

GMP Dashboard

Table M-1	NOV 2016	2016-17 YTD	Var. from Last YTD
Western Canadian GHTS Performance (Days)			
Total Time in System	40.9	37.5	-4.1%
Average Days In Store – Country	23.4	22.3	-2.6%
Loaded Transit Time	5.2	4.9	-3.7%
Average Days In Store – Terminal	12.3	10.3	-8.0%
Total Traffic ('000 tonnes)			
Primary Elevator Shipments	4,970.9	16,371.5	5.5%
Railway Shipments (all Western Canada traffic)	4,573.5	17,876.1	-0.9%
Western Port Terminal Shipments	3,529.0	12,524.3	-5.2%
Railway Performance			
Avg. Loads on Wheels (Cars)	11,867	10,355	-3.6%
Total Western Port Car Cycle (days)	12.7	12.9	-2.3%
Port Performance			
Western Port Unloads (Number of Cars)			
Vancouver	24,548	82,698	4.2%
Prince Rupert	7,639	22,403	-0.9%
Churchill	0	0	-100.0%
Thunder Bay	12,274	40,002	7.3%
Total	44,461	145,103	3.0%
Vessel Time in Port (days)	11.4	8.7	11.5%

- Order fulfillment measures have been removed from this table as comparative data is unavailable now.
 - YTD refers to the crop year to date (extending from August 1 through July 31).

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

Persistent wet conditions, including snowfall in the western prairies, challenged producers and by extension the entire GHTS throughout the harvest. Early seeding and good growing conditions had triggered optimistic projections for an early and bountiful harvest but, as the 2016 fall advanced and cool, wet weather continued, farmers' attempts to take the crops off the fields were stalled. An unseasonably warm period in early November allowed a continuation of harvest activity. While much

of the outstanding grain in Saskatchewan was brought in, many Alberta producers, especially in the northern regions, remained unable to complete their harvest.

Total Western Canadian originated rail movements fell 3.1% from the previous November, and lagged slightly on a year-to-date basis by 0.9% against last year's performance. Western port shipments for November totaled 3.5 MMT, a 3.9% increase from the previous month but 5.2% lower than November of last year. Accompanying this increase in shipments, is an 11.4-day average in the amount of time vessels spent in port, higher than October's 8.5-day average.

Highlights for November 2016

Traffic and Movement (page 2)

- Primary-elevator shipments were 16.4 MMT in the first four months of the 2016-17 crop year, 5.5% higher than last year.
- Total rail shipments (including primary/process elevators & producer cars) to all destinations from Western Canada reached 17.9 MMT, down 0.9% from that handled in the same four-month period a year earlier.
- Crop year-to-date shipments from Western Canadian ports totaled 12.5 MMT, down 5.2% from the same period last year.

System Efficiency and Performance (page 4)

- Average weekly stocks in the country decreased by 1.3% from last year-to-date, while the average days-in-store was down 2.6%.
- Average weekly port-terminal stocks decreased 13.4% from the same period last year, while average days-in-store fell 8.0%.
- Railcar cycle times through November averaged 12.9 days to western ports; 18.8 days to eastern Canada; and 23.2 days to US destinations.
- The year-to-date average for vessel time in port is 8.7 days, a 11.5% increase from that observed in the previous crop year.
- November port-terminal out-of-car time is up 20.7% in Vancouver and 4.2% in Prince Rupert while it fell to 4.2% in Thunder Bay.

Commercial Relations (page 6)

- Average primary-elevation charges rose 0.8% in the first four months of the crop year.
- Average terminal-elevation rates rose 0.1% through November.

Infrastructure (page 7)

- The GHTS's country-elevator network saw a net increase of six facilities in the first four months of the crop year, rising to 389 from 383, due largely to the licensing of several previously unlicensed facilities now operated by AGT Food and Ingredients. This, along with other expansion efforts lifted the system's overall licensed storage capacity to almost 8.0 MMT from 7.8 MMT.
- The relicensing of the MobilEx Terminal in Thunder Bay saw the number of terminal elevators increase to 16 from 15. This, coupled with the 81,700-tonne expansion of the Richardson International terminal in Vancouver, resulted in the GHTS's total terminal storage capacity increasing by 3.8%, to almost 2.5 MMT from the 2.4 MMT in place at the end of the 2015-16 crop year.

Production and Supply

The estimate from Statistics Canada's November survey for 2016 crop production in Western Canada stands at 71.3 MMT, a 10.2% increase over that harvested in 2015. Notwithstanding the difficult harvest conditions in 2016, the production estimate was increased 3.7 MMT from that based on the July survey.

Coupled with carry-forward stock of 7.3 MMT, 19.8% less than in 2015, the overall western grain supply is projected to be 78.7 MMT, 6.5% greater than that of the previous year.

