ('000 tonnes)				
Primary Elevator Shipments	2,997.0	2,901.1	27,101.4	-37.8%
Railway Shipments (all Western Canada traffic)	2,757.7	2,939.9	28,781.1	-42.0%
Western Port Terminal Shipments	1,390.3	1,546.8	18,925.6	-45.8%
Railway Performance				
Avg. Loads on Wheels (Cars)	7,073	6,564	7,613	-39.3%
Total Western Port Car Cycle (days)	16.9	15.4	17.5	16.8%
Port Performance				
Western Port Unloads (Number of Cars)	17,725	15,983	202,727	-44.9%
Vessel Time in Port (days)	12.8	5.7	10.2	-12.9%

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

Railway grain shipments from Western Canada rose by 6.6% in April 2022, to 2.9 MMT from March's 2.8 MMT. The increase was largely due to the opening of the St. Lawrence Seaway, which helped offset still weaker West Coast volumes. Owing to a significantly smaller crop, YTD railway shipments fell by 42.0%, to 28.8 MMT. Port shipments for April totaled 1.5 MMT, a 11.3% increase from March volumes. The overall first-three-quarter demand for shipping at both the West Coast and Thunder Bay lagged that seen in the previous crop year, with year-to-date bulk shipments from the western ports registering a decline of 45.8%. Accompanying the decrease in shipments, is a 5.7-day average in the amount of time vessels spent in port in April, with the first-three-quarter average measuring 10.2 days.

Highlights for April 2022 and Third Quarter 2021-22 CY

Traffic and Movement (page 2)

- Primary-elevator shipments were 27.1 MMT in the first nine months of the 2021-22 crop year, 37.8% less than the previous year.
- Total Western Canadian rail shipments (from all primary/process elevators and producer-car sites) totaled 28.8 MMT in the first nine months of the 2021-22 crop year, 42.0% below the previous crop year's 49.6-MMT record.
- Bulk shipments from Western Canadian ports totaled 18.9 MMT in the first three quarters of the 2021-22 crop year, down 45.8% from last crop year.

System Efficiency and Performance (page 4)

- Average weekly primary-elevator stocks declined by 7.5% from last year-to-date. The average days-in-store was up 55.0%.
- Average weekly port-terminal stocks decreased 14.8% from the same period last year, while average days-in-store grew 62.1%.
- Railcar cycle times fell in April, with the preliminary average for Western Canadian movements decreasing by 9.1%, to 15.4 days from 16.9 days in March. The year-to-date average rose by 16.8%, to 17.5 days from 15.0 days a year earlier.
- The first-three-quarters 2021-22 crop-year average for vessel time in port is 10.2 days, a 12.9% decrease from that observed in the previous crop year.
- Port-terminal out-of-car time fell to 5.8% at Vancouver in April from 9.8% in March, and to 48.9% at Prince Rupert from 62.9% the month before. At Thunder Bay, the out-of-car time dipped to 3.1% in April, down from March's 3.5%.

Commercial Relations (page 6)

- Average primary-elevation charges declined 0.4% in the first three quarters of the 2021-22 crop year.
- Both CN and CP decreased their single-car freight rates in the third quarter. CN applied a 7.0% reduction on westbound movements in March 2022, with a steeper 13.0% reduction on Thunder Bay movements. Westbound rates were cut by a further 2.9% in April. By the close of the third quarter these pricing actions, coupled with earlier hikes, had lifted rates on movements into Vancouver and Prince Rupert by 9.4%, and into Thunder Bay by 5.1%. CP followed suit with a 10.0% cut in its rates into Thunder Bay in March 2022, supported by reductions in April of 3.9% on movements into Vancouver, and 5.0% into Thunder Bay. At the close of the third quarter, CP's rates into Vancouver had risen by a net 5.8% while those into Thunder Bay had fallen 10.3%.
- Average terminal-elevation charges declined 0.3% in the first three quarters of the 2021-22 crop year.

Infrastructure (page 6)

- At the close of the third quarter the country-elevator network stood at 412 facilities with a record 9.4 MMT of storage. This included 39 loop-track facilities.
- Railway infrastructure remained unchanged at 17,265.7 route-miles.
- The terminal elevator network stood at 17 facilities with 2.8 MMT of storage.

Production and Supply

Statistics Canada's November survey for 2021 field-crop production in Western Canada stands at 47.0 MMT, a 40.2% decrease from 2020's record 78.5 MMT harvest. This dramatic decline reflects the impact of the prairie-wide drought during the 2021 growing season. The survey of producers' harvested acreage and yield was conducted between 8 October and 12 November 2021. It resulted in a decrease in the overall production estimate of 0.6 MMT from the model-based estimate published in September.

When coupled with July's 7.2 MMT of carry-forward stocks, some 14.7% less than in 2020, the overall grain supply is estimated at 54.1 MMT. This stands 37.7% below the 2020-21 crop year's 86.9-MMT record, ranking as the smallest grain supply since the drought-reduced shortfalls of 2001 to 2003.

