

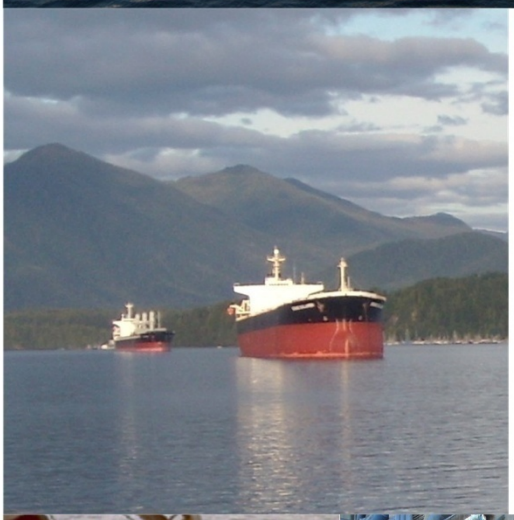

Monitoring the Canadian Grain Handling and Transportation System

First Quarter
2008-2009 Crop Year

1 Summary Report


Government of Canada
Gouvernement du Canada

Quorum Corporation

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 three-month period ended 31 October 2008. 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 quarter 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

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Findings

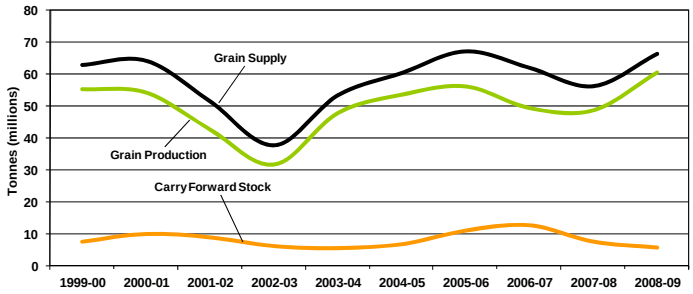
Favourable growing conditions across much of the prairies proved responsible for a significant increase in yield for the 2008-09 crop year. Generally good conditions allowed farmers to bring harvest to completion ahead of normal, and contributed to an improvement in overall grain quality. Although by 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 year's 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.

Figure 1: Western Canadian Grain Supply



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.

Notwithstanding the increase in Canadian grain production, falling worldwide demand resulted in a decrease in the GHTS's handlings in the first quarter. Railway shipments for the period fell by 19.1% from the record level of 7.3 million tonnes handled a year earlier, to 5.9 million tonnes. All commodities except canola saw significant declines, with wheat, durum and barley falling by 25.6%, 34.0% and 63.2% respectively. Strong export demand for canola resulted in a 43.0% increase in shipments, which reached a new record of 1.8 million

[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.

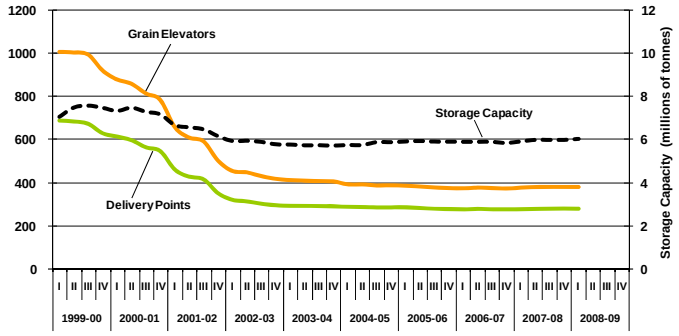
[2] Production in British Columbia declined by 25.3% to 155,900 tonnes.

tonnes for the commodity during the first quarter.[3] Similarly, special crop shipments posted a collective decline of 24.1%, falling to 0.8 million tonnes in comparison to the 1.0 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 continued to diminish in size, the pace of that reduction has abated significantly in recent years. The first quarter of the 2008-09 crop year saw no change in the number of licensed elevators recorded. Still, the 378 facilities forming the network at the end of October 2008 represents a net decrease of 62.2% from the 1,004 elevators that were in place at the beginning of the GMP. The delivery points remained at 276, as did the total country elevator capacity (6 million tonnes).

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



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. As was the case with licensed elevators, there was no change in the number of delivery points during the first quarter. The GHTS retained the 276 points that existed at the end of the 2007-08 crop year. As with the elevator infrastructure itself, the delivery points that remained constituted just 40.3% 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 just over one-third of the system's delivery points. In the 2006-07 crop year, the last for which data is available, 80% of the tonnage delivered into the system was gathered at just 97 locations.[4]

When contrasted with the decline in the number of elevators and delivery points, the reduction in associated storage capacity has not been nearly as dramatic. It also 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 by over 1.2 million tonnes in the first eight years of the GMP, from 7.0 million tonnes to 5.8 million tonnes, the reduction amounted to just 17.3%. However, during the 2007-08 crop year 144,300 tonnes of storage capacity was added to the system. This had the effect of increasing the overall storage capacity by 2.5%, to a total of almost 6.0 million tonnes. In the first quarter of the 2008-09 crop year, there was no further change to the licensed storage capacity of the GHTS.

These broad trends 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 first quarter that proportion had risen to a significantly greater 47.1%.

1.3 Railway Infrastructure

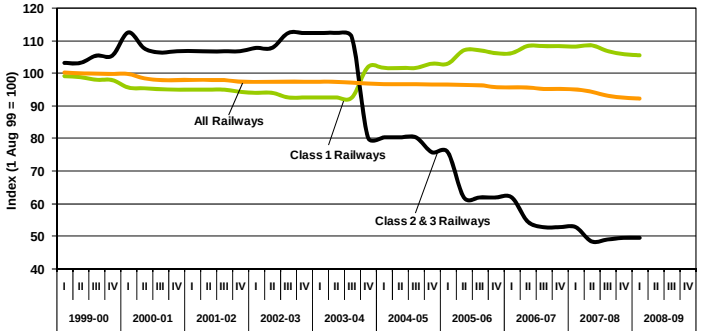
As previously reported, total railway infrastructure in western Canada has experienced a comparatively modest change since the beginning of the GMP. By the end of the 2007-08 crop year the network had been reduced by just 7.7%, to a total of 17,978.0 route-miles of track. Although 87.0% of this 1490.2-route-mile reduction

[3] 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 0.4 million tonnes by the end of the first quarter, making the country the second largest destination for Canadian canola.

[4] The most recent statistics available for grain deliveries by station are those from the 2006-07 crop year.

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.

Figure 3: Relative Change in Railway Infrastructure



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.[5] 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.

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 20.0% in the first three months of the 2008-09 crop year while those of Class 1 carriers decreased by 18.8%. Although there was no reduction in the number of licensed elevators served by shortline railways during the first quarter, the net reduction posted since the beginning of the GMP amounted to 82.9%, with just 14 remaining. This proved significantly greater than the 61.9% 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 83.9% versus 10.4% respectively.

A further 53.2 route miles of infrastructure was removed from the railway system in the first quarter 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). 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.

1.4 Terminal Elevator Infrastructure

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

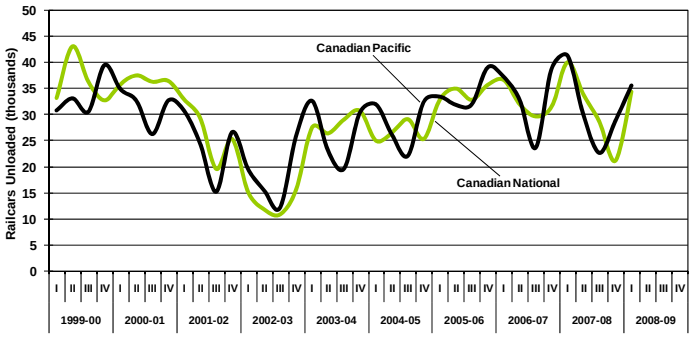
A total of 69,699 carloads of grain were unloaded at these facilities during the first quarter. This represented a decrease of 14.0% from the 81,083 handled during the same period a year earlier. Having originated 50.6% of the cars that were unloaded during this period, CP again nudged out CN as the largest handler of export grain

[5] 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.

in western Canada. This share was only marginally less than the 50.8% secured by CP during the first quarter of the previous crop year.

