

Monitoring the Canadian Grain Handling and Transportation System Second Quarter 2008-2009 Crop Year

1 Summary Report



Government of Canada
Gouvernement du Canada



Foreword

In keeping with the federal government's Grain Monitoring Program (GMP), the ensuing report focuses on the performance of the Canadian Grain Handling and Transportation System (GHTS) for the six-month period ended 31 January 2009. In addition to providing a current accounting of the indicators maintained under the GMP, it also outlines the trends and issues manifest in the movement of western Canadian grain during the first half of the 2008-09 crop year.

As with previous quarterly and annual reports, the report is structured around a number of performance indicators established under the GMP, and grouped under five broad series, namely:

- Series 1 – Industry Overview
- Series 2 – Commercial Relations
- Series 3 – System Efficiency
- Series 4 – Service Reliability
- Series 5 – Producer Impact

Although the indicators that follow largely compare the GHTS's current-year performance with that of the preceding 2007-08 crop year, they are also intended to form part of a time series that extends forward from the 1999-2000 crop year. As such, comparisons to earlier crop years are also made whenever a broader contextual framework is deemed appropriate.

The accompanying report, as well as the data tables which support it, can both be downloaded from the Monitor's website (www.quorumcorp.net).

QUORUM CORPORATION
Edmonton, Alberta

Table of Contents

Findings	1
1.0 Industry Overview	1
1.1 Grain Production and Supply	1
1.2 Country Elevator Infrastructure	2
1.3 Railway Infrastructure	3
1.4 Terminal Elevator Infrastructure	4
2.0 Commercial Relations	5
2.1 Tendering Program	5
2.2 Advance Car Awards Program	7
2.3 Other Commercial Developments	8
3.0 System Efficiency and Service Reliability	13
3.1 Trucking	13
3.2 Country Elevators	13
3.3 Railway Operations	14
3.4 Terminal Elevator and Port Performance	17
3.5 The Supply Chain	18
4.0 Producer Impact	20
4.1 Producer Netback	20
4.2 Producer-Car Loading	21
Synopsis – Industry Overview	22
Synopsis – Commercial Relations	24
Synopsis – System Efficiency	26
Synopsis – Service Reliability	28
Synopsis – Producer Impact	30
Appendix 1: Program Background	35
Appendix 2: Commodities Guide	37
Appendix 3: Producer Netback Calculator	39
Appendix 4: Acknowledgements	41
Appendix 5: Data Tables	43

Findings

Favourable growing conditions across much of the prairies proved responsible for a significant increase in yield for the 2008-09 crop year. Generally good conditions allowed farmers to bring harvest to completion ahead of normal, and contributed to an improvement in overall grain quality. Although by historical standards global grain prices have stood up fairly well, prices moved lower from the record levels of the previous crop year due to a loosening in overall grain supplies brought on by an end of drought conditions in Australia and the Ukraine. Prices were further pressured by the mounting crisis in financial and credit markets which exerted downward pressure on all commodities.

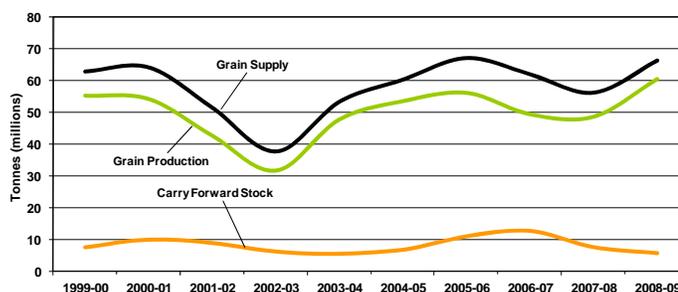
1.0 Industry Overview

1.1 Grain Production and Supply

Overall grain production for the 2008-09 crop year climbed to 60.4 million tonnes, an increase of 24.4% from the previous crop year's 48.5 million tonnes. This ranked as the largest crop witnessed under the GMP, and represents a 7.8% increase from the record-setting 56.0 million tonnes produced in the 2005-06 crop year. Reversing the previous two years' experience of consecutive reductions in output, total grain production climbed well above that of recent drought years.¹ Increased production was seen for all major crops other than oats. Wheat, durum and canola contributed the bulk of the gain rising to 20.0 million tonnes (up 35.8%), 5.5 million tonnes (up 49.9%) and 12.6 million tonnes (up 32.5%) respectively from a year earlier. As was the case with most other grains, special crop production rose appreciably, increasing by 17.1% to 5.2 million tonnes.

Production for all provinces but British Columbia saw significant year-over-year increases in 2008-09. Alberta, Manitoba and Saskatchewan posted increases of 18.4%, 26.3% and 25.5% respectively.² In keeping with this, the overall grain supply increased by 17.9%, climbing to 66.0 million tonnes from 56.0 million tonnes a year earlier. This growth in supply was somewhat mitigated by the effects of a 24.2% decrease in the amount of stocks carried forward from the preceding crop year, which fell to 5.6 million tonnes, the second-lowest level seen under the GMP, as compared to the 7.5 million tonnes that had been stockpiled a year earlier. Much of the impetus for this drawdown came as a result of the increasing global demand for grain and strong commodity prices during the 2007-08 crop year.

Figure 1: Western Canadian Grain Supply



Notwithstanding the increase in Canadian grain production, falling worldwide demand resulted in a decrease the GHTS's handlings in the first six months of the 2008-09 crop year. Railway shipments for the period, which totalled 11.3 million tonnes, fell 14.4% from the near-record level of 13.2 million tonnes handled a year earlier.³ All commodities except canola experienced declines, with wheat, durum and barley falling by 7.0%, 34.1% and 64.2% respectively. Strong export demand for canola resulted in a 26.0% increase in shipments, which

¹ Grain production in the 2001-02 and 2002-03 crop years was adversely impacted by drought, and fell sharply below the region's typical 50-million-tonne output, to 42.5 million tonnes and 31.5 million tonnes respectively.

² Production in British Columbia declined by 25.3% to 155,900 tonnes.

³ A record 13.5 million tonnes were moved under the GMP in the first half of the 2000-01 crop year.

reached a new record of 3.1 million tonnes for the commodity during the first half.⁴ Similarly, special crop shipments posted a collective decline of 23.8%, falling to 1.3 million tonnes in comparison to the 1.7 million tonnes shipped a year earlier.

1.2 Country Elevator Infrastructure

As outlined in the Monitor's previous reports, although the country elevator network has diminished dramatically in size, the pace of that reduction has abated significantly in recent years. However, the second quarter of the 2008-09 crop year produced the first change in the scope of this network in over a year, with another 12 licensed elevators having been removed from the system. This represented a further 3.2% reduction from the 378 facilities in place at the end of the preceding crop year. As a result, by the end of January 2009 the network encompassed a total of 366 elevators, marking a 63.5% net reduction from the 1,004 elevators that were in place at the beginning of the GMP.

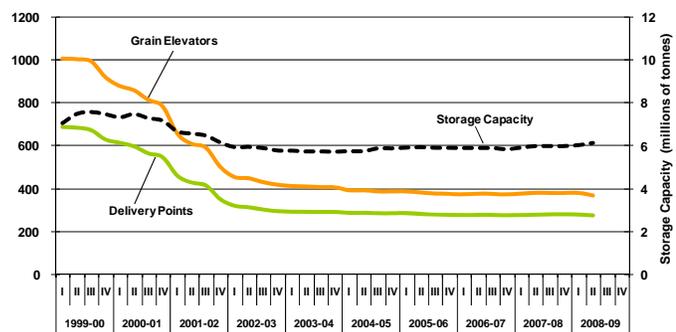
The decline in elevator facilities has been accompanied by a largely parallel reduction in the number of grain delivery points at which they were located. The elevator reductions posted in the first half had a corresponding impact on the number of surviving grain delivery points, which fell by 1.4% to 272.

As with the elevator infrastructure itself, the delivery points that remained constituted just 39.7% of the 685 that were in place at the beginning of the GMP. Although these installations are distributed generally throughout western Canada, grain deliveries have been concentrated at about one-third of the system's delivery points. In the 2007-08 crop year, the last for which data is available, 80% of the tonnage delivered into the system was gathered at just 91 locations.⁵

When contrasted with the decline in the number of elevators and delivery points, the reduction in associated storage capacity has not been nearly as pronounced. Moreover, it reflects the rate at which the storage capacity of high-throughput facilities has replaced that of smaller elevators. As such, even though licensed storage capacity declined from 7.0 million tonnes to 6.0 million tonnes over the course of the first nine years of the GMP, this reduction amounted to just 15.3%. Moreover, total storage capacity has been increasing modestly since the 2003-04 crop year, with another 106,500 tonnes having been added to the system in the first half of the current crop year. This had the effect of increasing the overall storage capacity by 1.8%, to a total of almost 6.1 million tonnes.

These changes provide a clear indication of the evolution that has been taking place within the industry since the beginning of the GMP. The elevator network now comprises significantly fewer facilities, many with larger storage capacities and the ability to load railcars in trainload lots. It is worth noting that while only 11.9% of the system's elevators were able to load 50 or more railcars at a time when the GMP began, by the end of the second quarter that proportion had risen to a significantly greater 50.5%.

Figure 2: Grain Delivery Points, Licensed Elevators, and Licensed Elevator Storage Capacity



⁴ Although demand from traditional customers such as Japan and Mexico was maintained, it was the return of China, with an objective of building oilseed stocks, that propelled canola shipments to record levels. Exports to China reached 1.0 million tonnes by the end of the first half, making the country the second largest destination for Canadian canola.

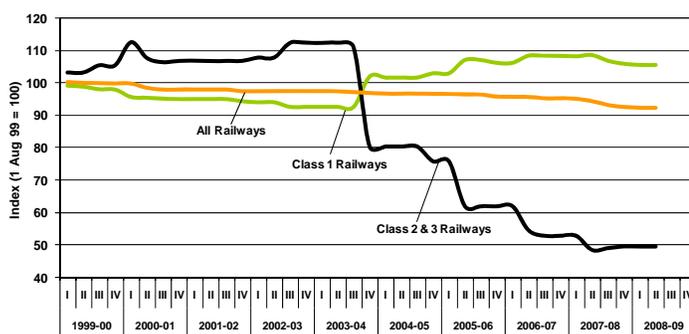
⁵ The most recent statistics available from the Canadian Grain Commission for grain deliveries by station are those from the 2007-08 crop year.

1.3 Railway Infrastructure

As previously reported, total railway infrastructure in western Canada has experienced a comparatively modest change since the beginning of the GMP. By the end of the 2007-08 crop year the network had been reduced by just 7.7%, to a total of 17,978.0 route-miles of track. Although 87.0% of this 1490.2-route-mile reduction was derived from the abandonment of grain-dependent branch lines, there were significant changes in the makeup of the system that remained. Much of this stemmed from the transfer by CN and CP of various branch line operations to a host of new shortline railways; a process that began in the mid 1990s. Although this was but one element in a wider industry restructuring, it resulted in slightly more than one-quarter of the railway network being operated by smaller regional and shortline carriers.

The waning financial health of shortlines at large prompted several of them to either sell or rationalize their own operations. In most instances, this resulted in shortlines reverting back to the control of the Class 1 carrier that had spun them off in the first place. Perhaps the most vivid example of this came in January 2006 when RailAmerica Inc. sold most of its holdings in western Canada back to CN.⁶ Such shifts resulted in a significant realignment of Class 1 and non-Class 1 railway operations over the course of the last four years. By the end of the 2007-08 crop year, CN and CP directly managed a total of 15,683.0 route-miles of track, which constituted a net gain of 5.8% over the 14,827.9 route-miles they controlled at the beginning of the GMP. In comparison, the network operated by western Canada's Class 2 and 3 carriers declined by 50.5%, from 4,640.3 route-miles to 2,295.0 route-miles.

Figure 3: Relative Change in Railway Infrastructure



Despite their best efforts, most shortline railways were simply unable to reshape the economics that gave rise to the elevator rationalization activities of the grain industry as a whole. Consequently, their traffic volumes have largely been on the decline. Even though an increase in producer-car loading has helped compensate for the closure of some local elevators, the continuing erosion of shortline traffic volumes does not augur well for the future of those that remain. Consistent with the overall reduction in shipments from country elevators, shortline volumes fell by 27.1% in the first six months of the 2008-09 crop year while those of Class 1 carriers decreased by a notably lesser 13.6%. And while the number of licensed elevators served by shortline railways actually increased by two in the first six months of the current crop year, the net reduction posted since the beginning of the GMP amounted to 80.5%, with just 16 remaining. This proved significantly greater than the 63.0% reduction in facilities served by the Class 1 railways during this same period. Equally telling has been the comparative decline in the associated storage capacities of these two elevator networks, which fell by 81.4% versus 8.7% respectively.

A further 53.2 route miles of infrastructure was removed from the railway system in the first six months of the 2008-09 crop year, all of which related to the pruning of portions of CN's Saskatchewan-based Matador Subdivision (29.7 route-miles) and White Bear Subdivision (23.5 route-miles) in the first quarter. This served to reduce the overall network by just 0.3% to 17,924.8 route-miles. Revisions to the network plans of both CN and CP during this period showed that another 850 route-miles of railway infrastructure are still being targeted for discontinuance over the next three years, with almost three-fifths of this amount currently earmarked by CP.

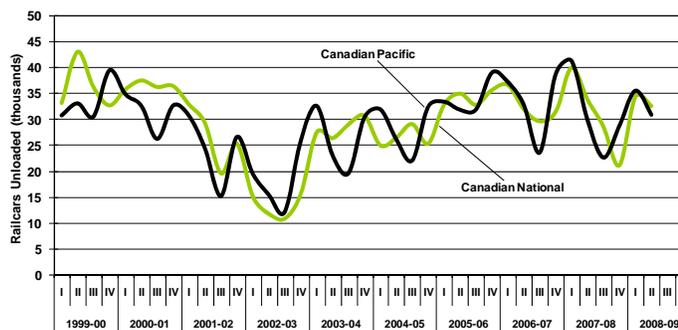
⁶ The sale encompassed 702.8 route-miles of railway infrastructure grouped under three separate operations: the Central Western Railway; the Lakeland and Waterways Railway; and the Mackenzie Northern Railway.

1.4 Terminal Elevator Infrastructure

No changes to the licensed terminal elevator network in western Canada were recorded during the first six months of the 2008-09 crop year. At the close of the period, the network comprised a total of 15 facilities with an associated storage capacity of 2.5 million tonnes.

A total of 132,974 carloads of grain were unloaded at these facilities during the first half. This represented an decrease of 8.0% from the 144,501 handled during the same period a year earlier. Having originated 50.2% of the cars that were unloaded during this period, CN marginally nudged out CP as the largest handler of export grain in western Canada. The year-to-date result was largely due to the carrier's stronger showing in the second quarter, where CN's share rose to 51.3% from its 49.2% in the first quarter. However, CN's share fell by 0.7 percentage points in comparison to the 50.9% it had secured in the first half of the previous crop year.

Figure 4: Terminal Elevator Unloads – Railway Carrier



Although the record is somewhat mixed, CP has often outpaced CN's quarterly handlings since the 2002-03 crop year. In large part, this can be explained by a distribution in crop production that has tended to benefit CP rather than CN. Still, CN's efforts to promote its Prince Rupert gateway appear to have done much to help compensate for this. Through reduced freight rates and a better allocation of cars to the corridor, CN appears to have narrowed the overall differential in market share substantially – even if the gain has come at the expense of the carrier's own reduced handlings into Vancouver.⁷

⁷ The downturn in first half volume actually produced a 37.3% reduction in CN's handlings at Prince Rupert. Much of this traffic appears to have been redirected to Vancouver, where CN's handlings increased by 13.5% in the face of a 2.9% reduction for CP. Although CN's share of the overall handlings into Vancouver rose to 42.3% from 38.6% a year earlier, this was the first time its share had increased in five years.

2.0 Commercial Relations

2.1 Tendering Program

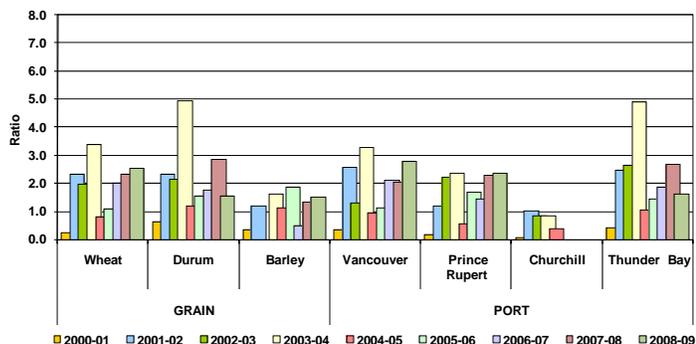
Owing to the changes brought forth in the 2003-04 crop year, the CWB continues to target a fixed 40% of its overall grain movements to the four ports in western Canada using a combination of tendering and advance car awards. Under the terms of the arrangement it has with its agents, the CWB is expected to tender up to a maximum of 20% of this volume in the 2008-09 crop year.

