

### **Grain Monitoring Program Report for: July 2015**

Release Date: August 31, 2015

### **GMP Dashboard**

	JUL 2015	JUL YTD	Var. from Last YTD
Western Canadian Gl	HTS Performan	ce (Days)	
Total Time in System	40.4	42.0	1.4%
Average Days In Store – Country	24.7	25.5	-5.2%
Loaded Transit Time**	4.9	5.8	8.5%
Average Days In Store – Terminal	10.8	10.7	20.2%
Total Traffic ('000 ton	nes)		
Primary Elevator Shipments	3,690.5	42,369.2	2.2%
Railway Shipments (all WC traffic)	3,915.1	49,660.7	n/a
Western Port Terminal Shipments	3,075.7	35,751.8	14.9%
Country Performance	•		
Primary Elevator Turnover Ratio*	1.6	6.6	-2.9%
Railway Performance			
Car Supply Performa	ance (Weekly Av	/erage)	
Cars Ordered	n/a	n/a	n/a
Cars Committed	n/a	n/a	n/a
Cars Placed	n/a	n/a	n/a
Avg. Loads on Wheels	10,586	13,135	n/a
Total Western Port Car Cycle (days)**	13.2	13.7	5.6%
Port Performance			
Western Port Unload	s (Number of Ca	ars)	
Vancouver	19,810	221,420	9.6%
Prince Rupert	6,758	67,905	2.9%
Churchill	571	5,897	-9.6%
Thunder Bay	10,023	89,560	20.2%
Total	37,162	384,782	10.2%
Vessel Time in Port (days)	8.8	10.2	-26.6%

<sup>\*</sup> Quarterly measure, to the end of Q4 (July)

n/a denotes measures for which data has not been supplied or comparative data is unavailable

### Highlights for July 2015

### Production and Supply (page 2)

- Total Western Canadian production for 2014 was 61.4 MMT.
- While overall grain supply is 8.5% below the record set in 2013, it is the second largest seen under the GMP.

#### Traffic and Movement (page 2)

- Shipments from primary elevators were 42.4 MMT in the 2014-15 crop year, up 2.2% from last year.
- All rail shipments (including primary/process elevators & producer cars) to all destinations from Western Canada totalled 49.7 MMT to the end of July 2015.
- Shipments from Western Canadian ports totalled 35.8 MMT, up 14.9% from last year

### System Efficiency and Performance (page 4)

- Average weekly stocks in the country dropped 2.9% from last year, with the average days in store down 5.2%.
- Port terminal stocks were up 39.1% over the same period last year with average days in store up 20.2%.
- Railcar cycle times averaged 13.7 days (13.0 days last year) to western ports; 23.4 days to eastern Canada; and 30.5 days to US destinations.
- The average vessel time in port in the 2014-15 crop year is 10.2 days, in line with the five year average but 26.6% lower than in the same period last year.
- Port-terminal out-of-car time reached 19.9% in Vancouver, 6.5% in Prince Rupert and 14.6% at Thunder Bay.

#### Commercial Relations (page 6)

- Average primary elevation charges have increased 3.1% to the end of the crop year.
- CN Rail single car rates increased 9.5% in the Vancouver and Prince Rupert corridors to the end of the fourth quarter.
- CP increased single car rates 22.3% and 25.9% in the Vancouver and Thunder Bay corridors respectively to the end of the fourth quarter. (magnified by reductions made in the latter part of the 2013-14 crop year).
- Average terminal elevation rates are up 2.3% to the end of the crop year.

#### Commercial Developments (page 6)

• This month's report covers events in the month of July.

#### Infrastructure (page 7)

 Railway infrastructure saw a reduction of 176.1 route-miles of track. No additional changes in elevator infrastructure were reported in July.

### Producer Cars (page 7)

- The number of producer car loading sites declined by 9.2% during the crop year. All reductions were made by the two Class 1 rail carriers.
- Total producer cars scheduled, at 9,867 cars, is 36.6% lower than the number scheduled to the end of the 2013-14 record high crop year.

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.

<sup>\*\*</sup> Note: Car-cycle and transit time values have been restated as a result of recent revisions to CN data. Marginally greater averages arise from the inclusion of more off-line time in interline movements. n/a denotes measures for which data has not been supplied or

### **Production and Supply**

Although 2014 crop production was 19.6% lower than 2013's record, overall grain supply to be moved by the Western Canadian GHTS fell by only 8.5% due to the large carry forward stock. Statistics Canada reported an upward revision (150,000 tonnes) in its estimate of 2014 lentil production in Saskatchewan when the July estimate of field crop production was released.

