



# Grain Monitoring Program Report for: February 2017

Release Date: April 12, 2017

## GMP Dashboard

Table M-1	FEB 2017	2016-17 YTD	Var. from Last YTD
<b>Western Canadian GHTS Performance (Days)</b>			
Total Time in System	47.7	39.4	-5.3%
Average Days In Store – Country	32.9	24.7	-3.9%
Loaded Transit Time	5.8	5.2	3.6%
Average Days In Store – Terminal	9.0	9.5	-12.8%
<b>Total Traffic ('000 tonnes)</b>			
Primary Elevator Shipments	3,139.3	26,449.6	0.9%
Railway Shipments (all Western Canada traffic)	3,640.1	29,872.8	-0.4%
Western Port Terminal Shipments	2,191.8	21,280.9	-1.4%
<b>Railway Performance</b>			
Avg. Loads on Wheels (Cars)	10,512	10,722	1.6%
Total Western Port Car Cycle (days)	14.2	13.7	3.1%
<b>Port Performance</b>			
Western Port Unloads (Number of Cars)			
Vancouver	20,416	140,470	1.5%
Prince Rupert	5,676	38,074	-7.9%
Churchill	0	0	-100.0%
Thunder Bay	563	51,137	2.8%
Total	26,655	229,681	-0.7%
Vessel Time in Port (days)	16.7	10.2	24.4%

- 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

The 2016 harvest was particularly challenging due to persistent cool, wet conditions in Western Canada. An unseasonably warm spell in early November allowed a continuation of harvest activity, but the arrival of winter didn't allow its completion. Estimates of unharvested acreage across the prairie range as high as 2.5 million acres. That constitutes approximately 4% of the overall 65 million acres seeded to field crops in Western Canada. It remains to be determined what portion of these crops will be salvageable.

Total Western Canadian rail shipments in the first seven months fell by 0.4%, due largely to a year-over-year reduction of 3.3% in February volumes. Western port shipments for February totaled 2.2 MMT, reflecting the absence of shipping on the St. Lawrence Seaway during the winter, and denoting a 22.3% decrease from January's total. This was 10.3% less than the amount shipped in February of

last year. Accompanying the decrease in shipments, is a 16.7-day average in the amount of time vessels spent in port in February, bumped up from January's 13.7-day average with no Thunder Bay vessels included in the monthly average.

Heavy snowfall in the southern Rockies caused numerous delays for the movement of trains in February as both the railways and Parks Canada dealt with avalanche issues.

## Highlights for February 2017

### Traffic and Movement (page 2)

- Primary-elevator shipments were 26.4 MMT in the first seven months of the 2016-17 crop year, 0.9% more than last year.
- Total rail shipments (including primary/process elevators & producer cars) to all destinations from Western Canada reached 29.9 MMT, down 0.4% from that handled in the same seven-month period a year earlier.
- Crop year-to-date shipments from Western Canadian ports totaled 21.3 MMT, down 1.4% from the same period last year.

### System Efficiency and Performance (page 4)

- Average weekly stocks in the country decreased by 2.0% from last year-to-date, while the average days-in-store was down 3.9%.
- Average weekly port-terminal stocks decreased 10.7% from the same period last year, while average days-in-store fell 12.8%.
- Railcar cycle times through February averaged 13.7 days to western ports; 20.2 days to eastern Canada; and 23.9 days to US destinations.
- The year-to-date average for vessel time in port is 10.2 days, a 24.4% increase from that observed in the previous crop year.
- February port-terminal out-of-car time grew to 20.6% in Vancouver and 1.7% in Prince Rupert.

### Commercial Relations (page 6)

- Average primary-elevation charges rose 1.1% in the first seven months of the crop year.
- There were no changes to the single-car freight rates posted by CN and CP in February 2017 from the January levels. Net increases through the first seven months of the crop year roughly ranged from 4% to 10%.
- Average terminal-elevation charges rose 0.4% in the first seven months of the crop year.

### Infrastructure (page 6)

- The GHTS's country-elevator network saw a net increase of three facilities in the first seven months of the crop year, rising to 386 from 383, due largely to the licensing of several previously unlicensed facilities. This, along with other expansion efforts lifted the system's overall licensed storage capacity to almost 8.1 MMT from 7.8 MMT at the beginning of this crop year.
- 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 and the second largest crop in Western Canadian history. Notwithstanding the difficult harvest conditions in 2016, the November production estimate was increased 3.7 MMT from the July survey.

Coupled with carry-forward stock of 7.4 MMT, 18.9% less than in 2015, the overall western grain supply is projected to be 78.8 MMT, 6.6% greater than that of the previous year.