Table M-2:	2021	2020	Var. from Last Yr.
Production & Carry Over (000's tonnes)			
Western Canada Total Production	46,967.2	78,527.7	-40.2%
Western Canada On Farm & Primary Elevator Carry Forward Stock	7,150.1	8,383.6	-14.7%
Total Grain Supply	54,117.3	86,911.3	-37.7%

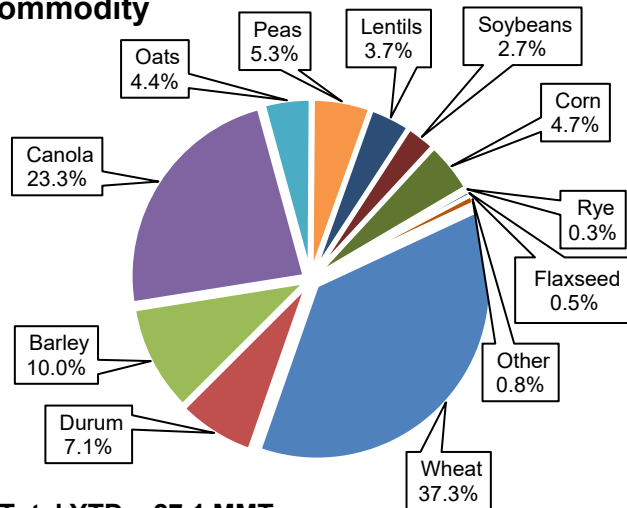
Traffic and Movement

With sluggish demand and a slow start to spring seeding, April deliveries fell to average just under 0.5 MMT per week. Weekly primary-elevator stock levels declined to average 4.0 MMT, with good space available in elevator facilities across the prairies.

Table M-3	APR 2022	2021-22 YTD	Var. from Last YTD
Primary Elevator Shipments (000's tonnes)			
Manitoba	522.9	5,454.9	-28.3%
Saskatchewan	1,339.4	12,317.8	-48.2%
Alberta	1,020.3	9,103.7	-24.1%
British Columbia	18.5	225.0	17.0%
Total	2,901.1	27,101.4	-37.8%
Western Canada Railway Traffic (000's tonnes)			
Shipments to Western Ports	2,070.2	21,306.2	-47.0%
Shipments to Eastern Canada	220.2	1,759.7	-49.1%
Shipments to US & Mexico	552.2	4,978.4	-6.0%
Shipments Western Domestic	97.3	736.8	13.9%
Total	2,939.9	28,781.1	-42.0%
Western Port Unloads (Number of Cars)			
Vancouver	9,599	137,907	-45.9%
Prince Rupert	2,536	20,644	-55.5%
Churchill	0	0	-100.0%
Thunder Bay	3,848	44,176	-32.3%
Total	15,983	202,727	-44.9%

Table M-3	APR 2022	2021-22 YTD	Var. from Last YTD
Terminal Elevator Shipments (000's tonnes)			
Vancouver	750.7	12,790.2	-47.8%
Prince Rupert	272.5	1,836.4	-57.1%
Churchill	0.0	0.0	-100.0%
Thunder Bay	523.6	4,299.0	-29.3%
Total	1,546.8	18,925.6	-45.8%

Primary Elevator Shipments by Commodity

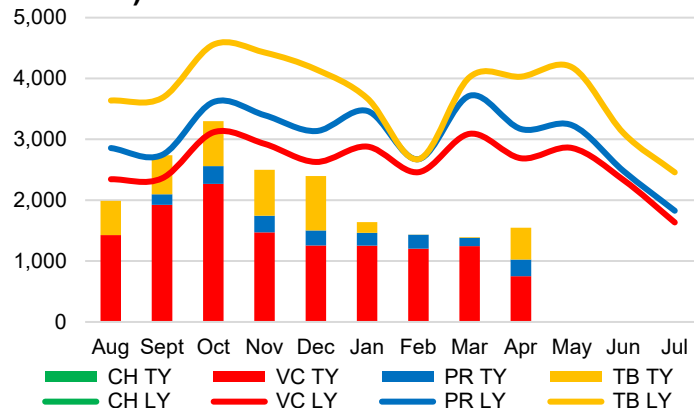


Total YTD = 27.1 MMT

GMP Data Table 2A-1

Grain shipments from primary elevators fell in the first three quarters of the 2021-22 crop year, registering 37.8% less than in the same period the previous year. Wheat, including durum, and canola continue to constitute the largest proportion of the movement at 67.7%. Movement of peas and lentils contributed 9.0% of the balance.

