



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

## 1: Summary Report



Government of Canada  
Gouvernement du Canada





## **Foreword**

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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 nine-month period ended 30 April 2009. In addition to providing a current accounting of the indicators maintained under the GMP, it also outlines the trends and issues manifest in the movement of western Canadian grain during the first three quarters 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](http://www.quorumcorp.net)).

**QUORUM CORPORATION**  
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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. Even though global grain prices remained higher than those posted a decade earlier under the GMP, they fell sharply from the record levels witnessed just a year earlier. Although much of this was due to the general improvement in grain supplies occasioned by the recent end of drought conditions in both Australia and Ukraine, grain prices could not escape the downward pressure occasioned by the financial crisis that gripped the world in the latter half of 2008.

## 1.0 Industry Overview

### 1.1 Grain Production and Supply

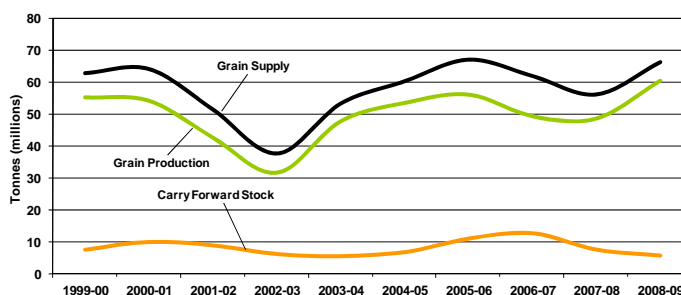
Overall grain production for the 2008-09 crop year climbed to 60.4 million tonnes, an increase of 24.4% from the previous crop year's 48.5 million tonnes. This marked the first increase in production following two consecutive years of decline. Moreover, the crop proved to be the largest yet witnessed under the GMP, exceeding the previous production record of 56.0 million tonnes set in the 2005-06 crop year by a comfortable 7.8%. Gains were noted in the output of all major crops save that of oats. Wheat, durum and canola accounted for the majority of the crops harvested, representing 20.0 million tonnes (up 35.8%), 5.5 million tonnes (up 49.9%), and 12.6 million tonnes (up 32.5%) respectively. In equal measure, special crop production also rose appreciably, increasing by 17.1% to 5.2 million tonnes.

Grain production in all provinces, save that of British Columbia, saw significant year-over-year increases in the 2008-09 crop year. Primary production in Alberta, Manitoba and Saskatchewan yielded expansions of 18.4%, 26.3% and 25.5% respectively.<sup>1</sup> In keeping with this, the overall grain supply grew by 17.9%, climbing to 66.0 million tonnes from 56.0 million tonnes a year earlier.

Notwithstanding the broader increase, the overall grain supply was contained by a 24.2% decrease in the amount of stocks carried forward from the preceding crop year, which fell to 5.6 million tonnes from the 7.5 million tonnes that had been stockpiled a year earlier. This proved to be the second smallest carryover witnessed under the GMP. Much of the impetus for the drawdown had come from prevailing market conditions in the 2007-08 crop year, which was characterized by strong demand as well as heightened commodity prices.

Despite the increase in Canada's grain supply, better global grain supplies and heightened competition from foreign suppliers resulted in a decrease the GHTS's handlings in the first and second quarters of the 2008-09 crop year. The cautious approach taken by international grain buyers in the face of that autumn's mounting economic worries also had an impact. Total railway shipments in the first quarter fell by a factor of 19.2% from that posted in the same period a year earlier. The story was much the same in the second quarter, although the decline in volume proved to be a more moderate 8.6%. By the end of the first half, cumulative railway shipments had fallen by 14.4%.<sup>2</sup>

Figure 1: Western Canadian Grain Supply



<sup>1</sup> Production in British Columbia declined by 25.3% to 155,900 tonnes.

<sup>2</sup> The decline in traffic recorded during this period proved to be the third steepest in the GMP's history, and was rivaled only by the drought-induced reductions posted in the 2001-02 and 2002-03 crop years.



However, volumes rebounded sharply in the third quarter, climbing by 45.1% to a record-setting 7.2 million tonnes for the period.<sup>3</sup> This served to counteract the weaker performances noted in the first and second quarters, and push the cumulative volume handled in the first nine months of the 2008-09 crop year to 18.5 million tonnes. This constituted a marginal gain of 1.7% over the 18.2 million tonnes handled in the same period a year earlier. Much of this surge could be traced to particularly heavy shipments of wheat and canola, which posted third-quarter increases of 60.6% and 61.8% respectively. It is worth noting that the heightened demand for canola also helped raise its year-to-date volume to a GMP record of 5.3 million tonnes.<sup>4</sup>

Save for wheat, canola and peas, all other commodities posted volume reductions for the first nine months of the current crop year. Among the more significant of these were the declines noted for durum and barley, which fell by 30.5% and 57.7% respectively. Third-quarter shipments of special crops also swelled substantially, climbing by 90.3% to 1.0 million tonnes. This gain proved more than sufficient to offset the weaker results posted in the first half and to raise the year-to-date volume on such shipments to 2.3 million tonnes, some 3.0% above the 2.2 million tonnes moved a year earlier.

## 1.2 Country Elevator Infrastructure

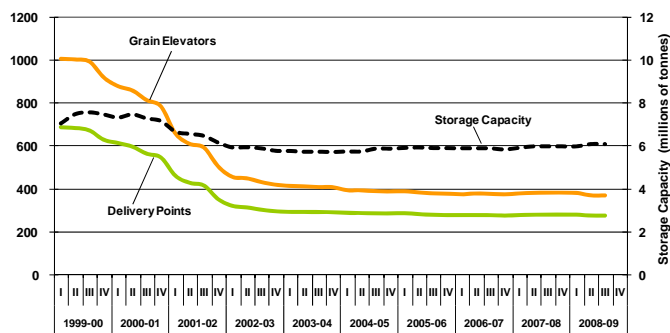
As outlined in the Monitor's previous reports, although the country elevator network has diminished dramatically in size since the beginning of the GMP, the pace of that reduction has abated significantly in recent years. The second quarter of the 2008-09 crop year produced the first change in the scope of this network in over a year, with a total of 12 licensed elevators having been removed from the system. This represented a 3.2% reduction from the 378 facilities in place at the end of the preceding crop year. As a result, by the end of January 2009 the network encompassed a total of 366 elevators, marking a 63.5% net reduction from the 1,004 elevators that were in place at the beginning of the GMP. The third quarter produced no further changes.

The decline in elevator facilities has largely been accompanied by a parallel reduction in the number of grain delivery points at which these elevators were located. The elevator reductions posted in the first nine months of the 2008-09 crop year had a corresponding impact on the number of surviving grain delivery points, which fell by 1.4% to 272.

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

When contrasted with the decline in the number of elevators and delivery points, the reduction in associated storage capacity has not proven nearly as pronounced. Moreover, it reflects the rate at which the storage capacity of high-throughput facilities has replaced that of smaller elevators. As such, even though licensed

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



<sup>3</sup> The GMP's previous record for third-quarter volume was set in the 1999-2000 crop year, when 6.4 million tonnes of grain were moved by rail. The 7.2 million tonnes handled in the third quarter of the current crop year represents an 11.8% gain over the previous record.

