Monitoring the Canadian Grain Handling and Transportation System

Grain Monitoring Program Report for: *March 2015*

Release Date: April 28, 2015

GMP Dashboard

	MAR 2015	MAR YTD	Var. from Last YTD
Western Canadian GHTS Performance (Days)			
Total Time in System	42.2	42.6	n/a
Average Days In Store – Country	29.6	26.3	-15.2%
Loaded Transit Time	5.4	5.6	n/a
Average Days In Store – Terminal	7.2	10.7	12.6%
Total Traffic ('000 tonnes)			
Primary Elevator Shipments	3,331.6	27,574.1	11.0%
Railway Shipments (all WC traffic)	3,351.4	33,102.0	n/a
Western Port Terminal Shipments	2,491.0	22,726.7	24.2%
Country Performance			
Primary Elevator Turnover Ratio*	1.4	3.2	0%
Railway Performance			
Car Supply Performance (Weekly Average)			
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	14,955	14,456	n/a
Total Western Port Car Cycle (days)	12.9	13.0	-7.4%
Port Performance			
Western Port Unloads (Number of Cars)			
Vancouver	18,182	140,344	12.5%
Prince Rupert	5,287	43,928	15.7%
Churchill	0	5,326	-13.5%
Thunder Bay	1,364	55,920	53.6%
Total	24,833	245,519	19.6%
Vessel Time in Port (days)	17.2	10.8	-23.9%

** Some GMP measures cover quarterly periods. For this report it covers to the end of Q2 (January 2015)*

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

Highlights for March

Production and Supply (page 2)

- Total Western Canadian production for 2014 was 61.2 MMT.
- While overall grain supply is 8.6% below the record set the previous year, it is the second largest seen under the GMP.

Traffic and Movement (page 2)

- Shipments from primary elevators were 27.6 MMT in the first eight months of the 2014-15 crop year, up 11% from last year.
- All rail shipments (including primary/process elevators & producer cars) to all destinations from Western Canada totalled 33.1 MMT to the end of March 2015.
- Shipments from Western Canadian ports totalled 22.7 MMT, up 24.2% from last year

System Efficiency and Performance (page 4)

- Average weekly stocks in the country were down 6.3% from the same period last year, with the average days in store down 15.2%.
- Port terminal stocks were up 58.8% over the same period last year with average days in store up 12.6%.
- Railcar cycle times are averaging 13.0 days (13.3 days last year) to western ports and 22.5 days to eastern Canada.
- The average vessel time in port year to date is 10.8 days, 23.9% lower than in the same period last year.
- Year-to-date port terminal out of car time is 20.1% in Vancouver, 7.2% in Prince Rupert and 24.0% at Thunder Bay.

Commercial Relations (page 6)

- Average primary elevation charges have increased 3.1% to the end of the second quarter.
- CN Rail single car rates increased 5% in both the Vancouver and Prince Rupert corridors to the end of the second quarter.
- CP Rail increased single car rates 17.9% and 18.8% in the Vancouver and Thunder Bay corridors respectively.
- Average terminal elevation rates are up 1.1% to the end of the second quarter.

Commercial Developments (page 6)

- This month's report covers events in the month of March.

Infrastructure (page 7)

- Infrastructure remained unchanged in the month of March.

Producer Cars (page 7)

- The number of producer car loading sites has declined by 4.3% thus far this crop year. All reductions were made by the two Class 1 rail carriers.
- Total producer cars scheduled, at 7,393 cars, is 39.0% lower than the number scheduled to the end of March in the 2013-14 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.

Production and Supply

Although 2014 crop production was 19.8% lower than 2013's record, overall grain supply to be moved by the Western Canadian GHTS fell by only 8.6% due to the large carry forward stock. Overall supply is the second largest on record at over 74 MMT.