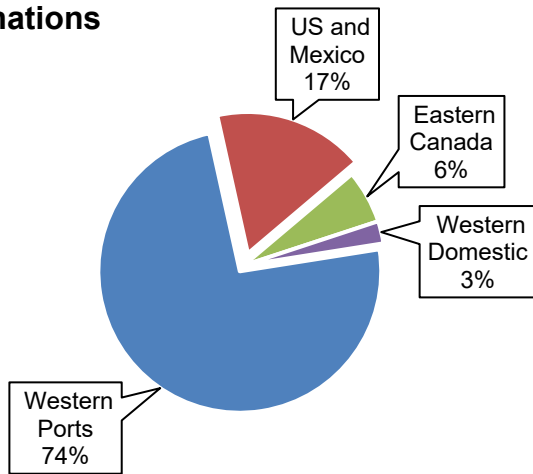
Terminal Elevator Shipments (000's tonnes)



GMP Data Table 2C-1

Bulk shipments from western ports fell in the first nine months of the 2021-22 crop year, registering a 45.8% decline on a year-over-year basis. Shipments were off at all ports. Prince Rupert recorded the largest decrease at 57.1%, while Vancouver and Thunder Bay were down 47.8% and 29.3% respectively.

Western Canadian Grain Destinations

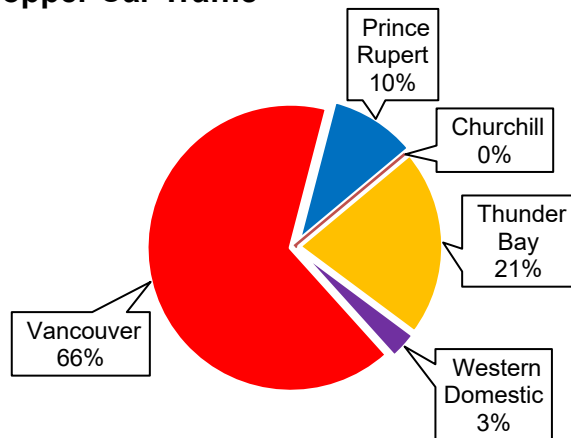


Total YTD = 28.8 MMT

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

Railway grain shipments from Western Canada fell to 28.8 MMT in the first nine months of the 2021-22 crop year, 42.0% less than the 49.6 MMT handled in the same period a year earlier. The majority, about 21.3 MMT, or 74%, was directed to Western Canadian ports in support of offshore sales; 47.0% less than what had been handled a year earlier. This decline was broadened by a 49.1% decrease in shipments to Eastern Canada as well as a 6.0% reduction for shipments into the US and Mexico. Running counter to these losses was a 13.9% gain in movements to Western Domestic destinations.

Western Canadian Destined Hopper Car Traffic



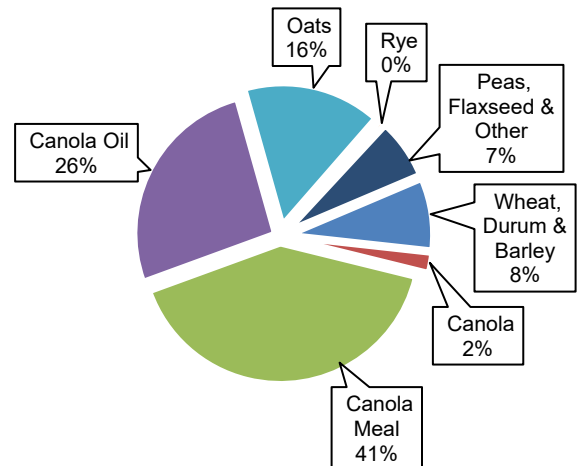
Total YTD - 21.3 MMT

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 nine months of the 2021-22 crop year this amounted to over 21.3 MMT, down 45.4% from a year earlier. Sixty-six 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. A 48.6% decline in hopper-car shipments to Vancouver was largely responsible for shaping the broader traffic reduction. This was supported by equally substantive decreases in shipments to Prince Rupert, Thunder Bay, and Churchill, which fell by 56.2%, 28.0%, and 100.0% respectively. Running counter to these decreases, however, was a gain in shipments to Western Domestic destinations, which rose by 13.8%.

US Destined Grain by Commodity

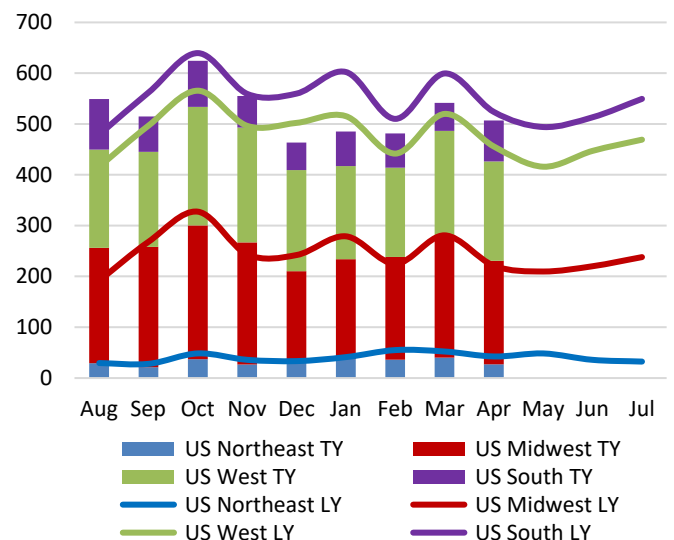


Total YTD - 4.7 MMT

GMP Data Table 2B-18

Total railway shipments into the US reached slightly over 4.7 MMT in the first nine months of the 2021-22 crop year, down 6.2% from that handled a year earlier. About 80% of these shipments are directed into the Midwestern and Western US, with canola and canola products dominating.

