

Grain Monitoring Program Report for: April 2020 / Q3 2019-20 CY

Release Date: May 21, 2020

GMP Dashboard

	MAR		2019-20	Var. from	
Table M-1	2019	APR 2020	YTD	Last YTD	
Western Canadian GHTS Performance (Days)					
Total Time in System	46.6	46.6	44.9	-1.1%	
Average Days In Store – Country	30.9	25.4	26.0	-4.4%	
Loaded Transit Time	7.8	7.4	7.6	-2.6%	
Average Days In Store – Terminal	7.9	13.8	11.3	8.7%	
Total Traffic ('000	tonnes)				
Primary Elevator Shipments	4,124.3	5,870.4	37,851.2	2.9%	
Railway Shipments (all Western Canada traffic)	5,116.7	5,531.7	42,182.1	2.1%	
Western Port Terminal Shipments	3,070.9	3,796.1	27,539.2	0.9%	
Railway Performance					
Avg. Loads on Wheels (Cars)	12,652	14,019	11,431	-8.5%	
Total Western Port Car Cycle (days)	17.1	14.8	16.8	4.2%	
Port Performance					
Western Port Unloads (Number of Cars)	29,397	48,438	249,408	1.9%	
Vessel Time in Port (days)	22.3	13.1	13.1	17.3%	

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 smartly in April 2020, to over 5.5 MMT, up 8.1% from March's 5.1 MMT. This strong showing helped lift year-to-date shipments to almost 42.2 MMT, 2.1% above the 41.3 MMT forwarded in the same nine-month period a year earlier, overcoming the backlog imposed by a delayed harvest, an eight-day strike at CN, as well as subsequent mainline washouts and blockades. Port shipments for April totaled 3.8 MMT, a 23.6% increase from March volumes as Thunder Bay shipments picked up following the opening of navigation on the Seaway. Year-to-date bulk shipments from western ports stand 0.9% higher than the previous year. Accompanying the increase in shipments, is a 13.1-day average in the amount of time vessels spent in port in April, with the first three quarters of the crop-year average also measuring 13.1 days.

Highlights for April 2020 and Third Quarter 2019-20 CY

Traffic and Movement (page 2)

- Primary-elevator shipments were 37.9 MMT in the first three quarters of the 2019-20 crop year, 2.9% more than last year.
- Total Western Canadian rail shipments (from all primary/process elevators and producer-car sites) totaled almost 42.2 MMT in the first nine months of the 2019-20 crop year, 2.1% above the previous crop year's record of 41.3 MMT. Despite the negative impacts of mainline washouts and blockades, larger third-quarter volumes more than offset traffic declines in first and second quarter tonnage.
- Crop year-to-date bulk shipments from Western Canadian ports totaled 27.5 MMT, up 0.9% from last crop year.

System Efficiency and Performance (page 4)

- Average weekly primary-elevator stocks decreased by 3.3% from last year-to-date. The average days-in-store was down 4.4%.
- Average weekly port-terminal stocks decreased 0.1% from the same period last year, while average days-in-store climbed 8.7%.
- Railcar cycle times fell sharply in April, with the preliminary average for Western Canadian movements decreasing to 14.8 days from 17.1 days in March. However, the year-to-date average still rose by 4.2%, climbing to 16.8 days from 16.1 days a year earlier.
- The first three quarters average for vessel time in port is 13.1 days, a 17.3% increase from that observed in the previous crop year.
- Port-terminal out-of-car time fell to 7.7% at Vancouver in April from 15.1% in March, and to 1.9% at Prince Rupert from 14.0%. At Thunder Bay the out-of-car time fell to 2.0% from 9.1% the previous month.