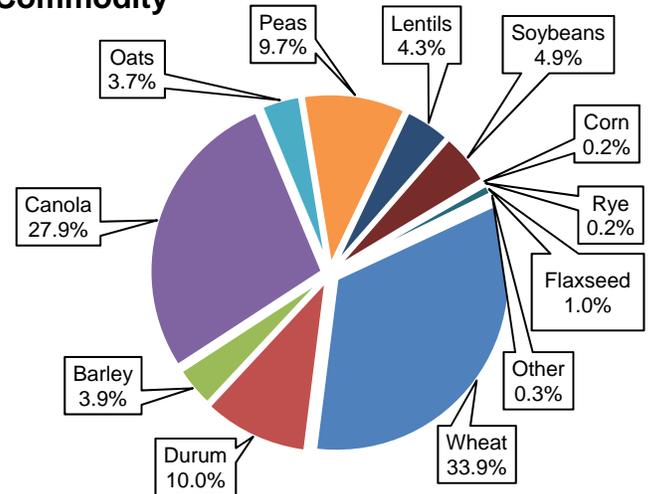
Production & Carry Over (000's tonnes) Table M-2	2016	2015	Var. from Last Year
Western Canada Total Production - Preliminary	71,336.8	64,738.6	10.2%
Western Canada On Farm & Primary Elevator Carry Forward Stock	7,428.9	9,162.6	-18.9%
<b>Total Grain Supply</b>	<b>78,765.7</b>	<b>73,901.2</b>	<b>6.6%</b>

## Traffic and Movement

As winter progressed with small eastern shipping programs, producer deliveries fell in February, averaging 0.8 MMT per week for the month. Primary elevator stock levels averaged 3.7 MMT, providing adequate supply for the shipping program.

Table M-3	FEB 2017	2016-17 YTD	Var. from Last YTD
<b>Primary Elevator Shipments (000's tonnes)</b>			
Manitoba	429.7	4,632.4	-0.1%
Saskatchewan	1,532.4	13,240.2	-0.5%
Alberta	1,145.4	8,370.4	4.7%
British Columbia	31.8	206.6	-23.1%
<b>Total</b>	<b>3,139.3</b>	<b>26,449.6</b>	<b>0.9%</b>
<b>Western Canada Railway Traffic (000's tonnes)</b>			
Shipments to Western Ports	2,612.5	23,192.5	-0.8%
Shipments to Eastern Canada	391.7	2,170.8	13.4%
Shipments to US & Mexico	591.8	4,179.5	-4.2%
Shipments Western Domestic	44.1	330.0	-1.1%
<b>Total</b>	<b>3,640.1</b>	<b>29,872.8</b>	<b>-0.4%</b>
<b>Western Port Unloads (Number of Cars)</b>			
Vancouver	20,416	140,470	1.5%
Prince Rupert	5,676	38,074	-7.9%
Churchill	0	0	-100.0%
Thunder Bay	563	51,137	2.8%
<b>Total</b>	<b>26,655</b>	<b>229,681</b>	<b>-0.7%</b>
<b>Terminal Elevator Shipments (000's tonnes)</b>			
Vancouver	1,712.7	13,184.2	1.7%
Prince Rupert	478.9	3,396.0	-9.7%
Churchill	0	0	-100.0%
Thunder Bay	0.2	4,700.7	1.0%
<b>Total</b>	<b>2,191.8</b>	<b>21,280.9</b>	<b>-1.4%</b>

## Primary Elevator Shipments by Commodity

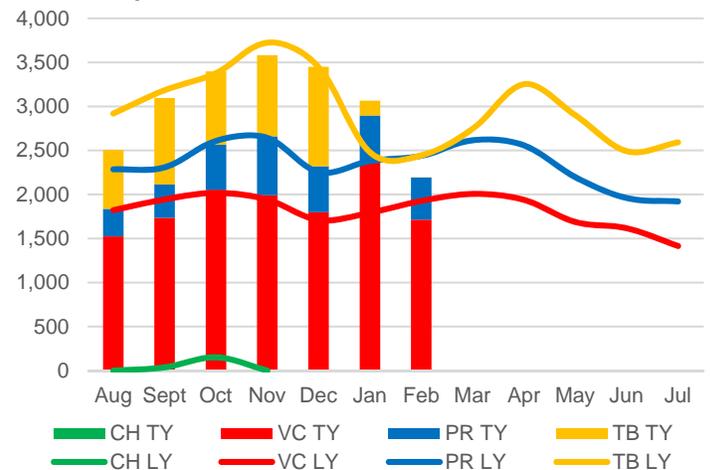


**Total YTD = 26.4 MMT**

GMP Data Table 2A-1

Grain shipments from primary elevators decreased in February reaching a level just 0.9% higher than the previous crop year to date. Despite some quality challenges, shipments have held up very well. At this point last crop year, wheat and durum combined comprised 51% of the shipments, while making up only 44% this year. Conversely, canola and peas make up 38% of this year's shipments as opposed to just 32% last year.