Production & Carry Over (000's tonnes)	2014	2013	Var. from Last Year
Western Canada Total Production	61,385.9	76,340.2	-19.6%
Western Canada On Farm & Primary Elevator Carry Forward Stock	12,901.0	4,889.9	163.8%
Total Grain Supply	74,286.9	81,230.1	-8.5%

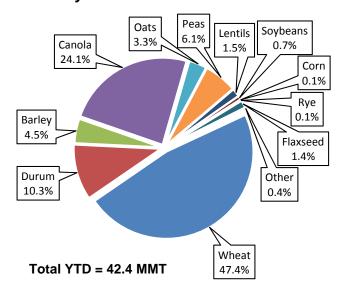
### **Traffic and Movement**

The GHTS total movement has maintained record-setting levels this crop year. Sales opportunities have remained strong translating into large shipping programs.

	JUL 2015	JUL YTD	Var. from Last YTD		
Primary Elevator Shipments	Primary Elevator Shipments (000's tonnes)				
Manitoba	695.7	6,241.3	-6.6%		
Saskatchewan	1,773.6	21,016.5	3.2%		
Alberta	1,196.2	14,682.6	4.9%		
British Columbia	25.0	428.8	11.0%		
Total	3,690.5	42,369.2	2.2%		
Western Canada Railway Tra	affic (000's to	nnes)			
Shipments to Western Ports	3,079.6	38,389.8	9.8%		
Shipments to Eastern Canada	153.0	3,016.0	n/a		
Shipments to US & Mexico	637.1	7,692.5	n/a		
Shipments Western Domestic	45.5	562.3	n/a		
Total	3,915.1	49,660.7	n/a		
Western Port Unloads (Num	ber of Cars)				
Vancouver	19,810	221,420	9.6%		
Prince Rupert	6,758	67,905	2.9%		
Churchill	571	5,897	-9.6%		
Thunder Bay	10,023	89,560	20.2%		
Total	37,162	384,782	10.2%		
Terminal Elevator Shipments (000's tonnes)					
Vancouver	1,728.5	20,616.4	16.0%		
Prince Rupert	564.1	6,151.3	3.9%		
Churchill	0.0	527.4	-17.1%		
Thunder Bay	783.1	8,466.7	24.7%		
Total	3,075.7	35,761.8	14.9%		

Country elevator shipments in July remained strong at 3.7 million tonnes, well above the monthly average of 3.2 million tonnes. The crop year total country elevator shipments are up 2.2% while shipments out of the four western ports are up 14.9%. This reflects the impact of volume thresholds earlier in the crop year that saw railways focusing their resources on movement to western ports where the quickest car cycles could be achieved.

## **Primary Elevator Shipments by Commodity**

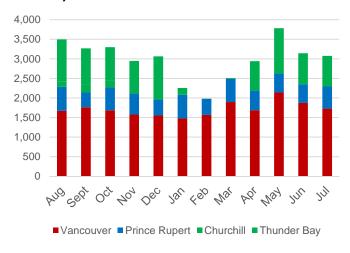


### **GMP Data Table 2A-1**

Wheat, including durum, continues to be the dominant commodity moved, although the proportion has fallen to 57.7%, from over 80% just 10 years ago.

Canola movements continue to increase in both the port and US corridors. The proportion of canola shipped has increased to 24.1% from 17% 10 years ago.

## Terminal Elevator Shipments (000's tonnes)

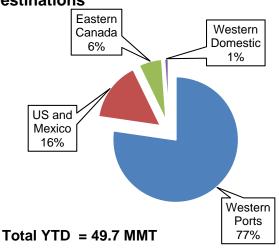


**GMP Data Table 2C-1** 



While lower than seen in June, terminal shipments remained strong, at 3.1 MMT during July.

