Second Quarter Report

2011-2012 Crop Year

Monitoring the Canadian Grain Handling and Transportation System

Government of Canada / Gouvernement du Canada

Quorum Corporation

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Foreword

The following report details the performance of Canada's Grain Handling and Transportation System (GHTS) for the six months ended 31 January 2012, and focuses on the various events, issues and trends manifest in the movement of Western Canadian grain during the first half of the 2011-12 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 2011-12 crop year is largely gauged against that of the 2010-11 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 into thirteen 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 5 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
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Executive Summary

PRODUCTION AND SUPPLY

As was the case a year earlier, the 2011 growing season was impacted by an excessive amount of spring moisture. A heavier-than-normal snowfall only compounded the soil saturation problems that remained from the previous year. Flooding throughout much of the southern prairies along with excessive rains in May and June resulted in 6.8 million acres left unseeded. The summer brought almost the reverse, with hot, dry conditions being experienced in eastern Saskatchewan and Manitoba.

Notwithstanding these forces, the extension of generally favourable weather conditions through to the end of September allowed for the quicker harvesting of a better quality crop across much of the prairies. As a result, overall grain production for the 2011-12 crop year increased by 4.6%, to 52.4 million tonnes from the previous crop year's 50.1 million tonnes. When combined with the 8.2 million tonnes of stock carried forward from the preceding crop year, the overall grain supply reached 60.6 million tonnes. This embodied a reduction of 1.1% from the previous crop year's 61.3 million tonnes.

TRAFFIC AND MOVEMENT

Despite the reduction in the grain supply, the Grain Handling and Transportation System's (GHTS) total handlings in the first six months of the 2011-12 crop year proved noticeably greater than that experienced a year earlier.

- Country elevator throughput, as gauged by all road and rail shipments from the primary elevators situated across western Canada, increased by 15.2% in the first half, to 18.4 million tonnes from 16.0 million tonnes a year earlier. Increased volumes from Alberta, Saskatchewan and British Columbia were partially countered by reduced shipments from Manitoba.

- The amount of grain moved by rail to western Canadian ports increased by 9.5% in the first half, with the total rising to a GMP record of 15.6 million tonnes from 14.2 million tonnes a year earlier. As in past years, the vast majority of this traffic, some 15.1 million tonnes, moved in covered hopper cars. The remaining 519,800 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, but received 0.4% less in volume, with first-half shipments remaining effectively unchanged at 8.6 million tonnes. Conversely, Prince Rupert saw shipments increase by 25.9%, to 2.4 million tonnes from 1.9 million tonnes. Thunder Bay also posted a significant gain in traffic volume, with shipments increasing by 39.2%, to 3.5 million tonnes from 2.5 million tonnes a year earlier. In contrast, rail shipments to Churchill decreased by 17.9%, to 491,800 tonnes from 598,800 tonnes.

- Port throughput, as measured by the volume of grain shipped from terminal elevator and bulk loading facilities located at Canada's four western ports, totalled 14.2 million tonnes. This represented a 10.4% increase over the 12.9 million tonnes handled in the first half of the previous crop year. Vancouver accounted for 54.9% of this volume, with total marine shipments increasing by 1.6%, to 7.8 million tonnes from 7.7 million tonnes. This was supported by a 19.4% increase in volume for Prince Rupert, which rose to 2.3 million tonnes from 1.9 million tonnes a year earlier. Thunder Bay also experienced a sharp upturn, with a 37.5% gain lifting its throughput in the first half to 3.6 million tonnes from 2.6 million tonnes. Churchill reported a 21.7% decrease in its handlings, which fell to 515,100 tonnes from 657,500 tonnes.

INFRASTRUCTURE

The infrastructure that defines the GHTS in western Canada has undergone significant change in the last dozen years. 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). Still, the evolution continues, with the following changes being noted in the first six months of the 2011-12 crop year.

- The total number of country elevators increased by 6.6% in the first half, to 390 from 366 at the close of the previous crop year. However, this gain was largely the product of a change in the licensing requirements of the Canadian Grain Commission rather than in the elevator network itself. Nevertheless, this served to reduce the accumulated loss since the beginning of the GMP to 614 facilities, or 61.2%. Much the same was true of the network's grain delivery points, which rose by a lesser 1.5%, to 277. This was complemented by 313,800 tonnes of added storage capacity, with the overall total being raised to almost 6.7 million tonnes for the first time since the close of the 2000-01 crop year.

- With no reported discontinuances in the first half, the scope of the western Canadian railway network remained unchanged at 17,830.3 route-miles. Although this denotes a contraction of 8.4% from the 19,468.2 route-miles in place at the beginning of the GMP, it remains substantially below that of the elevator system it serves. Still, the first half did see a further shift in the balance between the Class 1 and non-Class-1 carriers as a result of the creation of yet another shortline, Big Sky Rail, in September 2011. This served to reduce the infrastructure under Class 1 management to 15,029.0 route-miles, or 84.3%, while increasing that under the non-Class-1 carriers to 2,801.3 route-miles, or 15.7%.

- The first six months of the 2011-12 crop year saw a modest change to the terminal elevator network. Although the system remained comprised of 15 licensed facilities, its associated storage capacity declined by 46,600 tonnes, or 1.9%, to somewhat in excess of 2.4 million tonnes. These values differ only marginally from the base-year benchmarks of 14 elevators with 2.6 million tonnes of storage capacity respectively. With seven of the elevators and 48.9% of the storage capacity, Thunder Bay continued to hold the largest share of these assets. Vancouver held second place with six facilities and 36.7% of the system's storage capacity. Prince Rupert and Churchill both followed with one terminal elevator each, and storage capacity shares of 8.6% and 5.8% respectively.

COMMERCIAL RELATIONS

The first six months of the 2011-12 crop year saw a further rise in the cost of the commercial services used to move grain through the GHTS. These ranged from fairly sharp escalations in railway freight rates to more modest increases for country and terminal elevator handling.

- Slumping oil prices did much to contain the commercial trucking rates associated with moving grain in the first half of the 2011-12 crop year. As a result, the composite price index for short-haul trucking remained unchanged at 162.2.

- Railway freight rates moved generally higher at the outset of the 2011-12 crop year, with much of this seemingly tied to the seasonal pricing initiatives introduced by the railways five years earlier. Even so, these increases again proved corridor specific, and ranged from 5% to 16% depending on the originating carrier. For the most part, the rates published by both carriers remained unchanged through to the end of the second quarter. The sole exception pertained to the rates advanced by the Canadian National Railway on shipments to Thunder Bay, which were cut by an average of 7.3% in November 2011.

- Increases were noted in the per-tonne rates assessed by grain companies for a variety of primary elevator handling activities in the first half of the 2011-12 crop year. These ranged from an increase of just 0.1% for the receiving, elevating and loading out of grain to a high of 1.6% for the removal of dockage as well as for elevator storage.

- Most of the GHTS's terminal elevators increased their per-tonne rates for the receiving, elevating and loading out of grain in the first half of the 2011-12 crop year. The only exception was found in the rates posted by Churchill, which remained unchanged for an eighth consecutive shipping season. On the whole, these pricing actions proved comparatively modest, and served to raise the composite price index by just 1.4%. However, storage charges showed a more substantive 4.0% gain.

Tendering

The Canadian Wheat Board (CWB) issued a total of 91 tenders calling for the shipment of 1.5 million tonnes of grain in the first half. This represented a 26.7% decrease from the 2.0 million tonnes put out to tender in the same period a year earlier. The majority of this tonnage, 47.5%, related to the movement of wheat. This entailed a potential movement of 699,800 tonnes; an amount comparable to what had been called a year earlier. Barley ranked second, with calls for 695,200 tonnes having been issued. This denoted 47.2% of the overall total compared to 59.5% the previous year. Durum calls, which took a 5.3% share against the 5.1% share seen a year earlier, encompassed just 78,800 tonnes.

The CWB's tender calls were met by 311 bids offering to move 10.4 million tonnes of grain, more than seven times the amount sought. The majority of these bids, 81.3%, responded to calls for the movement of barley. Another 16.8% responded to those issued for wheat, while the remaining 1.9% answered those for durum. Ultimately, this resulted in the awarding of 119 contracts for the movement of 933,200 tonnes of grain. This marked a decline of 6.5% from the 998,400 tonnes awarded a year earlier. The largest

proportion, 51.9%, was directed to the port of Vancouver. This was followed in turn by Prince Rupert and Thunder Bay, which secured shares of 37.2% and 10.8% respectively. These shipments represented 13.2% of the total tonnage shipped by the CWB to western Canadian ports in the first half.

Advance Awards

The total tonnage moved under the CWB's advance car awards program fell by 41.1% in the first half, to 376,000 tonnes from 638,600 tonnes a year earlier. This represented just 5.3% of the total tonnage shipped to the four ports in western Canada by the CWB, against the 9.9% share produced in the same period a year earlier.

In conjunction with the 933,200 tonnes that moved under the CWB's tendering program, a total of 1.3 million tonnes of CWB grain were moved under the auspices of these two programs. On a combined basis, this represented 18.5% of the CWB's total grain shipments to the four ports. This fell considerably short of the 40% that had been targeted, and well below the 25.3% that had been handled under these same two programs a year earlier.

Commercial Developments

There were a number of significant developments in the commercial activities surrounding the movement of grain in the first six months of the 2011-12 crop year:

- The most substantive of these related to the federal government's enacting of Bill C-18, *The Marketing Freedom for Grain Farmers Act*. In essence, Bill C-18 provided for a number of amendments to the *Canadian Wheat Board Act*, not the least of which related to the removal of its long-standing monopoly over the sale of western Canadian wheat and barley. Although farmers would now have the right to sell their grain on the open market, Bill C-18 also provided for the transformation of the CWB into a voluntary marketing entity, with interim support from the federal government while the organization transitioned to full private ownership. In addition to having the option of selling their grain directly to a grain company, the producer would also be able to sell it to a revamped CWB. Moreover, the CWB would itself be able to engage in the sale of any grain, not just wheat and barley.

- With the introduction of Bill C-18, *The Marketing Freedom for Grain Farmers Act,* the federal government also acknowledged that Churchill might well face a greater challenge in adapting to the realities of an open market on 1 August 2012 than other ports in western Canada. This is due in large measure to the significant role played by the Canadian Wheat Board in directing grain to the port for export. Building on what it considered to be the importance of maintaining the port of Churchill as a viable shipping option, the government announced that it would be providing an economic incentive of up to $5.0 million per year for five years to support shipments of grain, including oilseeds, pulses and special crops, through this gateway. In addition, the government also indicated that it would be providing up to $4.1 million over three years to maintain the port during the transition period.

- Following the announcement of the federal government's plan to open the market for wheat and barley in western Canada, ICE Futures Canada began to design new commodity-specific futures contracts that would arm the grain industry with the standard

open-market mechanisms for price discovery, hedging and risk management. Intended for use by the trade at large, these instruments are aimed at providing buyers and sellers with more accurate market prices for spring wheat, durum and barley. The new ICE Futures contracts began trading on the electronic exchange on 23 January 2012. While initial trading volumes proved relatively low, industry participants believed that these instruments would begin to attract greater interest and usage as the 2012-13 crop year neared.

- In response to the concerns that had been raised by the majority of rail shippers regarding the state of railway service in Canada, the federal government committed itself in early 2008 to a review of railway service. This review was conducted in two phases: the first centred on gathering and analyzing data relating to the railways' performance during a two-year period between 2006 and 2008; while the second employed a panel of eminent persons to review the work completed in the first phase, and to consult with the stakeholder community regarding any problems identified. This panel formally submitted its final report to the Minister of State (Transport) in late December 2010. The federal government responded with a four-point course of action, which, among others, called for a six-month facilitated process to negotiate a template service agreement and commercial dispute resolution mechanism. Building on this, the Minister of Transport announced on 31 October 2011 that Jim Dinning, an Alberta businessman and former provincial cabinet minister, had been appointed to facilitate the negotiations aimed at developing the promised template service agreement and commercial dispute resolution mechanism. By the close of the second quarter this facilitation process was already well under way.

SYSTEM EFFICIENCY AND PERFORMANCE

Although the grain supply declined by 1.1%, falling to 60.6 million tonnes from 61.3 million tonnes, the 15.6 million tonnes of grain shipped in the first six months of the 2011-12 crop year proved to be a new record for the period under the GMP. As a result, the pressures brought to bear on the GHTS during the first half proved to be the greatest thus far experienced under the GMP.

- The overall amount of time involved in moving grain through the supply chain fell by 7.6% in the first half, to an average of 48.3 days from the previous crop year's overall 52.3-day average. This was due primarily to the reduced time spent by grain in storage in country elevators, which fell by an average of 2.6 days. A further 0.5 days was derived from a reduction in the railways' loaded transit time. Adding to these gains was a 0.9-day decrease in the amount of time grain spent in inventory at a terminal elevator. As a result, the amount of time spent by grain in moving through the GHTS in the first half of the 2011-12 crop year proved to be one of the better values observed under the GMP.

- By the beginning of the crop year the operational problems that had confronted the Canadian Pacific Railway and undermined its service offering throughout much of the previous crop year had effectively been overcome. As a result, grain moved to export position much more effectively and efficiently than it did twelve months earlier. Further, grain shippers reported comparatively few problems with the service they were receiving from the railways in the country, despite what was proving to be a near-record handling for the elevator system. More important was the improved fluidity with which grain was moving through the ports.

With better inbound supplies, the terminal elevator system, which was also bearing the pressures of a near-record throughput, was better able to provide for the timelier loading of awaiting ships.

PRODUCER IMPACT

All of the data assembled since the beginning of the GMP has consistently shown that the financial returns accruing 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, current price and input-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 2011-12 crop year are summarized below.

- The CWB's Pool Return Outlook (PRO) for 1 CWRS wheat (13.5% protein) moved lower in the first half. When gauged against the 2010-11 crop year's final realized price of $344.96 per tonne, the PRO fell by a factor of 11.0%, closing out the period at $307.00 per tonne. Much of the impetus for this price reduction came from continued uncertainty in world markets. Adding to this was a restoration of healthy yield and production levels among the major growing regions of Europe and the Black Sea. This suggests a decline in the financial returns accruing to western producers in the 2011-12 crop year.

- The Vancouver cash price for 1 Canada canola also moved lower in the first half. However, the average of $557.87 per tonne proved only 1.3% below the previous crop year's final average of $565.36 per tonne. This was attributable in large measure to an increase in Canadian production, which modestly undermined prices in the face of sustained demand. This strongly suggests only a modest impact on the per-tonne financial returns of western Canadian producers.

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 six months of the 2011-12 crop year are highlighted 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 365 of the original 709 left in service at the close of the 2010-11 crop year. The first half saw no change in this number, although there was a further shift in the balance between the Class-1 and non-Class-1 carriers as a result of the creation of Big Sky Rail, with those operated by the former falling to 233 from 250, and those of the latter increasing to 132 from 115.

- Even with the reduction in producer-car-loading sites, producer-car shipments have risen significantly over the course of the last twelve years. Total shipments in the first half of the 2011-12 crop year increased by 11.1%, to 5,946 carloads from 5,354 carloads a year earlier.

Section 1: Western Canadian Production and Supply

Indicator Description	Table	1999-00	2009-10	2010-11	2011-12 Q1	Q2	Q3	Q4	YTD	% VAR
Production and Supply										
Crop Production (000 tonnes)	1A-1	55,141.7	56,144.2	50,071.2	52,350.7				52,350.7	4.6%
Carry Forward Stock (000 tonnes)	1A-2	7,418.2	9,515.3	11,200.1	8,247.9				8,247.9	-26.4%
Grain Supply (000 tonnes)		62,559.9	65,659.5	61,271.3	60,598.6				60,598.6	-1.1%
Crop Production (000 tonnes) – Special Crops	1A-3	3,936.7	5,573.7	5,617.4	4,052.6				4,052.6	-27.9%

PRODUCTION AND SUPPLY

As was the case a year earlier, the 2011 growing season was impacted by an excessive amount of spring moisture. A heavier-than-normal snowfall only compounded the soil saturation problems that remained from the previous year. Flooding throughout much of the southern prairies along with excessive rains in May and June resulted in an estimated 6.8 million acres going unseeded.[1] The summer brought almost the reverse, with hot, dry conditions being experienced in eastern Saskatchewan and Manitoba.

Notwithstanding these forces, the extension of generally favourable weather conditions through to the end of September allowed for the quicker harvesting of a better quality crop across much of the prairies. As a result, overall grain production for the 2011-12 crop year increased by 4.6%, to 52.4 million tonnes from the previous crop year's 50.1 million tonnes. [Table 1A-1]

Provincial Distribution

Increased grain production was reported in all provinces except Manitoba. Saskatchewan led with a 3.4-million-tonne, or 14.8%, gain in production tonnage, which expanded to 26.0 million tonnes from 22.6 million tonnes a year earlier. Alberta followed with a 1.2-million-tonne increase, which saw the province's production climb to a Grain Monitoring Program (GMP) record of 20.6 million tonnes. Adding to this was a virtual doubling of the production in British Columbia, which rose to 300,100 tonnes from 141,100 tonnes.

Running counter to these tonnage gains was a 30.2% reduction for Manitoba, which saw production fall to 5.5 million tonnes from 7.9 million tonnes a year earlier. This downturn, which resulted in

1 The 2011 growing season marked a second consecutive year where excessive moisture resulted in a large number of acres going unseeded. A year earlier, a total of 10.5 million acres went unseeded.

Figure 1: Precipitation Compared to Historical Distribution (1 April to 31 August 2011)

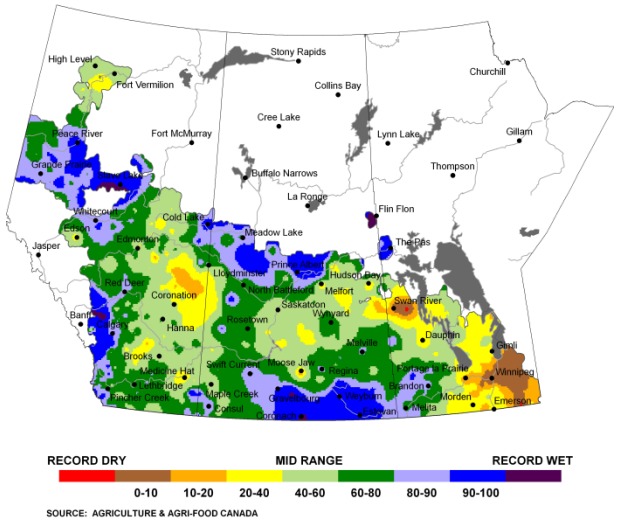
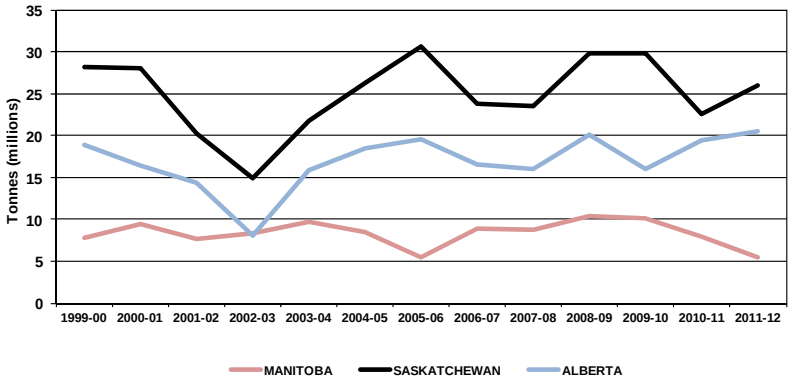


Figure 2: Provincial Grain Production



Manitoba's second smallest harvest under the GMP, was due in large measure to the adverse effects of severe flooding, particularly in the southwestern section of the province.[2]

Commodity Distribution

The 2011 growing season saw increased production for a number of crops. Canadian Wheat Board (CWB) grains posted the most significant gain, with an increase of 7.2% as compared to 1.2% for non-CWB grains. With total CWB grain production rising to 30.0 million tonnes from 28.0 million tonnes a year earlier, this sector accounted for almost 90% of the net increase in production. The gain derived from non-CWB grain production, which rose to 22.3 million tonnes from the previous crop year's 22.0 million tonnes, amounted to another 259,500 tonnes.

The 2.0-million-tonne expansion in CWB-grain production was largely shaped by a 37.9% increase in the amount of durum harvested, which rose to 4.2 million tonnes from 3.0 million tonnes a year earlier. This was augmented by the effects of a 3.1% increase in wheat production, which saw output rise to 18.6 million tonnes from 18.0 million tonnes the year previous. A 4.6% increase for barley raised production to 7.3 million tonnes from 7.0 million tonnes.

With 14.1 million tonnes of production, canola accounted for more than half of the 22.3 million tonnes of non-CWB grains harvested in the 2011-12 crop year. The 1.4-million-tonne gain in canola was complemented by a 605,600-tonne increase in oat production, which rose to 2.7 million tonnes from 2.1 million a year earlier. However, these gains were largely offset by a 1.7-million-tonne decline in the output of other non-CWB grains, the most notable being dry peas.