Production & Carry Over (000's tonnes)	2014	2013	Var. from Last Year
Western Canada Total Production	61,235.9	76,340.2	-19.8%
Western Canada On Farm & Primary Elevator Carry Forward Stock	13,036.0	4,889.9	166.6%
Total Grain Supply	**74,271.9**	**81,230.1**	**-8.6%**

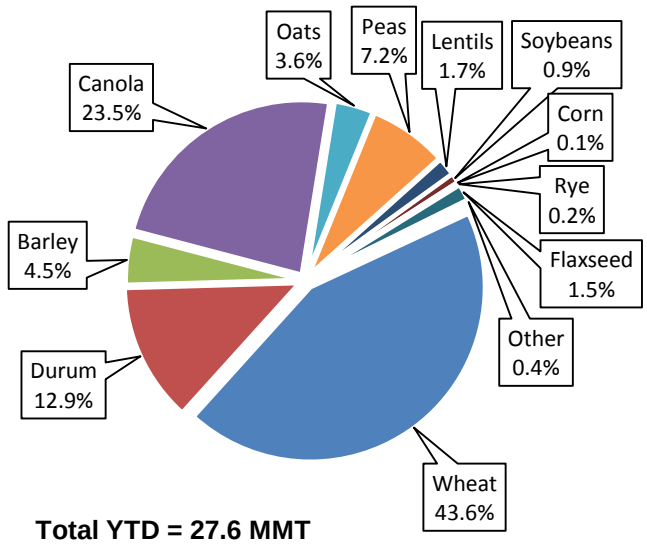
Traffic and Movement

The GHTS total movement has maintained record-setting levels in the first eight months of the 2014-15 crop year. Sales opportunities have remained strong translating into large shipping programs.

	MAR 2015	MAR YTD	Var. from Last YTD
Primary Elevator Shipments (000's tonnes)			
Manitoba	435.8	3,977.6	-3.3%
Saskatchewan	1,649.5	13,878.2	15.6%
Alberta	1,200.9	9,419.2	10.9%
British Columbia	45.4	299.1	30.4%
Total	**3,331.6**	**27,574.1**	**11.0%**
Western Canada Railway Traffic (000's tonnes)			
Shipments to Western Ports	2,223.7	25,015.1	19.8%
Shipments to Eastern Canada	448.6	2,370.2	n/a
Shipments to US & Mexico	635.0	5,317.3	n/a
Shipments Western Domestic	44.0	399.4	n/a
Total	**3,351.4**	**33,102.0**	**n/a**
Western Port Unloads (Number of Cars)			
Vancouver	18,182	140,344	12.5%
Prince Rupert	5,287	43,928	15.7%
Churchill	0	5,326	-13.5%
Thunder Bay	1,364	55,920	53.6%
Total	**24,833**	**245,519**	**19.6%**
Terminal Elevator Shipments (000's tonnes)			
Vancouver	1,876.4	13,096.1	18.4%
Prince Rupert	596.7	4,122.1	25.1%
Churchill	0.0	527.4	-17.1%
Thunder Bay	17.9	4,981.1	50.5%
Total	**2,491.0**	**22,726.7**	**24.2%**

The year-to-date total country elevator shipments are up 11.0% while shipments out of the four western ports are up 24.2% suggesting that railways are continuing to focus their resources on the movements to western ports where they can achieve the quickest cycles in order to meet the volume thresholds.

Primary Elevator Shipments by Commodity



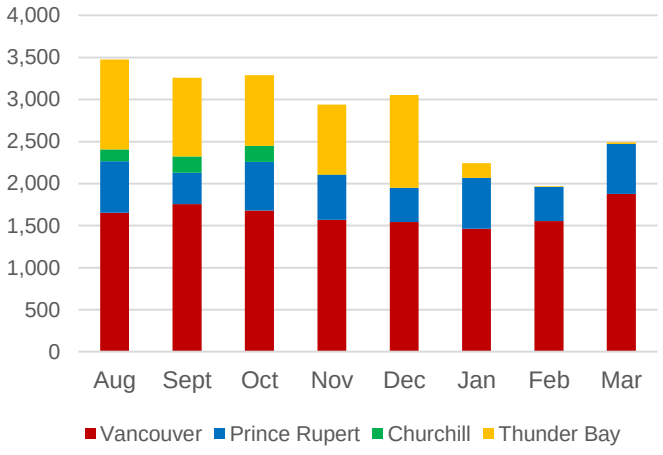
Total YTD = 27.6 MMT

GMP Data Table 2A-1

Wheat, including durum, continues to be the dominant commodity moved, although the proportion has fallen to 56.5%, 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 23.5% from 17% 10 years ago.