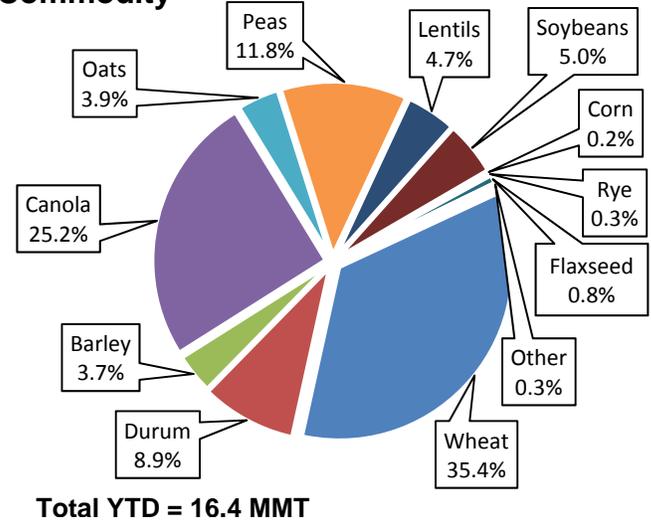
Production & Carry Over (000's tonnes) Table M-2	2016	2015	Var. from Last Year
Western Canada Total Production - Preliminary	71,336.8	64,738.6	10.2%
Western Canada On Farm & Primary Elevator Carry Forward Stock	7,343.9	9,162.6	-19.8%
Total Grain Supply	78,680.7	73,901.2	6.5%

Traffic and Movement

As harvest activity resumed, producer deliveries in November picked up, averaging over 1.0 MMT per week for the month. Primary elevator stock levels averaged 3.4 MMT, supporting good shipment levels. Some challenges persisted in matching grains and grades to sales programs due to quality issues resulting from wet harvest conditions.

Table M-3	NOV 2016	2016-17 YTD	Var. from Last YTD
Primary Elevator Shipments (000's tonnes)			
Manitoba	1,008.5	3,215.4	14.0%
Saskatchewan	2,491.2	8,098.3	2.6%
Alberta	1,440.3	4,949.3	6.7%
British Columbia	30.9	108.5	-32.5%
Total	4,970.9	16,371.5	5.5%
Western Canada Railway Traffic (000's tonnes)			
Shipments to Western Ports	3,600.1	14,345.1	-2.1%
Shipments to Eastern Canada	332.7	995.9	27.8%
Shipments to US & Mexico	595.0	2,358.5	-2.3%
Shipments Western Domestic	45.7	176.6	-5.2%
Total	4,573.5	17,876.1	-0.9%
Western Port Unloads (Number of Cars)			
Vancouver	24,548	82,698	4.2%
Prince Rupert	7,639	22,403	-0.9%
Churchill	0	0	-100.0%
Thunder Bay	12,274	40,002	7.3%
Total	44,461	145,103	3.0%
Terminal Elevator Shipments (000's tonnes)			
Vancouver	1,955.1	7,261.2	-3.7%
Prince Rupert	653.6	1,858.6	-12.3%
Churchill	0	0	n/a
Thunder Bay	920.3	3,404.5	1.3%
Total	3,529.0	12,524.3	-5.2%

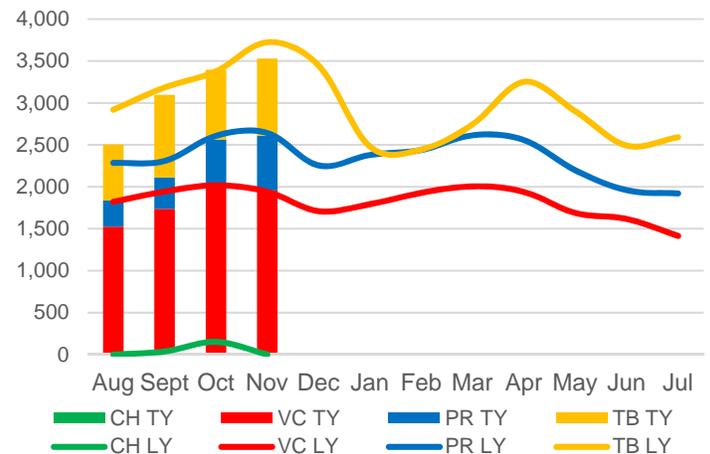
Primary Elevator Shipments by Commodity



GMP Data Table 2A-1

Grain shipments from primary elevators increased through November achieving a level 5.5% higher than the previous crop year. The movement was predominantly wheat, canola and peas. Peas comprised nearly 12.0% of the shipments, compared to only 6.0% for the whole of the previous crop year, which is a typical pattern as peas are marketed aggressively in the post-harvest period.