2 Although Manitoba typically experiences flooding of the Red and Assiniboine Rivers each spring, an unusually heavy snowfall led to a severe flooding of the Assiniboine River in 2011. Described as a once-in-300-year event, the flood significantly affected crop production in the western part of the province. Flooding of the Souris River, which flows into the Assiniboine River, only aggravated the situation, prompting a second cresting of the Assiniboine River flood.

Figure 3: Grain Production – CWB and Non-CWB Grains

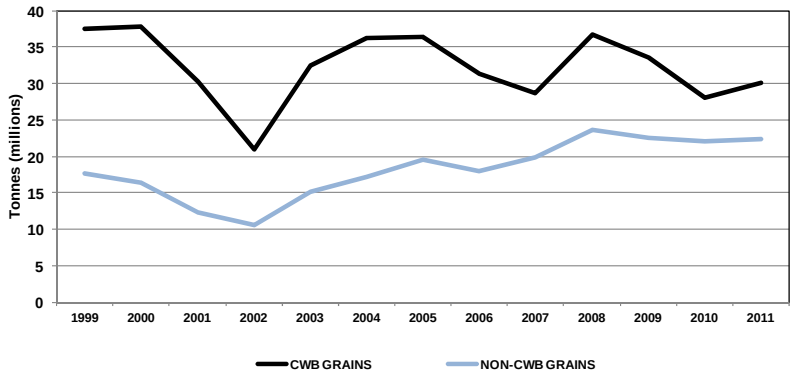
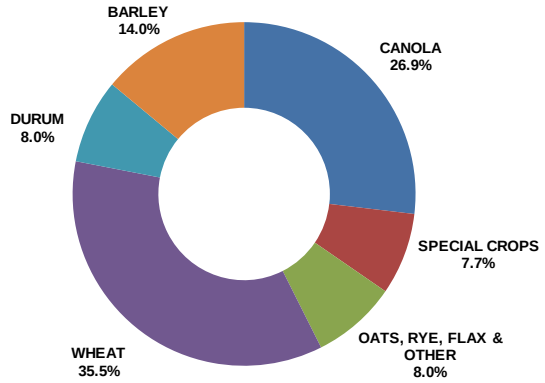


Figure 4: Major Grain Production – 2011-12 Crop Year



Special Crops

Despite the increase in non-CWB grain production, that of special crops declined sharply.[3] Total output for the sector amounted to 4.1 million tonnes, down 27.9% from the 5.6 million tonnes reported a year earlier. This 1.2-million-tonne reduction was reflective of equally steep declines in the output of its individual constituents, with the most significant being tied to dry peas – the sector's largest single crop – which posted a 29.9% decrease, and fell to 2.1 million tonnes from 3.0 million tonnes a year earlier. A sizable loss was also noted for lentils, which fell to 1.5 million tonnes from 1.9 million tonnes. Enlarging this were the losses for a host of other commodities, including mustard seed, canary seed, chickpeas, dry beans and sunflower seed. [Table 1A-3]

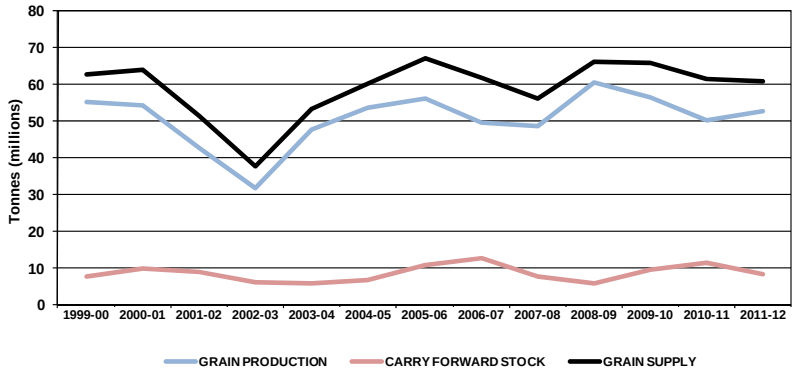
Carry-Forward Stock and Western Canadian Grain Supply

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.[4] These stocks tend to move in conjunction with changes in grain production, albeit on a lagging basis.

Totalling some 8.2 million tonnes, these stocks proved to be 26.4% less than the 11.2 million tonnes that had been carried forward a year earlier. Much of the impetus for this 3.0-million-tonne reduction came from the decline in the previous year's production as well as a continuing strong demand for Canadian export grain. When combined with 52.4 million tonnes of new production, the grain supply reached 60.6 million tonnes. This embodied a reduction of 1.1% from the previous crop year's 61.3 million tonnes. [Table 1A-2]

With a 3.1-million-tonne reduction in carry-forward stocks, Saskatchewan posted the most substantive decline. This was widened by a 370,500-tonne decrease in Manitoba's stocks. Only Alberta, which reported a stock increase of 529,500 tonnes, provided an offset to these reductions. With the exception of wheat, the carry-over for all major grain stocks moved sharply lower.

Figure 5: Western Canadian Grain Supply



3 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.

4 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	2009-10	2010-11	2011-12 Q1	Q2	Q3	Q4	YTD	% VAR
Country Elevator Throughput										
Grain Throughput (000 tonnes) – Primary Elevators	2A-1	32,493.9	33,861.4	32,270.4	8,984.1	9,416.1	-	-	18,400.2	15.2%
Railway Traffic										
Railway Shipments (000 tonnes) – All Grains	2B-1	26,439.2	28,443.8	28,007.8	8,149.8	7,434.7	-	-	15,584.5	9.5%
Railway Shipments (000 tonnes) – Hopper Cars	2B-1	25,664.6	27,777.8	27,096.7	7,907.0	7,157.7	-	-	15,064.8	9.9%
Railway Shipments (000 tonnes) – Non-Hopper Cars	2B-1	774.7	666.0	666.0	242.8	277.0	-	-	519.8	-2.6%
Special Crop Shipments (000 tonnes) – All Grains	2B-2	2,102.9	2,718.9	3,524.7	1,047.1	487.3	-	-	1,534.4	-19.3%
Special Crop Shipments (000 tonnes) – Hopper Cars	2B-2	1,844.1	2,665.3	3,480.6	1,010.6	450.4	-	-	1,460.9	-22.1%
Special Crop Shipments (000 tonnes) – Non-Hopper Cars	2B-2	258.7	53.5	44.2	36.5	36.9	-	-	73.4	176.9%
Hopper Car Shipments (000 tonnes) – Origin Province	2B-3									
Hopper Car Shipments (000 tonnes) – Primary Commodities	2B-4	25,664.6	27,777.8	27,096.7	7,907.0	7,157.7	-	-	15,064.8	9.9%
Hopper Car Shipments (000 tonnes) – Detailed Breakdown	2B-5									
Hopper Car Shipments (000 tonnes) – Grain-Dependent Network	2B-6	8,685.9	8,741.9	7,672.8	2,361.0	2,145.2	-	-	4,506.1	6.7%
Hopper Car Shipments (000 tonnes) – Non-Grain-Dependent Network	2B-6	16,978.7	19,035.9	19,423.8	5,546.1	5,012.6	-	-	10,558.6	11.4%
Hopper Car Shipments (000 tonnes) – Class 1 Carriers	2B-7	23,573.5	26,945.8	26,145.6	7,654.5	6,846.3	-	-	14,500.8	9.9%
Hopper Car Shipments (000 tonnes) – Non-Class-1 Carriers	2B-7	2,091.0	832.0	951.0	252.5	311.5	-	-	564.0	11.8%
Terminal Elevator Throughput										
Grain Throughput (000 tonnes) – All Commodities	2C-1	23,555.5	25,760.4	25,428.1	7,099.2	7,090.4	-	-	14,189.6	10.4%
Hopper Cars Unloaded (number) – All Carriers	2C-2	278,255	286,630	283,101	83,388	79,683	-	-	163,071	12.9%
Hopper Cars Unloaded (number) – CN	2C-2	144,800	144,894	151,554	38,661	41,815	-	-	80,476	2.6%
Hopper Cars Unloaded (number) – CP	2C-2	133,455	141,736	131,547	44,727	37,868	-	-	82,595	25.1%

COUNTRY ELEVATOR THROUGHPUT

Country elevator throughput, as gauged by all road and rail shipments from the primary elevators situated across western Canada, increased by 15.2% in the first six months of the 2011-12 crop year, rising to 18.4 million tonnes from 16.0 million tonnes a year earlier.

Provincial throughputs proved more varied. Alberta led with a 31.6% increase, with first-half throughput rising to 6.6 million tonnes from 5.0 million tonnes a year earlier. Saskatchewan followed with a 17.8% increase in shipments, which rose to 9.2 million tonnes from 7.8 million tonnes. Countering some of these gains was a 19.6% decrease for Manitoba, which reported that primary-elevator shipments fell to 2.4 million tonnes from 3.0 million tonnes a year earlier. [Table 2A-1]

RAILWAY TRAFFIC

The amount of regulated grain moved by rail to western Canadian ports increased by 9.5% in the first half of the 2011-12 crop year, to a GMP record of 15.6 million tonnes from 14.2 million tonnes a year earlier. As in past years, the vast majority of this traffic, some 15.1 million tonnes, moved in covered hopper cars. The remaining 519,800 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 just a small fraction of total railway shipments, with their share falling to 3.3% from 3.7% during the same period a year earlier. [Table 2B-1]

Special-crop shipments fell to 1.5 million tonnes in the first half, a drop of 19.3% against the 1.9 million tonnes shipped a year earlier. Given its dominance, this reduction closely mirrored the 22.1% decline in hopper-car shipments. A 176.9% increase in non-hopper-car shipments (boxcars, containers and tankcars) provided some counterweight to this, raising its share of the overall movement to 4.8% from 1.4% a year earlier. [Table 2B-2]

Figure 6: Primary Elevator Throughput

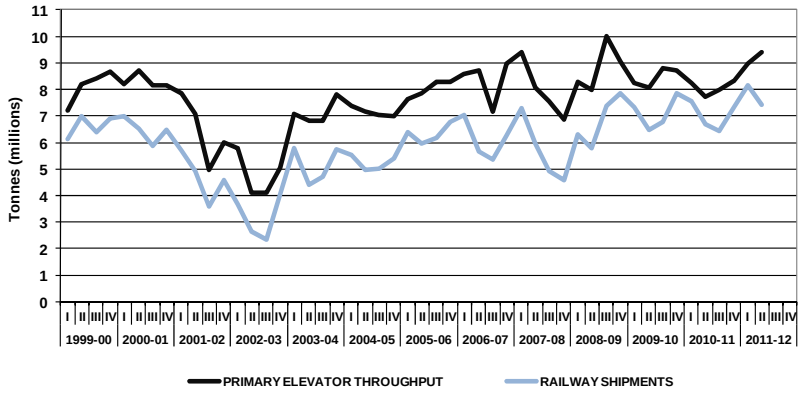
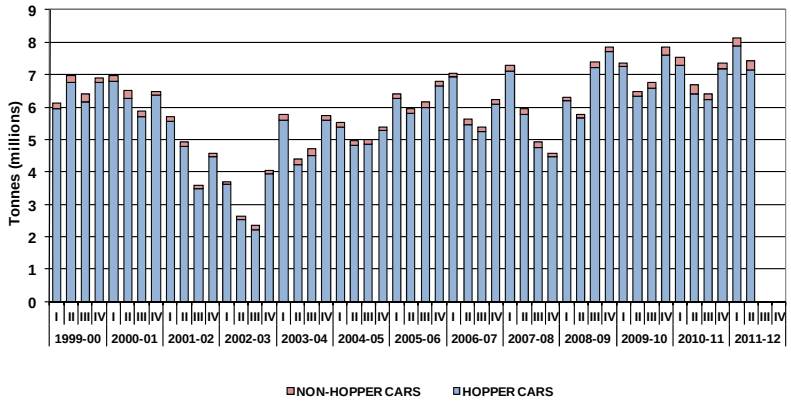


Figure 7: Railway Shipments – Hopper and Non-Hopper Cars



Hopper Car Movements

Western Canadian hopper-car shipments reached a GMP record of 15.1 million tonnes in the first six months of the 2011-12 crop year, a gain of 9.9% over the 13.7 million tonnes handled in the same period a year earlier. This differed markedly from the 4.6% increase noted for grain production as well as the 1.1% decrease in the overall grain supply.

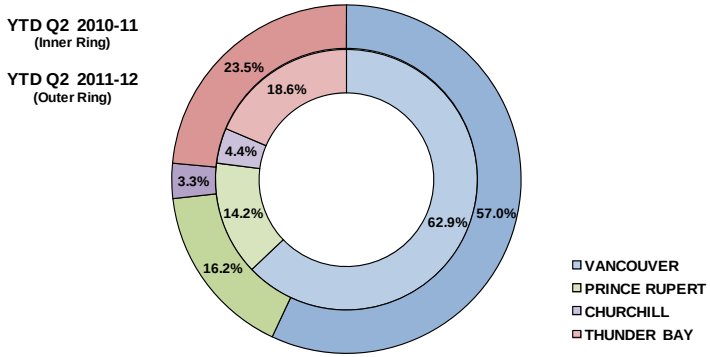
Much of this result was shaped by a 1.6-million-tonne increase in shipments from Alberta, which swelled by 33.3% to 6.3 million tonnes. Supporting this was a 438,100-tonne increase in shipments from Saskatchewan, which rose by a much lesser 6.3% to 7.4 million tonnes. These gains more than offset a 31.9% reduction in shipments from Manitoba, which fell to 1.3 million tonnes from 1.9 million tonnes a year earlier. A 32.8% reduction was also posted by British Columbia, which saw its shipments for the period slip to 104,700 tonnes from 155,700 tonnes. [Tables 2B-3 through 2B-5]

Destination Ports

The port of Vancouver remained the principal export destination for western Canadian grain in the first half. Traffic to Vancouver remained effectively unchanged at 8.6 million tonnes, but fell 0.4% below the previous year's GMP record. In conjunction with this reduction, the port's share of railway shipments also declined, to 57.0% from 62.9%. In contrast, Prince Rupert posted a 25.9% increase in railway shipments, with volume climbing to 2.4 million tonnes from 1.9 million tonnes. This 503,100-tonne gain also accorded the port a larger share, which was lifted to 16.2% from 14.2%.[5] Although these west coast ports received the majority of the grain moved to export position, their combined share fell to 73.2% from 77.0% a year earlier.

5 The gain noted here was magnified by comparison with lower-than-normal shipments in the first half of the 2010-11 crop year. This was largely shaped by a 608,500-tonne movement in the first quarter, which ranked as the lowest volume in six years.

Figure 8: Railway Hopper Car Shipments – Destination Port



This decline in the share accorded to the west-coast ports was mainly attributable to larger shipments of grain into Thunder Bay. In fact, stronger market conditions, which heightened CWB-grain shipments and virtually doubled the volume of canola, helped lift rail deliveries during the first half to 3.5 million tonnes; an amount second only to the 3.8-million-tonne record set under the GMP in the 2000-01 crop year. This marked a 39.2% increase over the 2.5 million tonnes shipped to Thunder Bay a year earlier. As a result, the port's share of total railway hopper-car shipments rose to 23.5% from 18.6%. In contrast, rail shipments to Churchill decreased by 17.9%, falling to 491,800 tonnes from 598,800 tonnes the year before. This also resulted in a traffic-share reduction, which decreased to 3.3% from 4.4%.

Grain-Dependent and Non-Grain-Dependent Originations

Traffic moved by the GHTS continues to reflect the changes that have been made to both the elevator and railway networks as a result of rationalization. In the first six months of the 2011-12 crop year, the tonnage originated by the non-grain-dependent network increased 11.4%,

to 10.6 million tonnes from 9.5 million tonnes a year earlier. At the same time, traffic originating at points on the grain-dependent network rose by a lesser 6.7%, to 4.5 million tonnes from 4.2 million tonnes.

As these results suggest, the non-grain-dependent network continues to garner a larger share of the overall traffic volume. In the first half of the 2011-12 crop year, 70.1% of all the grain traffic originated in western Canada was forwarded from points on the non-grain-dependent network. Still, this value stands only marginally ahead of the 65.9% share it earned in the same period of 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 29.9% from 34.1% over the same span of time. [Table 2B-6]

Class 1 and Non-Class-1 Originations

The same structural influences are also apparent in the volumes of grain originated by the Class 1 and non-Class-1 railways. Nominally, the tonnage originated by the Class 1 carriers increased by 9.9% in the first half, to 14.5 million tonnes from 13.2 million tonnes. At the same time, the volume originated by the smaller, non-Class-1 carriers increased by a slightly greater 11.8%, rising to 564,000 tonnes from 504,700 tonnes. [Table 2B-7]

Furthermore, despite the establishment of several new shortline railways in recent years, the relative volume of traffic originated by non-Class 1 carriers has also continued to decline. In the first half of the 2011-12 crop year their share of total originations amounted to just 3.7%, against 8.4% during the same period twelve years earlier.

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. In fact, the data indicates that increased producer-car loading has helped replace a significant portion of the grain volume that would otherwise have been lost following the closure of these licensed facilities. In the first six months of the 2011-12 crop year producer-car loading accounted for an estimated 59.8% of the

Figure 9: Hopper Car Shipments – Grain-Dependent Originations

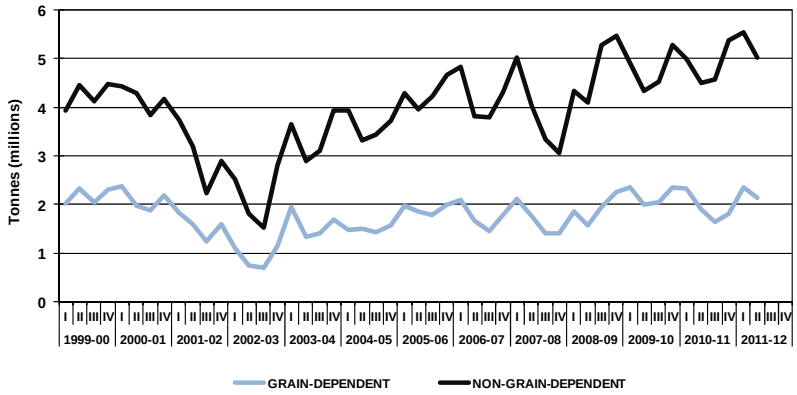
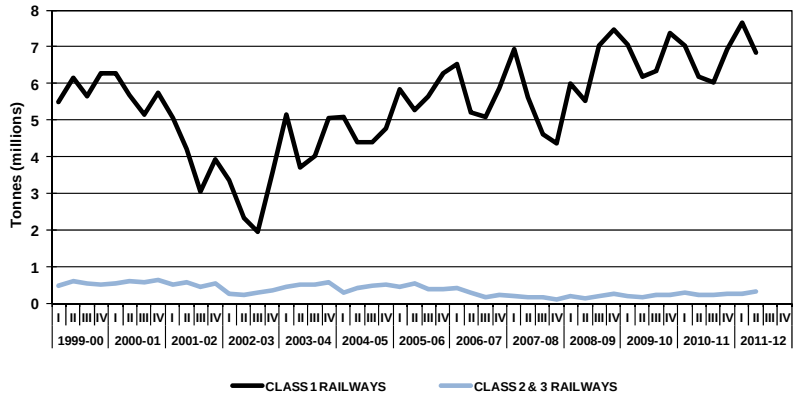


Figure 10: Hopper Car Shipments – Carrier Originations



grain originated by shortline carriers. This constitutes four times the 14.8% share accorded to such shipments in the first year of the GMP.

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, totalled 14.2 million tonnes in the first six months of the 2011-12 crop year. This proved to be a 10.4% increase over the 12.9 million tonnes handled in the same period a year earlier. [Table 2C-1]

Throughput increases were posted by three of the GHTS's four western ports. For the largest of these, Vancouver, total marine shipments in the first half increased by 1.6%, to 7.8 million tonnes from 7.7 million tonnes a year earlier. This represented 54.9% of the system's total throughput. This was supported by Prince Rupert, where shipments expanded by 19.4%, to 2.3 million tonnes from 1.9 million tonnes. When combined, the tonnage passing through these two west coast ports represented 70.9% of the overall total, a noticeable reduction from the 74.5% share they garnered a year earlier.

Of course, the decline posted by the west coast ports was reflected in a gain for the GHTS's other two ports. The combined share secured by the ports of Thunder Bay and Churchill in the first half rose to 29.1% from 25.5% a year earlier. Much of this gain was driven by a sharp upturn in shipments through Thunder Bay, which increased by 37.5%, to 3.6 million tonnes from 2.6 million tonnes. In fact, this proved to be the third largest throughput for the port under the GMP. Conversely, Churchill, the port with traditionally the lowest volume, saw its throughput decrease by 21.7%, to 515,100 tonnes from 657,500 tonnes.

