Second Quarter Report

2013-2014 Crop Year

Monitoring the Canadian Grain Handling and Transportation System

Government of Canada / Gouvernement du Canada

Quorum Corporation

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Additional copies of this report may be downloaded from the Quorum Corporation website.

Foreword

The following report details the performance of Canada's Grain Handling and Transportation System (GHTS) for the six months ended 31 January 2014, and focuses on the various events, issues and trends manifest in the movement of Western Canadian grain during the first half of the 2013-14 crop year.

As with the Monitor's previous quarterly and annual reports, the report that follows is structured around a number of measurement indicators. The close of the 2009-10 crop year saw the traditional five-group subdivision of these indicators changed, with their reorganization into a new six-group series, comprising:

Series 1 – Production and Supply
Series 2 – Traffic and Movement
Series 3 – Infrastructure
Series 4 – Commercial Relations
Series 5 – System Efficiency and Performance
Series 6 – Producer Impact

As in the past, each series builds on data collected by the Monitor from the industry's various stakeholders, and frames the discussion using year-over-year comparisons. To that end, activity in the 2013-14 crop year is largely gauged against that of the 2012-13 crop year. But the Grain Monitoring Program (GMP) was also intended to frame recent activity against the backdrop of a longer time series. Beginning with the 1999-2000 crop year – referred to as the GMP's "base" year – the Monitor has now assembled relatable quarterly data in a time series that extends through 15 crop years. This data constitutes the backbone of the GMP, and is used widely to identify significant trends and changes in GHTS performance.

Although the data tables presented in Appendix 4 of this report can only depict a portion of this time series, the full series can be obtained as an .XLSX spreadsheet from the Monitor's website (www.quorumcorp.net). Additional .PDF copies of this report, as well as all past reports, can also be downloaded from the Monitor's website.

QUORUM CORPORATION
Edmonton, Alberta

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Executive Summary

PRODUCTION AND SUPPLY

The 2013-14 crop year witnessed a record harvest, with western Canadian grain production increasing to 75.9 million tonnes. Not only did this mark a 33.4% gain over the previous crop year's 56.9-million-tonne crop, it also stood substantially above the previous GMP high of 60.4 million tonnes set just five years earlier. This unprecedented level of production was largely shaped by favourable weather conditions throughout the growing season, which allowed the crop to not only mature with minimal stress, but to also attain a good level of quality. When combined with 4.9 million tonnes of carry-forward stocks, the grain supply grew to an unprecedented 80.8 million tonnes. This embodied a 29.1% increase over the previous crop year's 62.6 million tonnes. The sheer size of the crop presented a number of challenges for the GHTS as a whole, not the least of which was its ability to effectively and efficiently provide for its movement.

TRAFFIC AND MOVEMENT

Despite the large increase in the grain supply, the Grain Handling and Transportation System's (GHTS) total handlings declined in the first half of the 2013-14 crop year.

- Country elevator throughput, as gauged by all road and rail shipments from the primary elevators situated across western Canada, decreased by 0.6%, to 18.6 million tonnes from 18.7 million tonnes a year earlier. This result was largely shaped by reduced shipments from Alberta, which fell by 9.9%; and British Columbia, 24.7%. Increased shipments from Saskatchewan and Manitoba, which rose by 4.5% and 7.3% respectively, helped to partially offset these losses.

- The amount of grain moved by rail to western Canadian ports decreased by 3.7%, falling to 15.9 million tonnes from 16.5 million tonnes a year earlier. As in past years, the vast majority of this traffic, some 15.4 million tonnes, moved in covered hopper cars. The remaining 552,200 tonnes moved in a combination of boxcars and containers for bulk and bagged grain shipments, as well as tankcars for export canola oil.

- The port of Vancouver remained the principal export destination for western Canadian grain, although covered-hopper-car shipments decreased by 1.0%, to 9.1 million tonnes, from 9.2 million tonnes. Prince Rupert also posted a decrease, with volume falling by 2.4%, but effectively remaining unchanged at 2.6 million tonnes. With a 14.5% decline in volume, Thunder Bay reported the steepest traffic reduction, with total tonnage falling to 3.2 million tonnes from 3.7 million tonnes. Shipments to Churchill, which increased by 29.6%, to 534,200 tonnes from 412,400 tonnes, helped to counter some of these losses.

- Port throughput, as measured by the volume of grain shipped from terminal elevator and bulk loading facilities located at Canada's four western ports, fell by 10.0%, to 13.5 million tonnes from 14.9 million tonnes a year earlier. Vancouver accounted for 55.1% of this volume, with total marine shipments decreasing by 11.3%, to 7.4 million tonnes from 8.4 million tonnes. Prince Rupert saw a 12.9% reduction, with shipments falling to 2.2 million tonnes from 2.5 million tonnes a year earlier. Thunder Bay witnessed a 12.1% decrease in volume, with throughput falling to 3.2 million tonnes from 3.6 million tonnes. Churchill reported a 50.5% increase in its handlings, which rose to 636,000 tonnes from 422,600 tonnes.

INFRASTRUCTURE

The infrastructure that defines the GHTS in western Canada has undergone significant change since the beginning of the GMP. Much of this reflects the rationalization of the country elevator network, which saw significant transformation in the first years of the Grain Monitoring Program (GMP). Even so, the evolution continues, with the following changes being noted in the first six months of the 2013-14 crop year.

- The total number of country elevators decreased by 1.3%, to 386 from 391 at the close of the previous crop year. This brought the accumulated loss since the beginning of the GMP to 618 facilities, or 61.6%. Much the same was true of the network's grain delivery points, which decreased by 0.7%, to 272 from 274. This was complemented by 25,700 tonnes of added storage capacity, with the overall total being raised to slightly under 6.9 million tonnes; a value not far removed from that benchmarked in the GMP's base year.

- The western Canadian railway network stood unchanged during the first half of the 2013-14 crop year, encompassing some 17,600.2 route-miles. Although this denotes a reduction of 9.6% from the 19,468.2 route-miles in place at the beginning of the GMP, the decline remains less than that of the elevator system it serves. There was also a shift in the balance between the Class 1 and non-Class-1 carriers as a result of the failure of the Kelowna Pacific Railway. This served to increase the infrastructure under Class 1 management to 15,011.5 route-miles, or 85.3%, and reduce that under the non-Class-1 carriers to 2,588.7 route-miles, or 14.7%.

- The first half of the 2013-14 crop year brought still more changes to the composition of the licensed terminal elevator network at Thunder Bay. The first involved the relicensing of the 231,030-tonne facility acquired by Richardson International from Viterra in May 2013. The second involved an agreement between Parrish and Heimbecker Limited and Cargill Limited to jointly operate the latter's existing facility. These effectively left Thunder Bay with 40.0% of the system's facilities and 47.7% of its storage capacity. Vancouver, which held the first-place ranking with seven facilities, saw its share of the network's storage capacity fall to 37.7%. Prince Rupert and Churchill both followed with one terminal elevator each, and storage capacity shares that fell to 8.7% and 5.8% respectively.

COMMERCIAL RELATIONS

The first six months of the 2013-14 crop year brought modest change to the cost of many of the commercial services used to move grain through the GHTS.

- While oil prices remained volatile, the commercial trucking rates associated with moving grain varied little through the first half of the 2013-14 crop year. As a result, the composite price index for short-haul trucking remained unchanged at 162.2.

- Single-car railway freight rates saw a mix of increases and decreases in the first quarter but were followed by reductions in the second. Once again, these varied according to the corridor and carrier involved. By the close of the period, westbound movements over both CN and CP lines had been reduced by 5.9%. Eastbound pricing provided more contrast, with CN reducing its rates into Thunder Bay and Churchill by 8.3% and 6.3% respectively, while CP had cut its rates into Thunder Bay by 9.9%.

- Only modest changes were noted in the per-tonne rates assessed by grain companies for a variety of primary elevator handling activities during the first half of the 2013-14 crop year. These ranged from a 1.0% decrease in the rates for storage to a 4.3% increase in those tied to elevation.

- There were only marginal changes to the rates assessed by the GHTS's terminal elevators for the receiving, elevating and loading out of grain in the first six months of the 2013-14 crop year, with the composite price index rising by just 0.4%, to 150.0 from 149.4. Storage-charge increases for the period proved equally marginal, also increasing by 0.4%, with the composite price index rising to 180.1 from 179.4.

Commercial Developments

Although the quantity and quality of the crop has always been a key factor in shaping the commercial activities surrounding the movement of grain, the sheer size of the crop harvested in the fall of 2013 was the dominant issue, and spotlighted renewed concerns over the inherent weaknesses of the existing supply chain.

- Western Canadian farmers began harvesting a crop of unprecedented size in August 2013. Even so, few within the grain industry could have anticipated that production would stand a full 25% above the previous record of 60.4 million tonnes. As the final estimate began to crystallize, the industry began to confront the realities attached to the marketing of a 75.9-million-tonne crop. But foremost among the growing list of concerns was the fear that the GHTS would be incapable of adequately providing for its movement. In fact, the majority of stakeholders hoped that the system would have sufficient capacity to handle a sizeable portion of the added production, thereby avoiding the buildup of an unwieldy level of carry-out stocks at year end. As the scope of the challenge confronting the industry became apparent the system quickly became inundated with grain. On-farm inventories were soon bulging with an unanticipated excess. Moreover, as elevator deliveries grew, the problem began to spread. Before long the country elevator system was beginning to congest, with many facilities forced to turn away producers for the

simple lack of space. Central to the timely processing of any elevator's grain was the carrying capacity provided to it by the railways; without an adequate supply of railcars the system would soon became backlogged. By mid September 2013 the demand for carrying capacity in the country was outpacing what was being supplied by a factor of 10%, leaving the equivalent of about 1,000 carloads of traffic going unmoved each week.[1] The effects of this were also beginning to spread, with terminal elevator stocks declining by as much as 20% from what had been observed during the same period a year earlier. More importantly, the number of vessels waiting to load at port had begun to climb. For its part, the carrying capacity supplied by the railways proved roughly equivalent to that supplied during the same period a year earlier. The situation was made all the worse given the urgency to sell grain in a market already characterized by declining prices. The pressure exerted by farmers trying to effect delivery sooner rather than later only compounded the system's growing problem with congestion. The situation was made no better when a CN freight train derailed near Gainford, Alberta, in mid October 2013, closing the carrier's principle artery to the west coast for four days. With the onset of winter, and more particularly during a five week stretch of record-setting cold in Manitoba and eastern Saskatchewan, the fluidity of railway operations was undermined still further. By the close of the second quarter country elevators stocks had risen to 3.7 million tonnes; uncommitted railcar orders had increased to over 50,000; and the number of ships waiting to load at west-coast ports had topped 40. As these problems grew so too did the rancour of shippers and farmers. By mid January 2014 their displeasure with railway service was beginning to register with the federal government. In response, the Minister of Agriculture and Agri-food convened an urgent meeting of stakeholders in Winnipeg to discuss the situation and press the railways for immediate corrective action. By the close of the month, however, the railways had still not presented a plan.

- In October 2012 the federal government moved to implement a number of its budgetary measures with the introduction of Bill C-45, the *Jobs and Growth Act, 2012*, in the House of Commons. The bill, which received Royal Assent on 14 December 2012, also included revisions to the *Canada Grain Act*. These amendments marked the first substantive changes to the Act in more than forty years, and were aimed at modernizing and streamlining the operations of the Canadian Grain Commission (CGC), eliminating any unnecessary or redundant services, and reducing the regulatory burden on the grain industry. Among the more noteworthy revisions to the *Canada Grain Act* was the transfer of responsibility for inward weighing and inspection at terminal elevators from the CGC to the private sector. Although the CGC would no longer be the primary source of this data, the Act affirmed its oversight role in collecting this fundamental information regarding terminal elevator operations. To this end, the CGC convened an industry working group to develop the standards and information-gathering protocols that would be used in the future. This ultimately evolved into what the CGC called its Licensed Terminal Elevator Reporting Requirements, which was distributed to the industry in June 2013. The transfer of this responsibility, which resulted in terminal-elevator staff collecting and reporting on data previously collected by the CGC, led to various teething pains in the first quarter of the 2013-14 crop year. Regular users of the Monitor's reports need to be mindful that these changes in the approach to data collection had inevitable

1 The number of railcars ordered serves as a proxy for the overall demand for carrying capacity. Those subsequently confirmed by the carriers (i.e., for which the carrier designates that a railcar will be supplied) serves as a stand-in for the available supply of carrying capacity. With an estimated 90% confirmation rate, approximately 10% of the orders placed proved to be beyond the servicing ability of the railways. These unconfirmed orders effectively denote a pent up, or unfilled, demand for railway carrying capacity.

consequences for the measures assembled for terminal-elevator operations. While the data provided by the terminal-elevators is equivalent to that previously collected by the CGC, it is gathered by a variety of companies with equally diverse approaches to data collection. This, along with other changes in the data reporting, makes some direct comparisons with previously collected data under the GMP difficult.

- On 26 November 2013 CWB – formerly the Canadian Wheat Board – announced that it had reached an agreement to purchase the grain handling and port terminal assets of Soumat Inc., a division of Toronto-based Upper Lakes Group Inc. This marked the company's first material acquisition since the federal government removed its monopoly over the sale of wheat and barley, and directed its reorganization in 2012. In specific terms, the acquisition encompassed three commercial entities: Mission Terminal Inc., Les Élévateurs des Trois-Rivières Ltée, and Services Maritimes Laviolette Inc. These commercial concerns would provide CWB with port facilities in Thunder Bay, Ontario, and Trois-Rivières, Quebec, along with a dock-services business in Trois-Rivières. This transaction denoted an important step in the process of transitioning itself into a private business. In strategic terms, the acquisition provided for a vertical integration of the company, bolstering its east-coast presence as well as its ability to service offshore customers. In equal measure, it also allowed CWB to cement its long-standing relationships with all three companies, as well as the producer-car shippers integral to their operations. But this acquisition, which was finalized in late December 2013, soon appeared as a mere starting point for the development of an even larger network of strategic grain-handling assets for CWB-marketed grain. In January 2014 the company announced that it had bought a minority share in Prairie West Terminal (PWT), a farmer-owned grain handler shipping over 420,000 tonnes annually from five facilities in western Saskatchewan. Moreover, CWB officials soon let it be known that they were also in discussions with other parties for the acquisition of, or an equity interest in, still other facilities. Despite this effort to develop its own asset base, there appeared little indication that CWB had any immediate plans to dispense with the grain-handling agreements that it had established with various grain companies in 2012. In fact, CWB signalled that it fully intended to maintain these agreements while building its own facility network.

SYSTEM EFFICIENCY AND PERFORMANCE

With the grain supply having risen to a record-breaking 80.8 million tonnes, the demand pressures brought to bear on the GHTS proved to be unprecedented. Even so, the GHTS moved to meet the challenge as best it could.

- The overall amount of time involved in moving grain through the supply chain rose sharply in the second quarter, lifting the year-to-date average to 46.6 days, 2.6% higher than the previous crop year's overall 46.2-day average. This was largely shaped by a 3.9-day increase in the amount of time spent by grain in storage at a country elevator, which rose to an average of 30.4 days from the previous crop year's 26.5-day average. This was partially countered by a 0.1-day reduction in the railways' loaded transit time, which fell to an average of 5.3 days from 5.4 days. Adding to this was a more substantive 3.4-day reduction in the amount of time grain spent in inventory at a terminal elevator.

- Despite the fact that the first quarter's "time-in-the-system" average ranked among the lowest reported during the GMP, by the close of the period there were already indications that this was unlikely to endure. These indications, which first began to manifest themselves in a shortage of railcars for loading in the country, were soon beginning to engulf other parts of the system. Burgeoning country elevator stocks, along with declining terminal elevator stocks and an increasing number of ships waiting to load, particularly at the ports of Vancouver and Prince Rupert, were all symptomatic of constrained handling capacity. The problems that beset the GHTS in the first quarter only increased in the second. The movement of grain was further undermined by the onset of winter and the various problems that extreme weather brought to railway operations, the most predominant being the necessity of moving to shorter trains lengths, which reduces the overall carrying capacity of the railways. These difficulties again exposed the vulnerabilities of the grain supply chain. Beyond the system's inability to accommodate the unprecedented size of the current crop, it also had difficulty in matching the performance exhibited in previous crop years. Moreover, the difficulty associated with gathering grain in the country, moving it to port by rail, and getting it loaded onto waiting ships, suggests a capacity deficiency arising from an inadequate supply of railway resources.

PRODUCER IMPACT

All of the data assembled since the beginning of the GMP has consistently shown that the financial returns arising to producers have been heavily influenced by the prevailing price of grain. While the export basis has unquestionably risen over time, it is the prevailing price of the commodity that continues to have the most sway over these returns. The GMP only includes the producer netback in the Monitor's annual reports since certain elements integral to the calculation are not available until after the close of the crop year itself. Nevertheless, relevant pricing and handling-cost data is collected for both wheat and canola as a means of providing some insight into their probable impact on the per-tonne financial return arising to producers. Some of the changes observed during the first six months of the 2013-14 crop year are summarized below.

- After undulating marginally in the opening months of the 2013-14 crop year, the export quotation for 1 CWRS wheat (13.5% protein) drifted down to an average of $317.50 per tonne by the close of the second quarter. Comparatively, this proved to be 3.4% below the 2012-13 crop year's average of $328.76 per tonne. The early price decline reflected an increase in international supplies, with global wheat production anticipated to reach near-record highs. This erosion suggested that the financial returns accruing to producers will likely decline modestly in the 2013-14 crop year.

- Canola saw a sharper price decline in the first six months of the crop year than did wheat, with the Vancouver cash price for 1 Canada canola slipping to $457.56 per tonne from the period's opening $542.35 per tonne value. With the close of the period, the average price of $503.03 per tonne stood 22.8% below the previous crop year's final average of $651.60 per tonne. Much of this decline was tied to an expected increase in oilseed supplies, which was being fed by bountiful soybean harvests in the United States and Brazil. The scope of this reduction suggests that producers are likely to see a significant decline in their per-tonne financial returns for the 2013-14 crop year.

Producer-car loading has increased substantially since the beginning of the GMP. This has come about as a result of many factors, not the least of which has been the formation of producer-car loading groups. Some of the more significant changes observed in the first half of the 2013-14 crop year are noted below.

- The number of producer-car loading sites situated throughout western Canada has been reduced by almost half since the beginning of the GMP, with only 362 of the original 709 left in service at the close of the 2012-13 crop year. The first six months of the 2013-14 crop year saw another 17 closures by CN and CP. As a result, the number of sites operated by the major railways fell to 211 while those tied to the shortlines remained unchanged at 134.

- Producer-car shipments rose by 45.3% in the first six months of the crop year, climbing to a record 6,864 carloads from 4,723 carloads in the same period a year earlier. This represented 4.0% of all covered hopper car movements, and a significant gain over the 2.7% share garnered twelve months before. Equally noteworthy was the continuing shift in the mix of commodities handled. Until the 2009-10 crop year, wheat, durum and barley was dominant, representing virtually all of traffic moved. The first half saw this share decline still further, to 68.6% from 82.4% in the same period a year earlier. On the other hand, shipments of oilseeds and other commodities continued its ascendancy, encompassing 31.4% of total producer-car movements against 17.6% the year previous.

Section 1: Production and Supply

Indicator Description	Table	1999-00	2011-12	2012-13	2013-14 Q1	Q2	Q3	Q4	YTD	% VAR
Production and Supply										
Crop Production (000 tonnes)	1A-1	55,141.7	53,543.9	56,882.1	75,897.3				75,897.3	33.4%
Carry Forward Stock (000 tonnes)	1A-2	7,418.2	8,627.9	5,733.5	4,909.9				4,909.9	-14.4%
Grain Supply (000 tonnes)		62,559.9	62,171.8	62,615.6	80,807.2				80,807.2	29.1%
Crop Production (000 tonnes) – Special Crops	1A-3	3,936.7	4,474.6	5,551.8	6,347.3				6,347.3	14.3%

PRODUCTION AND SUPPLY

The 2013-14 crop year witnessed a record harvest, with western Canadian grain production increasing to 75.9 million tonnes. Not only did this mark a 33.4% gain over the previous crop year's 56.9-million-tonne crop, it also stood substantially above the previous GMP high of 60.4 million tonnes set just five years earlier. This unprecedented level of production was largely shaped by favourable weather conditions throughout the growing season, which allowed the crop to not only mature with minimal stress, but to also attain a good level of quality. [Table 1A-1]

The sheer size of the crop presented a number of challenges for the GHTS as a whole, not the least of which was its ability to effectively and efficiently provide for its movement. Against these concerns was a broader backdrop that featured an increase in global grain production, which led to surplus supplies and declining market prices.