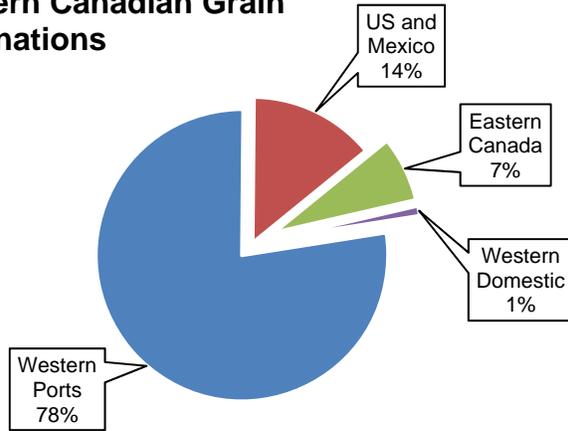
## Terminal Elevator Shipments (000's tonnes)



GMP Data Table 2C-1

Shipments out of the western ports declined in the first seven months of the crop year, registering a 1.4% decrease on a year-over-year basis. Early-season challenges matching supply with the waiting vessel nominations due to quality concerns during harvest were largely overcome as the crop year progressed. The 2016 season did 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



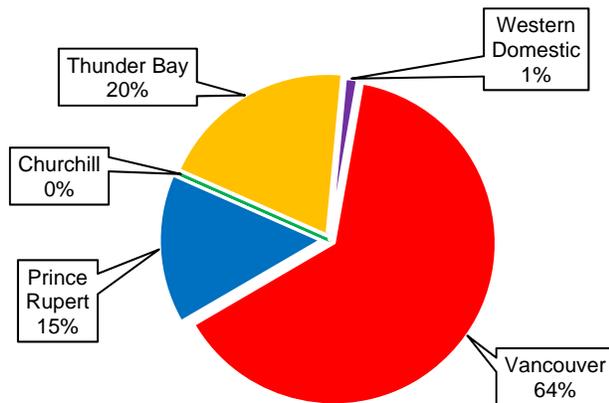
**Total YTD = 29.9 MMT**

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

About 78% of the grain shipped by rail from the prairies was directed to Western Canada's four ports in support of offshore sales. Total rail shipments to these ports in the first seven months of the 2016-17 crop year amounted to 23.2 MMT, down 0.8% from that handled in the same period a year earlier. Western Domestic shipments fell by a marginally greater 1.1%. In contrast, shipments to Eastern Canada rose by 13.4%, buoyed by larger movements of wheat, canola and other commodities.

Over 95% of the volume destined to Western Canada moves in covered hopper cars, with about 64% of this traffic being directed to Vancouver. Year-round operations, favourable economics and better access to major Asia-Pacific markets combine to favour this gateway over all others. Even so, reduced movements into Prince Rupert largely shaped a 1.8% decline in total volume. Hopper-car shipments through the first seven months of the crop year increased by 1.8% for Vancouver but fell by 11.6% for Prince Rupert and 1.4% for Thunder Bay.

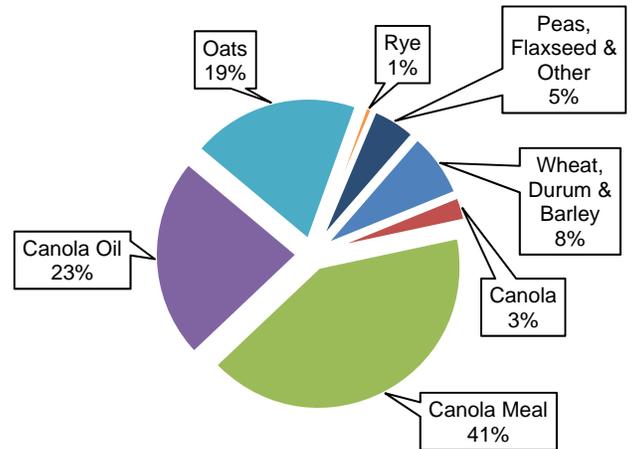
## Western Canadian Destined Hopper Car Traffic