Terminal Elevator Unloads

The number of covered hopper cars unloaded at terminal elevators increased by 12.9% in the first half, to 163,071 cars from 144,483 cars a year earlier. Even so, there was a pronounced shift in the number of cars unloaded by the Canadian National Railway (CN) and the Canadian Pacific

Figure 11: Terminal Elevator Throughput

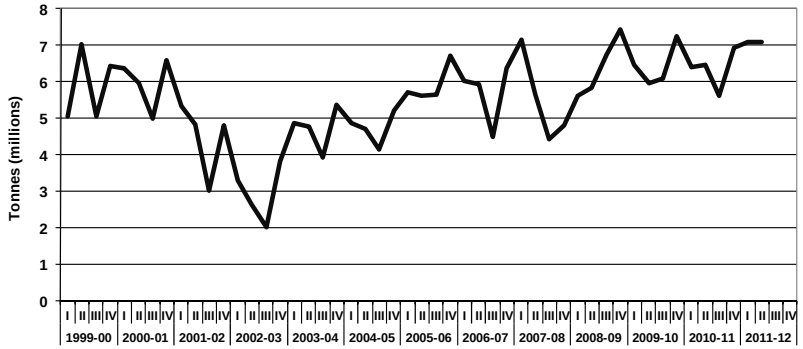
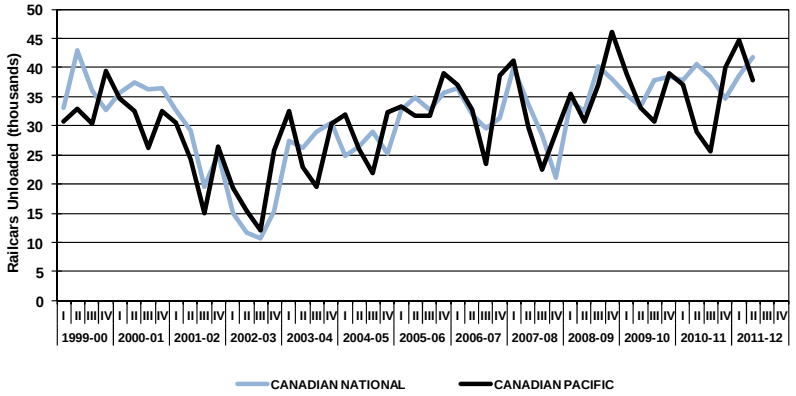


Figure 12: Terminal Elevator Unloads – Delivering Carrier



Railway (CP). In the case of CN, the number of cars unloaded rose by 2.6%, to 80,476 from 78,437. Comparatively, CP's handlings climbed by a more substantive 25.1%, to 82,595 cars from 66,046. This made CP the largest grain handler in western Canada, with a share of 50.6% against 49.4% for CN.

There was also a sizable shift in the amount of grain directed to Vancouver and Prince Rupert. Traffic destined to Vancouver increased by 2.4%, with 89,639 cars unloaded in the first half versus 87,551 cars a year earlier. Of particular interest was the relative division between CN and CP, with the former carrier's handlings into the port falling by 19.2% in the face of the latter's 23.8% increase. To a large extent, the rebound in CP's handlings into Vancouver indicated that the carrier had overcome the service problems that had plagued it a year earlier. Still, the memory of these problems may well have had some sway over the amount of grain directed to Prince Rupert in the first half, which rose by 30.7%, to 26,591 cars from 20,341 cars twelve months before.

Thunder Bay also witnessed a sharp rise in traffic, with its unloadings climbing by 38.9%, to 41,297 cars from 29,721 cars. Much of this gain stemmed from a substantive increase in the amount of canola being directed to the port, which also tended to favour CN as opposed to CP. Consequently, CN's handlings into Thunder Bay rose by 59.5% in comparison to a 30.0% increase for CP, with year-to-date unloadings of 14,439 cars and 26,858 cars respectively. Running counter to this was Churchill, which reported a 19.3% reduction in volume, with handlings of 5,544 cars against 6,870 a year earlier. [Table 2C-2]

Section 3: Infrastructure

Indicator Description	Table	1999-00	2009 -10	2010-11	2011-12 Q1	Q2	Q3	Q4	YTD	% VAR
Country Elevator Infrastructure										
Delivery Points (number)	3A-1	626	274	273	277	277	-	-	277	1.5%
Elevator Capacity (000 tonnes)	3A-1	7,443.9	6,343.3	6,369.4	6,653.8	6,683.2	-	-	6,683.2	4.9%
Elevators (number) – Province	3A-1									
Elevators (number) – Railway Class	3A-2	917	366	366	392	390	-	-	390	6.6%
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	243	241	248	248	-	-	248	2.9%
Elevators Capable of MCB Loading (number) – Railway Line Class	3A-6									
Elevator Closures (number)	3A-7	130	21	13	21	24	-	-	24	84.6%
Elevator Openings (number)	3A-8	43	20	13	47	48	-	-	48	269.2%
Delivery Points (number) – Accounting for 80% of Deliveries	3A-9	217	90	85	n/a	n/a	-	-	n/a	n/a
Railway Infrastructure										
Railway Infrastructure (route-miles) – Total Network	3B-1	19,390.1	17,904.7	17,830.3	17,830.3	17,830.3	-	-	17,830.3	0.0%
Railway Infrastructure (route-miles) – Class 1 Network	3B-1	14,503.0	15,403.7	15,249.5	15,029.0	15,029.0	-	-	15,029.0	-1.4%
Railway Infrastructure (route-miles) – Non-Class-1 Network	3B-1	4,887.1	2,501.0	2,580.8	2,801.3	2,801.3	-	-	2,801.3	8.5%
Railway Infrastructure (route-miles) – Non-Grain-Dependent Network	3B-1	14,513.5	14,313.1	14,245.1	14,245.1	14,245.1	-	-	14,245.1	0.0%
Railway Infrastructure (route-miles) – Grain-Dependent Network	3B-1	4,876.6	3,591.6	3,585.2	3,585.2	3,585.2	-	-	3,585.2	0.0%
Served Elevators (number)	3B-3	884	347	349	361	358	-	-	358	2.6%
Served Elevators (number) – Class 1 Carriers	3B-3	797	327	320	336	333	-	-	333	4.1%
Served Elevators (number) – Non-Class-1 Carriers	3B-3	87	20	29	25	25	-	-	25	-13.8%
Served Elevators (number) – Grain-Dependent Network	3B-3	371	118	117	115	115	-	-	115	-1.7%
Served Elevators (number) – Non-Grain-Dependent Network	3B-3	513	229	232	246	243	-	-	243	4.7%
Served Elevator Capacity (000 tonnes)	3B-3	7,323.0	6,254.7	6,290.7	6,501.2	6,529.4	-	-	6,529.4	3.8%
Served Elevator Capacity (000 tonnes) – Class 1 Carriers	3B-3	6,823.2	6,130.8	6,119.0	6,331.3	6,359.4	-	-	6,359.4	3.9%
Served Elevator Capacity (000 tonnes) – Non-Class-1 Carriers	3B-3	499.7	123.9	171.7	170.0	170.0	-	-	170.0	-1.0%
Served Elevator Capacity (000 tonnes) – Grain-Dependent Network	3B-3	2,475.4	1,742.7	1,755.6	1,809.7	1,821.7	-	-	1,821.7	3.8%
Served Elevator Capacity (000 tonnes) – Non-Grain-Dependent Network	3B-3	4,847.6	4,512.0	4,535.1	4,691.5	4,707.7	-	-	4,707.7	3.8%
Terminal Elevator Infrastructure										
Terminal Elevators (number)	3C-1	15	15	15	15	15	-	-	15	0.0%
Terminal Elevator Storage Capacity (000 tonnes)	3C-1	2,678.6	2,475.6	2,475.6	2,429.0	2,429.0	-	-	2,429.0	-1.9%

COUNTRY ELEVATOR INFRASTRUCTURE

The decline in the number of licensed country elevators in western Canada remains one of the most visible facets of the GHTS's continuing evolution. 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 2010-11 crop year, that number had fallen by 63.5% to 366.[6] [Table 3A-1]

Yet the first six months of the 2011-12 crop year saw a noticeable upturn in what had been a fairly progressive decline, with the elevator network gaining an additional 24 facilities. However, it must be noted that this 6.6% increase was chiefly the product of a change in the licensing requirements of the Canadian Grain Commission (CGC) rather than in the elevator network itself.[7] Even so, this raised the total number of elevators in western Canada to 390, and reduced the accumulated loss since the beginning of the GMP to 614 facilities, or 61.2%. Although the scope of the changes witnessed over the course of the past few years continues to suggest that grain-elevator rationalization has largely concluded, it remains to be seen whether the planned modification of the CWB's mandate may induce the grain companies into making still other adjustments.

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 2010-11 crop year the scope of this network had been reduced by 60.1%, to 273 delivery points from the 685 that had been in place at the beginning of the GMP. This count increased marginally in the

6 The reduction in licensed elevators cited here reflects the net change arising from elevator openings and closures over a given period.

7 The GMP uses the CGC's listing of licensed elevators to tabulate changes in elevator infrastructure. Following an internal review of its licensing practices, the CGC announced in July 2010 that it would begin reclassifying licenses as required when these came up for renewal during the 2010-11 crop year. This resulted in some 40 grain-dealer facilities being reclassified as primary elevators at the beginning of the 2011-12 crop year. In the face of other facility openings and closures, the net gain was trimmed to 24 elevators. While this alters the GMP's time series, it does not detract materially from its relatability.

Figure 13: Licensed Grain Elevators and Delivery Points

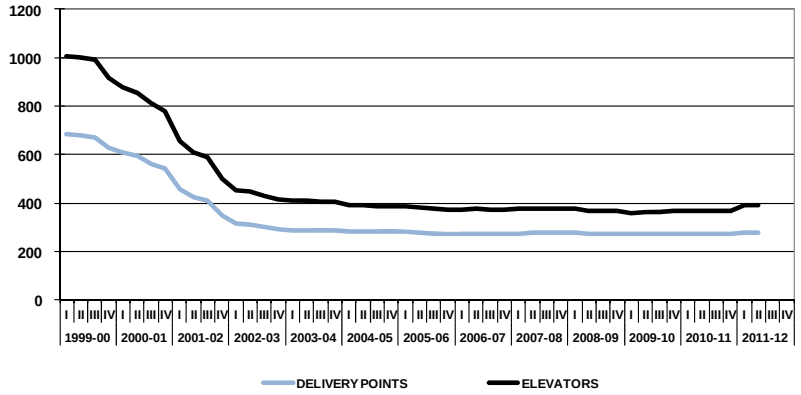
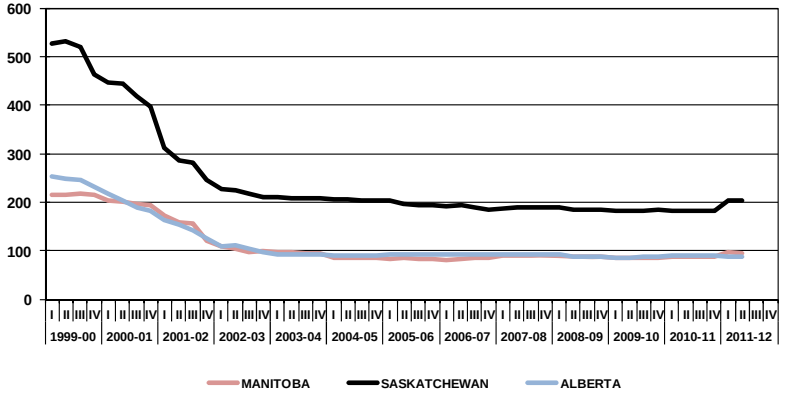


Figure 14: Licensed Grain Elevators – Provincial Distribution



first six months of the 2011-12 crop year, with the overall number rising by four to 277. The increase also served to narrow the net reduction in delivery points during the GMP to 59.6%.

Provincial Distribution

With the close of the first half, 202 of western Canada's licensed elevators were situated in Saskatchewan. This constituted 51.8% of the system's active total, and was consistent with the proportion held by the province at the beginning of the GMP. This was followed by Manitoba and Alberta, whose 95 and 87 elevators accounted for 24.4% and 22.3% respectively. The GHTS's 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 325, or 61.7%, elevators. In comparative terms, the 165-elevator reduction in Alberta represented a slightly higher 65.5%. Manitoba followed with a 56.0%, or 121-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 61.0% decline in the overall number of elevators, the network's storage capacity stands only 4.9% below the 7.0 million tonnes recorded at the outset of the GMP. For the most part, this lesser decline merely reflects the fact that while the grain companies were methodically closing their less-efficient smaller elevators, they were also opening and expanding others. In fact, the capacity added through investment in larger facilities actually outpaced that removed by the closure of smaller elevators early in the GMP, raising total storage capacity to almost 7.6 million tonnes. But the effect was not long lasting. By the end of the 2003-04 crop year, total GHTS storage capacity had fallen by 19.0% to 5.7 million tonnes.

Figure 15: Change in Licensed Elevators and Storage Capacity

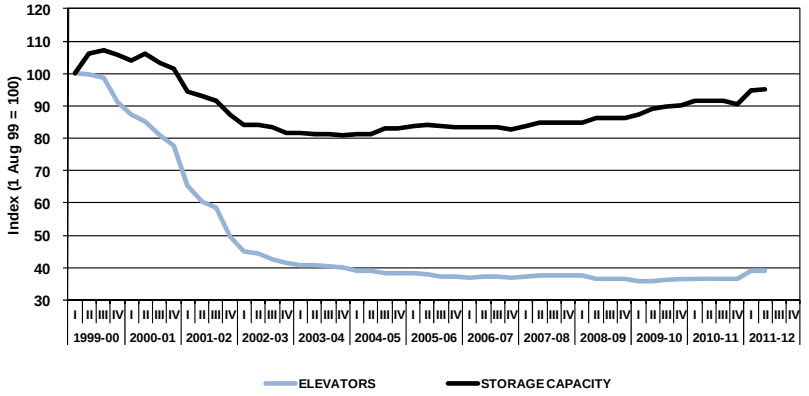
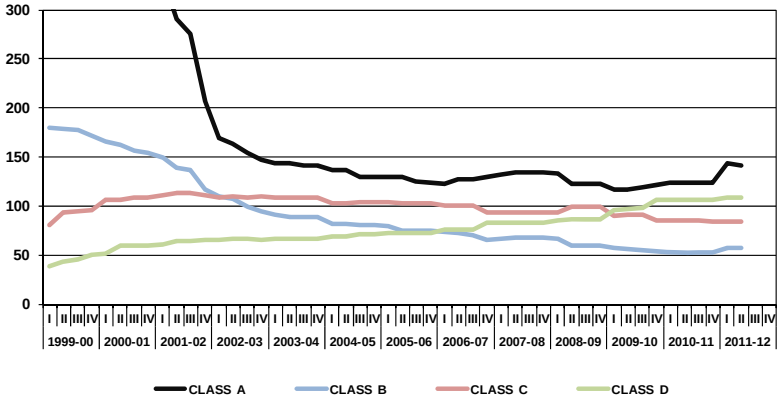


Figure 16: Licensed Elevators – Facility Class



This trend began to reverse in the 2004-05 crop year when system capacity increased by 157,000 tonnes. By the close of the 2010-11 crop year, the system's total storage capacity had gradually risen to almost 6.4 million tonnes. With further expansion as well as changes in the licensing requirements of the CGC, another 313,800 tonnes of storage capacity was added in the first half of the 2011-12 crop year. This 4.9% gain effectively raised total storage capacity to almost 6.7 million tonnes, a value not seen since the close of the 2000-01 crop year.

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 car 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.[8] 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 has changed significantly over the course of the GMP. The most striking aspect has been the 80.0% decline in the number of Class A facilities, which dropped to 141 from the 705 in place at the beginning of the GMP. This was followed closely by a 68.3% reduction in Class B facilities, which fell to 57 from 180 over the same period. Juxtaposed against this was the trade's pronounced shift towards the use of high-throughput elevators. During this same period the number of Class C facilities grew by 3.7%, to 84 from 81, while the number of Class D facilities almost tripled, rising to 108 from 38.

These statistics illustrate that the primary target in elevator rationalization has been the conventional wood-crib facility. Of the 935 elevator closures recorded since the beginning of the GMP, 714 related to the shutdown of Class A facilities.[9] To a large extent, this was because the economic efficiency of the high-throughput elevator had rendered these facilities obsolete. But 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.

These same forces also disadvantaged 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.[10] As a result, over the course of the GMP, a total of 151 Class B facilities also closed. Together, Class A and B facilities account for 92.5% of all recorded elevator closures. [Table 3A-7]

In contrast to their share of elevator closures, 202 of the 321 elevators opened during this period were Class A and B facilities. This differential calls attention to the fact that high-throughput facilities accounted for a much greater proportion of elevator openings than closures, 37.1% versus 7.5% respectively. Class C and D elevators were the only ones to have posted net increases since the 1999-2000 crop year. [Table 3A-8]

Since the close of the 2008-09 crop year, approximately half of the GHTS's elevators have been comprised of high-throughput facilities. More importantly, these facilities have claimed the lion's share of the

8 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.

9 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.

10 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.

system's storage capacity since the second year of the GMP. Although these proportions declined marginally in the first half of the 2011-12 crop year, to 49.2% of system elevators and 78.7% of its storage capacity, both remained significantly above the benchmarked values of 11.9% and 39.4% respectively held by high-throughput facilities at the beginning of the GMP.

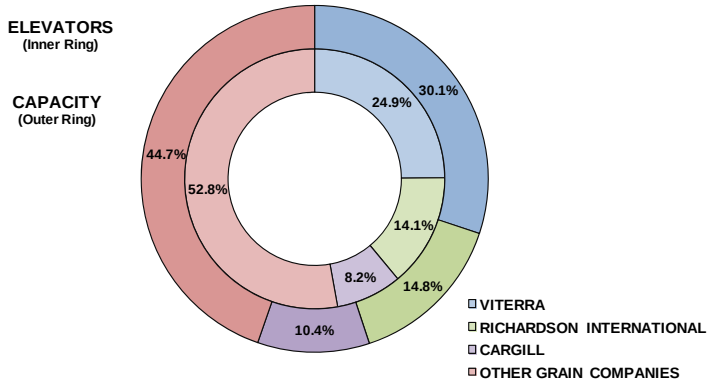
Grain Companies

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 603 facilities, or 86.1%, through the close of the first half.[11] Richardson International and Cargill posted the next deepest cuts, with elevator reductions of 47.6% and 45.8% respectively. This was complemented by Paterson Grain, with a 32.0% decrease, as well as Parrish and Heimbecker, with a 23.1% reduction.

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.

Figure 17: Licensed Elevators and Capacity – Q2 2011-12 Crop Year



In addition to controlling over half of the GHTS's elevators and storage capacity, Viterra, Richardson International and Cargill remain the dominant handlers of grain in western Canada. Together these three companies have consistently handled about 75% of the export grain moved by the GHTS since the beginning of the GMP. [Table 3A-3]

This concentration is also reflected in the way grain is gathered into the system, with the vast majority of the grain being collected through fewer than half of the GHTS's delivery points. In the 2010-11 crop year – the last for which statistics are available – 85 of the GHTS's 219 active delivery points took in 80% of the grain delivered. Although this 38.8% share is greater than the 33.5% recorded in the GMP's base year, it still suggests that deliveries remain highly concentrated within the smaller grain-gathering network. [Table 3A-9]

11 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 603 closures cited here represent the net reduction posted by Viterra's predecessor companies, which had a combined total of 700 elevators at the outset of the GMP.

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.[12] Although the railway network has contracted, the reduction has proven substantially less than that of the elevator system it serves. By the end of the 2010-11 crop year, the net reduction in western Canadian railway infrastructure amounted to just 8.4%, with the network's total mileage having been reduced to 17,830.3 route-miles overall. The largest share of this 1,637.9-route-mile reduction came from the abandonment of 1,369.5 route-miles of light-density, grain-dependent branch lines.[13]

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.

The first important variation in this restructuring strategy came in 2004 when CN acquired the operations of what was then western Canada's only Class 2 carrier, BC Rail Ltd. In addition, the waning financial health of

12 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.