Provincial Distribution

The overall increase in prairie grain production was reflective of an expansion that reached across all provinces. Nowhere was this more evident than in Saskatchewan, which accounted for just over half of the crop and saw output rise by 40.4%, to a record 38.4 million tonnes from 27.4 million tonnes a year earlier. The establishment of a new production record proved to be equally true for the other provinces as well. Alberta, which posted the next largest harvest, reaped 25.1 million tonnes against 20.0 million tonnes the previous crop year. Manitoba, with a gain of 28.6%, saw its production rise to 11.9 million tonnes from 9.3 million tonnes. Adding to this profusion was a 130,100-tonne increase for British Columbia, where production rose by 45.9%, to 413,300 tonnes from 283,200 tonnes.

Figure 1: Precipitation Compared to Historical Distribution (1 April to 31 August 2013)

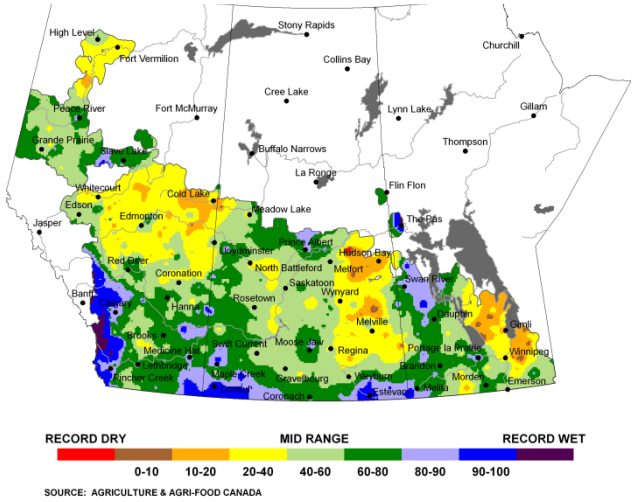
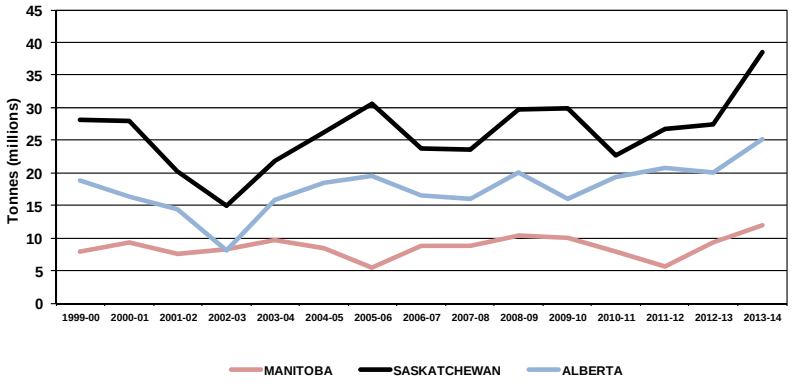


Figure 2: Provincial Grain Production



Commodity Distribution

The 2013 growing season saw substantive increases in the production of virtually all crops. The most significant gain was made by wheat, durum and barley, which collectively rose by 37.0% against a 28.7% increase in the output of oilseeds and other commodities. With total wheat, durum and barley production rising to 44.7 million tonnes from 32.6 million tonnes a year earlier, this sector accounted for 58.8% of total grain production. Oilseeds and other commodities rose to 31.2 million tonnes from 24.3 million tonnes, and represented 41.2% of the total output.

The 12.1-million-tonne increase in wheat, durum and barley production was led by a 38.7% increase in the amount of wheat harvested, which rose to 28.4 million tonnes from 20.5 million tonnes a year earlier. This was augmented by the effects of a 30.2% increase in barley production, which saw output rise to 9.7 million tonnes from 7.5 million tonnes the previous year. A 40.6% increase for durum saw production rise to 6.5 million tonnes from 4.6 million tonnes.

With almost 17.9 million tonnes of production, canola accounted for 57.2% of the 31.2 million tonnes of oilseeds and other commodities harvested in the 2013-14 crop year. Moreover, this denoted a 4.1-million-tonne increase over the 13.8 million tonnes of canola produced a year earlier. This gain was bolstered by a 1.1-million-tonne increase in oat production, which rose to 3.6 million tonnes from 2.5 million the year previous. A further 1.7 million tonnes was derived from increases in other commodities, chiefly dry peas, soybeans and grain corn.

Special Crops

Along with the increased production of oilseeds and other commodities was a heighted output for special crops.[2] Total production for the sector

2 For the purposes of the GMP, special crops are defined as including the following: dry peas; lentils; mustard seed; canary seed; chickpeas; dry beans; sunflower seed; safflower seed; buckwheat; and fababeans. An often referenced subset of special crops, known as pulse crops, encompasses dry peas, lentils, chickpeas, dry beans and fababeans.

Figure 3: Grain Production – Major Commodity Groupings

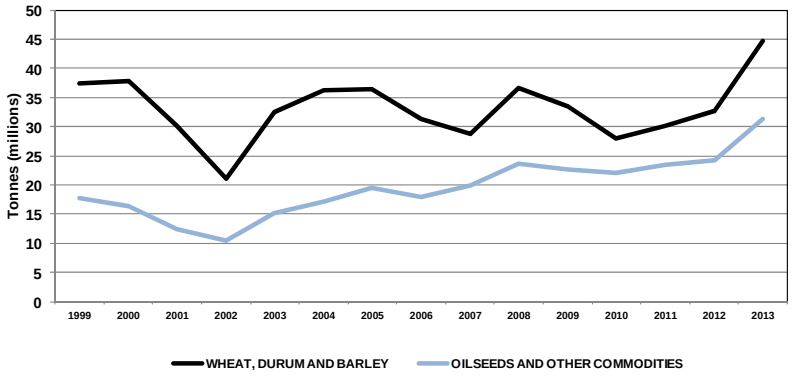
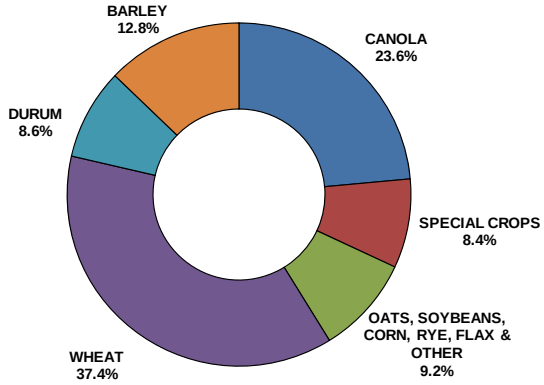


Figure 4: Major Grain Production – 2013-14 Crop Year



amounted to slightly more than 6.3 million tonnes, up 14.3% from the 5.6 million tonnes reported a year earlier. This gain was heavily influenced by a 508,500 increase in dry pea production – the sector's largest single crop – which rose to 3.8 million tonnes from 3.3 million tonnes a year earlier. This was augmented by a 342,600 rise in the output of lentils, and supplemented by lesser tonnage increases for mustard seed and chickpeas. Detracting marginally from these gains were reductions in the production of canary seed, dry beans and sunflower seed. [Table 1A-3]

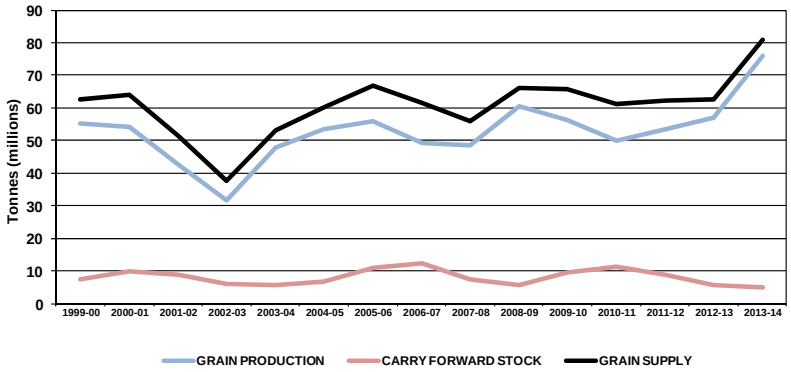
Carry-Forward Stock and Western Canadian Grain Supply

While grain production has the most immediate impact on the grain supply, it is also affected by the amount of grain held over in inventory from the previous crop year. In fact, carry-forward stocks typically account for about one-sixth of the overall grain supply.[3] These stocks tend to move in conjunction with changes in grain production, albeit on a lagging basis.

Totalling some 4.9 million tonnes, these stocks proved to be 14.4% less than the 5.7 million tonnes that had been carried forward a year earlier. Much of the impetus for this 823,600-tonne reduction came from the strong demand for Canadian export grain, which drew down year-end stocks. When combined with 75.9 million tonnes of new production, the grain supply grew to an unprecedented 80.8 million tonnes. This embodied a 29.1% increase over the previous crop year's 62.6 million tonnes. [Table 1A-2]

With a 639,500-tonne reduction in carry-forward stocks, Alberta posted the most substantive decline. This was followed by Saskatchewan, with a 113,100-tonne drop, along with decreases of 44,700 for British Columbia and 26,300 tonnes for Manitoba. With the exception of wheat, canola and rye, the carry-over for all major grain stocks moved sharply lower.

Figure 5: Western Canadian Grain Supply



3 Carry-forward stocks are defined as inventories on hand, be it on farms or at primary elevators, at the close of any given crop year (i.e., 31 July). As such, they are also deemed to be the stocks on hand as the new crop year begins (i.e., 1 August). The carry-forward stocks cited here are derived from data provided by Statistics Canada and the Canadian Grain Commission.

Section 2: Traffic and Movement

Indicator Description	Table	1999-00	2011-12	2012-13	2013-14 Q1	Q2	Q3	Q4	YTD	% VAR
Country Elevator Throughput										
Grain Throughput (000 tonnes) – Primary Elevators	2A-1	32,493.9	35,338.7	34,278.7	9,812.1	8,812.0	-	-	18,624.1	-0.6%
Railway Traffic										
Railway Shipments (000 tonnes) – All Grains	2B-1	26,439.2	29,291.0	29,606.8	8,482.3	7,467.6	-	-	15,949.9	-3.7%
Railway Shipments (000 tonnes) – Hopper Cars	2B-1	25,664.6	28,182.0	28,422.5	8,248.1	7,149.5	-	-	15,397.7	-3.6%
Railway Shipments (000 tonnes) – Non-Hopper Cars	2B-1	774.7	1,109.0	1,184.2	234.2	318.1	-	-	552.2	-6.4%
Special Crop Shipments (000 tonnes) – All Grains	2B-2	2,102.9	2,641.6	3,748.4	1,346.6	771.2	-	-	2,117.7	17.9%
Special Crop Shipments (000 tonnes) – Hopper Cars	2B-2	1,844.1	2,494.6	3,551.9	1,295.6	719.2	-	-	2,014.7	17.4%
Special Crop Shipments (000 tonnes) – Non-Hopper Cars	2B-2	258.7	147.0	196.5	51.0	52.0	-	-	103.0	30.2%
Hopper Car Shipments (000 tonnes) – Origin Province	2B-3									
Hopper Car Shipments (000 tonnes) – Primary Commodities	2B-4	25,664.6	28,182.0	28,422.5	8,248.1	7,149.5	-	-	15,397.7	-3.6%
Hopper Car Shipments (000 tonnes) – Detailed Breakdown	2B-5									
Hopper Car Shipments (000 tonnes) – Grain-Dependent Network	2B-6	8,685.9	8,496.1	8,222.4	2,602.5	2,145.8	-	-	4,747.8	1.4%
Hopper Car Shipments (000 tonnes) – Non-Grain-Dependent Network	2B-6	16,978.7	19,685.9	20,200.1	5,646.2	5,003.7	-	-	10,649.9	-5.7%
Hopper Car Shipments (000 tonnes) – Class 1 Carriers	2B-7	23,573.5	27,058.4	27,331.3	7,925.3	6,910.6	-	-	14,836.0	-3.6%
Hopper Car Shipments (000 tonnes) – Non-Class-1 Carriers	2B-7	2,091.0	1,123.6	1,091.3	322.8	238.9	-	-	561.7	-3.4%
Terminal Elevator Throughput										
Grain Throughput (000 tonnes) – All Commodities	2C-1	23,555.5	26,896.9	26,922.6	6,922.6	6,528.0	-	-	13,450.6	-10.0%
Hopper Cars Unloaded (number) – All Carriers	2C-2	278,255	295,397	300,423	83,655	73,001	-	-	156,656	-10.3%
Hopper Cars Unloaded (number) – CN	2C-2	144,800	151,790	153,751	42,731	40,058	-	-	82,789	-9.1%
Hopper Cars Unloaded (number) – CP	2C-2	133,455	143,607	146,672	40,924	32,943	-	-	73,867	-11.7%

COUNTRY ELEVATOR THROUGHPUT

Country elevator throughput, as gauged by all road and rail shipments from the primary elevators situated across western Canada, decreased by 0.6% in the first six months of the 2013-14 crop year. Total shipments for the period fell to 18.6 million tonnes from 18.7 million tonnes a year earlier. Despite this 118,800-tonne reduction, it was apparent that substantially more grain was being presented for movement than could be loaded out. Moreover, with the close of the second quarter, the elevator system was so congested that farmers were being deprived of delivery opportunities.

Much of the reduction was centred in Alberta, where primary-elevator shipments fell by 676,000 tonnes, or 9.9%, to 6.1 million tonnes from 6.8 million tonnes a year earlier. An additional 56,000 tonnes was lost as a result of reduced shipments from British Columbia, which posted a 24.7% decrease, and saw shipments slip to 170,900 tonnes from 226,900 tonnes. Offsetting a substantial portion of these losses were heightened shipments from Saskatchewan and Manitoba. Saskatchewn saw the largest increase in tonnage, with a 4.5% gain lifting throughput to 9.2 million tonnes from 8.8 million tonnes a year earlier. This was supported by Manitoba, which reported a 7.3% increase, and reported total volumes rising to 3.1 million tonnes from 2.9 million tonnes. [Table 2A-1]

RAILWAY TRAFFIC

The amount of regulated grain moved by rail to western Canadian ports during the first half of the 2013-14 crop year totaled 15.9 million tonnes, down 3.7% from the 16.6 million tonnes handled in the same period a year earlier. As in past years, the vast majority of this traffic, some 15.4 million tonnes, moved in covered hopper cars. The remaining 552,200 tonnes moved in a combination of boxcars and containers for bulk and bagged grain shipments, as well as tankcars for export canola oil. These latter movements represented a comparatively small fraction of total railway shipments, with their share falling to 3.5% from 3.6% a year earlier. [Table 2B-1]

Figure 6: Primary Elevator Throughput

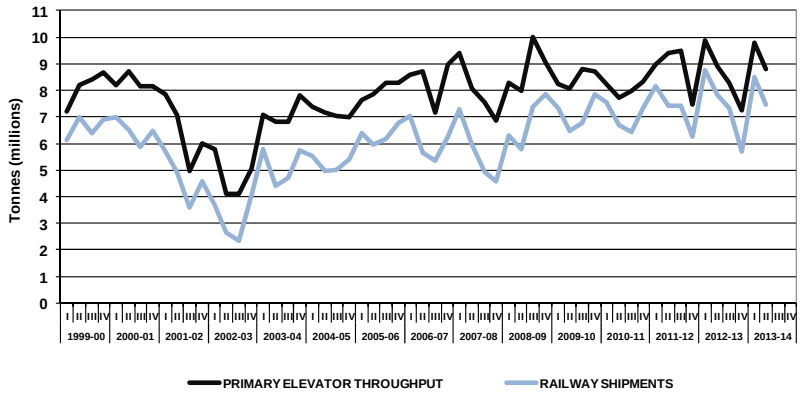
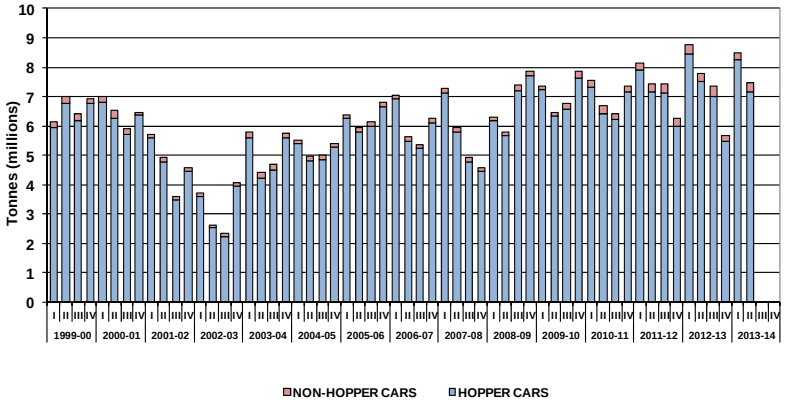


Figure 7: Railway Shipments – Hopper and Non-Hopper Cars



Compared to the grain movement in general, special-crop shipments in the first six months of the 2013-14 crop year proved particularly strong, increasing by 17.9%. This led to the setting of a new GMP record, with 2.1 million tonnes being shipped against 1.8 million tonnes a year earlier. Virtually all of this, 95.1%, moved in hopper cars, with shipments rising by 17.4%, to 2.0 million tonnes from 1.7 million tonnes. A more substantive 30.2% rise in non-hopper-car shipments (boxcars, containers and tankcars) resulted in their share of the overall movement rising to 4.9% from 4.4% a year earlier. [Table 2B-2]

Hopper Car Movements

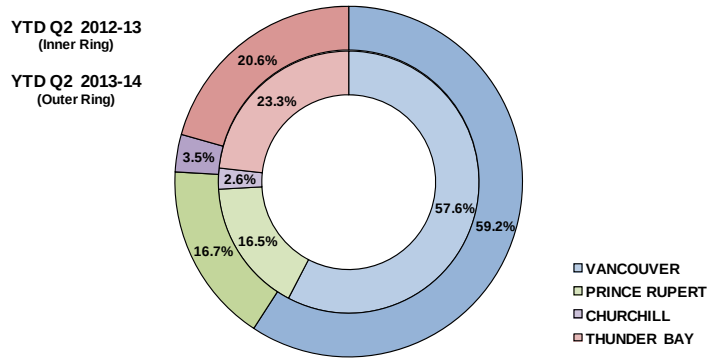
Western Canadian hopper-car shipments declined by 3.6% in the first half of the 2013-14 crop year, falling to 15.4 million tonnes from the 16.0 million tonnes handled a year earlier. This differed markedly from the previously noted increases for both grain production and the overall grain supply, which rose by 33.4% and 29.1% respectively.

This result was the product of general traffic reductions from all western provinces except Saskatchewan. Alberta saw the largest drop in tonnage, with total shipments falling by 13.9%, to 5.6 million tonnes from 6.5 million tonnes a year earlier. This was followed by Manitoba, which posted a 6.7% decrease, with shipments slumping to 1.6 million tonnes from 1.7 million tonnes. These were furthered by a 25.1% decline in traffic from British Columbia, which fell to 116,600 tonnes from 155,800 tonnes. Opposing these losses was a 6.3% increase in the amount of grain shipped from Saskatchewan, which rose to 8.1 million tonnes from 7.6 million tonnes. [Tables 2B-3 through 2B-5]

While the volume of grain directed into the GHTS is largely based on grain supply, its movement is constrained by the railways' available carrying capacity. This encompasses more than just the number of hopper cars allocated to moving grain, and ultimately reflects several other resource constraints, including the availability of motive power and crews. Equally important is the efficiency with which these resources are employed. A large portion of the volume gains witnessed since the beginning of the GMP stems from a 30% reduction in the average car cycle. A moderate contribution has also come from a 3.5% increase in payload weights, much of which has been tied to the railway industry's use of larger hopper cars and an upgrading of the government-owned fleet.[4]

Notwithstanding these efficiency gains, the railways were not prepared for the movement of so large a crop. In fact, both carriers suggested that their grain-handling capacity would differ little from that supplied in the previous 2012-13 crop year.[5] Although the grain industry accepted this limitation, the number of railcars they ordered for loading on a weekly

Figure 8: Railway Hopper Car Shipments – Destination Port



4 In 2007 the Government of Canada concluded new agreements with CN and CP for the operation of its government-owned fleet of covered hopper cars. A key provision in these agreements was the requirement that both carriers physically refurbish the cars, and raise the maximum load limit to 286,000 pounds from 263,000 pounds. Over the span of the GMP, this has helped to raise the average payload for a carload of grain by some three tonnes, to about 89 tonnes from the 86 tonnes benchmarked in the base year.