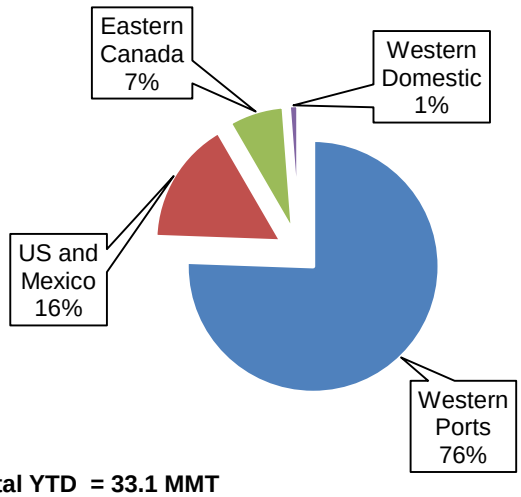
Terminal Elevator Shipments (000's tonnes)



GMP Data Table 2C-1

Monthly shipments from west coast terminal elevators rebounded in March from the slower pace exhibited earlier in the winter. The close of Seaway navigation limits shipments from Thunder Bay during the winter.

Western Canadian Grain Destinations

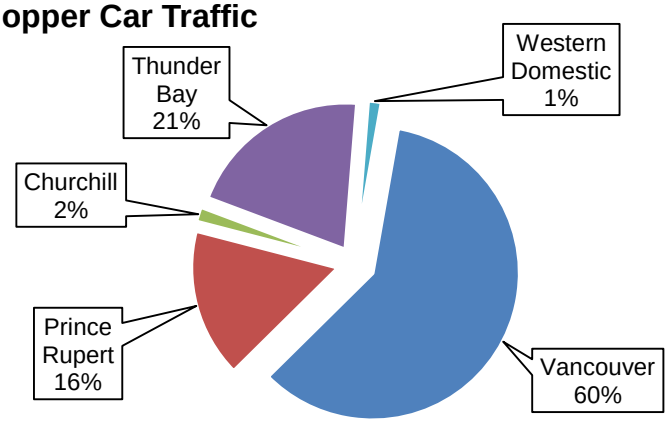


Total YTD = 33.1 MMT

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 previous winters has decreased in the past three years, due in part to the recent focus on higher velocity movement, but also as a consequence of the change in marketing practices that came about at the end of the CWB single desk.

