

### **Grain Monitoring Program Report for: July 2017**

Release Date: August 31, 2017

### **GMP** Dashboard

Table M-1	JUL 2017	2016-17 YTD	Var. from Last YTD
Western Canadian GHTS	Performance	e (Days)	
Total Time in System	46.2	40.6	-2.9%
Average Days In Store  - Country	30.3	24.9	-4.5%
<b>Loaded Transit Time</b>	5.5	5.2	8.0%
Average Days In Store – Terminal	10.4	10.5	-3.7%
Total Traffic ('000 tonnes	;)		
Primary Elevator Shipments	2,926.9	45,642.8	7.7%
Railway Shipments (all Western Canada traffic)	3,520.8	50,733.3	5.0%
Western Port Terminal Shipments	2,733.2	36,808.4	3.4%
Railway Performance			
Avg. Loads on Wheels (Cars)	8,964	10,256	7.8%
Total Western Port Car Cycle (days)	15.5	14.0	5.7%
Port Performance			
Western Port Unloads	(Number of Ca	ars)	
Vancouver	14,822	248,171	7.3%
Prince Rupert	5,367	67,238	-3.0%
Churchill	0	0	-100.0%
Thunder Bay	6,876	84, 131	7.8%
Total	27,065	399,540	5.1%
Vessel Time in Port (days)	9.9	10.3	30.4%

 Order fulfilment measures have been removed from this table as comparative data is unavailable now.

(days)

 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**

Despite a particularly challenging harvest in 2016, the overall Western Canadian GHTS performed very well throughout the 2016-17 crop year with new records set for the volumes handled by the country elevator system, the rail network and the terminal elevator system.

Total Western Canadian rail shipments in the 2016-17 crop year rose by 5.0%, due largely to substantially higher monthly volumes in the second half. Western port shipments for July totaled 2.7 MMT, a 5.7% decrease from June volumes, reflecting a modest retraction in the shipping programs on the St. Lawrence Seaway as well as at the West Coast. Nonetheless, this was 4.1% greater than the amount

shipped in July of last year. Accompanying the decline in shipments, is a 9.9-day average in the amount of time vessels spent in port in July, consistent with June's 10.0-day average.

While 2017 seeding and early crop development advanced relatively well across the prairie grain belt, dry condition and the lack of general rainfall took a toll on many areas during July. Sporadic rainfall benefited some regions, but the southern prairies largely suffered for lack of moisture.

Statistics Canada's June seeded acreage estimates indicated an increase of 12% and 67% respectively in canola and soybean plantings in Western Canada. Wheat and peas were projected to be down 3% each, with lentil acreage reduced by 25%, reflecting a return to 2015 levels after a 47% increase for lentils in 2016.

## **Highlights for July 2017**

#### Traffic and Movement (page 2)

- Primary-elevator shipments were 45.6 MMT in the 2016-17 crop year, 7.7% more than last year.
- Total rail shipments (including primary/process elevators & producer cars) to all destinations from Western Canada reached a record 50.7 MMT, up 5.0% from that handled in the same twelvemonth period a year earlier.
- Crop year-to-date shipments from Western Canadian ports totaled 36.8 MMT, up 3.4% from the same period last year.

#### System Efficiency and Performance (page 4)

- Average weekly stocks in the country increased by 8.6% from the same period last year. The average days-in-store was down 4.5%.
- Average weekly port-terminal stocks decreased 3.8% from the same period last year, while average days-in-store fell 3.7%.
- Railcar cycle times increased in July, with the preliminary average for the crop year rising to 14.0 days for movements to western ports; 20.8 days to eastern Canada; and 24.7 days to the US.
- The year-to-date average for vessel time in port is 10.3 days, a 30.4% increase from that observed in the previous crop year.
- Port-terminal out-of-car time rose from 6.9 in June to 12.8% in July at Vancouver, while falling month-over-month from 14.2% to 2.7% at Prince Rupert and climbing from 3.7% to 5.6% at Thunder Bay.