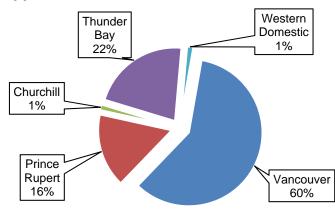
Western Canadian Grain Destinations



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

The primary unload destination of Western Canadian grain shipped by rail continues to be to the four western ports. The rail movement to Eastern Canadian ports seen in the past has decreased in the last three years, due in part to the recent focus on higher velocity movement, but also as a result of the change in marketing practices that came about at the end of the CWB single desk. This shift has been to the benefit of the Thunder Bay and seaway movements, which have seen an increase in that same period

Western Canadian Destined Hopper Car Traffic

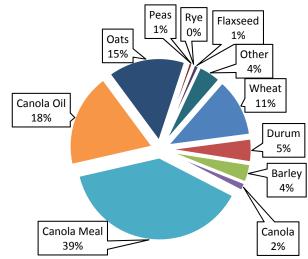


Total YTD - 37.9 MMT

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

Vancouver continues in its role as the dominant port of export for western grain. A combination of year round operations, better logistical economics and the access to major markets for Canadian grain in the Asia Pacific region favour the west coast gateway.

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

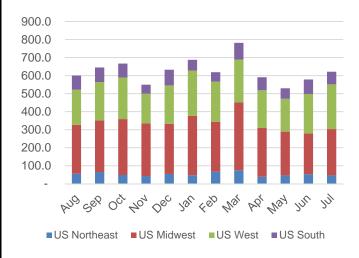


Total YTD - 7.5 MMT

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

Canola and canola products (seed, oil and meal) dominate the movement to US destinations, constituting 59% of the overall movement this crop year.

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



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

The majority of Western Canadian grain exported to the US continues to be moved to the US Midwest and West regions with 65% being sourced from the province of Saskatchewan.

Rail traffic from Western Canada to Mexico totaled 189,900 tonnes for the crop year.

# System Efficiency and Performance

	JUL 2015	JUL YTD	Var. from Last YTD
Primary Elevator			
Average Weekly Stocks (000's tonnes)	2,800.9	2,993.7	-2.9%
Average Days in Store	24.7	25.5	-5.2%
Average Weekly Cars Ordered	n/a	n/a	n/a
Average Weekly Car Orders Cancelled	n/a	n/a	n/a
Average Weekly Cars Planned for Spotting	n/a	n/a	n/a
Average Weekly Cars Actually Spotted	n/a	n/a	n/a
Railway Operations (days)			
Cycle Time to Western Ports	13.2	13.7	5.6%
Cycle Time to Eastern Ports	22.6	23.4	n/a
Cycle Time to US	25.0	30.5	n/a
Loaded Transit to Western Ports	4.9	5.8	8.5%
Loaded Transit to Eastern Ports	11.5	12.4	n/a
Loaded Transit to US	10.7	13.8	n/a
Traffic in 50-car+ blocks (Q4)	87.6%	84.2%	4.9%
Western Canada Terminal Elevator			
Average Weekly Stocks (000's tonnes)	1,005.0	1,281.8	39.1%
Average Days in Store	10.8	10.7	20.2%
Port Unloads (hopper cars)	37,162	384,782	10.2%
Terminal Out of Car Time	12.3%	17.1%	n/a
Western Canada Port Operations			
Average Vessel Time in Port (days)	8.8	10.2	-26.6%

**Note:** At the time of this publication, car order data (order fulfillment) was not complete from both railways and is therefore not included in this month's report.

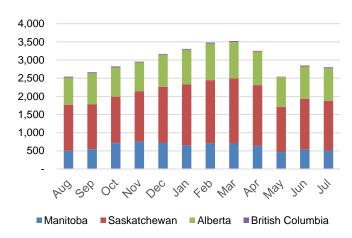
Primary elevator stocks held steady during July. The weekly average was 2.8 MMT. Available delivery space in the country network remained good throughout the period. Country elevators utilized an estimated 67% of the working capacity of the network. By province, stocks ranged from 58% of working capacity in Manitoba to 100% in B.C. Saskatchewan and Alberta were at 63% and 80% respectively.

Year-to-date average days in store in the primary elevator system fell by 5.2% from last year, when for much of the year elevator congestion was widespread.

Railway car cycles to western Canadian ports consistently held in the 11-13 day range from April to November 2014 coincident with the enactment of grain volume thresholds under the Orders in Council. However, as normally seen in the winter period, car cycles peaked with an average of 16.2 days in both January and February before beginning to decline, ultimately falling to 13.2 days in July.

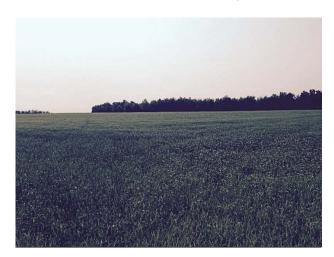
Year-to-date average time vessels are spending in port waiting and loading grain is 26.6% less than that experienced in the same period in 2013-14, reflective of the improvement in coordination of grain stocks at port to vessel loading since the challenges experienced in the last crop year. July saw a small decrease in the average which fell to 8.8 days from the 9.1 days registered in June. It remained a significant improvement from the 17.0 day range experienced over the winter months and the 13.9 days reached year-to-date July in the last crop year, which was a record high.