13 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

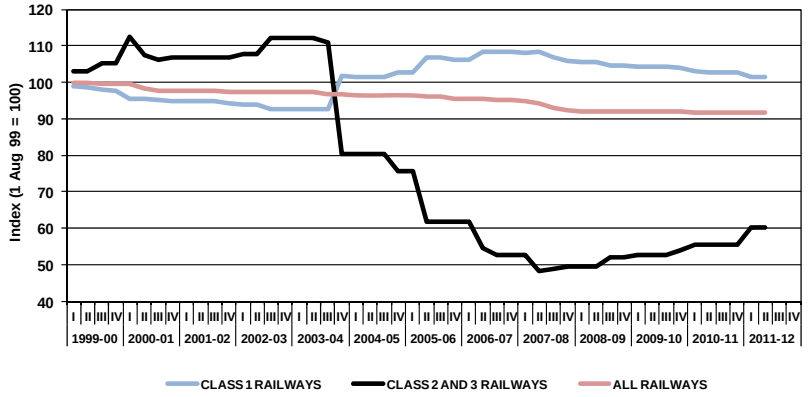
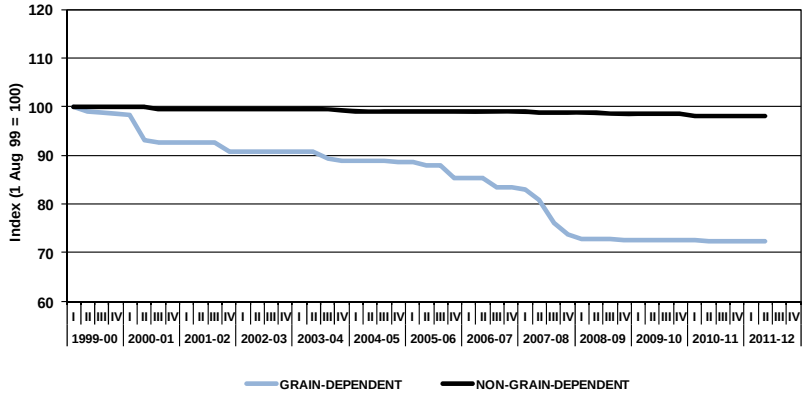


Figure 19: Change in Route-Miles – Railway Network



most shortline carriers led many to either rationalize or sell their own operations. Ultimately, this resulted in a number of shortlines being reabsorbed into the operations of the Class 1 carrier that had originally spun them off.[14] By the close of the 2010-11 crop year, the network operated by the Class 1 carriers had actually increased 2.8%, to 15,249.5 route-miles, whereas that of the Class 2 and 3 carriers had declined by 44.4%, to 2,580.8 route-miles.

Still, many of these shortlines had been established with an eye towards preserving railway service on what the Class 1 carriers had come to regard as uneconomic branch lines. While many of these branch lines were grain dependent, most shortlines proved incapable of reshaping the economics that had given rise to the grain industry's broader elevator-rationalization programs. Although these carriers could point to some success in attracting new business – much of which has been tied to increased producer-car loading – they ultimately could not prevent the grain companies from closing the smaller elevators that underpinned their commercial activity. In the face of several resultant business failures, the physical span of the prairie shortline network had contracted to less than half of the 2,011.0 route-miles that it had been at the outset of the GMP, ultimately falling to a low of 1,002.5 route-miles midway through the 2007-08 crop year.[15]

Notwithstanding this decline, the shortline industry was beginning to show signs of resurgence. Much of this could 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 2010-11 crop year, another six shortline railways had been established across the prairies.[16] Four of these were based in Saskatchewan, where the provincial government proved more receptive to providing financial assistance.[17]

Although the creation of these new entities had a comparatively modest impact on the division between Class 1 and non-Class-1 infrastructure, the prairie shortline system was again expanding. At the close of the 2010-11 crop year, the shortline network had increased by more than a third, to encompass 1,385.6 route-miles of track under the management of 14 separate carriers.

The 2011-12 crop year brought still another example of this expansion with the September 2011 formation of Big Sky Rail (BSR), which assumed operation of a 220.5-route-mile cluster of CN track situated in western Saskatchewan.[18] As with many of the shortlines created before it, the establishment of the BSR was but the latest evolutionary step in a broader effort aimed at preserving local railway service. Moreover, since 1997 these lines had served as the transportation backbone in a network of five producer-car loading sites operated by West Central Road and Rail (WCRR). In effect, the BSR represents a partnership between WCRR and Mobil Grain, which spearheaded the creation of the Last Mountain Railway (LMR) in 2009. A key facet of the new carrier's business plan centres on

14 The most significant of these reacquisitions came in January 2006 when RailAmerica Inc. sold most of its holdings in western Canada back to CN. Over the course of the next two years, CN also reacquired the operations of what had devolved into the Savage Alberta Railway as well as the Athabasca Northern Railway.

15 Prairie shortlines represent a geographic subset of the broader Class 2 and 3 railway classification cited previously. As at 31 January 2008 there were just eight shortline railways originating traffic on the prairies: Thunder Rail Ltd.; Carlton Trail Railway; Central Manitoba Railway; Fife Lake Railway; Great Western Railway Ltd.; Red Coat Road and Rail Ltd.; Southern Rails Cooperative Ltd.; and Wheatland Railway Inc.

16 The six shortline railways created during this period were: Torch River Rail Inc.; Boundary Trail Railway Co.; Great Sandhills Railway; Last Mountain Railway; Battle River Railway; and Stewart Southern Railway.

17 The Government of Saskatchewan lent financial support to several shortline initiatives, most often through the extension of interest-free loans. Additional financial support has also come through the province's Shortline Railway Sustainability Program.

18 The cluster encompassed 94.3 route-miles of CN's Conquest subdivision; 104.8 route-miles of its Elrose subdivision; and a 22.4-route-mile section of its Mantario subdivision. These three sections had long been identified by CN as potential discontinuance candidates.

sharing railway resources, with Mobil Grain employing the same assets to service both the LMR and the BSR.[19]

All of this resulted in comparatively modest changes to the face of the railway infrastructure in the first half, with the Class 1 network being reduced by 1.4%, to 15,029.0 route-miles, while the non-Class 1 network grew by another 8.5%, to 2,801.3 route-miles. [Table 3B-1]

Local Elevators

As previously outlined, the GHTS's elevator infrastructure has been transformed more substantively over the course of the last twelve years than has the railway network that services it. In broad terms, these facilities have decreased by 63.4% in number, to 358 from 979, and by 5.8% in terms of associated storage capacity, to 6.5 million tonnes from 6.9 million tonnes.[20]

But these reductions have manifest themselves in noticeably different ways for the Class 1 and non-Class 1 railways. By the close of the second quarter of the 2011-12 crop year, the elevator networks served by both carrier groups had fallen by comparable amounts: 62.9% in the case of those served by the major carriers; and 69.5% in the case of those served by the non-major carriers. [Table 3B-3]

However, there was a far more pronounced change in storage capacity, with only a 1.5% decline in the case of elevators local to Class 1 carriers versus a 64.4% reduction for those tied to non-Class 1 carriers. These latter changes underscore the fact that the grain companies have been investing in facilities served by the major railways rather than the

Figure 20: Change in Local Elevators – Railway Class

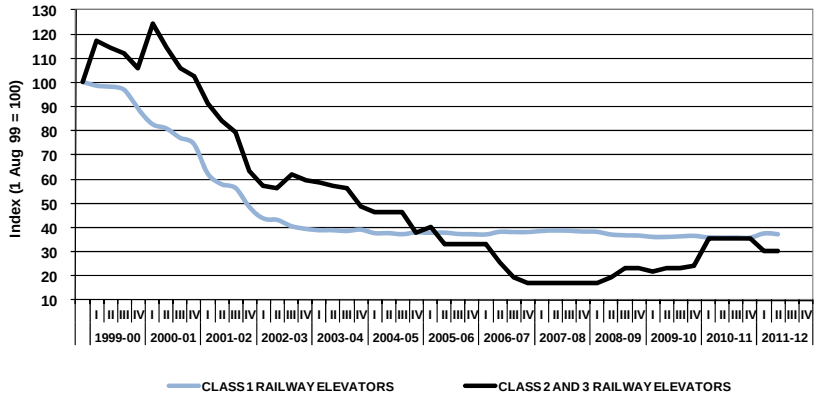
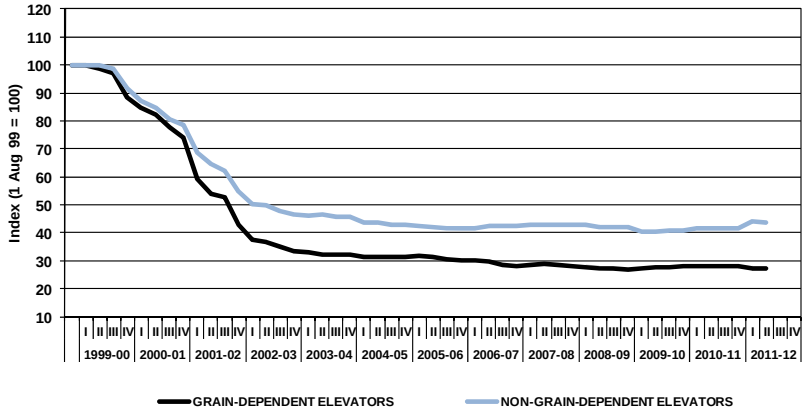


Figure 21: Change in Local Elevators – Railway Network



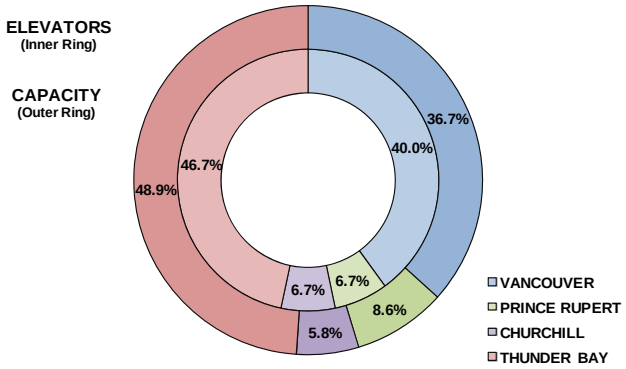
19 The networks of Big Sky Rail and the Last Mountain Railway are physically separate. As part of the transaction, Mobil Grain secured the right to shuttle equipment and crews between the two networks as required using trackage rights over CN lines into Saskatoon.

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

shortlines, situating virtually all of their high-throughput elevators on the networks belonging to CN and CP.[21] [Table 3B-3]

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 72.6% since the beginning of the GMP, to 115 from 420. For those situated along the non-grain-dependent network, the decline was 56.5%, with the number of elevators having fallen to 243 from 559. The change in associated storage capacity shows an even greater contrast, with that of the grain-dependent network falling by 26.8%, to 1.8 million tonnes, while that of the non-grain-dependent network actually increased by 5.9%, to 4.7 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.

Figure 22: Terminal Elevators – Q2 2011-12 Crop Year



TERMINAL ELEVATOR INFRASTRUCTURE

There was no change in the composition of the 15 licensed terminal elevators operating in western Canada during the first six months of the 2011-12 crop year. However, the associated storage capacity declined by 46,600 tonnes, or 1.9%, to somewhat in excess of 2.4 million tonnes. Although these values differ only marginally from the base-year benchmarks of 14 elevators and 2.6 million tonnes of storage capacity, the shift in storage capacity denotes the first reduction in four years.[22]

With seven elevators and 48.9% of the system's storage capacity, Thunder Bay held the largest share of these assets. Moreover, a 16,500-tonne expansion at Mission Terminal produced the first increase in the port's storage capacity in several years. Vancouver took second place with six facilities and 36.7% of the system's storage capacity. The first half also saw a decrease in the port's storage capacity, with a 63,100-tonne reduction having been posted by Pacific Elevators. Prince Rupert and Churchill both followed with one terminal elevator apiece, and storage capacity shares of 8.6% and 5.8% respectively. [Table 3C-1]

21 As at 31 January 2012, 184, or 95.8%, of the GHTS's 192 high-throughput elevators were served by CN and CP.

22 While the physical scope of the changes in this network has been minimal, there have been a number of significant changes in terminal ownership. Each of these was rooted in the various corporate mergers and acquisitions that have taken place since the GMP began. Those with the most direct bearing on terminal ownership involved the merger of Agricore Cooperative Ltd. and United Grain Growers Limited, which combined to form Agricore United in 2001, and the subsequent purchase of Agricore United by Saskatchewan Wheat Pool to form Viterra Inc. in 2007.

Section 4: Commercial Relations

Indicator Description	Table	1999-00	2009-10	2010-11	2011-12 Q1	Q2	Q3	Q4	YTD	% VAR
Trucking Rates										
Composite Freight Rate Index – Short-haul Trucking	4A-1	100.0	132.2	162.2	162.2	162.2	-	-	162.2	0.0%
Country Elevators Handling Charges										
Average Handling Charges – Country Delivery Points	4B-1									
Railway Freight Rates										
Composite Freight Rates ($ per tonne) – Rail	4C-1									
Multiple-Car Shipment Incentives ($ per tonne) – Rail	4C-2									
Effective Freight Rates ($ per tonne) – CTA Revenue Cap	4C-3	n/a	$28.76	$30.59	n/a	n/a	-	-	n/a	n/a
Terminal Elevator Handling Charges										
Average Handling Charges – Terminal Elevators	4D-1									
Tendering Program										
Tenders Called (000 tonnes)	4E-1	n/a	2,431.4	3,312.2	940.5	533.3	-	-	1,473.8	-26.7%
Tender Bids (000 tonnes)	4E-3	n/a	4,969.6	8,729.8	7,017.6	3,386.4	-	-	10,404.1	125.4%
Total CWB Movements (000 tonnes)	4E-5	n/a	15,175.0	13,452.8	3,984.2	3,103.9	-	-	7,088.2	9.3%
Tendered Movements (%) – Proportion of Total CWB Movements	4E-5	n/a	16.4%	12.3%	11.8%	14.9%	-	-	13.2%	-14.3%
Tendered Movements (000 tonnes) – Grain	4E-5	n/a	2,495.2	1,653.2	469.8	463.4	-	-	933.2	-6.5%
Average Tendered Multiple-Car Block Size (railcars) – Port	4E-17	n/a	64.8	59.8	65.4	69.9	-	-	67.2	18.3%
Railway Car Cycle (days) – Tendered Grain	4E-18	n/a	11.1	12.5	10.8	12.5	-	-	11.6	-11.5%
Railway Car Cycle (days) – Non-Tendered Grain	4E-18	n/a	13.1	14.1	13.8	13.9	-	-	13.8	-2.1%
Maximum Accepted Tender Bid ($ per tonne) – Wheat	4E-19	n/a	-$21.28	-$25.02	-$20.06	-$12.56	-	-	-$20.06	-19.8%
Maximum Accepted Tender Bid ($ per tonne) – Durum	4E-19	n/a	-$23.56	-$11.07	-$11.42	-$1.00	-	-	-$11.42	3.2%
Market Share (%) – CWB Grains – Major Grain Companies	4E-20	n/a	74.3%	74.8%	74.7%	72.8%	-	-	73.7%	-0.4%
Market Share (%) – CWB Grains – Non-Major Grain Companies	4E-20	n/a	25.7%	25.2%	25.3%	27.2%	-	-	26.3%	1.2%
Advance Car Awards Program										
Advance Award Movements (%) – Proportion of Total CWB Movements	4F-1	n/a	10.8%	8.3%	1.9%	9.7%	-	-	5.3%	-46.5%
Advance Award Movements (000 tonnes) – Grain	4F-1	n/a	1,633.3	1,112.1	74.4	301.5	-	-	376.0	-41.1%
Railway Car Cycle (days) – Advance Award Grain	4F-6	n/a	12.3	13.2	12.6	13.3	-	-	13.2	-1.5%

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.

But the 2010-11 crop year saw oil prices regain a lot of lost ground, which brought renewed 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 crop year. Although oil prices slumped again in the first quarter of the 2011-12 crop year, they had rebounded to about $95 US per barrel by the close of the second quarter. Despite this fluctuation trucking rates remained unaffected, with the composite price index remaining 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 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 2010-11 crop year, these costs had risen by 22.8%. Although the first six months of the 2011-12 crop year brought some modest rate adjustments, the overall composite price index rose just 0.1%, to 122.9.

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

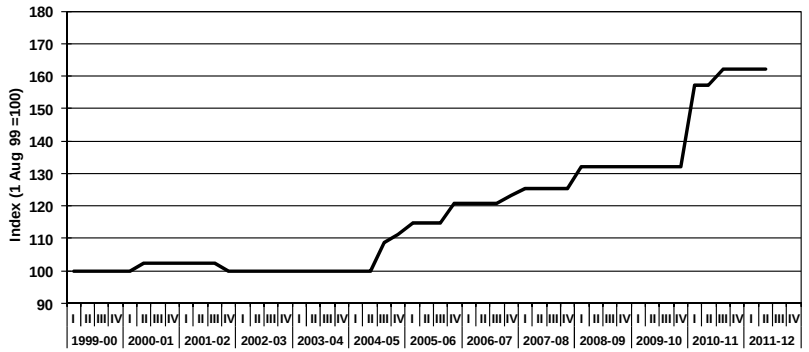
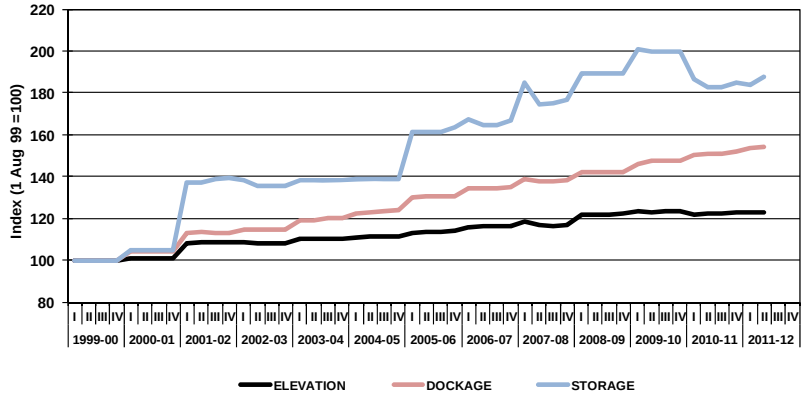


Figure 24: Change in Primary Elevator Handling Charges



The rates associated with the removal of dockage have increased at a faster pace. Through to the end of the 2010-11 crop year, these rates had already increased by 51.7%. With the close of the first half these rates had increased another 1.6%, which raised the composite price index to a value of 154.1.

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 84.8% through to the end of the 2010-11 crop year. Although a rollback in the rates applicable on the storage of grain in Manitoba did much to reduce these costs in the first quarter, second-quarter increases raised the composite price index by 1.6%, lifting it to 187.8. [Table 4B-1]

RAILWAY FREIGHT RATES

The single-car freight rates assessed 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. This became evident in the rate differentials that arose between specific grains and the ports to which they were destined. Much of this began to take shape at the beginning of the 2006-07 crop year when CN initiated a partial changeover to commodity-specific, per-car charges. With CP following suit, a wholesale conversion in the rate structures of both carriers was completed by the close of the 2007-08 crop year. [Table 4C-1]

This restructuring also resulted in more substantive rate increases being applied against shipments to Thunder Bay and Churchill rather than those to the west coast. Even within this broader initiative, CN widened the financial advantage it had begun giving single-car shipments to Prince Rupert. Not to be overlooked was an initial move towards seasonal pricing, which attempted to link freight rates to the rhythmic demand change for railway carrying capacity. This structure was complicated even further as both carriers began to adjust rates with greater geographic selectivity in response to evolving competitive pressures.

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

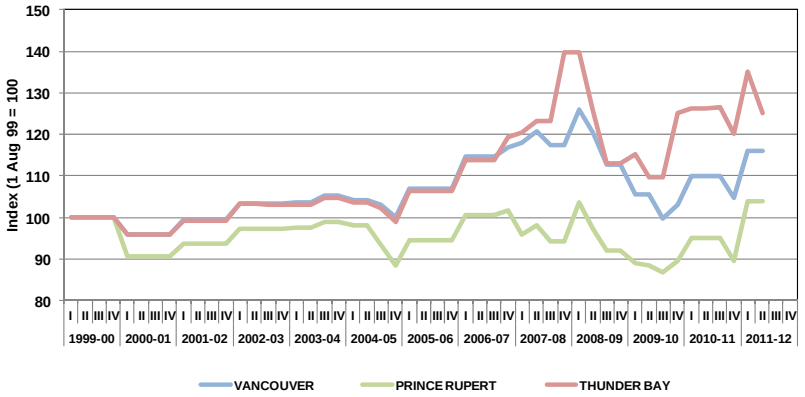
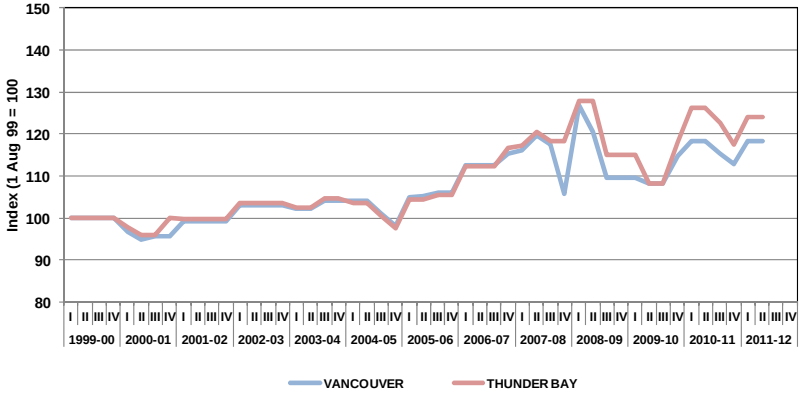


Figure 26: CP Single-Car Freight Rates – Primary Corridors



Both CN and CP escalated their single-car freight rates at the beginning of the 2011-12 crop year. For its part, CN instituted a series of sharp rate increases, ranging from a low of 10.8% in the Vancouver corridor to a high of 16.0% on movements into Prince Rupert. The escalations applied against the single-car rates on shipments to Thunder Bay and Churchill fell midway between these values, averaging 12.4% and 12.2% respectively. The rate increases advanced by CP proved comparatively more modest, with the average escalation on single-car movements into Vancouver and Thunder Bay amounting to 5.0% and 5.5% respectively.