Commercial Relations (page 6)

- Average primary-elevation charges rose 1.3% over the course of the first nine months of the crop year.
- After initially reducing their single-car freight rates in August 2019, both CN and CP advanced successive increases in September and October. These rates remained largely unchanged through April 2020. By the close of the third quarter CN had effectively lifted the rates on movements to Vancouver, Prince Rupert and Thunder Bay by 4.9%, 6.8% and 6.6% respectively. In comparison, CP's pricing actions raised rates on traffic destined to Vancouver and Thunder Bay by 6.7% and 6.5% respectively.
- Average terminal-elevation charges rose 0.1% during the first three quarters of the crop year.

Infrastructure (page 6)

Several changes were recorded in GHTS infrastructure in the first nine months of the crop year, with the number of country elevators rising to 403 from 399. This lifted storage capacity to a record 8.8 MMT from 8.7 MMT. Much of this was tied to the licencing of three new loop-track facilities operated by G3 and GrainsConnect. Similarly, the licencing of the new G3 terminal in Vancouver offset the closure of the Western Grains By-Products facility in Thunder Bay, leaving total terminals unchanged at 17 but bolstering storage by 6.0%, to almost 2.7 tonnes. Discontinuance of CP's Kelvington Subdivision shaved 14.2 route-miles from the railway network, which fell to a low of 17,265.7 route-miles in the third quarter.

Production and Supply

Statistics Canada's November survey for 2019 crop production in Western Canada stands at 73.5 MMT, a 2.4% increase from the 2018 harvest. This constitutes the second largest crop on record. This production estimate reflects a reduction of 1.7 MMT from the model-based estimate released by Statistics Canada in September, marking the challenging fall weather conditions and inability to complete harvest prior to the arrival of winter.

Coupled with carry-forward stock of 9.4 MMT at the end of July 2019, 9.3% less than in 2018, the overall grain supply is estimated to be 82.8 MMT. Year-end on-farm carry-forward stock was boosted 1.0 MMT in Statistics Canada's February release. The projected supply is 0.9% more than that of the previous year, and registers as the largest on record ensuring heavy demands on the GHTS throughout the balance of the crop year.

Table M-2:	2019	2018	Var. from Last Yr.	
Production & Carry Over (000's tonnes)				
Western Canada Total Production	73,455.2	71,723.6	2.4%	
Western Canada On Farm & Primary Elevator Carry Forward Stock	9,367.5	10,329.6	-9.3%	
Total Grain Supply	82,822.7	82,053.2	0.9%	

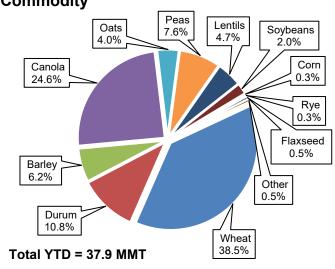
Traffic and Movement

Despite some axle weight restrictions (road bans), April deliveries averaged 1.1 MMT per week. Average weekly primary-elevator stock levels fell to 4.3 MMT from 4.6 MMT in March, with tight space conditions continuing in facilities across the prairies.

Table M-3	APR 2020	2019-20 YTD	Var. from Last YTD	
Primary Elevator Shipments (000's tonnes)				
Manitoba	907.6	6,313.1	-3.1%	
Saskatchewan	3,188.3	20,771.6	3.8%	
Alberta	1,743.8	10,457.9	5.0%	
British Columbia	30.7	308.6	9.5%	
Total	5,870.4	37,851.2	2.9%	
Western Canada Railway Traffic (000's tonnes)				
Shipments to Western Ports	4,460.2	32,689.9	1.3%	
Shipments to Eastern Canada	337.2	3,107.3	4.7%	
Shipments to US & Mexico	661.1	5,587.9	1.0%	
Shipments Western Domestic	73.1	796.9	51.6%	
Total	5,531.7	42,182.1	2.1%	
Western Port Unloads (Number of Cars)				
Vancouver	29,336	189,752	-0.1%	
Prince Rupert	6,706	42,599	-10.6%	
Churchill	0	1,434	n/a	
Thunder Bay	12,396	64,140	17.0%	
Total	48,438	297,925	1.9%	