**Total YTD - 22.5 MMT**

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

## US Destined Grain by Commodity



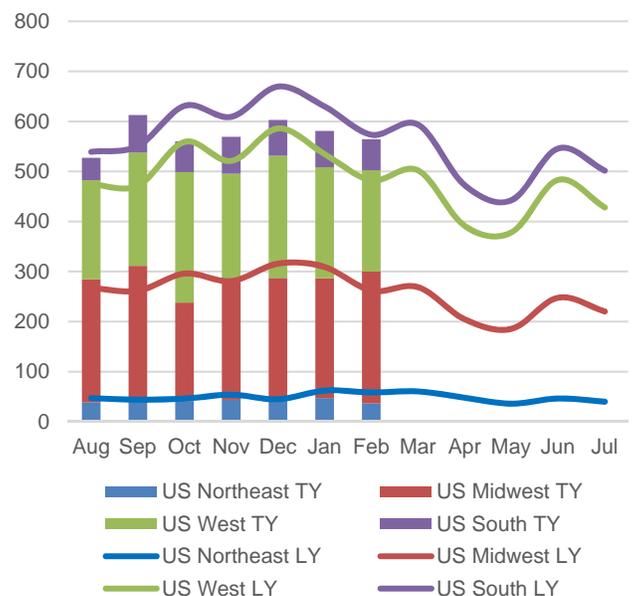
**Total YTD - 4.0 MMT**

GMP Data Table 2B-18

Rail shipments into the US, which totaled 4.0 MMT in the first seven months of the crop year, decreased by 4.4% from that handled in the same period a year earlier. The movement is dominated by canola and canola products, which accounted for 67% of the total tonnage. Over 80% of this US-bound tonnage is directed into markets in the Midwest and West.

Rail traffic from Western Canada to Mexico through February totaled 162,500 tonnes, a gain of 2.7% over that reported in the same seven-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 built up during February as variable winter weather with slides in the mountains posed challenges to the GHTS. The weekly average grew to 3.7 MMT. Available delivery space in the country network was good throughout the period. Country elevator stocks utilized 81% of the working capacity of the network. By province, stocks ranged from 76% of working capacity in Saskatchewan, to 84% and 86% in Alberta and Manitoba respectively, and 100% in British Columbia.

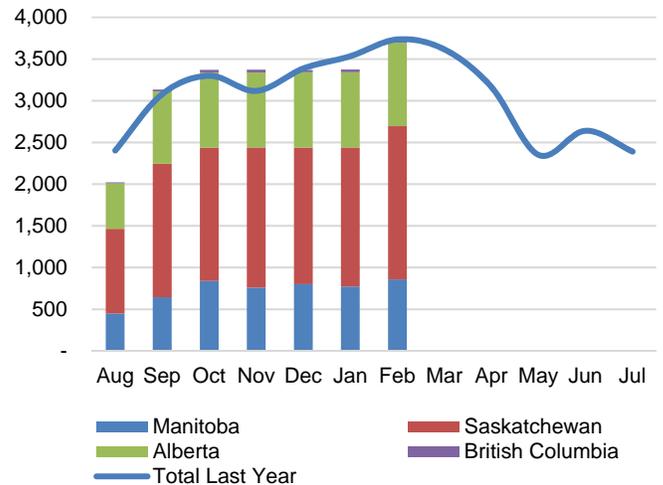
Year-over-year average days-in-store in the primary-elevator system for the crop year thus far shows a slight decline from past performance, falling by only 3.9% from that experienced last year.

Table M-4	FEB 2017	2016-17 YTD	Var. from Last YTD
<b>Primary Elevator</b>			
Average Weekly Stocks (000's tonnes)	3,726.2	3,153.9	-2.0%
Average Days in Store	32.9	24.7	-3.9%
<b>Railway Operations (days)</b>			
Cycle Time to Western Ports	14.2	13.7	3.1%
Cycle Time to Eastern Canada	20.2	20.2	-9.3%
Cycle Time to US	22.8	23.9	-10.0%
Loaded Transit to Western Ports	5.8	5.2	3.6%
Loaded Transit to Eastern Canada	8.2	8.3	-13.7%
Loaded Transit to US	9.2	10.0	-11.8%
Traffic in 50-car+ blocks (Q2)	80.7%	84.1%	-1.5%
<b>Western Canada Terminal Elevator</b>			
Average Weekly Stocks (000's tonnes)	1,186.5	1,075.8	-10.7%
Average Days in Store	9.0	9.5	-12.8%
Port Unloads (hopper cars)	26,655	229,681	-0.7%
Terminal Out-of-Car Time	14.6%	14.7%	25.0%
<b>Western Canada Port Operations</b>			
Average Vessel Time in Port (days)	16.7	10.2	24.4%