Western Canadian Destined Hopper Car Traffic

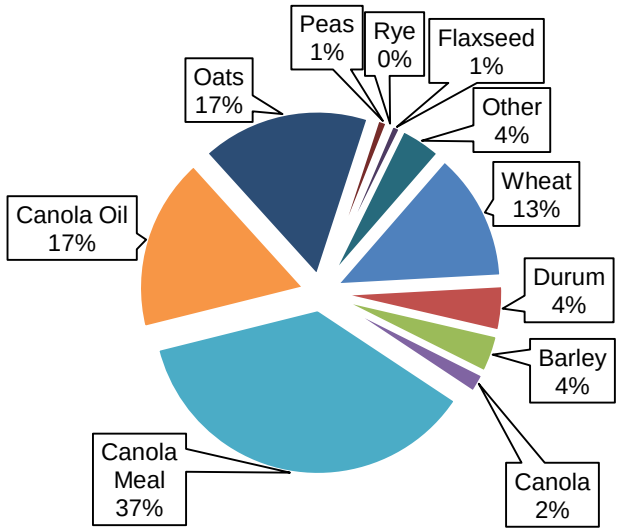


Total YTD - 24.7 MMT

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

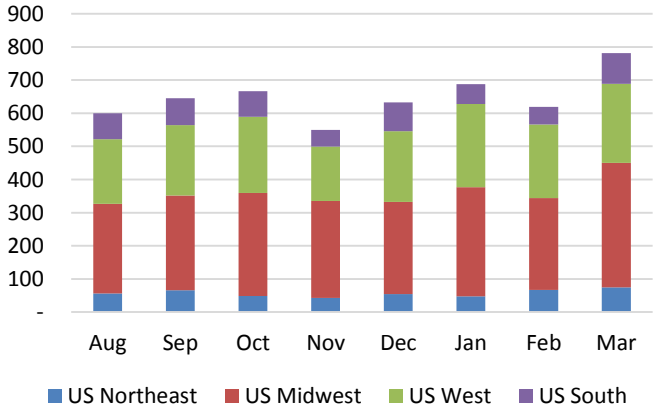


Total YTD - 5.2 MMT

GMP Data Table 2B-18

Canola and canola products (seed, oil and meal) dominate the movement to US destinations, constituting 56% of the overall movement this crop year to date.

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 135,200 tonnes year to date.

System Efficiency and Performance

	MAR 2015	MAR YTD	Var. from Last YTD
Primary Elevator			
Average Weekly Stocks (000's tonnes)	3,523.2	3,051.3	-6.3%
Average Days in Store	29.6	26.3	-15.2%
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	12.9	13.0	-7.4%
Cycle Time to Eastern Ports	21.0	22.5	n/a
Cycle Time to US & Mexico	n/a	n/a	n/a
Loaded Transit to Western Ports	5.4	5.6	1.6%
Loaded Transit to Eastern Ports	11.3	11.8	n/a
Loaded Transit to US & Mexico	n/a	n/a	n/a
Traffic in 50-car+ blocks (Q2)	82.1%	81.8%	4.9%
Western Canada Terminal Elevator			
Average Weekly Stocks (000's tonnes)	1,473.6	1,321.4	58.8%
Average Days in Store	7.2	10.7	12.6%
Port Unloads (hopper cars)	24,833	245,518	19.6%
Terminal Out of Car Time	22.9%	19.4%	n/a
Western Canada Port Operations			
Average Vessel Time in Port (days)	17.2	10.8	-23.9%

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.*

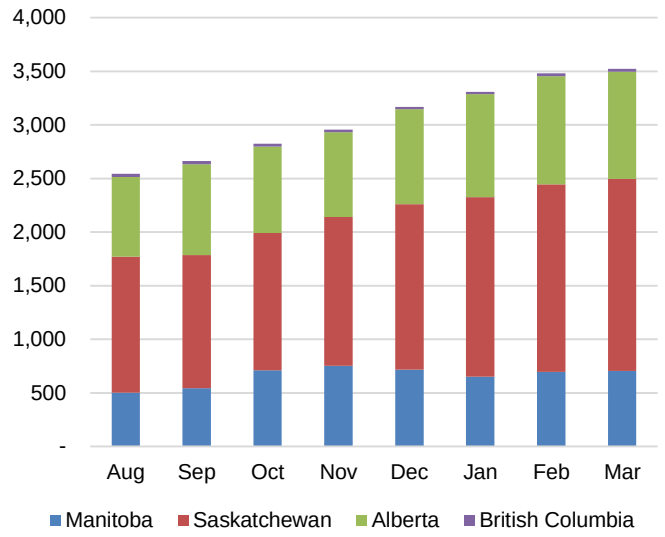
Primary Elevator Stocks have continued to climb since the beginning of the crop year. The weekly average in March was 3.5 MMT, up 40,000 tonnes from January. They utilized an estimated 84% of the working capacity of the network. By province, stocks ranged from 80% of working capacity in Manitoba and Saskatchewan, to 90% in Alberta and 95% in B.C.

Year-to-date average days in store in the primary elevator system fell by 15.2% from last year when elevator congestion was widespread.

Railway car cycles to western Canadian ports had consistently held in the 11-12 day range from April to November 2014 coincident with the enactment of grain volume thresholds under the Orders in Council. However, they have increased in the past three months, peaking with an average of over 15 days in January before slipping to 14.6 days in February and 12.9 days in March.