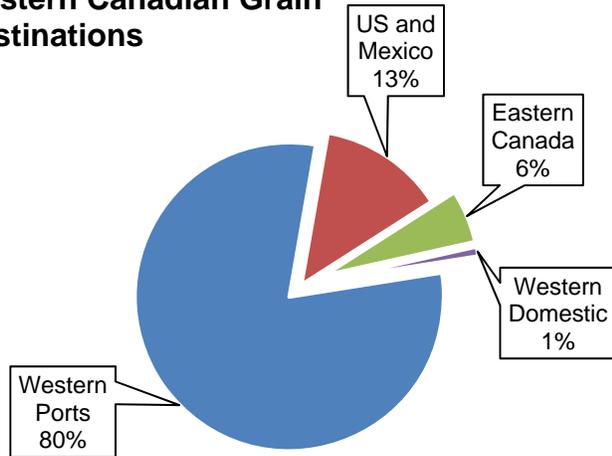
Terminal Elevator Shipments (000's tonnes)



GMP Data Table 2C-1

Shipments out of the western ports declined in the first quarter of the crop year, registering a 5.2% decrease on a year-over-year basis. Challenges in matching supply with the waiting vessel nominations were compounded by quality concerns as wet weather during harvest resulted in a smaller proportion achieving top grades. The 2016 season will not see any shipments from the Port of Churchill as the port's US-based owner, OmniTRAX, closed the grain terminal for the season.

Western Canadian Grain Destinations



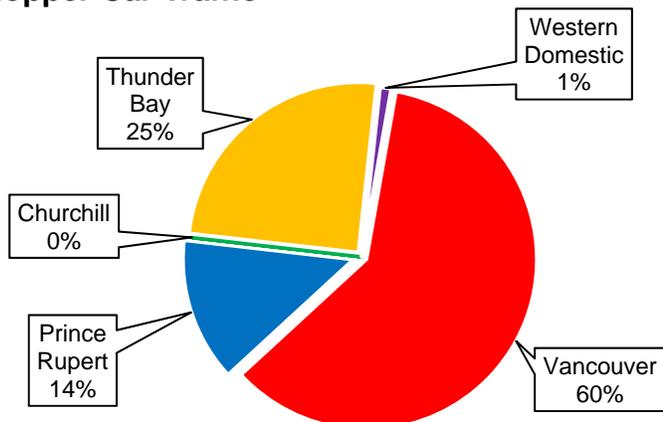
Total YTD = 17.9 MMT

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

About 80% of the grain shipped by rail from the prairies is directed to Western Canada's four ports in support of offshore sales. Total rail shipments to these ports in the first four months of the 2016-17 crop year amounted to 14.3 MMT, down 2.1% from that handled in the same period a year earlier. However, shipments into Eastern Canada jumped sharply in October and November, with the year-to-date total rising 27.8%.

Over 95% of the volume directed to western ports is handled in covered hopper cars, with almost two-thirds of this traffic moving to Vancouver. Year-round operations, favourable logistical economics and better access to major Asia-Pacific markets combine to favour this gateway over all others. After rebounding in September and October, hopper-car volumes to western ports fell off in November. Shipments through the first four months of the crop year increased by 0.8% for Vancouver but fell by 4.4% for Thunder Bay and 9.7% for Prince Rupert.

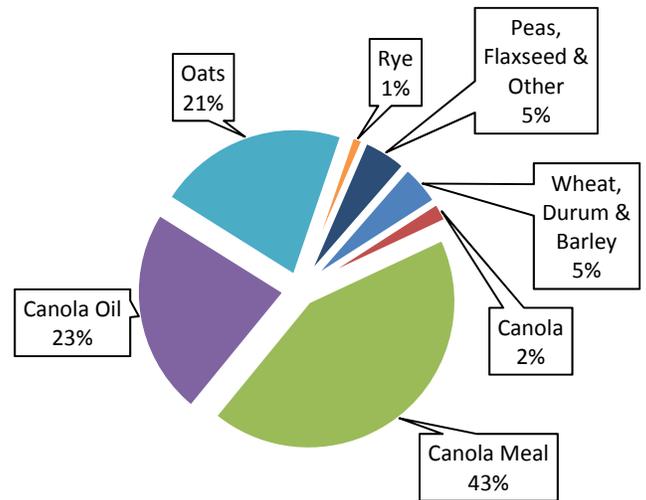
Western Canadian Destined Hopper Car Traffic