<sup>4</sup> Although demand from traditional customers such as Japan and Mexico was maintained, it was the return of China, with an objective of building oilseed stocks, that propelled canola shipments to record levels. Exports to China reached 1.9 million tonnes by the end of the third quarter, displacing Japan as the largest customer for Canadian canola.

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



storage capacity declined from 7.0 million tonnes to 6.0 million tonnes over the course of the first nine years of the GMP, this reduction amounted to just 15.3%. Moreover, total storage capacity has been increasing modestly since the 2003-04 crop year, with another 106,500 tonnes having been added to the system in the current crop year. This had the effect of increasing the system's overall storage capacity by 1.8%, to a total of almost 6.1 million tonnes.

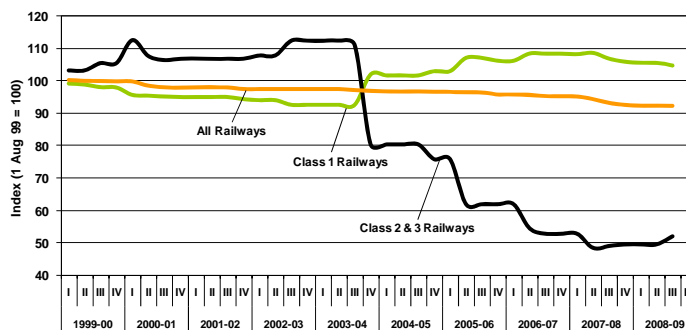
These changes provide a clear indication of the evolution that has been taking place within the industry since the beginning of the GMP. Although the elevator network as it is currently constituted encompasses significantly fewer facilities than it did a decade earlier, those that remain have greater storage capacities and are more likely 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 third quarter that proportion had risen to a significantly greater 50.5%.

### 1.3 Railway Infrastructure

In comparison to the elevator network, total railway infrastructure in western Canada has changed only modestly since the beginning of the GMP. By the end of the 2007-08 crop year the network's scope had been reduced by just 7.7%, to a total of 17,978.0 route-miles of track. Although 87.0% of this 1,490.2-route-mile reduction was derived from the abandonment of grain-dependent branch lines, there were significant changes in the makeup of the system that remained. Much of this stemmed from the transfer by CN and CP of various branch line operations to a host of new shortline railways; a process that began in the mid 1990s. Although this was but one element in a wider industry restructuring, it resulted in slightly more than one-quarter of the railway network being operated by smaller regional and shortline carriers.

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

Figure 3: Relative Change in Railway Infrastructure



Despite their best efforts, most shortline railways were simply unable to reshape the economics that gave rise to the elevator rationalization activities of the grain industry as a whole. Although there have been some noteworthy successes in attracting new business, much of which has been tied to increased producer-car loading, these carriers have largely been unable to compensate for the continued closure of small local elevators. And while the number of licensed elevators served by shortline railways actually increased by five in the first nine months of the current crop year, the net reduction posted since the beginning of the GMP stands at 76.8%, with just 19 such facilities remaining. In comparison, the Class 1 carriers have witnessed a somewhat lesser 63.3% reduction. More telling, however, has been the decline in the associated storage capacities of these two elevator systems, with that served by the shortline railways falling by 74.8% in the face of just a 9.1% reduction for CN and CP. As a consequence, shortline railway volumes have largely been on the

<sup>6</sup> 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.

decline. In fact, the volume of traffic originated by these carriers fell by 19.1% in the first nine months of the 2008-09 crop year while that of the Class 1 carriers increased by 3.1%.

This does not mean that the transfer of branch lines to shortline operators has ceased to be an option for either of the major railways. To be sure, the third quarter saw the official opening of yet another shortline railway in western Canada. In March 2009 the Great Sandhills Railway formally assumed operations from CP on a Saskatchewan branch line that the carrier had previously earmarked for discontinuance.<sup>7</sup> Although traffic along the line between Swift Current and Burstall had been declining for a number of years, the continuation of rail service was deemed to be a commercial necessity for the Great Sandhills Terminal, which has operated a local high-throughput elevator near Leader, Saskatchewan, since 1995. Given this, the company entered into an agreement with CP to acquire and operate the line largely out of its own self interest.<sup>8</sup> The transfer of this line effectively increased the span of the shortline network by 0.5%, to 2,411.3 route-miles in total.

A further 59.3 route miles of infrastructure was removed from the railway system in the first nine months of the 2008-09 crop year, much of which related to the pruning of portions of CN's Saskatchewan-based Matador Subdivision (29.7 route-miles) and White Bear Subdivision (23.5 route-miles) in the first quarter. An additional 6.1 route miles were removed from the system in the third quarter when CN effectively abandoned what remained of its former Stettler subdivision in Alberta.<sup>9</sup> These served to reduce the overall network by just 0.3% to 17,918.7 route-miles. At the time, CN and CP's network plans indicated that another 850 route-miles of railway infrastructure, somewhat less than 5% of that remaining in western Canada, were still being targeted for discontinuance.

#### 1.4 Terminal Elevator Infrastructure

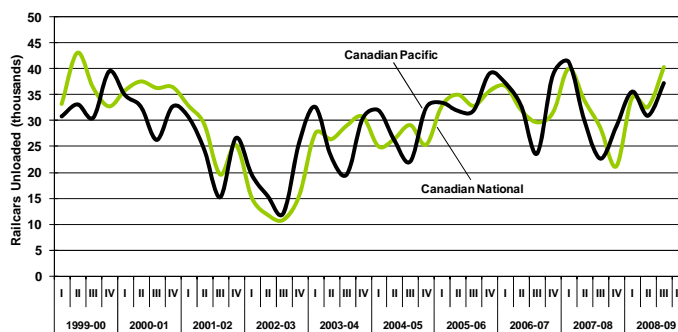
No changes to the licensed terminal elevator network in western Canada were recorded during the first nine months of the 2008-09 crop year. At the close of the period, the network comprised a total of 15 facilities with an associated storage capacity of 2.5 million tonnes.

A total of 210,231 carloads of grain were unloaded at these facilities during the first nine months of the 2008-09 crop year. This represented an increase of 7.5% from the 195,481 handled during the same period a year earlier. Having originated 50.9% of the cars that were unloaded during this period, CN marginally nudged

out CP as the largest handler of export grain in western Canada. The year-to-date result was largely due to the carrier's stronger showing in the second and third quarters. Even so, CN's share proved to be 1.3 percentage points lower than the 52.2% it had secured in the first nine months of the previous crop year.

Despite significant variation in the volume of grain handled in any particular quarter, the shares garnered by CN and CP have remained remarkably balanced over the course of the last decade. In effect, each carrier has moved about half of the grain shipped to the four ports in western Canada. To be sure, while the more recent

Figure 4: Terminal Elevator Unloads – Railway Carrier



<sup>7</sup> Extending over a distance of 116.3 route-miles, the line encompassed what remained of CP's Burstall and Empress subdivisions.