During the first six months of the 2008-09 crop year the CWB issued a total of 131 tenders calling for the movement of 1.4 million tonnes of grain. This marked a 32.3% increase from the 1.1 million tonnes put out for tender in the first half of the preceding crop year. As in most crop years, the largest portion of this tonnage, 71.6%, related to the movement of wheat.⁸ The remaining portion was split between barley and durum at 15.2 and 13.2% respectively.

Prince Rupert again displaced the other ports as the designated principal gateway for tendered grain in the first half, with 43.2% of the tonnage called having specified delivery there. The share of tender calls issued in favour of Thunder Bay trailed measurably, having secured 29.9% of the tonnage called, virtually equalling the 30.1% garnered a year earlier. Vancouver's allocation slipped to third place, falling to 26.9% as compared to 35.0% a year earlier.⁹ Also, for a fourth consecutive year, no tenders calling for the delivery of grain to Churchill were issued during this period.

The calls issued by the CWB were met by 488 tender bids offering to move an aggregated 3.3 million tonnes of grain, nearly two-and-a-half times the volume sought. The scope of this bidding generally showed a marked increase in intensity compared to that exhibited in the preceding crop year.¹⁰ Using the ratio of tonnage-bid to tonnage-called to measure grain company reaction, reveals mixed results in the response rates of the bidders was observed. Durum showed a steep relative decline in the response rates tied to individual grains, its ratio having fallen by 44.8%, to 1.6 compared to 2.9 for the previous crop year as a whole. The response rate for wheat rose, albeit by only 8.7%, to 2.5 from 2.3 in the 2007-08 crop year. Only barley showed a marked increase in bidding activity, achieving a ratio of 1.5 compared to the previous crop year when no tenders, save for that of malting barley, were issued.

Figure 5: Tendered Volume – Ratio of Tonnage Bid to Tonnage Called



Some pronounced changes in the response rates for the port specified in the tender calls were also evident. In particular, the ratio associated with grain intended for delivery at Thunder Bay declined by 40.7%, to 1.6 for the first half compared to a ratio of 2.7 for the previous crop year as a whole. The ratios noted for Vancouver and Prince Rupert both increased, reaching above the 2.0 mark, attaining values of 2.8 and 2.4 respectively.¹¹

⁸ Since the inception of the CWB's tendering program, wheat has always comprised the largest proportion of the tonnage put out for tender in any given crop year. However, there have been instances where the quarterly volumes have favoured other commodities. Such was the case in the first quarter of the 2005-06 crop year when, owing to a sizable short-term sales opportunity, tenders issued in favour of barley easily displaced those put out for wheat.

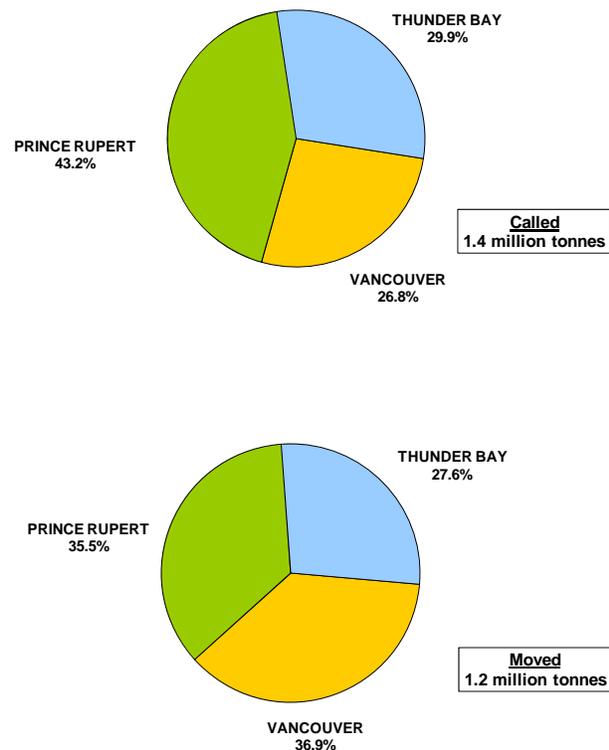
⁹ Vancouver's share of the tonnage put out for tender has declined significantly since the 2004-05 crop year, when it was accorded a record 70.9% of the total.

¹⁰ The contrast presented here largely relates to the bidding activity exhibited since the 2001-02 crop year, since meaningful comparisons with the 2000-01 crop year cannot be drawn as a result of the industry's limited participation in the CWB's new tendering program at that time.

¹¹ With no tender calls having been issued for Churchill, the ratio of tonnage-bid to tonnage-called remained at zero.

In large part, these strong response rates reflected the competition that had been stimulated in spite of an increase in the amount of grain put out for tender. Despite this response, an increase was registered in the proportion of the tender calls that went unfilled, which rose to 25.0% in the first half compared to 14.4% for the 2007-08 crop year as a whole. Even so, this overall value ignores the proportions attributable to specific ports. A closer examination of these individual values reveals that over half of the unfilled volume, 58.5%, was tied to tender calls issued in favour of Prince Rupert. Moreover, the port's unfilled proportion, 33.8%, proved to be significantly greater than that for either Vancouver (13.0%) or Thunder Bay (22.9%).¹²

Figure 6: Tendered Grain – Cumulative Volume to 31 January 2009



The skewed nature of these results continued to reflect the disinclination of grain companies having terminal facilities in Vancouver to bid as aggressively on tenders issued in favour of Prince Rupert. This apparent preference for Vancouver has led to somewhat less competitive bids on the tenders issued for Prince Rupert.¹³ Whereas there was a significant difference between the maximum discounts advanced on wheat tenders to Vancouver and Prince Rupert in the 2007-08 crop year, \$9.15 in favour of Vancouver, the discounts put forward in the first half of the 2008-09 crop year tended to favour Vancouver by only \$5.66 per tonne. Continuing this trend, the gap was narrowed substantially in the second quarter, with the differential falling to just \$2.61 per tonne.

As the volume offered increased from that offered the previous year, the discounts bid in an attempt to secure wheat tenders stayed within a similar range. Those for durum grew more aggressively than those put forward in the 2007-08 crop year, as did those for barley.¹⁴ The maximum discounts recorded in the first six months of the 2007-08 crop year declined by 3.2% in the case of wheat, to \$23.01 per tonne; and grew by a more substantial 42.1% on movements of durum, to \$14.95 per tonne.¹⁵ There were no instances where the CWB was required to pay a premium for tendered grain movements.¹⁶

¹² For the 2007-08 crop year as a whole, the unfilled proportion attributable to tender calls issued for Prince Rupert, Vancouver and Thunder Bay amounted to 18.6%, 4.10% and 7.5% respectively.

¹³ Shareholders of the Prince Rupert Grain facility all hold a larger stake in facilities in Vancouver, which provides them with an incentive to give preference to a Vancouver routing where they do not have to share terminal revenues. Some shareholders are also concerned with the lack of a competitive alternative to the single-carrier service provided by CN into Prince Rupert.

¹⁴ The tender bids advanced by the grain companies are typically expressed as a discount to the CWB's Initial Payment.

¹⁵ These discounts fell below the 2007-08 crop year's maximums of \$23.78 per tonne on wheat, and rose above the corresponding \$12.13 per tonne on durum.

¹⁶ In the 2007-08 and 2006-07 crop year, the CWB was required to pay premiums of as much as \$7.00 and \$16.00 per tonne respectively on tendered movements of feed barley.

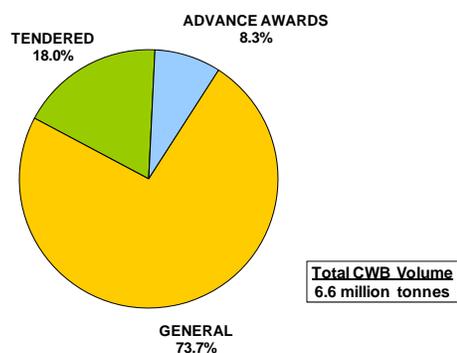
During the first six months of the 2008-09 crop year, the CWB awarded a total of 171 contracts for the movement of 1.2 million tonnes of grain.¹⁷ This represented an increase of 4.1% from the 1.1 million tonnes handled in the first half of the previous crop year. As opposed to the destinations specified in the tender calls, the largest proportion of the grain shipped, 36.9%, was sent to the port of Vancouver. Prince Rupert and Thunder Bay followed in turn with shares of 35.5% and 27.6% respectively. As for the composition of the movement, wheat accounted for 75.7% of the overall volume, while 13.9% was accorded to durum and a final 10.4% to barley.

As previously observed by the Monitor, the vast majority of the grain moved under the CWB's tendering program did so in blocks of 25 or more railcars. For the first six months of the 2008-09 crop year, 91.0% of the tendered grain volume moved in such blocks. This proportion proved to be slightly below the 91.8% recorded for the 2007-08 crop year as a whole. In addition, movements in blocks of 50 or more cars also decreased in the first half, falling to 61.7% from the previous crop year's overall 68.3% proportion. This was due in large part to an increase in movements incorporating blocks of 25-49 cars, which rose by 7.1 percentage points to take a 29.2% share.

High-throughput elevators remained the leading originators of tendered grain shipments. During the first half, 98.1% of the tendered tonnage was shipped from these larger facilities. This proportion proved clearly superior to the 91.8% recorded for the 2007-08 crop year as a whole, and with the first quarter of the 2008-09 crop year, ranked as the largest quarterly share posted under the GMP.¹⁸

Owing to its strong placement in the second quarter, CN displaced CP as the largest handler of tendered grain in the first six months of the 2008-09 crop year. With 51.0% of the volume, the carrier outdistanced the 49.0% share secured by CP. During this same period, CN also took the lion's share of tendered malting barley shipments, garnering 58.2% of the movement compared to CP's 41.8% share.¹⁹

Figure 7: Western Canadian CWB Grain Volumes



In aggregate, 18.0% of the CWB's total grain shipments moved under tender to western Canadian ports in the first six months of the 2008-09 crop year. Even though the 1.2 million tonnes of tendered grain handled during this period was 0.1 million tonnes greater than what it had been for the same period a year earlier, the CWB reported that its

Transportation Savings decreased by 2.4%, falling to \$16.4 million from \$16.8 million.²⁰

2.2 Advance Car Awards Program

With the 2008-09 crop year, the CWB marked the beginning of the sixth season for its advance car awards program, with under 0.6 million tonnes of grain having moved under the program in the first half. This constituted just 8.3% of the total volume shipped by the CWB to western Canadian ports during this period.

¹⁷ The volumes cited as moving under the CWB's tendering program also include malting barley, although such movements are administered apart from other CWB grains.

¹⁸ At 91.8%, the 2007-08 crop year held the previous record of greatest volume of tendered grain moved from high-throughput facilities.

¹⁹ Comparatively, CN generally originates a significantly greater amount of barley – whether tendered or non-tendered – than does CP. This extends somewhat naturally from the more northerly latitudes in which barley is grown, and in which CN operates.

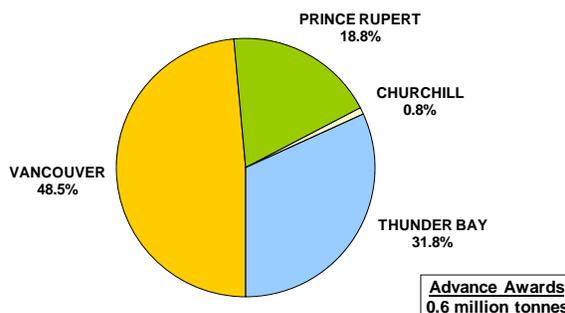
²⁰ The CWB defines its Transportation Savings as the savings in transportation costs it realizes from the discounts advanced by the successful bidders under the tender program, all freight and terminal rebates, and any financial penalties it may assess for non-performance.

Moreover, when considered alongside the 1.2 million tonnes of tendered grain already discussed, just 26.3% of the CWB's total grain shipments moved under the umbrella of these two programs.²¹

Despite periodic variations, the grain shipped under the CWB's advance car awards program has often reflected what has moved under its tendering program. Compositionally, this was again the case in the first half, even though no barley was shipped under the advanced car awards program during this period. As a result, wheat and durum took modestly larger shares of the movement. Wheat, which continued to be the foremost grain handled, accounted for almost 0.5 million tonnes and 84.6% of the program's overall volume. This was followed in turn by another 0.1 million tonnes of durum, which represented the balance of 15.4% of the total.

Still, there were some differences worth noting. Although Vancouver still garnered the largest share of the movement, at 48.5%, Thunder Bay, which had ranked third among tendered grain destinations, moved into second place with a 31.8% share. Prince Rupert fell to third place with 18.8% of the advance awards shipment terminating at the port. Unlike the case with tendered grain shipments where no movements were made to Churchill, a very small portion, amounting to 0.8% of the advance car awards program, was made to Churchill.

Figure 8: Advance Car Awards – Destination Port



Another contrast related to the fact that CP handled the majority of the grain moved under the advance car awards program, where it took a 74.9% share compared to its 49.0% share on tendered grain. Notwithstanding this carrier preference, there was little to differentiate the movement's broader attributes. The vast majority of the grain that moved under the advance car awards program, 96.8%, originated at high-throughput elevators. This percentage proved only marginally below the 98.1% share cited earlier for tendered grain shipments. In equal measure, the car cycle attributable to advance-car-awards movements amounted to an average of 14.4 days in the first half compared to that of 12.5 days on the movement of tendered grain.

Still, when compared to tendered shipments, a significantly lesser volume of the grain shipped under the advance car awards program moved in blocks of 25 or more cars. This is because the cars allocated to shippers under the advance car awards program are often integrated with those obtained through the tendering program as a means of optimizing individual block or train movements. As such, this practice effectively dilutes the values that are obtained for the aggregate volume moved under the two programs. By way of example, 85.6% of this total volume moved in blocks of 25 or more railcars compared to 91.0% for tendered grain alone. Similarly, the average overall size of these blocks amounted to 53.2 cars versus an average of 60.9 cars for tendered grain.

2.3 Other Commercial Developments

2.31 Grain Industry Again Seeks Redress on Railway Service Issues

Stakeholder complaints over railway service and car allocation have increased in recent years. Of particular concern has been a perceived decline in the consistency and reliability with which that service has been delivered. Grain shippers have frequently cited costly instances where railcars have not been spotted in a timely manner at country elevators for loading, or at destination terminals for unloading. The general car allocation process – always a contentious matter – also came under increasing fire from shippers who argued that they were being shortchanged by the preference given to unit trains ordered through the railways' advance

²¹ Since the 2003-04 crop year, the CWB has targeted to move 40% of the grain it ships to the four ports in western Canada using a combination of tendering and advance car awards.

products. In the interest of keeping readers of these reports informed, the Monitor has been following this issue throughout the past crop year.

One aggrieved grain shipper, Great Northern Grain Terminals Ltd. (GNG), opted to file a level-of-service complaint with the Canadian Transportation Agency in March 2007. In its complaint, GNG alleged that CN's advance products discriminated against it and other small shippers in the allocation of railcars, thus rendering them uncompetitive in the marketing of grain. Furthermore, the company alleged that CN had also failed to provide the complainant with an adequate level of rail service under its general car allocation program. In many ways the case acted as a lightning rod for a host of smaller shippers. Over 20 separate organizations sought intervenor status in the case.

In July 2007, the Agency determined that CN's car allocation practices had resulted in a significant deterioration in the service provided to GNG. Moreover, it found that CN had in fact breached its common carrier obligations and that GNG would likely suffer substantial commercial harm if the breach went unchecked.²² Although CN was directed to make reasonable accommodation for GNG's specific transportation needs, the Agency also found the difficulties encountered by GNG were not isolated, but rather the product of a widespread "systemic" failure.²³

With its implications for the industry at large, many of the GHTS's smaller shippers looked upon the Agency's decision with favour. Moreover, they anticipated that there would be a significant improvement in their ability to secure equipment and compete more fully in the 2007-08 crop year. In the weeks that followed, CN met with a variety of these smaller shippers in an effort to address the issues that had been raised by the Agency in its decision. Ultimately, however, the parties could not find the common ground needed to reconcile their differences. As a result, the structural changes brought forward by CN in August 2007 did little to mollify the concerns that these stakeholders had raised.