Total YTD - 14.0 MMT

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

US Destined Grain by Commodity



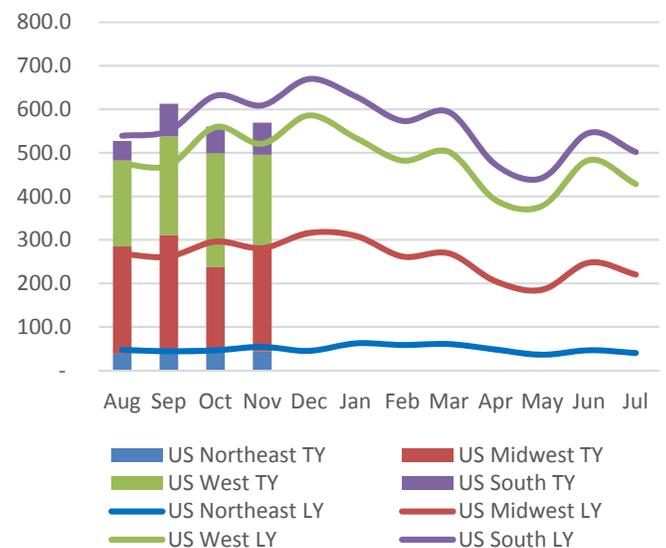
Total YTD - 2.3 MMT

GMP Data Table 2B-18

Rail shipments into the US, which totaled 2.3 MMT in the first four months of the crop year, decreased by 2.6% from that handled in the same period a year earlier. The movement is dominated by canola and canola products, which accounted for 68% of the total tonnage. Much of the US-bound traffic is directed into markets in the Midwest and West, with 52.9% of the tonnage sourced out of Saskatchewan.

Rail traffic from Western Canada to Mexico through November totaled 89,500 tonnes, an increase of 7.3% over that reported in the same four-month period a year earlier.

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



GMP Data Table 2B-18



System Efficiency and Performance

Primary elevator stocks held constant during November as the harvest wrapped up and the weather remained mild encouraging steady producer deliveries. The weekly average remained 3.4 MMT. Available delivery space in the country network was good throughout the period. Country elevator stocks utilized only 73% of the working capacity of the network. By province, stocks ranged from 70% of working capacity in Saskatchewan, to 76% in Manitoba and Alberta, and 100% in British Columbia.

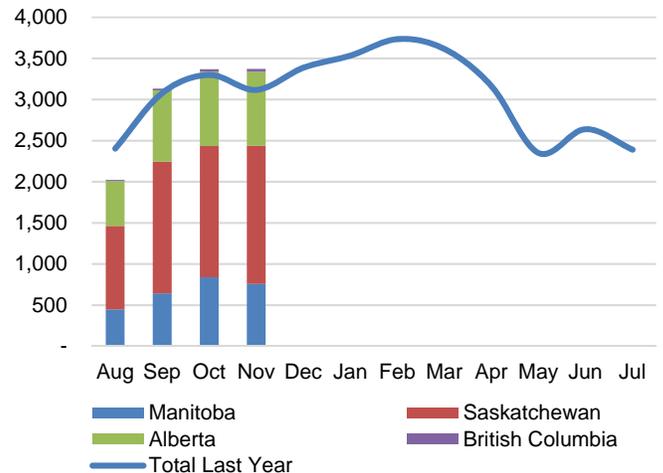
Year-over-year average days-in-store in the primary-elevator system for the crop year thus far shows a slight decline from past performance, falling by only 2.6% from that experienced last year.

Table M-4	NOV 2016	2016-17 YTD	Var. from Last YTD
Primary Elevator			
Average Weekly Stocks (000's tonnes)	3,372.2	2,942.9	-1.3%
Average Days in Store	23.4	22.3	-2.6%
Railway Operations (days)			
Cycle Time to Western Ports	12.7	12.9	-2.3%
Cycle Time to Eastern Canada	15.4	18.8	-20.4%
Cycle Time to US	21.6	23.2	-9.9%
Loaded Transit to Western Ports	5.2	4.9	-3.7%
Loaded Transit to Eastern Canada	6.7	7.7	-24.7%
Loaded Transit to US	9.2	9.6	-11.2%
Traffic in 50-car+ blocks (Q1)	87.1%	87.1%	0.7%
Western Canada Terminal Elevator			
Average Weekly Stocks (000's tonnes)	1,272.9	1,045.8	-13.4%
Average Days in Store	12.3	10.3	-8.0%
Port Unloads (hopper cars)	44,461	145,103	3.0%
Terminal Out-of-Car Time	14.4%	14.3%	47.4%
Western Canada Port Operations			
Average Vessel Time in Port (days)	11.4	8.7	11.5%

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



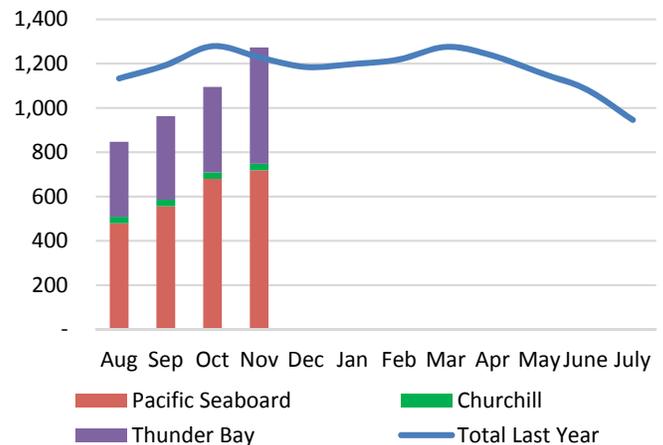
Average Weekly Primary Elevator Stocks (000's tonnes)