<sup>8</sup> The Great Sandhills Railway (GSR) was established as a subsidiary of Great Sandhills Terminal. Funding for the \$6.3-million transaction was secured through the issuance of additional equity in the company along with a \$1.9-million interest-free loan from the Government of Saskatchewan. In addition to its parent, the GSR also provides rail service to several locally situated grain elevators, producer-car loading sites and other customers.

<sup>9</sup> CN's Stettler subdivision had been sold to the Central Western Railway in 1986. Although much of the line was abandoned in the years that followed, RailAmerica sold what little remained of the CWR back to CN in January 2006. The section abandoned in February 2009, which had effectively been downgraded to a spur off of CN's Drumheller subdivision, extended from Dinosaur Junction to Morrin. In late 2008 CN added much of its Drumheller subdivision to the list of discontinuance candidates under its Three Year Network Plan.

quarterly data often suggested that CP movements were being favoured over those with CN, a broader time horizon generally provided for a tempering of these results. Even when the distribution in crop production tended to favour movement from the southern prairie, the record shows that CP has seldom been able to sustain a significant advantage over its primary competitor. Moreover, since the 2003-04 crop year this advantage has actually alternated between the carriers themselves, and never deviated materially from an almost even division of the traffic base.<sup>10</sup>

Notwithstanding this, there have been observable changes in the volumes accorded to each carrier in specific corridors. Much of this appears to have come from CN's efforts to promote its Prince Rupert gateway through reduced freight rates and a better allocation of cars to that corridor. As a result of this, the composition of CN's west coast handlings has shifted over the course of the past five years, with Prince Rupert taking a noticeably larger share of the carrier's total volume. In comparison, CN's handlings into Vancouver have declined against those of CP, with the latter carrier remaining the most dominant in that corridor.<sup>11</sup> CP's dominance in the Thunder Bay corridor has also remained unchallenged.

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<sup>10</sup> In the 1999-2000 through 2001-02 crop years, CN enjoyed no less than a four-percentage-point advantage in market share over CP. Owing to that year's drought, CN's overall market share in the 2002-03 crop year fell to its lowest level under the GMP, 42.2%. Since that time, the annual market shares accorded to both CN and CP have hovered between 48% and 52%, with the largest share alternately passing from one to the other.

<sup>11</sup> CN's share of the overall volume moving into Vancouver has declined steadily since the 2003-04 crop year, falling from 47.7% to 38.7% in the 2007-08 crop year. The 41.3% share garnered by CN in this corridor during the first nine months of the 2008-09 crop year denoted the first significant upturn in the carrier's handlings in several years.

## 2.0 Commercial Relations

### 2.1 Tendering Program

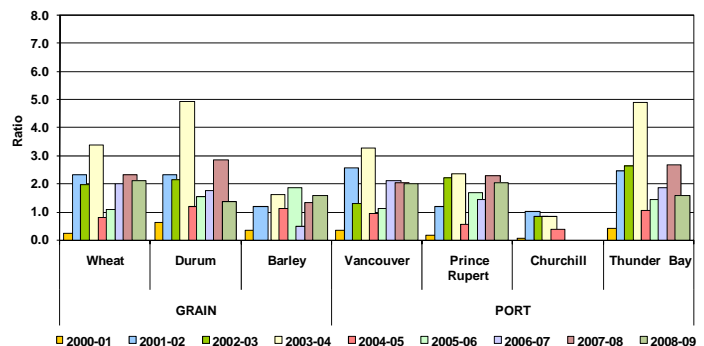
Owing to the changes brought forth in the 2003-04 crop year, the CWB continues to target a fixed 40% of its overall grain movements to the four ports in western Canada using a combination of tendering and advance car awards. Under the terms of the arrangement it has with its agents, the CWB is expected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

During the first nine months of the 2008-09 crop year the CWB issued a total of 210 tenders calling for the movement of 2.5 million tonnes of grain. This marked a 58.2% increase over the 1.6 million tonnes put out for tender in the first three quarters of the preceding crop year. As in most crop years, the largest portion of this tonnage, 71.5%, related to the movement of wheat.<sup>12</sup> The remainder was split between barley and durum, which respectively accounted for 18.9% and 9.5% of the overall total.

Once again, Prince Rupert was the designated gateway for most of the grain put out for tender in the first nine months of the current crop year. With 48.9% of the tonnage called having specified delivery there, Prince Rupert's share rose easily above the 42.5% it had garnered in the same period a year earlier. The proportion given over to Vancouver trailed noticeably, securing 29.5% of the tonnage called. Although this proved well below the proportion given over to the port in earlier years, it was little changed from the previous year's 29.9% share.<sup>13</sup> Thunder Bay saw its allocation fall to 21.6% from 27.5% twelve months before. For a fourth consecutive year, no tenders calling for the delivery of grain to Churchill were issued during this period.

The calls issued by the CWB were met by 719 tender bids offering to move an aggregated 4.8 million tonnes of grain, nearly twice the volume sought. The intensity of this bidding, as gauged by the ratio of tonnage-bid to tonnage-called, proved somewhat less than that exhibited in the previous crop year. For the most part, these response rates were more muted. Durum showed a steep relative decline in the response rates among individual grains, with its ratio having fallen by 51.7%, to 1.4 versus 2.9 for the previous crop year as a whole. The response rate for wheat also declined, albeit by a much lesser 9.5%, to 2.1 from 2.3 in the 2007-08 crop year. Only barley showed a marked rise in bidding activity, with a 17.4% increase lifting its response rate to 1.6 from the 1.3 recorded the year previous.

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



Decreased response rates for the port specified in the tender calls were also in evidence. In particular, the ratio associated with grain intended for delivery at Thunder Bay declined by 41.1%, to 1.6 for the first nine months as compared to a ratio of 2.7 for the previous crop year as a whole. The ratios for Vancouver and Prince Rupert also fell, but much less significantly, and with each producing a value of 2.0.<sup>14</sup>

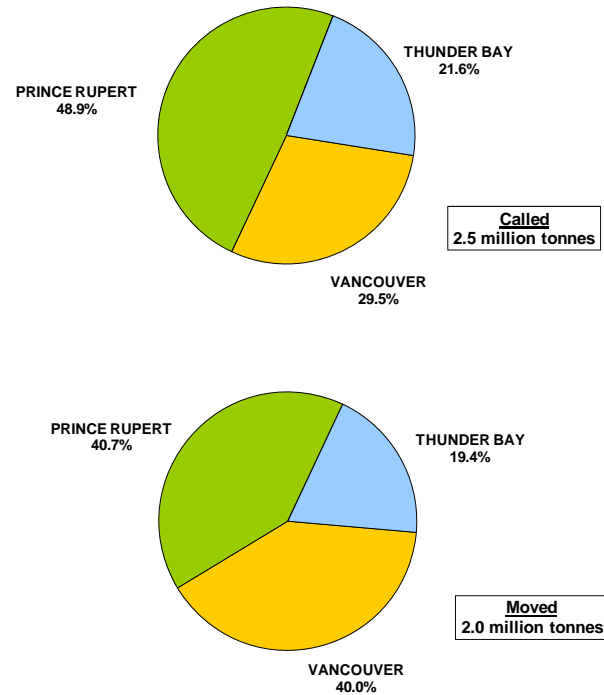
<sup>12</sup> Since the inception of the CWB's tendering program, wheat has always comprised the largest proportion of the tonnage put out for tender in any given crop year. However, there have been instances where the quarterly volumes have favoured other commodities. Such was the case in the first quarter of the 2005-06 crop year when, owing to a sizable short-term sales opportunity, tenders issued in favour of barley easily displaced those put out for wheat.