On 5 September 2007 the CWB, along with five other companies, filed a series of new complaints with the Agency regarding the level of service they were receiving from CN.²⁴ Each alleged that the carrier was still failing to provide them with adequate rail service owing to what they perceived to be the inherent failings of the car allocation process. In arguments that largely paralleled those put forward by GNG six months before, it was asserted that CN's advance products were still discriminatory and ultimately hindered the efficient movement of grain. More specifically, it was alleged that owing to the inherent preference given by CN in allocating cars to shippers capable of guaranteeing 100-car train movements over a consecutive 42-week period, smaller shippers were simply unable to get the cars that they needed for their own operations.

In light of this, the CWB and its fellow complainants requested that the Agency issue an interim order directing CN to suspend its advance products until their cases could be dealt with. Given the scope of the complaints brought forward, Agency staff at first attempted to mediate the dispute. However, by the end of September 2007 this effort at reconciliation had also met with failure, and the complaints were allowed to proceed. This was followed in mid October 2007 by the Agency's decision not to issue an interim order setting aside the carrier's advance programs, ruling that it could not find evidence of the irreparable harm that would warrant the undertaking of such extreme action. The Agency also found that it would be unreasonable to order CN to suspend these programs in the face of the potential impact this might have on other grain shippers.

In January 2008 the Agency issued an interim decision that found that CN's advance products had caused the complainants substantial commercial harm in the 2006-07 crop year, and that the carrier was in breach of its level-of-service obligations.²⁵ Moreover, the Agency found that further harm was likely to be incurred if some

²² See Canadian Transportation Agency Decision Number 344-R-2007, dated 6 July 2007.

²³ Ibid.

²⁴ There were in fact six separate complaints filed with the Canadian Transportation Agency on the issue of CN service. In addition to that filed by the Canadian Wheat Board, these included filings from North East Terminal Ltd., North West Terminal Ltd., Paterson Grain, Parrish & Heimbecker Limited, and Providence Grain Group Inc. All complainants were members of what had come to be known as the CARS Group, which was formed with the aim of sharing the cars allocated to them in the aftermath of the advance products introduced by CN. Since all six filings dealt with a similar complaint, the Agency chose to address the complaints collectively.

²⁵ Collective reference is made here to the six decisions simultaneously brought down by the Canadian Transportation Agency. See Canadian Transportation Agency Decision Numbers 20-R-2008 through 25-R-2008, all dated 18 January 2008.

form of corrective action was not taken. However, the Agency recognized that CN had made some effort at revising its advance products in order to better reflect the wider needs of shippers as the 2007-08 crop year got underway. Still, the Agency concluded that it simply could not gauge the effects of these changes in the absence of the data necessary to make such an assessment. Accordingly, the Agency deferred a final decision in the matter until all of the requisite data could be assembled and analyzed.²⁶

On 25 September 2008, the CTA released its decision, deciding in favour of four of the six companies that filed complaints. The Agency found that, based on its established service performance benchmarks for the movement of western grain for these complainants, CN was in breach of its level of service obligations to four of the six applicants for the crop year 2007-08.²⁷ In granting relief to the successful complainants, the Agency decided that a performance-based benchmark was a remedy which would be fair and reasonable to the parties in order to ensure “predictable” rail service.

The Agency ordered CN to provide these four grain companies, with a minimum of 80% of their requested rail cars. Further, 90% of the confirmed cars were to be delivered either on time or in the subsequent two weeks (three weeks total). CN was to meet these performance standards on a 12-week rolling average throughout each crop year. This requirement was to be put into effect for the 2008-09 crop year and beyond.

The Grain Monitor will continue to follow events related to these issues as they unfold through the remainder of the crop year.

2.32 Kernel Visual Distinguishability (KVD) Removed for 2008-09 Crop Year

The Minister of Agriculture and Agri-Food announced in mid February 2008 that the KVD-based system which had been used to classify western Canadian wheat would end with the 2007-08 crop year. As of 1 August 2008 it was replaced by a system involving farmer-based declarations. The intent of this regulatory change was to encourage the development and introduction of new varieties of wheat with enhanced characteristics for traditional users as well as different quality attributes and yield potential for ethanol and feed usage. The Canadian Grain Commission (CGC) and the grain industry have worked collectively to ensure that the changeover does not compromise the integrity of the existing quality assurance system, and in developing a rapid-testing mechanism for implementation at a future date.

The declaration process has revealed, in a limited number of instances, that some farmers are growing wheat varieties that are no longer registered.²⁸ The CGC and Canadian Food Inspection Agency recognized that enhanced notification systems need to be implemented to ensure that producers have access to current information on registered and deregistered varieties.

2.33 Ocean Freight Rates and Financial Turmoil

As discussed in previous editions of the Monitor’s reports, ocean freight rates have fluctuated dramatically since the 2002-03 crop year. Half way through the 2003-04 crop year, they had climbed to a level that was four times what they had been just 18 months earlier. Ultimately, however, this marked a plateau from which they soon began to fall. To an extent, the undulating pattern exhibited was repeated in both the 2004-05 and 2005-06 crop years, as ocean freight rates drifted steadily lower. After bottoming out in the second quarter of the 2005-06 crop year, however, these rates again began to rise. By the end of July 2006, the Baltic Dry Index

²⁶ The Canadian Transportation Agency ordered that each of the parties submit detailed information on grain movements during the first 36 weeks of the 2007-08 crop year. In general terms, the information requested was aimed at identifying the number of cars actually ordered, allocated and moved during this period.

²⁷ The four successful complainants were North East Terminal Ltd., North West Terminal Ltd., Parrish & Heimbecker Ltd. and Paterson Grain. The CTA ruled that CN did not breach its level of service obligation to the CWB and Providence Grain Group Inc. for the 2007-08 crop year.

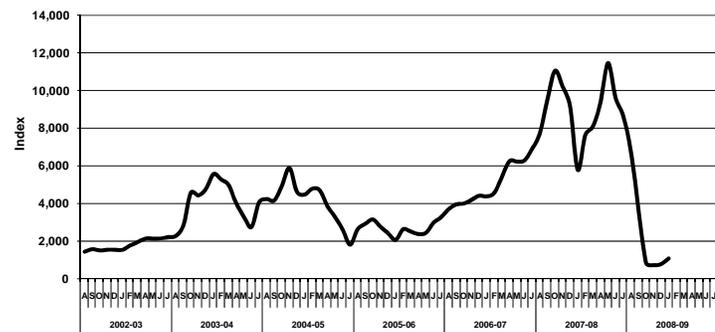
²⁸ Under the *Canada Grain Act*, all wheat delivered into the licensed elevator system in western Canada is to be of types registered under the *Seeds Act* (administered by the Canadian Food Inspection Agency), otherwise it will be classified as feed wheat with a potential loss of up to a third of its value. Some previously registered varieties have been removed from the registration list.

(BDI) had risen to about 3,300 points.²⁹ A year later, it was closing in on a loftier 6,900 points; a level almost five times greater than that witnessed at the outset of the 2002-03 crop year.

Much of this price movement reflected the prevailing, and perceived future, demand for vessels to service China's growing trade in raw materials and finished goods. This had a significant impact on the export programs for CWB as well as non-CWB grains. In some cases, grain importers consciously deferred buying Canadian grain in the hope that ocean freight rates would moderate. In others, they simply turned to less-distant grain-exporting nations in an effort to contain these costs. Even in North America, the rise in these costs changed traditional routing decisions. By way of example, Canadian grain exports to Mexico, which had long used ocean-going vessels in movements from west coast ports, were being displaced by direct-rail shipments. The growing spread between other benchmark ocean freight rates resulted in more grain being moved through ports in the US Pacific Northwest as well as eastern Canada.

Ocean freight rates rose even more dramatically in the first quarter of the 2007-08 crop year. With the BDI surging past the 11,000 level for the first time ever, ocean freight rates proved to be almost eight times greater than they had been six years before. From this pinnacle, however, they then began to plummet; falling by a factor of almost 50% in just three months. Even so, by early June 2008 they had regained all of this lost ground, and then some. By this time the BDI had reached another all-time high, coming within striking distance of 12,000 points. But as before, they again began to tumble. With the close of the 2007-08 crop year the BDI had fallen to 8,600 points.

Figure 9: Ocean Freight Rates – Baltic Dry Index



The first quarter of the 2008-09 crop year saw the most dramatic shift to date in the BDI. By the end of October 2008 the Index had fallen to just one tenth of the level at which it had started the quarter, sitting at 850. The second quarter saw a further eroding in the BDI, which fell to 700 before stabilizing and returning to near 1,100 by the end of January, 2009. This precipitous fall was a result of the mounting financial crisis, which had roots in the mortgage and housing credit facilities and soon spread to financial and consumer markets globally. Diminishing demand for raw materials, especially those destined to China, and for consumer products in the largest markets of North America and Europe, left considerable excess ocean shipping capacity.

Much of this capacity had recently come online following ship-building programs initiated in response to the surge in ocean freight rates caused by China's economic expansion. This expansion was seen as the main driver in both the rise and unprecedented volatility of ocean shipping rates. With iron ore and coal needing about half of the shipping industry's dry bulk capacity, the increase in rates was being fuelled by a seemingly insatiable Chinese demand for these commodities.³⁰ Moreover, the periodic pricing standoffs that the Chinese were having with exporters of these commodities produced sharp demand swings that added to their instability.

Ocean freight rates can have considerable impact on Canada's competitive standing in the international grain market. Western Canadian grain usually trades at a freight disadvantage in many parts of the world owing to the greater distances involved in shipping it to market. As ocean freight rates rise, so too does the cost disadvantage for buyers located around the world.

As rates fall, Canada's ability to compete into the major markets of the Asia-Pacific region is enhanced. Although this was the case during the first half, any impact was tempered by the uncertainty in financial and

²⁹ The Baltic Dry Index is produced by The Baltic Exchange Limited, a London-based organization that provides independently gathered real-time freight market information such as daily fixtures, indices for the cost of shipping wet and dry cargoes, route rates, as well as a market for the trading of freight futures. The Baltic Dry Index is a price index of ocean freight rates based on a composite of daily rate quotes for 24 shipping routes. The information presented in the accompanying chart is drawn from publicly available secondary sources.

³⁰ In comparison, the marine movement of grain accounts for about 10% of the global dry bulk trade.

credit markets which was having a significant impact on all commodity prices. Steep declines were registered for most commodities, although grains and oilseed demand and prices escaped the worst of the carnage, falling from the highs seen in the 2007-08 crop year, but still remaining strong by historical standards (see Section 4.1 for further details).

As the first half of the crop year came to a close, uncertainty remained as to how far the influence of this turmoil would reach. The tightening of credit was reportedly having a significant impact on the demand for commodities generally. Although to this point, the export of Canadian grains, oilseeds and special crops was not immune from these larger forces, its demand was holding up relatively well. In fact, the downturn in the demand for most other commodities appeared to have left ample capacity within the transportation system to meet the immediate needs for the movement of export grain.

2.34 Revenue Cap Adjusted to Reflect Reduced Maintenance Allowances

One of the more contentious issues that arose during the debate over the future of the hopper car fleet related to the actual costs incurred in maintaining them. This effectively came to a head when the Farmer Rail Car Coalition (FRCC) made a bid to acquire these cars in 2004. The FRCC's proposal was founded largely on the principle that these costs could effectively be reduced to an estimated annual average of \$1,500 per car from the \$4,329 per car that the railways were provided under the revenue cap.³¹ A subsequent examination into the matter revealed that these actual maintenance costs fell well below the allowances that had been granted.

To correct this, the federal government brought forward an amendment to the *Canada Transportation Act* that would permit a one-time adjustment to the maintenance allowances accorded to CN and CP.³² By more closely aligning this compensation with the actual cost of maintaining the hopper cars in regulated grain service, it was estimated that allowable carrier revenues could be reduced by as much as \$2.00 per tonne. Towards the close of the 2006-07 crop year, the federal Minister of Transport, Infrastructure and Communities formally requested that the Canadian Transport Agency make this adjustment.

Since the calculation of this adjustment was expected to take several months to complete and be applicable to the revenues that CN and CP would earn over the course of the entire 2007-08 crop year, the Agency issued an interim decision wherein it advised the railways that the Volume Related Composite Price Index (VRCPI) was being rolled back from its previously determined value of 1.1611 to 1.0884.³³

On 19 February 2008 the Agency rendered its final determination in the matter, finding that a one-time adjustment of \$72.2 million was warranted. This translated into an estimated \$2.59 per tonne as compared to the \$2.00-per-tonne value that had been approximated initially. As a result, the Agency rolled back the VRCPI for the 2007-08 crop year even further: to 1.0639 from the interim estimate of 1.0884.³⁴

Having disagreed with various aspects of the process as well as the final determination, both CN and CP appealed the Agency's decision to the Federal Court of Appeal. However, the court ultimately ruled against the railways, which allowed the one-time adjustment of \$72.2 million to be factored into the Agency's calculation of allowable carrier revenues for the 2007-08 crop year.³⁵

³¹ The annual average of \$4,329 per car cited here was developed by the Canadian Transportation Agency at the request of Transport Canada using the 1992 costing base, and represents an estimate of the associated maintenance costs embedded in the CN and CP revenue caps for the 2003-04 crop year. It should be noted that this estimate was specific to the FRCC proposal and, therefore, did not take into consideration other cost elements where some maintenance provisions may have been excluded.

³² Bill C-11, *An Act to amend the Canada Transportation Act and the Railway Safety Act and to make consequential amendments to other Acts*, received Royal Assent on 22 June 2007.

³³ The Volume Related Composite Price Index for the 2007-08 crop year was originally given a value of 1.1611 by the Agency. See Canadian Transportation Agency Decision Number 211-R-2007, dated 27 April 2007. This was subsequently reduced to 1.0884 in consideration of the previously estimated \$2.00-per-tonne adjustment the Agency was being asked to make. See Canadian Transportation Agency Decision Number 388-R-2007 dated 31 July 2007.

³⁴ See Canadian Transportation Agency Decision Number 67-R-2008, dated 19 February 2008.

³⁵ See consolidated decision of the Federal Court of Appeal, *Canadian National Railway Company v. Canadian Transportation Agency*, 2008 FCA 363, dated 24 November 2008.

Being unsatisfied with the Federal Court ruling, on 23 January 2009 both CN and CP filed applications for leave to appeal this decision to the Supreme Court of Canada. On 23 April 2009, the Supreme Court dismissed the application without costs.

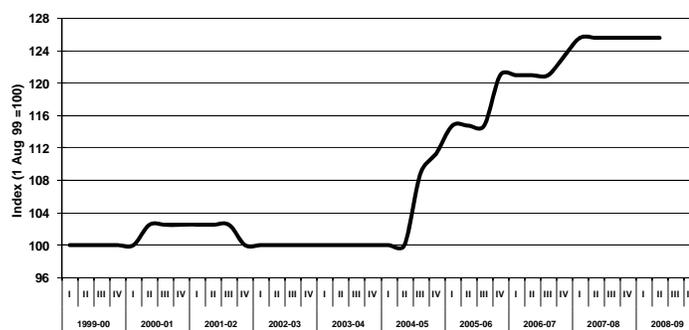
3.0 System Efficiency and Service Reliability

3.1 Trucking

During the first three months of the 2007-08 crop year, short-haul trucking rates rose 1.9%. This increased inflationary pressure resulted in the composite price index rising to 125.5 by the close of that first quarter. Much of this inflationary pressure was due to the escalating price of fuel, which had been rising in conjunction with crude oil prices since the end of the 2006-07 crop year. By the end of October 2007 the price of West Texas Intermediate crude oil had increased by a factor of 20%, rising from about \$75 US per barrel to \$90 US per barrel. The price of crude fluctuated around this level

through to the end of the second quarter before then beginning to rise again. By mid July 2008 the per-barrel price had risen by another 50%, to over \$140 US before then pulling back to about \$120 at the close of the crop year. This spurred domestic fuel prices even higher. The first half of the 2008-09 crop year saw the per-barrel price tumble to just over \$40 US by the end of January amidst growing economic turmoil. This in turn relieved the pressure at the gas pumps.