GMP Data Table 5A-2

Following a sharp decline to 2.0 MMT in August, average country elevator stocks reversed direction and climbed to nearly 3.4 MMT in October and November. Despite challenging harvest conditions, new crop deliveries replenished supplies as shipping grew to meet aggressive sales programs. Weekly producer deliveries averaged over 1.0 MMT throughout November.

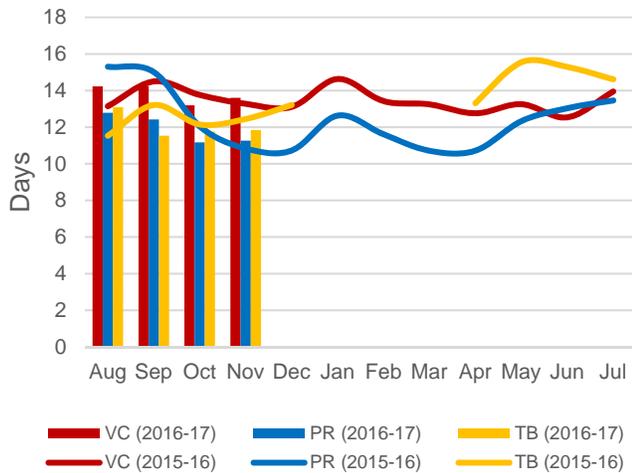
Average Weekly Terminal Elevator Stocks (000's tonnes)



GMP Data Table 5C-2

As with country elevator stocks, the average of 1.3 MMT in store at terminal elevators in November echoes a rebound from the low seen in August. Terminal stock levels had been steadily declining from the 1.3 MMT seen in March. A steady supply of vessels has been on hand at the West Coast and at Thunder Bay to load arriving grain. Port operators responded rapidly to increased grain arrivals, eager for supplies to match sales programs. Currently western ports are utilizing just 73% of their overall working capacity.

Railway Cycle Times to Western Ports (days)

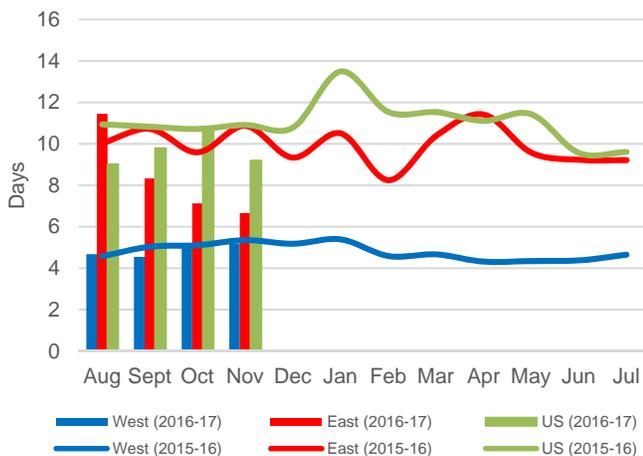


GMP Data Table 5B-1

Railway car cycles to Western Canadian ports averaged 12.9 days through November 2016, a reduction of 2.3% from the 13.2-day average recorded in the same four-month period a year earlier. This reduction was largely shaped by a 9.8% decrease in the Prince-Rupert corridor, which fell to an average of 11.7 days, and was supported by a 3.2% decrease in the average for the Thunder-Bay corridor. This was partially offset by a 0.7% increase in the Vancouver corridor's average.

Car cycles to Eastern Canada decreased more substantively during this period, falling by 20.4%, to an average of 18.8 days from 23.6 days a year earlier. Similarly, the car cycle for movements into the United States declined by 9.9%, to an average of 23.2 days from the 25.7-day average posted in the same period of the previous crop year.