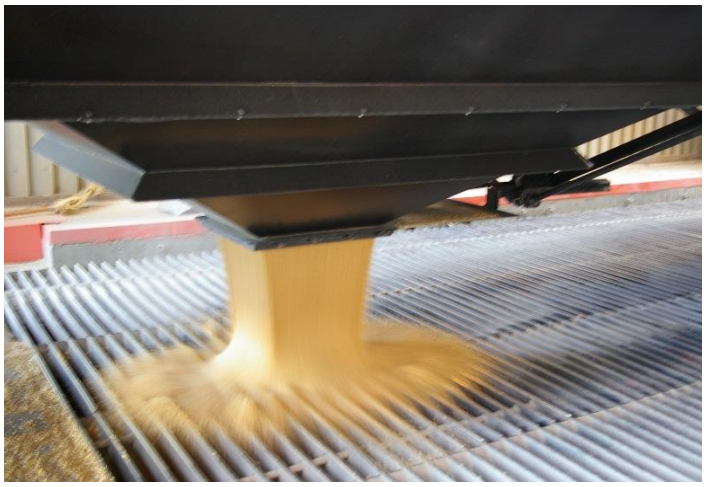
Although year-to-date average time vessels are spending in port waiting and loading grain is 24% less than that experienced in the same period in 2013-14, recent months have seen increases, rising above 17 days in February and March. While significantly lower than the 28.4 days experienced last March, it is higher than a third quarter 5-year average of 15.5 days.

Average Weekly Primary Elevator Stocks (000's tonnes)

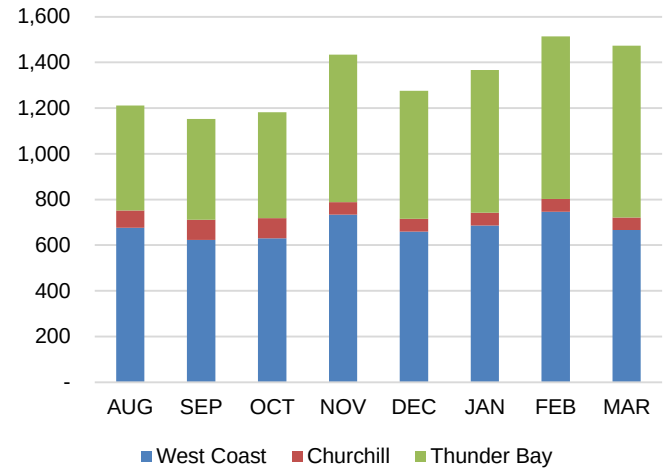


GMP Data Table 5A-2

Average weekly primary elevator stock levels have grown 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). Although stocks this year have been lower, they continued to increase throughout the winter operating season, exceeding 80% throughout the month of March.



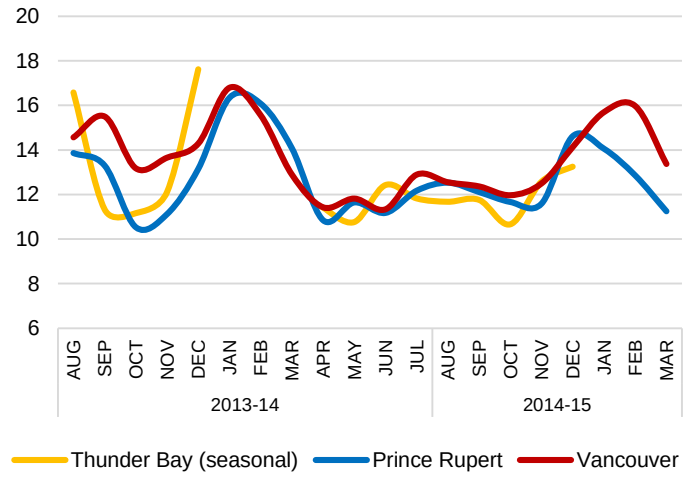
Average Weekly Terminal Elevator Stocks (000's tonnes)



GMP Data Table 5C-2

Terminal elevator stocks have risen measurably over the course of the crop year to date. At an average of just under 1.5 MMT throughout March, they were utilizing approximately 88% of the estimated working capacity. By the end of March terminal stocks in Thunder Bay reached almost 725,000 tonnes, over 90% of working capacity, in anticipation of the opening of navigation in the Seaway.