Figure 10: Composite Index – Short-Haul Trucking



Such fluctuations undoubtedly had a further impact on commercial trucking rates. However, it must be noted here that owing to consolidations within the grain industry, the rate data that had been used in calculating the composite price index was no longer being made available to the Monitor. As such, information pertaining to the changes in commercial trucking rates beyond that recorded for this period was unavailable. As such, the second quarter-end value of the composite price index, 125.5, only reflects changes registered through to the end of the first quarter of the 2007-08 crop year. Notwithstanding this, the Monitor continues to examine alternative methodologies that would allow for the future continuation of this data series.

3.2 Country Elevators

Total country elevator throughput for the first six months of the 2008-09 crop year, as measured by shipments from primary elevator facilities, decreased by 7.0%, falling to 16.3 million tonnes from the record pace of 17.5 million tonnes a year earlier. The decline in tonnage was also reflected in a lower capacity turnover ratio for the primary elevator system as a whole, which fell by 6.1% to 3.1 turns in the first half. Notwithstanding the lower throughput and turnover ratio during the first half of the 2008-09 crop year, the effects of an accumulated 0.9-million-tonne net reduction in storage capacity over the last nine crop years have helped improve the turnover ratio substantially. The progressive increase in these quarterly values continues to emphasize the fact that the GHTS's remaining primary elevator network is handling comparatively more grain than at any other point in the GMP's history.³⁶

The amount of grain maintained in inventory decreased by 6.2% in the first half, falling to a weekly average of 2.7 million tonnes compared to 2.9 million tonnes a year earlier. Although much of the reduction appears to have been tied to an overall slowdown in system activity, the period's average inventory level was not

³⁶ Comparatively, the annualized equivalent of the volume of grain that was shipped from the primary elevator system in the first quarter would have yielded a capacity turnover ratio of 6.2. This ratio compares favourably with those recorded in the first nine years of the GMP, notably the 6.5 realized in the 2006-07 crop year as a previous best.

inconsistent with the quarterly averages observed over the five previous crop years. Moreover, the average still remained well below the values posted in the first two years of the GMP.³⁷ Despite the reduction in the overall stock level, the amount of time grain spent in inventory remained consistent with the 30.5 days registered in the first half of the previous crop year. This suggests that grain inventories were turning over more-or-less at the same pace, notwithstanding the reduced commercial activity.

The reduction in grain inventories served to reduce the overall average weekly stock-to-shipment ratio for the period by 2.3%, which fell to 4.2 from the 4.3 scored in the first half of the previous crop year. Even so, this value affirms that grain inventories were still more than sufficient to meet the prevailing demand, and that the grain companies faced comparatively few challenges in sourcing product in the country during this period.

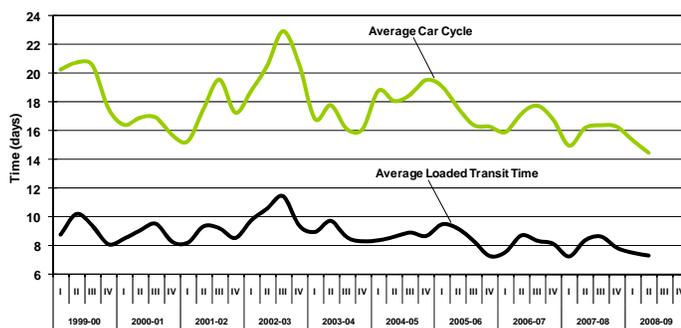
3.3 Railway Operations

The volume of grain moved in covered hopper cars during the first half fell by 14.0%, to 11.1 million tonnes from 12.9 million tonnes a year earlier. With originations of 10.8 million tonnes, the Class 1 carriers experienced a decline in volume of 1.7 million tonnes, or 13.6%, for the period. This represented a share of 97.7%, which proved marginally greater than the 97.3% share they held twelve months earlier. The amount of grain originated by shortlines in the first six months of the current crop year, which totalled less than 0.3 million tonnes, declined by a more significant 27.1%. A comparatively greater 19.9% decline in the amount of grain sourced from the grain-dependent network continued to underscore the broader trend that has increasingly disfavoured such shipments. The decline in shortline shipments came despite a 4.4% increase in producer-car loadings for the period.³⁸

3.31 Car Cycles

The railways' average car cycle for the first six months of the current crop year decreased by 4.3% from that posted for the same period a year earlier, falling to 14.9 days from 15.5 days. Without exception, improvements were noted in each of the operating corridors. The greatest improvement was noted in the Prince Rupert corridor, where the average fell by 8.5% to 12.8 days. The Vancouver corridor posted the next largest decrease, 5.5%, which served to reduce its average cycle to 15.8 days from 16.7 days a year earlier. The Thunder Bay corridor produced a more moderate 2.8% decrease, with the average falling to 14.8 days from 15.2 days twelve months before.

Figure 11: Average Railway Car Cycle



These decreases extended equally to the average car cycle's loaded and empty transit time components. In the case of the former, the average loaded transit time for the first half fell by 4.9%, to a value of 7.4 days from 7.8 days a year earlier. As for the average empty transit time, there was a marginally lesser 3.6% improvement, with the year-to-date average falling to 7.5 days from 7.7 days.

CN and CP both contributed to these broader improvements, posting reductions in their overall car cycles that amounted to 6.5% and 1.9% respectively. These improvements were reflected in their respective loaded and

³⁷ Country elevator stocks have generally been falling in conjunction with the overall reduction in the system's storage capacity. Despite periodic fluctuations, the year-to-date average of 2.7 million tonnes remains well below the 4.1-million-tonne average set as a record in the second quarter of the 1999-2000 crop year.

³⁸ Producer-car loading has increased significantly in recent years. Although this has largely been facilitated by the advent of license-exempt producer loading facilities, the conversion of previously closed elevators into producer-car loading sites has also helped. With the erosion of their conventional grain business, shortline railways have grown highly dependent on the volumes shipped in producer cars.

empty transit times. The most marked improvement was reflected in a 6.9% reduction in the average loaded transit time posted by CN while the CP average fell by 2.1%. These results were paralleled in improvements to their loaded transit times, with the CN average falling by 6.1% while the CP average fell by 1.8%.

Despite the onset of winter, which normally leads to comparatively longer car cycles in the second and third quarters, the 14.9-day average posted for the first half of the 2008-09 crop year proved to be the best yet recorded for the period under the GMP. This result was fuelled in large part by a 14.5-day average for the second quarter, which bettered the previous quarterly low by half a day.³⁹ CN in particular has made significant strides in narrowing the performance gap that it had opened between itself and CP almost four years before.⁴⁰ And while a renewed emphasis on unit train operations in the Vancouver and Thunder Bay corridors has been instrumental in this, so too has the increased volume of grain being shipped to Prince Rupert.⁴¹ Even so, it is difficult to ignore the benefit that may have arisen from the economic downturn that reduced overall railway volumes sharply in the latter months of 2008. It is entirely possible that this overarching decline in traffic may well have freed more capacity for the movement of grain, rather than other commodities, during this period.

3.32 Railway Freight Rates

As outlined in the Monitor's previous reports, CN and CP broke with the practice of advancing largely parallel adjustments to their single-car freight rates at the beginning of the 2003-04 crop year. They also made the first substantive changes to the incentive discounts that they had been offering for movements in multiple-car blocks at that time. Over the next four crop years, a process involving the setting of new rates at the beginning of the crop year followed by at least one adjustment in the second half emerged. Without doubt, this new process was aimed at maximizing the revenues that the carriers were entitled to receive under the revenue cap, with both CN and CP having become quite skilful in doing so.

The 2006-07 crop year brought even more changes to the prevailing rate structure. The most striking element in this was CN's decision to phase out its wholesale per-tonne rates, and to replace them with commodity-specific, per-car charges.⁴² And while CP did not immediately follow suite with a similar change to its structure, both carriers increased their single-car rates substantially in the face of mounting fuel costs. In addition to finalizing the transition to per-car charges, the 2007-08 crop year brought about a renewed emphasis on differential pricing. The more substantive rate increases applied on shipments to Thunder Bay and Churchill, rather than those moving to the west coast, made this especially evident. Further, CN widened the advantage on single-car movements in favour of Prince Rupert to about 10% below that of Vancouver.⁴³

Inherent within this, was also an initial move towards seasonal pricing, which tied rates to the prevailing demand for railway carrying capacity at various points in the crop year. This introduced a new element of complexity to the movement of grain. CP appeared to lead the charge in this regard, increasing the single-car rates it had in place at the end of the 2007-08 crop year by an average of 19.9% in the Vancouver corridor, and by 8.0% in the Thunder Bay corridor. In opposition to this were the single-car rates posted by CN, which remained effectively unchanged in all corridors until the very end of the first quarter, when the carrier increased

³⁹ The lowest system-wide average cycle time, 15.0 days, was achieved in the first quarter of the 2007-08 crop year.

⁴⁰ CN returned to the practice of using grain to fill-out its manifest trains early in the 2004-05 crop year. This resulted in a significant elongation of the loaded and empty transit times for CN movements. With CP's continued focus on moving grain in unit trains, the comparative averages for these two carriers began to diverge. This ultimately manifested itself in a measurable performance advantage for CP. Since CN renewed its focus on moving grain in unit-train service early in the 2005-06 crop year, this gap in comparative performance has narrowed appreciably.

⁴¹ Movements to Prince Rupert, which have consistently posted some of the lowest corridor averages, have had an equally significant impact on the improvement of the overall car cycle.

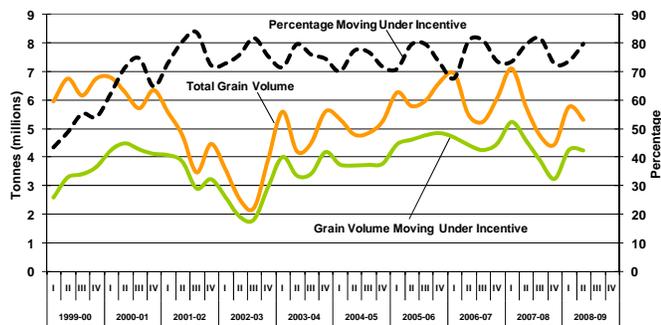
⁴² In adopting per-car rates, CN grouped these rates according to the average loading weights for commodities having similar densities. As a result, the per-car rates published for a given group differ from those published for another. The complexities introduced as a result of the adoption of this structure makes tracking all rate changes impractical. As a result, the GMP focuses its attention on the changes pertaining to the movement of wheat and those grains grouped with it.

⁴³ At the beginning of the GMP, single car rates for grain moving to Prince Rupert were about 13% greater than those applicable on its movement to Vancouver. The actions taken by CN in reducing its rates in the Prince Rupert corridor over the course of the last several years denotes a significant change in its pricing strategy, and one that has resulted in a substantial increase in volume for this more northerly port.

the rates on westbound movements to Vancouver and Prince Rupert by an average of 7.3% and 9.8% respectively. For the most part, these increases appeared to be consistent with an 8.0% escalation in the Volume-Related Composite Price Index as previously determined by the Canadian Transportation Agency.⁴⁴

The second quarter produced more changes to these rates. With the exception of those applicable to the movement of grain to Churchill, which remained unchanged, CN moved to reduce most of its rates towards the end of November 2008. Although largely tied to the carrier's seasonal pricing initiative, these adjustments proved more mixed than in the past, with reductions that ranged from about 6% on movements to the west coast to 10% on those directed to Thunder Bay. The carrier followed these initial adjustments with an increase of about 1% on movements to Vancouver in mid January 2009. In comparison, the adjustments advanced by CP during this period proved less extensive, with the rates on movements to Vancouver rolled back by 5.0% in December 2008.

Figure 12: Railway Volume Moving Under Incentive



The compound effect of the price changes witnessed over the course of the last ten years has produced some significant contrasts. By the close of the second quarter, the single-car rates on movements in the Vancouver corridor had increased by an average of 20.4%, while those in the Thunder Bay corridor had risen by a more substantive 26.7%.⁴⁵ For the more northerly situated ports, the compound effect of CN's rate adjustments produced an overall reduction of 2.8% on movements to Prince Rupert, and a 39.6% increase on those directed to Churchill.⁴⁶

In addition to this, both carriers moved to increase the monetary incentives they offered on multiple-car movements. By the close of the second quarter, the discounts offered by CN on the block movement of 50-99 cars had increased from \$3.00 per tonne to \$4.00 per tonne. At the same time, the incentive tied to shipments of 100 or more cars was raised from \$7.00 per tonne to \$8.00 per tonne. In comparison, CP increased the discount it offered on movements in blocks of 56-111 cars from \$4.00 per tonne to \$5.00, and for shipments in blocks of 112 cars from \$7.00 per tonne to \$8.00 per tonne.

The quantity of grain moved under the railways' incentive programs during the first six months of the 2008-09 crop year decreased by 13.5%, to 8.5 million tonnes from 9.8 million tonnes a year earlier. Although this was largely in keeping with the general decline in grain shipments discussed earlier, the value of the discounts earned by shippers fell by a lesser 8.5%, totalling \$49.2 million as opposed to \$53.8 million a year earlier. This latter result was the product of not only a further migration towards the use of larger car blocks, but the larger

⁴⁴ The revenue cap is adjusted annually for inflation by the Canadian Transportation Agency. For the 2008-09 crop year, the Agency had determined that the Volume-Related Composite Price Index used to accomplish this was to be increased by 8.0%. See Canadian Transportation Agency Decision Number 207-R-2008 dated 24 April 2008. It should be remembered, however, that both railways had moved to challenge the Agency's earlier decision concerning a one-time adjustment to this index for the 2007-08 crop year, which resulted in the railways generating a combined \$59.8 million in excess revenues for the period. Although the Federal Court of Appeal upheld the Agency's decision in November 2008, the carriers moved to appeal the matter to the Supreme Court of Canada in January 2009. Despite the denial of this appeal, the case will likely have implications for railway pricing in the remainder of the 2008-09 crop year.

⁴⁵ While these composite values help underscore overall escalation of single-car rates in the two corridors, they also obscure some of the differences between the carriers. CN's single-car rate increases during this period amounted to an average of 20.5% on movements to Vancouver, and 25.6% on those destined to Thunder Bay. CP's corresponding average increases amounted to 20.4% and 27.8% respectively.

⁴⁶ Owing to the limitations of consistent pricing data over the full span of the GMP, inter-carrier comparisons of the single-car rates on CN and CP originated traffic to Prince Rupert and Churchill are not possible. The averages inherent in the increases posted by CN provide the best indication of price movement in both corridors.

discounts brought to bear on these movements. This was reflected in a 5.8% increase in the period's average-earned discount, which rose to an estimated \$5.79 per tonne from \$5.47 per tonne twelve months before.

3.4 Terminal Elevator and Port Performance

3.41 Terminal Elevators

A total of 11.5 million tonnes of grain passed through the terminal elevators of Canada's western ports in the first half of the 2008-09 crop year. This marked a 10.4% decrease from the 12.8 million tonnes handled in the same period a year earlier. Accounting for over half of the overall volume, Vancouver again proved itself to be the largest export gateway. The port's total throughput declined marginally from that reported a year earlier, by 1.2%, to reach 6.3 million tonnes. Reversing the trend that had seen Prince Rupert gaining significant volume, the first half results for the port were just 1.7 million tonnes, a 35.7% decrease from the previous year's first half record of 2.6 million tonnes.⁴⁷

The results for the eastern gateways of Churchill and Thunder Bay were also weaker. With a 28.4% decrease in terminal throughput, Churchill volume totalled just 0.4 million tonnes, a significant pull-back from the more aggressive program it handled the previous two years. For the first time during the course of the GMP, the Churchill sales program was entirely wheat, with no durum, barley, canola nor special crops being handled by the port during the first half of the crop year. In comparison, the port of Thunder Bay saw its six-month volume decrease by a much smaller 5.1%, falling to 3.1 million tonnes in total. This result was driven by reductions in the port's handlings of all CWB and non-CWB commodities, with declines ranging from a low of 0.3% for barley to a high of 100% for rye.

Terminal inventories averaged 1.4 million tonnes for the first six months of the 2008-09 crop year, which represented a reduction of just 0.8% from that recorded in the same period of the previous crop year. Notwithstanding this minor decline in the year-to-date average, terminal inventories have steadily increased over the course of the last four years, gaining about 0.4 million tonnes over the 1.0-million-tonne average typical of the 2002-03 and 2003-04 crop years. Although much of this gain parallels the increase in terminal throughput recorded over this same timeframe, terminal stocks have grown to a level well beyond those observed when terminal shipments were comparable earlier in the GMP.