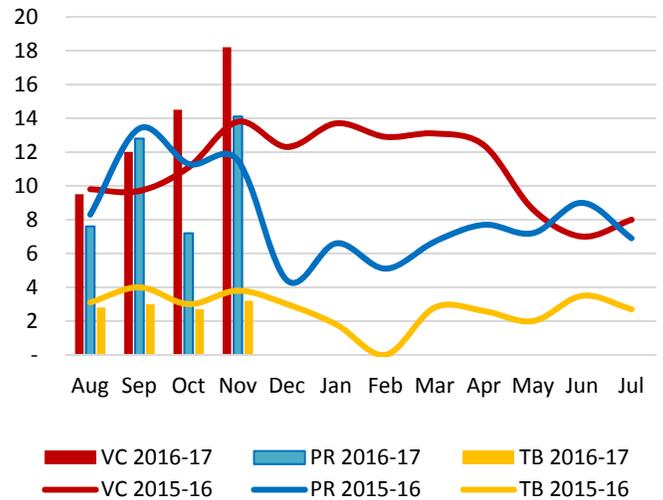
Average Loaded Transit Times (days)



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

Loaded transit time for traffic destined to Western Canadian ports averaged 4.9 days through the first four months of the 2016-17 crop year, down 3.7% from the 5.1-day average posted a year earlier. This result was shaped by reductions in all three corridors: Vancouver, 1.8%; Prince Rupert, 6.9%; and Thunder Bay, 4.6%. The average loaded transit time for movements into Eastern Canada declined more sharply, falling by 24.7%, to 7.7 days from 10.2 days the year previous. The corresponding average for US-destined traffic declined substantially as well, falling by 11.2%, to 9.6 days from the 10.8-day average posted twelve months earlier.

Average Days in Port per Vessel



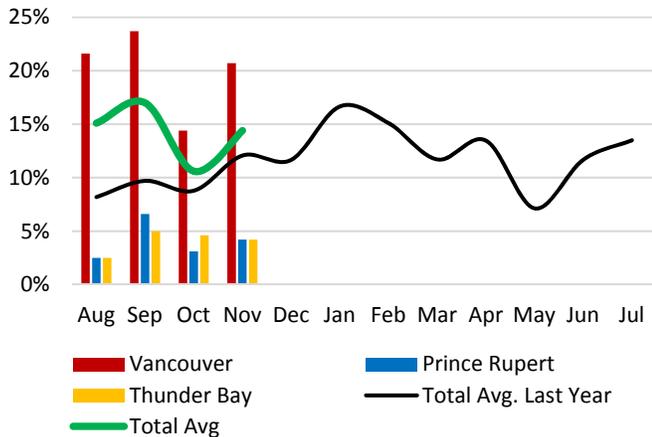
GMP Data Table 5D-1

For the first four months of the 2016-17 crop year, the average time vessels were in port waiting and loading grain was 11.5% greater than in the same period of the previous year. The average for all ports was 11.4 days in October 2016, nearly double the 6.0-day average registered at the end of the 2015-16 crop year. The delays in harvest and challenges matching grain and grade arrivals to the sales programs represented by waiting vessels has contributed to this increase.

During the 2015-16 crop year, the average time vessels spent in port at Vancouver fluctuated between ten and fifteen days, dipping below that level as the year ended. At Prince Rupert, the last crop year started with averages in that range but moderated by December, with the time in port fluctuating between five and ten days for the balance of the year. Thunder Bay's average hovered in the two to four-day range. The 2016-17 crop year has seen the Thunder Bay average hold steady while that for Vancouver and Prince Rupert has increased. While the average number of days vessels are spending at Prince Rupert has fluctuated somewhat, Vancouver has experienced a steady increase to over 18 days in November, an increase of 32% over the same period last year. Although movement from country to port has been relatively smooth thus far this year, these elevated timeframes warrant close attention as the year progresses.



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).

Notwithstanding some fluctuation, the percentage of time terminals are out of cars has charted a trend of improvement from its high of 29.8% in January of 2015. Following a decline to 10.6% in October 2016, November's aggregate measure for all ports climbed to 14.4%. While terminals at Vancouver and Prince Rupert registered increases, rising to 20.7% and 4.2% respectively, Thunder Bay terminals experience a small decline to 4.2% of their time being without railcars to unload.

Commercial Relations

Table M-5 Rates: \$CDN per tonne	Q1 2016-17	Index (1999=100)	% Change YTD
Avg. Primary Elevation	\$16.01	133.5	0.3%
Rail to Vancouver			
CN	\$50.50	136.9	3.6%
CP	\$52.34	140.9	4.0%
Rail to Pr. Rupert			
CN	\$50.50	121.0	2.6%
Rail to Thunder Bay			
CN	\$50.46	157.5	4.9%
CP	\$44.98	151.0	3.9%
Average Terminal Elevation	\$14.31	156.9	0.1%

Note: Commercial rates are measured on a quarterly basis, the above table refers to rates at the close of the first quarter of the 2016-17 crop years. Rail rates are as at October 31, 2016, and reflect the average weighted single-car rate. They do not include multi-car incentives (\$4/tonne for 50 + car blocks and \$8/tonne for 100 + car blocks).

Single-car freight rates moved generally higher at the beginning of October 2016, with across-the-board escalations of 5.0% made by CN and 4.0% by CP. This followed the limited reductions initially made by CN at the beginning of the 2016-17 crop year, which amounted to 1.4% and 2.3% in its Vancouver and Prince Rupert corridors respectively. Consequently, the rates in place at the close of November proved about 3.8% higher on westbound movements into Vancouver, and about 4.4% higher on eastbound movements into Thunder Bay. Such pricing actions fell somewhat short of the potential rise suggested by a 4.8% increase in the VRCPI, which was determined by the Canadian Transportation Agency in April 2016.