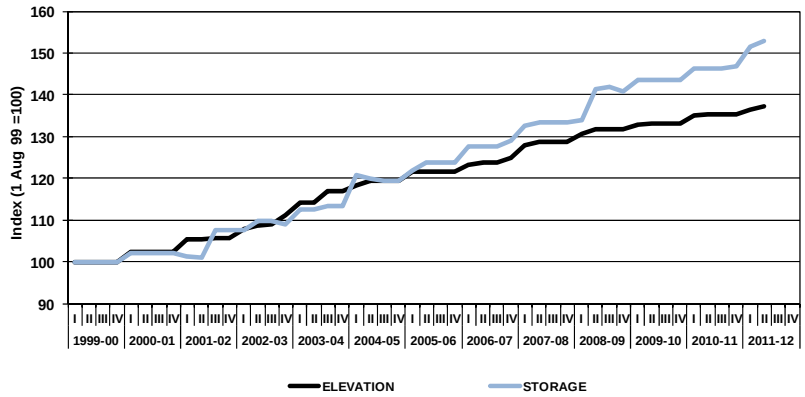
For the most part, the rates published by both carriers remained unchanged through to the end of the second quarter. The sole exception pertained to the rates advanced by CN on shipments to Thunder Bay, which were cut by an average of 7.3% in November 2011.

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.

These freight discounts remained unchanged in the first and second quarters of the 2011-12 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]

Figure 27: Change in Terminal Elevator Handling Charges



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 2010-11 crop year these ranged from a low of about $8.08 per tonne for wheat delivered at Churchill, to a high of $14.96 per tonne for flaxseed shipped to Vancouver.

Rate increases were noted in the first half for all major ports save that of Churchill, which remained unchanged for a seventh consecutive shipping season. At Vancouver, these increases ranged from a low of 1.3% on barley to a high of 2.3% on rye. The story was much the same at Prince Rupert, where rate hikes ranged from 2.4% to 2.7%. In comparison, Thunder Bay advanced more modest gains, ranging from 0.9% to 1.8%. On the whole, these pricing actions served to raise the composite price index by a further 1.4%, bringing the combined value of all increases made since the beginning of the GMP to 37.1%. [Table 4D-1]

As with the cost of elevation, the daily charge for storage also varied widely, ranging from a low of about $0.07 per tonne on the majority of commodities held at Churchill to a high of $0.15 per tonne on oats maintained in inventory at Vancouver. With the exception of Churchill, where the prevailing year-end rates were once again extended, these daily charges moved generally higher in the first half. The largest increase was posted by Prince Rupert, where a sharp upturn in the movement of canola lifted the associated storage charges by 36.6%. This was in turn followed by Thunder Bay and Vancouver with more modest increases of 3.3% and 2.5% respectively. Together, these actions served to raise the composite price index on storage by 4.0% in the first half, bringing the cumulative increase since the beginning of the GMP to 52.8%.

TENDERING PROGRAM

The 2011-12 crop year marks the twelfth for the Canadian Wheat Board's (CWB) tendering program. Although initially established with a three-year life under a Memorandum of Understanding (MOU) between the Minister Responsible for the Canadian Wheat Board and the CWB, the program has evolved significantly since the original MOU expired at the end of the 2002-03 crop year. Within its existing framework, the CWB committed to move a total of 40% of the grain it ships to the four ports in western Canada using a roughly equal combination of tendering and advance car awards.

While the amount of grain shipped under these two programs never reached much beyond a third of the overall movement, this proportion has been drifting steadily lower in recent years. Much of this was due to the CWB's adoption of a less rigid target, and one that gave it a greater degree of flexibility in moving grain. The first six months of the 2011-12 crop year showed still more signs of decline.

Tender Calls

The CWB issued a total of 91 tenders calling for the shipment of 1.5 million tonnes of grain in the first six months of the 2011-12 crop year. This represented a 26.7% decrease from the 2.0 million tonnes put out to tender in the same period a year earlier. The majority of this tonnage,

Figure 28: Tendered Grain – Q2 2011-12 Crop Year

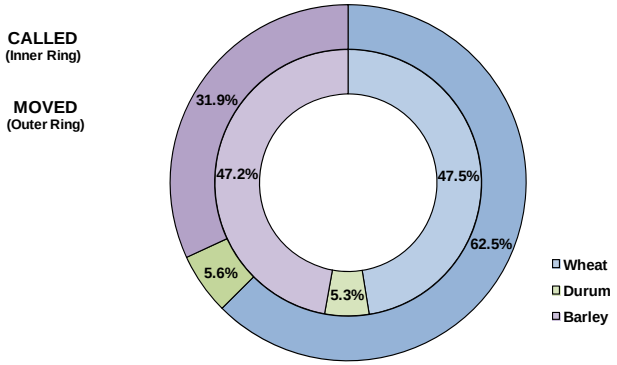
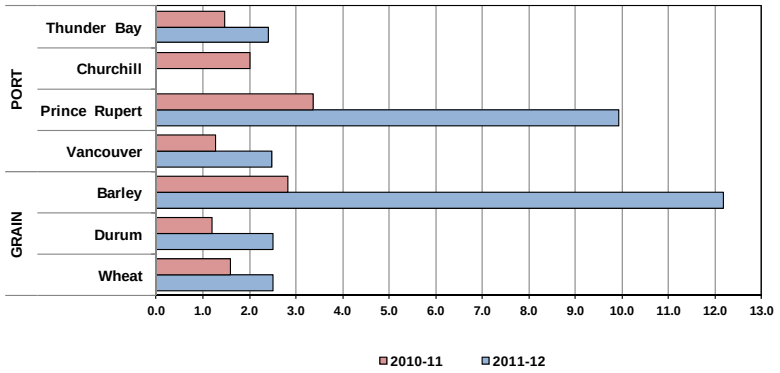


Figure 29: Tonnage-Bid-to-Called Ratio – Q1 2011-12 Crop Year



699,800 tonnes, related to wheat. Barley tenders trailed marginally with calls for 695,200 tonnes. This, however, denoted 47.2% of the overall total compared to 59.5% the year previous. Durum calls, which claimed a slightly greater 5.3% share against 5.1% a year earlier, encompassed just 78,800 tonnes.

The CWB sought to move the majority of the grain, representing a full 90.0% of the tonnage called, through the west coast ports of Vancouver and Prince Rupert. This was marginally behind the combined 91.7% share observed a year earlier. However, Vancouver's role in this mix was greatly diminished as a result of a sharp reduction in called tonnage, with its share falling to 28.5% from 43.5% twelve months before. Naturally, Prince Rupert took on a correspondingly larger role, with its share climbing to 61.5% from 48.2%. Thunder Bay also posted a gain, with 10.0% of the tonnage called being allocated there, as compared to 7.8% a year earlier. With no tenders having been issued for Churchill, its share fell to zero from 0.4%. [Tables 4E-1 and 4E-2]

Tender Bids

The CWB's tender calls were met by 311 bids offering to move 10.4 million tonnes of grain, more than seven times the amount sought. The vast majority of these bids, 81.3%, responded to calls for the movement of barley. Another 16.8% responded to those issued for wheat, while the remaining 1.9% answered those for durum. When examined with respect to the port specified in the tender call, 86.6% of the bids were directed to Prince Rupert, 10.0% to Vancouver, and 3.4% to Thunder Bay. [Tables 4E-3 and 4E-4]

The relative strength of the grain companies' response to this segment of the CWB's business can be gauged through the ratio derived from comparing the number of tonnes bid against the number of tonnes called. Overall bidding in the first half proved significantly more intense than in the same period a year earlier. Moreover, the response rate for barley, which posted a ratio of 12.2 against just 2.8 twelve months before, proved much stronger than that of either wheat or durum. Durum elicited the next largest gain, with its ratio more than doubling, to 2.5 from 1.2 a year earlier. Wheat tenders, while showing a lesser gain, also yielded a ratio of 2.5; an increase of 58.0% over the 1.6 recorded twelve months before.

The response rates for the port specified in the tender calls also showed equally substantive increases. This was particularly true of Prince Rupert, which garnered the highest response rate among the four ports, with a ratio of 9.9 against that of 3.4 a year earlier. While rising by 95.3%, the ratio associated with delivery at Vancouver stood substantially behind this, climbing to 2.5 from 1.3 a year earlier. Thunder Bay's ratio of 2.4 ranked third among these primary ports, although it increased by 62.5% from the 1.5 registered a year earlier. Owing to the fact that no tenders were issued for Churchill, its ratio fell to zero from 2.0.

Contracts Awarded

A total of 119 contracts were subsequently signed for the movement of 933,200 tonnes of grain.[23] This was 6.5% less than the 998,400 tonnes awarded a year earlier. However, this constituted just 13.2% of the tonnage shipped by the CWB to western Canadian ports in the first six months of the crop year, falling well short of its 20% target. [Tables 4E-5 and 4E-6]

In contrast to the tonnage specified in the tender calls, 51.9% of the grain contracted for movement under the tendering program was directed to the port of Vancouver. This greater share was complemented by a correspondingly lesser one for Prince Rupert, which garnered 37.2% of the contracted tonnage. The proportion secured by Thunder Bay also proved to be modestly greater than that defined by the CWB's tender calls, with an earned share of 10.8%.

23 The volumes cited as moving under the CWB's tendering program also extend to tendered malting barley – which is administered independently of other tendered CWB grains.

Malting Barley

Owing to a rebound in grain quality, a single tender was issued by the CWB for the movement of malting barley in the second quarter of the 2011-12 crop year. This resulted in the awarding of three contracts for the movement of 134,900 tonnes of malting barley. As the sole grain sold on a Free-on-Board basis, this represented 14.5% of all tendered grain shipments moved in the first half. The remaining 85.5% were all sold on an "in-store" basis. [Table 4E-9]

Originating Carrier

CN secured 55.0% of the grain volume that moved under the CWB's tendering program in the first six months of the 2011-12 crop year. This denoted a modest reduction from the 60.6% share taken by the carrier a year earlier. Notwithstanding this overall result, CN's share dropped sharply between the first and second quarters, to 46.0% from 61.3%, largely as a result of the improvement in CP's service offering. CN also garnered a 71.6% share of the malting barley movement. [Table 4E-11]

Multiple-Car Blocks

The majority of the grain shipped under tender moves in multiple-car blocks. In fact, since the beginning of the CWB's tendering program, the proportion moving in blocks of 25 or more railcars has never fallen below 80%. This was again the case in the first six months of the 2011-12 crop year, when 90.8% of the tendered grain volume moved in such blocks, a marginal gain over the 88.3% value recorded in the same period a year earlier. Underscoring this increase was the fact that fifty-or-more-car shipments assumed a larger role in the first half, taking a 68.4% share against a 57.0% share twelve months before. [Table 4E-12]

Tendered Origins

With 408,800 tonnes of grain shipped in the first half, Alberta was the largest originator of tendered grain in western Canada. Although volume fell by 51,100 tonnes, the province's relative share rose to 51.2% from 46.1% a year earlier, owing in large measure to the comparatively steeper

Figure 30: Destination Port – Q2 2011-12 Crop Year

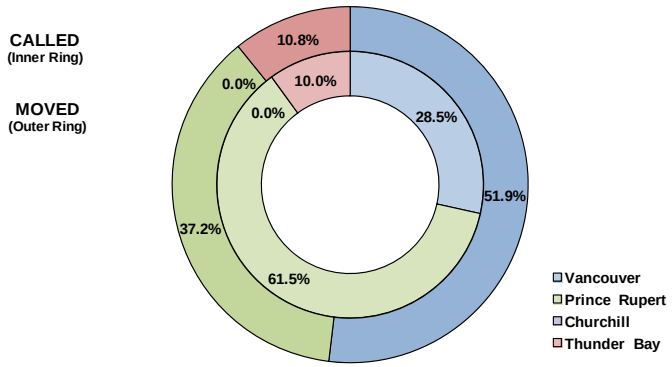
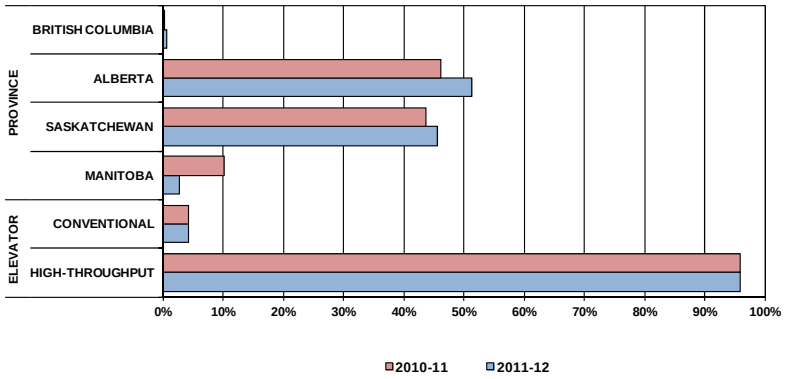


Figure 31: Tendered Grain – Originations



reductions posted by Saskatchewan and Manitoba. Saskatchewan followed with a movement of 363,200 tonnes, which represented a 16.7% contraction from its handlings twelve months earlier. Here too the province's share also rose, to 45.5% from 43.7%. This was followed by Manitoba, with originations of only 21,500 tonnes in comparison to 100,500 tonnes twelve months before, and which saw its share fall to 2.7% from 10.1%. Only British Columbia reported an increase in volume, with shipments rising to 4,900 tonnes from 2,000 tonnes the previous year.

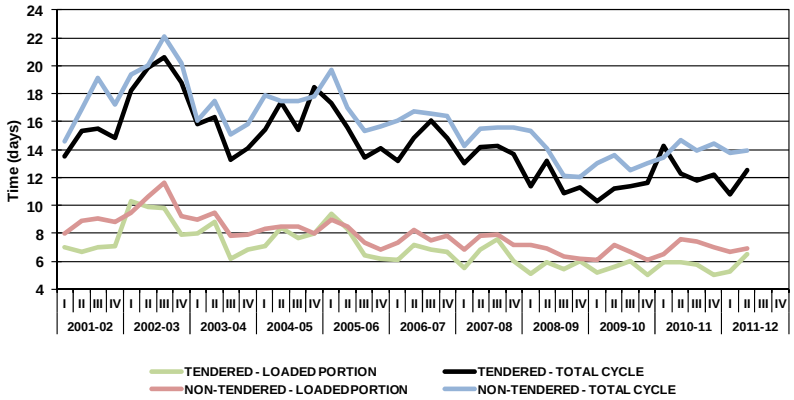
High-throughput elevators have been the principal facilities used in moving tendered grain. From the outset of the GMP, over 90% of the annual tendered grain movement originated at such facilities. In more recent years, this share has moved steadily higher, reaching a record 97.7% in the 2008-09 crop year. Results from the first half were consistent with this, with 95.8% of the tendered grain movement having originated at high-throughput elevators. Equally large proportions were attributable to the tonnages originated by each of the producing provinces, save that of British Columbia, where all tendered grain movements originated at conventional elevators.[24] [Table 4E-14]

Car Cycles

The average car cycle for tendered grain shipments decreased sharply in the first six months of the 2011-12 crop year, falling 11.5%, to 11.6 days from the 13.1-day average recorded in the same period a year earlier. This improvement largely reflected CP's overcoming of the operational challenges that had begun to undermine their service offering a year earlier. [Table 4E-18]

This also resulted in a restoration of the traditional relationship between the car cycles for tendered and non-tendered CWB grain shipments, with that of tendered grain falling 15.9% below that of non-tendered CWB grain, which posted averages of 11.6 days and 13.8 days respectively. These statistics show the reassertion of the time advantage that had long been given tendered grain movements, but which had been lost – at least temporarily – at the beginning of the previous crop year. The 2.2-day advantage for tendered grain shipments was noticeably greater than the 1.3-day benefit observed over the longer term.

Figure 32: Car Cycles – Tendered and Non-Tendered Grain



Accepted Bids

Although the actual winning bids remain confidential, the CWB discloses the range of bids received for each tender it issues. As "price takers," it is in the CWB's best interest to accept the most remunerative bid put forward.[25] As a result, the maximum discount offered by grain companies, and generally accepted by the CWB, provides a reasonable basis by which to compare differences in the bidding behaviours of both the major, and non-major, grain companies.[26]

24 There are no high-throughput elevators situated in British Columbia.

25 The bids submitted are expressed as a per-tonne discount to the CWB's initial price for wheat, durum and barley.

26 As used here, the term "major grain companies" refers specifically to Viterra Inc., Cargill Limited and Richardson International. These companies effectively constitute the three largest firms sourcing grain within western Canada.

The maximum discounts put forward by both groups show a significant degree of variation over the course of the last decade, be it on a quarterly or an annual basis. To a large extent, these fluctuations reflected their response to changing marketplace conditions. Even so, the maximum discounts offered by the major grain companies typically exceeded those advanced by their smaller competitors, although there were numerous instances where the latter outbid their larger rivals. In addition, the deepest discounts have often manifested themselves early in the crop year, with a gradual easing following thereafter. [Table 4E-19]

From the outset of the 2011-12 crop year the maximum discounts advanced for wheat proved generally weaker than those observed a year earlier, with the maximum bid cut by 19.8%, to $20.56 per tonne from $25.02 per tonne. This decline continued into the second quarter, where the maximum bid slid to just $12.56 per tonne. The pattern was much the same for durum, which after an initial rise to $11.42 per tonne from the previous year's $11.07-per-tonne maximum, slid to just $1.00 per tonne by the close of the second quarter. There was an even more dramatic fall for barley, with the maximum bid quickly plunging to $4.00 per tonne from $20.00 per tonne a year earlier.

Market Share

The best indicator of market dominance remains the market shares held by the major and non-major grain companies. The share secured by the larger grain companies in the movement of CWB grain, be it tendered or non-tendered, has not changed all that significantly over the course of the last twelve years. In the case of tendered-grain shipments, their share has floated around 85%, while on non-tendered grain shipments they have taken a somewhat lesser 75%. Necessarily, the market shares held by the non-major grain companies have proven notably less: amounting to about 15% on tendered grain; and to approximately 25% on non-tendered grain. [Table 4E-20]

Notwithstanding this generalization of the annualized results, the market shares of both groups show greater quarterly volatility, particularly in the case of the non-major grain companies. This was evident in the results for tendered-grain shipments during the first and second

Figure 33: Maximum Discount from Initial Price - Wheat

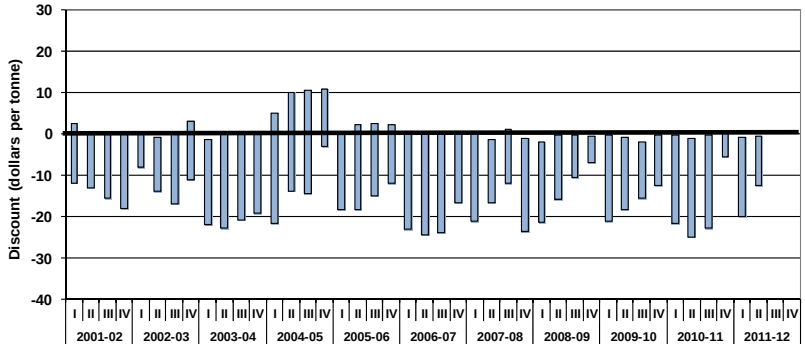
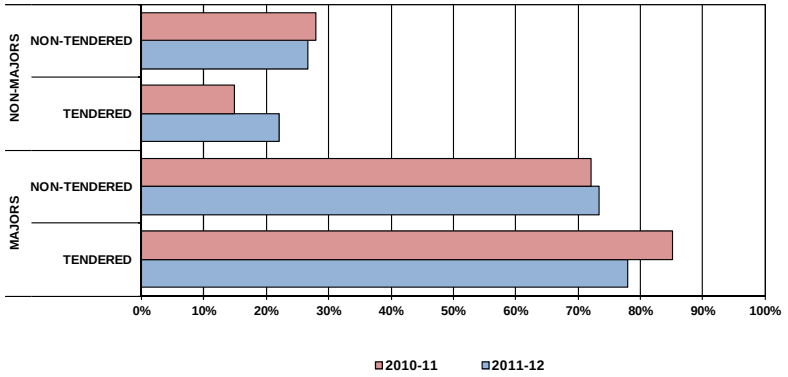


Figure 34: Market Share – Q2 2010-11 Crop Year



quarters, with the year-to-date share of the major-grain companies slipping to 77.9% while that of the non-major grain companies rose to 22.1%. The shares accorded to both groups on the movement of non-tendered grain proved more consistent, amounting to 73.3% and 26.7% respectively.

Financial Savings

Although the discounts advanced by the grain companies figure prominently in the calculation of the CWB's overall transportation savings, they are but one component. Freight and terminal rebates, as well as any financial penalties for non-performance, also figure into this calculation. For the first six months of the 2011-12 crop year, the CWB estimated these savings – which are ultimately passed back to producers through its pool accounts – at $16.6 million. This marked a 14.0% decrease from the $19.3 million saved a year earlier.