The average amount of time spent by grain in inventory increased by 7.9%, climbing to an average of 20.4 days for the first six months, compared to 18.9 days a year earlier. This rise was derived from storage-time increases in all ports, with the steepest being that of Prince Rupert, which reported a 54.7% increase. This increase of time spent in storage coincides with the 35.7% drop in throughput at Prince Rupert.

With throughput increasing in the face of comparatively small changes in terminal grain inventories, mixed results were observed in the stock-to-shipment ratios for the major grains. Wheat and barley achieved higher ratios at Vancouver while at Thunder Bay these ratios fell from those experienced in the first quarter of the previous crop year. Even so, the average ratios all remained above the 1.0 threshold.⁴⁸ Although previous experience has demonstrated periods when shortages were not fully avoided, and inventories were tight at specific periods, few concerns were registered during the first quarter of the 2008-09 crop year due to the relatively smaller sales program and the downturn in overall traffic for railways and ports, resulting in lesser competition for transportation resources.

3.42 Port Performance

Some 380 vessels called at western Canadian ports during the first six months of the 2008-09 crop year, a decrease of 14.4% from the 444 vessels that called during the same period a year earlier. The average amount of time these vessels spent in port decreased by 16.4%, rising to an average of 4.6 days for the period from 5.5 days the year before. This decrease in the year-to-date average was driven largely by the first quarter

⁴⁷ For the most part, the gains registered by Prince Rupert in recent years have reflected the economic advantage given to moving grain through the port, which has been precipitated in large part by reduced CN freight rates and an improvement in car allocation.

⁴⁸ A stock-to-shipment ratio in excess of a value of 1.0 implies that a terminal's existing stocks were sufficient to fill the demand posed by vessels loading in the coming week.

results when sustained stock levels in the face of significantly lower sales programs and throughput at the ports caused a 32.6% reduction.

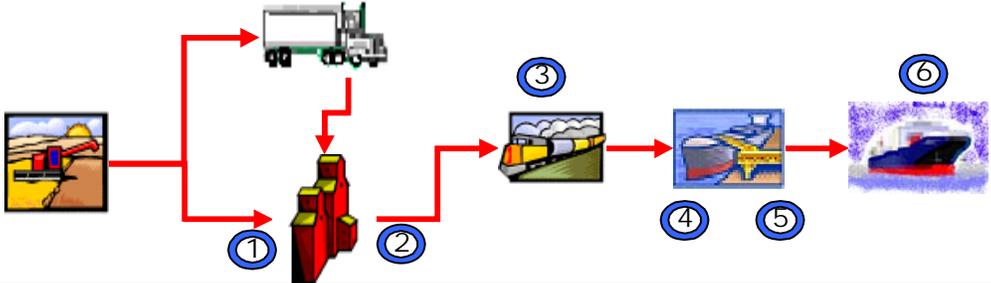
On the whole, much of the overall decrease was attributable to shorter vessel-waiting times, which fell by 25.9%, or 0.7 days, to an average of 2.0 days. A good deal of the decline was derived from sharp decreases in the waiting times reported for vessels loading at Vancouver and Prince Rupert. In comparison, the average amount of time devoted to vessel loading in the first half declined by a more modest 7.1%, or 0.2 days, to an average of 2.6 days. While the average loading time remained constant at Vancouver, at 3.9 days, the ports of Prince Rupert, Churchill and Thunder Bay all experienced reductions ranging from 8.3% to 20.0%.

When examining the amount of time spent by vessels at individual ports, all experienced decreases during the first half of the 2008-09 crop year. The largest decline in average length of time in port was at Prince Rupert, a drop of 29.6% to 5.0 days from 7.1 days the previous year. Vancouver decreased by 13.4% in the first half, falling to 7.1 days from 8.2 days a year earlier. The duration of vessel layovers at Thunder Bay fell by a lesser 5.9%, declining to an average of 1.6 days from 1.7 days. The smallest reduction was posted by Churchill which saw the average decline by 3.9%, to 5.0 days from 5.1 days.

3.5 The Supply Chain

As outlined in earlier editions of the Monitor's quarterly and annual reports, the supply chain model provides a useful framework by which to examine the speed with which grain moves through the GHTS. For the 2007-08 crop year, it was observed that this process required an average of 60.1 days; some 2.0 days more than had been the case a year earlier.

Table 1: The GHTS Supply Chain



SUPPLY CHAIN ELEMENT	TABLE	1999-00	2004-05	2005-06	2006-07	2007-08	YTD 2008-09	SUPPLY CHAIN EFFECT
<u>SPEED RELATED</u>								
2 Country Elevator – Average Days-in-Store	3B-4	41.7	29.5	30.1	30.7	31.1	30.5	▼
3 Average Railway Loaded Transit Time (days)	3C-4	9.2	8.7	8.6	8.2	8.0	7.5	▼
5 Terminal Elevator – Average Days-in-Store	3D-4	18.6	19.9	17.9	19.2	21.0	20.4	▼
Average Total Days in GHTS		69.4	58.1	56.6	58.1	60.1	58.4	▼
<u>SERVICE / ASSET RELATED</u>								
1 Average Country Elevator Capacity Turnover Ratio	3B-2	4.8	5.6	6.2	6.5	6.0	6.2 *	▲
4 Average Terminal Elevator Capacity Turnover Ratio	3D-2	9.1	7.5	8.7	8.3	8.5	n/a	–
3 Average Railway Car Cycle (days)	3C-4	19.9	18.7	17.3	16.8	15.9	14.9	▼
6 Average Vessel Time in Port (days)	3D-7	4.3	4.9	4.8	5.3	5.0	4.6	▼
* For comparative purposes, the value of 6.2 presented here represents an annualized equivalent for the 3.1 actually recorded as the country elevator's capacity turnover ratio in the first six months of the 2008-09 crop year.								

Much of this increase was driven by a 1.8-day rise in the amount of time spent by grain in storage at port. A 0.4-day rise in the amount of time spent in country elevator storage also contributed to the broader increase. Only a 0.2-day reduction in the loaded railway transit time served to counteract these forces.

The overall amount of time involved in moving grain through the supply chain fell by 1.7 days in the first six months of the 2008-09 crop year, to an average of 58.4 days. This result was shaped by modest reductions in each of the primary supply chain elements: country elevator storage time; loaded railway transit time; and terminal elevator storage time. And while this average is somewhat greater than the record low established three years earlier, it still ranks amongst the lowest values yet witnessed under the GMP.

In addition to the preceding, a few other comments concerning the performance of the GHTS in the first half of the 2008-09 crop year are warranted:

- Firstly, a record harvest, producing 60.4 million tonnes, up 24.4% from the previous year, led to the expectation of more intense pressure on the GHTS. Despite a 24.2% reduction in the previous crop year's carry forward stock, which totalled only 5.6 million tonnes, the second largest grain supply during the course of the GMP, 66.0 million tonnes, lay in farmer's bins and country elevators awaiting movement. The easing in demand, brought on by good harvests in many countries and replenished world supplies, resulted in lower volumes passing through western Canadian ports during the first six months of the 2008-09 crop year. As a result, the pressures brought to bear on the GHTS in the first half were modest in comparison to the record breaking pace set in the first half of the 2007-08 crop year.
- Secondly, with the reduced pressures exerted on the GHTS, few of the complaints levelled during the previous crop year with regard to car supply and the need for more responsive railway service were encountered during the first half of the 2008-09 crop year.
- Finally, grain was moving through the GHTS at a faster pace from that seen in the previous crop year. Although it was nearly two days longer than the record pace achieved during the 2005-06 crop year, grain moved through the supply chain at a consistently faster pace than seen in the first few years of the GMP. Much of the overall improvement has come from a reduction in the amount of time spent by grain as inventory in the country elevator network, which has clearly been driven by the rationalization of these same facilities. Complementing this, however, has been the benefit of recent improvements in the railways' average loaded transit time. The 7.4-day average loaded transit time achieved during the first half marked the best performance achieved to date under the GMP.

4.0 Producer Impact

4.1 Producer Netback

One of the GMP's key objectives is to determine the 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.⁴⁹

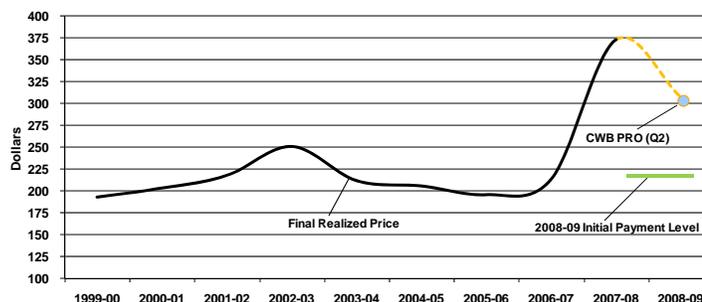
In its earlier reports, the Monitor described how increased commodity prices had largely been responsible for the improvement in the per-tonne returns accruing to producers of wheat, durum, canola, and yellow peas in the first four crop years of the GMP. During this same period, the export basis also fell marginally, thereby adding to the gains that improved grain prices had already generated. When prices began to decline in the 2003-04 crop year, these per-tonne gains were significantly eroded. This continued to be the case through to the end of the 2005-06 crop year, at which point these returns were seen to have fallen to their lowest values under the GMP. In the 2006-07 crop year, however, world grain prices began to move noticeably higher. This trend became much more pronounced during the 2007-08 crop year, proving advantageous to producers at large, and reflecting a substantial improvement in the financial returns they derived from the sale of these commodities.

The GMP only includes these indicators 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 half of the 2008-09 crop year are summarized below.

4.11 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. Throughout the first quarter of the 2008-09 crop year, the CWB's PRO for 1 CWRS wheat moved steadily downwards from the 2007-08 crop year's final realized price of \$372.06 per tonne. By the end of October, the PRO had fallen 17.5% to \$307.00 per tonne. Although slight fluctuation was noted, the PRO essentially remained constant and again rested at \$307.00 per tonne at the end of January 2009. This value well exceeded the \$219.2 per tonne that had been set as the farmer's initial payment for the 2008-09 crop year by 40.1%.

Figure 13: Recent Price Changes – 1CWRS Wheat (dollars per tonne)



Much of the impetus for this decline in price stemmed from a loosening of the global wheat supply coupled with uncertainty in global financial markets and volatility in the commodity sector. Favourable harvests in most exporting countries producing a record world wheat crop and strong export programs from Europe and the Black Sea region pressured prices. Commodity futures prices, including wheat, were also under extreme pressure by the credit crisis that gripped the world's financial markets. In the face of weaker export demand, all of these forces served to pull back the PRO from the record high levels exhibited during the previous crop year. As a result, the financial returns accruing to producers are expected to decline significantly in the 2008-09 crop year, but still measure favourably against historic levels.

⁴⁹ Among other elements, the export basis includes the cost of trucking, elevator handling and railway movement. It also includes where applicable, the CWB's pooling costs, and other incidental charges. Similarly, it also includes a deduction for any of the financial benefits accruing to producers as a result of the receipt of trucking or any similar premiums, as well as the CWB's transportation savings.

4.12 Non-CWB Grains

Virtually equalling the decline posted for wheat, the Vancouver cash price for 1 Canada canola fell by 17.7% in the first half of the 2008-09 crop year, reaching an average of \$458.22 per tonne compared to the previous crop year's final \$556.76-per-tonne average. This drop was triggered by the wider expectations of the global oilseed market, reacting negatively to an anticipated abundant supply situation and the increasing concern in financial and credit markets which pressured all commodity prices.

Record canola production in Canada, measured at 12.6 million tonnes, and the expectation that higher year-end carry-out stock would result, led prices lower. Other regions of the world were also facing higher stock levels in the edible oil complex. Rapeseed exports from Russia and Ukraine as well as canola exports from Australia, which was recovering from its drought, were anticipated to be strong. Increasing palm oil production from countries such as Indonesia added to the pressure. Countering these forces was the recognition that Chinese demand for oil to build reserve stocks, which resulted in significant purchases of Canadian canola during the first half, was most likely to continue.

The magnitude of the price decrease noted for 1 Canada canola strongly suggests that there will be a negative impact on the per-tonne financial returns of western Canadian grain producers in the 2008-09 crop year, although as with wheat, prices and returns are still expected to be strong by historical standards.

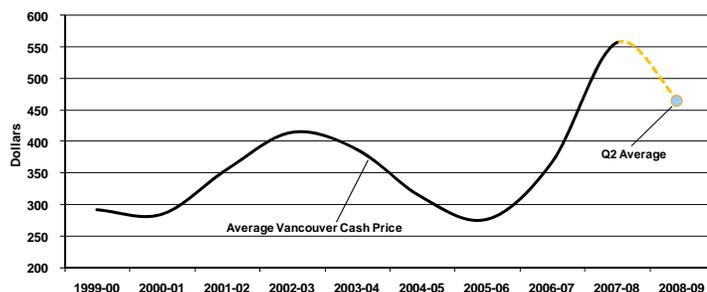
Rising input costs seemed likely to further erode these returns. Among the most pronounced of these were the increases tied to various country and terminal elevator activities. In the case of the former, these increases ranged from a low of 2.7% for cleaning to a high of 7.1% for storage. Similarly, the escalation on the tariff rates tied to terminal elevation and storage activities amounted to about 2.5% and 5.8% respectively. In equal measure, the rates associated with moving wheat by rail also rose. While no change was registered in the rates associated with moving grain to Churchill, those tied to the other three western ports proved more substantial. In comparative terms, these ranged from a reduction of 10.1% on CN shipments to the port of Thunder Bay, to a 14.0% increase on CP movements to Vancouver.

4.2 Producer-Car Loading

As related in the Monitor's 2007-08 annual report, the aggregate number of producer-car loading sites had fallen from 709 to 454 over the course of the last nine crop years. Much of this net decline was the product of a reduction in the number of sites maintained by CN and CP. Still, the operation of a portion of these was assumed by various shortline railways, which resulted in their count rising from 65 to a height of 166 by the end of the 2003-04 crop year. However, the subsequent demise of several small carriers resulted in some of these reverting back to Class-1-carrier control. By the end of the 2007-08 crop year only 108 producer-car loading sites remained under the umbrella of shortline operators. The first six months of the 2008-09 crop year saw no changes in these totals with the number operated by Class 1 carriers holding steady at 346, and the overall total at 454.

Producer-car shipments during the first half of the 2008-09 crop year increased by 4.4% from that handled a year earlier, rising to 5,415 from 5,188. In relation to the volume of grain shipped in covered hoppers, producer-car loadings accounted for just 4.4% of the overall total. This share increased to 7.9% when gauged against CWB grains alone, which constituted the majority of producer car movements. Both values were noticeably greater than the 3.6% and 5.8% shares respectively secured twelve months before.

Figure 14: Recent Price Changes – 1 Canada Canola (dollars per tonne)



Synopsis – Industry Overview

The purpose of the Industry Overview series of indicators is to track changes in grain production, the structure of the industry itself and the infrastructure comprising the GHTS. Changes in these areas can have a significant influence on the efficiency, effectiveness and competitiveness of the GHTS as a whole. Moreover, they may also be catalysts that shift traditional traffic patterns, the demand for particular services, and the utilization of assets.

Highlights – Second Quarter 2008-09 Crop Year

Grain Production and Supply

- Grain production increased by 24.4% to 60.4 million tonnes.
 - Largest production seen in ten years under the Grain Monitoring Program..
- Carry forward stocks decreased by 24.2% to 5.6 million tonnes.
 - Drawdown prompted by heightened global demand for grain.
- Overall grain supply increased by 17.9% to 66.0 million tonnes.

Railway Traffic

- Railway tonnage during the first half decreased 14.4% to 11.3 million tonnes.
 - Reflected reduced export demand for all commodities except canola.
- Traffic to western Canadian ports decreased in the first half.
 - Vancouver – down by 3.5% to 6.8 million tonnes.
 - Experienced smallest decrease in volume.
 - Thunder Bay – down by 21.6% to 2.4 million tonnes.
 - Prince Rupert – down by 32.4% to 1.8 million tonnes.
 - Churchill – down by 27.6% to 0.4 million tonnes.

Country Elevator Infrastructure

- Modest changes recorded during the first half.
 - Grain delivery points decreased by four to 272.
 - Number of country elevators decreased by 12 to 366.
- Elevator storage capacity increased by 1.8% to 6.1 million tonnes.
- Elevators capable of loading in blocks of 25 or more cars increased by one to 244.
 - Accounted for 66.6% of total elevators.
 - Accounted for 90.2% of total storage capacity.
- Elevators capable of loading in blocks of 50 or more cars increased by nine to 185.
 - Accounted for 50.5% of total elevators.
 - Accounted for 81.0% of total storage capacity.