<sup>13</sup> 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.

<sup>14</sup> With no tender calls having been issued for Churchill, the ratio of tonnage-bid to tonnage-called remained at zero.

In many ways the overall size of the CWB grain movement served to dampen the response rates on tendered grain. This was reflected in the proportion of tender calls that went unfilled, which rose to 30.3% in the first nine months as compared to 11.0% for the 2007-08 crop year as a whole. Even so, a closer examination of the data reveals that over half of the unfilled volume, 56.1%, was tied to tender calls issued in favour of Prince Rupert. Moreover, the port's unfilled proportion, 34.8%, proved to be noticeably greater than those for either Vancouver or Thunder Bay, which stood at 25.0% and 27.5% respectively.<sup>15</sup>

Figure 6: Tendered Grain – Cumulative Volume to 30 April 2009



As noted in previous reports, the skewed nature of these results seemed to reflect the disinclination of those grain companies having terminal facilities in Vancouver to bid as aggressively on tenders issued in favour of Prince Rupert.<sup>16</sup> To be sure, the maximum discounts advanced on wheat tenders in the 2007-08 crop year favoured Vancouver by as much as \$9.15 per tonne.<sup>17</sup> But while this remained much the case in the first quarter of the 2008-09 crop year, the differential soon began to diminish. In fact, by the end of the third quarter the differential had shifted to the point where it actually favoured Prince Rupert by as much as \$0.39 per tonne.

Much of the impetus for this appeared tied to a significant change in overall market conditions, which produced an unusually heavy movement of CWB as well as non-CWB grains in the third quarter. The demands placed on the GHTS around this period meant that the grain companies were less inclined to offer the discounts that had prevailed the previous year. In fact, there was a progressive reduction in the value of all bids put forward during this period. By way of example, the maximum discount for wheat was halved in the first nine months of the 2008-09 crop year, falling from \$23.01 per tonne in the first quarter to \$11.15 per tonne in the third. The decline associated with durum shipments proved even more dramatic, falling from a high of \$14.95 per tonne to just \$0.53 per tonne over the same period of time.<sup>18</sup> There were no instances where the CWB was required to pay a premium for tendered grain movements.<sup>19</sup>

<sup>15</sup> 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.

<sup>16</sup> Shareholders of the Prince Rupert Grain facility all hold a larger stake in facilities in Vancouver, which provides them with an incentive to give preference to a Vancouver routing where they do not have to share terminal revenues. Some shareholders are also concerned with the lack of a competitive alternative to the single-carrier service provided by CN into Prince Rupert.

<sup>17</sup> The tender bids advanced by the grain companies are typically expressed as a discount to the CWB's Initial Payment.

<sup>18</sup> The maximum discounts recorded for the 2007-08 crop year amounted to \$23.78 per tonne on wheat, and \$10.52 per tonne on durum.

<sup>19</sup> In the 2007-08 and 2006-07 crop year, the CWB was required to pay premiums of as much as \$7.00 and \$16.00 per tonne respectively on tendered movements of feed barley.

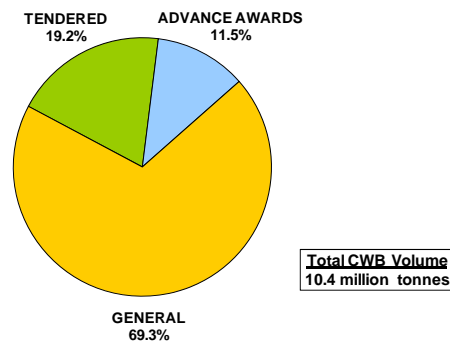
During the first nine months of the 2008-09 crop year, the CWB awarded a total of 282 contracts for the movement of 2.0 million tonnes of grain.<sup>20</sup> This represented an increase of 25.9% from the 1.6 million tonnes handled in the same period a year earlier. The largest proportion of the grain shipped, 40.7%, was sent to the port of Prince Rupert. Vancouver and Thunder Bay followed with shares of 40.0% and 19.4% respectively. Wheat accounted for 74.3% of the overall volume, 16.4% was barley and durum, 9.3%.

As previously observed by the Monitor, the vast majority of the grain moved under the CWB's tendering program was shipped in blocks of 25 or more railcars. For the first nine months of the 2008-09 crop year, 91.9% of the tendered grain volume moved in such blocks. This proportion proved to be somewhat greater than the 88.8% recorded for the 2007-08 crop year as a whole. Notwithstanding this, movements in blocks of 50 or more cars actually decreased during this period, falling to 63.4% from the previous crop year's 66.7% share. This was due in large part to an increase in movements incorporating blocks of 25-49 cars, which rose by 6.4 percentage points to take a 28.5% share.

High-throughput elevators remained the leading originators of tendered grain shipments. During the first nine months of the 2008-09 crop year, 98.7% 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 share yet given over to these facilities under the GMP.<sup>21</sup>

Owing to its strong placement in the second and third quarters, CN easily displaced CP as the largest handler of tendered grain in the first nine months of the 2008-09 crop year. With 56.7% of the volume, the carrier outdistanced the 43.3% share secured by CP. During this same period, CN also took the lion's share of tendered malting barley shipments, garnering 56.3% of the movement compared to CP's 43.7% share.<sup>22</sup>

**Figure 7: Western Canadian CWB Grain Volumes**



In aggregate, 19.2% of the CWB's total grain shipments moved under tender to western Canadian ports in the first nine months of the 2008-09 crop year. Even though the 2.0 million tonnes of tendered grain handled during this period proved 25.9% greater than that handled in the same period of the 2007-08 crop year, the CWB reported that its Transportation Savings had increased by only 5.8%, rising to \$23.8 million from \$22.5 million.<sup>23</sup> This result largely reflected the negative impact of the reduced discounts that began to take hold on the movement of tendered grain in the second quarter.

<sup>20</sup> The volumes cited as moving under the CWB's tendering program also include malting barley, although such movements are administered apart from other CWB grains.

<sup>21</sup> The 91.8% cited here for the 2007-08 crop year constituted the previous record for tendered grain movements from high-throughput facilities.

<sup>22</sup> Comparatively, CN generally originates a significantly greater amount of barley – whether tendered or non-tendered – than does CP. This extends somewhat naturally from the more northerly latitudes in which barley is grown, and in which CN operates.

<sup>23</sup> 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.