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 partially at the expense of the carrier's own reduced handlings into Vancouver.[6]

Figure 4: Terminal Elevator Unloads – Railway Carrier



[6] The downturn in first quarter volume actually produced a 46.6% reduction in CN's handlings at Prince Rupert. This reflected a decrease in CWB wheat movement of 54%, offset by an increase in canola movements of 163%, Much of this traffic that was reduced appears to have been redirected to Vancouver, where CN's handlings increased by 12.9% in the face of a 9.8% reduction for CP. Although CN's share of the overall handlings into Vancouver rose to 42.0% from 36.7% a year earlier, this was the first time its share had increased in five years.

2.0 Commercial Relations

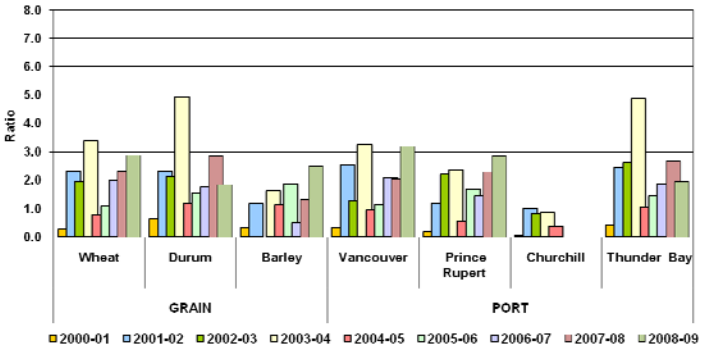
2.1 Tendering Program

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.

In the first quarter the CWB issued 56 tenders calling for the movement of 0.6 million tonnes of grain. This virtually mirrored the 0.6 million tonnes put out for tender in the first quarter of the preceding crop year. As in most previous crop years, the substantive portion of this tonnage, 76.0%, again related to the movement of wheat.[7] Durum accounted for most of the remaining 24.0% as there was only one call issued for 8,800 tonnes of barley during the period.

First quarter tender calls issued in favour of Thunder Bay reflected its greater prominence for a second consecutive year, with a 38.3% share as compared to a 39.4% share achieved in the first quarter of the 2007-08 crop year. Driven in large part by its allocation of all the durum tenders, Thunder Bay was again the largest designated export gateway for tendered grain shipments. Vancouver's allocation took second place in the rankings, with a share of 35.0% as compared to 31.7% a year earlier.[8] Prince Rupert saw its overall share slip to 26.7% from 28.9% twelve months before. For a fourth consecutive year, no tenders calling for delivery of grain to Churchill were issued.

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



The calls issued by the CWB were met by 225 tender bids offering to move an aggregated 1.5 million tonnes of grain, about two-and-a-half times the volume sought. The scope of this bidding generally showed a continued increase in intensity as was exhibited in the preceding crop year.[9] Using the ratio of tonnage-bid to tonnage-called to measure grain company reaction shows mixed results in the response rates of the bidders. Although barley showed the steepest relative gain in the response rates tied to individual grains, its ratio having climbed by 92.3%, to 2.5 as compared to 1.3 for the previous crop year as a whole, this activity was tied to just one tender offer at Vancouver. Representing the largest portion of the tendering program in the first quarter, the response rate for wheat rose by a lesser 26.1%, to 2.9 from 2.3 in the 2007-08 crop year. Only durum showed a marked decrease in bidding activity, with the ratio falling 37.9%, to 1.8 from 2.9 the previous year.

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 Vancouver increased by 52.4%, to 3.2 in the first quarter as compared to a ratio of 2.1 for the previous crop year as a whole. The ratio noted for Prince

[7] This was not the case in the first quarter of the 2005-06 crop year when barley, owing to a sizable short-term movement, actually displaced wheat as the largest single grain put out for tender.

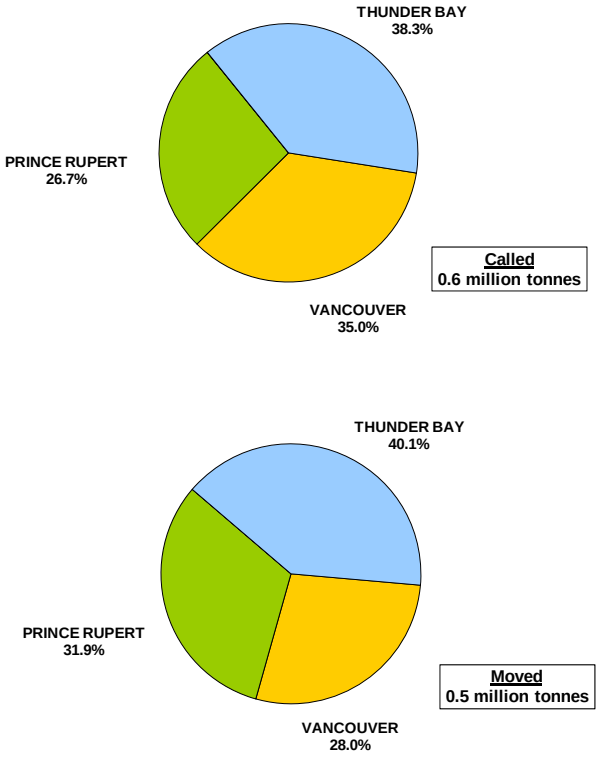
[8] Vancouver's share of the tonnage put out for tender has declined significantly since the 2004-05 crop year, when it was accorded a record 70.9% of the total.

[9] 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.

Rupert experienced a 12.1% increase, rising to 2.9 from the previous year's 2.3. Only Thunder Bay saw the ratio decrease, falling 23.1% to 2.0 from 2.6 for the 2007-08 crop year as a whole.[10]

In large part, these better response rates reflected the competition that had been stimulated as a result of a further reduction in the amount of grain put out for tender. This was also reflected in a reduction in the proportion of the tender calls that went unfilled, which fell to 2.1% in the first quarter as compared to 11.0% 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 fully three quarters of the unfilled volume, 75.6%, was tied to tender calls issued in favour of Thunder Bay. Its unfilled proportion proved to be significantly greater than that for Vancouver: 4.1% versus 1.4%. Tender volumes for Prince Rupert were fully subscribed during the first quarter.[11]

Figure 6: Tendered Grain – Cumulative Volumes to 31 October 2008



This near equilibrium denotes a change from the more skewed results of earlier years, where the disinclination of grain companies having terminal facilities in Vancouver favoured more aggressive bids to Vancouver rather than Prince Rupert. While this preference for Vancouver has led to somewhat less competitive bids on tenders for Prince Rupert, the gap appears to be narrowing.[12] Whereas the difference between the maximum discounts advanced on wheat tenders to Vancouver and Prince Rupert in the 2007-08 crop year was as much as $9.25, the discounts put forward by the grain companies in the first quarter of the 2008-09 crop year tended to favour Vancouver by a noticeably lower $6.00 per tonne.

As the volume offered remained relatively consistent with that offered the previous year, the discounts bid in an attempt to secure wheat tenders, although dipping slightly, stayed within a similar range. Those for durum grew more aggressive than those put forward in the 2007-08 crop year, and those for barley fell sharply.[13] The maximum discounts recorded in the first three months of the 2008-09 crop year declined by 9.3% in the case of wheat, to $21.58 per tonne; and rose by a more substantial 43.0% on potential movements of durum, to $17.35

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

[11] 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%, 4.1% and 7.5% respectively.

[12] Shareholders of the Prince Rupert Grain facility all hold a larger stake in facilities in Vancouver, providing them an incentive to give preference to a Vancouver routing where they do not have to share in the terminal revenues. Some shareholders are also concerned with the single-carrier service to Prince Rupert, and a lack of a competitive alternative.

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

per tonne.[14] There were no instances where the CWB was required to pay a premium for tendered grain movements.[15]

During the first three months of the 2008-09 crop year, the CWB awarded a total of 73 contracts for the movement of an aggregated 0.5 million tonnes of grain.[16] This represented a decrease of 19.3% from the 0.6 million tonnes handled in the first quarter of the previous crop year. As specified in the tender calls, the largest proportion of the grain shipped, 40.1% was destined to the port of Thunder Bay. Prince Rupert and Vancouver followed in turn with shares of 31.9% and 28.0% respectively.

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 quarter of the 2008-09 crop year, 91.4% of the tendered grain volume moved in such blocks. This proportion proved to be only marginally above the 88.8% recorded for the entire 2007-08 crop year. Even so, movements in blocks of 50 or more cars decreased slightly in the first quarter, to 65.3% from the previous crop year's overall 66.7% proportion. It should be noted, however, that there was a substantial increase in the proportion moved in blocks of 100 or more cars, which rose to 18.4% from 10.0% in the previous crop year as a whole.