Table M-3	APR 2019	2019-20 YTD	Var. from Last YTD	
Terminal Elevator Shipments (000's tonnes)				
Vancouver	2,294.6	17,737.8	0.6%	
Prince Rupert	523.9	3,853.6	-14.5%	
Churchill	0.0	137.3	410 .4%	
Thunder Bay	977.6	5,810.5	13.5%	
Total	3,796.1	27,539.2	0.9%	

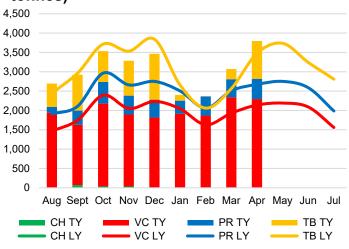
Primary Elevator Shipments by Commodity



GMP Data Table 2A-1

Grain shipments from primary elevators grew in the first three quarters, registering 2.9% more than the crop-year-to-date total for the previous year. Wheat, including durum, and canola continue to constitute the largest proportion of the movement at 73.9%. Movement of peas and lentils were relatively consistent in April, constituting 12.3% of the total, up from 12.2% in March.

Terminal Elevator Shipments (000's tonnes)

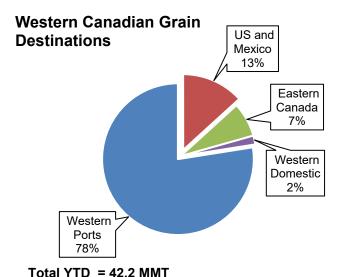


GMP Data Table 2C-1

Bulk shipments from western ports grew in the first three quarters of the 2019-20 crop year, registering a 0.9% increase on a year-over-year basis. Shipment were up from all ports except Prince

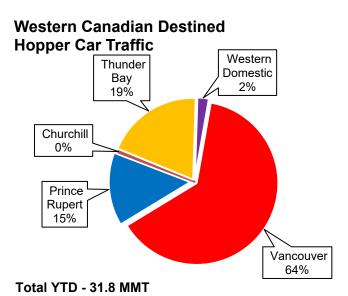


Rupert which experienced a decline of 14.5%, while Thunder Bay recorded an increase of 13.5% from the previous crop year.



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

Owing to a particularly strong showing in the third quarter, railway grain shipments from Western Canada in the first nine months of the 2019-20 crop year amounted to a record 42.2 MMT, some 2.1% more than the 41.3 MMT handled in the same period a year earlier. The majority, about 32.7 MMT, or 78%, was directed to Western Canadian ports in support of offshore sales; 1.3% over what had been handled a year earlier. Shipments to the US and Mexico also increased by 1.0%. Movements to Eastern Canada as well as Western Domestic destinations rose more substantively, with gains of 4.7% and 51.6% respectively.

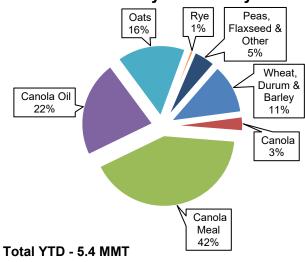


GMP Data Tables 2B-3 to 2B-7

Over 95% of the tonnage directed to destinations within Western Canada moves in covered hopper cars. During the first nine months of the 2019-20 crop year this amounted to just over 31.8 MMT, up 2.0% from the same period a year earlier. On the

receiving end, 64% 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, favourable logistical economics and year-round operations. Hopper-car shipments to Vancouver decreased by 0.6% during this period. West-Coast shipments through Prince Rupert saw a more substantive decline, with volumes falling by 10.8%. Running counter to these declines were increased shipments to Thunder Bay and Western Domestic destinations, which rose by 17.5% and 60.0% respectively. Thunder Bay increases were largely seen in the durum and caola sectors attributable to stronger eurpean demand.