#### Commercial Relations (page 6)

- Average primary-elevation charges rose 1.1% over the course of the crop year.
- Both CN's and CP's single-car freight rates remained unchanged in July 2017.
- Average terminal-elevation charges rose 0.4% during the twelve months of the crop year.

#### Infrastructure (page 6)

- The GHTS's country-elevator network saw a net increase of eight facilities during the 2016-17 crop year, rising to 391 from 383, due largely to the licensing of several previously unlicensed facilities in Saskatchewan. This, along with other expansion efforts lifted the system's overall licensed storage capacity to almost 8.2 MMT from 7.8 MMT at the beginning of this crop year.
- The number of terminal elevators remains at 16. The recent 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 mid-summer estimate.

Coupled with carry-forward stock of 7.4 MMT in 2016, 18.9% less than in 2015, the overall western grain supply is estimated to be 78.8 MMT, 6.6% greater than that of the previous year.

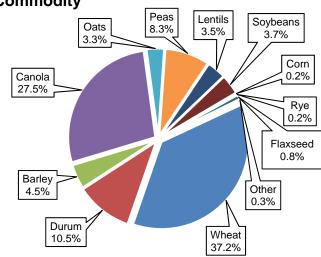
Production & Carry Over (000's tonnes) <i>Table M-2</i>	2016	2015	Var. from Last Year
Western Canada Total Production - Preliminary	71,336.8	64,738.6	10.2%
Western Canada On Farm & Primary Elevator Carry Forward Stock	7,428.9	9,162.6	-18.9%
Total Grain Supply	78,765.7	73,901.2	6.6%

### **Traffic and Movement**

With the growing season well underway, producer deliveries fell during July, averaging just above 0.7 MMT per week for the month. Average weekly primary elevator stock levels increased to 3.1 MMT, continuing to provide adequate supply for the 2016-17 crop year shipping program.

Table M-3	JUL 2017	2016-17 YTD	Var. from Last YTD
Primary Elevator Shipments	(000's tonnes	s)	
Manitoba	496.3	7,693.6	5.6%
Saskatchewan	1,492.5	22,691.6	8.7%
Alberta	915.0	14,890.4	8.0%
British Columbia	23.1	367.2	-12.4%
Total	2,926.9	45,642.8	7.7%
Western Canada Railway Tra	affic (000's toı	nnes)	
Shipments to Western Ports	2,667.4	39,651.2	4.5%
Shipments to Eastern Canada	177.6	3,294.3	17.8%
Shipments to US & Mexico	620.7	7,172.2	2.1%
Shipments Western Domestic	55.2	615.6	14.0%
Total	3,520.8	50,733.3	5.0%
Western Port Unloads (Num	ber of Cars)		
Vancouver	14,822	248,171	7.3%
Prince Rupert	5,367	67,238	-3.0%
Thunder Bay	6,876	84,131	7.8%
Churchill	0	0	n/a
Total	27,065	399,540	5.1%
Terminal Elevator Shipments	s (000's tonne	es)	
Vancouver	1,562.7	22,981.7	6.1%
Prince Rupert	501.6	5,939.8	-6.4%
Churchill	0	0	-100.0%
Thunder Bay	668.9	7,886.9	6.8%
Total	2,733.2	36,808.4	3.4%

## Primary Elevator Shipments by Commodity

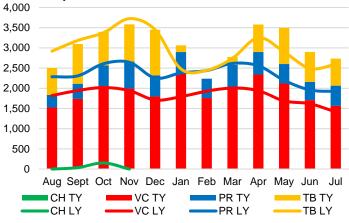


Total YTD = 45.6 MMT

#### **GMP Data Table 2A-1**

Grain shipments from primary elevators remained steady in July achieving a level 7.7% 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 comprised 52% of total shipments, while making up only 48% this year. Conversely, canola and peas make up 36% of this year's total shipments as opposed to just 33% last year.