High-throughput elevators remained the leading originators of tendered grain shipments. During the first quarter, 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 ranked as the largest quarterly share posted under the GMP.[17]

In terms of originating carriers, CP retained its position as the largest handler of tendered grain in the first quarter. With 57.4% of the volume, the carrier easily outdistanced CN's 42.6% share. CP's first quarter share proved to be significantly greater than the 47.6% it had secured for the 2007-08 crop year as a whole.

In aggregate, 16.4% of the CWB's total grain shipments moved under tender to western Canadian ports in the first quarter of the 2008-09 crop year. Even though the 0.5 million tonnes of tendered grain handled during this period trailed what it had been a year earlier, the CWB reported that its transportation savings grew by 12.3%, to $7.3 million from $6.5 million.[18] Much of this increase can be attributed to more aggressive bidding activity.

2.2 Advance Car Awards Program

The 2008-09 crop year marked the commencement of the sixth season for the CWB's advance car awards program, with slightly more than 0.3 million tonnes of grain having been moved under it in the first quarter. This constituted just 10.2% of the total grain volume shipped by the CWB to western Canadian ports during the period. When considered alongside the 0.5 million tonnes of tendered grain already discussed, just 26.5% of the CWB's total grain shipments moved under the umbrella of these two programs.

The composition of the grain shipped under the CWB's advance car awards program in the first quarter was similar to that moved under its tendering program. There was minimal barley moved under the tendering program and none under advance awards. As a result, wheat and durum took larger shares of the movement than in previous years. Wheat, which continued to be the foremost grain handled, accounted for over 0.2

[14] These discounts fell below the 2007-08 crop year's maximum of $23.78 per tonne on wheat, and rose above the corresponding $12.13 per tonne on durum.

[15] In the 2007-08 and 2006-07 crop years, 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.

[16] The volumes cited as moving under the CWB's tendering program also extend to malting barley – which is administered independent of other CWB grains.

[17] The 2007-08 crop year held the previous record of greatest volume of tendered grain moved from high-throughput facilities.

[18] 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.

million tonnes and 81.5% of the program's overall volume. This was followed in turn by less than 0.1 million tonnes of durum, which represented 18.5% of the total.

The similarities continued in the amount of grain shipped to each of the four ports. Thunder Bay, which had ranked first among tendered grain destinations with a 40.1% share, also received the largest share of the volume shipped under the advance car awards program, 44.5%. Although shipments to Prince Rupert ranked second, accounting for a 31.9% share of the tendered grain, they fell to third place in the advance awards program, garnering only 21.1%. The reverse was true for Vancouver, which saw its share under the advance car awards program grow to secure 32.9%, while garnering only 28.0% of that offered under the tendering program. Although Churchill had no shipments under the tendered grain program, it secured 1.5% of those under the advance car awards program.

As was the case with tendered grain shipments, the vast majority of the grain moved under the advance car awards program, 94.6%, originated at high-throughput elevators. This, however, proved to be somewhat below the 98.1% share cited earlier for tendered grain shipments. CP also handled the majority of this grain, taking a significantly higher 75.8% share as compared to a 57.4% share on tendered grain.

Figure 7: Western Canadian CWB Grain Volumes

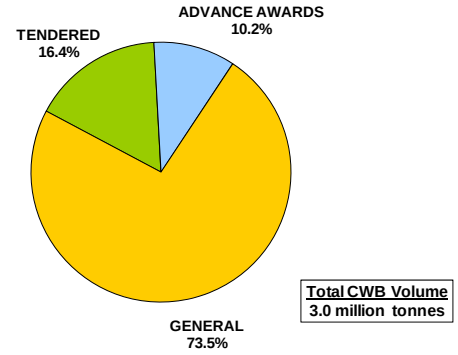
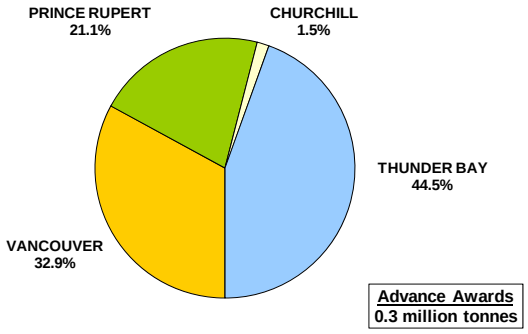


Figure 8: Advance Car Awards – Destination Port



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, 84.9% of this total volume moved in blocks of 25 or more railcars as compared to 91.4% for tendered grain alone. Similarly, the average overall size of these blocks amounted to 52.0 cars versus an average of 61.5 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 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, with over 20 separate organizations having sought intervener 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. 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.[19] 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.[20]

With its implications for the industry at large, many of the GHTS's smaller shippers looked upon the Agency's decision with favour. 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, 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.[21] 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 in due course 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.[22] Further, the Agency found that further harm was likely to be incurred if some

[19] See Canadian Transportation Agency Decision Number 344-R-2007, dated 6 July 2007.

[20] Ibid.

[21] 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 came 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.

[22] 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.[23]

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.[24] 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.

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. As there were no varieties not meeting KVD registration for this crop year, any impact on the operations of the GHTS arising from the implementation of this new declaration system remains to be seen.

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 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 (BDI) had risen to about 3,300 points.[25] 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

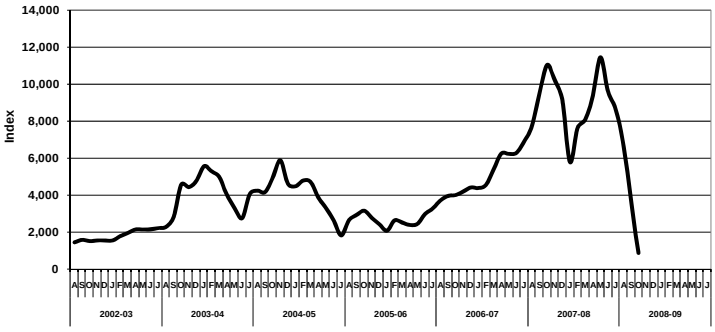
[23] The Canadian Transportation Agency ordered that each of the parties submit detailed information on grain movements during the first 36 weeks of the 2007-08 crop year. In general terms, the information requested was aimed at identifying the number of cars actually ordered, allocated and moved during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

[24] 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.

[25] 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 cargos, 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.

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.

Figure 9: Ocean Freight Rates – Baltic Dry Index



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.

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. This precipitous fall was a result of the mounting financial crisis, which had roots in the collapse of the US 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 recent economic expansion. This expansion was seen as the main driver in both the rise and unprecedented volatility of 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.[26] Moreover, the periodic pricing standoffs that the Chinese were having with the 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 quarter, any impact was tempered by the uncertainty in financial and 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).

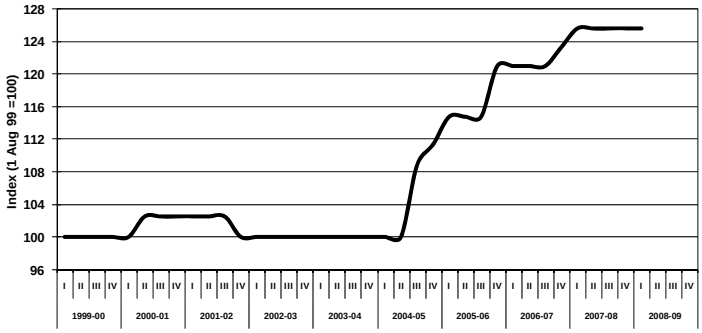
As the quarter came to a close, it was uncertain as to how far the influence of this turmoil would reach. The tightening of credit was reportedly having significant impact on commodity shipping, but to this point had minor impact on the export of Canadian grains, oilseeds and special crops.

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

3.0 System Efficiency and Service Reliability

3.1 Trucking

Figure 10: Composite Index – Short-Haul 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 beginning of the 2008-09 crop year saw the per-barrel price tumble to just under $70 US by the end of October amidst growing economic turmoil. This in turn relieved the pressure at the gas pumps.