5 In meetings between various grain companies and the railways, both carriers indicated that they had anticipated volumes consistent with what had moved the previous year.

basis soon began to swell well beyond that which the railways were capable of providing. Of the 279,300 railcars ordered by shippers in the first six months of the 2013-14 crop year, the railways confirmed orders for 234,700, or about 84.0%.[6] This meant that, for the first half of the 2013-14 crop year, about 16.0% of these orders went unfilled.[7] Even so, the carriers appeared to fall about 20% short of their commitment, with 156,700 railcars having been unloaded at the four ports in western Canada against confirmed orders for 194,700 railcars.[8]

Destination Ports

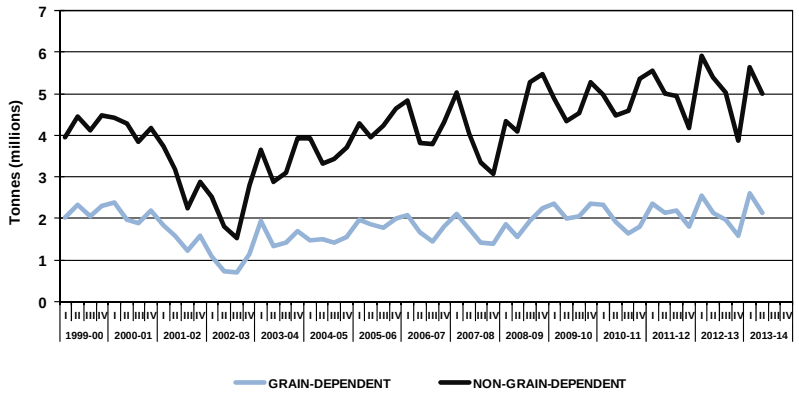
The port of Vancouver remained the principal export destination for western Canadian grain in the first six months of the 2013-14 crop year. Traffic to Vancouver decreased by 1.0%, to 9.1 million tonnes from the 9.2 million tonnes directed there a year earlier. However, the port's share of railway shipments increased, rising to 59.2% from 57.6%. Prince Rupert also posted a modest decrease, with railway shipments falling by 2.4%, but effectively remaining unchanged at 2.6 million tonnes. Even so, the port took a slightly greater share of the overall movement, which rose to 16.7% from 16.5%. On a combined basis, these two west-coast ports handled 75.9% of the grain directed to export positions, earning them a moderately greater proportion of the total grain movement than the 74.1% share they secured a year earlier.

6 A confirmed order is defined as the number of railcars the railway agrees to supply against the total number ordered by a shipper. An unconfirmed order (also known as an unfilled order) carries no such commitment, and represents the difference between the total number of railcars ordered by a shipper and those confirmed by the railway.

7 The number of railcars ordered serves as a proxy of the overall demand for railway carrying capacity. Those subsequently confirmed by the carriers (i.e., for which the carrier designates that a railcar will be allocated) serves as a stand-in for the available supply of carrying capacity. The 84% confirmation rate estimated here suggests that at least 16% of the orders placed were beyond the servicing ability of the railways. These unconfirmed orders effectively denote a pent up, or unfilled, demand for railway carrying capacity.

8 Committed orders for the four ports through the first half totaled 194,700 railcars. The actual number of railcars unloaded fell 19.5% below this value.

Figure 9: Hopper Car Shipments – Grain-Dependent Originations



This shift towards westbound grain shipments, which became particularly pronounced in the second half of the preceding crop year, saw eastbound shipments slump noticeably in the first half. In fact, total shipments into Thunder Bay and Churchill declined by 416,500 tonnes, or 10.1%. Rail deliveries into Thunder Bay fell by 14.5%, to 3.2 million tonnes from 3.7 million tonnes a year earlier. Consequently, the port's share of total railway hopper-car shipments also fell, to 20.6% from 23.3%. Providing some counterweight to this erosion was an increase in railway shipments into Churchill, which rose to 534,200 tonnes from 412,400 tonnes a year earlier. This also resulted in a traffic-share increase, which rose to 3.5% from 2.6%.

Grain-Dependent and Non-Grain-Dependent Originations

The effect of both elevator and railway rationalization continues to manifest itself in changes to the railways' traffic mix. In the first half of the 2013-14 crop year, the tonnage originated by the non-grain-dependent network decreased by 5.7%, falling to 10.6 million tonnes from 11.3 million tonnes a year earlier. At the same time, traffic originating at

points on the grain-dependent network increased by 1.4%, effectively remaining unchanged at 4.7 million tonnes.

Notwithstanding seasonal gyrations, the non-grain-dependent network continues to garner a larger share of the overall traffic volume. During the first half, 69.2% of all the grain originated in western Canada was forwarded from points on the non-grain-dependent network. This value stands marginally above the 66.2% share garnered in the GMP's base year. The reverse is of course true of the traffic originated by the grain-dependent network, whose relative share fell to 30.8% from 33.8% over the same span of time. [Table 2B-6]

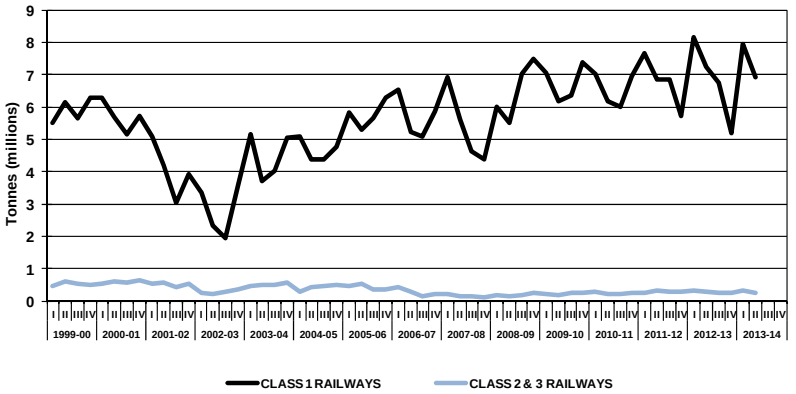
Class 1 and Non-Class-1 Originations

The same structural influences have also been reflected in the grain volumes originated by the Class 1 and non-Class-1 railways. Nominally, the tonnage originated by the Class 1 carriers decreased by 3.6% in the first six months of the 2013-14 crop year, falling to 14.8 million tonnes from 15.4 million tonnes a year earlier. At the same time, the tonnage originated by the non-Class-1 carriers fell by a slightly lesser 3.4%, to 561,700 tonnes from 581,200 tonnes. It is worth noting that the latter's performance was sustained by a particularly sharp increase in producer-car shipments during the second quarter.

Despite the emergence of several new shortline-railways in recent years, the traffic originated by non-Class 1 carriers has declined fairly significantly over the course of the GMP. During the first six months of 2013-14 crop year, their share of total originations amounted to just 3.6%, less than half of the 8.1% share benchmarked in the GMP's base year. [Table 2B-7]

Even so, the traffic originated by shortline railways has not fallen as sharply as the number of licensed elevators served by them, which were reduced by 69.5% in the same period. This is because increased producer-car loading helped to replace a significant portion of the traffic that had been lost following the closure of these elevators. In fact,

Figure 10: Hopper Car Shipments – Carrier Originations



producer-car loading has accounted for approximately two-thirds of the grain originated by these carriers in recent years. This proportion, which is about four times greater than the share producer cars garnered in the first year of the GMP, underscores that dependence.

TERMINAL ELEVATOR THROUGHPUT

Port throughput, as measured by the volume of grain shipped from the terminal elevator and bulk loading facilities located at Canada's four western ports, decreased by 10.0% in the first half of the 2013-14 crop year, falling to 13.5 million tonnes from 14.9 million tonnes in the same period a year earlier. It is worth noting that this reduction exceeded the 3.6% decline in railway hopper-car shipments by a significant margin, suggesting that the terminal elevators were forced to draw down their stocks in the face of inadequate railway deliveries. [Table 2C-1]

Reduced throughputs were noted for all ports save that of Churchill. The most significant volumes continued to funnel through the west coast

ports of Vancouver and Prince Rupert. For Vancouver, total marine shipments decreased by 11.3%, to 7.4 million tonnes from 8.4 million tonnes a year earlier. This represented 55.1% of the system's total throughput. Prince Rupert posted a greater loss, with shipments falling by 12.9%, to 2.2 million tonnes from 2.5 million tonnes. When combined, the tonnage passing through these two west coast ports represented 71.6% of the overall total, a modest decline against the 73.0% share garnered a year earlier.

Of course, the decrease posted by the west coast ports was reflected in an increase for the GHTS's other two ports. The combined share secured by the ports of Thunder Bay and Churchill in the first half of the 2013-14 crop year rose to 28.4% from 27.0% a year earlier. Much of this gain stemmed from the comparatively stronger performance of Churchill, which saw a 50.5% increase in shipments, with throughput rising to 636,000 tonnes from 422,600 tonnes. Juxtaposed against this was a 12.1% decline for Thunder Bay, with throughput falling to 3.2 million tonnes from 3.6 million tonnes.

Terminal Elevator Unloads

The number of covered hopper cars unloaded at terminal elevators in the first six months of the 2013-14 crop year decreased by 10.3%, falling to 156,656 cars from 174,718 cars a year earlier. The Canadian National Railway (CN) experienced a slightly lesser 9.1% decline, with the number of hopper cars unloaded dropping to 82,789 from 91,063 a year earlier. In comparison, the Canadian Pacific Railway's (CP) handlings decreased by a somewhat steeper 11.7%, to 73,867 cars from 83,655 cars. As a result, CN retained its standing as the largest grain handling railway in western Canada, with a share of 52.8% against 47.2% for CP. [Table 2C-2]

Although the movement of grain was largely funneled through the west coast ports of Vancouver and Prince Rupert, there were some notable shifts in the amount of grain handled by each port. Traffic destined to Vancouver fell by 9.1%, with 88,379 cars unloaded versus 97,199 cars a year earlier. Of particular interest was the relative division between CN

Figure 11: Terminal Elevator Throughput

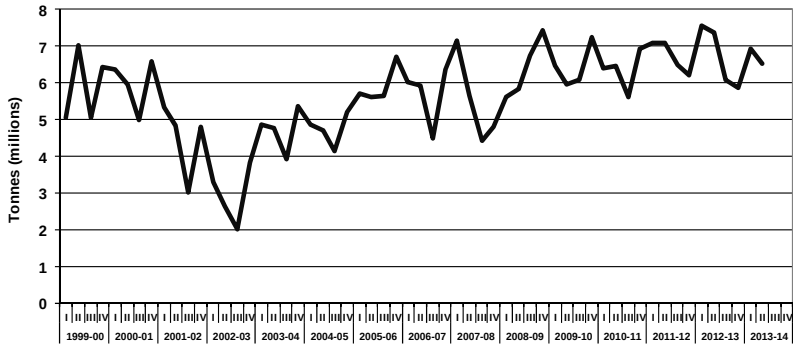
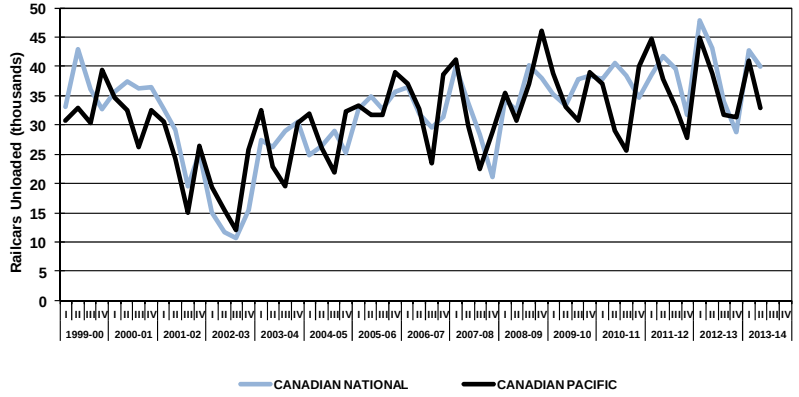


Figure 12: Terminal Elevator Unloads – Delivering Carrier



and CP, with the former carrier's handlings into the port falling by 12.8% against a 6.2% decline for CP. At the same time, CN's handlings into Prince Rupert fell by a noticeably lesser 6.3%, to 27,631 cars from 29,486 cars a year earlier.

The first half of the 2013-14 crop year also brought a significant reduction in the amount of grain shipped to Thunder Bay, with total handlings declining by 19.8%, to 34,490 cars from 42,983 cars a year earlier. CN saw its handlings into the port fall by 14.8%, unloading 12,123 cars against 14,227 cars the year previous. CP posted a more substantive decrease, with its total shipments falling to 22,367 cars from 28,756 cars. In contrast, eastbound shipments into Churchill climbed sharply, increasing by 21.9%, to 6,156 cars from 5,050 cars a year earlier.

Section 3: Infrastructure

Indicator Description	Table	1999-00	2011-12	2012-13	2013-14 Q1	Q2	Q3	Q4	YTD	% VAR
Country Elevator Infrastructure										
Delivery Points (number)	3A-1	626	271	274	272	272	-	-	272	-0.7%
Elevator Capacity (000 tonnes)	3A-1	7,443.9	6,739.7	6,851.9	6,877.6	6,877.6	-	-	6,877.6	0.4%
Elevators (number) – Province	3A-1									
Elevators (number) – Railway Class	3A-2	917	386	391	386	386	-	-	386	-1.3%
Elevators (number) – Grain Company	3A-3									
Elevators Capable of MCB Loading (number) – Province	3A-4									
Elevators Capable of MCB Loading (number) – Railway Class	3A-5	317	246	245	242	242	-	-	242	-1.2%
Elevators Capable of MCB Loading (number) – Railway Line Class	3A-6									
Elevator Closures (number)	3A-7	130	39	29	11	11	-	-	11	-62.1%
Elevator Openings (number)	3A-8	43	59	34	6	6	-	-	6	-82.4%
Delivery Points (number) – Accounting for 80% of Deliveries	3A-9	217	82	89	n/a	n/a	-	-	n/a	n/a
Railway Infrastructure										
Railway Infrastructure (route-miles) – Total Network	3B-1	19,390.1	17,830.3	17,600.2	17,600.2	17,600.2	-	-	17,600.2	0.0%
Railway Infrastructure (route-miles) – Class 1 Network	3B-1	14,503.0	15,029.0	14,907.3	15,011.5	15,011.5	-	-	15,011.5	0.7%
Railway Infrastructure (route-miles) – Non-Class-1 Network	3B-1	4,887.1	2,801.3	2,692.9	2,588.7	2,588.7	-	-	2,588.7	-3.9%
Railway Infrastructure (route-miles) – Non-Grain-Dependent Network	3B-1	14,513.5	14,245.1	14,135.6	14,135.6	14,135.6	-	-	14,135.6	0.0%
Railway Infrastructure (route-miles) – Grain-Dependent Network	3B-1	4,876.6	3,585.2	3,464.6	3,464.6	3,464.6	-	-	3,464.6	0.0%
Served Elevators (number)	3B-3	884	358	365	361	361	-	-	361	-1.1%
Served Elevators (number) – Class 1 Carriers	3B-3	797	334	340	336	336	-	-	336	-1.2%
Served Elevators (number) – Non-Class-1 Carriers	3B-3	87	24	25	25	25	-	-	25	0.0%
Served Elevators (number) – Grain-Dependent Network	3B-3	371	115	114	114	114	-	-	114	0.0%
Served Elevators (number) – Non-Grain-Dependent Network	3B-3	513	243	251	247	247	-	-	247	-1.6%
Served Elevator Capacity (000 tonnes)	3B-3	7,323.0	6,602.4	6,714.2	6,741.9	6,741.9	-	-	6,741.9	0.4%
Served Elevator Capacity (000 tonnes) – Class 1 Carriers	3B-3	6,823.2	6,428.0	6,528.1	6,555.3	6,555.3	-	-	6,555.3	0.4%
Served Elevator Capacity (000 tonnes) – Non-Class-1 Carriers	3B-3	499.7	174.4	186.2	186.6	186.6	-	-	186.6-	0.2%
Served Elevator Capacity (000 tonnes) – Grain-Dependent Network	3B-3	2,475.4	1,868.2	1,848.7	1,849.9	1,849.9	-	-	1,849.9	0.1%
Served Elevator Capacity (000 tonnes) – Non-Grain-Dependent Network	3B-3	4,847.6	4,734.2	4,865.5	4,892.1	4,892.1	-	-	4,892.1	0.5%
Terminal Elevator Infrastructure										
Terminal Elevators (number)	3C-1	15	16	15	15	15	-	-	15	0.0%
Terminal Elevator Storage Capacity (000 tonnes)	3C-1	2,678.6	2,213.8	2,213.0	2,403.2	2,403.2	-	-	2,403.2	8.6%

COUNTRY ELEVATOR INFRASTRUCTURE

At the outset of the 1999-2000 crop year, there were 1,004 licensed primary and process elevators on the prairies. By the end of the 2012-13 crop year, that number had fallen by 61.1%, to 391, making this decline one of the most visible facets of the changes brought to the GHTS since the beginning of the GMP.[9] [Table 3A-1]

The first half of the 2013-14 crop year saw little meaningful change, with the elevator network losing another five facilities. This saw the total number of elevators in western Canada fall to 386, and brought the accumulated loss since the beginning of the GMP to 618 facilities, or 61.6%. The marginal scope of the changes witnessed in recent years continues to suggest that grain-elevator rationalization has largely concluded, and that the network's overall size has effectively stabilized.

Much the same is true of the decline in grain delivery points, which have largely fallen in conjunction with the reduction in licensed elevators. By the close of the 2012-13 crop year the scope of this network had been reduced by 60.0%, to 274 delivery points from the 685 that had been in place at the beginning of the GMP. This count decreased marginally in the first half of the 2013-14 crop year, with the overall number falling by two to 272. This brought the net reduction in delivery points during the GMP to 60.3%.

Provincial Distribution

At the close of the 2013-14 crop year's first half, 196 of western Canada's licensed elevators were situated in Saskatchewan. These facilities constituted 50.8% of the system's active total; a proportion similar to that held by the province at the beginning of the GMP. This was followed by Manitoba and Alberta, whose corresponding 99 and 85 elevators accounted for shares of 25.6% and 22.0% respectively. The GHTS's

9 The reduction in licensed elevators cited here reflects the net change arising from various elevator openings and closures.

Figure 13: Licensed Grain Elevators and Delivery Points

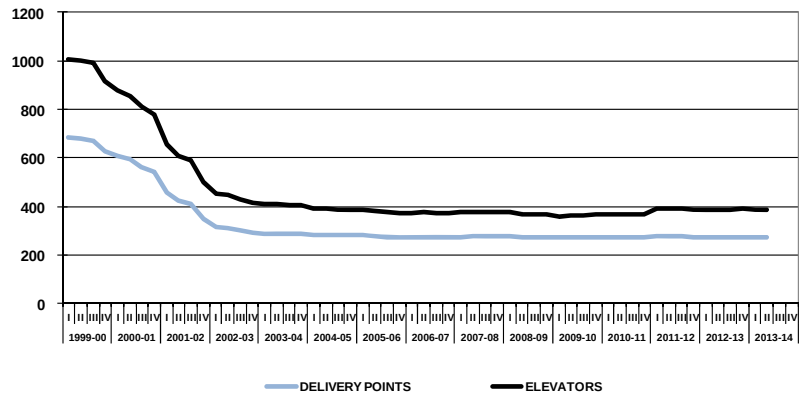
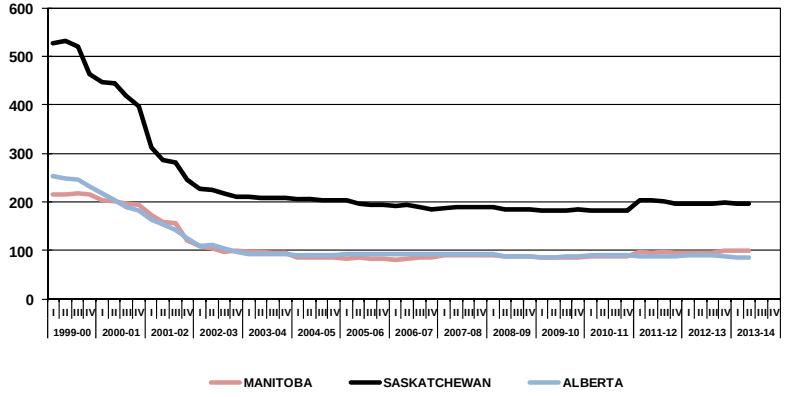


Figure 14: Licensed Grain Elevators – Provincial Distribution



remaining six facilities were divided between British Columbia, with five, and Ontario, with one.

Over the term of the GMP, Saskatchewan posted the greatest reduction in licensed elevation facilities, closing 331, or 62.8%, of its elevators. In comparative terms, the 167-elevator reduction in Alberta represented a slightly greater 66.3%. Manitoba followed with a 54.2%, or 117-elevator, reduction in its facilities. The comparable nature of these reductions indicates that elevator rationalization has been broadly based, and that the facilities of any single province have not been unduly targeted.