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



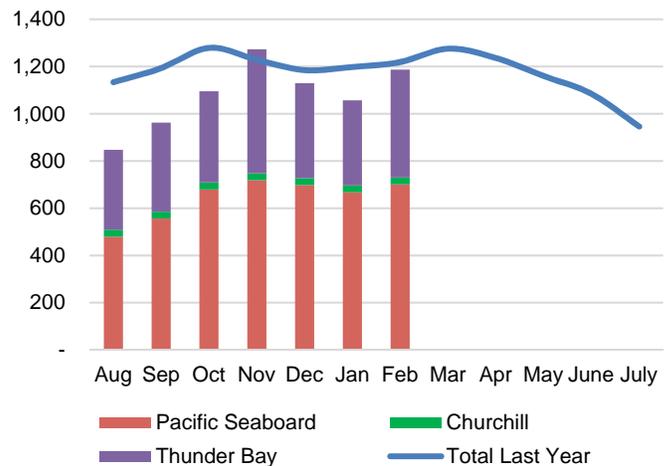
## Average Weekly Primary Elevator Stocks (000's tonnes)



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 where they remained until rising further to 3.7 MMT in February. Following the delayed, wet harvest, consistent grain deliveries have ensured product was available to meet aggressive sales programs. Weekly producer deliveries averaged 0.8 MMT throughout February.

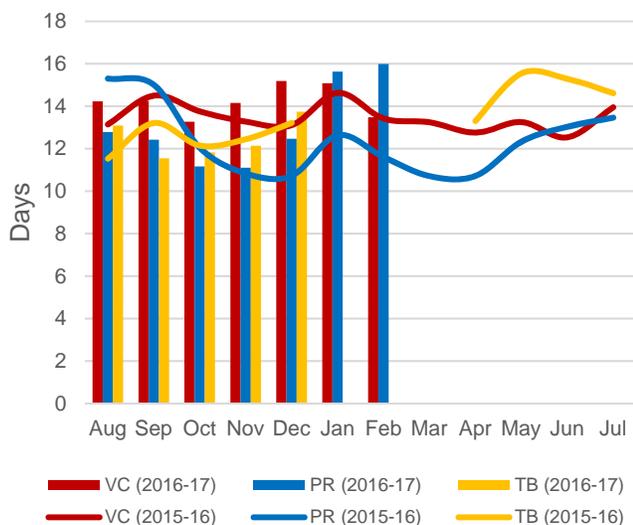
## Average Weekly Terminal Elevator Stocks (000's tonnes)



GMP Data Table 5C-2

Terminal elevator stocks averaged 1.2 MMT in February, higher than that seen a month earlier as stock levels started to build again at Thunder Bay. Average terminal stock levels had been 1.3 MMT in November, but were drawn down by the steady supply of vessels arriving at the West Coast and Thunder Bay to load grain to meet aggressive sales programs. Currently western ports are utilizing just 68% of their overall working capacity.

## Railway Cycle Times to Western Ports (days)

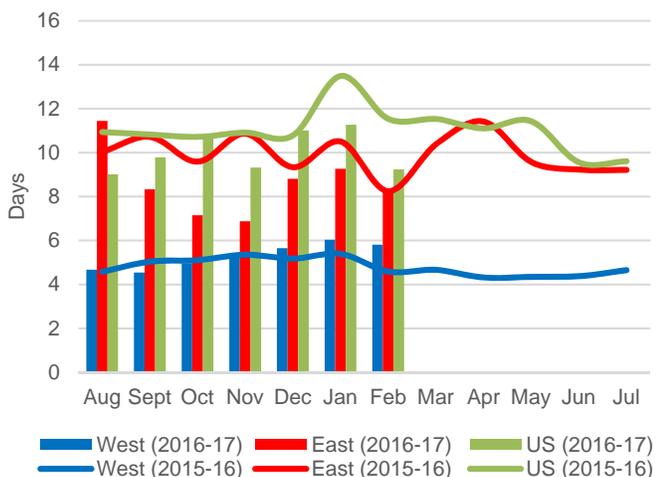


GMP Data Table 5B-1

Railway car cycles to Western Canadian ports averaged 13.7 days through February 2017, an increase of 3.1% from the 13.3-day average posted in the same seven-month period a year earlier. This resulted from increases in the Vancouver and Prince Rupert corridors, which both rose by 4.1%. A 0.3% reduction in the Thunder Bay corridor served as a marginal offset.