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 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, measured by shipments from primary elevator facilities, decreased by 12.1% in the first three months of the 2008-09 crop year, falling to 8.3 million tonnes from the record pace of 9.4 million tonnes in the same period 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 11.1% to 1.6 turns in the first quarter. Notwithstanding the lower throughput and turnover ratio during the first quarter of the 2008-09 crop year, the effects of an accumulated 1.0-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.[27]

The amount of grain maintained in inventory decreased by 8.8% in the first quarter, falling to a weekly average of 2.6 million tonnes as compared to 2.9 million tonnes a year earlier. Although much of this reduction appears to be tied to an overall slow-down in system activity, this inventory level proved to be consistent with many of the quarterly averages recorded over the preceding five crop years, and well below the higher values posted in

[27] 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 6.4. 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.

the program's first two years.[28] Contrary to the reduction in the overall stock level, the amount of time spent by grain in inventory during the first quarter rose marginally, climbing by 1.4% to an average of 29.6 days as compared to 29.2 days twelve months before. This suggests that grain inventories were turning over more-or-less at the same pace, notwithstanding reduced commercial activity.

These forces served to elevate the overall average weekly stock-to-shipment ratio for the period by a marginal 2.4%, which grew to 4.2 from the 4.1 scored a year earlier. This value affirms that grain inventories were still more than sufficient to meet the prevailing demand, and that the grain companies faced few challenges in sourcing product during this period.

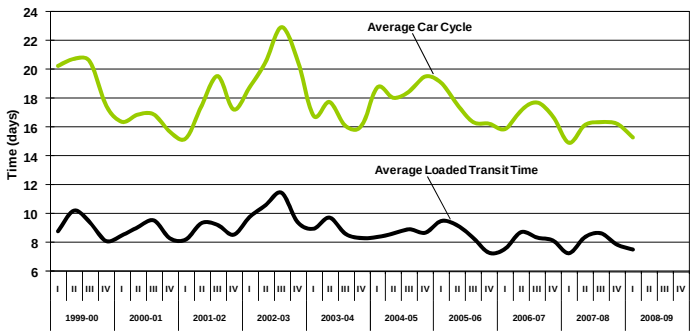
3.3 Railway Operations

The volume of grain moved in covered hopper cars during the first quarter fell by 18.8%, to 5.8 million tonnes from 7.1 million tonnes a year earlier. With originations of 5.6 million tonnes, the Class 1 carriers experienced a decline in volume of 1.3 million tonnes, or 18.8%, for the period. This represented a share of 97.3%, which differed little from the 97.1% share they held twelve months earlier. Shortline-originated volumes, which amounted to 0.2 million tonnes in the first quarter, experienced a similar decline, falling by 20.0%. A marginally greater 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 2.6% increase in producer-car loadings for the period.[29]

3.31 Car Cycles

The railways' average car cycle for the first quarter increased by 2.0% from that posted a year earlier, rising to 15.3 days from 15.0 days. Once again, an improvement was noted in the Prince Rupert corridor, with its overall average falling 3.7% to 13.1 days. The Thunder Bay corridor posted the largest overall increase, 4.9%, which pulled the average up to 15.0 days from 14.3 days a year earlier. The Vancouver corridor saw a marginal increase, 0.6%, rising to 16.4 days versus 16.3 days twelve months before.

Figure 11: Average Railway Car Cycle



The increase 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 grew by 2.7%, to a first-quarter value of 7.5 days from 7.3 days a year earlier. As for the average empty transit time, there was a marginal deterioration amounting to 1.3%, with the quarterly average having risen to 7.8 days from 7.7 days.

The two main carriers showed differing results. While the average car cycle grew by 5.3% for CP, it remained constant with that achieved a year earlier for CN. Both railways posted increases in loaded transit times with CN up 3.5% and CP up 4.4%. The results were somewhat mixed with respect to their empty transit times. Although CN posted a 4.4% reduction in its average empty transit time, the average for CP increased by 6.0%.

[28] Country elevator stocks have generally been falling in conjunction with the overall reduction in the system's storage capacity. Despite periodic fluctuations, the quarterly value remains well below the record average of 4.1 million tonnes, which was set in the second quarter of the 1999-2000 crop year.

[29] 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.

Notwithstanding the increase in overall averages for the period, these cycles proved to be among the best yet recorded under the GMP.[30] CN in particular has made significant strides in narrowing the performance gap that it had opened between them and CP almost four years before.[31] Although a greater emphasis on unit train operations in the Vancouver and Thunder Bay corridors has been instrumental in this, the increased volume of grain being shipped to Prince Rupert – and which now consistently post some of the lowest corridor averages – has had an equally important effect on improving overall efficiency.

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. This new process was aimed at maximizing the revenues that the carriers were entitled to receive under the revenue cap. It is without doubt that both CN and CP have become quite skilful at managing their revenues within this regulatory framework.

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.[32] 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.[33]

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. To be sure, 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 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.[34]

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

[31] 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.

[32] 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.

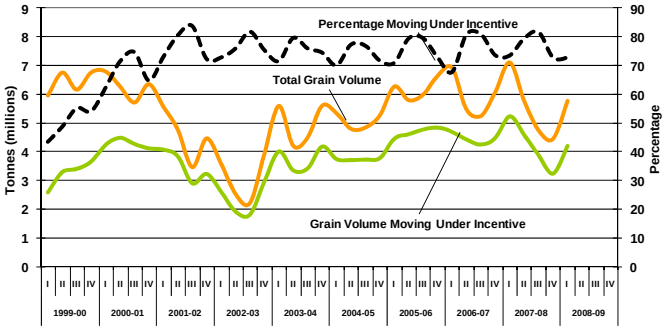
[33] At the beginning of the GMP, single car rates for grain moving to Prince Rupert were about 13% greater than those applicable on its movement to Vancouver. The actions taken by CN in reducing its rates in the Prince Rupert corridor over the course of the last several years denotes a significant change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

[34] 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. Regardless of the outcome, the case will likely have implications for railway pricing in the remainder of the 2008-09 crop year.

Even so, 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 first quarter, the single-car rates on movements in the Vancouver corridor had increased by an average of 26.4%, while those in the Thunder Bay corridor had risen by a more substantive 33.8%.[35] For the more northerly situated ports, the compound effect of CN's rate increases produced average gains of just 3.5% on movements to Prince Rupert, and 39.6% on those directed to Churchill.[36]

There were no significant changes to the monetary incentives offered by the railways on multiple-car movements in the first quarter. For CN the discounts offered on movements in blocks of 50-99 cars remained at $3.00 per tonne, as did the $7.00 per tonne incentive offered on movements of 100 or more cars. By the same standard, the $4.00-per-tonne discount advanced by CP for movements in blocks of 56-111 cars was also unaltered, as was its $7.00-per-tonne maximum on shipments in blocks of 112 cars.

Figure 12: Railway Volume Moving Under Incentive



The quantity of grain moved under the railways' incentive programs during the first quarter decreased by 19.7%, to 4.2 million tonnes from 5.2 million tonnes a year earlier. This was largely in keeping with the general decline in grain shipments discussed earlier, and resulted in an 18.1% reduction in the value of the discounts earned by shippers, which fell to a total of $23.1 million from $28.2 million a year earlier. This latter reduction was softened in part by a further migration towards the use of larger car blocks, which helped increase the first quarter's average-earned discount by 1.9%, to $5.50 per tonne from $5.39 per tonne twelve months before.

3.4 Terminal Elevator and Port Performance

3.41 Terminal Elevators

A total of 5.6 million tonnes of grain passed through the terminal elevators of Canada's western ports in the first quarter of the 2008-09 crop year. This marked a 21.5% decrease from the 7.1 million tonnes handled in the same period a year earlier. Although spread across all of the four ports, the decline was the steepest at Prince Rupert.

Accounting for over half of the overall throughput, Vancouver again proved itself to be the largest export gateway and experienced the smallest decline in volume during the first quarter. Total throughput for the port decreased by 10.2%, falling to 2.9 million tonnes from 3.3 million tonnes a year earlier. Reversing the trend that had seen Prince Rupert gaining significant volume, the first quarter results for the port were just 0.7 million tonnes, a 51.2% decrease from the previous year's first quarter record of 1.3 million tonnes.[37]

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[35] 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 26.1% on movements to Vancouver, and 39.7% on those destined to Thunder Bay. CP's corresponding average increases amounted to 26.7% and 27.8% respectively.

[36] 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.

[37] 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 was precipitated in large part by reduced CN freight rates and an improvement in car allocation.

The results for the eastern gateways of Churchill and Thunder Bay were also weaker. With a 28.3% 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, barely, canola nor special crops being handled by the port during the first quarter. The port of Thunder Bay saw its first quarter volume decrease by a smaller 18.2% to reach 1.6 million tonnes. 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 9.7% for durum to a high of 100% for rye.