ADVANCE CAR AWARDS PROGRAM

A total of 376,000 tonnes moved under the CWB's advance car awards program in the first six months of the 2011-12 crop year. This represented a 41.1% reduction from the 638,600 tonnes moved in the same period a year earlier. Moreover, this denoted just 5.3% of the total tonnage shipped to the four ports in western Canada by the CWB, and a substantive reduction from the 9.9% share garnered a year earlier. In conjunction with the 933,200 tonnes that moved under the CWB's tendering program, a total of 1.3 million tonnes of grain were moved under the auspices of these two programs. On a combined basis, this represented 18.5% of the CWB's total grain shipments to the four ports. This fell considerably short of the 40% that had been targeted, and well below the 25.3% that had been handled under these same two programs a year earlier.

Traffic Composition

Grain shipped under the advance car awards program often parallels that moved under the tendering program, but frequently differs in a number of respects. Owing to the much smaller volume of grain shipped under

Figure 35: Traffic Composition – Q2 2011-12 Crop Year

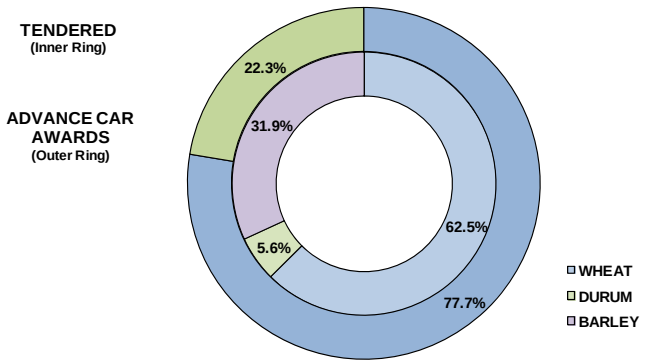
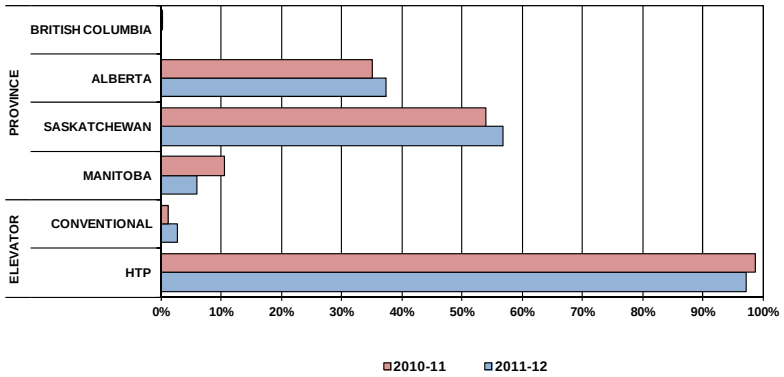


Figure 36: Advance Car Awards – Originations



the advance car awards program in the first six months of the 2011-12 crop year, these differences proved even more pronounced. Foremost among these was the fact that no barley moved under the advance car awards program, whereas it made up almost a third of the tendered grain volume. As a result, wheat commanded a larger share of the overall movement, 77.7% versus 62.5% for tendered grain shipments. Durum also assumed a disproportionately greater role, taking a 22.3% share of advance car award shipments against just 5.6% of the tendered grain shipments. [Table 4F-1]

The largest portion of the volume that moved under the advance car awards program, 144,200 tonnes, or 38.3%, was destined to the port of Vancouver. This was in turn followed by Thunder Bay with 127,400 tonnes, and a 33.9% share; and Prince Rupert with 104,400 tonnes, and a 27.8% share. No tonnage was directed to Churchill during this period. [Table 4F-2]

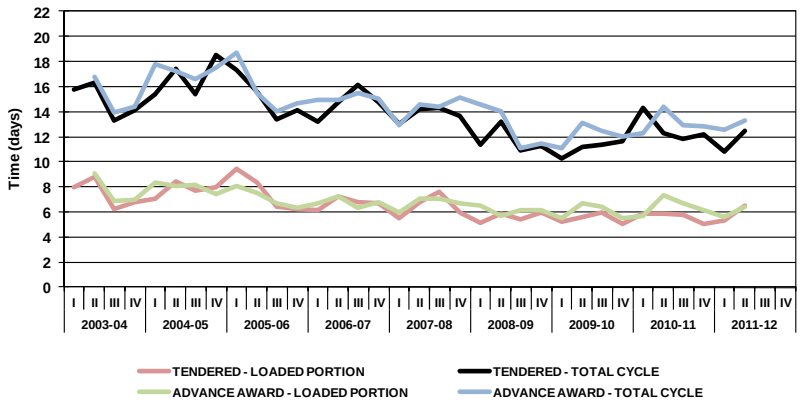
Originating Carrier

Shipments under the advance car awards program in the first six months of the 2011-12 crop year were almost evenly divided between CN and CP, with each garnering shares of 49.3% and 50.7% respectively. This differed somewhat from the results presented for tendered grain, where CN secured a 55.0% share. Moreover, CP's share was sharply reduced from the 69.8% it secured during the same period a year earlier. Even so, CP's share in the advance car awards proved entirely consistent with its 50.6% share in the overall movement of western Canadian grain for the first half. [Table 4F-3]

Traffic Origination

Unlike tendered grain, the majority of the tonnage moved under the CWB's advance car awards program originated in Saskatchewan. With just over 213,200 tonnes, these shipments accounted for well over half, 56.7%, of the program's total volume. Moreover, this share proved to be well above the 45.5% stake given over to the province on the movement of tendered grain. Alberta and Manitoba followed with corresponding originations of 140,200 tonnes and 22,500 tonnes, and shares of 37.3% and 6.0% respectively. No grain from British Columbia was moved under the advance car awards program in the first half. [Table 4F-4]

Figure 37: Car Cycle – Advance Car Awards



Virtually all of the grain shipped under the advance car awards program in the first six months of the crop year, 97.2%, came from high-throughput elevators. This proved marginally less than the 98.8% share secured by these facilities in the same period a year earlier. Provincially, there was little material difference in the usage rates for these facilities, which ranged from a low of 94.1% for Alberta to a high of 99.7% for Manitoba.

Car Cycles

The car cycle for grain shipped under the CWB's advance car awards program averaged 13.2 days in the first six months of the 2011-12 crop year. This value proved to be 1.5% less than the 13.4-day average recorded in the same period a year earlier. This, however, proved noticeably greater than the 11.6-day average recorded for tendered grain shipments. [Table 4F-6]

These comparatively longer times were equally evident in the loaded and empty portions of the movement, with the advance-car-award program's 6.3-day loaded movement proving 6.8% greater than the 5.9-day average on tendered grain shipments. The average empty movement showed an even larger differential, with the 6.9-day average for advance-car-awards standing 21.1% above the 5.7-day average for tendered grain.

While longer than that of tendered grain shipments, the 13.2-day average cycle for advance-car-award movements proved less than that of non-tendered CWB movements in general. To be sure, the latter's average of 13.8 days for the first half proved 0.6 days, or 4.5%, longer than that associated with advance-car award shipments.

COMMERCIAL DEVELOPMENTS

Legislation Removing the CWB's Monopoly Enacted

As part of its plan to bring greater marketing freedom to prairie grain producers, the federal government moved forward with the development of the legislation needed to repeal the CWB's monopoly over the sale of western Canadian wheat and barley as of 1 August 2012.

As a preliminary step in this process, the government established a working group tasked with determining how the transition could best be accomplished. Their report, which was issued in late September 2011, suggested that market forces be allowed to take root and that any potential government intervention in its workings be limited.

Undeterred by opposition forces that claimed the government had failed to first consult with farmers, the government argued that Parliament had the constitutional right to amend the CWB's mandate, and that it would continue to work on the draft legislation needed to accomplish this within the timeframe originally laid out.[27] A little more than one month later, on 18 October 2011, the Minister of Agriculture and Agri-Food rose in the House of Commons to introduce Bill C-18, *The Marketing Freedom for Grain Farmers Act*.

In essence, Bill C-18 provided for a number of amendments to the *Canadian Wheat Board Act*, not the least of which would remove its long-standing monopoly over the sale of western Canadian wheat and barley. Although this would now extend farmers the right to sell their grain on the open market, Bill C-18 also provided for the transformation of the CWB into a voluntary marketing entity, with interim support from the federal government while the organization transitioned to full private ownership. In addition to having the option of selling their grain directly to a grain company, the producer would also be able to sell it to a revamped CWB. Moreover, the CWB would itself be able to engage in the sale of any grain, not just wheat and barley.[28] The draft legislation also removed the hurdles that prevented farmers as well as grain companies from forward contracting for the delivery of wheat and barley on or after 1 August 2012.

Although the legislation met with the general favour of the grain industry at large, there still remained strong pockets of opposition within the producer community. A week after Bill C-18 was introduced, the CWB itself moved to challenge the legality of the government's action, announcing that it was filing a lawsuit in federal court. Once again, the central issues swirled around the intent of Section 47.1 of the *Canadian Wheat Board Act*, and the perceived need for a farmer plebiscite in advance of a change in the CWB's mandate. This action effectively paralleled one launched by the Friends of the Canadian Wheat Board in late June 2011.

In the meantime, the grain industry underscored its need for greater certainty as it stepped up its preparations for open-market operations. Building on this, and dismissing the merits of the legal challenges that had been brought forward, the government moved to progress its

27 This view led the CWB into initiating a plebiscite that would directly probe farmer sentiment over a possible surrendering of the CWB's monopoly. The results, which were reported in mid September, indicated that 62% favoured maintaining the single desk for wheat, while only 51% favoured maintaining it for barley.

28 The extension of the CWB's right to engage in the sale of additional grains would be limited only by the *Canada Grain Act*.

legislation quickly through Parliament. Not even a federal court ruling in December 2011, which held largely for the applicants, did much to sidetrack matters as the government quickly announced that it would appeal the decision.[29] With the granting of Royal Assent on 15 December 2011 the CWB's monopoly was removed, and farmers given the right to forward contract for the delivery of their wheat and barley as of 1 August 2012.

Along with the removal of the CWB's monopoly, there were a number of changes to the organization itself. Among the most visible of these was the replacement of the 15-member board of directors established in 1998 with a smaller, five-member board appointed by the federal government. With it, the CWB also announced a change in direction: indicating that it was dropping its lawsuit; and repositioning itself to compete in the post-monopoly environment of the upcoming 2012-13 crop year.

Although various legal actions continued to make their way through the court system, by the close of the second quarter the grain industry was moving decidedly ahead with its preparations for the changeover. One of the most visible features in this was the issuance by a number of grain companies of forward-delivery contracts. The CWB indicated that it too would be offering farmers a variety of new pool and cash options, although the details surrounding these had yet to be announced.

Government Announces Transitional Support for Churchill

With the introduction of Bill C-18, *The Marketing Freedom for Grain Farmers Act,* the federal government also acknowledged that Churchill might well face a greater challenge in adapting to the realities of an open market on 1 August 2012 than other ports in western Canada. This was due in large measure to the significant role played by the CWB in directing grain to the port for export.

Building on what it considered to be the importance of maintaining the port of Churchill as a viable shipping option, the government announced that it would be providing an economic incentive of up to $5.0 million per year for five years to support shipments of grain, including oilseeds, pulses and special crops, through this gateway. In addition, the government also indicated that it would be providing up to $4.1 million over three years to maintain the port during the transition period.

Concurrent with this, the government planned to extend its agreement with the Churchill Gateway Development Corporation on improvements to port infrastructure through 2015. The government also promised to consult with affected stakeholders in exploring the various longer-term options open for the future of Churchill.

ICE Futures Canada Launches Wheat, Durum and Barley Contracts

Following the announcement of the federal government's plan to open the market for wheat and barley in western Canada, ICE Futures Canada began to design new commodity-specific futures contracts that would arm the grain industry with the standard open-market mechanisms for price discovery, hedging and risk management.[30] Intended for use by the trade at large, these instruments are aimed at providing buyers and sellers with more accurate market prices for spring wheat, durum and barley.

The new contracts trade in Canadian dollars and permit multiple delivery points in Western Canada designed to provide a representative price for these crops. Although based on its popular 20-tonne canola contract, the

29 The federal court ruled that the government had in fact failed to respect the provisions of Section 47.1 of the existing *Canadian Wheat Board Act*, thereby handing the CWB and the Friends of the Canadian Wheat Board an early legal victory in its efforts to prevent the government from enacting its proposed legislation. See Friends of the Canadian Wheat Board v. Canada (Attorney General) (2011 FC 1432) T-1057-11, T-1735-11, Dated 7 December 2011.

30 A futures contract is a standardized contract between two parties to buy or sell a specified asset of standardized quantity and quality for an agreed upon price today with delivery and payment occurring at a specified future date. These contracts are negotiated through exchanges such as that operated by ICE Futures Canada, and which acts as an intermediary between the buyer and seller. ICE Futures Canada was formed in 2007 when Atlanta-based Intercontinental Exchange (ICE) acquired what was then the Winnipeg Commodity Exchange. With an ancestry that extends back to the Winnipeg Grain and Produce Exchange in 1887, ICE Futures Canada remains the country's only agricultural exchange, having both facilitated futures-contract trading since 1904 and overseen the establishment of the first fully-electronic exchange in North America in 2004.

new wheat contract is built around a 100-tonne commitment, and a size that more closely reflects the standard American contract. Similarly, the new wheat contract is expected to compete against those traded in Minneapolis (hard red spring wheat), Chicago (soft red winter wheat) and Kansas City (hard red winter wheat). In contrast to the ICE Futures Canada contract for wheat, the contract for durum would be a unique trading instrument while those for barley would have few competitors.

The new ICE Futures Canada contracts began trading on the electronic exchange on 23 January 2012. While initial trading volumes proved relatively low, industry participants believed that these instruments would begin to attract greater interest and usage as the 2012-13 crop year neared.

Initiative to Develop Railway Service Agreements Begins

In response to the concerns that had been raised by the majority of rail shippers regarding the state of railway service in Canada, the federal government committed itself in early 2008 to a review of railway service. This review was conducted in two phases: the first centred on gathering and analyzing data relating to the railways' performance during a two-year period between 2006 and 2008; while the second employed a panel of eminent persons to review the work completed in the first phase, and to consult with the stakeholder community regarding any problems identified.[31]

The panel formally submitted its final report to the Minister of State (Transport) in late December 2010. After due consideration, the Government of Canada formally released the panel's report on 18 March 2011. In broad terms, the panel found that there was an imbalance in the commercial relationship between the railways and other stakeholders, but believed that a commercial – rather than a regulatory – approach provided the best means of rectifying this imbalance.

In response to the panel's report, the federal government adopted a four-point course of action encompassing: a six-month facilitated process to negotiate a template service agreement and commercial dispute resolution mechanism; the introduction of a bill in Parliament that would give shippers the right to a service agreement; and to establish a Commodity Supply Chain Table that would address logistical concerns and develop performance metrics to improve competitiveness. Also, Transport Canada and Agriculture and Agri-Food Canada were to initiate an in-depth analysis of the grain supply chain.

Building on this, the Minister of Transport announced on 31 October 2011 that Jim Dinning, an Alberta businessman and former provincial cabinet minister, had been appointed to facilitate the negotiations aimed at developing the promised template service agreement and commercial dispute resolution mechanism. By the close of the second quarter this facilitation process was already well under way. However, given the anticipated time horizon, the facilitator's report was not expected much before the end of the 2011-12 crop year.

31 Representatives from all corners of the grain industry were actively involved in this process, which resulted in submissions from the Western Grain Elevator Association, the Inland Terminal Association of Canada, and numerous commodity and producer groups. For the most part, these submissions not only voiced anew the grain industry's long-standing concerns over the reliability and consistency of existing railway service, but also argued for stronger regulatory measures as a means of tempering what was still widely regarded as the extensive market power of railways.

Section 5: System Efficiency and Performance

Indicator Description	Table	1999-00	2009-10	2010-11	2011-12 Q1	Q2	Q3	Q4	YTD	% VAR
Country Elevator Operations										
Average Elevator Capacity Turnover Ratio	5A-1	4.8	6.2	5.7	1.5	1.6	-	-	3.1	10.7%
Average Weekly Elevator Stock Level (000 tonnes)	5A-2	3,699.3	2,832.6	2,722.9	2,774.8	2,927.1	-	-	2,847.9	2.3%
Average Days-in-Store (days)	5A-3	41.7	30.5	30.8	28.1	28.3	-	-	28.2	-11.6%
Average Weekly Stock-to-Shipment Ratio – Grain	5A-4	6.2	4.3	4.5	4.3	3.9	-	-	4.1	-8.9%
Railway Operations										
Railway Car Cycle (days) – Empty Movement	5B-1	10.7	6.7	7.2	7.0	6.7	-	-	6.8	-4.7%
Railway Car Cycle (days) – Loaded Movement	5B-1	9.2	6.5	7.1	6.6	6.8	-	-	6.7	-6.6%
Railway Car Cycle (days) – Total Movement	5B-1	19.9	13.2	14.3	13.5	13.5	-	-	13.5	-5.6%
Railway Car Cycle (days) – Non-Special Crops	5B-2	19.3	13.1	14.2	13.4	13.4	-	-	13.4	-6.0%
Railway Car Cycle (days) – Special Crops	5B-3	25.8	15.3	15.3	15.6	16.1	-	-	15.8	3.5%
Railway Transit Times (days)	5B-4	7.8	5.5	6.0	5.4	5.7	-	-	5.5	-7.9%
Hopper Car Grain Volumes (000 tonnes) – Non-Incentive	5B-5	12,718.7	5,747.7	5,500.2	1,736.2	1,059.6	-	-	2,795.9	-14.0%
Hopper Car Grain Volumes (000 tonnes) – Incentive	5B-5	12,945.9	22,030.1	21,596.5	6,170.8	6,098.1	-	-	12,268.9	17.4%
Hopper Car Grain Volumes ($ millions) – Incentive Discount Value	5B-6	$31.1	$146.4	$145.5	$41.6	$42.4	-	-	$84.0	20.1%
Traffic Density (tonnes per route mile) – Grain-Dependent Network	5B-7	442.5	608.5	534.8	658.5	598.3	-	-	628.4	6.8%
Traffic Density (tonnes per route mile) – Non-Grain-Dependent Network	5B-7	292.5	332.5	340.9	389.3	351.9	-	-	370.6	11.4%
Traffic Density (tonnes per route mile) – Total Network	5B-7	330.4	387.9	379.9	443.5	401.4	-	-	422.4	10.0%
Terminal Elevator Operations										
Average Terminal Elevator Capacity Turnover Ratio	5C-1	9.1	10.0	9.9	n/a	n/a	-	-	n/a	n/a
Average Weekly Terminal Elevator Stock Level (000 tonnes)	5C-2	1,216.2	1,274.8	1,197.8	1,211.1	1,141.4	-	-	1,177.6	-3.8%
Average Days-in-Store – Operating Season (days)	5C-3	18.6	16.2	15.5	15.7	13.6	-	-	14.6	-15.6%
Port Operations										
Average Vessel Time in Port (days)	5D-1	4.3	6.2	9.9	5.2	7.7	-	-	6.5	-24.4%
Annual Demurrage Costs ($millions)	5D-4	$7.6	$11.2	$50.1	n/a	n/a	-	-	n/a	n/a
Annual Dispatch Earnings ($millions)	5D-4	$14.5	$17.2	$9.4	n/a	n/a	-	-	n/a	n/a
Avg. Weekly Stock-to-Vessel Requirements Ratio – VCR – Wheat	5D-5	3.1	2.3	2.4	2.3	2.6	-	-	2.4	-5.2%
Avg. Weekly Stock-to-Vessel Requirements Ratio – VCR – Canola	5D-5	2.5	1.5	0.7	1.6	1.6	-	-	1.6	298.5%
Avg. Weekly Stock-to-Vessel Requirements Ratio – TBY – Wheat	5D-5	5.6	5.3	4.7	3.7	4.3	-	-	4.0	-24.6%
Avg. Weekly Stock-to-Vessel Requirements Ratio – TBY – Canola	5D-5	2.8	3.9	4.6	4.2	2.6	-	-	3.5	-32.0%
Avg. Weekly Stock-to-Shipment Ratio – VCR – CWB Grains	5D-7	3.5	2.8	3.7	3.3	2.8	-	-	3.0	-5.1%
Avg. Weekly Stock-to-Shipment Ratio – VCR – Non-CWB Grains	5D-7	3.6	1.8	1.0	1.9	1.8	-	-	1.8	123.8%
Avg. Weekly Stock-to-Shipment Ratio – TBY – CWB Grains	5D-7	4.6	4.8	4.6	3.2	3.1	-	-	3.2	-40.7%
Avg. Weekly Stock-to-Shipment Ratio – TBY – Non-CWB Grains	5D-7	3.3	5.2	5.1	4.2	3.4	-	-	3.9	-29.6%
Terminal Handling Revenue ($millions)	5D-8	$274.8	$389.2	$416.2	n/a	n/a	-	-	n/a	n/a
CWB Carrying Costs ($millions)	5D-8	$94.7	$147.6	$146.6	n/a	n/a	-	-	n/a	n/a
System Performance										
Total Time in Supply Chain (days)	5E-1	68.1	52.2	52.3	49.2	47.6	-	-	48.3	-12.5%

COUNTRY ELEVATOR OPERATIONS

The net effect of changes in primary elevator throughput and storage capacity is reflected in the system's capacity-turnover ratio. Owing in large measure to a 9.0% increase in throughput, the turnover ratio for the first half of the 2011-12 crop year rose by 10.7%, to 3.1 turns from 2.8 turns in the same period a year earlier. [Table 5A-1]

This wider gain built on the increases reported by most producing provinces. Alberta posted the most significant of these, with its ratio climbing by 35.5%, to 4.2 turns from 3.1 turns. This was followed by Saskatchewan, which posted an increase of 11.1%, with its ratio rising to 3.0 turns from 2.7 turns a year earlier. Conversely, Manitoba posted a reduction of 24.1%, with its ratio falling to 2.2 from 2.9.