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



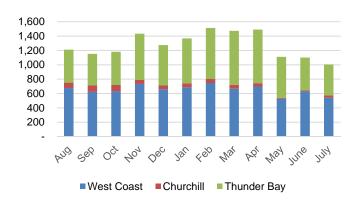
### **GMP Data Table 5A-2**

Prior to April, average weekly primary elevator stock levels grew steadily throughout the current crop year. This is in contrast to the previous crop year when, from the beginning of week 7 (late September) to week 36 (early April), stocks in the country network were constantly near working capacity limits (95% or more). Following two months of decline, the rebound of stock levels during June and July resulting in a crop year average that is 2.9% less than in the previous crop year, representing a utilization rate of approximately 71% of the available working capacity.





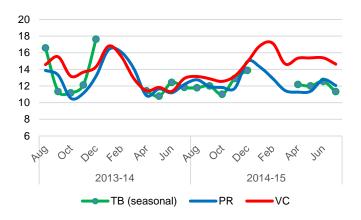
### Average Weekly Terminal Elevator Stocks (000's tonnes)



#### **GMP Data Table 5C-2**

Terminal elevator stocks climbed measurably throughout most of the 2014-15 crop year. May through July brought an appreciable decline, with an average between 1.0 and 1.1 MMT in the western ports utilizing approximately 64% of the estimated working capacity. As the 2015 shipping season progresses at Thunder Bay, average terminal stocks in store at the port continue to decline. During July they registered significantly less than the high level seen prior to the opening of navigation, at just over 430,000 tonnes, which utilized approximately 54% of working capacity.

## Railway Cycle Times to Western Ports (days)



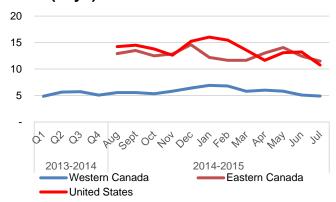
### **GMP Data Table 5B-1**

Despite seasonal fluctuations, the average car cycle in Western Canada has continued to decline since the beginning of the GMP. With the close of July, the average for the 2014-15 crop year stood at 13.7 days, 5.69% above the 13.0-day average posted for the previous crop year. This was largely the product of an increase in the Vancouver corridor, which rose by 8.7%, to 14.6 days from 13.4 days. In comparison, the average in the Prince Rupert corridor fell by 1.3%, to 12.4 days from 12.6 days, and that of the Thunder Bay by 0.5%, to 12.6 days from 12.7 days. All three corridors posted progressive declines from their winter

spikes, which began to rise in November 2014 and carried through to February 2015, before subsiding in March 2015. At their height, these spikes saw the monthly average for Vancouver rise to 17.1 days; Prince Rupert, 15.0 days; and Thunder Bay, 18.1 days.

This month sees the introduction of car cycle calculations to Churchill in our performance measures tables (5B-2M). The YTD measure for Churchill is 20.5 days, with July at 20.8 days. This represents four months of performance data as no cars were moved in this corridor from November 2014 to June 2015.

### Average Loaded Transit Times (days)

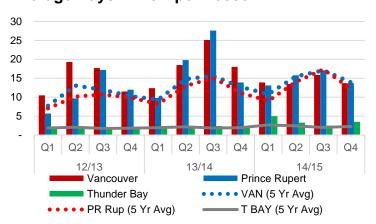


#### GMP Data Tables 5B-4, 5B-8, 5B-12

Loaded transit time for traffic destined to Western Canadian ports averaged 5.8 days in the 2014-15 crop year, up 8.5% from the 5.3-day average posted in the previous crop year. The July average fell to 4.9 days from 5.1 days in June.

Eastern Canadian car cycles and transit times also declined in July, with crop-year averages of 23.4 days and 12.4 days respectively. Corresponding values for US-destined traffic amounted to 30.5 days and 13.8 days. Longer distances to market and smaller car block movements are the chief drivers of these larger values.