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



GMP Data Table 2B-18

System Efficiency and Performance

Primary-elevator stocks grew in the first nine months of the crop year, climbing from 2.4 MMT in August to 4.0 MMT in April. The overall first-three-quarter average is 3.8 MMT. Country space was good throughout the period. Country stocks utilized 72% of the working capacity of the network in April. By province, stocks ranged from 60% in Manitoba to 74% and 76% in Saskatchewan and Alberta respectively, and 87% in British Columbia.

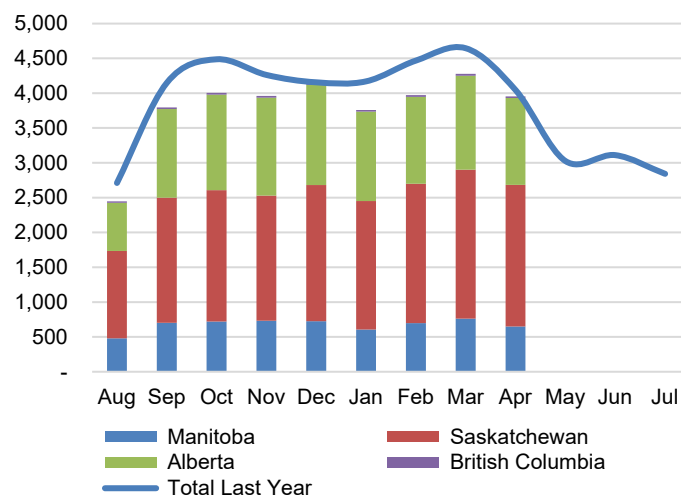
The average days-in-store in the primary-elevator system for the year to date increased from last year, rising 55.0% to 39.5 days.

Table M-4	APR 2022	2021-22 YTD	Var. from Last YTD
Primary Elevator			
Average Weekly Stocks (000's tonnes)	3,952.3	3,824.3	-7.5%
Average Days in Store	39.0	39.5	55.0%
Railway Operations (days)			
Cycle Time to Western Ports	15.4	17.5	16.8%
Cycle Time to Eastern Canada	34.2	29.5	38.3%
Cycle Time to US	28.8	27.4	6.4%
Loaded Transit to Western Ports	6.3	7.1	1.1%
Loaded Transit to Eastern Canada	18.4	13.6	27.8%
Loaded Transit to US	12.2	11.8	9.4%
Rail Fleet in Grain Service	13,886	15,269	-34.4%
Western Canada Terminal Elevator			
Average Weekly Stocks (000's tonnes)	1,344.4	1,125.2	-14.8%
Average Days in Store	23.3	15.4	62.1%
Port Unloads (hopper cars)	15,983	202,727	-44.9%
Terminal Out-of-Car Time	9.3%	20.2%	39.3%
Western Canada Port Operations			
Average Vessel Time in Port (days)	5.7	10.2	-12.9%

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



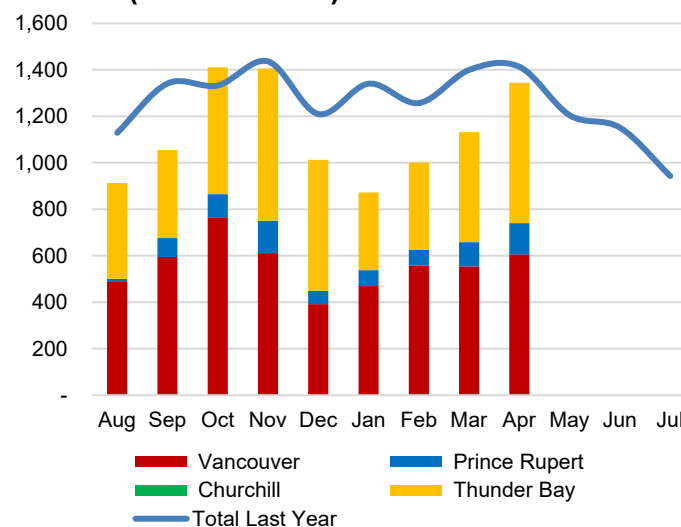
Average Weekly Primary Elevator Stocks (000's tonnes)



GMP Data Table 5A-2

Primary elevator stocks ended the last crop year averaging 2.8 MMT in store. In August, they pulled back further to average 2.4 MMT before reversing direction and rising to average 4.3 MMT in March. In April they retreated to 4.0 MMT. Wheat, including durum, and canola, comprise 72% of the total stock. At 16% of the stock, barley, oats and peas made up much of the balance.