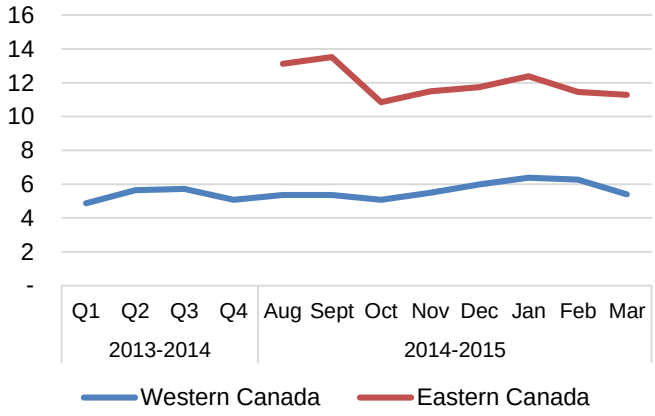
Railway Cycle Times to Western Ports (days)



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 March, the year-to-date average for the 2014-15 crop year had fallen to 13.0 days from the 14.1-day average posted in the same period of the previous crop year. This was the product of improvements in all three corridors: with the year-to-date average in the Vancouver corridor down by 7.3%, to 13.4 days from 14.5 days; the Prince Rupert corridor down by 6.2%, to 12.5 days from 13.3 days; and the Thunder Bay corridor down by 10.0%, to 12.3 days from 13.7 days. Despite these broader declines, the onset of winter brought a spike in the monthly averages for all three corridors, which began to rise in November 2014 and carried through to February 2015, before largely starting to subside in March 2015. At their height, these spikes saw the monthly average for Vancouver rise to 16.0 days; Prince Rupert, 14.6 days; and Thunder Bay, 18.0 days.

Average Loaded Transit Times (days)

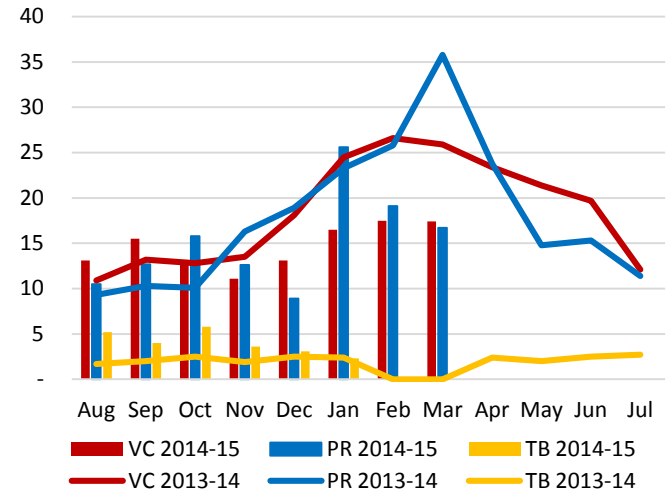


GMP Data Tables 5B-4, 5B-8

Loaded transit time for traffic destined to Western Canadian ports averaged 5.6 days for the first seven months of the crop year, down from the 5.5-day average posted in the same period last crop year. The monthly average declined to 5.4 days from 6.3 in February.

The measurement for Eastern Canadian car cycles and transit times also declined slightly, with the year-to-date averages amounting to 22.5 days and 11.8 days respectively. Longer distances and smaller volumes are the chief drivers in larger values to eastern destinations.

Average Days in Port per Vessel

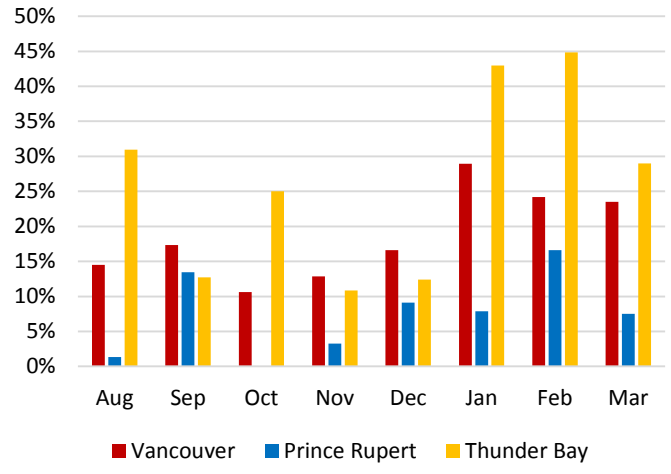


GMP Data Table 5D-1

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. While there are a number of possible contributing factors, it is important to note that this pattern began two years prior to the elimination of the Canadian Wheat Board's single desk, which suggests that this is likely not attributable to that specific marketplace change.