Railway Infrastructure

- Western Canadian rail network reduced by 0.3% to 17,924.8 route-miles.
 - Reflected abandonment of 53.2 route-miles of CN's Matador and White Bear Subdivisions.
- Discontinuance plans for over 850 route-miles of CN and CP infrastructure remain.

Terminal Elevator Infrastructure

- Licensed GHTS terminal elevators remained unchanged at 15.
 - Licensed storage capacity remained unchanged at 2.5 million tonnes.
- Terminal elevator unloads for the first six months decreased by 8.0% to 132,974 carloads.

Indicator Series 1 – Industry Overview

		2008-09										
Table	Indicator Description	Notes	1999-00	2005-06	2006-07	2007-08	Q1	Q2	Q3	YTD (1)	% VAR	
Production and Supply [Subseries 1A]												
1A-1	Crop Production (000 tonnes)	(1)	55,141.7	56,002.7	49,264.6	48,517.3	60,351.7	-	-	60,351.7	24.4%	▲
1A-2	Carry Forward Stock (000 tonnes)	(1)	7,418.2	10,768.0	12,424.7	7,450.6	5,646.6	-	-	5,646.6	-24.2%	▼
	Grain Supply (000 tonnes)	(1)	62,559.9	66,770.7	61,689.3	55,967.9	65,998.3	-	-	65,998.3	17.9%	▲
1A-3	Crop Production (000 tonnes) – Special Crops	(1)	3,936.7	5,169.5	3,938.1	4,404.3	5,157.4	-	-	5,157.4	17.1%	▲
Rail Traffic [Subseries 1B]												
1B-1	Railway Grain Volumes (000 tonnes) – Origin Province	(1)	26,440.8	25,304.7	24,311.7	22,766.5	5,891.4	5,448.8	-	11,340.3	-14.4%	▼
1B-2	Railway Grain Volumes (000 tonnes) – Primary Commodities	(1)										
1B-3	Railway Grain Volumes (000 tonnes) – Detailed Breakdown	(1)										
1B-4	Railway Grain Volumes (000 tonnes) – Special Crops	(1)	2,103.4	2,608.2	2,344.3	2,481.0	789.9	511.8	-	1,301.7	-23.8%	▼
Country Elevator Infrastructure [Subseries 1C]												
1C-1	Grain Delivery Points (number)	(2)	626	275	272	276	276	272	-	-	-1.4%	▼
1C-1	Grain Elevator Storage Capacity (000 tonnes)	(2)	7,443.9	5,870.8	5,808.2	5,952.5	5,952.5	6,059.5	-	-	1.8%	▲
1C-1	Grain Elevators (number) – Province	(2)	917	374	371	378	378	366	-	-	-3.2%	▼
1C-2	Grain Elevators (number) – Railway Class	(2)										
1C-3	Grain Elevators (number) – Grain Company	(2)										
1C-4	Grain Elevators Capable of Multiple Car Loading (number) – Province	(2)	317	250	240	243	244	244	-	-	0.4%	-
1C-5	Grain Elevators Capable of Multiple Car Loading (number) – Railway Class	(2)										
1C-6	Grain Elevators Capable of Multiple Car Loading (number) – Railway Line Class	(2)										
1C-7	Grain Elevator Openings (number) – Province	(2)	43	10	48	10	0	18	-	-	80.0%	▲
1C-8	Grain Elevator Openings (number) – Railway Class	(2)										
1C-9	Grain Elevator Openings (number) – Railway Line Class	(2)										
1C-10	Grain Elevator Closures (number) – Province	(2)	130	21	51	3	0	30	-	-	900.0%	▲
1C-11	Grain Elevator Closures (number) – Railway Class	(2)										
1C-12	Grain Elevator Closures (number) – Railway Line Class	(2)										
1C-13	Grain Delivery Points (number) – Accounting for 80% of Deliveries	(2)(3)	217	90	97	91	n/a	n/a	n/a	n/a	n/a	-
Railway Infrastructure [Subseries 1D]												
1D-1	Railway Infrastructure (route-miles) – Grain-Dependent Network	(2)	4,876.6	4,221.6	4,137.7	3,658.8	3,605.6	3,605.6	-	-	0.0%	-
1D-1	Railway Infrastructure (route-miles) – Non-Grain-Dependent Network	(2)	14,513.5	14,373.4	14,357.6	14,319.2	14,319.2	14,319.2	-	-	0.0%	-
1D-1	Railway Infrastructure (route-miles) – Total Network	(2)	19,390.1	18,595.0	18,495.3	17,978.0	17,924.8	17,924.8	-	-	-0.3%	-
1D-2	Railway Grain Volumes (000 tonnes) – Grain-Dependent Network	(1)	8,686.5	7,601.2	6,988.8	6,648.9	1,663.0	1,417.5	-	3,080.5	-19.9%	▼
1D-2	Railway Grain Volumes (000 tonnes) – Non-Grain-Dependent Network	(1)	16,975.8	17,119.6	16,748.1	15,435.1	4,110.1	3,894.8	-	8,000.7	-11.5%	▼
1D-2	Railway Grain Volumes (000 tonnes) – Total Network	(1)	25,662.3	24,720.8	23,736.9	22,084.0	5,769.0	5,312.3	-	11,081.3	-14.0%	▼
1D-3	Shortline Railway Infrastructure (route-miles)	(2)	3,043.0	2,445.6	2,023.2	1,870.7	1,870.7	1,870.7	-	-	0.0%	-
1D-3	Shortline Railway Grain Volumes (000 tonnes)	(1)	2,090.5	1,709.2	1,059.1	578.3	155.9	96.9	-	252.8	-27.1%	▼
1D-5	Railway Grain Volumes (000 tonnes) – Class 1 Carriers	(1)	23,571.8	23,011.6	22,677.8	21,505.7	5,613.1	5,215.3	-	10,828.4	-13.6%	▼
1D-5	Railway Grain Volumes (000 tonnes) – Class 2 and 3 Carriers	(1)	2,090.5	1,709.2	1,059.1	578.3	155.9	96.9	-	252.8	-27.1%	▼
1D-6	Grain Elevators (number) – Grain-Dependent Network	(2)	371	127	117	117	116	114	-	-	-2.6%	▼
1D-6	Grain Elevators (number) – Non-Grain-Dependent Network	(2)	513	233	238	240	240	234	-	-	-2.5%	▼
1D-6	Grain Elevator Storage Capacity (000 tonnes) – Grain-Dependent Network	(2)	2,475.4	1,628.8	1,575.6	1,593.9	1,589.5	1,614.5	-	-	1.3%	▲
1D-6	Grain Elevator Storage Capacity (000 tonnes) – Non-Grain-Dependent Network	(2)	4,847.6	4,188.9	4,169.0	4,274.7	4,274.7	4,370.8	-	-	2.2%	▲
Terminal Elevator Infrastructure												
1E-1	Terminal Elevators (number)	(2)	15	16	16	15	15	15	-	-	0.0%	-
1E-1	Terminal Elevator Storage Capacity (000 tonnes)	(2)	2,678.6	2,642.6	2,642.6	2,475.6	2,475.6	2,475.6	-	-	0.0%	-
1E-2	Terminal Elevator Unloads (number) – Covered Hopper Cars	(1)	278,255	271,714	261,204	245,213	69,699	63,275	-	132,974	-8.0%	▼

(1) – Year-To-Date values are reported for volume-related indicators only (i.e., Railway Grain Volumes). The accompanying percentage variance denotes the relative change in the current YTD value compared to the same period a year earlier.

(2) – Quarterly values for non-volume-related indicators (i.e., Grain Delivery Points) are “as at” the end of the reporting period. The accompanying percentage variance denotes the relative change in the value of the most recent reporting period as compared to that at the end of the preceding crop year.

(3) – Statistics relating to grain deliveries by station, as produced by the Canadian Grain Commission, are generally produced a full six months after the close of the crop year. The most recent statistics available are those from the 2007-08 crop year.

Synopsis – Commercial Relations

One of the objectives of the government's regulatory reforms was to provide the GHTS with a more commercial orientation. To this end, a cornerstone element in the reforms was the introduction, and gradual expansion of tendering for Canadian Wheat Board (CWB) grain shipments to Western Canadian ports. For the 2008-09 crop year, the CWB has once again committed itself to moving 40% of its grain shipments under a new program that combines tendering as well as advance car awards.

The government also expects that industry stakeholders will forge new commercial processes that will ultimately lead to improved accountability. The purpose of this monitoring element is twofold: to track and assess the impact of the CWB's tendering practices as well as the accompanying changes in the commercial relations existing between the various stakeholders within the grain industry.

Highlights – Second Quarter 2008-09 Crop Year

Tendering Program

- 131 tender calls were issued by the CWB during the first six months of the 2008-09 crop year.
 - Calls for the movement of 1.4 million tonnes to export positions in western Canada.
 - Prince Rupert delivery – 43.2%; Thunder Bay – 29.9%; Vancouver – 26.8%; and Churchill – 0.0%.
- 488 bids received; offered an aggregated 3.3 million tonnes.
 - Response rates significantly greater than in any of the four preceding crop years.
 - Reflected heightened demand and availability of export grains.
- 171 contracts concluded for the movement of 1.2 million tonnes.
 - Vancouver deliveries – 36.9%; Prince Rupert – 35.5%; Thunder Bay – 27.6%; and Churchill – 0.0%.
 - Represented 18.0% of volume shipped by CWB to port positions in western Canada.
 - Fell below maximum 20% target.
- Tenders for 25.0% of the tonnage called either partially, or not at all, filled.
 - Sharp increase from the 14.4% recorded for the 2007-08 crop year.
 - 7,700 tonnes – non-compliance with bid specifications.
 - 163,700 tonnes – unacceptable bid price.
 - 12,000 tonnes – insufficient quantity bid.
 - 63,000 tonnes – no bid.
 - 114,400 tonnes – tonnage not required
- Proportion of tendered grain volume moving in multiple car blocks increased to 91.0%.
 - Proportion moving in blocks of 50 or more cars decreased to 61.7% from 68.3% in the 2007-08 crop year.
- 98.1% of all tendered movements originated at high-throughput elevators.
 - Significantly greater than 91.8% observed in the 2007-08 crop year.
 - CWB estimated that the overall transportation savings for the first half decreased by 2.4% to \$16.4 million.

Other Commercial Developments

- CTA provides final decision in grain shippers' level-of-service complaints against CN.
 - CWB and five other grain shippers filed level-of-service complaints against CN in September 2008.
 - Alleged that discriminatory car allocation practices were inherent in advance products.
 - CTA decision in favour of four of six applicants
 - Implements a performance-based benchmark as a remedy to ensure "predictable" rail service.
- Kernel Visual Distinguishability (KVD) removed for 2008-09 crop year.
 - Replaced with a system of farmer-based declarations.
- Global shipping demand and price volatility continues.
 - BDI falls to 700 before rebounding to near 1,100 at the end of January 2009.
 - Impact of mounting global financial crisis and credit crunch.
 - Demand for grains and resources within the GHTS to handle and move them appear to be holding up.
- Appeals of revenue cap adjustment concluded.
 - CN and CP appeal CTA decision on revenue cap adjustment to Federal Court and ultimately Supreme Court of Canada.
 - Federal Court of Appeals rules against the railways, allowing one-time adjustment of \$72.2 million to stand.
 - Supreme Court of Canada dismisses application without costs.

Indicator Series 2 – Commercial Relations

											2008-09	
Table	Indicator Description	Notes	1999-00	2005-06	2006-07	2007-08	Q1	Q2	Q3	YTD (1)	% VAR	
Tendering Program [Subseries 2A]												
2A-1	Tenders Called (000 tonnes) – Grain	(1)	n/a	5,325.7	3,765.1	1,891.2	782.7	662.0	-	1444.7	32.3%	▲
2A-2	Tenders Called (000 tonnes) – Grade	(1)										
2A-3	Tender Bids (000 tonnes) – Grain	(1)	n/a	7,131.0	6,753.6	4,396.7	1854.2	1402.0	-	3256.3	12.1%	▲
2A-4	Tender Bids (000 tonnes) – Grade	(1)										
2A-5	Total CWB Movements (000 tonnes)	(1)(2)	n/a	15,132.6	14,932.2	13,332.3	2984.6	3637.3	-	6621.9	-12.8%	▼
2A-5	Tendered Movements (%) – Proportion of Total CWB Movements	(1)(2)	n/a	16.2%	17.8%	14.3%	18.5%	17.6%	-	18.0%	19.2%	▼
2A-5	Tendered Movements (000 tonnes) – Grain	(1)(2)	n/a	2,447.5	2,651.6	1,900.0	551.7	640.1	-	1191.8	4.1%	▲
2A-6	Tendered Movements (000 tonnes) – Grade	(1)(2)										
2A-7	Unfilled Tender Volumes (000 tonnes)	(1)	n/a	2,913.9	1,276.6	207.9	234.0	126.8	-	260.8	129.8%	▲
2A-8	Tendered Movements (000 tonnes) – Not Awarded to Lowest Bidder	(1)	n/a	130.5	46.3	18.7	4.9	0.0	-	4.9	-50.5%	▼
2A-9	Tendered Movements (000 tonnes) – FOB	(1)(2)	n/a	155.6	152.8	65.1	0.0	115.9	-	115.9	78.0%	▼
2A-9	Tendered Movements (000 tonnes) – In-Store	(1)	n/a	2,291.9	2,651.6	1,835.0	551.7	524.2	-	1075.9	-0.3%	▼
2A-10	Distribution of Tendered Movements – Port	(3)										
2A-11	Distribution of Tendered Movements – Railway	(3)										
2A-12	Distribution of Tendered Movements – Multiple-Car Blocks	(3)										
2A-13	Distribution of Tendered Movements – Penalties	(3)										
2A-14	Distribution of Tendered Movements – Province / Elevator Class	(3)										
2A-15	Distribution of Tendered Movements – Month	(3)										
2A-16	Distribution of Tender Delivery Points (number) – Contracted Cars	(3)										
2A-17	Average Tendered Multiple-Car Block Size (railcars) – Port		n/a	54.4	64.7	57.5	60.2	61.7	-	60.9	10.1%	▲
2A-18	Railway Car Cycle (days) – Tendered Grain		n/a	15.7	14.7	13.9	11.4	13.2	-	12.5	-9.4%	▼
2A-18	Railway Car Cycle (days) – Non-Tendered Grain		n/a	16.8	16.4	15.2	15.3	14.1	-	14.6	-2.0%	▼
2A-19	Maximum Accepted Tender Bid (\$ per tonne) – Wheat		n/a	-\$18.58	-\$24.51	-\$23.78	-\$23.01	-\$16.08	-	-\$23.01	8.1%	▲
2A-19	Maximum Accepted Tender Bid (\$ per tonne) – Durum		n/a	-\$18.05	-\$21.56	-\$10.52	-\$14.95	-\$6.01	-	-\$14.95	42.1%	▲
2A-20	Market Share (%) – CWB Grains – Major Grain Companies		n/a	76.1%	75.6%	74.3%	76.3%	70.5%	-	73.1%	-1.3%	▼
2A-20	Market Share (%) – CWB Grains – Non-Major Grain Companies		n/a	23.9%	24.4%	25.7%	23.7%	29.5%	-	26.9%	3.7%	▲
Advance Car Awards Program [Subseries 2B]												
2B-1	Advance Award Movements (%) – Proportion of Total CWB Movements		n/a	15.6%	15.8%	13.7%	10.2%	6.8%	-	8.3%	-27.8%	▼
2B-1	Advance Award Movements (000 tonnes) – Grain		n/a	2,365.1	2,362.9	1,831.0	304.7	246.0	-	550.7	-36.8%	▼
2B-2	Distribution of Advance Award Movements – Port	(4)										
2B-3	Distribution of Advance Award Movements – Railway	(4)										
2B-4	Distribution of Advance Award Movements – Province / Elevator Class	(4)										
2B-5	Distribution of Advance Award Movements – Month	(4)										
2B-6	Railway Car Cycle (days) – Advance Award Grain		n/a	15.6	15.1	14.4	14.6	14.0	-	14.4	0.0%	–
2B-7	Distribution of Advance Award Movements – Multiple-Car Blocks	(4)										
2B-8	Weighted Average Tendered and Advance Award Multiple-Car Block Size (railcars) – Port		n/a	46.0	53.9	52.0	51.8	54.7	-	53.2	3.3%	▲

- (1) – Year-To-Date values are reported for volume-related indicators only (i.e., Tenders Called). The accompanying percentage variance denotes the relative change in the current YTD value compared to the same period a year earlier. Significant variances may be observed as a result of a change in the Canadian Wheat Board's tendering commitment.
- (2) – Includes tendered malting barley volumes.
- (3) – Indicators 2A-10 through 2A-16 examine tendered movements along a series of different dimensions. This examination is intended to provide greater insight into the movements themselves, and cannot be depicted within the summary framework presented here. The reader is encouraged to consult the corresponding data table directly.
- (4) – Indicators 2B-2 through 2B-5, as well as 2B-7, examine advance car awards movements along a series of different dimensions. This examination is intended to provide greater insight into the movements themselves, and cannot be depicted within the summary framework presented here. The reader is encouraged to consult the corresponding data table directly.