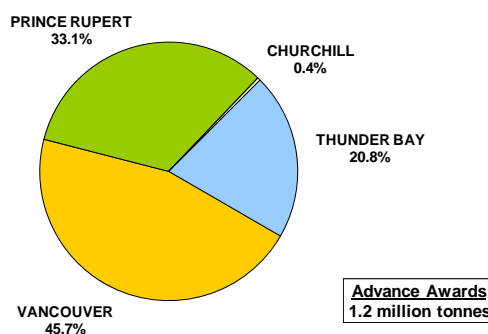
## 2.2 Advance Car Awards Program

The 2008-09 crop year marked the beginning of the sixth season for the CWB's advance car awards program, with 1.2 million tonnes of grain having moved under the program in the first three quarters. This constituted just 11.5% of the total volume shipped by the CWB during this period to the four ports in western Canada. Moreover, when considered alongside the 2.0 million tonnes of tendered grain already discussed, just 30.7% of the CWB's total grain shipments moved under the umbrella of these two programs.<sup>24</sup>

Despite periodic variations in volume, the grain shipped under the CWB's advance car awards program often reflects what moves under its tendering program. Compositionally, this was again the case in the first nine months of the current crop year, although no barley was actually shipped under the advanced car awards program. As a result, wheat and durum took modestly larger shares of the overall movement. Wheat, which continued to be the foremost grain handled, accounted for almost 1.1 million tonnes and 89.7% of the program's total volume. The remaining 10.3% was made up of another 0.1 million tonnes of durum.

Still, there were some differences worth noting. Among these was the fact that Vancouver still garnered the largest share, 45.7%, of the overall movement. This was followed in turn by Prince Rupert and Thunder Bay, which took shares of 33.1% and 20.8% respectively. As opposed to tendered grain shipments, where no movements to Churchill were recorded, a small portion of the tonnage moved under the advance car awards program, albeit just 0.4% of the overall total, was directed to this port.

Figure 8: Advance Car Awards – Destination Port



Another contrast related to the fact that CP handled the majority of the grain moved under the advance car awards program, with the carrier taking a 61.4% share as compared to its 43.3% share on tendered grain. The car cycle attributable to advance-car-awards movements proved somewhat longer than that of tendered grain, with nine-month averages of 12.5 days as compared to 11.8 days respectively. One area where the differences proved minimal related to originations at high-throughput elevators. Like tendered grain, the vast majority of the tonnage moved under the advance car awards program, 95.4%, originated at such facilities. This proved only marginally less than the 98.7% share cited earlier for tendered grain shipments.

Still, when compared to tendered shipments, a significantly lesser volume of the grain shipped under the advance car awards program moved in blocks of 25 or more cars. This is because the cars allocated to shippers under the advance car awards program are often integrated with those obtained through the tendering program as a means of optimizing individual block or train movements. As such, this practice effectively dilutes the values that are obtained for the aggregate volume moved under the two programs. By way of example, 86.3% of this total volume moved in blocks of 25 or more railcars compared to 98.7% for tendered grain alone. Similarly, the average overall size of these blocks amounted to 54.4 cars versus an average of 61.2 cars for tendered grain.

<sup>24</sup> Since the 2003-04 crop year, the CWB has targeted to move 40% of the grain it ships to the four ports in western Canada using a combination of tendering and advance car awards.



## 2.3 Other Commercial Developments

### 2.31 Grain Industry Continues to Seek Redress on Railway Service Issues

Stakeholder complaints over railway service and car allocation have increased steadily over the course of the past few 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 fire from shippers who argued that they were being shortchanged by the preference given to unit trains ordered through the railways' advance products.

These issues initially came to a head when 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.<sup>25</sup>

In July 2007, the Agency determined that CN's car allocation practices had resulted in a significant deterioration in the service provided to GNG. Moreover, it found that CN had in fact breached its common carrier obligations and that GNG would likely suffer substantial commercial harm if the breach went unchecked.<sup>26</sup> 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.<sup>27</sup>

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

In 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.<sup>28</sup> Each alleged that the carrier was still failing to provide them with adequate rail service owing to what they perceived to be the inherent failings of the car allocation process. In arguments that largely paralleled those put forward by GNG six months before, it was asserted that CN's advance products were still discriminatory and ultimately hindered the efficient movement of grain. More specifically, it was alleged that owing to the inherent preference given by CN in allocating cars to shippers capable of guaranteeing 100-car train movements over a consecutive 42-week period, smaller shippers were simply unable to get the cars that they needed for their own operations.<sup>29</sup>

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<sup>25</sup> In many ways the case acted as a lightning rod for a host of smaller shippers, with over 20 separate organizations having sought intervenor status in the case.

<sup>26</sup> See Canadian Transportation Agency Decision Number 344-R-2007, dated 6 July 2007.

<sup>27</sup> Ibid.

<sup>28</sup> There were in fact six separate complaints filed with the Canadian Transportation Agency on the issue of CN service. In addition to that filed by the Canadian Wheat Board, these included filings from North East Terminal Ltd., North West Terminal Ltd., Paterson Grain, Parrish & Heimbecker Limited, and Providence Grain Group Inc. All complainants were members of what had come to be known as the CARS Group, which was formed with the aim of sharing the cars allocated to them in the aftermath of the advance products introduced by CN. Since all six filings dealt with a similar complaint, the Agency chose to address the complaints collectively.

<sup>29</sup> 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

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.<sup>30</sup> Moreover, the Agency found that further harm was likely to be incurred if some 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. Concluding that it simply could not gauge the effects of these changes in the absence of the pertinent data, the Agency deferred its final decision until all of the requisite data could be assembled and analyzed.<sup>31</sup>

On 25 September 2008, the CTA finally 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 in the 2007-08 crop year.<sup>32</sup> Prescribing a remedy with performance-based standards, the Agency directed CN to ensure that these four grain companies henceforth received at least 80% of their weekly car orders.<sup>33</sup>

But complaints about the carrier's service were not to end there. In March 2009, Western Grain Trade Ltd. lodged a similar complaint with the CTA against the service it had been receiving from CN at its facility in Hamlin, Saskatchewan. As a processor and exporter of special crops, WGTL maintained that reliable and consistent rail service was essential to its commercial success. Moreover, the shipper alleged that the erratic service it was now receiving from CN had already undermined its business and caused it financial harm. The complainant indicated that it was ultimately seeking an order, consistent with the remedies previously advanced by the CTA in such matters, which would direct the carrier to provide service that better reflected the shipper's specific needs. A decision in the matter was not expected until the end of the 2008-09 crop year.

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

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

Following the adoption of this new declaration process, a long-standing concern with farmers inadvertently delivering wheat varieties that were no longer registered began to take on a new importance.<sup>34</sup> Although such

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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.

<sup>30</sup> 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.

<sup>31</sup> 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.

<sup>32</sup> 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. On 4 February 2009 the CWB, one of the two companies denied remedy under the CTA decision, filed an application appealing this decision to the Federal Court of Appeal, claiming that the CTA had erred by failing to take into account pertinent information from the 2007-08 crop year.

<sup>33</sup> The order further stipulated that 90% of the confirmed car orders were to be delivered either in the week requested or in the two that followed, and that CN's performance would be assessed on the basis of a 12-week rolling average.