Elevator Storage Capacity

Despite a 61.6% decline in the overall number of elevators, the network's storage capacity stands only 2.1% below the 7.0 million tonnes recorded at the outset of the GMP. This differential reflects the character of the tactical transformation that had taken place: that the grain companies were substituting the handling capacity inherent in their existing wood-crib elevators with that provided by a lesser number of more efficient high-throughput facilities. In fact, the capacity added through their investment in these larger facilities temporarily outpaced that removed by the closure of older elevators early in the GMP, raising the system's total storage capacity to a level of almost 7.6 million tonnes. But soon the reverse became true, and by the close of the 2003-04 crop year total GHTS storage capacity had fallen by 19.0%, to reach a low of 5.7 million tonnes.

As elevator closures began to moderate, this trend was again reversed. Marked by a 157,000-tonne expansion in the 2004-05 crop year, the system's total storage capacity began to increase steadily. By the close of the 2012-13 crop year, it had risen to somewhat less than 6.9 million tonnes. The first six months of the 2013-14 crop year saw another 25,700 tonnes of storage capacity added to the system. This 0.4% gain effectively raised total storage capacity marginally closer to 6.9 million tonnes, a value not far removed from that benchmarked in the GMP's base year.

Figure 15: Change in Licensed Elevators and Storage Capacity

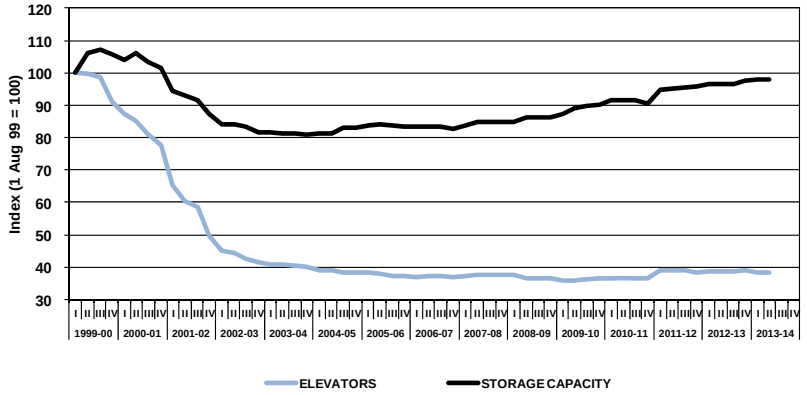
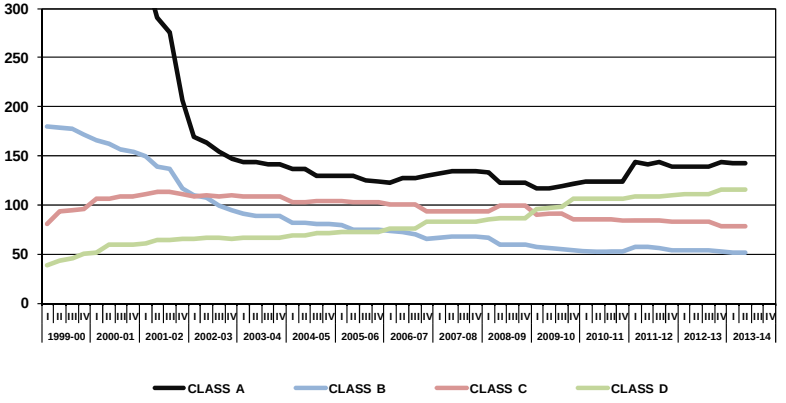


Figure 16: Licensed Elevators – Facility Class



Facility Class

For comparative purposes, the GMP groups elevators into four classes. These classes are based on the loading capability of each facility, which is in turn defined by the number of railcar spots each possesses. Those with less than 25 car spots are deemed to be Class A facilities; those with 25-49, Class B; those with 50-99, Class C; and those with 100 or more, Class D.[10] In addition, the GMP deems Class C and D facilities to be high-throughput elevators given their ability to load railcars in larger numbers.

Within this framework, the composition of the elevator network can be seen to have changed significantly since the beginning of the GMP. The most striking aspect of this has been the decline in the number of smaller elevators. Over the course of the last 15 years the number of licensed Class A elevators has been reduced by 79.9%, to 142 from 705. This was complemented by a 71.7% reduction in the number of licensed Class B elevators, which fell to 51 from 180.

Juxtaposed against this has been a fairly steady rise in the number of licensed high-throughput facilities. In the initial years of the GMP this was manifest in numerical increases for Class C as well as Class D elevators. But the physical expansion of Class C facilities has resulted in many being converted into Class D facilities. As a result, the number of Class C facilities has actually fallen below its base-year level, with a net decline of 3.7%, to 78 from 81. In comparison, the number of Class D elevators has effectively tripled, rising to 115 from 38.

These statistics illustrate that the prime target in elevator rationalization has been the conventional wood-crib facility. Of the 990 elevators closed since the beginning of the GMP, 739 related to the shutdown of Class A facilities.[11] To a large extent, this was because the economic efficiency of the high-throughput elevator had rendered these facilities obsolete. They had also been undermined by the financial incentives that the railways used to encourage grain to move in blocks of 25 or more railcars at a time. [Table 3A-7]

These same forces also disfavoured the Class B facilities, albeit not to the same degree. More particularly, even though grain movements from these facilities were eligible to receive discounted freight rates, they were not as generous as those accorded shipments from high-throughput elevators. These small-block discounts were later reduced and ultimately eliminated.[12] As a result, over the course of the GMP, a total of 160 Class B facilities also closed. Together, Class A and B facilities account for 90.8% of all recorded elevator closures.

The opportunity cost associated with being unable to ship grain in 100-car blocks also roused some grain companies into expanding the physical capacity of several Class C elevators. Since the beginning of the GMP, such expansion has resulted in the upgrading of 35 facilities, along with their ensuing reclassification as Class D facilities. This evolution has served to raise the total number of Class-C-elevator closures during this period to 59. Likewise, Class D facilities posted the smallest number of closures, with just 32 recorded.

While the emergence of independent grain operations also provided Class A and B facilities with a majority of elevators openings during this same period, 231 out of 372, the proportion accorded to them was a noticeably lower 62.1%. Compared to the 90.8% share taken in elevator closures, this lower value again underscores the shift towards the use of high-

10 The facility classes employed here mirror the thresholds delineated by Canada's major railways at the beginning of the GMP for the receipt of discounts on grain shipped in multiple-car blocks. At that time, these thresholds involved shipments of 25, 50 or 100 railcars. First introduced in 1987, these incentives were aimed at drawing significantly greater grain volumes into facilities that could provide for movement in either partial, or full, trainload lots.

11 Statistics associated with elevator closures and openings are gross measures and do not distinguish between licensed facilities that may have been closed by one operator but, as a result of its subsequent sale, later reopened by another.

12 With the commencement of the 2003-04 crop year, CN eliminated the $1.00-per-tonne discount that had been given to movements from Class B facilities since the beginning of the GMP, while CP reduced it to $0.50 per tonne. By the close of the 2005-06 crop year, CP had also eliminated its discount on movements in blocks of 25-49 cars.

throughput facilities, which accounted for 141, or 37.9% of the overall elevator openings. [Table 3A-8]

Since the close of the 2008-09 crop year, approximately half of the GTHS's elevators have been comprised of high-throughput facilities. More importantly, these facilities have claimed the lion's share of the system's storage capacity since the second year of the GMP. At the close of the first half, high-throughput facilities represented 50.0% of system elevators and 78.5% of its storage capacity, with both standing significantly above their respective base-year values of 11.9% and 39.4%.

Grain Companies

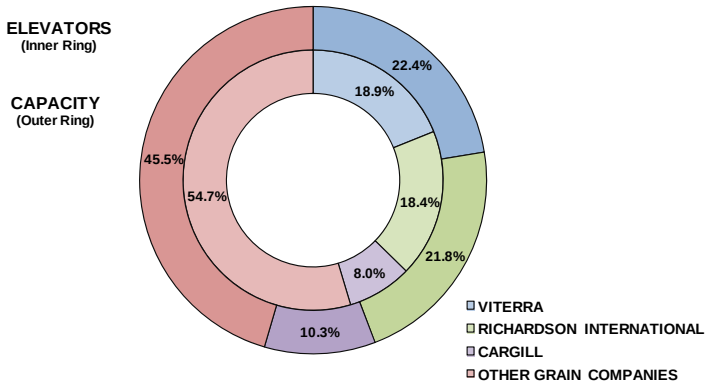
For a number of grain companies, the key to improving the economic efficiency of their grain-gathering networks has been to rationalize their elevator assets. With the cornerstone of this strategy being the replacement of smaller elevators by larger high-throughput facilities, it follows that this would better lend itself to those grain companies having large physical networks. In fact, the largest grain companies proved to be the primary practitioners of elevator rationalization.

The predecessors of today's Viterra Inc. posted what amounts to the deepest overall reduction, with a net decrease of 627 facilities, or 89.6%, through the close of the second quarter of the 2013-14 crop year.[13] The next deepest cut, 47.5%, was posted by Cargill Limited. This was followed in turn by Richardson International and Paterson Grain, which saw reductions of 32.4% and 30.0% respectively.[14] Rounding out the field was Parrish and Heimbecker, which posted a 19.2% decrease. [Table 3A-3]

13 Viterra Inc. was formed in 2007 following Saskatchewan Wheat Pool's purchase of Agricore United, which was itself the product of a merger between Agricore Cooperative Ltd. and United Grain Growers Limited in 2001. Given this heritage, Viterra Inc. is the corporate successor to the three largest grain companies in existence at the beginning of the GMP. The 627 closures cited here represent the net reduction posted by Viterra and its predecessor companies, which had a combined total of 700 elevators at the outset of the GMP.

14 In advancing its acquisition of Viterra Inc in December 2012, Glencore International PLC had agreed to a sale of Viterra's interest in 19 country and two terminal elevators to Richardson International. This asset transfer, which was finalized on 1 May 2013, effectively reduced the size differential between the two largest grain companies in western Canada. Up until Richardson International assumed control of these assets, the company had reduced the scope of its elevator network by 49.5%.

Figure 17: Licensed Elevators and Capacity – Q2 2013-14 Crop Year



Elevator closures have abated significantly since the creation of Viterra in 2007. Moreover, the total number of facilities actually began to rise after reaching a GMP low of 360 elevators in the first quarter of the 2009-10 crop year. However, much of the subsequent increase is misleading, since it largely reflects changes in the licensing requirements of the CGC rather than in the actual addition of new elevators. A number of companies, including Alliance Pulse Processors Inc., Simpson Seeds Inc. and Legumex-Walker Inc., figure prominently in this expansion since most – if not all – of their facilities had previously been unlicensed. Nevertheless, there has been a 157.1% increase in the number of elevators operated by smaller grain companies, which has climbed to 144 from 56.

Despite this numerical shift, Viterra, Richardson International and Cargill remain the dominant handlers of grain in western Canada, accounting for

approximately 75% of the annual export grain movement. This concentration is also reflected in the way grain is gathered into the system, with the vast majority of the tonnage collected at fewer than half of the GHTS's delivery points. In the 2012-13 crop year – the last for which statistics are available – 89 of the GHTS's 220 active delivery points took in 80% of the grain delivered. Although this 40.5% share is greater than the 33.5% recorded in the GMP's base year, it still suggests that deliveries remain highly concentrated within a smaller grain-gathering network. [Table 3A-9]

RAILWAY INFRASTRUCTURE

At the outset of the 1999-2000 crop year, the railway network in western Canada encompassed 19,468.2 route-miles of track. Of this, Class 1 carriers operated 76.2%, or 14,827.9 route-miles, while the smaller Class 2 and 3 carriers operated the remaining 23.8%, or 4,640.3 route-miles.[15] Although the railway network has contracted, the reduction has proven substantially less than that of the elevator system it serves. By the close of the 2012-13 crop year, the net reduction in western Canadian railway infrastructure amounted to just 9.6%, with the network's total mileage having been reduced to 17,600.2 route-miles overall. The largest share of this 1,868.0-route-mile reduction came from the abandonment of 1,490.1 route-miles of light-density, grain-dependent branch lines.[16] [Table 3B-1]

15 The classes used here to group railways are based on industry convention: Class 1 denotes major carriers such as the Canadian National Railway or the Canadian Pacific Railway; Class 2, regional railways such as the former BC Rail; and Class 3, shortline entities such as the Great Western Railway.

16 The term "grain-dependent branch line", while largely self-explanatory, denotes a legal designation under the Canada Transportation Act. Since the Act has application to federally regulated railways only, grain-dependent branch lines transferred to provincially regulated carriers lose their federal designation. This can lead to substantive differences between what might be considered the physical, and the legally-designated, grain-dependent branch line networks. For comparison purposes only, the term has been affixed to those railway lines so designated under Schedule I of the Canada Transportation Act (1996) regardless of any subsequent change in ownership or legal designation.

Figure 18: Change in Route-Miles – Railway Class

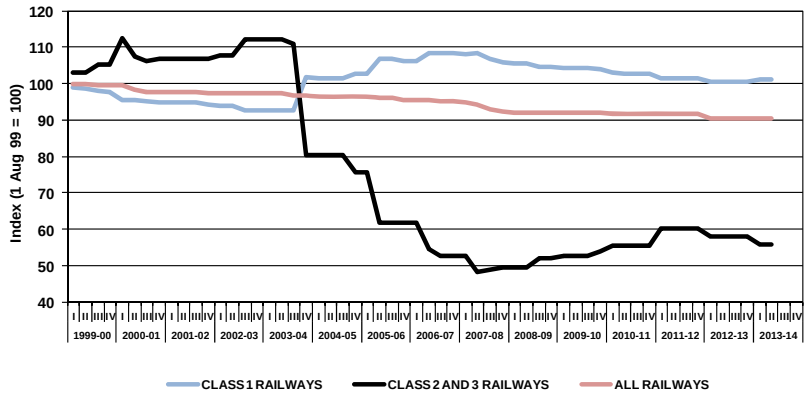
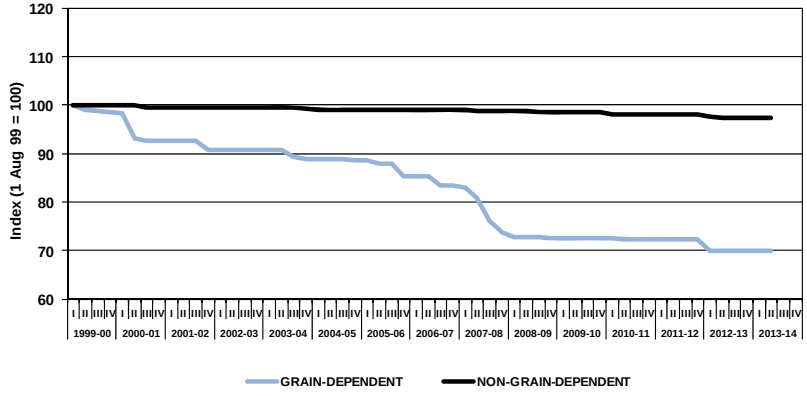


Figure 19: Change in Route-Miles – Railway Network



Notwithstanding its physical reduction, the railway network had changed in other ways as well. Much of this related to the transfer by CN and CP of various branch line operations to a host of new shortline railways. This practice, which began in the mid 1990s, was one of the cornerstones in a wider industry restructuring that resulted in slightly more than one-quarter of the railway network in western Canada being operated by smaller regional and shortline carriers.

Although a good number of these carriers proved commercially unsuccessful, ultimately bringing about either their abandonment or re-absorption into the CN and CP networks, the shortline industry has shown new signs of growth. Much of this can be traced back to the successful takeover of the Great Western Railway by a consortium of local municipal and business interests in 2004. Their model, which essentially integrated the railway's operations with local producer-car loading activity, fostered imitation. By the close of the 2012-13 crop year, an additional nine prairie shortlines had been established, effectively raising the total number of carriers to 17 with operations over 1,497.7 route-miles of track.[17]

However, the commercial fragility of the shortline industry was revealed yet again when the Kelowna Pacific Railway (KPR) went into receivership after suspending operations on 5 July 2013. The KPR, which operated over 104.2 route-miles of track leased from CN, had been suffering from the effects of a steadily eroding traffic base for several years.[18] With no grain traffic having been originated by the KPR since the inception of the GMP, there was no direct impact on the workings of the GHTS.

17 The nine shortline railways established during this period were: Torch River Rail Inc.; Boundary Trail Railway Co.; Great Sandhills Railway; Last Mountain Railway; Battle River Railway; Stewart Southern Railway; Big Sky Rail; Lake Line Railroad; and Long Creek Railroad.

18 The Kelowna Pacific Railway commenced operations in January 2000, providing rail service to customers located along two sections of track leased from CN: the 89.8-route-mile Okanagan Subdivision, which extended from Kamloops to Kelowna; and a 14.4-route-mile offshoot known as the Lumby Subdivision. Service over the KPR also employed a 14.7 route-mile section of connecting track between Armstrong and Vernon, which it jointly operated with the Okanagan Valley Railway until that carrier's suspension of operations in 2009.

Figure 20: Change in Local Elevators – Railway Class

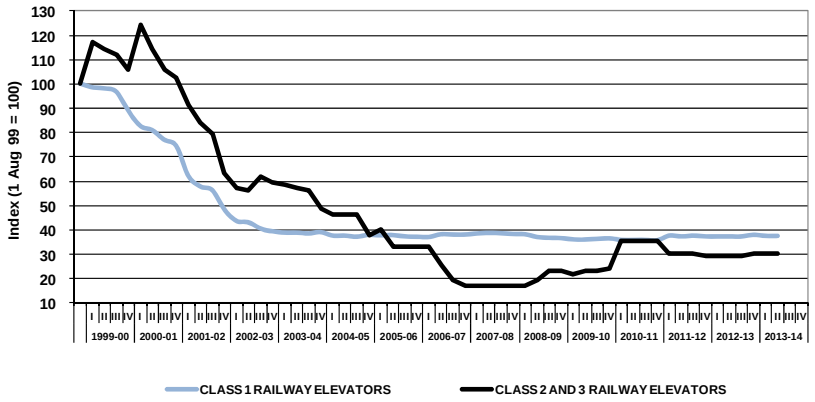
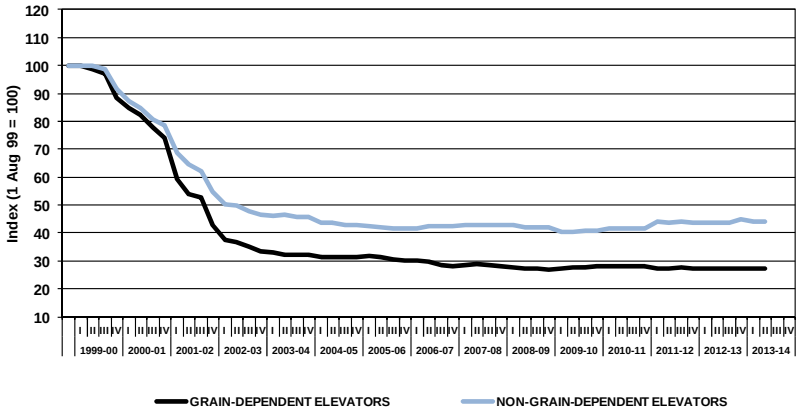


Figure 21: Change in Local Elevators – Branch Line Class



Nevertheless, much of the operation reverted back to CN control in September 2013, which moved to resume service between Kamloops and Lumby while marking the remainder for discontinuance.

These actions produced no immediate change in the scope of the railway network in western Canada during the first six months of the 2013-14 crop year, which stood at 17,600.2 route-miles. However, the Class 1 railway network increased by 0.7%, to 15,011.5 route-miles from 14,907.3 route-miles. Naturally, the infrastructure tied to non-Class-1-carrier operations decreased by a corresponding amount, falling by 3.9%, to 2,588.7 route-miles from 2,692.9 route-miles.

Local Elevators

As previously outlined, the GHTS's elevator infrastructure has been transformed more substantively over the course of the last 15 years than has the railway network that services it. In broad terms, these facilities have decreased by 63.1% in number, to 361 from 979, and by 2.8% in terms of associated storage capacity, to 6.7 million tonnes from 6.9 million tonnes.[19]

These reductions, however, manifested themselves in noticeably different ways for the Class 1 and non-Class 1 railways. Through to the end of the first half of the 2013-14 crop year the decline in the number of elevators tied to each group proved roughly analogous, 62.5% against 69.5% respectively. Yet the change in associated storage capacities was noticeably different, with a marginal increase of 1.5% for elevators local to Class 1 carriers set against a 60.9% decline for elevators local to the non-Class-1 carriers. [Table 3B-3]

These latter changes underscore the fact that the grain companies have been investing in facilities served by the major railways rather than the shortlines, situating virtually all of their high-throughput elevators on the networks belonging to CN and CP.[20]

A more telling portrayal comes from examining the change in facilities local to both the grain-dependent, and non-grain-dependent, railway networks. Elevators situated along the grain-dependent network have fallen by 72.9% since the beginning of the GMP, to 114 from 420. For those situated along the non-grain-dependent network, the decline was 55.8%, with the number of elevators having fallen to 247 from 559. The change in associated storage capacity shows an even greater contrast, with that of the grain-dependent network falling by 25.6%, to 1.8 million tonnes, while that of the non-grain-dependent network actually increased by 10.0%, to almost 4.9 million tonnes. On the whole, these patterns clearly indicate that the elevators tied to the grain-dependent railway network have diminished at a noticeably faster pace.