Car cycles to Eastern Canada posted a decrease during this period, falling by 9.3%, to an average of 20.2 days from 22.3 days a year earlier. Similarly, the car cycle for movements into the United States declined by 10.0%, to an average of 23.9 days from the 26.6-day average posted in the same period of the previous crop year.

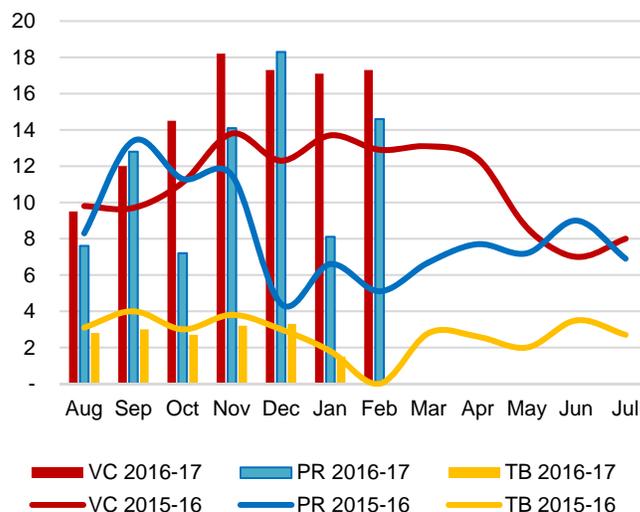
## Average Loaded Transit Times (days)



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

Loaded transit time for traffic destined to Western Canadian ports averaged 5.2 days through the first seven months of the 2016-17 crop year, up 3.6% from the 5.0-day average posted a year earlier. This result was primarily shaped by increases in the Vancouver and Prince Rupert corridors, which rose by 4.6% and 14.0% respectively. These were tempered by a 6.5% reduction in the Thunder Bay-corridor average. The average loaded transit time for movements into Eastern Canada declined sharply, falling by 13.5%, to 8.0 days from 9.2 days the year previous. The corresponding average for US-destined traffic decreased markedly as well, falling by 11.8%, to 10.0 days from the 11.3-day average posted twelve months earlier.

## Average Days in Port per Vessel



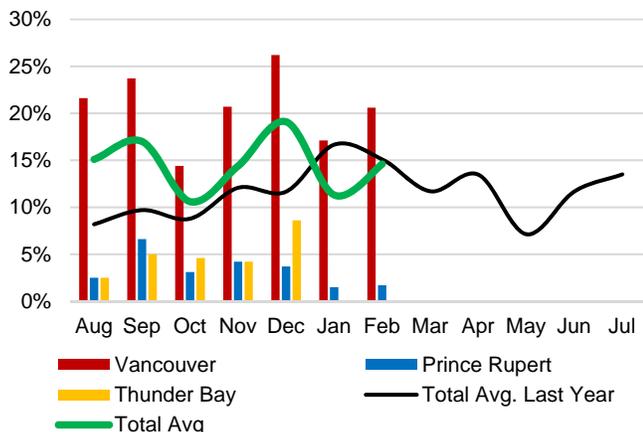
GMP Data Table 5D-1

For the crop year-to-date, the average time vessels were in port waiting and loading grain was 24.4% greater than in the same period of the previous year. The average for all ports was 16.7 days in February 2017, 47.8% higher than the average registered in February of the 2015-16 crop year. This divergence was the result of a sizable lineup of vessels waiting at both Vancouver and Prince Rupert.

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 Vancouver and Prince Rupert have fluctuated somewhat, the two west coast ports have experienced monthly increases to over 18 days in November and December, moderating only slightly by February. Although movement from country to port has been relatively smooth thus far this year, these elevated timeframes warrant continued monitoring 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, the aggregate measure for all ports climbed steadily to 19.1% in December before pulling back to 14.6% by February. Terminals at Vancouver and Prince Rupert registered increases in February, climbing to 20.6% and 1.7% respectively, of their time being without railcars to unload. Thunder Bay remained at 0.0%.

## Commercial Relations

Table M-5 Rates: \$CDN per tonne	Q2 2016-17	Index (1999=100)	% Change YTD
Avg. Primary Elevation	\$16.15	134.7	1.1%
Rail to Vancouver			
CN	\$52.98	143.6	8.6%
CP	\$52.34	140.9	4.0%
Rail to Pr. Rupert			
CN	\$52.98	126.9	7.6%
Rail to Thunder Bay			
CN	\$52.96	165.3	10.1%
CP	\$44.98	151.0	3.9%
Average Terminal Elevation	\$14.35	157.3	0.4%

**Note:** Commercial rates are measured on a quarterly basis, the above table refers to rates at the close of the second quarter of the 2016-17 crop years. Rail rates are as at January 31, 2017, and reflect an average of the published single-car rates. They do not include multi-car incentives (\$4/tonne for 50 + car blocks and \$8/tonne for 100 + car blocks).