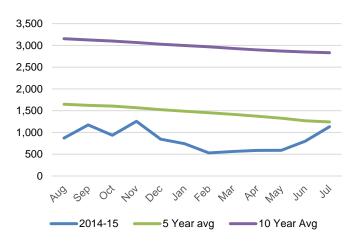
### Average Days in Port per Vessel



GMP Data Table 5D-1

Prior to the 2010-11 crop year, the average time vessels spent in port at Vancouver and Prince Rupert was between five and ten days. Despite seasonal fluctuations, a steady increase in this time has been recorded over the past four years. The high point last winter exceeded 26 days. There are a number of possible contributing factors that include having the right grain in position at port when the vessel is ready for loading to the unusually low cost of ocean freight being experienced presently.

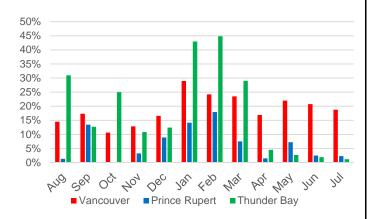
### **Baltic Dry Index**



#### **Source: Capital Link Maritime Transportation**

As the supply of global vessel carrying capacity has increased in the past three years, ocean freight rates have fallen to record low levels (as noted above). The Baltic Dry Index this crop year averaged 835, compared to a 10 year average of 3,152. Consequently, it is likely that some of the increased time can be attributed to the approach taken in the management of vessel assets. There have also been several claims by terminal operators that the right grain has not been in position for the vessels waiting in port.

## Port Terminal Out of Car Time (% of total operating hours)



#### **GMP Data Table 5C-5**

The port terminal out of car time measure uses data collected from the terminal elevators representing the total number of hours the 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).

Year-to-date the total measure has fallen again this month from 17.7% in June to 17.1% in July. Vancouver decreased from 20% to 19.9%, Prince Rupert was down from 6.9% to 6.5% and Thunder Bay from 16.6% to 14.6%.

The month of July saw a decrease at Vancouver terminals, to 18.8% from 20.8% in June. Thunder Bay's June percentage declined from 1.9% to 1.2%.

### **Commercial Relations**

A vast number of individual tariff rates exist for country and terminal elevation services and for rail freight. These rates are measured quarterly by the GMP, with the final quarter of the crop year being presented this month.

The GMP consolidates these rates into averages for presentation purposes. Increases or decreases are presented based on an index with the base year (August 1, 1999) equal to 100.

The increase in single car rates for CP, seen below, is magnified by reductions that the carrier incorporated in the later part of the 2013-14 crop year.

Rates: \$CDN per tonne	Q4 2015	Index (1999=100)	% Change YTD
Avg. Primary Elevation	\$16.22	135.3	3.1%
Rail to Vancouver			
CN	\$52.08	141.3	9.5%
CP	\$53.95	145.2	22.3%
Rail to Pr. Rupert			
CN	\$52.09	124.9	9.5%
Rail to Thunder Bay			
CN	\$48.74	151.6	4.1%
СР	\$45.05	151.1	25.9%
Average Terminal Elevation	\$13.99	153.4	2.3%

**Note:** Rail rates are as at Jul. 31, 2015 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).

### **Commercial Developments**

**Cargill opens canola oil refinery:** On July 23, 2015 Cargill announced the opening of their new canola oil refinery in Clavet, SK. With a capacity to refine over 450,000 tonnes of canola oil annually, it will be Cargill's largest refinery in North America.

Canadian Pacific and union reach tentative deal: On July 29, 2015, CP reached a tentative five-year agreement with the Brotherhood of Railway Carmen (BRC-TCU), a division of the Transportation and Communications Union/International Association of Machinists. The BRC represents employees on its wholly owned subsidiary, Soo Line Railroad Company.



New CN Canadian Grain Products for the 2015-16 Crop Year: In July CN announced two new service products for the 2015-2016 crop year. The "Export Fleet Integration Program" is similar to CN's "Commercial Fleet Integration Program" (CFIP) used for US destined products. It allows grain shippers to integrate privately owned, shipper-supplied cars into CN's common western grain hopper car fleet, in turn receiving car supply based on predetermined car cycle times. The program is available for 25-car block movements and larger. The second program offers private shuttle train service for those shippers who possess private car fleets. The service is offered in unit train lots. Both programs apply to movements between pre-approved, CN-served origins in western Canada and pre-approved unloading facilities at CNserved destinations in Vancouver, Prince Rupert, and Thunder Bay, as well as at the St. Lawrence River ports of Montreal and Quebec City. The latter program will run outside of CN's general allocation programs.

CN also plans to allow grain shippers to bid on cars supplied in their general allocation through an auction process in order to secure a guaranteed allotment of 25-car shipping blocks. The program applies to CN-served loading locations in western Canada. CN will advise the industry weekly as to the number of cars to be offered through the auction determined in part by market factors and operational considerations.