As ocean freight rates have fallen to record low levels and the supply of vessel carrying capacity has increased in the past three years, it is likely that some of the increased time can be attributed to less discipline in managing the 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

A new measure introduced this year gauges the time port terminals did not have cars to unload but had crews in place. The weekly measure uses data collected from the terminal elevators on 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 in Vancouver, the out of car time was 20.1%, at Prince Rupert 7.2% and at Thunder Bay it was 24.0%. The month of March saw a small decline at Vancouver terminals, to 23.5% from over 24% in January.

Thunder Bay's March percentage declined to 29% in advance of the opening of the Seaway and commencement of shipping.

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 and are presented for reference purposes 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.

Rates: $CDN per tonne	JAN 2015	Index (1999=100)	% Change YTD
Avg. Primary Elevation	$16.22	135.3	3.1%
Rail to Vancouver			
CN	$49.95	135.6	5.0%
CP	$52.11	140.0	17.9%
Rail to Pr. Rupert			
CN	$49.96	119.8	5.0%
Rail to Thunder Bay			
CN	$46.80	145.6	0.0%
CP	$42.41	142.6	18.8%
Average Terminal Elevation	$13.83	151.6	1.1%

Note: *Rail rates are as at Jan. 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

Statistics Canada releases 2014 survey of on-farm storage: The survey states there is 68.7 MMT of permanent on-farm storage capacity in the three Prairie Provinces. By province, storage tonnage is as follows:

Manitoba	11,572,000
Saskatchewan	32,217,000
Alberta	24,938,000
	68,727,000

CP and union ratify agreement: On March 9 CP announced that a labour agreement with mechanical employees represented by Unifor (Canada's largest private sector union) had been ratified. This brought the number of CP's long-term collective agreements with its Canadian unions to six. Agreements are also in place with the Rail Traffic Controllers, International Brotherhood of Electrical Workers, Teamsters Maintenance of Way employees, Police and United Steel Workers.

CN unions ratify agreements: On March 17 CN announced that Unifor shopcraft group representing 2,100 company car mechanics, heavy-duty equipment mechanics and electricians in Canada had ratified a four-year labour agreement. A day earlier it was announced that CN's clerical/intermodal, CN Transportation Limited and excavator-operators ratified agreements with a 51-month term.

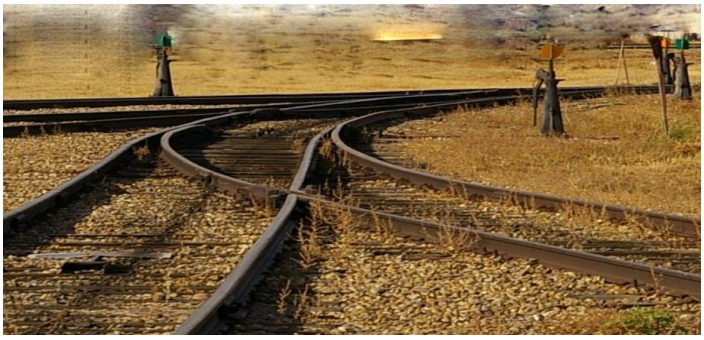
Camrose canola facility accepting deliveries - Cargill began accepting deliveries of canola at its new crushing facility in Camrose, AB on March 24, 2015. When in full production, the facility will crush up to 2,500 tonnes daily.

Minimum volume requirements not renewed: On March 28 the Transport Minister and Agriculture Minister announced that the minimum grain volume requirements for CN and CP would not be renewed. The Order in Council mandating the volumes expired that day. Initially brought into place March 7, 2014 to protect farmers and Canada's reputation as a reliable supplier, the requirements were subsequently extended twice, first in August then again in November.

Saskatchewan shortlines to share provincial funding: On March 30 the Saskatchewan Government announced that the Shortline Railway Sustainability Program will provide $900,000 in grants to the 13 shortline railways in the province for projects such as the upgrading of track, stabilizing track roadbeds and repairing bridges. The funds will come from the Saskatchewan Grain Car Corporation.