Terminal inventories during the first quarter decreased by just 1.7%, leaving the overall average largely unchanged, at 1.4 million tonnes, from the previous year which had constituted the largest value reported for a first quarter under the GMP.[38] At the same time, the average amount of time spent by grain in inventory jumped significantly, by 18.4%, climbing to a first quarter average of 23.2 days from 19.6 days a year earlier.[39] This was derived from storage-time increases in all ports, with that of Prince Rupert jumping the greatest amount, 87.5% to reach 19.5 days. This near doubling of time spent in storage coincides with the 51.2% drop in throughput at Prince Rupert.

With throughput decreasing 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. Other than for canola at Prince Rupert, the average ratios all remained above the 1.0 threshold.[40] Although previous experience has demonstrated periods when shortages were not fully avoided, and inventories were tight at specific periods, few concerns were registered due to the relatively small sales program executed during the first quarter of the 2008-09 crop year.

3.42 Port Performance

Some 190 vessels called at western Canadian ports during the first three months of the 2008-09 crop year, a decrease of 21.5% from the 242 vessels that called during the same period a year earlier. The average amount of time these vessels spent in port decreased by 32.6%, falling to an average of 3.1 days from the average of 4.6 days in the first quarter of the previous crop year. This 3.1-day average was the lowest first quarter value recorded under the GMP and stemmed from sustained stock levels in the face of significantly lower sales and throughput at the ports. It remains to be seen whether this performance can be maintained as sales volumes increase. For comparative purposes, vessel time in port in the four to four-and-a-half day range has generally been observed over the course of the preceding nine crop years.[41]

On the whole, much of the overall improvement was attributable to a decrease in vessel waiting time, which fell by 54.5%, or 1.2 days, to an average of 1.0 days. Much of the decline was derived from sharp decreases in the waiting times reported for vessels loading at Vancouver and Prince Rupert, 2.0 days and 3.7 days respectively. In contrast, the average loading time for the first quarter actually increased at Thunder Bay and Churchill, but by relatively small amounts, 0.1 days and 0.5 days respectively.

When examining the amount of time spent by vessels at individual ports, those calling at Vancouver and Prince Rupert were observed to have posted the greatest overall decreases. The average length of these stays at Vancouver decreased by 35.9% in the first quarter, falling to 4.1 days from 6.4 days a year earlier. The duration of vessel layovers at Prince Rupert declined by an even greater 51.9%, falling to an average of 3.8 days from 7.9 days. Experiencing much smaller changes were Churchill and Thunder Bay, where a 3.9%

[38] The previous high for first quarter terminal stocks came in the 2006-07 crop year when they attained an average of 1,390,100 tonnes. The 2007-08 crop year's average of 1,410,300 tonnes exceeded that mark by 1.5%.

[39] This constituted the second highest average number of days in terminal storage seen under the GMP, nearly overtaking the 23.4 days experienced during first quarter of the 2001-02 crop year.

[40] 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.

[41] During the course of the GMP, there were instances where the quarterly average exceeded the 4.5 days cited here as the typical maximum. The most significant deviation was observed in the 2006-07 crop year, where the average reached a height of 9.0 days in the third quarter.

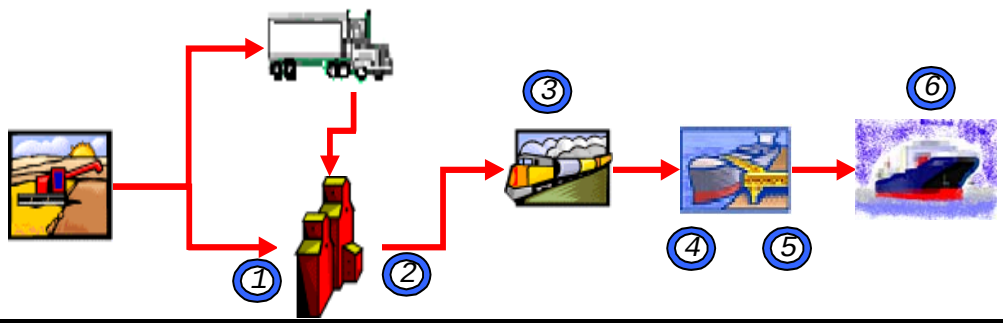
decrease for the former reduced the average stay in port to 4.9 days from 5.1 days. At Thunder Bay no change was registered with the layovers averaging just 1.6 days.

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.

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.

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
	SPEED RELATED								
2	Country Elevator – Average Days-in-Store	3B-4	41.7	29.5	30.1	30.7	31.1	29.6	▼
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	23.2	▲
	Average Total Days in GHTS		69.4	58.1	56.6	58.1	60.1	60.3	▲
	SERVICE / ASSET RELATED								
1	Average Country Elevator Capacity Turnover Ratio	3B-2	4.8	5.6	6.2	6.5	6.0	6.4 *	▲
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	15.3	▼
6	Average Vessel Time in Port (days)	3D-7	4.3	4.9	4.8	5.3	5.0	3.1	▼

* For comparative purposes, the value of 6.4 presented here represents an annualized equivalent for the 1.6 actually recorded as the country elevator's capacity turnover ratio in the first three months of the 2008-09 crop year.

Notwithstanding reduced time spent in the country elevator storage and loaded railway transit, 1.5 days and 0.5 days respectively, the overall amount of time involved in moving grain through the supply chain rose marginally in the first quarter of the 2008-09 crop year, to an average of 60.3 days. This was due to a 2.2 day increase in

the time grain spent in store at terminal elevators. This proved to further extend the negative trend, which has now added 3.7 days from the record-setting 56.6-day average achieved three years earlier.

In addition to the preceding, a few other comments concerning the performance of the GHTS in the first quarter 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 three months of the 2008-09 crop year. As a result, the pressures brought to bear on the GHTS in the first quarter were modest in comparison to the record breaking pace set in the first quarter 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 quarter of the 2008-09 crop year.

- Finally, although grain was moving through the GHTS at a slightly elevated pace from that seen in the previous crop year, it continued to move through the supply chain at a consistently faster pace that in the first few years of the GMP. To be sure, 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. Complimenting this, however, has been the benefit of recent improvements in the railways' average loaded transit time. The 7.5-day average loaded transit time achieved during the first quarter compares favourably with the GMP record of a 7.3-day average posted in the first quarter of the 2007-08 crop year.

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.[42]

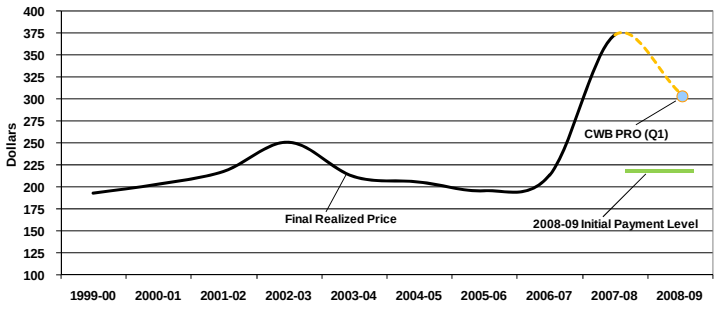
In its earlier reports, the Monitor described how increased commodity prices had largely been responsible for the improvement in the per-tonne returns accruing to producers of wheat, durum, canola, and yellow peas in the first four crop years of the GMP. During this same period, the export basis also 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 quarter 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. Still, this value well exceeded the $219.20 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)



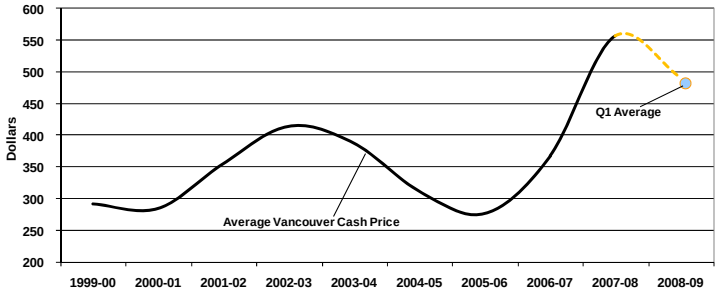
Much of the impetus for this decline in price stemmed from a loosening of the global wheat supply coupled with uncertainty in global financial markets and volatility in the commodity sector. Favourable harvests in most exporting countries producing a record world wheat crop and strong export programs 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.