<sup>34</sup> Under the *Canada Grain Act*, all wheat delivered into the licensed elevator system in western Canada must be of a type registered under the *Seeds Act* (administered by the Canadian Food Inspection Agency), otherwise it will be classified as feed

deliveries affected very little of the grain that entered the GHTS, the CGC and the Canadian Food Inspection Agency recognized that an enhanced notification system was needed in order to ensure that producers had the most current information available regarding registered varieties. Both organizations vowed to address the issues in the near future.

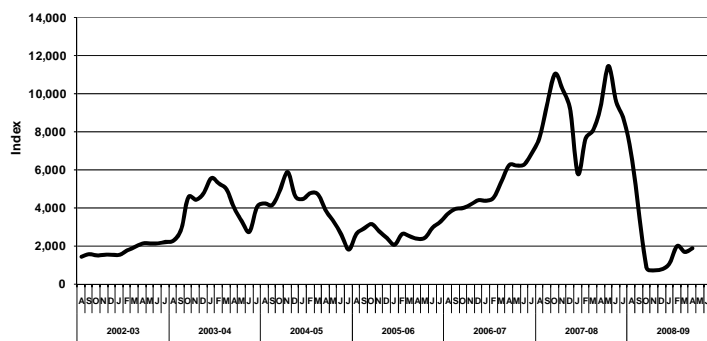
### 2.33 Ocean Freight Rates and Financial Turmoil

As discussed in previous editions of the Monitor's reports, ocean freight rates have fluctuated dramatically over the course of the last several crop years. From an initial value of about 1,400 points at the outset of the 2002-03 crop year, the Baltic Dry Index (BDI) moved sharply higher, peaking in the area of 6,000 points in both the 2003-04 and 2004-05 crop years.<sup>35</sup> However, ocean freight rates soon began to drift steadily lower, effectively bottoming out in the second quarter of the 2005-06 crop year at about 2,100 points. Still, this denoted the starting point in a more sustained price rally that witnessed the index climb to almost 6,900 points over the next six quarters.

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

The first quarter of the 2007-08 crop year saw ocean freight rates climb even more dramatically, with the BDI surging past the 11,000 point level for the first time in its history. But market volatility returned, and rates began to plummet, falling by a factor of almost 50% in the next three months. Even so, by early June 2008, the BDI had rebounded to another all-time high, coming within striking distance of 12,000 points. Just as was the case a year earlier, this too proved short-lived. By the close of the 2007-08 crop year the BDI had again shed almost a third of its value, falling to 8,600 points.

**Figure 9: Ocean Freight Rates – Baltic Dry Index**



But any resurgence in ocean freight rates that might have been anticipated in light of the previous market undulations outlined here was not evidenced in the first quarter of the 2008-09 crop year. Instead, ocean freight rates virtually collapsed. By the end of October 2008, the BDI had cast off another 7,800 points to stand at just over 850 points. To be sure, the index had fallen by an unprecedented 90% in the course of less than six months. This precipitous fall reflected a mounting financial crisis, which although rooted in the United States, was rapidly spreading around the world. In the face of an economic calamity that had not been seen in almost eighty years, the demand for consumer as well as industrial goods fell off sharply. The negative impact this had on the international ocean movement of raw materials, especially to China, produced an extraordinary

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wheat with a potential loss of up to a third of its value. The failure of some farmers to recognize that certain wheat varieties had been deregistered resulted in their deliveries being classified as feed wheat.

<sup>35</sup> 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.

build-up in excess shipping capacity. Ships that had previously been in high demand were being sidelined in large numbers as the bottom fell out of the charter market.

Much of this capacity had recently come online following ship-building programs initiated in response to the surge in ocean freight rates caused by China's economic expansion. This expansion was seen as the main driver in both the rise and unprecedented volatility of ocean shipping rates. With iron ore and coal needing about half of the shipping industry's dry bulk capacity, the increase in rates was being fuelled by a seemingly insatiable Chinese demand for these commodities.<sup>36</sup> Moreover, the periodic pricing standoffs that the Chinese were having with exporters of these commodities produced sharp demand swings that added to their instability.

The second quarter saw little improvement in the situation as nations around the world struggled to contain the spreading financial crisis. In a reflection of this the BDI continued to fall, ultimately dropping to less than 700 points before showing any signs of stabilizing. From the lows recorded in late 2008 the index crept modestly higher, climbing to about 1,100 points by the end of January 2009. Mounting investor confidence saw a further strengthening of the market in the third quarter, with the BDI rising to almost 2,300 points by mid March before pulling back to close out the period at just below 1,900 points.

As observed previously, ocean freight rates can have a 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. But the reverse is also true, with Canada's ability to compete often enhanced when ocean freight rates fall.

Although this was indeed the case in the 2008-09 crop year, the fear that rippled through the financial markets also undermined those for a host of other commodities. Steep declines in Canadian exports of coal, fertilizers and forest products were noted throughout this period. And while the market for grain and oilseeds escaped the worst of this carnage, prices still fell by a factor of 20% from their recent 2007-08 crop year highs. (A fuller discussion of these price changes can be found in Section 4). Even so, it became increasingly apparent that the export demand for Canadian grains, oilseeds and special crops was actually building. In fact, the capacity released from the downturn in other commodities enabled the GHTS to handle a record volume of export grain during this period.

#### 2.34 Revenue Cap Adjusted to Reflect Reduced Maintenance Allowances

One of the more contentious issues that arose during the debate over the future of the hopper car fleet related to the actual costs incurred in maintaining them. This effectively came to a head when the Farmer Rail Car Coalition (FRCC) made a bid to acquire these cars in 2004. The FRCC's proposal was founded largely on the principle that these costs could effectively be reduced to an estimated annual average of \$1,500 per car from the \$4,329 per car that the railways were provided under the revenue cap.<sup>37</sup> A subsequent examination into the matter revealed that these actual maintenance costs fell well below the allowances that had been granted.

To correct this, the federal government brought forward an amendment to the *Canada Transportation Act* that would permit a one-time adjustment to the maintenance allowances accorded to CN and CP.<sup>38</sup> By more closely aligning this compensation with the actual cost of maintaining the hopper cars in regulated grain service, it was estimated that allowable carrier revenues could be reduced by as much as \$2.00 per tonne. Towards the close of the 2006-07 crop year, the federal Minister of Transport, Infrastructure and Communities formally requested that the Canadian Transport Agency make this adjustment.

Since the calculation of this adjustment was expected to take several months to complete and be applicable to the revenues that CN and CP would earn over the course of the entire 2007-08 crop year, the Agency issued

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<sup>36</sup> In comparison, the marine movement of grain accounts for about 10% of the global dry bulk trade.

<sup>37</sup> The annual average of \$4,329 per car cited here was developed by the Canadian Transportation Agency at the request of Transport Canada using the 1992 costing base, and represents an estimate of the associated maintenance costs embedded in the CN and CP revenue caps for the 2003-04 crop year. It should be noted that this estimate was specific to the FRCC proposal and, therefore, did not take into consideration other cost elements where some maintenance provisions may have been excluded.