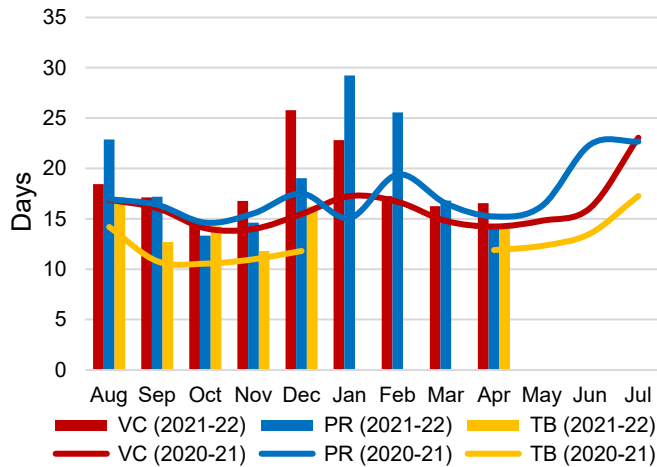
Average Weekly Terminal Elevator Stocks (000's tonnes)



GMP Data Table 5C-2

Overall terminal-elevator stocks averaged 1.1 MMT in the first three quarters of the 2021-22 crop year, 14.8% less than the previous year. April stocks achieved the highest level since November 2021, posting an 18.8% gain from that seen in March. Wheat, including durum, and canola, comprise nearly 88% of the total stock. In April, western ports utilized 70% of their overall working capacity.

Railway Cycle Times to Western Ports (days)

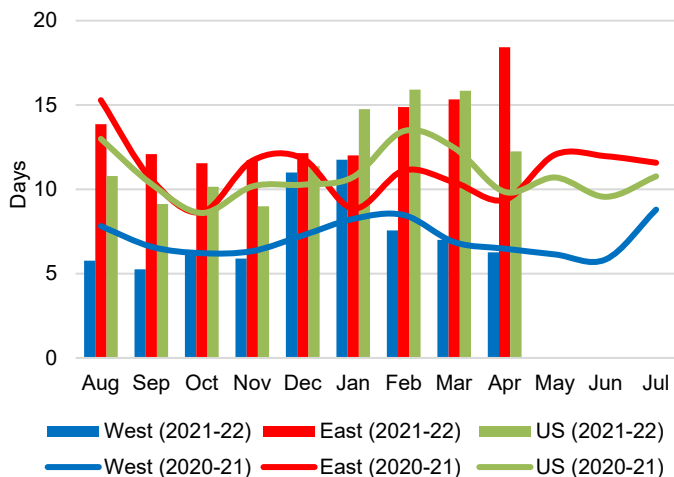


GMP Data Table 5B-1

Railway car cycles to Western Canadian ports averaged 17.5 days in the first nine months of the 2021-22 crop year, up 16.8% from the 15.0-day average posted in the previous crop year. This result reflected increases in all three corridors: with Vancouver up by 17.2%; Prince Rupert, 12.5%; and Thunder Bay, 25.6%.

The average car cycle on movements into Eastern Canada also rose, increasing 38.3%, to 29.5 days from 21.3 days a year earlier. The car cycle for movements into the United States rose by a much lesser 6.4%, to an average of 27.4 days from the 25.8-day average posted in the same period of the previous crop year.

Average Loaded Transit Times (days)

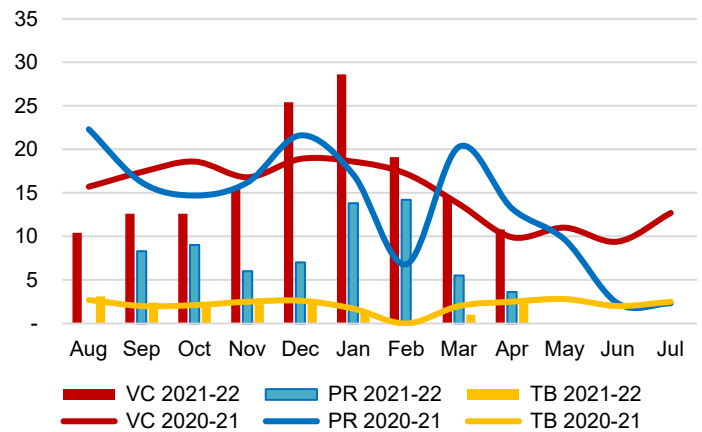


GMP Data Tables 5B-4, 5B-8, 5B-12

The loaded transit time for traffic destined to Western Canadian ports averaged 7.1 days in the first nine months of the 2021-22 crop year, up 1.1% from the 7.0-day average posted a year earlier. This was largely the product of increases in the Vancouver and Thunder Bay averages, which rose by 1.7% and 12.4% respectively, while the Prince Rupert average fell 5.0%. A 27.8% increase was observed on movements into Eastern

Canada, with the average loaded transit time rising to 13.6 days from 10.6 days twelve months before. The average on movements into the United States increased by 9.4%, to 11.8 days from 10.8 days.