Commercial Developments

Transport Minister announces 2030 plan:

On 3 November 2016 the federal Transport Minister Marc Garneau outlined a modernization plan for transportation in Canada. This announcement followed a wide-ranging consultation process with the stakeholder community and touched on several items of specific interest to the grain-handling industry. Among these were the planned introduction of legislation in the spring of 2017 aimed at advancing a long-term agenda for a more transparent, balanced, and efficient rail system that reliably moves Canadian goods to global markets. Part of this plan will be to: establish the ability to apply reciprocal penalties between railway companies and their customers in their service level agreements; better define "adequate and suitable service" in the *Canada Transportation Act*; improve access and timelines for Canadian Transportation Agency decisions; and address the future of the Maximum Revenue Entitlement and extended interswitching.

Fraser Grain Terminal proposal released:

A new 4-million-tonne per annum grain-handling facility has been proposed by Fraser Grain Terminal Ltd., a joint venture of Parrish and Heimbecker, Ltd. and Paterson Global Foods Inc. The terminal will be located along the Fraser River in Surrey, British Columbia, adjacent to Fraser Surrey Docks. The new terminal is expected to include: an unloading station and transfer tower with fully enclosed conveying equipment and modern dust suppression system; 34 steel storage bins with 77,000 tonnes of storage capacity (in addition to 15,000 tonnes of existing storage); a travelling shiploader with telescopic cascading spout; semi-loop rail track and holding tracks to reduce shunting during unloading; a container loading facility and storage yard; a rail and truck loading facility; as well as an administration building and maintenance shop. The project is in the preliminary review phase of the Vancouver Fraser Port Authority's Project and Environmental Review Process and an initial public comment period. Preliminary Review Reports will be posted on the project website in preparation for the submission of a Permit Application.

Infrastructure

The GMP measures on infrastructure changes are reported in the data tables on a quarterly basis with the exception of the railway car fleet. Only modest changes were noted to the GHTS's infrastructure through the first four months of the 2016-17 crop year. Chief among these was a 1.6% increase in the total number of country elevators, which rose to 389 from 383, due in large measure to the November licensing of several previously unlicensed facilities acquired by AGT Food and Ingredients. This, along with other recent expansion initiatives, lifted the GHTS's licensed storage capacity by 1.8%, to almost 8.0 MMT from the 7.8 MMT in place at the close of the 2015-16 crop year.

This period also saw the establishment of the first modern shortline in southern Alberta, Forty Mile Rail. The new carrier resurrected operations along a 45.7-route-mile section of CP's former Stirling Subdivision, which had lain dormant since 2006. Along with this came CN's decision to abandon the last remaining 12.0-route-mile section of its Athabasca Subdivision (aka Athabasca spur). This served to reduce the network by less than 0.1%, to 17,276.1 route-miles from 17,288.1 route-miles.

November also saw the relicensing of the MobilEx Terminal facility, now owned by AGT Food and Ingredients, at Thunder Bay. This, in conjunction with an 81,700-tonne increase in the capacity of the Richardson International terminal in Vancouver, raised the total number of GHTS terminal elevators to 16 from 15, and lifted the system's total licenced storage capacity to almost 2.5 MMT from the 2.4 MMT in place at the close of the previous crop year.

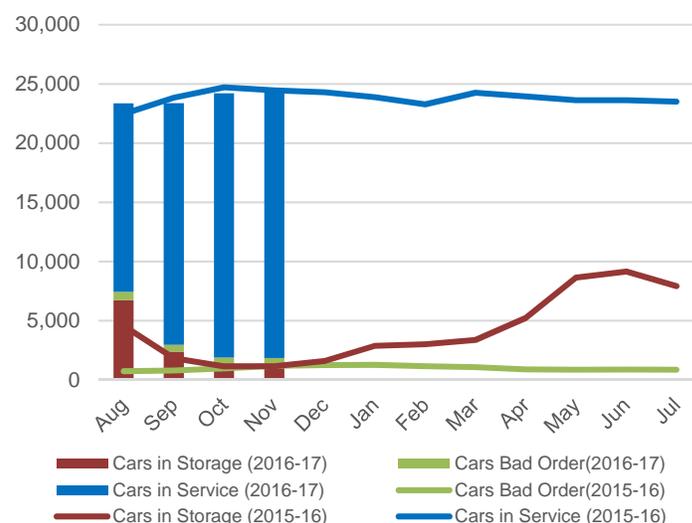
Table M-6	Q1 2016-17	Index (1999=100)	% Change YTD
Country Elevator			
Primary and Process Elevators (Count)	382	38.0	-0.3%
Storage Capacity (000's tonnes)	7,952.1	113.2	1.4%
Railway			
Route Miles - Major Carriers	14,606.5	98.5	-0.4%
Route Miles - Shortline Carriers	2,6669.6	57.5	1.7%
Route Miles - Total	17,276.1	88.7	-0.1%
Average Weekly Total Hopper Car Fleet Size*	24,674	n/a	0.2%
Terminal Elevator			
Terminal Facilities (Count)	15	107.1	0.0%
Storage Capacity (000's tonnes)	2,475.0	96.8	3.4%