Synopsis – System Efficiency

One of the chief aims in the government's decision to move the GHTS towards a more commercial orientation was to improve overall system efficiency. This stems from the belief that a more efficient system will ultimately enhance the competitiveness of Canadian grain in international markets to the benefit of all stakeholders.

The indicators presented here are intended to examine the relative change in the efficiency of the GHTS. A preceding chapter – Industry Overview – addressed changes observed in the basic components of the GHTS (country elevators, railways, and terminal elevators). In comparison, the following series of indicators largely concentrates on how these assets are utilized, and the overall time it takes grain to move through the system.

Highlights – Second Quarter 2008-09 Crop Year

Trucking

- Composite Freight Rate Index for short-haul trucking remains at 125.5 in the second quarter.
- Data for current period unavailable; measurement under review.

Country Elevators

- Throughput decreased by 7.0% to 16.3 million tonnes.
 - Grain movement volume maintained in face of general economic slowdown.
- The average elevator capacity turnover ratio decreased 6.1% to 3.1 turns.
 - Reflected effects of increased storage capacity.
- Average inventory level decreased by 6.2% to 2.7 million tonnes.
- Average number of days-in-store unchanged from previous crop year at 30.5 days.
- Average weekly stock-to-shipment ratio decreased by 2.3% to 4.2 for the first half.
- Average posted tariff rates for elevation, cleaning and storage increased by up to 7.1% in the first half.

Rail Operations

- Average car cycle decreased by 4.3% to 14.9 days for the first half of the crop year.
 - Improvement in underlying empty and loaded transit time averages.
 - Average empty transit time decreased 3.8% to 7.5 days.
 - Average loaded transit time decreased 5.4% to 7.4 days
 - Marks the shortest quarterly and first half car cycle performance under the GMP.
- Proportion of grain moving under incentive programs essentially unchanged at 76.6% compared to 76.7% in the 2007-08 crop year.
- Railway incentive payments estimated to have decreased by 8.5% to \$49.2 million in the first half.
 - Reflected decrease in tonnage along with an increase in the applicable discounts.
- Single car freight rates show more signs of differentiation in the 2008-09 crop year.
 - Evidence of seasonal pricing considerations by CN and CP.
 - CP posted increases for wheat shipments in both of its primary corridors.
 - Thunder Bay – up by 8.0%; Vancouver – up by 14.0%.
 - CN increased rates on westbound wheat shipments while decreasing those to Thunder Bay.
 - Vancouver – up by 2.6%; Prince Rupert – up by 3.1%.
 - Thunder Bay – down by 10.1%

Terminal Elevators and Port Performance

- Terminal throughput decreased by 10.4% to 11.5 million tonnes during the first half.
 - Decline from record volumes shipped during previous crop year.
- 380 vessels loaded at western Canadian ports during the first six months of the crop year.
 - Average time in port decreased by 16.4% to 4.6 days.
- Average posted tariff rates for elevator handling and storage increased by up to 5.8% in the first half.

Indicator Series 3 – System Efficiency

											2008-09	
Table	Indicator Description	Notes	1999-00	2005-06	2006-07	2007-08	Q1	Q2	Q3	YTD (1)	% VAR	
Trucking [Subseries 3A]												
3A-1	Composite Freight Rate Index – Short-haul Trucking	(2)	100.0	120.9	123.2	125.5	125.5	125.5	-	-	0.0%	—
Primary Country Elevators [Subseries 3B]												
3B-1	Grain Volume Throughput (000 tonnes)	(1)	32,493.9	32,105.2	33,452.6	31,886.4	8,270.9	7,980.0	-	16,250.9	-7.0%	▼
3B-2	Average Elevator Capacity Turnover Ratio	(1)	4.8	6.2	6.5	6.0	1.6	1.5	-	3.1	-6.1%	▼
3B-3	Average Weekly Elevator Stock Level (000 tonnes)	(1)	3,699.3	2,651.2	2,814.7	2,705.5	2,608.8	2,746.0	-	2,674.7	-6.2%	▼
3B-4	Average Days-in-Store (days)	(1)	41.7	30.1	30.7	31.1	29.6	31.3	-	30.5	0.0%	—
3B-5	Average Weekly Stock-to-Shipment Ratio – Grain	(1)	6.2	4.3	4.5	4.5	4.2	4.2	-	4.2	-2.3%	▼
3B-6	Average Handling Charges – Country Delivery Points	(3)										
Rail Operations [Subseries 3C]												
3C-1	Hopper Car Grain Volumes (000 tonnes) – Province	(1)	25,662.3	24,720.8	23,736.9	22,084.0	5,769.0	5,312.3	-	11,081.3	-14.0%	▼
3C-2	Hopper Car Grain Volumes (000 tonnes) – Primary Commodities	(1)										
3C-3	Hopper Car Grain Volumes (000 tonnes) – Detailed Breakdown	(1)										
3C-4	Railway Car Cycle (days) – Empty Transit Time	(1)	10.7	8.8	8.7	7.9	7.8	7.1	-	7.5	-3.8%	▼
3C-4	Railway Car Cycle (days) – Loaded Transit Time	(1)	9.2	8.6	8.2	8.0	7.5	7.4	-	7.4	-5.4%	▼
3C-4	Railway Car Cycle (days) – Total Transit Time	(1)	19.9	17.3	16.8	15.9	15.3	14.5	-	14.9	-4.3%	▼
3C-5	Railway Car Cycle (days) – Non-Special Crops	(1)	19.3	17.2	16.6	15.7	15.2	14.3	-	14.8	-3.8%	▼
3C-6	Railway Car Cycle (days) – Special Crops	(1)	25.8	19.5	20.0	18.1	16.3	17.0	-	16.6	-7.0%	▼
3C-7	Railway Car Connections (days)	(1)(3)										
3C-8	Hopper Car Grain Volumes (000 tonnes) – Non-Incentive	(1)	12,716.9	6,037.9	5,888.5	5,149.5	1,514.3	1,074.7	-	2,589.0	-15.5%	▼
3C-8	Hopper Car Grain Volumes (000 tonnes) – Incentive	(1)	12,945.5	18,682.9	17,848.4	16,934.5	4,254.7	4,237.6	-	8,492.3	-13.5%	▼
3C-9	Hopper Car Grain Volumes (\$ millions) – Incentive Discount Value	(1)	\$31.1	\$89.9	\$96.5	\$93.3	\$23.3	\$25.9	-	\$49.2	-8.5%	▼
3C-10	Traffic Density (tonnes per route mile) – Grain-Dependent Network	(1)	442.5	439.0	418.0	427.5	461.2	393.1	-	427.2	-9.8%	▼
3C-10	Traffic Density (tonnes per route mile) – Non-Grain-Dependent Network	(1)	292.4	297.8	291.5	269.3	286.7	272.0	-	279.4	-11.4%	▼
3C-10	Traffic Density (tonnes per route mile) – Total Network	(1)	330.3	330.5	320.1	303.1	321.8	296.4	-	309.1	-11.7%	▼
3C-11	Composite Freight Rates (\$ per tonne) – Rail	(2)(3)										
3C-12	Multiple-Car Shipment Incentives (\$ per tonne) – Rail	(2)(3)										
3C-13	Effective Freight Rates (\$ per tonne) – CTA Revenue Cap	(2)(4)	n/a	\$27.97	\$29.90	\$30.46	n/a	n/a	n/a	n/a	n/a	—
Terminal Elevator and Port Performance [Subseries 3D]												
3D-1	Annual Port Throughput (000 tonnes) – Grain	(1)	23,555.5	23,722.7	22,823.9	22,026.4	5,603.3	5,847.1	-	11,450.4	-10.4%	▼
3D-2	Average Terminal Elevator Capacity Turnover Ratio	(1)(5)	9.1	8.7	8.3	8.5	n/a	n/a	n/a	n/a	n/a	—
3D-3	Average Weekly Terminal Elevator Stock Level (000 tonnes)	(1)	1,216.2	1,281.7	1,385.3	1,432.7	1,386.8	1,377.0	-	1,382.1	-0.8%	—
3D-4	Average Days-in-Store – Operating Season (days)	(1)	18.6	17.9	19.2	21.0	23.2	17.9	-	20.4	7.9%	▲
3D-5	Average Weekly Stock-to-Shipment Ratio – Grain	(1)(3)										
3D-6	Average Weekly Stock-to-Shipment Ratio – Grade	(1)(3)										
3D-7	Average Vessel Time in Port (days)	(1)	4.3	4.8	5.3	5.0	3.1	6.0	-	4.6	-16.4%	▼
3D-8	Distribution of Vessel Time in Port	(1)(3)										
3D-9	Distribution of Berths per Vessel	(1)(3)										
3D-10	Annual Demurrage Costs (\$millions)	(5)	\$7.6	\$6.7	\$15.1	\$23.3	n/a	n/a	n/a	n/a	n/a	—
3D-10	Annual Dispatch Earnings (\$millions)	(5)	\$14.5	\$15.2	\$24.6	\$29.3	n/a	n/a	n/a	n/a	n/a	—
3D-11	Average Handling Charges – Terminal Elevators	(2)(3)										

- (1) – Year-To-Date values are reported for volume-related indicators only (i.e., Grain Volume Throughput). The accompanying percentage variance denotes the relative change in the current YTD value compared to the same period a year earlier.
- (2) – Quarterly values for non-volume-related indicators (i.e., Composite Freight Rate Index) are "as at" the end of the reporting period. The accompanying percentage variance denotes the relative change in the value of the most recent reporting period compared to that at the end of the preceding crop year.
- (3) – Changes in the indicator cited cannot be depicted within the summary framework presented here. The reader is encouraged to consult the corresponding data table directly.
- (4) – Statistics relating to effective railway freight rates, as determined by the Canadian Transportation Agency, are generally produced about six months after the close of the crop year. The most recent statistics available are those from the 2005-06 crop year.
- (5) – The GMP provides for the calculation of this indicator on an annual basis. Quarterly values are not available.

Synopsis – Service Reliability

The true test of any logistics chain is its ability to provide for the timely delivery of product, as it is needed – whether it is raw materials, semi-processed goods, component parts, or finished products. This applies in equal measure to both industrial and consumer products, and is summarized by a widely used colloquialism within the logistics industry: “to deliver the right product, to the right customer, at the right time.” The indicators that follow are largely used to determine whether grain is moving through the system in a timely manner, and whether the right grain is in stock at port when a vessel calls for loading.

Highlights – Second Quarter 2008-09 Crop Year

Port Performance

- Average weekly stock-to-vessel-requirements ratios posted mixed results for the first half of the 2008-09 crop year.
 - Vancouver
 - Wheat – 3.8 for the first six months of the 2008-09 crop year, up by 21.8%.
 - Canola – 2.4, down by 35.8%.
 - Thunder Bay
 - Wheat – 5.3 for the first six months of the 2008-09 crop year, down by 4.1%.
 - Canola – 5.3, down by 44.9%.
 - Indicates that grain inventories were generally sufficient to meet short-term demand.
- Average stock-to-shipment ratios provide similar evidence of the ability of these ports to meet short-term demand.
 - Vancouver
 - CWB grains – 3.2 for the first six months of the 2008-09 crop year, up by 20.3%.
 - Non-CWB grains – 2.5, down by 21.9%.
 - Thunder Bay
 - CWB grains – 4.6 for the first six months of the 2008-09 crop year; down by 5.3%.
 - Non-CWB grains – 4.4; down by 23.7%.

Indicator Series 4 – Service Reliability

		2008-09										
Table	Indicator Description	Notes	1999-00	2005-06	2006-07	2007-08	Q1	Q2	Q3	YTD (1)	% VAR	
Port Performance [Subseries 4A]												
4A-1	Avg. Weekly Stock-to-Vessel Requirements Ratio – VCR – Wheat	(1)	3.1	3.4	3.3	3.6	3.5	4.0	-	3.8	21.8%	▲
4A-1	Avg. Weekly Stock-to-Vessel Requirements Ratio – VCR – Canola	(1)	2.5	2.3	2.8	3.7	3.3	1.4	-	2.4	-35.8%	▼
4A-1	Avg. Weekly Stock-to-Vessel Requirements Ratio – TBY – Wheat	(1)	5.6	6.6	7.0	5.0	5.6	4.8	-	5.3	-4.1%	▼
4A-1	Avg. Weekly Stock-to-Vessel Requirements Ratio – TBY – Canola	(1)	2.8	4.4	5.3	8.3	6.5	3.8	-	5.3	-44.9%	▼
4A-2	Avg. Weekly Stock-to-Vessel Requirements Ratio – Grade	(1)(2)										
4A-3	Avg. Weekly Stock-to-Shipment Ratio – VCR – CWB Grains	(1)	3.5	3.2	2.9	2.9	3.3	3.2	-	3.2	20.3%	▲
4A-3	Avg. Weekly Stock-to-Shipment Ratio – VCR – Non-CWB Grains	(1)	3.6	3.2	3.6	3.6	2.8	2.1	-	2.5	-21.9%	▼
4A-3	Avg. Weekly Stock-to-Shipment Ratio – TBY – CWB Grains	(1)	4.6	6.8	6.2	5.2	4.4	4.8	-	4.6	-5.3%	▼
4A-3	Avg. Weekly Stock-to-Shipment Ratio – TBY – Non-CWB Grains	(1)	3.3	3.6	4.4	5.7	5.5	3.5	-	4.4	-23.7%	▼
4A-4	Terminal Handling Revenue (\$millions) – Vancouver	(1)(3)	\$192.7	\$225.5	\$202.9	\$238.7	n/a	n/a	n/a	n/a	n/a	–
4A-4	Terminal Handling Revenue (\$millions) – Thunder Bay	(1)(3)	\$82.1	\$86.9	\$83.5	\$81.2	n/a	n/a	n/a	n/a	n/a	–
4A-4	CWB Carrying Costs (\$millions) – Pacific Seaboard	(1)(3)	\$63.3	\$95.4	\$93.9	\$77.4	n/a	n/a	n/a	n/a	n/a	–
4A-4	CWB Carrying Costs (\$millions) – Thunder Bay	(1)(3)	\$31.3	\$38.5	\$35.9	\$37.6	n/a	n/a	n/a	n/a	n/a	–

(1) – Year-To-Date values are reported for volume-related indicators only (i.e., Average Weekly Stock-to-Vessel Requirements Ratio). The accompanying percentage variance denotes the relative change in the current YTD value compared to the same period a year earlier.

(2) – Changes in the indicator cited cannot be depicted within the summary framework presented here. The reader is encouraged to consult the corresponding data table directly.

(3) – The GMP provides for the calculation of this indicator on an annual basis. Quarterly values are not available.

Synopsis – Producer Impact

One of the key objectives of the GMP rests in determining the producer impacts that stem from changes in the GHTS. The principal measure in this regard is the producer netback – an estimation of the financial return to producers after deduction of the “export basis.” The methodology employed in calculating these measures was developed following an extensive study conducted as a Supplemental Work Item under the GMP, and approved for incorporation into the mainstream indicators of the GMP by Transport Canada and Agriculture and Agri-Food Canada.

Highlights – Second Quarter 2008-09 Crop Year

Export Basis and Producer Netback – CWB Grains

- Changes in the CWB’s Pool Return Outlook (PRO) for 1 CWRS wheat:
 - Farmer’s initial payment set at \$219.20 per tonne.
 - Represented a 41.1% decrease from the final realized price for the 2007-08 crop year of \$372.06 per tonne.
 - PRO decreased to \$307.00 per tonne by the end of the second quarter.
 - Represented a 40.1% premium to the farmer’s initial payment.
 - Price decline largely a result of good production and assured global stock situation coupled with the global credit crisis and downturn in commodity prices.
- Recent changes in input costs:
 - Country elevator handling – up by an average of 4.4% for elevation; 2.7% for cleaning.
 - Storage charges increased by an average 7.1%.
 - Rail transportation – seasonal pricing produces significant charges to the rates in most corridors.
 - Decreases of up to 10% on CN movements to Thunder Bay
 - Increases of up to 14% on CP shipments to Vancouver.
 - Terminal elevator handling – up by as much as 5.8% for storage.
- While changes in the PRO for 1 CWRS wheat, and input costs to the export basis, suggests significant drop in the producer’s per-tonne netback for CWB grains in the 2008-09 crop year compared to the previous year, returns are expected to remain strong by historical standards.