TERMINAL ELEVATOR INFRASTRUCTURE

The first half of the 2013-14 crop year brought additional changes to the licensed terminal elevator network which, although remaining comprised of 15 facilities, saw an 8.6% increase in storage capacity, to 2.4 million tonnes from 2.2 million tonnes. This compares to a network of 14 elevators with 2.6 million tonnes of storage capacity benchmarked in the GMP's base year.[21] [Table 3C-1]

From the outset of the GMP, Thunder Bay has been home to the majority of the GHTS's terminal-elevator assets. But the compound effects of a decade's worth of incremental change had steadily eroded its position.

19 The reductions cited here relate only to the facilities directly served by rail.

20 As at 31 January 2014 there were 192 high-throughput elevators served by rail. Of these, 184 were served by CN and CP.

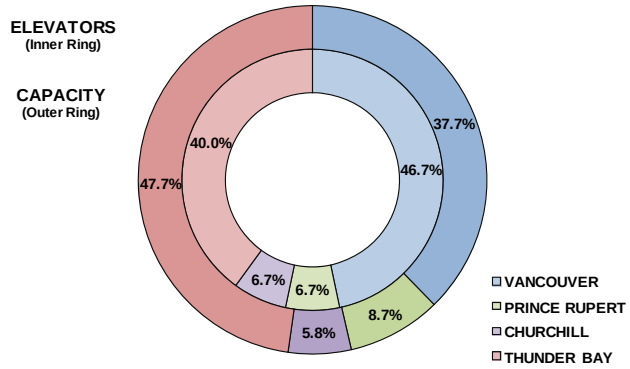
21 Beyond the change in its physical scope, the network was affected by a number of changes in terminal ownership. Much of this was tied to the various corporate mergers and acquisitions made since the beginning of the GMP. Those having the most bearing on terminal ownership came from the merger of Agricore Cooperative Ltd. and United Grain Growers Limited, which combined to form Agricore United in 2001. This entity was itself bought out by Saskatchewan Wheat Pool in 2007, which subsequently rebranded itself as Viterra Inc.

As the 2012-13 crop year neared its close, that position was weakened still further with the de-licensing of the Viterra C facility.[22] This terminal elevator, which had sat largely idle since 2001, was transferred along with other Viterra assets to Richardson International under the terms of an agreement made with Glencore International PLC in advance of the latter's takeover of Viterra in December 2012.[23] Following its necessary rehabilitation, Richardson International relicensed this facility towards the close of the first quarter, restoring its former 231,030 tonnes of storage capacity.

Concurrent with this, Cargill Limited and Parrish and Heimbecker Limited (P&H) announced that they had signed an agreement calling for the joint operation of the existing Cargill terminal in Thunder Bay. The new venture, which was licensed as Superior Elevator ULC on 1 August 2013, provided both companies with an opportunity to combine their commercial activities under one roof, thus improving efficiency and promoting cost reduction. And while P&H's 40,800-tonne was de-licensed at the same time, the company retained the right to direct commodities not handled by the new joint venture there in future.

An equally noteworthy change came at the close of December 2013 when CWB Ltd. took ownership of Mission Terminal Inc., which operated a 137,740-tonne facility in Thunder Bay. The takeover, which came as a result of the CWB's purchase of the grain handling and port terminal assets from Soumat Inc., a division of Toronto-based Upper Lakes Group Inc., marked the first significant asset purchase by the company since losing its monopoly at the beginning of the 2012-13 crop year.

Figure 22: Terminal Elevators – Q2 2013-14 Crop Year



In view of these changes, Thunder Bay remained home to six licensed terminal elevators, but its associated storage capacity increased by 19.9%, to 1.1 million tonnes. This gave the port a 40.0% share of the system's elevators and a 47.7% share of its licensed storage capacity; both down from the 50.0% shares benchmarked 15 years earlier.

Aside from Thunder Bay, there were no other changes to the makeup of the terminal elevator system in western Canada during the first six months of the 2013-14 crop year. Even so, its changes did have an impact on the relative standing accorded the other ports. Vancouver, which had seen its terminal elevators increase to seven from five over the course of the previous 15 years, now accounted for 46.7% of the system's facilities and 37.7% of its licensed storage capacity as compared to their corresponding base-year values of 35.7% and 36.3%.

22 At the time of its de-licensing, the storage capacity of the Viterra C terminal was formally listed as being only 800 tonnes. Until downgraded a year earlier, this facility had previously been licensed with 231,030 tonnes of storage capacity.

23 At the beginning of the GMP this 231,030-tonne terminal elevator was operated by United Grain Growers Limited, but has remained largely inactive since the company was merged with Agricore Cooperative to form Agricore United (AU) in 2001. Ownership of the facility passed to Saskatchewan Wheat Pool following that company's acquisition of AU in 2007, with its subsequent rebranding as Viterra Inc. Concurrent with its planned takeover of Viterra, Glencore International PLC announced in March 2012 that it had entered into an agreement with Richardson International for the sale of certain Viterra assets, including the Viterra C terminal elevator. The finalization of this sale on 1 May 2013 gave Richardson International full ownership of the facility, which was de-licensed that same day.

Similarly, while neither Prince Rupert nor Churchill saw changes to their terminal assets during this same period, both gained relatively higher standing as a result of the evolution at Thunder Bay and Vancouver. Both still registered one terminal elevator apiece, and storage capacity shares of 8.7% and 5.8% respectively.

Section 4: Commercial Relations

Indicator Description	Table	1999-00	2011-12	2012-13	2013-14 Q1	Q2	Q3	Q4	YTD	% VAR
Trucking Rates										
Composite Freight Rate Index – Short-haul Trucking	4A-1	100.0	162.2	162.2	162.2	162.2	-	-	162.2	0.0%
Country Elevators Handling Charges										
Composite Rate Index – Receiving, Elevating and Loading Out	4B-1	100.0	122.9	123.5	124.9	128.8	-	-	128.8	4.3%
Composite Rate Index – Dockage	4B-1	100.0	154.1	154.2	154.4	154.6	-	-	154.6	0.2%
Composite Rate Index – Storage	4B-1	100.0	187.8	189.9	189.9	188.0	-	-	188.0	-1.0%
Railway Freight Rates										
Composite Freight Rate Index – CN Vancouver	4C-1	100.0	112.4	135.1	130.1	127.1	-	-	127.1	-5.9%
Composite Freight Rate Index – CP Vancouver	4C-1	100.0	114.8	140.3	134.7	132.0	-	-	132.0	-5.9%
Composite Freight Rate Index – CN Thunder Bay	4C-1	100.0	136.0	141.4	144.1	129.6	-	-	129.6	-8.3%
Composite Freight Rate Index – CP Thunder Bay	4C-1	100.0	123.5	143.9	144.0	129.6	-	-	129.6	-9.9%
Effective Freight Rates ($ per tonne) – CTA Revenue Cap	4C-3	n/a	$31.37	$33.99	n/a	n/a	-	-	n/a	n/a
Terminal Elevator Handling Charges										
Composite Rate Index – Receiving, Elevating and Loading Out	4D-1	100.0	146.5	149.4	149.6	150.0	-	-	150.0	0.4%
Composite Rate Index – Storage	4D-1	100.0	178.7	179.4	179.4	180.1	-	-	180.1	0.4%

TRUCKING RATES

Short-haul trucking rates rose substantially between the 2004-05 and 2008-09 crop years, increasing by a factor of one-third from what they had been at the beginning of the GMP. Although this escalation was largely derived from rising fuel and labour costs, it was also supported by a heightened demand for carrying capacity, which allowed service providers a greater degree of latitude in passing these costs onto grain producers. Even with a subsequent collapse in crude oil prices, these rates remained unchanged through the close of the 2009-10 crop year.[24]

But the 2010-11 crop year saw oil prices regain a lot of lost ground, reaching as much as $110 US per barrel by April 2011. This ultimately raised fuel prices and brought new pressure to bear on the cost of moving grain by truck. As a result, the composite price index for short-haul trucking rose to a GMP high of 162.2 by the close of the 2010-11 crop year. Although fuel prices remained volatile throughout the ensuing 2011-12 and 2012-13 crop years, trucking rates varied little. Much the same was observed in the first half of the 2013-14 crop year. As a result, the composite price index stood unchanged at 162.2. [Table 4A-1]

COUNTRY ELEVATOR HANDLING CHARGES

The per-tonne rates assessed by grain companies for a variety of primary elevator handling activities are the primary drivers of corporate revenues. Comparatively, those assessed for the receiving, elevating and loading out of grain are the most costly for producers. These are in turn followed by the charges levied for the removal of dockage (cleaning) and storage. These rates vary widely according to the activity, grain and province involved.

Given the wide variety of tariff rates, the GMP necessarily uses a composite price index to track changes in them. Since the beginning of

24 The market price for West-Texas-Intermediate crude fell from a high of $133 US per barrel in June 2008 to a low of just $40 US per barrel by February 2009.

Figure 23: Change in Composite Freight Rates – Short-Haul Trucking

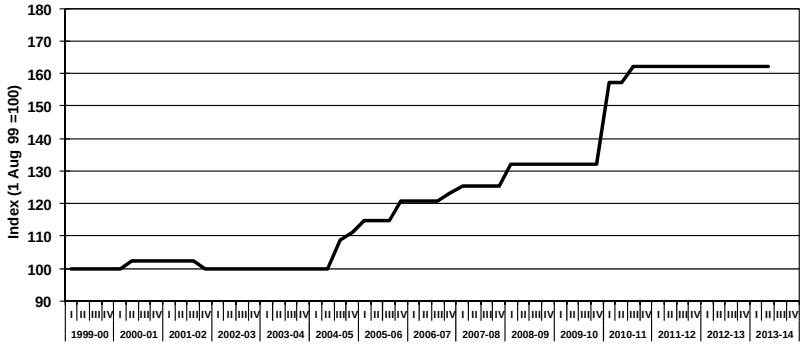
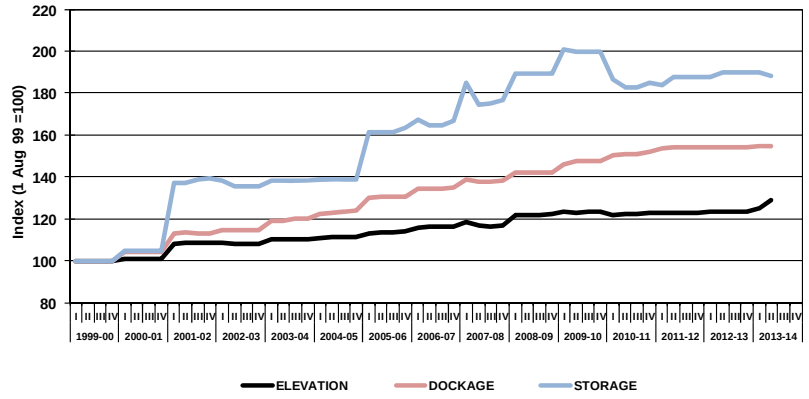


Figure 24: Change in Primary Elevator Handling Charges



the GMP, the rates for all of these services have risen considerably. The smallest increases have been in those tied to the receiving, elevating and loading out of grain. Through to the end of the 2012-13 crop year, these costs had risen by 23.5%. The first half of the 2013-14 crop year brought a further escalation in these rates, with the overall composite price index rising by 4.3%, to 128.8.

The rates associated with the removal of dockage have increased at a somewhat faster pace. Through to the end of the 2012-13 crop year, these rates had already increased by 54.2%. Minor changes in the first quarter resulted in the composite price index rising by 0.2%, to 154.6.

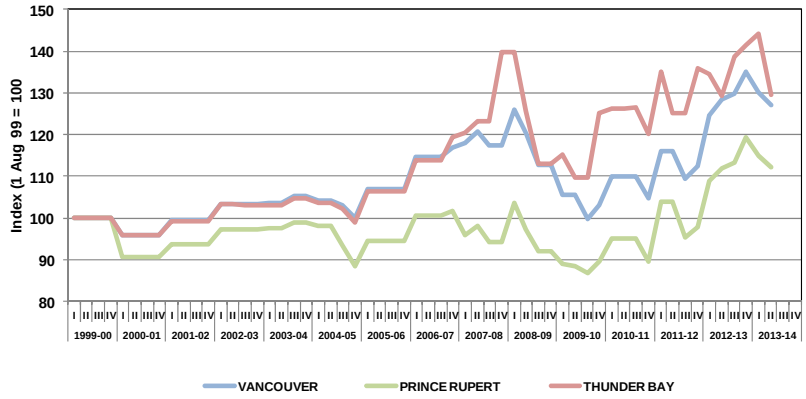
The most substantive rate escalations observed thus far have related to elevator storage. Much of the initial price shock came towards the end of the 2000-01 crop year, when these rates were raised by a factor of almost one-third. Since then they have continued to climb, rising by 89.9% through to the end of the 2012-13 crop year.[25] Rate reductions in Manitoba during the second quarter resulted in the composite price index falling by 1.0%, to 188.0. [Table 4B-1]

RAILWAY FREIGHT RATES

The single-car freight rates charged by CN and CP for the movement of regulated grain have changed substantially since the beginning of the GMP, evolving from what were largely mileage-based tariffs into a less rigidly structured set of more market-responsive rates. Likewise, these changes also employed pricing that presented differentials based on the commodity, type of railcar, destination and period in which the traffic was to be moved. [Table 4C-1]

Despite the Canadian Transportation Agency having brought forward a 1.8% reduction in the Volume-Related Composite Price Index for the 2013-14 crop year, these determinants led both CN and CP to follow with

Figure 25: CN Single-Car Freight Rates – Primary Corridors



a mix of increases as well as decreases to their single-car freight rates in the first quarter.[26] CN's initial pricing actions came in August 2013, when it raised its eastbound rates into Thunder Bay and Churchill by an average of 1.9% and 4.1% respectively. In contrast, the carrier's single-car rates into Vancouver and Prince Rupert, which were initially extended into the new crop year, were decreased by an average of 3.7% in September. These were followed early in the second quarter by reductions to the single-car freight rates in all four corridors: 2.3% in the Vancouver corridor; 2.0% in the Prince Rupert corridor; 10.1% in the Thunder Bay corridor; and 10.0% in the Churchill corridor.

This directional differentiation was equally evident in the pricing actions taken by CP at the beginning of the crop year, which effectively held the single-car rates on movements into Thunder Bay unchanged while reducing those into Vancouver by 4.0%. Both were followed by second-

25 It should be noted that all tariff rates constitute a legal maximum, and that the rates actually paid by any customer for storage may well fall below these limits.

26 See Canadian Transportation Decision Number 161-R-2013 dated 30 April 2013.

quarter reductions, with the single-car rates into Thunder Bay cut by 10.1%, while those into Vancouver were culled by a much lesser 2.0%.

An examination of the pricing changes enacted since the beginning of the GMP provides some insight into the evolution of today's single-car freight rates. Despite significant differences over the past several years, by the close of the second quarter, the single-car rates applicable on the movement of grain to the jointly served ports of Vancouver and Thunder Bay had both risen by an average of 29.6%. The overall gain for Churchill was consistent with this value, having risen by 29.9%. However, Prince Rupert, which benefited from a change to the rate structure more than a decade ago, posted an overall increase of just 12.3%.

Taken altogether, these increases are in keeping with the 26.9% gain in revenues that where allowed by the Canadian Transportation Agency under the Maximum Revenue Entitlement (revenue cap). At the same time, the narrowing in the escalation differentials between Vancouver and Thunder Bay also suggests that the preference previously given to the handling of westbound grain had, at least temporarily, been withdrawn.

Multiple-Car-Block Discounts

There have been equally significant changes to the structure of the freight discounts both carriers use to promote the movement of grain in multiple car blocks. The most noteworthy aspect of this evolution was the gradual elimination of the discounts applicable on movements in blocks of less than 50 cars, along with a progressive escalation in the discounts tied to blocks of 50 or more cars. Over the course of the GMP, the discount applicable on the largest of these has risen by a factor of 60%, to $8.00 per tonne from $5.00 per tonne. More importantly, there can be little doubt that this has been a central force in the rationalization of the western Canadian elevator system and in the expansion of high-throughput facilities.

Figure 26: CP Single-Car Freight Rates – Primary Corridors

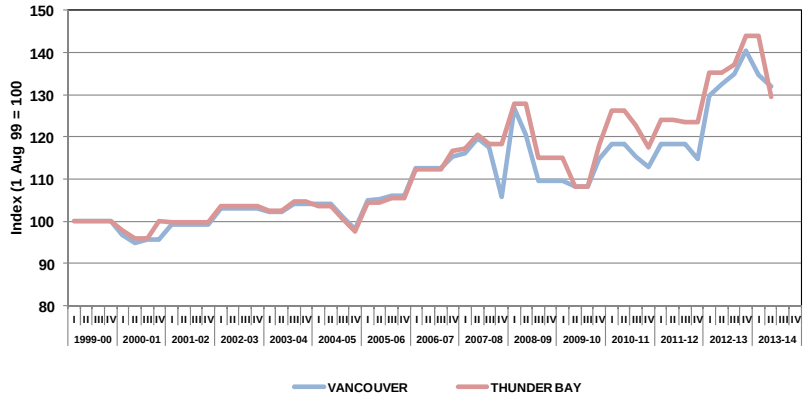
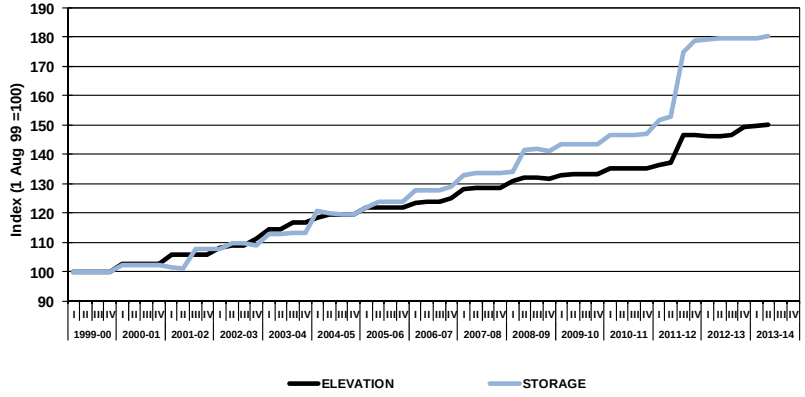


Figure 27: Change in Terminal Elevator Handling Charges



These freight discounts remained unchanged in the first half of the 2013-14 crop year. CN continued to offer discounts on movements in blocks of 50-99 cars that equated to $4.00 per tonne, and to $8.00 per tonne on movements of 100 or more cars. The corresponding discounts for CP remained at $4.00 per tonne for shipments in blocks of 56-111 cars, and at $8.00 per tonne for shipments in blocks of 112 cars. [Table 4C-2]

TERMINAL ELEVATOR HANDLING CHARGES

The rates posted for the receiving, elevating and loading out of grain nominally represent the most substantive assessed by the terminal elevator operators. As with other measures, an examination of price movement is best performed using a composite index, given the myriad of different tariff rates. At the end of the 2012-13 crop year these ranged from a low of about $9.79 per tonne on wheat delivered at Thunder Bay, to a high of $16.50 per tonne on oats shipped to Churchill.

The first six months of the 2013-14 crop year brought little change to these rates. The exceptions were at Vancouver and Prince Rupert, where marginal increases for the majority of commodities lead to a 0.4% rise in the composite price index, which rose to 150.0 from 149.4. [Table 4D-1]

As with the cost of elevation, the daily charge for storage also varied widely, ranging from a common low of about $0.08 per tonne on most wheat held at port to a high of $0.16 per tonne on oats maintained in inventory at Churchill. Here too, changes to the storage rates assessed at Vancouver and Prince Rupert lead to a 0.4% increase in the composite price index, which rose to 180.1 from 179.4.

COMMERCIAL DEVELOPMENTS

Giant Crop Confronts Grain Handling and Transportation System

Following a late start to the growing season, the summer of 2013 provided ideal growing conditions. Western Canadian farmers began harvesting a crop of unprecedented size in August. Reports of

Trucks loaded with grain are seen lining up in the driveway to an elevator located on the outskirts of Winnipeg, Manitoba, awaiting their turn at delivering a small portion the 2013-14 crop year's record-breaking harvest.

substantially greater yields and a potential bumper crop had begun to circulate in the late summer. Even so, few within the grain industry could have anticipated that production would stand a full 25% above the previous record of 60.4 million tonnes set in the 2008-09 crop year.