<sup>38</sup> Bill C-11, *An Act to amend the Canada Transportation Act and the Railway Safety Act and to make consequential amendments to other Acts*, received Royal Assent on 22 June 2007.

an interim decision wherein it advised the railways that the Volume Related Composite Price Index (VRCPI) was being rolled back from its previously determined value of 1.1611 to 1.0884.<sup>39</sup>

In February 2008 the Agency rendered its final determination in the matter, finding that a one-time adjustment of \$72.2 million was warranted. This translated into an estimated \$2.59 per tonne as compared to the \$2.00-per-tonne value that had been approximated initially. As a result, the Agency rolled back the VRCPI for the 2007-08 crop year even further: to 1.0639 from the interim estimate of 1.0884.<sup>40</sup> Having disagreed with various aspects of the process as well as the final determination, both CN and CP decided to appeal the Agency's decision to the Federal Court of Appeal. Hinging much on the success of this appeal, the carriers did little to reduce their rates by the magnitude needed to avoid a significant overage in their revenue caps, which was later calculated at \$59.8 million before applicable penalties.<sup>41</sup>

However, in November 2008 the Federal Court of Appeal ruled against the railways, upholding the legitimacy of the Agency's determination and the one-time adjustment of \$72.2 million.<sup>42</sup> Dissatisfied with this, the carriers sought leave to appeal the decision before the Supreme Court of Canada.<sup>43</sup> The court, however, dismissed the application towards the end of the third quarter.<sup>44</sup>

### 2.35 Amendments to the Canada Grain Act Reintroduced

In September 2006 the federal government tabled a report completed by Compas Inc., a Toronto-based research firm, which had been selected to lead an independent statutory review of the Canadian Grain Commission (CGC) and the *Canada Grain Act*. Built on its consultations with hundreds of stakeholders, the Compas report recommended a number of substantive changes to the mandate of the CGC, many of which would fundamentally alter the way the GHTS works today.<sup>45</sup> Of particular importance were the implications arising from the report's recommendation regarding quality assurance, and the potential alteration of a classification system that has long been based solely on Kernel Visual Distinguishability (KVD).<sup>46</sup>

Following its referral to the House of Commons Standing Committee on Agriculture and Agri-Food, the committee advanced 12 specific recommendations. Among the most noteworthy were those calling for the alteration of the CGC's existing governance structure; that farmers maintain their access to producer-car loading; and that inward inspection services are made optional. In addition, the committee also suggested that KVD be abandoned, and replaced with a system of farmer declarations supported by science-based mechanisms of quality control.

Building on these recommendations the federal government moved to amend the *Canada Grain Act*, introducing Bill C-39 in the House of Commons on 13 December 2007. Among the amendments being advanced were provisions aimed at clarifying the CGC's core mandate, removing its obligation to provide mandatory inward inspections at terminal and transfer elevators, and ending its administration of the producer payment security program.

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<sup>39</sup> The Volume Related Composite Price Index for the 2007-08 crop year was originally given a value of 1.1611 by the Agency. See Canadian Transportation Agency Decision Number 211-R-2007, dated 27 April 2007. This was subsequently reduced to 1.0884 in consideration of the previously estimated \$2.00-per-tonne adjustment the Agency was being asked to make. See Canadian Transportation Agency Decision Number 388-R-2007 dated 31 July 2007.

<sup>40</sup> See Canadian Transportation Agency Decision Number 67-R-2008, dated 19 February 2008.

<sup>41</sup> See Canadian Transportation Agency Decision Number 628-R-2008, dated 30 December 2008.

<sup>42</sup> See consolidated decision of the Federal Court of Appeal, *Canadian National Railway Company v. Canadian Transportation Agency*, 2008 FCA 363, dated 24 November 2008.

<sup>43</sup> CN and CP both filed applications for leave to appeal on 23 January 2009.

<sup>44</sup> The Supreme Court of Canada dismissed the application without costs on 23 April 2009.

<sup>45</sup> These recommendations were outlined more fully in section 2.35 of the Monitor's Annual Report for the 2006-07 Crop Year.

<sup>46</sup> KVD has provided a low-cost method of identifying wheat types that fit into the various uniform classes established as part of the variety registration system in Canada. In order for unrestricted registration, production and handling of a wheat variety, it has to conform to visual recognition that it is part of a "class" indicative of intrinsic and processing quality.

The CGC's mandate was to be divided into two parts. The first dealt with the affirmation of its role in establishing and maintaining the quality standards that would govern Canadian grain, as well as in the regulation of grain handling in Canada so as to ensure that these standards are respected. The second part underscored the CGC's responsibility to protect the interests of grain producers in delivering their grain to elevators and grain dealers, in securing their access to binding determinations on the grade and dockage of their deliveries, and in their allocation of producer cars.

One of the more controversial changes put forward in Bill C-39 related to the making of inward grain weighing and inspection at terminal and transfer elevators an optional service. Even so, producers would still retain the right to have any shipment weighed and inspected, with the elevator operator being obligated to furnish them with access to an independent service provider whenever such requests were made. In the event of a grading dispute between the parties, the CGC would serve as a binding arbitrator. Notwithstanding this alteration to the existing process, the CGC would still continue to perform the outbound inspection on all export shipments in order to safeguard the quality of the grain leaving Canada.

Finally, the elimination of the producer payment security program was aimed at reducing costs and bringing the western Canadian grain industry in line with that of eastern Canada and other agricultural sectors. The program, commonly referred to as "bonding", was seen as a barrier to potential new entrants. Its removal was intended to open the door to producer driven initiatives, such as the development of a "commodity clearing house," in order to manage commercial risks in a more cost-effective manner.<sup>47</sup>

However, with the proroguing of the 39<sup>th</sup> Parliament on 7 September 2008, Bill C-39 died on the House of Commons order paper. These amendments were effectively resurrected, however, and reintroduced in the House of Commons on 24 February 2009 as Bill C-13. Even so, the bill soon came under attack from the opposition. Before the bill was brought forward for second reading, which would have then seen it referred to the Standing Committee on Agriculture and Agri-Food for further study, the opposition parties moved to postpone its reading for six months. Known as a "hoist amendment," the action was tantamount to defeating the bill by postponing its consideration. At the close of the third quarter, it was not clear what further action – if any – the government was contemplating.

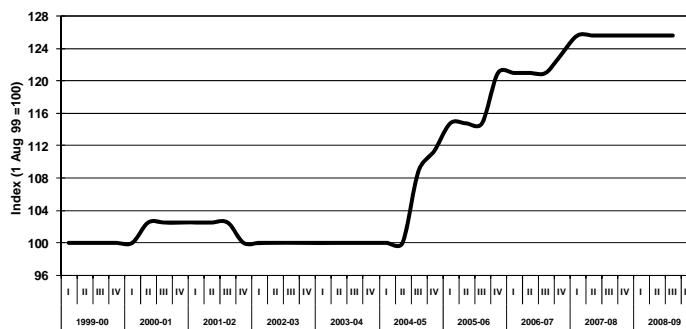
### 3.0 System Efficiency and Service Reliability

#### 3.1 Trucking

During the first three months of the 2007-08 crop year, short-haul trucking rates rose 1.9%. This increased inflationary pressure resulted in the composite price index rising to 125.5 by the close of that crop year's 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. By the end of 2008, however, the per-barrel price had collapsed, falling to a

Figure 10: Composite Index – Short-Haul Trucking



<sup>47</sup> For more information on producer payment security models, see Appendix A of the "Government Response to the Fifth Report of the Standing Committee on Agriculture and Agri-Food on the Review of the *Canada Grain Act* and the Canadian Grain Commission Conducted by Compas Inc.," tabled 16 April 2007.

low of about \$30 US in the face of a global financial crisis. Ultimately prices stabilized around this mark, and later began to move higher. With the close of the third quarter the per-barrel price had risen to about \$50 US.