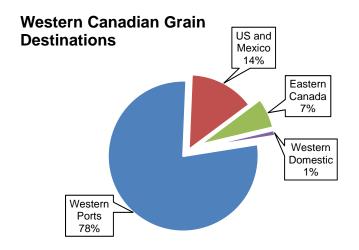
# Terminal Elevator Shipments (000's tonnes)



**GMP Data Table 2C-1** 

Shipments out of the western ports grew in the twelvemonths of the 2016-17 crop year, registering a 3.4% increase 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.





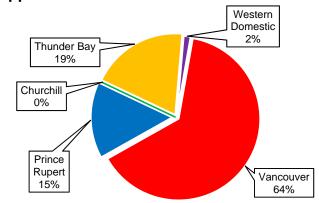
Total YTD = 50.7 MMT

#### 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 during the 2016-17 crop year amounted to 39.7 MMT, up 4.5% from that handled in the previous crop year. In comparison, Western Domestic shipments grew by 14.0%. Shipments to Eastern Canada rose by an even greater 17.8%, 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 offset other gains, effectively limiting the overall rise in Western Canadian hopper-car shipments for the 2016-17 crop year to 3.9%. Hopper-car shipments increased by 7.4% for Vancouver and 4.1% for Thunder Bay, but fell by 7.0% for Prince Rupert.

# Western Canadian Destined Hopper Car Traffic

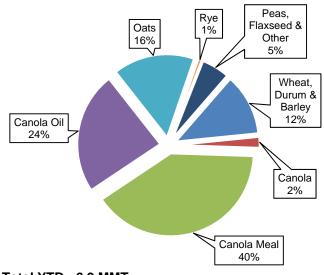


Total YTD - 38.6 MMT

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

## Government Gouvernement of Canada du Canada

#### **US Destined Grain by Commodity**



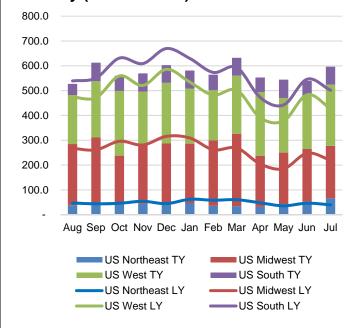
Total YTD - 6.9 MMT

#### **GMP Data Table 2B-18**

Rail shipments into the US, which totaled 6.9 MMT in the 2016-17 crop year, increased by 1.8% from that handled a year earlier. The movement is dominated by canola and canola products, which accounted for 66% 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 July totaled 290,600 tonnes, a gain of 9.9% over that reported 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 during July while country shipping held steady to meet sales programs. The weekly average grew to 3.1 MMT from 2.9 MMT in June. Country elevator stocks utilized 65% of the working capacity of the network. By province, stocks ranged from 60% of working capacity in Saskatchewan to 64% and 76% in Manitoba and Alberta respectively and 97% in British Columbia.

Year-over-year average days-in-store in the primary-elevator system for the crop year shows an improvement from past performance, falling 4.5% from that experienced last year.

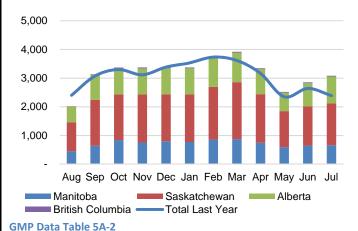
Table M-4	JUL 2017	2016-17 YTD	Var. from Last YTD
Primary Elevator			
Average Weekly Stocks (000's tonnes)	3,083.1	3,152.8	2.9%
Average Days in Store	30.3	24.9	-4.5%
Railway Operations (days)			
Cycle Time to Western Ports	15.5	14.0	5.7%
Cycle Time to Eastern Canada	20.7	20.8	-10.9%
Cycle Time to US	26.7	24.7	-7.3%
Loaded Transit to Western Ports	5.5	5.2	8.0%
Loaded Transit to Eastern Canada	9.9	8.7	-11.5%
Loaded Transit to US	10.1	9.8	-12.0%
Traffic in 50-car+ blocks (Q4)	84.2%	83.9%	-2.1%
Western Canada Terminal Elevator			
Average Weekly Stocks (000's tonnes)	986.2	1,138.8	-3.8%
Average Days in Store	10.4	10.5	-3.7%
Port Unloads (hopper cars)	27,065	399,540	5.1%
Terminal Out-of-Car Time	9.9%	12.1%	3.3%
Western Canada Port Opera	tions		
Average Vessel Time in Port (days)	9.9	10.3	30.4%