As the final estimate started to crystallize, the industry began to confront the realities attached to the marketing of a 75.9-million-tonne crop. Compounding this was carry-forward stocks of 4.9 million tonnes that lifted the overall grain supply to 80.8 million tonnes. With the international marketplace seemingly already awash in grain, this left many worried about further erosion in grain prices. But foremost among the growing list of concerns was the fear that the GHTS would be incapable of adequately providing for the movement of such a large crop. In fact, rather than being focused on moving it all, the majority of stakeholders hoped that the system would have sufficient capacity to

handle a sizeable portion of the added production, thereby avoiding the buildup of an unwieldy level of carry-out stocks at year end.

As the scope of the challenge confronting the industry became apparent the system quickly became inundated with grain. On-farm inventories were soon bulging with an unanticipated excess, which gave way to the broad use of temporary storage options. Moreover, as elevator deliveries grew, the problem began to spread. Before long the country elevator system was beginning to congest, with many facilities forced to turn away producers for the simple lack of space. Central to the timely processing of any elevator's grain was the carrying capacity provided to it by the railways; without an adequate supply of railcars the system would soon became backlogged.

By mid September 2013 the demand for carrying capacity in the country was outpacing what was being supplied by a factor of 10%, leaving the equivalent of about 1,000 carloads of traffic going unmoved each week. The effects of this were also beginning to spread, with terminal elevator stocks declining by as much as 20% from what had been observed during the same period a year earlier. More importantly, the number of vessels waiting to load at port was now beginning to climb. By the close of the first quarter the majority of these indicators had only worsened: country elevators stocks rose to 3.5 million tonnes; uncommitted railcar orders topped 15,000; and the number of ships waiting to load at west-coast ports was approaching 20.

For its part, the carrying capacity supplied by the railways proved roughly equivalent to that supplied during the same period a year earlier. In fact, total hopper-car shipments during the first quarter actually declined by 2.6%. This served to fuel the ire of the grain industry at large because railway representatives were indicating that their operations were ill prepared to deal with the movement of a crop that was so much larger than normal. Moreover, the railways had been striving to enhance the productivity of their operations; increasing equipment velocity while reducing locomotives, railcars and human resources.

The situation was made all the worse given the urgency to sell grain in a market already characterized by declining prices. The pressure exerted by farmers trying to effect delivery sooner rather than later only compounded the system's growing problem with congestion. Confronted with the increasingly difficult task of delivering their grain, many producers turned to enhancing the storage capacity of their farms. But the ready supply of available storage bins soon exceeded the demand. As a result, farmers moved to store a significant portion of their crop on the ground, an option that carried with it the heightened threat for spoilage. For those who had not contracted for the delivery of their grain, market conditions continued to eat away at the value of the crop they had stored. Compounding the issue of eroding market prices, the grain companies had now begun to widen their basis levels, hacking away even further at the producers' potential returns. Even those who had signed delivery contracts were seeing these deferred to later in the season.

The situation was made no better when a CN freight train derailed near Gainford, Alberta, in mid October 2013, closing the carrier's principle artery to the west coast for four days. With the onset of winter, and more particularly during a five-week stretch of record-setting cold in Manitoba and eastern Saskatchewan, the fluidity of railway operations was undermined still further. By the close of the second quarter country elevators stocks had risen to 3.7 million tonnes; uncommitted railcar orders had ballooned to over 50,000; and the number of ships waiting to load at west-coast ports had topped 40.

As these problems grew so too did the rancour of shippers and farmers. Moreover, by mid January 2014 their displeasure with railway service was beginning to register with the federal government. In response, the Minister of Agriculture and Agri-food convened an urgent meeting of stakeholders in Winnipeg to discuss the situation and press the railways for immediate corrective action. By the close of the month, however, the railways had still not presented a plan.

Changes to the Collection of Canadian Grain Commission Data

In October 2012 the federal government moved to implement a number of its budgetary measures with the introduction of Bill C-45, the *Jobs and Growth Act, 2012*, in the House of Commons. The bill, which received Royal Assent on 14 December 2012, also included revisions to the *Canada Grain Act*. These amendments marked the first substantive changes to the Act in more than forty years, and were aimed at modernizing and streamlining the operations of the Canadian Grain Commission (CGC), eliminating any unnecessary or redundant services, and reducing the regulatory burden on the grain industry.

Among the more noteworthy revisions to the *Canada Grain Act* was the transfer of responsibility for inward weighing and inspection at terminal elevators from the CGC to the private sector. Although the CGC would no longer be the primary source of this data, the Act affirmed its oversight role in collecting this fundamental information regarding terminal elevator operations.

To this end, the CGC convened an industry working group to develop the standards and information-gathering protocols that would be used in the future. This ultimately evolved into what the CGC called its Licensed Terminal Elevator Reporting Requirements, which was distributed to the industry in June 2013. The transfer of this responsibility, which resulted in terminal-elevator staff collecting and reporting on data previously collected by the CGC, led to various teething pains in the first quarter of the 2013-14 crop year.

Regular users of the Monitor's reports need to be mindful that these changes in the approach to data collection had inevitable consequences for the measures assembled for terminal-elevator operations. While the data provided by the terminal-elevators is equivalent to that previously collected by the CGC, it is gathered by a variety of companies with equally diverse approaches to data collection. This, along with other changes in the data reporting, makes some direct comparisons with previously collected data under the GMP difficult. By way of example, much of the data pertaining to terminal operations in Vancouver and Prince Rupert has been superseded by single values for the Pacific Seaboard.

CWB Begins Establishing Grain-Handling Network

On 26 November 2013 CWB – formerly the Canadian Wheat Board – announced that it had reached an agreement to purchase the grain handling and port terminal assets of Soumat Inc., a division of Toronto-based Upper Lakes Group Inc. This marked the company's first material acquisition since the federal government removed its monopoly over the sale of wheat and barley, and directed its reorganization in 2012.[27]

In specific terms, the acquisition encompassed three commercial entities: Mission Terminal Inc., Les Élévateurs des Trois-Rivières Ltée, and Services Maritimes Laviolette Inc. These commercial concerns would provide CWB with port facilities in Thunder Bay, Ontario, and Trois-Rivières, Quebec, along with a dock-services business in Trois-Rivières. This transaction denoted an important step in the process of transitioning itself into a private business.[28] In strategic terms, the acquisition provided for a vertical integration of the company, bolstering its east-coast presence as well as its ability to service offshore customers. In equal measure, it also allowed CWB to cement its long-standing relationships with all three companies, as well as the producer-car shippers integral to their operations.

Mission Terminal Inc. (MTI), which sources and markets a variety of grains for customers around the globe, operates a primary elevator at Alexander, Manitoba, in addition to its namesake terminal elevator in

27 Before losing its monopoly, the Canadian Wheat Board was prohibited from owning any grain-handling assets, and effectively employed various agents to use their assets to handle grain on its behalf.

28 As part of the legislation stripping the Canadian Wheat Board of its monopoly, often referred to as its single desk, Ottawa gave the recast CWB until 2017 to become a privately-run company. In the interim, the federal Agriculture Minister would continue to oversee its operations.

Thunder Bay, Ontario. The latter facility, which has a licensed storage capacity of 137,740 tonnes, handles approximately 1.5 million tonnes annually. The company also has an equity stake in three producer-car loading facilities situated in Manitoba and Saskatchewan. Similarly, MTI has a commercial interest in five shortline railways operating throughout this same geographic area, including: the Great Western Railway; the Great Sandhills Railway, Boundary Trail Railway, the Lake Line Railway; and the Long Creek Railway.

Les Élévateurs des Trois-Rivières Ltée , located at Trois-Rivières, Quebec, is a receiving, storage and loading facility capable of storing 109,000 tonnes of grain, along with another 78,000 tonnes of alumina and 20,000 tonnes of coke. It can receive grain by ocean ship, laker, rail or truck and is one of the few facilities able to unload vessels of up to Panamax size. Services Maritimes Laviolette, also located in Trois-Rivières, Quebec, offers stevedoring and other related services.

But this acquisition, which was finalized in late December 2013, soon appeared as a mere starting point for the development of an even larger network of strategic grain-handling assets for CWB-marketed grain. In January 2014 the company announced that it had bought a minority share in Prairie West Terminal (PWT), a farmer-owned grain handler shipping over 420,000 tonnes annually from five facilities in western Saskatchewan. Combined with the small stake it had already inherited through its purchase of MTI a month earlier, CWB was increasing its total interest in PWT to 12.1%. Moreover, CWB officials soon let it be known that they were also in discussions with other parties for the acquisition of, or an equity interest in, still other facilities.

Despite this effort to develop its own asset base, there appeared little indication that CWB had any immediate plans to dispense with the grain-handling agreements that it had established with various grain companies in 2012. In fact, CWB signalled that it fully intended to maintain these agreements while building its own facility network.

Section 5: System Efficiency and Performance

Indicator Description	Table	1999-00	2011-12	2012-13	2013-14 Q1	Q2	Q3	Q4	YTD	% VAR
Country Elevator Operations										
Average Elevator Capacity Turnover Ratio	5A-1	4.8	6.0	5.8	1.7	1.5	-	-	3.2	0.0%
Average Weekly Elevator Stock Level (000 tonnes)	5A-2	3,699.3	2,660.8	2,489.6	2,849.4	3,440.7	-	-	3,133.2	18.7%
Average Days-in-Store (days)	5A-3	41.7	27.6	26.5	26.8	34.6	-	-	30.4	15.6%
Average Weekly Stock-to-Shipment Ratio – Grain	5A-4	6.2	4.1	3.9	3.7	5.2	-	-	4.4	18.9%
Railway Operations										
Railway Car Cycle (days) – Empty Movement	5B-1	10.7	7.2	7.5	7.4	7.7	-	-	7.6	5.9%
Railway Car Cycle (days) – Loaded Movement	5B-1	9.2	6.7	6.5	5.9	6.7	-	-	6.3	-2.5%
Railway Car Cycle (days) – Total Movement	5B-1	19.9	13.9	14.0	13.3	14.4	-	-	13.9	1.9%
Railway Car Cycle (days) – Non-Special Crops	5B-2	19.3	13.8	13.9	12.9	14.3	-	-	13.6	1.3%
Railway Car Cycle (days) – Special Crops	5B-3	25.8	16.3	15.8	16.2	17.0	-	-	16.5	3.3%
Railway Transit Times (days)	5B-4	7.8	5.6	5.4	4.9	5.6	-	-	5.3	-2.9%
Hopper Car Grain Volumes (000 tonnes) – Non-Incentive	5B-5	12,718.7	5,455.6	6,488.9	2,099.4	1,288.9	-	-	3,388.3	-5.8%
Hopper Car Grain Volumes (000 tonnes) – Incentive	5B-5	12,945.9	22,726.3	21,933.7	6,148.7	5,860.7	-	-	12,009.4	-3.0%
Hopper Car Grain Volumes ($ millions) – Incentive Discount Value	5B-6	$31.1	$154.6	$155.5	$44.3	$43.4	-	-	$87.6	-0.3%
Traffic Density (tonnes per route mile) – Grain-Dependent Network	5B-7	442.5	592.4	593.3	751.0	619.4	-	-	685.2	1.4%
Traffic Density (tonnes per route mile) – Non-Grain-Dependent Network	5B-7	292.5	345.5	357.2	399.4	354.0	-	-	376.7	-5.6%
Traffic Density (tonnes per route mile) – Total Network	5B-7	330.4	395.1	403.6	468.6	406.2	-	-	437.4	-3.6%
Terminal Elevator Operations										
Average Terminal Elevator Capacity Turnover Ratio	5C-1	9.1	11.1	11.1	n/a	n/a	-	-	n/a	n/a
Average Weekly Terminal Elevator Stock Level (000 tonnes)	5C-2	1,216.2	1,091.6	1,139.6	833.0	769.8	-	-	802.7	-30.8%
Average Days-in-Store – Operating Season (days)	5C-3	18.6	13.9	14.3	11.8	9.7	-	-	10.9	-20.4%
Port Operations										
Average Vessel Time in Port (days)	5D-1	4.3	6.6	9.7	7.8	11.9	-	-	9.9	13.8%
Average Vessel Time in Port (days) – Waiting	5D-1	1.9	3.0	4.8	3.7	6.5	-	-	5.1	10.9%
Average Vessel Time in Port (days) – Loading	5D-1	2.4	3.6	4.9	4.1	5.4	-	-	4.8	17.1%
System Performance										
Total Time in Supply Chain (days)	5E-1	68.1	47.1	46.2	43.5	49.9	-	-	46.6	2.6%

COUNTRY ELEVATOR OPERATIONS

The net effect of changes in primary elevator throughput and storage capacity is reflected in the system's capacity-turnover ratio. Echoing a 0.6% decrease in primary-elevator throughput, the turnover ratio for the first six months of the 2013-14 crop year effectively remained unchanged at 3.2 turns. [Table 5A-1]

This result was shaped by opposing forces, with increased turnover ratios in Manitoba and Saskatchewan countered by reductions in Alberta and British Columbia. Manitoba reported the most substantive increase, with its ratio rising by 16.0%, to 2.9 turns from 2.5 turns. This was followed by Saskatchewan, which posted a gain of 7.1%, with its ratio rising to 3.0 turns from 2.8 turns a year earlier. The largest counterweight to this was Alberta, which saw its ratio fall by 11.6%, to 3.8 turns from 4.3 turns. Additional downward pressure came from British Columbia, which posted a decrease of 8.7%, with its ratio falling to 4.2 turns from 4.6 turns.

Elevator Inventories

In assessing the operational efficiency of the primary elevator system, the GMP also considers the amount of grain maintained in inventory. Beyond measuring stock levels, this examination takes into account the amount of time grain spent in inventory, along with its ability to satisfy immediate market needs.

Notwithstanding periodic fluctuations, approximately half of the GHTS's primary elevator storage capacity is actively employed in maintaining its grain inventories. What is more, even with a 5.8% contraction in the system's associated storage capacity, today's stocks typically stand well below the 3.7-million-tonne average benchmarked at the beginning of the GMP, seldom exceeding 3.0 million tonnes. This was not the case in the first and second quarters of the 2013-14 crop year, as primary elevator inventories climbed noticeably, to 2.8 million tonnes and then 3.4 million tonnes respectively. As a result, the overall average for the first half of the crop year surpassed this threshold, rising by 18.7%, to 3.1 million

Figure 28: Primary Elevator Capacity Turnover Ratio

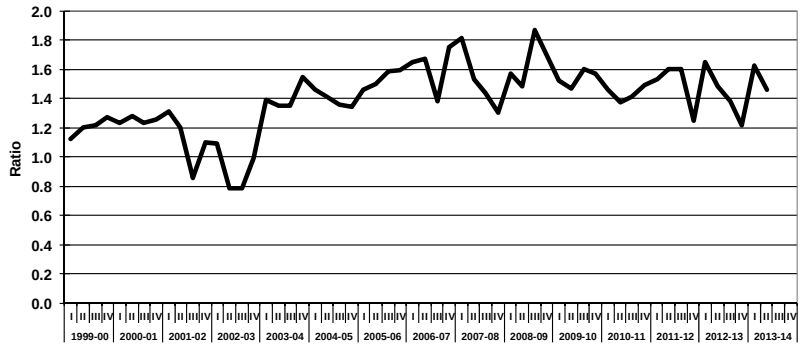
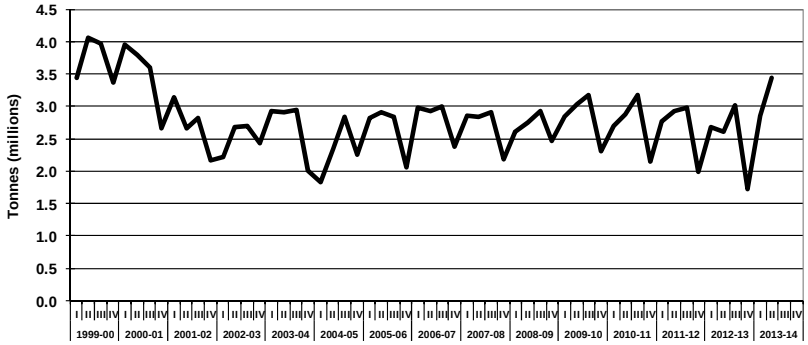


Figure 29: Average Weekly Stock Levels



tonnes from 2.6 million tonnes a year earlier. Although much of the increase was tied to the record harvest, it also reflected the buildup occasioned by inability of the grain companies to secure the railcars necessary for its export movement. [Table 5A-2]

Just as the average stock level has moved generally lower, so too has the average amount of time spent by grain in inventory. While seasonality remains a factor, the quarterly average has largely fluctuated around the 30-day mark for several years, and well below the GMP's base-year average of 41.7 days. Although this contributed significantly to improving the speed with which grain moves through the GHTS, such was not the case in the first half of the 2013-14 crop year. In step with the rise in grain inventories was the time spent by grain in inventory, which rose to an average of 26.8 days in the first quarter, and to a more lengthy average of 34.6 days in the second. On the whole, the 30.4-day average posted for the first six months of the 2013-14 crop year proved 15.6% greater than the 26.3-day average reported in the same period a year earlier. This result was heavily influenced by a sharp rise in the Manitoba average, which rose by 47.2%, to 39.9 days from 27.1 days. All other provinces save British Columbia, reported less substantive increases. [Table 5A-3]

Stock-to-Shipment Ratios

The adequacy of country elevator inventories can be gauged by comparing their level at the end of any given shipping week, with the truck and railway shipments actually made in the next seven days. In recent years the quarterly average stock-to-shipment ratio has generally fluctuated around a value of 4.0. As such, the inventory on hand at the close of any given week typically exceeded that required for shipment in the next by a factor of at least four.[29] These ratios are, however, heavily

29 In the event that the ratio of these two values amounts to 1.0, it would mean that country elevator stocks exactly equalled shipments made in the following week. A ratio above this value would denote a surplus supply in the face of short-term needs.

Figure 30: Average Days in Store

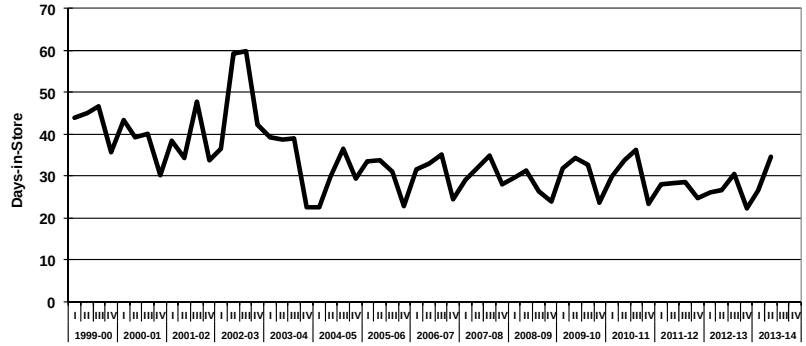
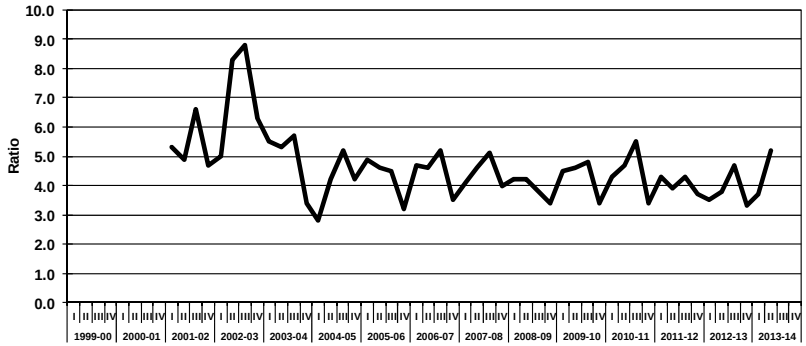


Figure 31: Primary Elevators – Stock-to-Shipment Ratio



influenced by the amount of time that grain spends in inventory, and mimic their movement rather closely. [Table 5A-4]

This again proved to be the case in the first half of the 2013-14 crop year. While the first quarter saw a modest 2.8% rise in the stock-to-shipment ratio, the second quarter produced a more substantive 36.8% increase, attaining a value of 5.2.[30] The six-month gain amounted to 18.9%, with the ratio rising to 4.4 from 3.7 for the same period a year earlier. While much of this increase was tied to the broader buildup in grain inventories, it also reflected, at least partially, the problems being incurred in securing the railcars necessary to move it.