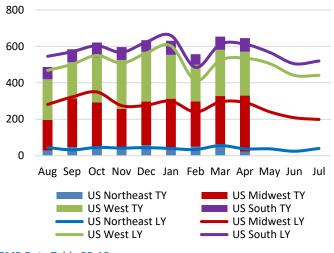
US Destined Grain by Commodity



GMP Data Table 2B-18

Total railway shipments into the US reached slightly over 5.4 MMT in the first nine months of the 2019-20 crop year, a gain of 2.4% from that handled in the same period 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 steadily until March, climbing from 2.1 MMT in August to 4.6 MMT before pulling back to 4.3 MMT in April, for a first-three-quarters average of 3.6 MMT. Space in the country system was tight during April. Country stocks utilized 85% of the working capacity of the network. By province, stocks ranged from 72% in Manitoba, to 82% and 85% in British Columbia and Saskatchewan respectively and 94% in Alberta.

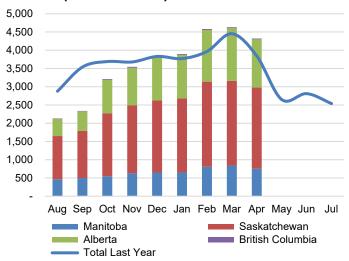
The average days-in-store in the primary-elevator system for the first three quarters of the crop year decrease from last year, falling 4.4% to 26.0 days.

Table M-4	APR 2020	2019-20 YTD	Var. from Last YTD
Primary Elevator			
Average Weekly Stocks (000's tonnes)	4,322.1	3,611.5	-3.3%
Average Days in Store	25.4	26.0	-4.4%
Railway Operations (days)			
Cycle Time to Western Ports	14.8	16.8	4.2%
Cycle Time to Eastern Canada	19.3	22.7	3.2%
Cycle Time to US	19.9	25.4	-4.5%
Loaded Transit to Western Ports	7.4	7.6	-2.6%
Loaded Transit to Eastern Canada	9.2	10.7	0.4%
Loaded Transit to US	8.6	9.9	-11.8%
Rail Fleet in Grain Service	24,599	22,250	-3.2%
Western Canada Terminal Elevato	r		
Average Weekly Stocks (000's tonnes)	1,466.1	1,210.4	-0.1%
Average Days in Store	13.8	11.3	8.7%
Port Unloads (hopper cars)	48,438	297,925	1.9%
Terminal Out-of-Car Time	5.8%	11.0%	-13.4%
Western Canada Port Operations			
Average Vessel Time in Port (days)	13.1	13.1	17.3%

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



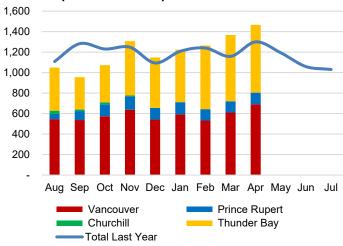
Average Weekly Primary Elevator Stocks (000's tonnes)



GMP Data Table 5A-2

Primary elevator stocks ended the last crop year averaging 2.5 MMT in store. In August, they pulled back further to average 2.1 MMT before reversing direction and rising to average 4.6 MMT in March. April saw a retraction to 4.3 MMT. Wheat, including durum, and canola, comprise 71% of the total stock. At 19% of the stock, barley, oats and peas made up much of the balance.

Average Weekly Terminal Elevator Stocks (000's tonnes)

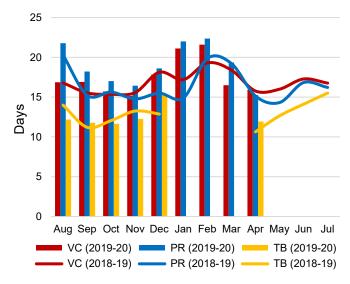


GMP Data Table 5C-2

Overall terminal elevator stocks averaged 1.2 MMT in the first three quarters of the crop year, 0.1% less than the previous year. April stock levels built at all ports and were 12.8% higher than in the same month in 2019. Wheat, including durum, and canola, comprise over 83% of the total stock. In April, western ports utilized 77% of their overall working capacity.