[42] 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

Although not as significant a decline as that posted for wheat, the Vancouver cash price for 1 Canada Canola fell by 12.0 % in the first quarter of the 2008-09 crop year, attaining an average of $490.18 per tonne as compared to the previous crop year's final average of $556.76-per-tonne. 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.

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



The prospect of record production in Canada, ultimately 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 early in the crop year was uncertainty in Chinese demand for oil, which materialized with significant purchases of Canadian canola during the first quarter. 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. To a lesser degree, the escalation on the tariff rates tied to terminal elevation and storage activities amounted to about 1.6% and 0.3% respectively. While no change was registered in the rates associated with moving grain by rail for the port of Churchill, the other three western ports experienced substantial increases from those in place at the end of the previous crop year. These increases in rail freight rates reached highs of 8.0% on shipments to the port of Thunder Bay and 19.9% on those 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 quarter 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 quarter of the 2008-09 crop year increased by 2.6% from that handled a year earlier, rising to 2,459 from 2,396. In relation to the volume of grain shipped in covered hoppers, producer-car loadings accounted for just 3.8% of the overall total. This share increased to 7.4% when gauged against CWB grains alone, which constituted the majority of producer car movements. Both values were substantially greater than the 3.0% and 4.9% shares respectively secured twelve months before.

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. They may also be catalysts that shift traditional traffic patterns, the demand for particular services, and the utilization of assets.

Highlights – First 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 quarter decreased 19.1% to 5.9 million tonnes.*
  - *Reflected reduced export demand for all commodities except canola.*
- *Traffic to most western Canadian ports decreased in the first quarter.*
  - *Vancouver – down by 8.9% to 3.4 million tonnes.*
  - *Thunder Bay – down by 19.0% to 1.4 million tonnes.*
  - *Prince Rupert – down by 43.7% to 0.7 million tonnes.*
    - *Much larger proportional decline than Vancouver.*
  - *Churchill – down by 29.1% to 0.4 million tonnes.*

Country Elevator Infrastructure

- *No changes recorded during the first quarter.*
  - *Grain delivery points remain at 276.*
  - *Number of country elevators static at 378.*
- *Elevator storage capacity maintained at 6.0 million tonnes.*
- *Elevators capable of loading in blocks of 25 or more cars increased by one to 244.*
  - *Accounted for 64.6% of total elevators.*
  - *Accounted for 88.5% of total storage capacity.*
- *Elevators capable of loading in blocks of 50 or more cars increased by two to 178.*
  - *Accounted for 47.1% of total elevators.*
  - *Accounted for 78.4% 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 some 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 three months decreased by 14.0% to 69,699 carloads.*

Indicator Series 1 – Industry Overview

Table	Indicator Description	Notes	1999-00	2005-06	2006-07	2007-08	2008-09 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)										
1B-2	Railway Grain Volumes (000 tonnes) – Primary Commodities	(1)	26,440.8	25,304.7	24,311.7	22,766.5	5,896.9	-	-	5,896.9	-19.1%	▼
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	-	-	789.9	-24.1%	▼
	Country Elevator Infrastructure [Subseries 1C]											
1C-1	Grain Delivery Points (number)	(2)	626	275	272	276	276	-	-		0.0%	–
1C-1	Grain Elevator Storage Capacity (000 tonnes)	(2)	7,443.9	5,870.8	5,808.2	5,952.5	5,952.5	-	-		0.0%	–
1C-1	Grain Elevators (number) – Province	(2)										
1C-2	Grain Elevators (number) – Railway Class	(2)	917	374	371	378	378	-	-		0.0%	–
1C-3	Grain Elevators (number) – Grain Company	(2)										
1C-4	Grain Elevators Capable of Multiple Car Loading (number) – Province	(2)										
1C-5	Grain Elevators Capable of Multiple Car Loading (number) – Railway Class	(2)	317	250	240	243	244	-	-		0.4%	–
1C-6	Grain Elevators Capable of Multiple Car Loading (number) – Railway Line Class	(2)										
1C-7	Grain Elevator Openings (number) – Province	(2)										
1C-8	Grain Elevator Openings (number) – Railway Class	(2)	43	10	48	10	0	-	-		-100.0%	▼
1C-9	Grain Elevator Openings (number) – Railway Line Class	(2)										
1C-10	Grain Elevator Closures (number) – Province	(2)										
1C-11	Grain Elevator Closures (number) – Railway Class	(2)	130	21	51	3	0	-	-		-100.0%	▼
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	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	-	-		-1.5%	▼
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	-	-		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	-	-		-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	1,665.0	-	-	1,665.0	-20.7%	▼
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	-	-	4,110.1	-18.0%	▼
1D-2	Railway Grain Volumes (000 tonnes) – Total Network	(1)	25,662.3	24,720.8	23,736.9	22,084.0	5,775.1	-	-	5,775.1	-18.8%	▼
1D-3	Shortline Railway Infrastructure (route-miles)	(2)	3,043.0	2,445.6	2,023.2	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	156.0	-	-	156.0	-20.0%	▼
1D-5	Railway Grain Volumes (000 tonnes) – Class 1 Carriers	(1)	23,571.8	23,011.6	22,677.8	21,505.7	5,619.1	-	-	5,619.1	-18.8%	▼
1D-5	Railway Grain Volumes (000 tonnes) – Class 2 and 3 Carriers	(1)	2,090.5	1,709.2	1,059.1	578.3	156.0	-	-	156.0	-20.0%	▼
1D-6	Grain Elevators (number) – Grain-Dependent Network	(2)	371	127	117	117	116	-	-		-0.9%	–
1D-6	Grain Elevators (number) – Non-Grain-Dependent Network	(2)	513	233	238	240	240	-	-		0.0%	–
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	-	-		-0.3%	–
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	-	-		0.0%	–
	Terminal Elevator Infrastructure											
1E-1	Terminal Elevators (number)	(2)	15	16	16	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	-	-		0.0%	–
1E-2	Terminal Elevator Unloads (number) – Covered Hopper Cars	(1)	278,255	271,714	261,204	245,213	69,699	-	-	69,699	-14.0%	▼

(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 as 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 2006-07 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 – First Quarter 2008-09 Crop Year

Tendering Program

- *56 tender calls were issued by the CWB during the first three months of the 2008-09 crop year.*
  - *Calls for the movement of 0.6 million tonnes to export positions in western Canada.*
    - *Thunder Bay delivery – 38.3%; Vancouver – 35.0%; Prince Rupert – 26.7%; and Churchill – 0.0%.*
- *225 bids received; offered an aggregated 1.5 million tonnes.*
  - *Response rates similar to the preceding crop year's aggressive pace.*
    - *Reflected plentiful harvest and availability of grains.*
- *73 contracts concluded for the movement of 0.5 million tonnes.*
    - *Thunder Bay – 40.1%; Prince Rupert – 31.9%; Vancouver deliveries – 28.0%; and Churchill – 0.0%.*
  - *Represented 16.4% of volume shipped by CWB to port positions in Western Canada.*
    - *Fell below maximum 20% target.*
- *Tenders for 2.1% of the tonnage called either partially, or not at all, filled.*
  - *Sharp reduction from the 12.0% recorded for the 2007-08 crop year.*
    - *7,700 tonnes – non-compliance with bid specifications.*
    - *3,800 tonnes – insufficient quantity bid.*
- *Proportion of tendered grain volume moving in multiple car blocks increased to 91.4%.*
  - *Proportion moving in blocks of 50 or more cars decreased to 65.3% from 66.7% in the 2007-08 crop year.*
- *98.1% of all tendered movements originated at high-throughput elevators.*
  - *Measurably higher than 91.8% observed in the 2007-08 crop year.*
  - *Represents highest percentage achieved during the GMP.*
- *CWB estimated that the overall transportation savings for the first quarter increased by 13.0% to $7.3 million.*
  - *Reinforces aggressive pursuit of tendered volume.*

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 one tenth the level it started the quarter at – to 850 at the end of October 2008.*
    - *Impact of mounting global financial crisis and credit crunch.*
    - *Extent of impact on western Canadian grain movement remained to be seen.*