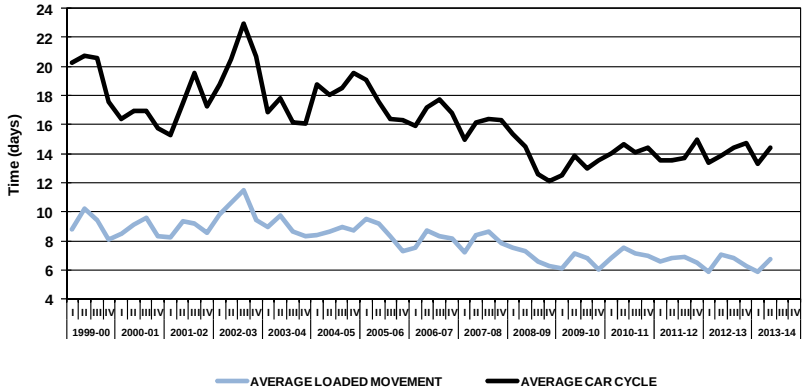
RAILWAY OPERATIONS

In the context of the GHTS, the car cycle measures the average amount of time taken by the railways in delivering a load of grain to a designated port in western Canada, and then returning the empty railcar back to the prairies for reloading. During the first six months of the 2013-14 crop year this task required an average of 13.9 days to complete, a 1.9% increase over the 13.6-day average recorded in the same period a year earlier.

Much of this increase was attributable to longer car cycles in the Vancouver and Prince Rupert corridors. The Prince Rupert corridor posted the most substantive rise, with a 6.9% increase producing an average of 12.7 days against 11.8 days a year earlier. A 0.8% increase was noted for movements in the Vancouver corridor, where the average car cycle rose to 14.6 days from 14.5 days. The only reduction came in the Thunder Bay corridor, where a 0.2% decrease resulted in the average car cycle effectively remaining unchanged at 13.7 days. [Table 5B-1]

30 The 5.2 ratio attained in the second quarter marked the highest witnessed for the period since the 2003-04 crop year, when it stood at 5.3. Since then, the quarterly average has only reached above a value of 5.2 twice.

Figure 32: Average Railway Car Cycle



The overall increase in the average car cycle was largely due to a rise in the empty portion of the movement, which increased by 5.9%, to an average of 7.6 days from 7.1 days a year earlier. This was partially offset by a 2.5% decrease in the loaded portion of the movement, which fell to an average of 6.3 days from 6.5 days a year earlier.

There were even greater contrasts in the results posted by CN and CP, with CN reporting a 7.7% increase in its average cycle against a 2.8% decrease for CP. Much of the increase noted for CN was attributable to an 18.0% rise in the empty portion of its car cycle. This was tempered by a marginal reduction in the loaded portion of the carrier's car cycle, which remained effectively unchanged. In comparison, CP's reduced average was driven by decreases for both portions of the car cycle, with a 5.0% decline in the loaded portion, and a 1.3% decrease in the empty portion.

A modest increase in the car cycle for the movement of non-special crops was also observed, with the average rising 1.3%, to 13.6 days from 13.4 days a year earlier. Special crops saw an even greater increase, with its

average rising by 3.3%, to 16.5 days from 16.0 days. Comparatively, the average for special crops proved to be 21.3% greater than that of non-special crops. On the whole, these results continued to point to a structural disadvantage being given to the movement of special crops. In large measure, this appears to be linked to the character of special-crop shipments, which generally move as small-block shipments in regular freight service rather than in the unit-train lots typical of non-special crops. [Tables 5B-2 and 5B-3]

Loaded Transit Time

More important than the railways' average car cycle, is the average loaded transit time. This measure focuses on the amount of time taken in moving grain from a country elevator to a port terminal for unloading. As with the overall car cycle, the average loaded transit time has drifted gradually lower since the beginning of the GMP. With the close of the 2012-13 crop year, 2.4 days had been shed from the 7.8-day average benchmarked in the base year. Notwithstanding the aforementioned increase in the overall car cycle, the railways' average loaded transit time declined by 2.9% in the in the first six months of the 2013-14 crop year, falling to 5.3 days from 5.4 days a year earlier. Moreover, the variability in the underlying distribution, as measured by the coefficient of variation, fell by 9.5%, to 29.1% from 32.2%.[31] Despite this, it continued to indicate that the time taken in moving a loaded hopper car between any two points remained highly erratic. [Table 5B-4]

Multiple-Car Blocks

In the first six months of the 2013-14 crop year, 12.0 million tonnes of grain moved in the multiple-car blocks that offered discounted freight

31 The coefficient of variation effectively removes the distortions that arise from measuring the transit times tied to individual movements in a diverse population set by focusing on the underlying variability in the distributions tied to each origin-destination pair. As a ratio, smaller values depict tighter distributions than larger ones. To this end, a lower ratio can be deemed indicative of better consistency around the average loaded transit time presented.

Figure 33: Average Loaded Transit Time

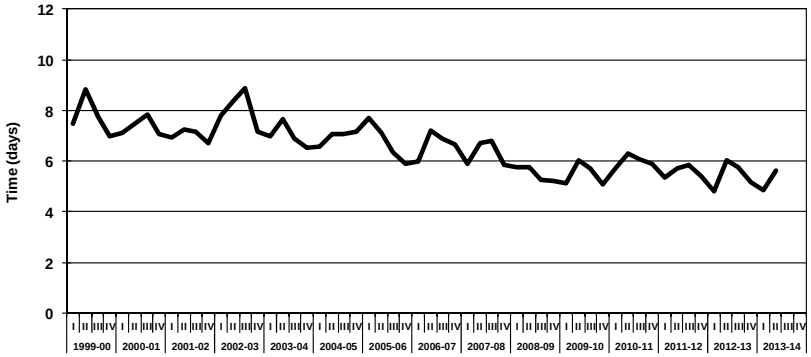
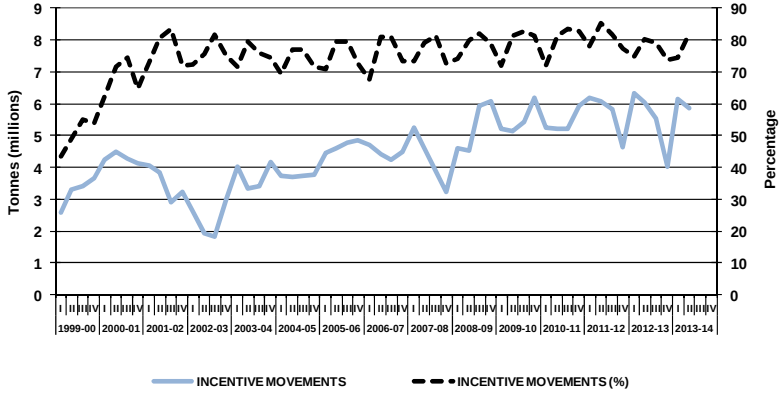


Figure 34: Railway Traffic Moving Under Incentive



rates. This denoted a 3.0% decrease from the 12.4 million tonnes handled in the same period a year earlier. [Table 5B-5]

Despite this reduction, the proportion of railway traffic moving in multiple-car blocks remained substantial. In fact, since the 2005-06 crop year, approximately three-quarters of the regulated grain moving to the four ports in western Canada was earning a discount, against roughly the one-half observed in the GMP's base year. While this value has exhibited a highly seasonal variability, it has continued to tenaciously drift around this mark for several crop years. The 2013-14 crop year has thus far proven little different, with 78.0% of the grain shipped during the first half being in blocks of 50 or more cars.

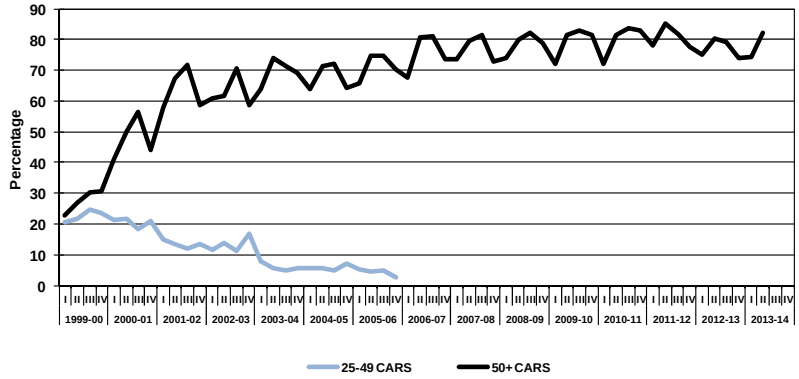
At the same time, the annual value of the discounts earned by grain shippers – estimated as a gross savings in railway freight charges – increased fivefold, rising to an estimated $154.6 million in the 2012-13 crop year from $31.1 million in the GMP's base year. Much of this expansion, however, was the product of more substantive increases in the per-tonne discounts than it was of the traffic base.

Despite a 3.0% decrease in the tonnage moving under these discounted freight rates in the first half of the 2013-14 crop year, the earned value of these discounts fell by a lesser 0.3%, to an estimated $87.6 million from $87.9 million a year earlier. For the most part, this was indicative of the continuing shift towards movements in blocks of 100 or more cars, aided in part by the physical conversion of some Class C elevators into larger Class D facilities. This has also been reflected in a steadily rising average earned discount, which reached an estimated $7.30 per tonne against $7.11 per tonne a year earlier. [Table 5B-6]

TERMINAL ELEVATOR OPERATIONS

Over the course of the GMP, the amount of grain held in inventory at terminal elevators has had a fairly consistent relationship with the system's overall handlings, typically encompassing from 20% to 25% of the quarterly throughput. However, in the face of dwindling stocks from

Figure 35: Composition of Multiple-Car Block Movements



the 2012-13 crop year, grain inventories at the beginning of the 2013-14 crop year were being drawn down significantly. As a result, the first quarter's average weekly stock level fell 24.7% below the 1.1 million tonnes recorded in the same period a year earlier. This continued through the second quarter, with average stocks falling still further, to an average of 769,800 tonnes, a record low for any quarter under the GMP. For the first half of the crop year as a whole, the average fell by 30.8%, to 802,700 tonnes from 1.2 million tonnes the year before.

This decline reflected those experienced along the Pacific Seaboard and at Thunder Bay. Stocks held at the west coast ports of Vancouver and Prince Rupert accounted for 54.8% of total terminal stocks, and declined by 33.6%, to an average of 439,500 tonnes from 661.800 tonnes a year earlier. A 35.1% reduction was reported by Thunder Bay, with stocks falling to an average of 295,300 from 454,900 tonnes. The exception was Churchill, where stocks increased by 58.6%, to an average of 67,900 tonnes from 42,800 tonnes. [Table 5C-2]

As in past years, wheat again constituted the largest single commodity held in inventory, accounting for 53.5% of the total. Wheat inventories decreased by 17.4% in the first half of the 2013-14 crop year, to an average of 429,300 tonnes from 519,900 tonnes a year earlier. This was complemented by even more substantive declines for other major commodities: canola, 28.3%; durum, 39.7%; flaxseed, 51.1%; Rye, 63.6%; oats, 69.6%; and barley, 72.5%. [Table 5C-2]

Days in Store

Along with the decline in terminal stocks was a decrease in the amount of time grain spent in inventory, with the overall number of days-in-store falling by 20.4%, to an average of 10.9 days from 13.7 days a year earlier. Much of the impetus for this came from reductions along the Pacific Seaboard and at Thunder Bay. The number of days-in-store for the Pacific Seaboard stood at an average of 9.0 days. This value, however, cannot be compared directly to those of Vancouver and Prince Rupert, which, until the 2013-14 crop year, had been reported individually.[32] Even so, it is lower than the 11.8-day and 11.9-day values respectively reported by Vancouver and Prince Rupert during the same period a year earlier. This was supported by a 24.5% decrease at Thunder Bay, which saw its average fall to 14.5 days from 19.2 days. Partially blunting these decreases was a 38.6% increase at Churchill, where the average rose to 18.3 days from 13.2 days a year earlier. [Table 5C-3]

The overall reduction was also reflective of the declines posted by the majority of individual commodities held in inventory. For the most sizeable of these stockpiles, wheat, the decrease amounted to 12.0%, with storage time falling to an average of 12.5 days from 14.2 days a year earlier. Durum, which ranked second in terms of inventory tonnage, saw a more substantive 21.1% reduction, with storage time falling to an

32 Owing to changes in the presentation of data received from the Canadian Grain Commission, many of the statistics that had previously been made available for Vancouver and Prince Rupert are now aggregated into a single value for the Pacific Seaboard. Any direct comparison with the data gathered under the GMP for previous crop years is no longer possible.

Figure 36: Terminal Elevators – Average Weekly Stocks

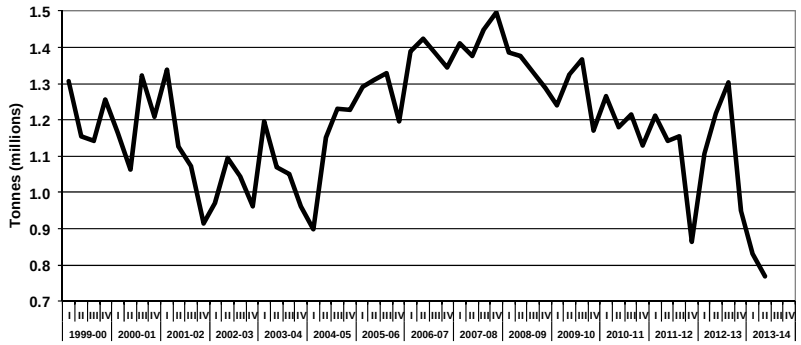
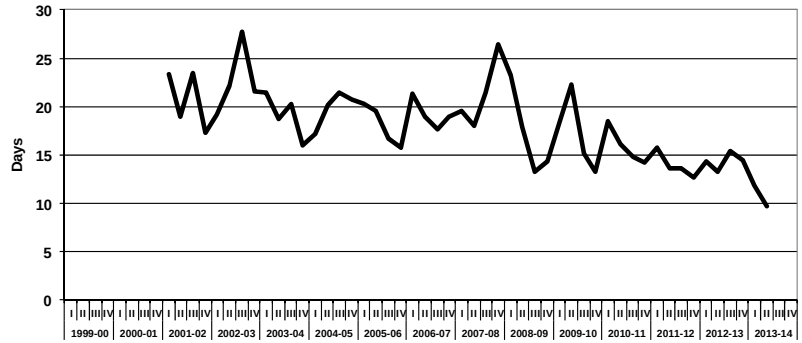


Figure 37: Terminal Elevators – Average Days-in-Store



average of 15.0 days from 19.0 days. Third-ranked canola posted a reduction of 16.7%, with its average time in storage falling to 7.0 days from 8.4 days. This was supported by decreases of 41.2% for flaxseed, 51.0% for barley, and 57.8% for oats.

Stock-to-Shipment Ratios

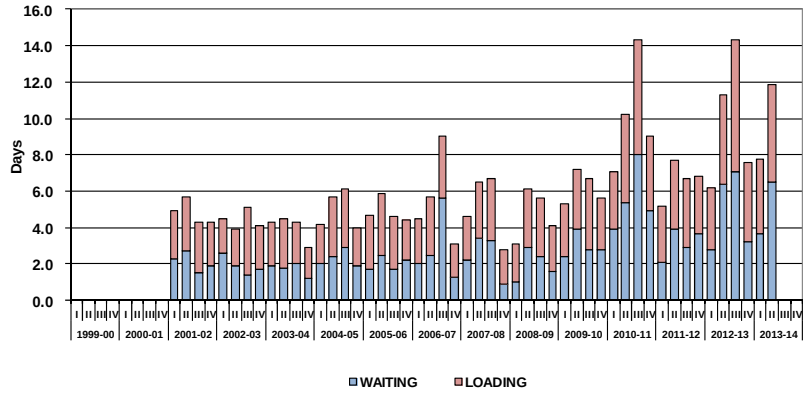
Whether sufficient stocks were on hand to meet demand can best be gauged by the average weekly stock-to-shipment ratios. This measure provides an indication of how terminal stock levels related to the volume of grain loaded onto ships during the course of any particular week.[33]

Here too, data specific to Vancouver and Prince Rupert is no longer being published. Rather, these port-specific values are now being aggregated into a single value for the Pacific Seaboard at large. As a result, any comparison to the data gathered for previous crop years is no longer possible. What can be said is that the average ratio for most grains moving through these west coast ports stood comfortably above a value of 2.0. The exceptions to this were peas and flaxseed, which posted average ratios of 1.2 and 0.8 respectively. [Table 5C-4]

For the most part, the ratios posted by Thunder Bay also stood well above a value of 2.0. This included wheat, which posted a reduction of 45.0% to 3.7, and durum, which fell by a lesser 25.5% to 2.3. Churchill's ratio values were consistent with those of Thunder Bay, but moved substantially higher: by 33.1%, to 1.9, in the case of wheat; and by 206.0%, to 2.6 in the case of durum.

33 As a multiple of the volume of grain ultimately shipped in a given week, the stock-to-shipment ratio provides an objective measurement of whether or not sufficient terminal stocks were on hand to meet short-term demand. Ratio values of one or more denote a sufficient amount of stock on hand. By way of example, a ratio of 2.5 would indicate that two-and-a-half times the volume of grain ultimately shipped in a given week had been held in inventory at the beginning of that same week.

Figure 38: Average Vessel Time in Port



PORT OPERATIONS

A total of 409 vessels called for grain at western Canadian ports during the first six months of the 2013-14 crop year. This represented an 8.7% reduction from the 448 ships that arrived for loading in the same period a year earlier. Most of the decline was tied to Vancouver, where 178 vessels called compared to 205 a year earlier. Contributing to the broader loss was a seventeen-ship reduction at Thunder Bay, which reported 157 vessels calling against the previous crop year's 174. Partially countering these declines were the gains posted by Prince Rupert and Churchill, which counted increases of three and two ships respectively.

Average Vessel Time in Port

The amount of time spent by vessels in port increased by 13.8% in the first half of the 2013-14 crop year, climbing to an average of 9.9 days from the 8.7-day average reported a year earlier. A 17.1% increase in the amount of time vessels spent loading, which rose to an average of 4.8

days from 4.1 days a year earlier, was the chief driver in the overall escalation.[34] This was supported by a 10.9% increase in the amount of time vessels spent waiting to load, which rose to an average of 5.1 days from 4.6 days.

With the exception of Thunder Bay, all ports reported year-over-year increases. The most critical increases were tied to the west-coast ports of Vancouver and Prince Rupert. In the case of Vancouver, the average rose by 4.0%, to 15.5 days from 14.9 days a year earlier. Prince Rupert posted a far more substantive 90.2% increase, with its average climbing to 15.6 days from 8.2 days. Adding to this upward pressure was the increase posted by Churchill, where the average rose by 50.0%, to 5.1 days from 3.4 days. Thunder Bay posted no change, with its average time-in-port remaining unvaried at 2.1 days.[35] [Table 5D-1]

Distribution of Vessel Time in Port

In keeping with the added time taken by ships in port, the proportion of ships spending more than five days in port also rose, to 50.9% from 45.8% a year earlier. Moreover, there was a rise in the number of ships that remained in port for an uncommonly lengthy period of time, with the proportion of vessels spending 16 or more days in port rising to 24.4% from 17.9% a year earlier. All of these delays were associated with ships calling at Vancouver and Prince Rupert. These statistics again suggest that the movement of grain in the first half of the 2013-14 crop year was not keeping pace with the demand as embodied by the vessels arriving at port. Moreover, these delays have progressively worsened since the 2010-11 crop year, suggesting the cause is of a more structural, rather than isolated, nature. [Table 5D-2]

34 The number of days a vessel spent waiting is determined using the difference between the time the vessel passed the inspection of the Port Warden and Canadian Food Inspection Agency, and the time at which actual loading was commenced.

35 Thunder Bay generally posts the lowest average for time spent by vessels in port. This lower average stems chiefly from the greater regularity with which vessels move through the St. Lawrence Seaway, the port's ample storage capacity, and the limited delays incurred by vessels waiting to berth.

SYSTEM PERFORMANCE

The supply chain model provides a useful framework by which to examine the speed with which grain moves through the GHTS. For the 2012-13 crop year, it was observed that this process required an average of 46.2 days; the lowest annualized value yet observed under the GMP. Reductions in the supply chain's principal components – time in storage at a country elevator, time in transit as a railway shipment, and time in inventory at a terminal elevator – were all instrumental in shaping this 21.9-day improvement over the base-year average of 68.1 days.

Although the overall average fell still further in the first quarter of the 2013-14 crop year, to 43.5 days, it rose sharply in the second, attaining a height of 49.9 days. This produced a higher year-to-date average for the first half of 46.6 days. The result was mainly shaped by a 3.9-day increase in the amount of time spent by grain in storage at a country elevator, which rose to 30.4 days from the previous crop year's 26.5-day average. This increase, however, was largely countered by a 3.4-day reduction in the amount of time grain spent in inventory at a terminal elevator, which fell to an average of 10.9 days from 14.3 days. Adding to the offset was a 0.1-day reduction in the railways' loaded transit time, which fell to an average of 5.3 days from 5.4 days. [Table 5E-1]

Despite the fact that the first quarter's average ranked among the lowest reported during the GMP, by the close of the period there were already indications that this was unlikely to endure. Burdened with a harvest of riches, the GHTS found itself awash in grain that it simply could not move. This was widely reflected in an overall deterioration in system performance during the second quarter. A few observations relating to this follows:

- First, grain production shattered the previous record, reaching 75.9 million tonnes. Along with carry-forward stocks of 4.9 million tonnes, this effectively raised the grain supply to an extraordinary 80.8 million tonnes. This proved to be 20% larger than anything

witnessed in the GMP's 14-year history, and constituted an enormous challenge to the GHTS as a whole.