Railway Cycle Times to Western Ports (days)

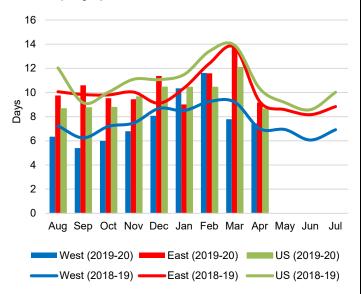


GMP Data Table 5B-1

Railway car cycles to Western Canadian ports averaged 16.8 days in the first nine months of the 2019-20 crop year, up 4.2% from the 16.1-day average posted in the same period of the previous crop year. This result was shaped by increases in all three corridors, with the Prince Rupert average gaining 13.7%. This was followed by increases of 3.5% in the Thunder Bay corridor, and 3.4% in the Vancouver corridor.

Car cycles to Eastern Canada showed a comparable increase, rising by 3.2%, to an average of 22.7 days from 22.0 days a year earlier. Conversely, the car cycle for movements into the United States fell by 4.5%, to an average of 25.4 days from the 26.6-day average posted in the same period of the previous crop year.

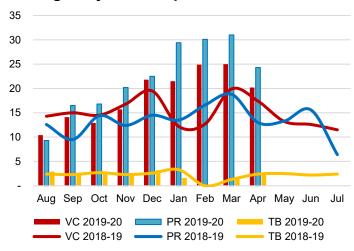
Average Loaded Transit Times (days)



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

The loaded transit time for traffic destined to Western Canadian ports averaged 7.6 days in the first nine months of the 2019-20 crop year, down 2.6% from the 7.8-day average posted in the same period a year earlier. This resulted chiefly from reductions in the Vancouver and Thunder Bay corridors, which fell by 3.5% and 10.4% respectively. In contrast, the Prince Rupert average rose by 14.2%. The average loaded transit time for movements into Eastern Canada increased, albeit by a marginal 0.4%, to remain effectively unchanged at 10.7 days. The average for US-destined traffic declined by 11.8%, to 9.9 days from the 11.2-day average posted twelve months earlier.

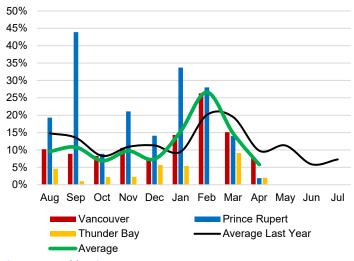
Average Days in Port per Vessel



GMP Data Table 5D-1

In April, the overall average time vessels were in port waiting and loading grain fell to 13.1 days from 22.3 days the month before. The crop-year average also stands at 13.1 days, 17.3% higher than that registered in the previous crop year. Both Vancouver and Prince Rupert saw month-over-month decreases from March levels. For the month of April, days in port stood at 20.2 for Vancouver, 24.3 for Prince Rupert and 2.2 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 5.8% in April from 14.8% in March. Terminal out-of-car time at Vancouver declined to 7.7% in April, to 1.9% at Prince Rupert and to 2.0% at Thunder Bay.

Commercial Relations

Table M-5	Q3	Index	% Change
Rates: \$CDN per tonne	2019-20	(1999=100)	YTD
Avg. Primary Elevation	16.45	137.1	1.3%
Rail to Vancouver			
CN	58.67	159.9	4.9%
СР	60.64	164.4	6.7%
Rail to Pr. Rupert			
CN	58.67	141.2	6.8%
Rail to Thunder Bay			
CN	57.44	177.9	6.6%
СР	51.90	172.8	6.5%
Average Terminal Elevation	14.40	157.9	0.1%

Note: Commercial rates are measured on a quarterly basis, the above table refers to rates at the close of the third quarter of the 2019-20 crop year (as at 30 April 2020). Railway freight rates reflect average published single-car rates, and do not include multi-car incentives (\$8/tonne for 100+ car blocks).