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. The data presented this month is for reference purposes.



	Q2 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	0.0%
Railway			
Route Miles - Major Carriers	15,011.5	101.2	0.0%
Route Miles - Shortline Carriers	2,588.7	55.8	0.0%
Route Miles - Total	**17,600.2**	**90.4**	**0.0%**
Average Weekly Hopper Car Fleet Size	22,208	n/a	-2.5%
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 in the GHTS infrastructure in the first six months of 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. 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 decreased 2.5% since the beginning of this crop year.

Producer Cars

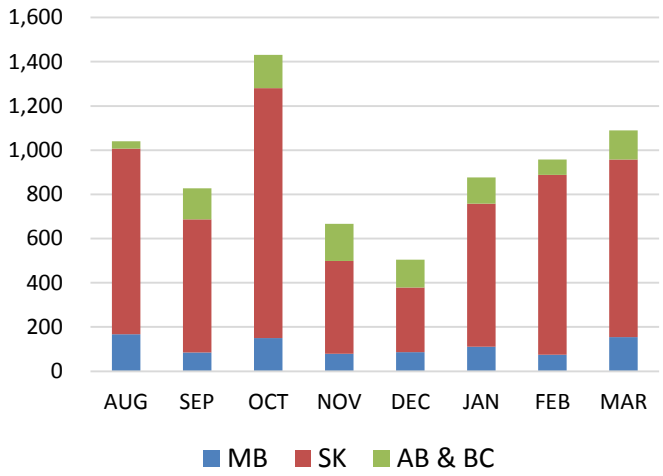
The primary producer impact measure in the GMP is the Producer Netback. The Netback and accompanying Export Basis are calculated on an annual basis and will be included in the Annual Report. The GMP also monitors elements of producer car infrastructure and movement.

Producer Car Loading Sites	Q2 2014-15	Index (1999=100)	% Change YTD
Class 1 Carriers	196	30.4	-7.1%
Shortline Carriers	135	207.7	0.0%
All Carriers	**331**	**46.7**	**-4.3%**

Class 1 carriers eliminated 15 producer loading sites in the first quarter of this crop year (CN 9, CP 6), further reducing the total number of available loading locations to 331.

Producer Cars Scheduled	MAR 2015	MAR YTD	Var. from Last YTD
Manitoba	154	907	-24.2%
Saskatchewan	803	5,546	-35.4%
Alberta & B.C.	133	940	-59.9%
Total	**1,090**	**7,393**	**-39.0%**

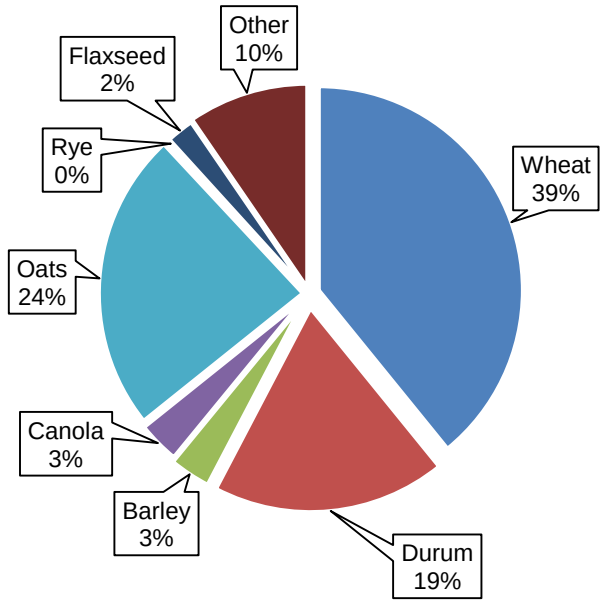
Producer Cars Scheduled by Province



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 mode.

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: www.grainmonitor.ca

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

Quorum Corporation
Suite 701, 9707 – 110 Street
Edmonton, AB T5K 2L9

Phone: (780) 447–2111
Email: info@quorumcorp.net
Web: www.grainmonitor.ca