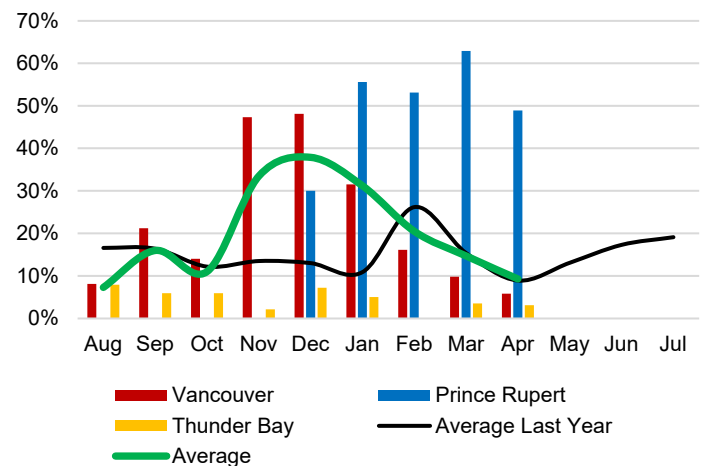
Average Days in Port per Vessel



GMP Data Table 5D-1

In April, the overall average time vessels were in port waiting and loading grain fell to 5.7 days from 12.8 days the month before. The crop-year-to-date average stands at 10.2 days, 12.9% lower than that registered in the previous crop year. While Vancouver and Prince Rupert experienced month-over-month decreases, Thunder Bay saw a modest increase from March levels. For the month of April, days in port stood at 10.8 for Vancouver, 3.6 for Prince Rupert and 2.3 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).

The aggregate measure for all ports fell to 9.3% in April, with a crop-year-to-date average of 20.2%. Terminal out-of-car time at Vancouver fell to 5.8% in April, to 48.9% at Prince Rupert, and to 3.1% at Thunder Bay.

Commercial Relations

<i>Table M-5</i> Rates: \$CDN per tonne	Q3 2021-22	Index (1999=100)	% Change YTD
Avg. Primary Elevation	16.51	137.7	-0.4%
Rail to Vancouver			
CN	56.03	152.7	9.4%
CP	65.13	176.7	5.8%
Rail to Pr. Rupert			
CN	56.03	134.9	9.4%
Rail to Thunder Bay			
CN	49.70	153.8	5.1%
CP	47.48	158.1	-10.3%
Average Terminal Elevation	15.06	165.2	-0.3%

Note: Commercial rates are measured on a quarterly basis, the above table refers to rates at the close of the third quarter of the 2021-22 crop year (as at 30 April 2022). 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 CP increased their single-car freight rates in the first quarter of the 2021-22 crop year. In the case of the former, this amounted to an initial across-the-board increase of 10.0% in August, followed by consecutive increases of 5.0% in both September and October. These rates remained unaltered until March 2022 when CN reduced its westbound rates by 7.0% and its rates into Thunder Bay by 13.0%. A further 2.9% reduction was applied against its westbound rates in April. At the close of the third quarter these actions produced net rate increases of 9.4% on movements into Vancouver and Prince Rupert, and 5.1% into Thunder Bay. In comparison, CP left its year-end rates to Vancouver unchanged until September, when it applied a 4.0% increase, followed by another 6.0% increase in October. Conversely, the carrier reduced its rates to Thunder Bay by 4.0% at the beginning of August before then applying increases of 4.0% in September and 5.0% in October. These remained unchanged until March 2022 when CP cut its Thunder Bay rates by 10.0%. This was followed in April by reductions of 3.9% for movements into Vancouver, and 5.0% into Thunder Bay. At the close of the third quarter, CP had effectively raised its Vancouver rates by 5.8% while lowering its Thunder Bay rates by 10.3%.

Commercial Developments

Ukraine conflict impacts global grain markets: Russia's invasion of Ukraine in late February has sent shockwaves through various commodity markets owing to the resultant trade disruptions in the Black Sea region. Russia is the world's largest natural gas and fertilizer exporter, as well as its second largest crude oil exporter. Together with Ukraine, these two countries account for nearly a third of global wheat exports, a fifth of its corn exports, and 80 percent of its sunflower oil exports. According to the World Bank, global food and fuel price shocks linked to the

Russia-Ukraine war are set to last until at least the end of 2024. The bank indicated that the war will likely result in the biggest commodity price shock since the 1970s, building on already elevated inflationary pressures that will likely raise most global commodity prices by anywhere from 20% to 50% in 2022. The bank also warned that, in the event of a prolonged war or additional Western sanctions against Russia, prices could prove even more volatile and reach still higher. Disruptions to the flow of grain from the Black Sea has already spurred prices sharply higher, with international buyers scrambling to secure alternative supplies. Canadian grain suppliers were, however, largely unable to respond given 2021's smaller crop. Nevertheless, prevailing market conditions suggest that the demand for Canadian grain will remain strong well into the 2022-23 crop year.