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.

As a result of a general reduction in storage capacity observed since the beginning of the GMP, primary elevator stocks now stand well below the 3.7 million tonnes that had been benchmarked twelve years earlier. Despite periodic fluctuations, approximately half of the system's storage capacity is actively employed in maintaining these stocks. Still, the recent expansion in storage capacity has led to modest stock-level increases. The first six months of the 2011-12 crop year witnessed a 2.3% increase in prairie grain inventories, with the average remaining effectively unchanged at 2.8 million tonnes. [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 continued to fluctuate around

Figure 38: Primary Elevator Capacity Turnover Ratio

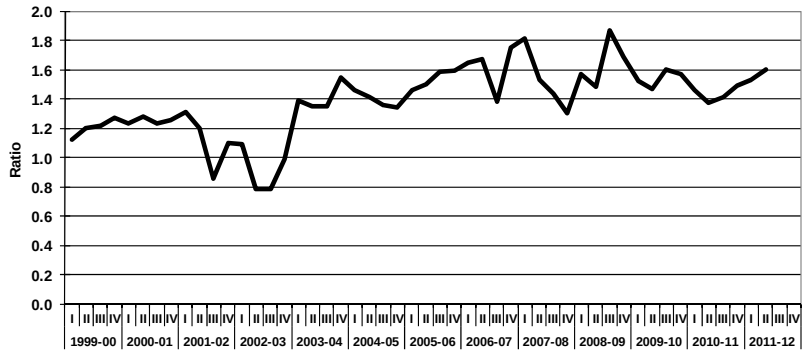
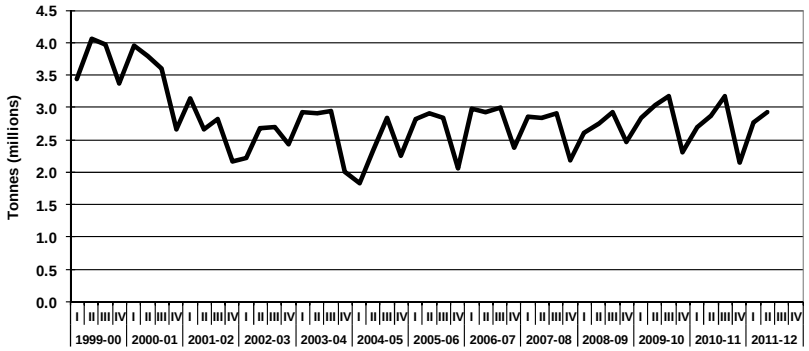


Figure 39: Average Weekly Stocks



the 30-day mark for several years. Still, these values stand about ten days below the GMP's base-year average of 41.7 days, contributing significantly to the improved speed with which grain moves through the GHTS. The first six months of the 2011-12 crop year proved consistent with this pattern, with its average of 28.2 days falling 11.6% below the 31.9-day average for the same period a year earlier. This result was largely shaped by reduced storage times for barley, canola and oats, whose stocks fell fairly sharply in the face of strong market demand. [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.[32] These ratios are, however, heavily influenced by the amount of time that grain spends in inventory, and mimic their movement rather closely. [Table 5A-4]

The overall stock-to-shipment ratio fell by 8.9% in the first half of the 2011-12 crop year, to 4.1 from 4.5 a year earlier. This result was largely shaped by counteracting market forces: one that saw a drawdown in barley and canola stocks; while the other brought about a buildup in wheat and durum inventories.

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

Figure 40: Average Days-in-Store

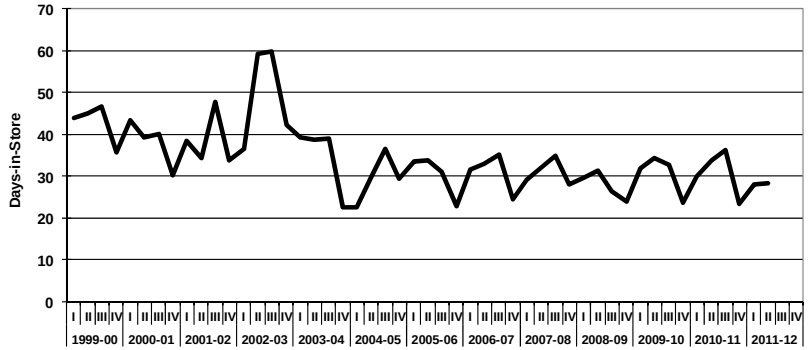
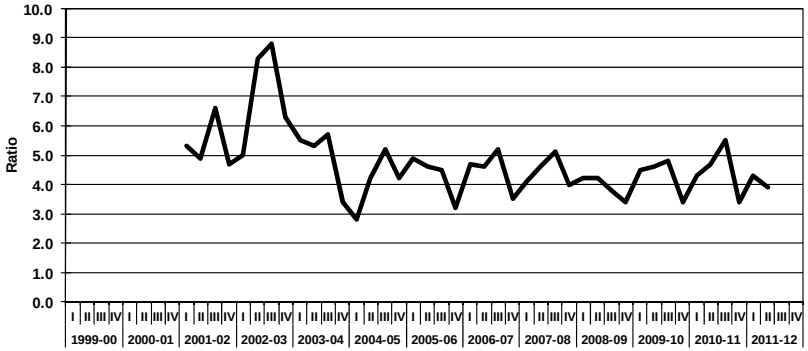


Figure 41: Primary Elevators – Stock-to-Shipment Ratio



32 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.

port in western Canada, and then returning the empty railcar back to the prairies for reloading. Following on the heels of the previous crop year's weaker performance, the average car cycle for the first six months of the 2011-12 crop year showed improvement, falling 5.6%, to 13.5 days from 14.3 days a year earlier.

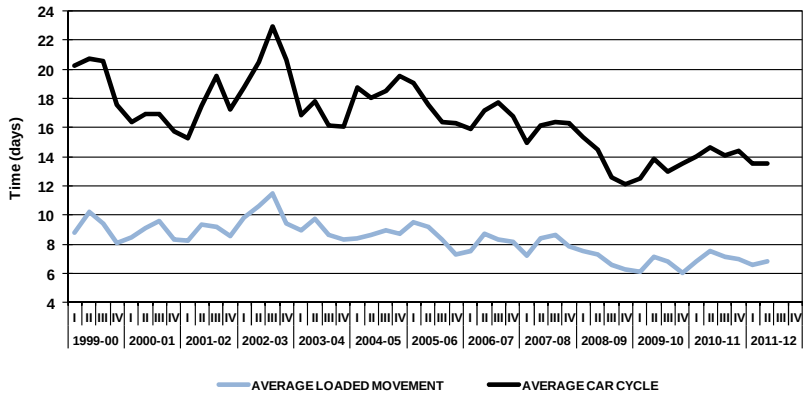
This result was driven primarily by improvements in both of the west-coast corridors. With an 8.5% reduction, movements in the Vancouver corridor posted the largest overall decline, with the average cycle falling to 14.0 days from 15.3 days a year earlier. This was followed by a 7.4% reduction in the Prince Rupert corridor, which saw its average fall to 11.8 days from 12.8 days. Detracting from these advances was a 3.0% increase in the Thunder Bay cycle, where the average rose to 13.9 days from 13.5 days twelve months earlier. [Table 5B-1]

Reductions extended equally to the loaded and empty portions of the car cycle. In the case of the former, the average time under load fell by 6.5%, to 6.7 days from 7.2 days a year earlier. A 4.7% decrease was observed for the empty portion of the movement, with the average falling to 6.8 days from 7.2 days.

Although CN and CP both posted reductions in their average cycles, the 7.9% decline posted by CP outpaced the 3.6% decrease reported by CN. To an extent, these results extended to the loaded and empty portions of each carrier's car cycle. In the case of CN, the carrier posted a 1.3% decrease in its loaded movement versus a 6.4% reduction in its empty movement. CP, in comparison, reported reductions of 10.8% and 5.5% respectively. These more substantive reductions indicated that CP had effectively surmounted the problems that had undermined its service offering a year earlier.[33]

33 CP's performance in the first half of the 2010-11 crop year was undermined by a variety of service problems. Although initially tied to a June 2010 washout of the carrier's mainline near Medicine Hat, Alberta, its disruptive effects were amplified by the operational difficulties that had been plaguing the railway since the beginning of 2010. The situation only worsened in the second quarter as an unusually heavy accumulation of snow in the southern Rockies, which occasioned avalanches and related control efforts, began to wreck havoc on the carrier's operations in the Vancouver corridor.

Figure 42: Average Railway Car Cycle



A reduction in the car cycle for the movement of non-special crops was also observed, with the average falling 6.0%, to 13.4 days from 14.2 days a year earlier. However, the reverse was true for special crops, with its average rising by 3.5%, to 15.8 days from 15.2 days. This value proved to be 17.9% 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. [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. One of the most common concerns voiced by grain shippers relates to the consistency of the service they receive from the railways. Specifically, they find it difficult to develop logistics plans when actual transit times can vary widely from the average.

As with car cycles at large, the railways' loaded transit time showed an improvement in the first six months of the 2011-12 crop year, declining by 7.9%, to an average of 5.5 days from 6.0 days a year earlier. The variability in the underlying distributions also decreased, albeit by just 0.5%, with the coefficient of variation falling to 32.0% from 32.2%.[34] This continues to indicate that the average loaded transit time between any two points remains highly variable. [Table 5B-4]

Multiple-Car Blocks

In the first six months of the 2011-12 crop year, 12.3 million tonnes of grain moved in the multiple-car blocks that offered discounted freight rates. This represented an increase of 17.4% over the 10.5 million tonnes handled a year earlier, and established a new record for the period under the GMP.

From the beginning of the GMP, it has been clear that the largest block sizes were the most popular with grain shippers. This stems simply from the fact that they provide the deepest monetary discounts, allowing the grain companies to realize the greatest financial returns. Moreover, both railways promoted these larger block sizes by systematically increasing the discounts on shipments in blocks of 50 or more cars. At the same time, they also moved to reduce, and ultimately eliminate, the discounts on movements in blocks of 25-49 cars.[35] [Table 5B-5]

As a result, the proportion of railway traffic moving in multiple-car blocks climbed quite rapidly. By the close of the 2010-11 crop year, 79.7% of the regulated grain moving to the four ports in western Canada

34 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.

35 CN eliminated its $1.00-per-tonne discount on shipments in blocks of 25-49 railcars at the beginning of the 2003-04 crop year. Although CP reduced its discount to $0.50 per tonne at that time, the carrier only did away with them at the commencement of the 2006-07 crop year.

Figure 43: Average Loaded Transit Time

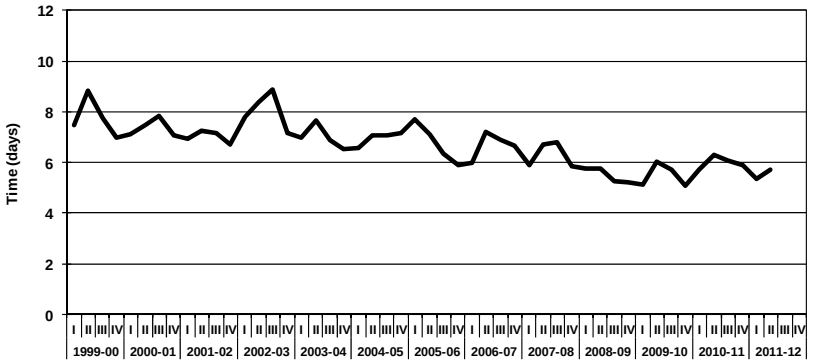
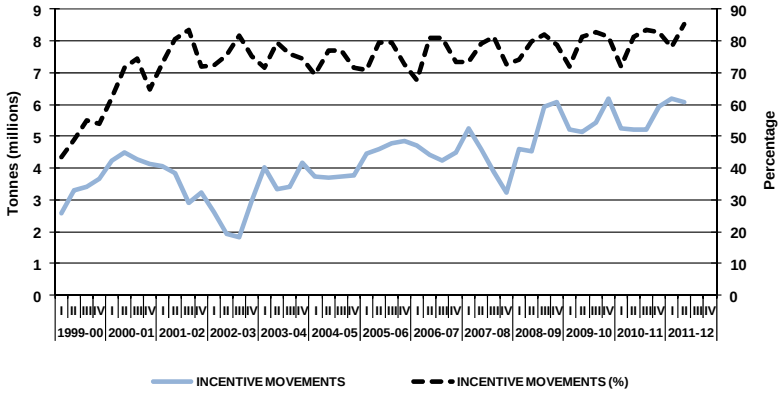


Figure 44: Railway Traffic Moving Under Incentive



was earning a discount, against 50.4% in the GMP's base year. By extension, the proportion of grain moving in smaller, non-discounted car blocks declined steadily, to 20.3% from 49.6%. At the same time, the annual value of the discounts earned by grain shippers – estimated as a gross savings in railway freight charges – more than quadrupled, climbing to an estimated $145.5 million from $31.1 million in the first year of the GMP. However, this savings expansion was largely the product of a more substantive increase in the per-tonne discounts than it was of the traffic base.

Still, the increased tonnage moving under discounted freight rates in the first half precipitated a 20.1% rise in the earned value of these discounts, which reached an estimated $84.0 million against $69.9 million a year earlier. This was also reflected in a greater average earned discount, which is estimated to have risen to $6.84 per tonne from $6.69 per tonne. [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. Notwithstanding an 10.4% increase in terminal throughput, the average weekly stock level declined by 3.8% in the first six months of the 2011-12 crop year, remaining effectively unchanged at 1.2 million tonnes.

This result was shaped in large measure by a combined 181,200-tonne reduction in the stocks held at Thunder Bay and Churchill, which fell by 27.2% and 22.3% respectively. Tempering this was a 134,600-tonne build-up in inventories at the west-coast ports of Vancouver and Prince Rupert, which rose by 27.1% and 17.6% respectively.

As in past years, wheat stocks again constituted the largest single commodity held in inventory. However, these stocks declined by 17.5%, to 473,600 tonnes from 573,800 tonnes a year earlier. The same was true

Figure 45: Composition of Multiple-Car-Block Movements

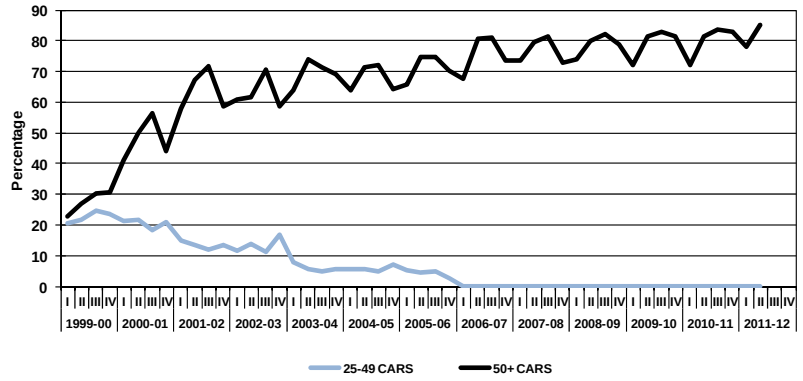
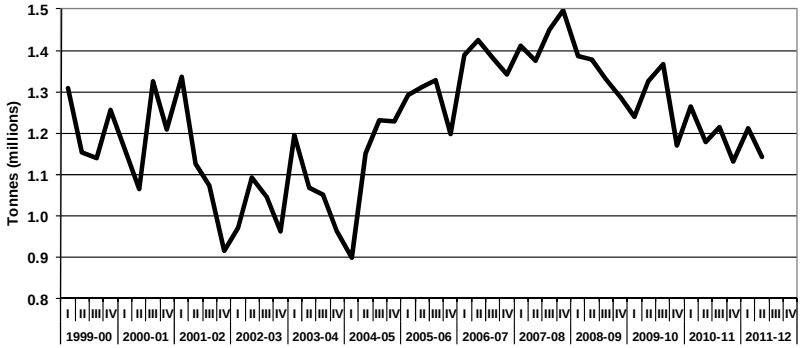


Figure 46: Terminal Elevators – Average Weekly Stocks



of barley, which posted a 56.9% reduction, falling to 82,600 tonnes from 191,500 tonnes. In large measure, these reduced stocks gave way to increased durum and canola inventories, which rose by 54.1% and 66.3% respectively. [Table 5C-2]

Days in Store

Alongside a modest decline in terminal stocks came a 15.6% reduction in the amount of time grain spent in inventory, with the overall number of days-in-store falling to a first-half average of 14.6 days from 17.3 days a year earlier. Much of the impetus for this came from a 47.8% reduction at Thunder Bay, which saw its average fall to 20.2 days from 38.7 days twelve months before. This was complemented by more moderate decreases of 13.6% at Prince Rupert and 3.9% at Churchill. The only port to post an increase was Vancouver, which reported a 24.2% gain, with its average rising to 12.3 days from 9.9 days. [Table 5C-3]

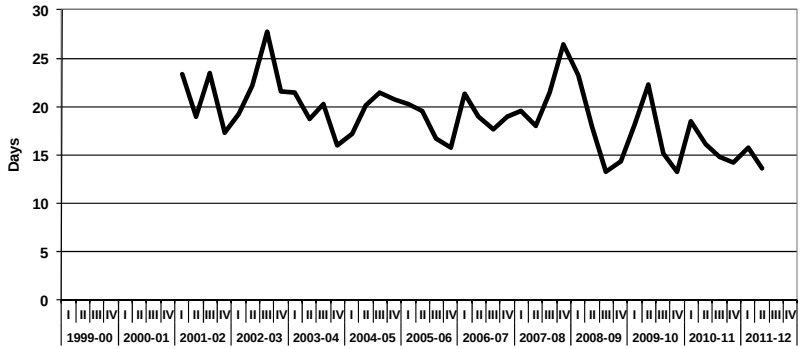
The most significant commodity-related reduction was tied to wheat, where the average number of days-in-store declined by 33.2%, to 14.1 days from 21.1 days a year earlier. This was supported by reductions in the storage times for oats, 49.6%, as well as flaxseed, 4.3%. Running counter to this were increases in the storage times for durum, 56.6%; barley, 14.9%; canola, 29.3%; peas, 54.2%; and flaxseed, 38.6%.

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.[36]

36 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 47: Terminal Elevators – Average Days-in-Store



For Vancouver, the average ratio on most grains stood comfortably above a value of 2.0. The chief exception to this proved to be canola, which posted an average ratio of 1.4. Save for wheat and barley, which posted reductions of 25.5% and 30.2% respectively, all of the port's ratios moved sharply higher. Although Prince Rupert reported comparatively lower ratio values than did Vancouver, a sharp upturn in throughput and inventories resulted in modest reductions for all grains save canola, which increased by 60.9%. [Table 5C-4]

The ratios posted by Thunder Bay also stood well above a value of 2.0. Still, many of these ratios showed marked reductions from those posted a year earlier. Among the most noteworthy reductions were: wheat, 56.8%; barley, 71.0%; and canola, 39.8%. Churchill reported comparatively lower ratio values than did Thunder Bay, with its ratio for wheat rising by 16.1% while that tied to durum fell by 50.5%.

On the whole, these measures suggest that terminal stocks were largely adequate to meet the prevailing demand, although they also continued to

point to periodic stock shortages. While grade-based stock-to-shipment ratios show a greater degree of variability, they suggest much the same. [Table 5C-5]

PORT OPERATIONS

A total of 429 vessels called for grain at western Canadian ports during the first six months of the 2011-12 crop year. This represented an 8.1% increase over the 397 ships that arrived for loading in the same period a year earlier.