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



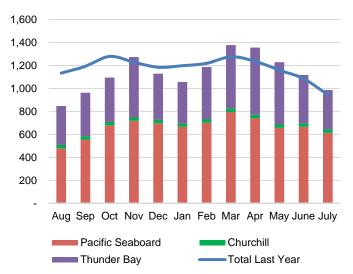
P&H Vulcan (Quorum)

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



Following a sharp decline to 2.0 MMT in August, average country elevator stocks reversed direction and climbed to 3.9 MMT by March. Robust shipping programs in April and May saw these stocks drawn down to 2.5 MMT before rebounding to 3.1 MMT in July. Weekly producer deliveries averaged just over 0.7 MMT throughout July.

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

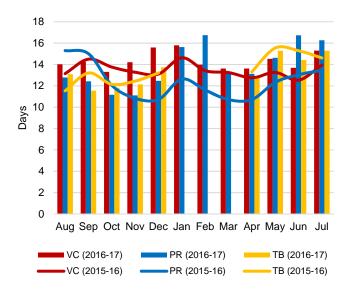


GMP Data Table 5C-2

Overall terminal elevator stocks averaged 1.0 MMT in July, a decline from the level seen a month earlier. Stock levels held relatively constant at the Pacific Seaboard while falling at Thunder Bay. Wheat, including durum and canola stock, comprise the majority at 88% of the total stock. Sufficient vessel arrivals continue to keep port operations fluid as the last quarter of the crop year wrapped up. Currently, western ports are utilizing just 57% of their overall working capacity.



# Railway Cycle Times to Western Ports (days)

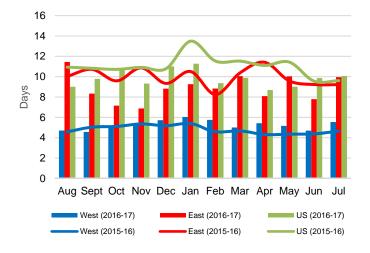


#### **GMP Data Table 5B-1**

Railway car cycles to Western Canadian ports averaged 14.0 days through July 2017, an increase of 5.7% from the 13.3-day average posted for the previous crop year. This result was largely shaped by increases in the Vancouver and Prince Rupert corridors, which rose by 5.6% and 12.2% respectively. Car cycles in the Thunder Bay corridor fell by 0.1%.

Car cycles to Eastern Canada posted a decrease for the crop year, falling by 10.9%, to an average of 20.8 days from 23.4 days a year earlier. Similarly, the car cycle for movements into the United States declined by 7.3%, to an average of 24.7 days from the 26.6-day average posted the previous crop year.

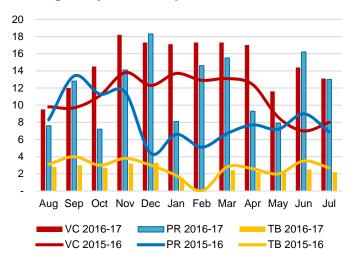
# Average Loaded Transit Times (days)



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

Loaded transit time for traffic destined to Western Canadian ports averaged 5.2 days in the 2016-17 crop year, up 8.0% from the 4.8-day average posted a year earlier. This result was primarily shaped by increases in the Vancouver and Prince Rupert corridors, which rose by 8.7% and 22.8% 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 11.5%, to 8.7 days from 9.9 days the year previous. The corresponding average for US-destined traffic decreased markedly as well, falling by 12.0%, to 9.8 days from the 11.1-day average posted twelve months earlier.