CN raised its single-car freight rates by about 5.0% in early December 2016. This followed an earlier across-the-board rate escalation of 5.0% at the beginning of October. Owing to the cuts it made at the beginning of the 2016-17 crop year, however, CN's rates on westbound movements into Vancouver stood only 8.6% higher at the close of February, and 7.6% higher on those into Prince Rupert. CN's eastbound rates into Thunder Bay saw a net increase of about 10.1% during this same period. CP's single-car freight rates also rose, with a 4.0% increase being instituted at the beginning of October 2016. These rates remained unchanged through the close of February. All these pricing actions were consistent with a 4.8% increase in the VRCPI, as determined by the Canadian Transportation Agency in April 2016.

## Commercial Developments

### India Removes Phytosanitary Exemption:

India's plant quarantine directorate announced that it will not be extending the exemption to its methyl bromide fumigation policy on the importation of agricultural products beyond its 31 March 2017 expiry. The policy, which calls for inbound shipments of all agricultural commodities to have been fumigated in the country of export, means that any grain shipments not meeting this test will be rejected by the authority beginning 1 April 2017. Since 2004, Canadian exports have landed in India under an exemption that has permitted fumigation to occur at destination rather than at the port of exit. The potential removal of this exemption has been a concern to many in the Canadian pulse industry since India constitutes the single largest market for domestically-grown peas and lentils, and enforcement of the policy could undermine trade worth more than \$1 billion annually. Since temperatures in Canada are often too cold for effective fumigation, the Canadian government has been looking for a viable alternative, proposing instead that the Canadian Food Inspection Agency be allowed to issue phytosanitary certificates based on shipment sampling rather than actual fumigation. And while India has promised to review Canada's request, no decision has yet been made.

## 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 seven months of the 2016-17 crop year. This resulted in a 0.8% increase in the total number of country elevators, which by the close of February 2017 had risen to 386 from 383. This increase was the result of various elevator closures that were countered by the licensing of previously unlicensed facilities, many of which are now operated by AGT Food and Ingredients, EGT Commodities and Providence Grain Group. This, along with other expansion initiatives, lifted the GHTS's licensed storage capacity by 3.0%, to almost 8.1 MMT from the 7.8 MMT in place at the close of the 2015-16 crop year.

Following the establishment of Forty Mile Rail in southern Alberta along with CN's decision to abandon the last remaining 12.0-

route-mile section of its Athabasca Subdivision, the railway network in Western Canada was reduced by less than 0.1%, falling to a total of 17,276.1 route-miles from the 17,288.1 route-miles in place at the close of the 2015-16 crop year.

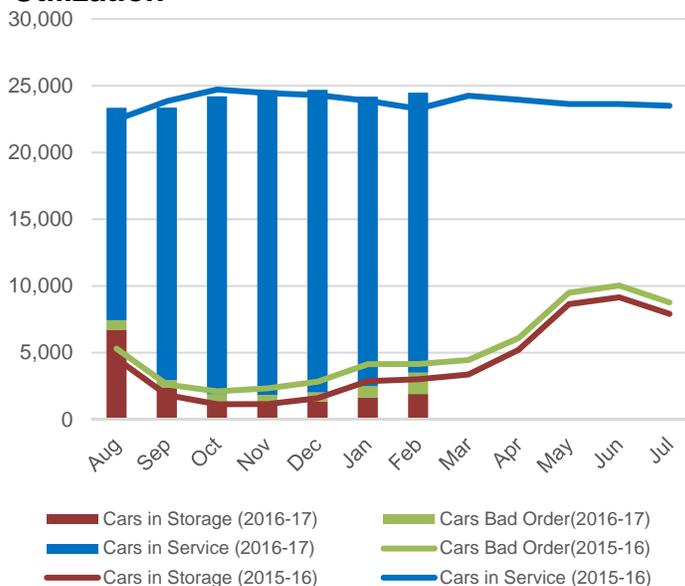
The relicensing of the MobilEx Terminal facility at Thunder Bay again increased the GHTS's terminal elevators to 16 from 15. This, along an 81,700-tonne expansion of the Richardson International terminal in Vancouver, raised the system's total licenced storage capacity to almost 2.5 MMT from the 2.4 MMT in place at the close of the previous crop year.