After initially reducing their single-car freight rates in August 2019, both CN and CP advanced successive increases in September and October. CN's August reductions ranged from 3.0% in the Prince Rupert corridor to 5.0% in the Thunder Bay corridor. These were reversed in September with corridor-specific increases that ranged from 4.9% to 7.0%, with an across-the-board follow-up escalation of 5.0% in October. These rates remained largely unchanged through April 2020. By the close of the third quarter CN had effectively lifted the rates on movements to Vancouver, Prince Rupert and Thunder Bay by 4.9%, 6.8% and 6.6% respectively. In comparison, CP followed its initial 5.0% reduction with increases approaching 7.0% in September, and 5.0% in October. As with CN, CP retained these rates unchanged through April 2020. At the end of the third quarter these actions had raised the rates on traffic destined to Vancouver and Thunder Bay by 6.7% and 6.5% respectively.

Commercial Developments

Protests lead to railway blockades: Opposition to the construction of a natural gas pipeline through traditional Wet'suwet'en First Nation territory in northern British Columbia led to protests and rail blockades as well as disruption for commercial vehicle access to the Port of Vancouver. Within a few days, other barricades were established at various locations throughout Canada in a show of solidarity. This prompted widespread

shutdowns of freight and passenger railway services, particularly in the eastern portion of the country. The impact was no less severe in Western Canada, with rotating blockades backlogging the flow of railway traffic from Winnipeg through to the West Coast. The CN network was particularly hard hit, with an across-the-board cut to service in the Prince Rupert corridor stranding the port altogether. Export grain movements suffered alongside other commodities in the face of reduced railway service, which led to elevator congestion and deferred producer deliveries in the country. When the blockades were lifted in early March, 53 ships were waiting at West Coast ports to take delivery of some 2.8 tonnes of delayed railway grain shipments. Notwithstanding this, the railways moved quickly to restore service and expedite its movement, handling near-record volumes in the process. By the close of the third quarter, railway movements were once again in balance with arriving vessels, with the backlog having effectively been eliminated.

COVID-19 impacts on grain trade: Against the backdrop of an expanding global COVID-19 pandemic, foreign grain buyers were becoming increasingly concerned with the vulnerabilities of their existing supply chains. This was occasioned by the restrictions imposed by several grain-exporting nations to ensure domestic food security. And while Canada's reputation as a reliable supplier was tarnished in late 2019 and early 2020 following a rail strike, various service disruptions and country-wide blockades that slowed grain movements and delayed export sales programs, foreign buyers seemed appreciative of the efforts made by Canadian exporters to honour their obligations in the international marketplace. That is not to say that the GHTS was unimpacted. But the designation of essential services along with the adoption of appropriate physical-distancing protocols at country elevators. railways, and port terminals went a long way in protecting the efficient movement of grain. While bulk grain shipments fared comparatively well alongside a general reduction in other railway traffic, Canadian exporters employing containers to move smaller volumes - such as pulses and special crops - struggled with the constricted supply of equipment occasioned by the pandemic. During the third quarter, the ports of Vancouver and Prince Rupert saw dozens of scheduled vessel arrivals cancelled outright. This led to a shortage of empty 20-foot containers on the West Coast which, in turn, caused backlogs at the container-stuffing facilities that transload grain into containers for shipment overseas. Most industry observers suspect that the shortage will persist until the pandemic has passed, North Americans return to work, and the importing of consumer goods from Asia returns to pre-pandemic levels.

Infrastructure

Apart from the railways' car fleet, GMP measures relating to infrastructure are reported on a quarterly basis. The first nine months of the 2019-20 crop year produced some notable changes to the GHTS's physical infrastructure.

The country-elevator network grew modestly through the third quarter, to 403 facilities from 399. This gain was the product of various licencing changes, including those associated with three



new loop-track facilities operated by G3 and GrainsConnect. This helped lift total storage capacity to a record 8.8 MMT from 8.7 MMT. During this same period, Parrish and Heimbecker also assumed formal control over the ten facilities it acquired from Louis Dreyfus.

Discontinuance of CP's Kelvington Subdivision shaved 14.2 route-miles from the overall railway network, which fell to a low of 17,265.7 route-miles in the third quarter, with 84.6% of it being operated by CN and CP.