#### Average Days in Port per Vessel

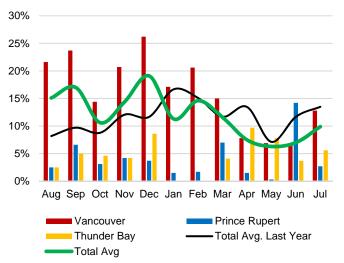


#### **GMP Data Table 5D-1**

For the crop year-to-date, the average waiting and loading time for vessels in port was 30.4% greater than in the same period of the previous year. The average for all ports was 9.9 days in July 2017, 70.7% higher than the average registered in July of the 2015-16 crop year. This divergence is primarily the result of the lineup of vessels waiting at Vancouver and Prince Rupert.

During the 2015-16 crop year, the average time vessels spent in port at Vancouver fluctuated between 10 and 15 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 5 and 10 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 has fluctuated somewhat, the two west coast ports experienced monthly increases to over 18 days in November and December. While time in port moderated somewhat by May, it again jumped up in June and July. Movement from country to port has been relatively smooth thus far this year, although the increase in vessel time in port was a cause of concern throughout the winter shipping period.

# 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 dropping to 9.9% in July. Terminal out-of-car time at Vancouver rose to 12.8% in July, and to 5.6% at Thunder Bay, while falling to 2.7% at Prince Rupert.

### **Commercial Relations**

Table M-5	Q4	Index	% Change
Rates: \$CDN per tonne	2016-17	(1999=100)	YTD
Avg. Primary Elevation	\$16.15	134.7	1.1%
Rail to Vancouver			
CN	\$50.40	136.6	3.3%
СР	\$48.19	130.0	-4.1%
Rail to Pr. Rupert			
CN	\$50.40	120.7	2.4%
Rail to Thunder Bay			
CN	\$50.39	157.3	4.7%
СР	\$40.12	134.4	-7.5%
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 fourth quarter of the 2016-17 crop year. Rail rates are as at July 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's single-car freight rates remained unchanged in July 2017, after having been decreased by about 4.9% three months earlier. In conjunction with the pricing adjustments advanced by the carrier in August, October and December 2016, this left CN's rates on westbound movements into Vancouver 3.3% higher than at the close of the previous crop year. Similarly, the net increase on its rates into Prince Rupert and Thunder Bay during this period amounted to about 2.4% and 4.7% respectively. As with CN, CP's single-car rates remained unchanged in July; having been cut in May by about 2.8% in the Vancouver corridor and 6.0% in the Thunder Bay corridor. These latter reductions followed earlier pricing actions that by the close of the crop year had produced net rate reductions amounting to 4.1% and 7.5% for westbound and eastbound movements respectively.

### **Commercial Developments**

Saskatchewan sells hopper-car fleet: On 5 July 2017 the Saskatchewan government announced that it had secured commitments from three provincially-based shortline railways to purchase the remnants of the Saskatchewan Grain Car Corporation's fleet of 1,000 cylindrical hopper cars. Originally bought in 1981 to supplement the federal government's fleet of 14,000 hopper cars, the Saskatchewan government indicated in March 2017 that it had decided to exit the business and would be putting the 898 cars remaining in its fleet up for sale as a budgetary measure, with provincially-based shortlines given the first opportunity to acquire them through a Request for Offer process. This concluded with the acceptance of three offers, worth a combined \$9.7 million, that will see the fleet apportioned between: Big Sky Rail, which will obtain 663 of the cars; Great Western Railway, 150 cars; and Great Sandhills Railway, 85 cars. The sale of the cars, which are estimated to have a serviceable life of about 14 years remaining, is expected to be finalized before the fall.

#### 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 2016-17 crop year. This resulted in a 2.1% increase in the total number of country elevators, which by the close of July 2017 had risen to 391 from 383. The licensing of several previously unlicensed facilities largely shaped this increase, many of which are now operated by AGT Food and Ingredients, Canpulse Foods, EGT Commodities and Providence Grain Group. But it also includes a new loop-track equipped high-throughput facility operated by Paterson Grain at Daysland, Alberta. Coupled with other expansion initiatives, this served to lift the GHTS's licensed storage capacity by 4.1%, to a record of almost 8.2 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 discontinue 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.