* Hopper Car Fleet Size represents all cars in all statuses for the month of November 2016.

During times of heavy demand for grain hopper cars, nearly all of the grain hopper car fleet is called into service. As traffic volumes

slowed in the later months of the 2015-16 crop year, railways began the process of moving cars into storage. In July 2016, a weekly average of only 14,724 cars, representing 63% of the fleet was in active service. The cars in service rebounded to a degree during August, climbing to 15,918. As harvest progressed and sales of the new crop advanced, the weekly average of cars in service climbed, reaching 22,834 in November, and now encompassing 93% of the overall fleet. The balance of the fleet, comprising 7% of the rail cars, is in storage or repair status (bad order), a steep decline from 37% in July.

Railway Grain Fleet Size and Utilization



GMP Data Table 3B-2

Producer Cars

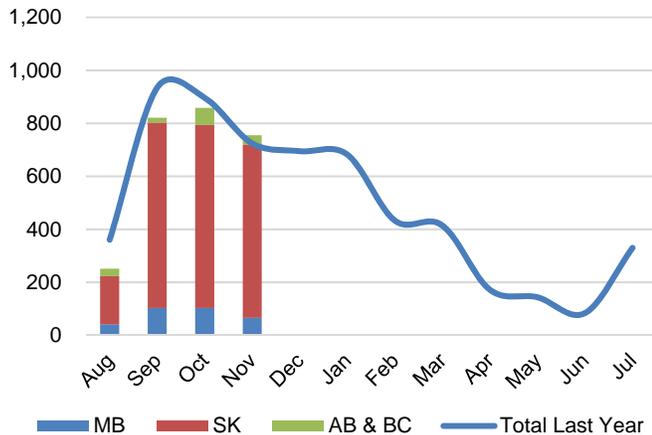
In September, CP de-listed a total of 22 producer car loading sites. This was comprised of three sites in Manitoba, four in Alberta and 15 in Saskatchewan. At the same time, CP added two loading sites to their Saskatchewan list. The net reduction is 20 Class 1 Carrier sites. The total number of available producer car loading locations now stands at 296.

Table M-7 Producer Car Loading Sites	Q1 2016	Index (1999=100)	% Change YTD
Class 1 Carriers	159	24.7	-11.1%
Shortline Carriers	137	210.8	0.0%
All Carriers	296	41.7	-6.5%

Table M-8 Producer Cars Scheduled	NOV 2016	2016-17 YTD	Var. from Last YTD
Manitoba	66	314	-36.0%
Saskatchewan	654	2,224	-1.4%
Alberta & B.C.	35	147	-13.0%
Total	755	2,685	-7.9%



Producer Cars Scheduled by Province



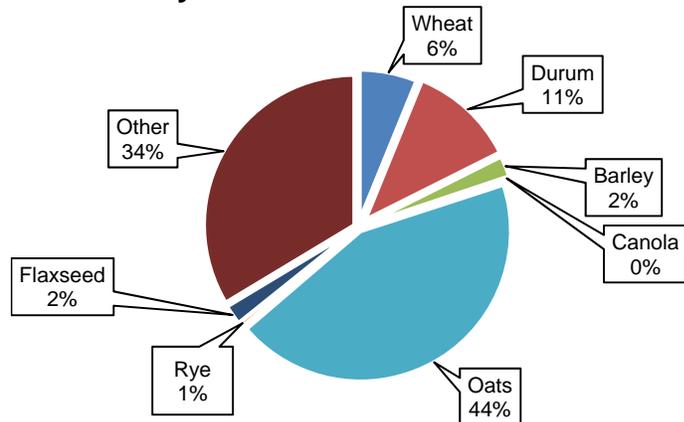
GMP Data Table 6B-2

Producer car shipments have shifted from primarily being wheat, durum and oats with a significant increase in the numbers of cars carrying special crops. Shipments in the first four months of the crop year continue to reflect this trend, with the traditional

commodities comprising only 61% of the total. The balance consists primarily of peas and special crops.

Producer cars scheduled this year-to-date are down 7.9% from the previous year. Delays in harvesting the 2016 crop contributed to a reduction of over 12.0% in producer car applications received during this period.

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