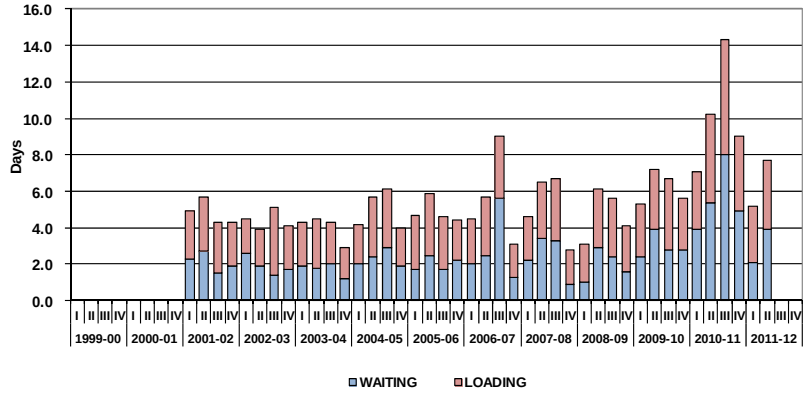
Average Vessel Time in Port

The average amount of time spent by vessels in port decreased by 24.4% in the first half of the 2011-12 crop year, falling to an average of 6.5 days from 8.6 days a year earlier. This decline was largely shaped by a 34.8% reduction in the amount of time vessels spent waiting to load, which fell to an average of 3.0 days from 4.6 days a year earlier. Supporting this improvement was a 12.5% reduction in the amount of time vessels spent loading, which fell to an average of 3.5 days from 4.0 days.

All ports save that of Prince Rupert reported significant decreases in the first half. The most substantive of these was posted by Churchill, where the average fell by 45.3%, to 5.2 days from 9.5 days a year earlier. Thunder Bay reported the second largest reduction, with its average falling by 33.3%, to 1.8 days from 2.7 days.[37] Vancouver trailed with a 25.0% decrease, which lowered its average to 9.3 days from 12.4 days. Prince Rupert reported the longest stays in port, with its average for the first six months of the crop year rising by 25.8%, to 12.2 days from 9.7 days. Much of this increase was due to delays occasioned by inclement weather. [Table 5D-1]

37 Thunder Bay's lower averages stem 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.

Figure 48: Average Vessel Time in Port



Distribution of Vessel Time in Port

In addition to the reduced averages noted above, the proportion of ships needing more than five days in port also moved lower, falling to 45.0% from 51.6% a year earlier. The more important force shaping this result was the sharp reduction in the proportion of ships requiring unusually long periods of time in port. To this end, the share of vessels needing 16 or more days in port during the first six months of the crop year was virtually halved, falling to 9.8% from 19.9% a year earlier. Much of this reduction reflected an improvement at Vancouver. [Table 5D-2]

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 2010-11 crop year, it was observed that this process required an average of 52.3 days; one of the lower annualized values 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 15.8-day improvement over the base-year average of 68.1 days.

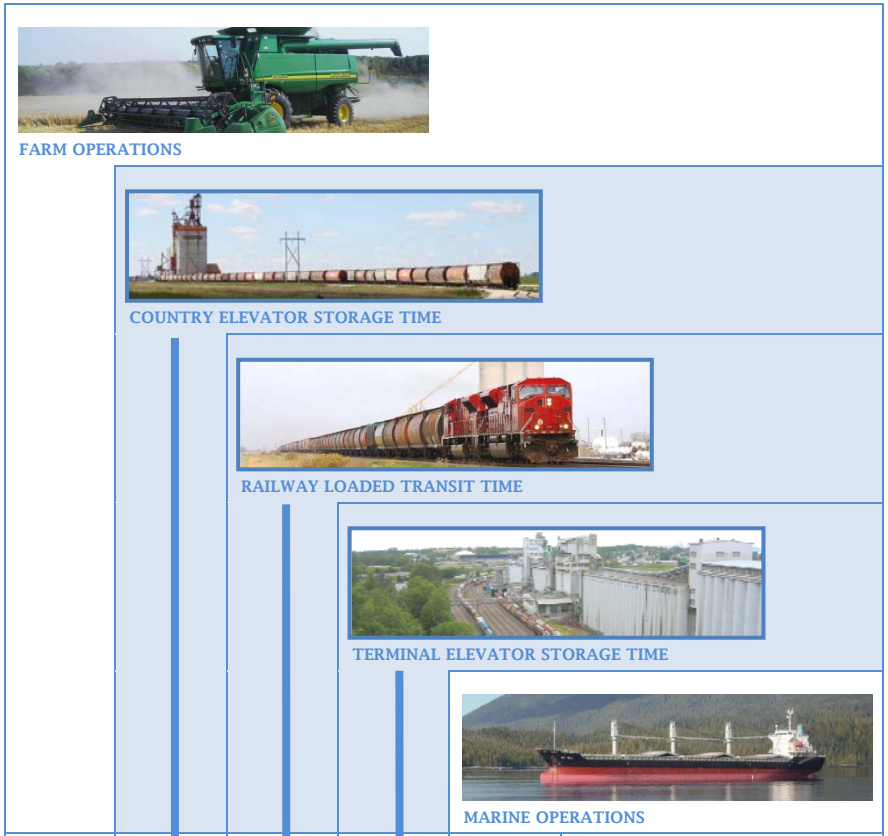
This average fell to 48.3 days in the first six months of the 2011-12 crop year. The result was largely shaped by a reduction in the amount of time spent by grain in storage in the country elevator system, which decreased by an average of 2.6 days. A further 0.5 days was derived from a reduction in the railways' loaded transit time. Adding to these gains was a 0.9-day decrease in the amount of time grain spent in inventory at a terminal elevator. [Table 5E-1]

These forces served to make the first-half's average one of the better values observed under the GMP. The following outlines a few of the factors that helped shape this result:

- Firstly, a decrease in the grain supply reduced the amount of grain available for movement in the 2011-12 crop year by 1.1%, to 60.6 million tonnes from 61.3 million tonnes a year earlier. Although this suggested a possible easing of the pressures that would be brought to bear on the GHTS, total grain shipments in the first half reached a GMP record of 15.6 million tonnes. As such, the demands placed on the system proved to be the greatest experienced thus far.

- Secondly, by the beginning of the crop year the operational problems that had confronted CP and undermined its service offering throughout much of the previous crop year had effectively been overcome. As a result, grain moved to export position much more effectively and efficiently than it did a year earlier. Further, grain

Figure 49: Days Spent Moving Through the GHTS Supply Chain



				TOTAL	NET CHANGE
1999-00	41.7	7.8	18.6	68.1	
2008-09	27.7	5.5	16.7	49.9	
2009-10	30.5	5.5	16.2	52.2	
2010-11	30.8	6.0	15.5	52.3	
2011-12	28.2	5.5	14.6	48.3	-29.1%

shippers reported comparatively few problems with the service they were receiving from the railways in the country, despite what was proving to be a near-record handling for the elevator system. Even more important was the fluidity with which grain was moving through the ports. With better inbound supplies, the terminal elevator system, which was also bearing the pressures of a near-record throughput, was better able to provide for the timelier loading of awaiting ships.

- Finally, and as demonstrated during other highly productive periods in the GMP's history, the GHTS's performance in the first half of the 2011-12 crop year revealed once again how effective the system can be when all of its elements are working in close harmony. This should not be interpreted to mean that there was no room for improvement, for concerns remained over the vulnerabilities that could once again undermine system performance.

Section 6: Producer Impact

Indicator Description	Table	1999-00	2009-10	2010-11	2011-12 Q1	Q2	Q3	Q4	YTD	% VAR
Export Basis										
1CWRS Wheat ($ per tonne)	6A-10A	$54.58	$65.86	$73.35						
1CWA Durum ($ per tonne)	6A-10B	$67.63	$79.52	$89.36						
1 Canada Canola ($ per tonne)	6A-10C	$52.51	$49.73	$53.14						
Canadian Large Yellow Peas – No. 2 or Better ($ per tonne)	6A-10D	$54.76	$78.32	$84.86						
Producer Cars										
Producer-Car-Loading Sites (number) – Class 1 Carriers		415	268	250	233	233	-	-	233	-6.8%
Producer-Car-Loading Sites (number) – Class 2 and 3 Carriers		122	110	115	132	132	-	-	132	14.8%
Producer-Car-Loading Sites (number) – All Carriers		537	378	365	365	365	-	-	365	0.0%
Producer-Car Shipments (number) – Covered Hopper Cars	6B-2	3,441	12,198	13,041	1,798	4,148	-	-	5,946	11.1%

PRODUCER NETBACK

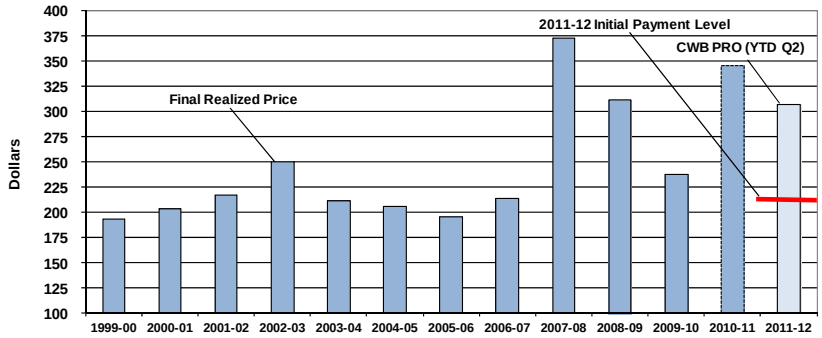
One of the GMP's key objectives is to determine the financial impact on producers arising from changes in the GHTS. The principal measure in this regard is the producer netback, an estimation of the per-tonne financial return to producers after the various logistics costs, collectively known as the export 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 three years. Nevertheless, by the close of the 2010-11 crop year, grain prices had rebounded to near-record levels.

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, current price and input-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 2011-12 crop year are presented here.

Figure 50: Recent Price Changes – 1CWRS Wheat (dollars per tonne)



CWB Grains

The GMP uses the CWB's Pool Return Outlook (PRO) for 1 CWRS wheat (13.5% protein) as the principal barometer of changing CWB grain prices. Through the first four months of the 2011-12 crop year the CWB's PRO for 1 CWRS wheat moved steadily lower, before then beginning to rebound. When gauged against the 2010-11 crop year's final realized price of $344.96 per tonne, the PRO fell by a factor of 11.0% in the first half of the 2011-12 crop year, closing out the period at $307.00 per tonne. This proved to be well above the farmer's initial payment, which had opened the year at $214.85 per tonne.

Much of the impetus for this price reduction came from continued uncertainty in world markets. Adding to this was a restoration of healthy yield and production levels among the major growing regions of Europe and the Black Sea. Coupled with projections for the third largest global wheat harvest on record, this put significant downward pressure on wheat prices. To an extent, tightening American corn stocks helped limit

the decline by lending general support to future prices. Owing to these forces, the financial returns accruing to producers are expected to decline in the 2011-12 crop year, although still placing well against some of the GMP's better returns.

Non-CWB Grains

As with wheat, the Vancouver cash price for 1 Canada Canola also moved lower during the initial months of the 2011-12 crop year before then rebounding modestly. This was attributable in large measure to an increase in Canadian production, which undermined prices in the face of sustained demand. Still, the $557.87-per-tonne average realized during the first half fell by 1.3% from the previous crop year's final average of $565.36 per tonne.

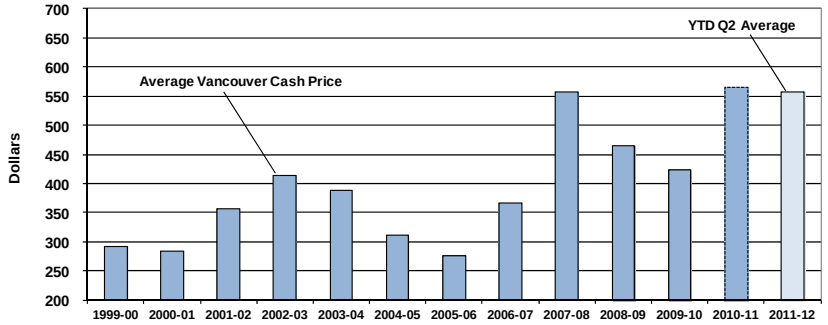
The limited change in price noted thus far into the 2011-12 crop year suggests that producers of 1 Canada canola will witness only a modest impact on the per-tonne financial returns. Moreover, these returns are still expected to remain among the better values posted under the GMP.

Notwithstanding the effects to be derived from the change in price, rising input costs also seemed likely to detract from the farmer's financial returns. The most pronounced of these were the increases tied to railway freight rates, which ranged from 5% to 16% depending on the corridor and carrier. More modest impacts came from the handling charges for various elevator activities. In the case of country elevators, these ranged from a 0.1% increase in the tariff rates for elevation, to 1.6% increases on those cleaning and storage. Terminal elevator activities showed somewhat greater increases, with the tariff rates for elevation rising by 1.4% while those for storage rose 4.0%.

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

Figure 51: Recent Price Changes – 1 Canada Canola (dollars per tonne)



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. 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

The number of producer-car loading sites situated throughout western Canada has been reduced by almost a half since the beginning of the GMP. With the close of the 2010-11 crop year, only 365 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 the number of sites they serviced by 61.2%, to 250 from 644. Conversely, the number of

sites operated by the smaller Class 2 and 3 carriers increased to 115 from 65. [Table 6B-1]

The first six months of the 2011-12 crop year saw a further shift in this balance, with the Class 1 carriers transferring another 17 sites to the smaller non-Class 1 carriers. All of these were tied to the creation of Big Sky Rail early in the first quarter, which assumed operation of the sites previously served by CN. By the close of the second quarter, the number of sites operated by the major railways had fallen to 233 while those tied to the shortlines had increased to 132.

Producer Car Shipments

Despite the last twelve years' reduction in producer-car-loading sites, producer-car shipments have risen significantly. By the close of the 2010-11 crop year, total shipments had almost quadrupled, having climbed to 13,041 carloads from 3,441 carloads in the base year. However, this growth has proven somewhat sluggish in the face of periodic downturns in volume.

Despite reduced volumes in the first quarter, producer-car shipments surged in the second quarter. As such, producer-car shipments in the first six months of the 2011-12 crop year increased by 11.1%, to 5,946 carloads from 5,354 carloads in the same period a year earlier. This represented 3.6% of all covered hopper car movements, and a marginal gain over the 3.5% garnered twelve months before. When gauging only CWB grain shipments, the share for producer cars represented a greater 6.4%, but also fell slightly from the 6.6% share earned twelve months before. [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.

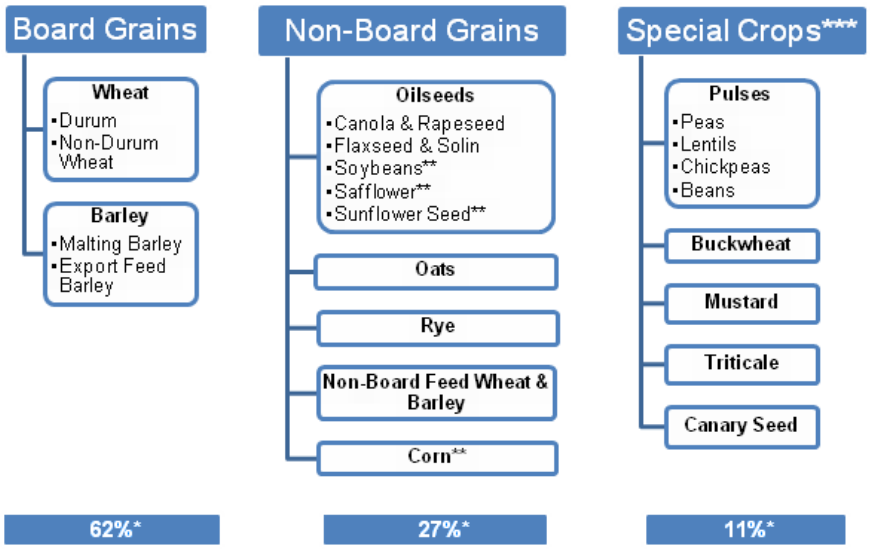
- Series 4 – Commercial Relations: Measurements relating to the rates applicable on various grain-handling and transportation services, as well as the activities of the Canadian Wheat Board in the adoption of more commercially oriented policies and practices.

- 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: Commodities 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.



* Percent of railway shipments to the four western ports in the past five years.

** Also may be considered special crops.

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

Board Grains: Board grains are western grains marketed under the control of the Canadian Wheat Board (CWB). These include western wheat and barley destined for the export market, as well as domestic sales of wheat and barley for human consumption. Domestic feed wheat and domestic feed barley may be sold either on the open market or delivered to the CWB.

Non-Board Grains: Non-Board grain is grain marketed through the open market system. Such grain includes domestic feed wheat and barley, rye, oilseeds and specialty crops.

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.

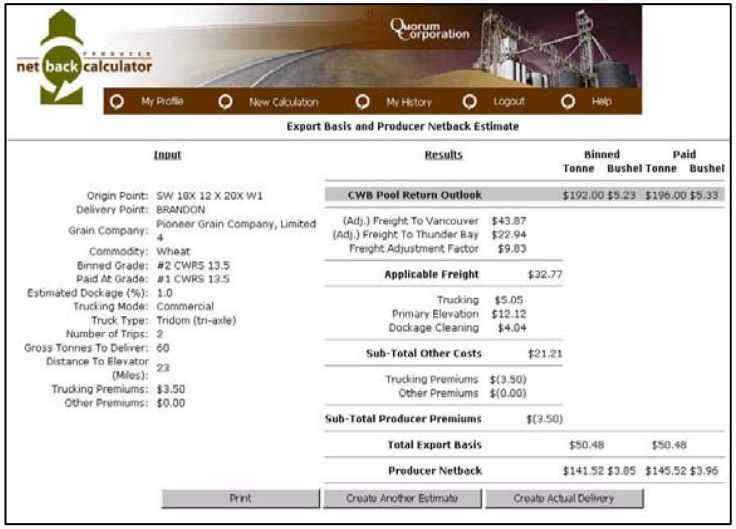
Special Crops: Special crops are considered to be beans, buckwheat, chick peas, corn, fababeans, lentils, mustard, peas, safflower, soybeans, sunflower, and triticale.

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: Producer Netback Calculator

Many stakeholders have expressed concern over the increased trucking distances in moving grain from the farm gate to the elevator as a result of the rationalization of GHTS infrastructure. While all evidence suggests that truck hauls are increasing because of the reduced number of delivery points, the exact – or even approximate – amount of this increase remains unknown. The GMP assumes an average haul of 40 miles when estimating the producers' netback. Following stakeholder consultations, an internet-based approach was developed. The Producer Netback Calculator (PNC) was designed to provide a cost-effective and non-intrusive means of gathering better data on the producer's actual trucking distances.



The output screen for Quorum Corporation's Netback Calculator.

To entice producers into providing this data, the PNC would provide farmers with data on the costs associated with moving grain from farm-specific locations to export position (the export basis). These costs are the same ones reflected as deductions on cash tickets. The PNC was designed to assist farmers in determining the delivery options that would provide them with the best returns for their wheat, durum and feed barley.

To gain access to the PNC, producers are provided with their own personal log-in identification and password, which is secured through 128-bit encryption technology. This ensures that all information is communicated with the strictest confidentiality. Producers can also be assured that Quorum Corporation will not publish or share any of the information it collects.

Calculation of a producer's estimated export basis and netback is based on the entry of movement-specific information (i.e., delivery point, grain company, grain, grade, etc.). After entering this basic information, the producer can then run a calculation that will return a tabular accounting of the export basis and producer netback based on the CWB's Pool Return Outlook. The producer also has the option of "recalculating" these estimates by returning to a previous screen, and changing any of the parameters used in the calculation (i.e., destination station, grain company, etc.).

Every estimate will be recorded and accessible to the producer through a "history" listing. It is through this screen that producers are given the ability to create comparative reports that can present these estimates – or those they wish to see – in summary or detail. These reports can also be printed or presented as a computer spreadsheet. This is also the section of the system where the

producer identifies estimates that subsequently resulted in actual grain movements. As a result, it is hoped that Quorum Corporation will be able to gather meaningful logistics data from these transactions, and more specifically the actual length of haul involved in delivering grain to an elevator. If successful, this information will be incorporated into the calculation of the producer's netback.

Appendix 4: 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 Infrastructure and Transportation
Alliance Grain Terminal Ltd.
Alliance Pulse Processors Inc.
Battle River Railway
Boundary Trail Railway Company Inc.
Canadian Canola Growers Association
Canadian Grain Commission
Canadian Maritime Chamber of Commerce
Canadian National Railway
Canadian Pacific Railway
Canadian Ports Clearance Association
Canadian Ship Owners Association
Canadian Special Crops Association
Canadian Transportation Agency
Canadian Wheat Board
Cando Contracting Ltd.
Canola Council of Canada
Cargill Limited
CMI Terminal
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
Lethbridge Inland Terminal Ltd.
Louis Dreyfus Canada Ltd.
Manitoba Agriculture, Food and Rural Initiatives
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 of Churchill
Port of Prince Rupert
Port of Thunder Bay
Port of Vancouver
Prairie West Terminal
Prince Rupert Grain Ltd.
Red Coat Road and Rail Ltd.
Richardson Pioneer Ltd.
Saskatchewan Agriculture and Food
Saskatchewan Highways and Transportation
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.
Wild Rose Agricultural Producers