Indicator Series 2 – Commercial Relations

Table	Indicator Description	Notes	1999-00	2005-06	2006-07	2007-08	2008-09 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	560.2	-	-	560.2	-8.4%	▼
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	1,481.7	-	-	1,481.7	-9.8%	▼
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	2,984.6	-	-	2,984.6	-29.0%	▼
2A-5	Tendered Movements (%) – Proportion of Total CWB Movements	(1)(2)	n/a	16.2%	17.8%	14.3%	16.4%	-	-	16.4%	13.9%	▲
2A-5	Tendered Movements (000 tonnes) – Grain	(1)(2)	n/a	2,447.5	2,651.6	1,900.0	488.0	-	-	488.0	-19.3%	▼
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	11.5	-	-	11.5	-84.4%	▼
2A-8	Tendered Movements (000 tonnes) – Not Awarded to Lowest Bidder	(1)	n/a	130.5	46.3	18.7	4.9	-	-	4.9	-50.5%	▼
2A-9	Tendered Movements (000 tonnes) – FOB	(1)(2)	n/a	155.6	152.8	65.1	0.0	-	-	0.0	-100.0%	▼
2A-9	Tendered Movements (000 tonnes) – In-Store	(1)	n/a	2,291.9	2,651.6	1,835.0	488.0	-	-	488.0	-9.5%	▼
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	61.5	-	-	61.5	10.8%	▲
2A-18	Railway Car Cycle (days) – Tendered Grain		n/a	15.7	14.7	13.9	11.4	-	-	11.4	-12.3%	▼
2A-18	Railway Car Cycle (days) – Non-Tendered Grain		n/a	16.8	16.4	15.2	15.3	-	-	15.3	7.0%	▲
2A-19	Maximum Accepted Tender Bid ($ per tonne) – Wheat		n/a	-$18.58	-$24.51	-$23.78	-$21.58	-	-	-$21.58	1.4%	▲
2A-19	Maximum Accepted Tender Bid ($ per tonne) – Durum		n/a	-$18.05	-$21.56	-$10.52	-$14.95	-	-	-$14.95	42.1%	▲
2A-20	Market Share (%) – CWB Grains – Major Grain Companies		n/a	76.1%	75.6%	74.3%	76.3%	-	-	76.3%	1.9%	▲
2A-20	Market Share (%) – CWB Grains – Non-Major Grain Companies		n/a	23.9%	24.4%	25.7%	23.7%	-	-	23.7%	-5.6%	▼
	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%	-	-	10.2%	37.8%	▲
2B-1	Advance Award Movements (000 tonnes) – Grain		n/a	2,365.1	2,362.9	1,831.0	303.8	-	-	310.3	-2.1%	▼
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	-	-	12.9	13.2%	▲
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	52.0	-	-	52.0	-2.3%	▼

(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 as 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 – First Quarter 2008-09 Crop Year

Trucking

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

Country Elevators

- *First quarter throughput decreased by 12.1% to 8.3 million tonnes.*
  - *Strong canola export program tempered effects of weaker CWB program.*
- *The average elevator capacity turnover ratio decreased 11.1% to 1.6 turns over the same period last year.*
  - *Reflected effects of decreased throughput.*
- *Average inventory level decreased by 8.8% to 2.6 million tonnes.*
- *Average number of days-in-store increased by 1.4% to 29.6 days.*
- *Average weekly stock-to-shipment ratio increased by 2.4% to 4.2 for the first quarter.*
- *Average posted tariff rates for elevation increased by 4.4% in the first quarter.*

Rail Operations

- *Average car cycle increased by 2.5% to 15.3 days during the first quarter of the crop year.*
  - *Slight elongation in underlying empty and loaded transit time averages.*
    - *Average empty transit time increased 1.3% to 7.8 days.*
    - *Average loaded transit time increased 2.7% to 7.5 days.*
- *Proportion of grain moving under incentive programs decreased to 72.8% from 76.7% in the 2007-08 crop year.*
- *Railway incentive payments estimated to have decreased by 18.1% to $23.1 million in the first quarter.*
  - *Reflected decrease in tonnage.*
- *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 by19.9%.*
  - *CN extended the rates in place at the end of the 2007-08 crop year until October 2008.*
    - *Only westbound shipments were increased.*
    - *Vancouver – up by 7.3%; Prince Rupert – up by 9.8%.*
    - *Preferential pricing on shipments to Prince Rupert narrowed marginally.*

Terminal Elevators and Port Performance

- *Terminal throughput decreased by 21.5% to 5.6 million tonnes during the first quarter.*
- *190 vessels loaded at western Canadian ports during the first three months of the crop year.*
  - *Average time in port decreased 32.6% to 3.1 days.*
- *Average posted tariff rates for elevator handling and storage increased by up to 1.6% in the first quarter.*

Indicator Series 3 – System Efficiency

Table	Indicator Description	Notes	1999-00	2005-06	2006-07	2007-08	2008-09 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	-	-		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	-	-	8,270.9	-12.1%	▼
3B-2	Average Elevator Capacity Turnover Ratio	(1)	4.8	6.2	6.5	6.0	1.6	-	-	1.6	-11.1%	▼
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	-	-	2,608.8	-8.8%	▼
3B-4	Average Days-in-Store (days)	(1)	41.7	30.1	30.7	31.1	29.6	-	-	29.6	1.4%	▲
3B-5	Average Weekly Stock-to-Shipment Ratio – Grain	(1)	6.2	4.3	4.5	4.5	4.2	-	-	4.2	2.4%	▲
3B-6	Average Handling Charges – Country Delivery Points	(3)										
	Rail Operations [Subseries 3C]											
3C-1	Hopper Car Grain Volumes (000 tonnes) – Province	(1)										
3C-2	Hopper Car Grain Volumes (000 tonnes) – Primary Commodities	(1)	25,662.3	24,720.8	23,736.9	22,084.0	5,775.1	-	-	5,775.1	-18.8%	▼
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	-	-	7.8	1.3%	▲
3C-4	Railway Car Cycle (days) – Loaded Transit Time	(1)	9.2	8.6	8.2	8.0	7.5	-	-	7.5	2.7%	▲
3C-4	Railway Car Cycle (days) – Total Transit Time	(1)	19.9	17.3	16.8	15.9	15.3	-	-	15.3	2.5%	▲
3C-5	Railway Car Cycle (days) – Non-Special Crops	(1)	19.3	17.2	16.6	15.7	15.2	-	-	15.2	3.3%	▲
3C-6	Railway Car Cycle (days) – Special Crops	(1)	25.8	19.5	20.0	18.1	16.3	-	-	16.3	-4.0%	▼
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	1,571.2	-	-	1,571.2	-16.5%	▼
3C-8	Hopper Car Grain Volumes (000 tonnes) – Incentive	(1)	12,945.5	18,682.9	17,848.4	16,934.5	4,203.9	-	-	4,203.9	-19.7%	▼
3C-9	Hopper Car Grain Volumes ($ millions) – Incentive Discount Value	(1)	$31.1	$89.9	$96.5	$93.3	$23.1	-	-	$23.1	-18.1%	▼
3C-10	Traffic Density (tonnes per route mile) – Grain-Dependent Network	(1)	442.5	439.0	418.0	427.5	461.8	-	-	461.8	-9.6%	▼
3C-10	Traffic Density (tonnes per route mile) – Non-Grain-Dependent Network	(1)	292.4	297.8	291.5	269.3	287.0	-	-	287.0	-17.8%	▼
3C-10	Traffic Density (tonnes per route mile) – Total Network	(1)	330.3	330.5	320.1	303.1	322.2	-	-	322.2	-16.4%	▼
3C-11	Composite Freight Rates ($ 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	$30.46	n/a	n/a	n/a		n/a	–
	Terminal Elevator and Port Performance [Subseries 3D]											
3D-1	Annual Port Throughput (000 tonnes) – Grain	(1)	23,555.5	23,722.7	22,823.9	22,026.4	5,603.3	-	-	5,603.3	-21.5%	▼
3D-2	Average Terminal Elevator Capacity Turnover Ratio	(1)(5)	9.1	8.7	8.3	8.5	n/a	n/a	n/a		n/a	–
3D-3	Average Weekly Terminal Elevator Stock Level (000 tonnes)	(1)	1,216.2	1,281.7	1,385.3	1,432.7	1,386.8	-	-	1,386.8	-1.7%	▼
3D-4	Average Days-in-Store – Operating Season (days)	(1)	18.6	17.9	19.2	21.0	23.2	-	-	23.2	18.4%	▲
3D-5	Average Weekly Stock-to-Shipment Ratio – Grain	(1)(3)										
3D-6	Average Weekly Stock-to-Shipment Ratio – Grade	(1)(3)										
3D-7	Average Vessel Time in Port (days)	(1)	4.3	4.8	5.3	5.0	3.1	-	-	3.1	-32.6%	▼
3D-8	Distribution of Vessel Time in Port	(1)(3)										
3D-9	Distribution of Berths per Vessel	(1)(3)										
3D-10	Annual Demurrage Costs ($millions)	(5)	$7.6	$6.7	$15.1	$23.3	n/a	n/a	n/a		n/a	–
3D-10	Annual Dispatch Earnings ($millions)	(5)	$14.5	$15.2	$24.6	$29.3	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 as 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 as 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 2007-08 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 indeed 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 – First Quarter 2008-09 Crop Year