CP train and yard workers labour disruption: In early March 2022, following six months of protracted negotiations, the Canadian Pacific Railway (CP) found itself unable to reach an agreement with the Teamsters Canada Rail Conference (TCRC), which represents some 3,000 train and yard employees, on a new labour contract. Although a vote in favour of strike action by the TCRC's membership threatened a countrywide work stoppage by mid month, both parties continued to converse under the auspices of a federally appointed mediator. With frustrations mounting, both sides edged closer to a showdown. On 16 March 2022 CP issued a 72-hour notice providing for the lock-out of its TCRC-member employees, to become effective at 00h01 the following Sunday. Just two hours prior to the appointed hour, however, the TCRC called out its members, initiating a work stoppage. Following the union's agreement to binding arbitration less than 48 hours later, railway service was quickly resumed.

CTA determines VRCPI for 2022-23 crop year: The Canadian Transportation Agency announced sharp increases in the Volume-Related Composite Price Index (VRCPI), which is used in determining the Maximum Revenue Entitlement for the Canadian National Railway Company (CN) and the Canadian Pacific Railway Company (CP) in the movement of western Canadian grain. Essentially an inflationary adjustment factor, the VRCPI reflects price changes for railway labour, fuel, and material. Citing heavier investments in equipment along with the price impacts of recent world events, the Agency prescribed record increases of 11.99% for CN, and 12.70% for CP.

Infrastructure

Apart from the railways' car fleet, GMP measures relating to infrastructure are reported on a quarterly basis. The first nine months of the 2021-22 crop year saw several changes in the GHTS's physical infrastructure.

The licensing and delicensing of several country elevators lifted the total network to 412 facilities from 411, with storage capacity reaching a record 9.4 MMT. The total number of loop-track facilities rose to 39 from 34.

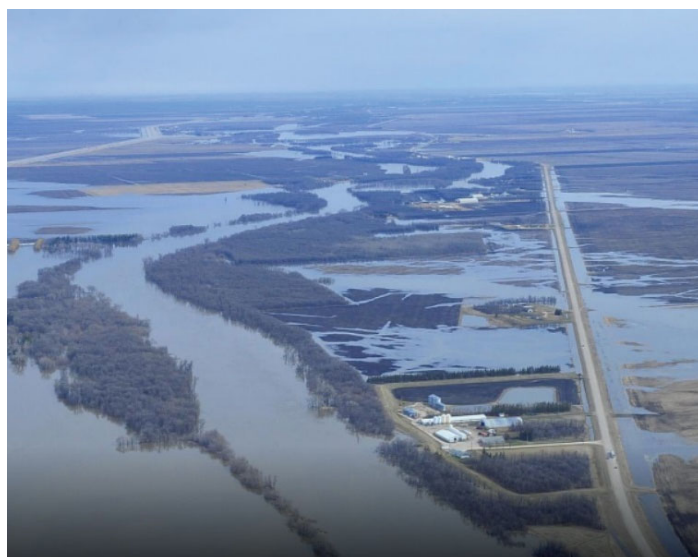
There were no changes recorded against the railway network in the first nine months of the 2021-22 crop year. Total mileage remained unaltered at 17,265.7 route-miles, with 84.5% of it being operated by CN and CP.

The delicensing of the former Parrish & Heimbecker facility in Surrey BC reduced the terminal elevator network to 17 facilities with 2.8 MMT of storage capacity.

Table M-6	Q3 2021-22	Index (1999=100)	% Change YTD
Country Elevator			
Primary and Process Elevators (Count)	412	41.0	0.2%
Storage Capacity (000's tonnes)	9,430.8	134.2	1.7%
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*	19,339	n/a	-17.4%
Terminal Elevator			
Terminal Facilities (Count)	17	121.4	-5.6%
Storage Capacity (000's tonnes)	2,752.5	107.6	-5.4%

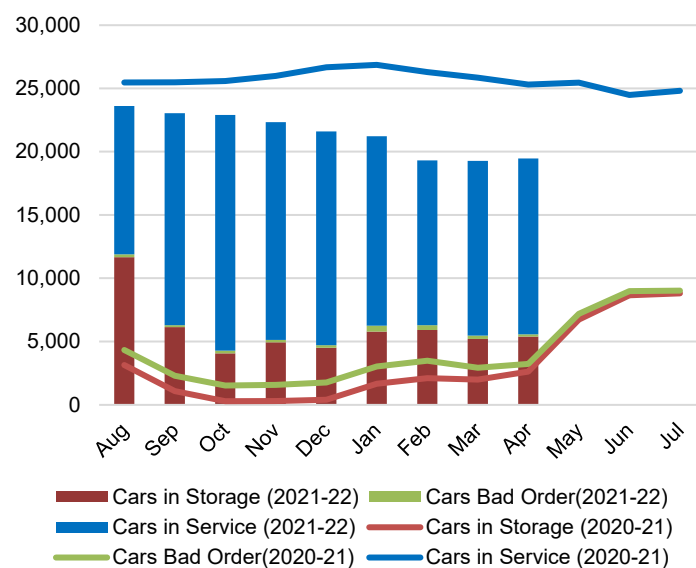
* Hopper Car Fleet Size represents all cars in all statuses for the first nine months of the 2021-22 crop year.