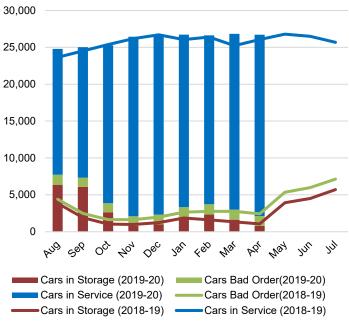
The terminal elevator network also saw changes, with the licencing of the new G3 terminal in Vancouver offsetting the closure of the Western Grains By-Products facility in Thunder Bay, leaving the total number unchanged at 17 but bolstering storage by 6.0%, to almost 2.7 tonnes.

Table M-6	Q3 2019-20	Index (1999=100)	% Change YTD
Country Elevator			
Primary and Process Elevators (Count)	403	40.1	1.0%
Storage Capacity (000's tonnes)	8,845.9	125.9	1.5%
Railway			
Route Miles - Major Carriers	14,596.1	98.4	-0.1%
Route Miles - Shortline Carriers	2,669.6	57.5	0.0%
Route Miles - Total	17,265.7	88.7	-0.1%
Average Weekly Total Hopper Car Fleet Size*	26,126	n/a	2.3%
Terminal Elevator			
Terminal Facilities (Count)	17	121.4	0.0%
Storage Capacity (000's tonnes)	2,695.5	105.4	6.0%

^{*} Hopper Car Fleet Size represents all cars in all statuses for the first three quarters of the 2019-20 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 2018-19 crop year as in July 2019, a weekly average of 18,548 cars, representing 72% of the fleet was in active service. Cars in service fell further in August, to 17,062 before reversing direction and rising to 24,343 by December. Winter operations saw a pullback to 22,905 cars in service in February before increasing again to 24,599 in April. The overall-average car fleet in service during the first three quarters of the 2019-20 crop year was 22,250 cars, encompassing 85% of the fleet. The balance of the fleet, comprising 15% of the rail cars, was in storage or repair status (bad order), considerably less than 28% in July 2019.

Railway Grain Fleet Size and Utilization



GMP Data Table 3B-2

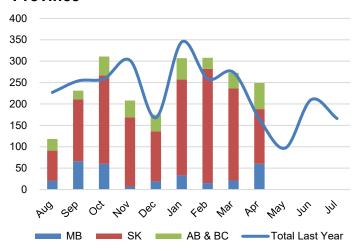
Producer Cars

No change was registered in the number of producer-car loading sites in the first three quarters of the 2019-20 crop year. The total number of available producer-car loading locations at the end of April stands at 272.

Table M-7 Producer Car Loading Sites	Q3 2019-20	Index (1999=100)	% Change YTD
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 Producer Cars Scheduled	Q3 2019-20	2019-20 YTD	Var. from Last YTD
Manitoba	96	301	20.4%
Saskatchewan	610	1,536	-6.7%
Alberta & B.C.	124	343	-3.9%
Total	830	2,180	-3.2%

Producer cars scheduled for April 2020 are 50.9% more that in April 2019, while for the crop year to date are down 3.2% from the previous year. The 2019-20 crop year has seen another reduction in producer-car applications received by the Canadian Grain Commission.

Producer Cars Scheduled by Province

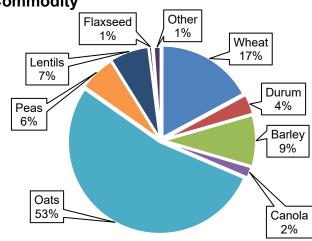


GMP Data Table 6B-2

The proportion of producer-car shipments devoted to oats has continued to grow while a decrease has been registered in the number of cars carrying other cereal crops. Shipments throughout the first three quarters of the 2019-20 crop year continue to reflect

this trend, with oats shipments comprising 53% of the total, while wheat, durum and barley combined comprise only 30%. Special crops such as peas, lentils and chickpeas contributed 14%, while oilseeds rounded out the final 3% 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