Port Performance

- *Average weekly stock-to-vessel-requirements ratios posted mixed results for the first quarter of the 2007-08 crop year.*
  - *Vancouver*
    - *Wheat – 3.5 for the first three months of the 2008-09 crop year, up by 6.5%.*
    - *Canola – 3.3, up by 0.4%.*
  - *Thunder Bay*
    - *Wheat – 5.6 for the first three months of the 2008-09 crop year, down by 17.4%.*
    - *Canola – 6.5, down by 13.5%.*
  - *Indicates that grain inventories were 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 – 3.3 for the first three months of the 2008-09 crop year, up by 15.7%.*
    - *Non-CWB grains – 2.8, up by 0.8%.*
  - *Thunder Bay*
    - *CWB grains – 4.4 for the first three months of the 2008-09 crop year; down by 15.7%.*
    - *Non-CWB grains – 5.5, up by 5.4%.*

Indicator Series 4 – Service Reliability

Table	Indicator Description	Notes	1999-00	2005-06	2006-07	2007-08	2008-09 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	-	-	3.5	6.5%	▲
4A-1	Avg. Weekly Stock-to-Vessel Requirements Ratio – VCR – Canola	(1)	2.5	2.3	2.8	3.7	3.3	-	-	3.3	0.4%	▲
4A-1	Avg. Weekly Stock-to-Vessel Requirements Ratio – TBY – Wheat	(1)	5.6	6.6	7.0	5.0	5.6	-	-	5.6	-17.4%	▼
4A-1	Avg. Weekly Stock-to-Vessel Requirements Ratio – TBY – Canola	(1)	2.8	4.4	5.3	8.3	6.5	-	-	6.5	-13.5%	▼
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	-	-	3.3	15.7%	▲
4A-3	Avg. Weekly Stock-to-Shipment Ratio – VCR – Non-CWB Grains	(1)	3.6	3.2	3.6	3.6	2.8	-	-	2.8	0.8%	▲
4A-3	Avg. Weekly Stock-to-Shipment Ratio – TBY – CWB Grains	(1)	4.6	6.8	6.2	5.2	4.4	-	-	4.4	-15.7%	▼
4A-3	Avg. Weekly Stock-to-Shipment Ratio – TBY – Non-CWB Grains	(1)	3.3	3.6	4.4	5.7	5.5	-	-	5.5	5.4%	▲
4A-4	Terminal Handling Revenue ($millions) – Vancouver	(1)(3)	$192.7	$225.5	$202.9	$238.7	n/a	n/a	n/a		n/a	–
4A-4	Terminal Handling Revenue ($millions) – Thunder Bay	(1)(3)	$82.1	$86.9	$83.5	$81.2	n/a	n/a	n/a		n/a	–
4A-4	CWB Carrying Costs ($millions) – Pacific Seaboard	(1)(3)	$63.3	$95.4	$93.9	$77.4	n/a	n/a	n/a		n/a	–
4A-4	CWB Carrying Costs ($millions) – Thunder Bay	(1)(3)	$31.3	$38.5	$35.9	$37.6	n/a	n/a	n/a		n/a	–

(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 as 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 – First 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 first 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 in the fall of 2008.*
- *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 – up by range of from 8.0% for Thunder Bay to 20.0% for shipments to Vancouver from most origin.*
    - *No change from those in place at the end of the previous crop year at Churchill.*
  - *Terminal elevator handling – up by as much as 1.6% for elevation.*
- *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 $423.28 per tonne for the first quarter of the 2008-09 crop year.*
    - *Represented a 24.0% decrease 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 – up by range of from 8.0% for Thunder Bay to 20.0% for shipments to Vancouver from most origin.*
    - *No change from those in place at the end of the previous crop year at Churchill.*
  - *Terminal elevator handling – up by as much as 1.6% for elevation.*
- *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 2.6% to 2,459 railcars in the first quarter.*

Indicator Series 5 – Producer Impact

Table	Indicator Description	Notes	1999-00	2005-06	2006-07	2007-08	2008-09 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	-	-		0.0%	–
5B-1	Producer-Car-Loading Sites (number) – Class 2 and 3 Carriers	(2)	122	129	106	108	108	-	-		0.0%	–
5B-1	Producer-Car-Loading Sites (number) – All Carriers	(2)	537	483	474	454	454	-	-		0.0%	–
5B-2	Producer-Car Shipments (number) – Covered Hopper Cars	(1)	3,441	11,345	12,529	10,729	2,459	-	-	2,459	2.6%	▲

(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 as 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 as 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.

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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: 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.[43] 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.

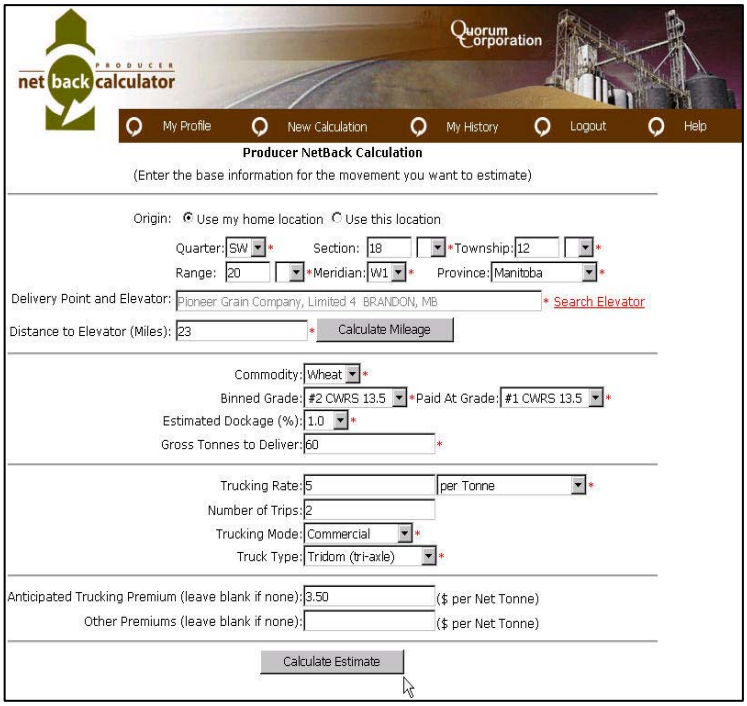

Figure A1: An image of the input screen for Quorum Corporation's Netback Calculator.

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.).

[43] 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.

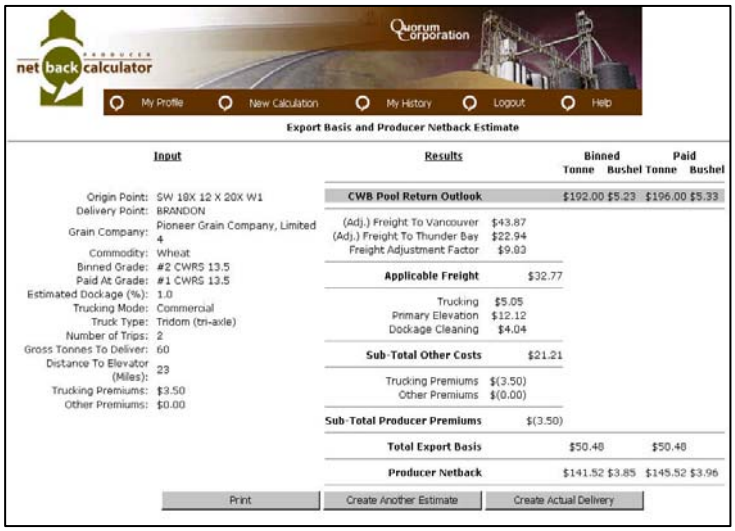

Figure A2: An image of the output screen for Quorum Corporation's Netback Calculator.

Appendix 3: Acknowledgements

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

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