During times of heavy demand for grain hopper cars, nearly all of the hopper-car fleet is placed in service. It is normal practice for railways to move cars into storage as traffic volumes decrease in the latter months of the crop year. This was the case in the 2020-21 crop year as in July 2021, a weekly average of 15,781 cars, representing 64% of the fleet, was in active service. Cars in service fell further in August, to an average of just 11,713 per week before reversing directions and climbing to 18,617 in



October. By April, they again retreated to 13,886. The average cars in service for the first nine months of the crop year represents 71% of the total fleet. The balance of the fleet, comprising 29% of the rail cars, was in storage or repair status (bad order).

Railway Grain Fleet Size and Utilization



GMP Data Table 3B-2

Producer Cars

No change was registered in the number of producer-car loading sites in the first three quarters of the 2021-22 crop year. The total number of available producer-car loading locations at the end of April stands at 272.

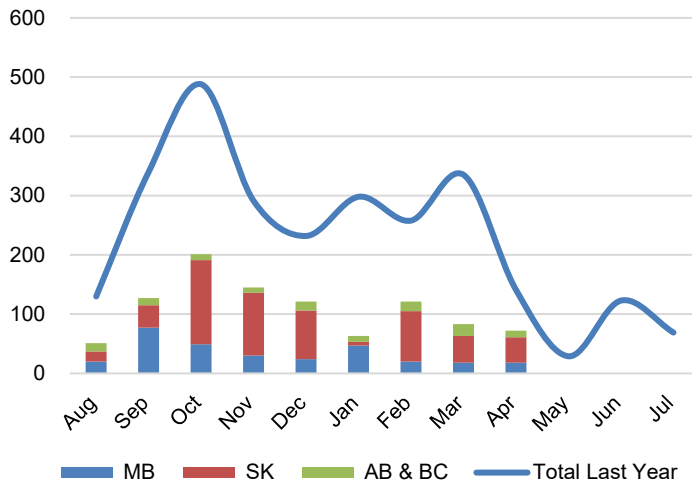
Table M-7	Q3 2021-22	Index (1999=100)	% Change YTD
Producer Car Loading Sites			
Class 1 Carriers	142	22.2	0.0%
Shortline Carriers	130	200.0	0.0%
All Carriers	272	38.3	0.0%

Table M-8	Q3 2021-22	2021-22 YTD	Var. from Last YTD
Producer Cars Scheduled			
Manitoba	56	303	-33.4%
Saskatchewan	173	564	-69.2%
Alberta & B.C.	47	117	-47.8%
Total	276	984	-60.8%

Producer cars scheduled for April 2022 were 48.9% less than in April 2021, marking an overall crop-year downturn of 60.8% from the previous year. The 2021-22 crop year reverses the trend of improved producer-car numbers seen in the previous two crop years. The drought-reduced production of 2021 will negatively impact producer cars scheduled throughout the balance of this crop year.



Producer Cars Scheduled by Province

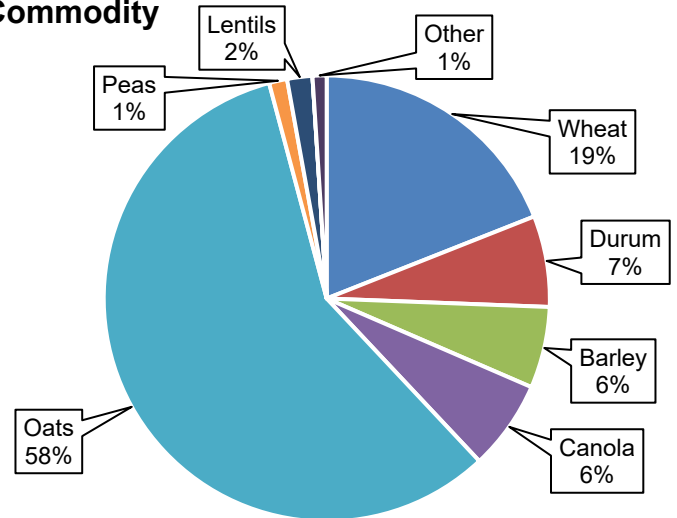


GMP Data Table 6B-2

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 three quarters of the 2021-22 crop year continue to reflect

this trend, with oats comprising 58% of the total, while wheat, durum and barley combined comprise only 32%. Canola contributed 6%, while special crops and other rounded out the final 4% of the total volume.

Producer Cars Scheduled by Commodity



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