Export Basis and Producer Netback – Non-CWB Commodities

- Changes in Vancouver cash price for 1 Canada canola:
 - Price fell to an average of \$458.22 per tonne for the first half of the 2008-09 crop year.
 - Represented a 17.7% increase from the 2007-08 crop year’s monthly average of \$556.76 per tonne.
 - Price decrease largely driven by adequate global oilseed stock situation.
- Recent changes in input costs:
 - Country elevator handling – up by an average of 4.4% for elevation; 2.7% for cleaning.
 - Storage charges increased by an average 7.1%.
 - Rail transportation – seasonal pricing produces significant charges to the rates in most corridors.
 - Decreases of up to 10% on CN movements to Thunder Bay
 - Increases of up to 14% on CP shipments to Vancouver.
 - Terminal elevator handling – up by as much as 5.8% for storage.
- Changes in the price of 1 Canada canola, and input costs to the export basis, suggests significant drop in the producer’s per-tonne netback for non-CWB commodities in the 2008-09 crop year compared to the previous year, returns are expected to remain strong by historical standards.

Producer-Car Loading

- Number of producer-car-loading sites unchanged at 454.
- Producer-car shipments increased by 4.4% to 5,415 railcars in the first half.
 - Represented 4.4% of total covered hopper car movements, and 7.9% of CWB grain movements.

Indicator Series 5 – Producer Impact

							2008-09					
Table	Indicator Description	Notes	1999-00	2005-06	2006-07	2007-08	Q1	Q2	Q3	YTD (1)	% VAR	
Export Basis												
Western Canada												
5A-10	CWRS Wheat (\$ per tonne)	(1)(3)	\$54.58	\$61.81	\$63.20	\$67.65						
5A-10	CWA Durum (\$ per tonne)	(1)(3)	\$67.63	\$72.61	\$76.18	\$84.44						
5A-10	1 Canada Canola (\$ per tonne)	(1)(3)	\$52.51	\$41.76	\$45.80	\$53.47						
5A-10	Canadian Large Yellow Peas – No. 2 or Better (\$ per tonne)	(1)(3)	\$54.76	\$52.94	\$62.17	\$85.51						
Producer-Car Loading												
5B-1	Producer-Car-Loading Sites (number) – Class 1 Carriers	(2)	415	354	368	346	346	346	-		0.0%	–
5B-1	Producer-Car-Loading Sites (number) – Class 2 and 3 Carriers	(2)	122	129	106	108	108	108	-		0.0%	–
5B-1	Producer-Car-Loading Sites (number) – All Carriers	(2)	537	483	474	454	454	454	-		0.0%	–
5B-2	Producer-Car Shipments (number) – Covered Hopper Cars	(1)	3,441	11,345	12,529	10,729	2,459	2956	-	5,415	4.4%	▲

(1) – Year-To-Date values are reported for volume-related indicators only (i.e., Producer-Car Shipments). The accompanying percentage variance denotes the relative change in the current YTD value compared to the same period a year earlier.

(2) – Quarterly values for non-volume-related indicators (i.e., Producer-Car-Loading Sites) are “as at” the end of the reporting period. The accompanying percentage variance denotes the relative change in the value of the most recent reporting period compared to that at the end of the preceding crop year.

(3) – The GMP provides for the calculation of this indicator on an annual basis. Quarterly values are not available.



Members of the Quorum Corporation Advisory Board

Mark A. Hemmes

*Chairman of the Advisory Board
President, Quorum Corporation
Edmonton, Alberta*

J. Marcel Beaulieu

*Director – Research and Analysis, Quorum Corporation
Sherwood Park, Alberta*

Richard B. Boyd

*Senior Vice President, Canadian National Railway Company (retired)
Kelowna, British Columbia*

A. Bruce McFadden

*Director – Research and Analysis, Quorum Corporation
Edmonton, Alberta*

Shelley J. Thompson

*President, SJT Solutions
Souhey, Saskatchewan*

Members of the Quorum Corporation Grain Monitoring Team

Mark Hemmes

President

Marcel Beaulieu

Director – Research and Analysis

Bruce McFadden

Director – Research and Analysis

Vincent Roy

Senior Technical Officer

Corporate Offices

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

Telephone: 780 / 447-2111
Fax: 780 / 447-2630

Website: www.quorumcorp.net
Email: info@quorumcorp.net

Additional copies of this report are available for downloading directly from the company's website.

Appendix 1: Program Background

On June 19, 2001, the Government of Canada announced that Quorum Corporation had been selected to serve as the Monitor of Canada's Grain Handling and Transportation System (GHTS). Under its mandate, Quorum Corporation provides the federal government with quarterly and annual reports aimed at measuring the system's performance, as well as assessing the effects arising from the government's two principal reforms, namely:

- The introduction, and gradual expansion of tendered grain movements by the Canadian Wheat Board; and
- The replacement of the maximum rate scale for rail shipments with a cap on the annual revenues that railways can earn from the movement of regulated grain.

In a larger sense, these reforms are 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 series of indicators, the government's Grain Monitoring Program (GMP) aims to measure the performance of both the system as a whole, and its constituent parts, as this evolution unfolds. With this in mind, the GMP is designed to reveal whether the movement of grain from the farm gate to lake- and sea-going vessels (i.e., the supply chain) is being done more efficiently and reliably than before.

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

- Series 1 – Industry Overview
Measurements relating to annual grain production, traffic flows and changes in the GHTS infrastructure (country and terminal elevators as well as railway lines).
- Series 2 – Commercial Relations
Measurements focusing on the tendering activities of the Canadian Wheat Board as it moves towards a more commercial orientation as well as changes in operating policies and practices related to grain logistics
- Series 3 – System Efficiency
Measurements aimed at gauging the operational efficiency with which grain moves through the logistics chain.
- Series 4 – Service Reliability
Measurements focusing on whether the GHTS provides for the timely delivery of grain to port in response to prevailing market demands.
- Series 5 – Producer Impact
Measurements designed to capture the value to producers from changes in the GHTS, and is focused largely on the calculation of “producer netback.”

Appendix 2: Commodities Guide

To assist the reader of the Grain Monitor's reports, the following description of various commodities discussed is provided. These selections are taken from the CGC *Official Grain Grading Guide* – Chapter 27.

Board Grain: 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.

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.

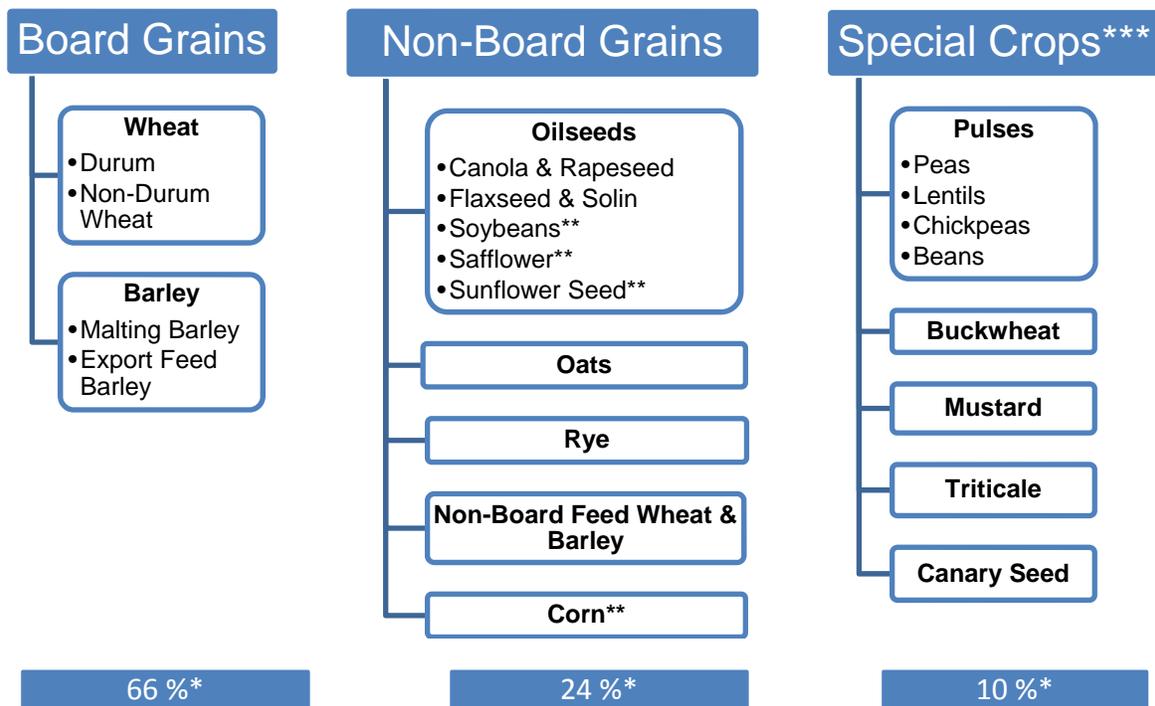
Non-Board Grain: Non-Board grain is grain marketed through the open market system. Such grain includes domestic feed wheat and barley, rye, oilseeds and specialty crops.

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

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.

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



* percent of shipments (railway volume) to four western ports in 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

Appendix 3: Producer Netback Calculator

A prime issue with many stakeholders is the impact that the shrinking GHTS network has had on the length of truck haul from farm gate to elevator. 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 is unknown. Following discussions with stakeholders and the government, a methodology that would allow the Monitor to gather the data necessary to enhance the quality and reliability of this component of the export basis has been developed.⁵⁰ The Producer Netback Calculator (PNC) was designed to provide a cost-effective and non-intrusive means of gathering this data.

At the same time, and in response to producers' requests, the Monitor will provide access to 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 has been designed to assist farmers in determining the delivery options that may provide the best returns for their wheat, durum and feed barley. When these costs are subtracted from the most recent CWB Pool Return Outlook (PRO), the resulting calculation of producer netback provides the best possible estimate of the real returns to be had for their grain.

To gain access to the PNC, producers are provided with their own personal log-in identification and password. Once they have logged into the system, all communication will be secured through 128 bit encryption technology, identical to that used by major banks to allow customers access to their accounts over the internet. This ensures that all information is communicated and held with the strictest confidentiality, while allowing the Monitor to classify data according to the demographics of the specific producer. Producers can be assured that no data specific to any individual will be published, or shared, by Quorum Corporation.

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 PRO. 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.).

The screenshot shows the 'Producer Netback Calculation' form. At the top, there's a navigation bar with 'My Profile', 'New Calculation', 'My History', 'Logout', and 'Help'. Below that, the form title is 'Producer Netback Calculation' with a sub-instruction: '(Enter the base information for the movement you want to estimate)'. The form is divided into several sections: 1. Origin: Radio buttons for 'Use my home location' (selected) and 'Use this location'. 2. Location details: Dropdowns for Quarter (SW), Section (18), Township (12), Range (20), Meridian (W1), and Province (Manitoba). 3. Delivery Point and Elevator: Text input for 'Pioneer Grain Company, Limited 4 BRANDON, MB' and a 'Search Elevator' button. 4. Distance to Elevator (Miles): Text input for '23' and a 'Calculate Mileage' button. 5. Commodity and Grade: Dropdowns for Commodity (Wheat), Binned Grade (#2 CWRS 13.5), and Paid At Grade (#1 CWRS 13.5). 6. Estimated Dockage (%): Text input for '1.0'. 7. Gross Tonnes to Deliver: Text input for '60'. 8. Trucking Rate: Text input for '5' and a dropdown for 'per Tonne'. 9. Number of Trips: Text input for '2'. 10. Trucking Mode: Dropdown for 'Commercial'. 11. Truck Type: Dropdown for 'Tridom (tri-axle)'. 12. Anticipated Trucking Premium: Text input for '3.50' and a label '(\$ per Net Tonne)'. 13. Other Premiums: Text input and a label '(\$ per Net Tonne)'. At the bottom, there is a 'Calculate Estimate' button.

Figure A1: An image of the input screen for Quorum Corporation's Netback Calculator.

⁵⁰ The GMP currently incorporates trucking costs based on the commercial short-haul trucking rates for an average haul of 40 miles, as presented in Table 3A-1.

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.

The Grain Monitoring Program will gain valuable data on grain logistics by retaining a record of the individual transactions that pertain to actual deliveries. In specific terms, this data will assist in analyzing the average length of haul to elevators, modal utilization, and other farm gate to elevator delivery issues. This information will be incorporated into the calculation of producer netback in future reports of the Monitor.

Input	Results	Binned		Paid	
		Tonne	Bushel	Tonne	Bushel
Origin Point: SW 18X 12 X 20X W1	CWB Pool Return Outlook	\$192.00	\$5.23	\$196.00	\$5.33
Delivery Point: BRANDON	(Adj.) Freight To Vancouver			-\$43.87	
Grain Company: Pioneer Grain Company, Limited	(Adj.) Freight To Thunder Bay			-\$22.94	
Commodity: Wheat	Freight Adjustment Factor			\$9.00	
Binned Grade: #2 CWRS 13.5	Applicable Freight	\$32.77			
Paid At Grade: #1 CWRS 13.5	Trucking			\$5.05	
Estimated Dockage (%): 1.0	Primary Elevation			\$12.12	
Trucking Mode: Commercial	Dockage Cleaning			\$4.04	
Truck Type: Tridem (tri-axle)	Sub-Total Other Costs	\$21.21			
Number of Trips: 2	Trucking Premiums			\$(3.50)	
Gross Tonnes To Elevator: 60	Other Premiums			\$(0.00)	
Distance To Elevator (Miles): 23	Sub-Total Producer Premiums			\$(3.50)	
Trucking Premiums: \$3.50	Total Export Basis	\$50.48		\$50.48	
Other Premiums: \$0.00	Producer Netback	\$141.52	\$3.85	\$145.52	\$3.96

Figure A2: An image of the output screen for Quorum Corporation's Netback Calculator.

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 Grain Monitoring Program (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 GMP. 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 program.

Agricultural Producers Association of Saskatchewan	Manitoba Agriculture, Food and Rural Initiatives
Agriculture and Agri-Food Canada	Manitoba Infrastructure and Transportation
Alberta Agriculture, Food and Rural Development	Mission Terminal Inc.
Alberta Infrastructure and Transportation	National Farmers Union
Alliance Grain Terminal Ltd.	North East Terminal Ltd.
Alliance Pulse Processors Inc.	North West Terminal Ltd.
Canadian Canola Growers Association	OmniTRAX Canada, Inc.
Canadian Grain Commission	Parrish & Heimbecker Ltd.
Canadian Maritime Chamber of Commerce	Paterson Grain
Canadian National Railway	Port of Churchill
Canadian Pacific Railway	Port of Prince Rupert
Canadian Ports Clearance Association	Port of Thunder Bay
Canadian Ship Owners Association	Port of Vancouver
Canadian Special Crops Association	Prairie West Terminal
Canadian Transportation Agency	Prince Rupert Grain Ltd.
Canadian Wheat Board	Red Coat Road and Rail Ltd.
Cando Contracting Ltd.	Saskatchewan Agriculture and Food
Cargill Limited	Saskatchewan Highways and Transportation
CMI Terminal	Saskatchewan Association of Rural Municipalities
Fife Lake Railway Ltd.	South West Terminal
Gardiner Dam Terminal	Statistics Canada
Government of British Columbia	Transport Canada
Grain Growers of Canada	Viterra Inc.
Great Sandhills Terminal	West Central Road and Rail Ltd.
Great Western Railway Ltd.	Western Barley Growers Association
ICE Futures Canada, Inc.	Western Canadian Wheat Growers Association
Inland Terminal Association of Canada	Western Grain By-Products Storage Ltd.
James Richardson International Ltd. (Pioneer Grain)	Western Grain Elevator Association
Keystone Agricultural Producers	Weyburn Inland Terminal Ltd.
Kinder Morgan Canada	Wild Rose Agricultural Producers
Louis Dreyfus Canada Ltd.	