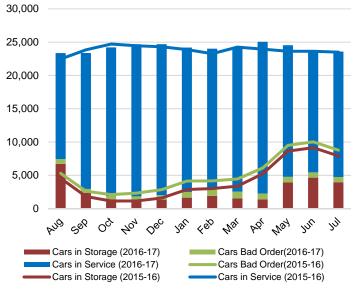
The relicensing of the MobilEx Terminal facility at Thunder Bay again increased the GHTS's terminal elevators to 16 from 15. This, along an 81,700-tonne expansion of the Richardson International terminal in Vancouver, raised the system's total licenced storage capacity to almost 2.5 MMT from the 2.4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

Table M-6	Q4 2016-17	Index (1999=100)	% Change YTD
Country Elevator			
Primary and Process Elevators (Count)	391	38.9	2.1%
Storage Capacity (000's tonnes)	8,163.2	116.2	4.1%
Railway			
Route Miles - Major Carriers	14,606.5	98.5	-0.4%
Route Miles - Shortline Carriers	2,669.6	57.5	1.7%
Route Miles - Total	17,276.1	88.7	-0.1%
Average Weekly Total Hopper Car Fleet Size*	23,581	n/a	1.3%
Terminal Elevator			
Terminal Facilities (Count)	16	114.3	6.7%
Storage Capacity (000's tonnes)	2,485.0	97.2	3.8%

<sup>\*</sup> Hopper Car Fleet Size represents all cars in all statuses for the month of July 2017.

During times of heavy demand for grain hopper cars, nearly all of the grain hopper car fleet is placed in 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. While the number of cars in service retreated during the winter months, it grew again to reach 22,773 in April before retreating to 18,832 by July, now encompassing 80% of the overall fleet. This is 28% higher than in July last year. The balance of the fleet, comprising 20% 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**

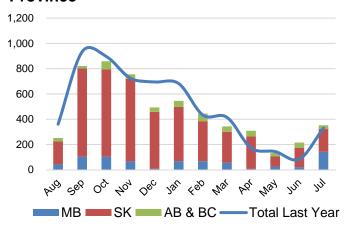
Table M-7 Producer Car Loading Sites	Q4 2016-17	Index (1999=100)	% Change YTD
Class 1 Carriers	159	24.7	-11.2%
<b>Shortline Carriers</b>	129	198.5	-5.8%
All Carriers	288	40.6	-8.9%
Table M-8	JUL	2016-17	Var. from
Producer Cars Scheduled	2017	YTD	Last YTD
Producer Cars Scheduled	2017	YTD	Last YTD
Producer Cars Scheduled  Manitoba	<b>2017</b> 143	<b>YTD</b> 707	-16.6%

Producer cars scheduled this year-to-date are down 6.0% from the previous year. Delays in harvesting the 2016 crop contributed to a reduction of 9.7% in producer car applications received throughout the crop year.



Second Narrows Rail Bridge (Quorum 2017)

## Producer Cars Scheduled by Province

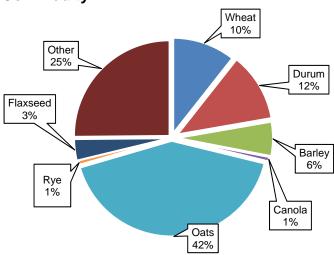


**GMP Data Table 6B-2** 

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 throughout the 2016-17 crop year continue to reflect this trend, with the traditional

commodities comprising only 64% of the total. The balance consists primarily of peas and lentils.

## Producer Cars Scheduled by Commodity



**GMP Data Table 6B-2** 



**Richardson Terminal (Quorum 2017)** 



Quorum Corporation Suite 701, 9707 – 110 Street Edmonton, AB T5K 2L9 Email: info@quorumcorp.net Web: www.grainmonitor.ca Phone: (780) 447–2111 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: <a href="https://www.grainmonitor.ca">www.grainmonitor.ca</a>

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