Table M-6	Q2 2016-17	Index (1999=100)	% Change YTD
<b>Country Elevator</b>			
Primary and Process Elevators (Count)	389	38.7	1.6%
Storage Capacity (000's tonnes)	7,987.4	113.7	1.8%
<b>Railway</b>			
Route Miles - Major Carriers	14,606.5	98.5	-0.4%
Route Miles - Shortline Carriers	2,669.6	57.5	1.7%
<b>Route Miles - Total</b>	<b>17,276.1</b>	<b>88.7</b>	<b>-0.1%</b>
Average Weekly Total Hopper Car Fleet Size*	24,485	n/a	1.1%
<b>Terminal Elevator</b>			
Terminal Facilities (Count)	16	114.3	6.7%
Storage Capacity (000's tonnes)	2,485.0	97.2	3.8%

\* Hopper Car Fleet Size represents all cars in all statuses for the month of February 2017.

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, before starting a steady retreat to 20,983 by February, now encompassing 86% of the overall fleet. This is 9.8% higher than February last year. The balance of the fleet, comprising 14% 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. Seven former producer car loading sites on the Big Sky Railway in west-central Saskatchewan have now been licensed as primary elevators, thereby reducing the number of Shortline Carrier sites. The total number of available producer car loading locations now stands at 289.

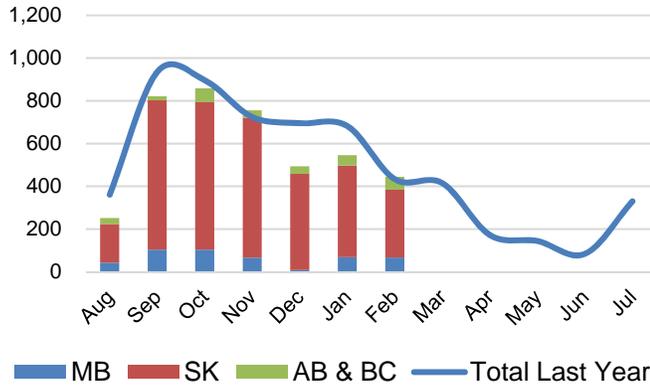
Table M-7	Q2 2016-17	Index (1999=100)	% Change YTD
<b>Producer Car Loading Sites</b>			
Class 1 Carriers	159	24.7	-11.2%
Shortline Carriers	130	200.0	-5.1%
<b>All Carriers</b>	<b>289</b>	<b>40.8</b>	<b>-8.5%</b>

Table M-8	FEB 2017	2016-17 YTD	Var. from Last YTD
<b>Producer Cars Scheduled</b>			
Manitoba	67	457	-35.2%
Saskatchewan	317	3,420	-8.2%
Alberta & B.C.	60	290	-2.4%
<b>Total</b>	<b>444</b>	<b>4,167</b>	<b>-11.8%</b>

Producer cars scheduled this year-to-date are down 11.8% from the previous year. Delays in harvesting the 2016 crop contributed to a reduction of over 12.7% in producer car applications received thus far this crop year.



## Producer Cars Scheduled by Province

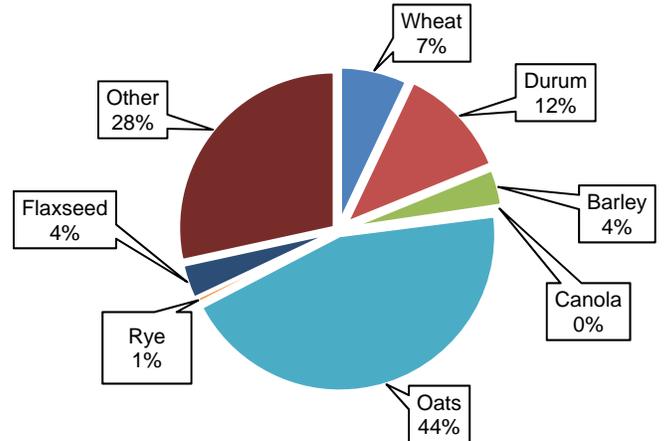


GMP Data Table 6B-2

Producer car shipments have shifted from primarily being wheat, durum and oats to reflect a significant increase in the number of cars carrying special crops. Shipments in the first seven months

of the crop year continue to reflect this trend, with the traditional commodities comprising only 63% of the total. The balance consists primarily of peas and lentils.

## Producer Cars Scheduled by Commodity



GMP Data Table 6B-2



**Quorum Corporation**  
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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](http://www.grainmonitor.ca)

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