- Second, by the close of the first quarter there were indications that the GHTS's carrying capacity was not adequate to the task presented. These indications, which first began to manifest themselves in a shortage of railcars for loading in the country, were soon beginning to engulf other parts of the system. Burgeoning country elevator stocks, along with declining terminal elevator stocks and an increasing number of ships waiting to load, particularly at the ports of Vancouver and Prince Rupert, were all symptomatic of constrained handling capacity.

- The problems that beset the GHTS in the first quarter only increased in the second. The movement of grain was further undermined by the onset of winter and the various problems that extreme weather brought to railway operations, the most predominant being the necessity of moving to shorter train lengths, which reduces the overall carrying capacity of the railways. In part, this led to the railways being unable to carry through on the equipment that they themselves had committed to providing, which constricted the flow of grain still further. By the close of January 2014 the situation was becoming acute, with farmers and shippers all decrying the level of service they were receiving from the railways. Moreover, these complaints were now being directed to the Government of Canada with demands for some form of corrective action.

- Finally, these difficulties again exposed the vulnerabilities of the grain supply chain. Beyond the system's inability to accommodate a crop of such unprecedented size, it also had difficulty in matching the performance exhibited in previous crop years. Moreover, the difficulty associated with gathering grain in the country, moving it to port by rail, and getting it loaded onto waiting ships, suggests a capacity deficiency arising from an inadequate supply of railway resources. Whether owing to a lack of locomotives, rolling stock or people, the evidence would suggest that North American railways

Figure 39: Days Spent Moving Through the GHTS Supply Chain

FARM OPERATIONS

COUNTRY ELEVATOR STORAGE TIME

RAILWAY LOADED TRANSIT TIME

TERMINAL ELEVATOR STORAGE TIME

MARINE OPERATIONS

				TOTAL	NET CHANGE
1999-00	41.7	7.8	18.6	68.1	
2010-11	30.8	6.0	15.5	52.3	
2011-12	27.6	5.6	13.9	47.1	
2012-13	26.5	5.4	14.3	46.2	
2013-14	30.4	5.3	10.9	46.6	-31.6%

have repeatedly had difficulty in servicing their customers when confronting a sharp rise in traffic volume, derailments, or harsh weather conditions. While much of this is beyond the railways' control, there is a suggestion that the reduction in physical and human resources arising from their quest to improve productivity may have also undermined their ability to maintain service levels when challenged.[36]

36 Over the course of the last three decades, all North American railways have strived to enhance their operational efficiency by sharply reducing their total costs. Much of this effort has focused on improving the utilization of their various assets. By way of example, since installing a new chief executive officer in 2012, CP has embarked on an aggressive cost-cutting program. In that time, the railway has reduced the number of its locomotives from 1,710 to 1,651; its rolling stock fleet from 58,100 railcars to 47,600 railcars; and the average number of its employees from 16,097 to 15,011. Source: Securities and Exchange Commission filings, Form 40-F, Canadian Pacific Railway Company, for fiscal years 2011, 2012, and 2013.

Section 6: Producer Impact

Indicator Description	Table	1999-00	2011-12	2012-13	2013-14 Q1	Q2	Q3	Q4	YTD	% VAR
Export Basis										
1CWRS Wheat ($ per tonne) – Original Methodology	6A-10A	$54.58	$74.75	n/a						
1CWRS Wheat ($ per tonne) – Revised Methodology (1)	6A-10A	n/a	n/a	$53.49						
1CWA Durum ($ per tonne) – Original Methodology	6A-10B	$67.63	$97.24	n/a						
1CWA Durum ($ per tonne) – Revised Methodology (1)	6A-10B	n/a	n/a	$108.47						
1 Canada Canola ($ per tonne)	6A-10C	$52.51	$54.16	$56.50						
Canadian Large Yellow Peas – No. 2 or Better ($ per tonne)	6A-10D	$54.76	$92.64	$81.07						
Producer Cars										
Producer-Car-Loading Sites (number) – Class 1 Carriers	6B-1	415	234	228	228	211	-	-	211	-7.5%
Producer-Car-Loading Sites (number) – Class 2 and 3 Carriers	6B-1	122	132	134	134	134	-	-	134	0.0%
Producer-Car-Loading Sites (number) – All Carriers	6B-1	537	366	362	362	345	-	-	345	-4.7%
Producer-Car Shipments (number) – Covered Hopper Cars	6B-2	3,441	14,341	9,259	2,206	4,658	-	-	6,864	45.3%

(1) The methodology used to calculate the export basis in the 2012-13 crop year does not allow for direct comparison with those of previous crop years.

PRODUCER NETBACK

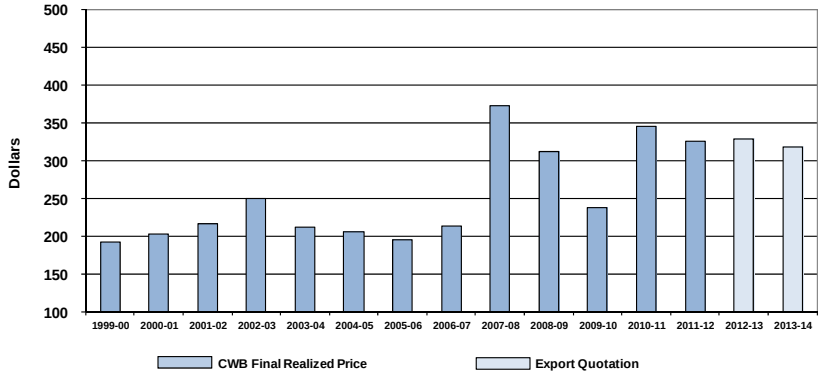
One of the GMP's key objectives is to determine the financial impact on producers arising from changes in the GHTS. The principal measure in this regard is the producer netback, an estimation of the per-tonne financial return to producers after the various logistics costs, collectively known as the export basis, are deducted from the actual price realized in a grain sale.

In its earlier reports, the Monitor described how increased commodity prices had largely been responsible for the improvement in the per-tonne returns accruing to producers of wheat, durum, canola, and yellow peas. Even in those years when the export basis fell, the financial gain derived from the reduction proved far less than that gained from better grain prices. But the escalation in grain prices has been highly erratic.

In the first four years of the GMP, grain prices moved steadily higher. This, however, was followed by a three-year decline beginning in the 2003-04 crop year. But prices began to rally yet again in the 2006-07 crop year, with the ensuing appreciation lifting producer returns to their highest levels the following year. This age-old rise and fall in prices would be repeated yet again, although with greater severity owing to the financial crisis that gripped the world, over the course of the next four years. Nevertheless, by the close of the 2012-13 crop year, grain prices had rebounded substantially.

The GMP only includes the producer netback in the Monitor's annual reports since certain elements integral to the calculation are not available until after the close of the crop year itself. Nevertheless, relevant pricing and handling-cost data is collected for both wheat and canola as a means of providing some insight into their probable impact on the per-tonne financial return arising to producers. Some of the changes observed during the first six months of the 2013-14 crop year are presented here.

Figure 40: Price Changes – 1CWRS Wheat (dollars per tonne)



Wheat

The GMP uses an export quotation for 1 CWRS wheat (13.5% protein) as the principal barometer of changing prices. This value undulated marginally in the opening months of the 2013-14 crop year, finally drifting down to an average of $317.50 per tonne by the close of the second quarter. Comparatively, this proved to be 3.4% below the 2012-13 crop year's average of $328.76 per tonne.

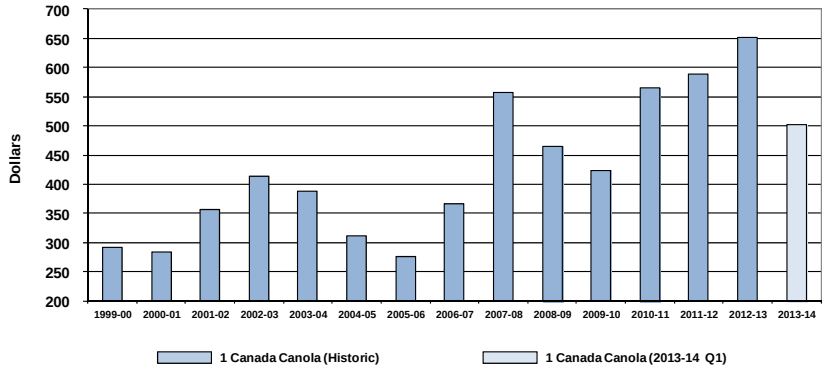
The early price decline reflected an increase in international supplies, with global wheat production anticipated to reach near-record highs. Much of this was tied to expectations of increased wheat production within key exporting regions, including Black Sea countries, the European Union, Australia and Argentina. This erosion in price suggested that the financial returns accruing to producers will likely decline modestly in the 2013-14 crop year.

Canola

As with wheat, the Vancouver cash price for 1 Canada Canola also moved lower during the first half of the 2013-14 crop year, albeit to a more significant degree. Here too, an expected increase in oilseed supplies did much to undermine prices. The key drivers in this were the bountiful soybean harvests in both the United States and Brazil. Likewise, an increase in the output of both Canadian canola and soybeans only contributed to the downward price pressure.

During the first six months of the 2013-14 crop year the Vancouver cash price for 1 Canada canola slipped from $542.35 per tonne to $457.56 per tonne. With the close of the period, the average price stood at $503.03 per tonne, 22.8% below the previous crop year's final average of $651.60 per tonne. This decline suggests that producers of 1 Canada canola are likely to experience a significant reduction in their per-tonne financial returns for the 2013-14 crop year.

Figure 41: Price Changes – 1 Canada Canola (dollars per tonne)



Despite the dampening effects of declining prices, varying input costs offered little real prospect of bettering the financial returns of farmers. While modest in scope, these included increases of 4.3% for country elevation, and 0.2% for dockage. Counteracting some of this was the cost of storage, which declined by 1.0%. Generally lesser increases were noted for terminal-elevator activities, with elevation and storage rates both rising by 0.4%. Single-car railway freight rates, however, showed more meaningful reductions, with westbound rates falling by about 5.9% while eastbound rates declined by up to 9.9%.

PRODUCER CARS

Producer-car loading has increased substantially since the beginning of the GMP. This has come about as a result of many factors, not the least of which has been the formation of producer-car loading groups. These range from small groups loading cars with mobile augers on a designated siding, to more sophisticated organizations with significant investments in fixed trackside storage and carloading facilities.[37] Some have gone so far as to purchase the branch lines being abandoned by CN or CP, establishing shortline railways that then became an integral element in their broader grain-handling operations. Although the majority of these producer groups are situated in Saskatchewan, a number can also be found in Manitoba and Alberta.

Loading Sites

Through the first 14 years of the GMP the number of producer-car loading sites situated across western Canada was reduced by almost a half. With the close of the 2012-13 crop year, only 362 out of 709 remained. Much of the overall decline can be traced back to the closures made by the larger Class 1 carriers, which reduced its serviced sites by

37 Regardless of the approach employed, the economic rationale for producer-car loading remains rooted in the farmer's ability to avoid the comparatively higher cost of turning his grain over to a commercial grain company for movement.

64.6%, to 228 from 644. Conversely, those operated by the smaller Class 2 and 3 carriers increased by 106.2%, to 134 from 65. The second quarter of the 2013-14 crop year saw another 17 sites closed, reducing the overall total by 4.7%, to 345 from 362. As all of these closures were made by the major railways, their number was reduced by 7.5%, to 211 from 228. Of the 17 sites closed, 12 were situated along the CN network, and five along that of CP. [Table 6B-1]

Producer Car Shipments

Despite the general reduction in loading sites, producer-car shipments have risen significantly. Over the course of the GMP's first 13 years these shipments more than quadrupled, increasing to a high of 14,341 carloads in the 2011-12 crop year from 3,441 carloads in the base year. However, this growth proved somewhat sluggish in the face of periodic downturns in volume. Such was the case in the 2012-13 crop year, where shipments fell to 9,259 carloads. Much of this downturn, however, may well have been tied to the uncertainty that accompanied the loss of the CWB's monopoly over the marketing of wheat and barley.

Even so, shipments in the first half of the 2013-14 crop year rebounded sharply, by 7.5% in the first quarter, and by 74.5% in the second. Total shipments through this six-month period rose by 45.3%, to 6,864 carloads from 4,723 carloads a year earlier. Moreover, this constituted a new record for the period under the GMP, surpassing the previous high of 5,946 carloads set in the 2011-12 crop year by 15.4%. This increase denoted a surmounting of the commercial concerns that had challenged these operators a year earlier. Part of this was tied to the forging of new marketing arrangements, as well as the practical financial considerations inherent in trying to move so large a crop in a declining market.

Even with the increase in volume, producer-car shipments only represented 4.0% of all covered hopper car movements. But this was a significant gain over the 2.7% share garnered twelve months before. Equally noteworthy was the continuing shift in the mix of commodities handled. Until the 2009-10 crop year, wheat, durum and barley was dominant, representing virtually all of traffic moved. The first half saw this share decline still further, to 68.6% from 82.4% in the same period a year earlier. On the other hand, shipments of oilseeds and other commodities continued its ascendancy, with 2,154 carloads moved against a much lesser 830 a year earlier. Moreover, these shipments encompassed a much greater share of total producer-car movements, accounting for 31.4% compared to 17.6%. Much of this gain appears attributable to the authority now held by the CWB in handling these commodities, and which provided producers with a much needed marketer for their shipments. [Table 6B-2]

Appendix 1: Program Background

The Government of Canada selected Quorum Corporation to serve as the Monitor of Canada's Grain Handling and Transportation System (GHTS) in June 2001. Under this mandate, Quorum Corporation provides the government with a series of regular reports relating to the system's overall performance, as well as the effects of the various policy reforms enacted by the government since 2000.

In a larger sense, these reforms were expected to alter the commercial relations that have traditionally existed between the primary participants in the GHTS: producers; the Canadian Wheat Board; grain companies; railway companies; and port terminal operators. Using a broad series of indicators, the government's Grain Monitoring Program (GMP) was designed to measure the performance of the GHTS as this evolution unfolded. Moreover, these indicators are intended to reveal whether grain is moving through the supply chain with greater efficiency and reliability.

To this end, the GMP provides for a number of specific performance indicators grouped under six broad series, namely:

- Series 1 – Production and Supply: Measurements relating to grain production in western Canada. In addition to the major cereal grains, this also includes oilseeds and special crops.

- Series 2 – Traffic and Movement: Measurements focusing on the amount of grain moved by the western Canadian GHTS. This includes shipments from country elevators; by rail to the four western ports; and by vessel from terminal elevators at the ports.

- Series 3 – Infrastructure: Measurements illustrating the makeup of the GHTS. These statistics include both the number and capacity of the country as well as terminal elevator systems, and the composition of the western Canadian railway network.

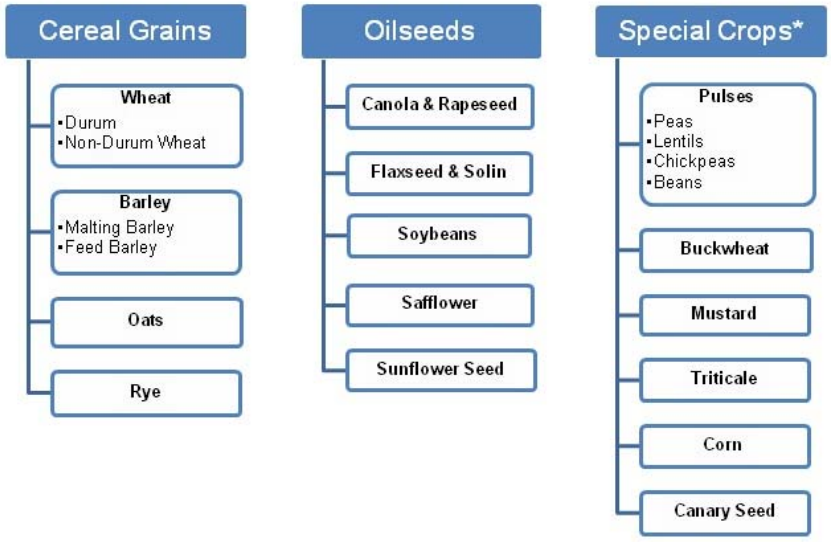
- Series 4 – Commercial Relations: Measurements relating to the rates applicable on various grain-handling and transportation services, as well as the activities of the Canadian Wheat Board in the adoption of more commercially oriented policies and practices.

- Series 5 – System Efficiency and Performance: Measurements aimed at gauging the operational efficiency with which grain moves through the logistics chain.

- Series 6 – Producer Impact: Measurements designed to capture the value to producers from changes in the GHTS, and which are focused largely on the calculation of the "producers' netback."

Appendix 2: Commodity Guide

The following provides a high-level overview of the various commodities discussed in this report. The delineations made here are drawn from the Canadian Grain Commission's Official Grain Grading Guide Glossary.



* Not all special crops as defined by the CGC are included under the umbrella of the Canadian Special Crops Association

Cereal Grains: Cereal grains are any grain or edible seed of the grass family which may be used as food.

Oilseeds: Oilseeds include flaxseed and solin, canola and rapeseed, soybeans, safflower and sunflower seed.

Canola: The term "canola" was trademarked in 1978 by the Western Canadian Oilseed Crushers' Association to differentiate the new superior low-erucic acid and low-glucosinolate varieties and their products from older rapeseed varieties.

Special Crops: Special crops are considered to be beans, buckwheat, chick peas, corn, fababeans, lentils, mustard, peas, safflower, soybeans, sunflower, and triticale.

Pulses: Pulses are crops grown for their edible seeds, such as peas, lentils, chick peas or beans.

Screenings: Screenings is dockage material that has been removed by cleaning from a parcel of grain.

Appendix 3: Acknowledgements

The scope of this review is far-reaching and could not have been completed without the assistance of the various stakeholders that submitted views on the detailed monitoring design and provided the data in support of the GMP. Quorum Corporation would like to thank the following organizations, and more particularly the individuals within them, for the cooperation they have extended in our efforts to implement the Grain Monitoring Program. We have come to appreciate not only their cooperation as suppliers of data under the program, but to value their assistance in helping to improve the quality of the program as a whole. We look forward to their continued input and cooperation throughout the duration of the Monitoring Program.

Agricultural Producers Association of Saskatchewan
Agriculture and Agri-Food Canada
Alberta Agriculture, Food and Rural Development
Alberta Federation of Agriculture
Alberta Transportation
Alliance Grain Terminal Ltd.
Alliance Pulse Processors Inc.
Battle River Railway
BC Maritime Employers Association
Big Sky Rail Corp.
Boundary Trail Railway Company Inc.
Canadian Canola Growers Association
Canadian Grain Commission
Canadian Maritime Chamber of Commerce
Canadian National Railway
Canadian Pacific Railway
Canadian Ship Owners Association
Canadian Special Crops Association
Canadian Transportation Agency
Cando Contracting Ltd.
Canola Council of Canada
Cargill Limited
Chamber of Shipping of British Columbia
CMI Terminal
CWB
Fife Lake Railway Ltd.
Gardiner Dam Terminal
Government of British Columbia
Grain Growers of Canada
Great Sandhills Terminal
Great Western Railway Ltd.
ICE Futures Canada, Inc.
Inland Terminal Association of Canada
Keystone Agricultural Producers
Kinder Morgan Canada
Lake Line Railroad Inc.
Lethbridge Inland Terminal Ltd.
Long Creek Railroad
Louis Dreyfus Canada Ltd.
Manitoba Agriculture, Food and Rural Development
Manitoba Infrastructure and Transportation
Mission Terminal Inc.
Mobile Grain Ltd.
National Farmers Union
North West Terminal Ltd.
OmniTRAX Canada, Inc.
Parrish & Heimbecker Ltd.
Paterson Grain
Port Metro Vancouver
Port of Churchill
Port of Thunder Bay
Prairie West Terminal
Prince Rupert Grain Ltd.
Prince Rupert Port Authority
Red Coat Road and Rail Ltd.
Richardson Pioneer Ltd.
Saskatchewan Agriculture
Saskatchewan Highways and Infrastructure
Saskatchewan Association of Rural Municipalities
South West Terminal
Statistics Canada
Stewart Southern Railway
Transport Canada
Viterra Inc.
West Central Road and Rail Ltd.
Western Barley Growers Association
Western Canadian Wheat Growers Association
Western Grain By-Products Storage Ltd.
Western Grain Elevator Association
Weyburn Inland Terminal Ltd.