Canadian Transportation Agency finds CN failed in its levelof-service obligations: The problems that manifest themselves in the movement of grain during the 2013-14 crop year saw several shippers file level-of-service complaints with the Canadian Transportation Agency. These included complaints launched in June 2014 by Canada's two largest grain handlers: Richardson International Limited; and Viterra Inc. Effectively, both alleged that CN had failed to respect the car allocation commitments that the carrier had made to the complainants earlier in the crop year. In late May 2015 the Agency rendered its final decision in both cases, although these were not made public until July 2015. In both instances, the Agency found that CN had failed in its level-of service obligations to both shippers, and ordered the carrier to make up the allocation shortfall to each by providing both with up to 100 additional cars per week through to the end of the 2015-16 crop year until the shortfall has been fulfilled.



### Infrastructure

The GHTS infrastructure underwent significant rationalization in the 1990's and early 2000's. Since that time the pace of change has largely abated. The GMP monitors infrastructure changes on a quarterly basis.

	Q4 2014-15	Index (1999=100)	% Change YTD
Country Elevator			
Primary and Process Elevators (Count)	370	36.9	-0.3%
Storage Capacity (000's tonnes)	7,334.8	104.4	0.1%
Railway			
Route Miles - Major Carriers	14,835.4	100.1	-1.2%
Route Miles - Shortline Carriers	2,588.7	55.8	0.0%
Route Miles - Total	17,424.1	89.5	-1.0%
Average Weekly Hopper Car Fleet Size	19,824	n/a	0.0%
Terminal Elevator			
Terminal Facilities (Count)	17	121.4	13.3%
Storage Capacity (000's tonnes)	2,423.9	94.8	0.9%

There were modest changes to GHTS's infrastructure in the 2014-15 crop year. The total number of country elevators declined by one to 370, after seeing 16 facilities de-licenced last crop year. Railway infrastructure was reduced by 176.1 routemiles as a result of CP's abandonment of portions of the Glenboro, Gravelbourg and Arcola subdivisions. Two newly licensed terminal elevators were added to the network at the end of the second quarter, both located in Thunder Bay. The number of railway hopper cars in the fleet has been reduced since the beginning of the crop year.

### **Producer Cars**

The primary producer impact measure in the GMP is the Producer Netback. The Netback and accompanying Export Basis are calculated on an annual basis and will be included in the Annual Report. The GMP also monitors elements of producer car infrastructure and movement.

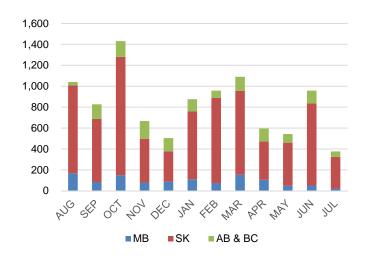
Producer Car Loading Sites	Q4 2014-15	Index (1999=100)	% Change YTD
Class 1 Carriers	179	27.8	-15.2%
Shortline Carriers	135	207.7	0.0%
All Carriers	314	44.3	-9.2%

Although no reductions were recorded during the fourth quarter, the Class 1 carriers eliminated 17 producer car loading sites during the third quarter. This brought the total decline in the crop year to 32 (CN 23, CP 9). Loading sites were eliminated in conjunction

with the closure and removal of some branch lines, such as CP's Gainsborough and Gravelbourg lines. The total number of available producer car loading locations now stands at 314. In August of 1999 there were 709 producer loading sites in Western Canada.

Producer Cars Scheduled	JUL 2015	JUL YTD	Var. from Last YTD
Manitoba	22	1,133	-27.8%
Saskatchewan	302	7,413	-33.7%
Alberta & B.C.	53	1,321	-53.6%
Total	377	9,967	-36.8%

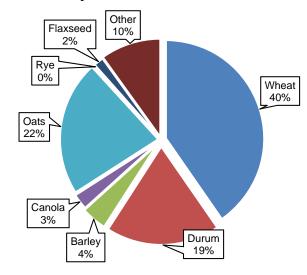
### Producer Cars Scheduled by Province



**GMP Data Table 6B-2** 

In the past, producer car shipments were primarily wheat, durum and oats. Since the elimination of the single desk, greater volumes of canola and special crops are moving via this method.

## Producer Cars Scheduled by Commodity



**GMP Data Table 6B-2** 

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 the address below by either phone or email.

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