Such dramatic changes undoubtedly had an impact on commercial trucking rates during the first nine months of the 2008-09 crop year. 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 through to the end of the first quarter of the 2007-08 crop year was no longer being made available to the Monitor. As such, information pertaining to the changes in commercial trucking rates beyond this point was unavailable. Accordingly, the value of the composite price index has remained unchanged, and continues to reflect the level reached 18 months earlier, specifically 125.5. Nevertheless, the Monitor continues to examine alternative methodologies that would allow for the future continuation of this data series.

### 3.2 Country Elevators

Total country elevator throughput for the first nine months of the 2008-09 crop year, as measured by shipments from primary elevator facilities, increased by 5.0%, rising to 26.3 million tonnes from 25.0 million tonnes a year earlier. This constituted the largest nine-month volume yet observed under the GMP, surpassing the previous record by a full 1.2 million tonnes.<sup>48</sup> Much of this result was driven by the shipment of a record 10.0 million tonnes in the third quarter.<sup>49</sup> This increase in tonnage was equally reflected in a higher capacity turnover ratio for the primary elevator system as a whole, which reached record highs of 1.9 turns in the third quarter as well as 5.0 turns on a year-to-date basis. Notwithstanding the increase in throughput, the turnover ratio has also benefitted from the effects of an accumulated 1.0-million-tonne reduction in storage capacity since the beginning of the GMP. The progressive increase in this ratio continues to underscore the fact that the GHTS's remaining primary elevator network is handling comparatively more grain than at any previous point in its history.<sup>50</sup>

The amount of grain maintained in inventory decreased by 4.0% in the first nine months, falling to a weekly average of 2.8 million tonnes from 2.9 million tonnes a year earlier. Although much of this reduction appears to have been tied to an increase in system activity, primary elevator inventories remain consistent with those observed over the course of the preceding five crop years. Of particular interest is the fact that the current average stands well below the quarterly values posted in the first year of the GMP, when the storage capacity of the primary elevator system was at its greatest.<sup>51</sup> Along with the reduction in the overall stock level, the amount of time grain spent in inventory also declined by 9.1%, to an average of 29.0 days from 31.9 days a year earlier. This suggests that grain inventories were turning over somewhat faster in the face of heightened commercial activity.

The decline in grain inventories was also reflected in a 10.9% reduction in the overall average weekly stock-to-shipment ratio, which fell to 4.1 from the 4.6 scored in the first nine months of the previous crop year. Even so, this value affirms that grain inventories were still more than sufficient to meet the prevailing demand, and that the grain companies faced comparatively few challenges in sourcing product in the country during this period.

### 3.3 Railway Operations

The volume of grain moved in covered hopper cars during the first nine months of the 2009-09 crop year rose by 2.5%, to 18.1 million tonnes from 17.6 million tonnes a year earlier. With originations of 17.7 million tonnes, the Class 1 carriers accounted for the majority of this traffic, with a volume gain of 3.1% for the period. This represented an overall share of 97.8% for the major carriers, which proved to be marginally greater than the

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<sup>48</sup> The previous record was set in the 2000-01 crop year when shipments for the first nine months reached 25.1 million tonnes.

<sup>49</sup> The previous quarterly record of 9.4 million tonnes was achieved in the first quarter of the 2007-08 crop year.

<sup>50</sup> Comparatively, the annualized equivalent volume of grain shipped from the primary elevator system in the first nine months of the 2008-09 crop year would have yielded a capacity turnover ratio of 6.7. This ratio well exceeds those recorded in the first nine years of the GMP, including the 6.5 realized as a previous best in the 2006-07 crop year.

<sup>51</sup> Country elevator stocks have generally been falling in conjunction with the overall reduction in the system's storage capacity. Despite periodic fluctuations, the year-to-date average of 2.8 million tonnes remains well below the 4.1-million-tonne average set as a record in the second quarter of the 1999-2000 crop year.



97.2% share they held twelve months earlier. Conversely, the amount of grain originated by shortline railways in the first nine months of the current crop year, which totalled less than 0.4 million tonnes, declined by 19.1%. A 6.0% gain in the amount of grain drawn from the non-grain dependent network ran counter to a 5.9% decline in that sourced from the grain-dependent network, which continued to underscore the disfavour given to such shipments. The decline in shortline shipments came despite a 13.9% increase in producer-car loadings for the period.<sup>52</sup>

### 3.31 Car Cycles

The railways' average car cycle for the first nine months of the current crop year decreased by 10.9% from that posted for the same period a year earlier, falling to 14.0 days from 15.7 days. Without exception, improvements were noted in each of the operating corridors. The greatest improvement was noted in the Vancouver corridor, where the average fell by 13.7% to 14.6 days. The Prince Rupert corridor posted the next largest decrease, 13.2%, which served to reduce its average cycle to 12.3 days from 14.2 days a year earlier. The Thunder Bay corridor produced a more moderate 5.1% reduction, with the average falling to 14.4 days from 15.2 days twelve months before.

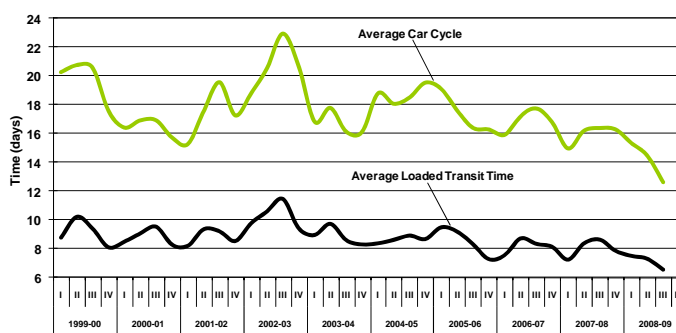
These decreases extended equally to the average car cycle's loaded and empty transit time components. In the case of the former, the average loaded transit time for the first nine months fell by 11.5%, to a value of 7.1 days from 8.0 days a year earlier. As for the average empty transit time, there was a marginally lesser 10.3% improvement, with the year-to-date average falling to 6.9 days from 7.7 days.

CN and CP both contributed to these broader improvements, posting reductions in their overall car cycles that amounted to 11.5% and 10.2% respectively. These improvements were reflected in their loaded and empty transit times as well. The most marked improvement came from a 14.1% reduction in the average loaded transit time posted by CN while the CP average fell by 7.1%. These results were paralleled in improvements to their empty transit times, with the CN average falling by 8.3% while the CP average fell by a somewhat greater 12.7%.

Despite the onset of winter, which normally leads to an elongation of the car cycle in the second and third quarters, the quarterly average was reduced from an initial value of 15.3 days in the first quarter to 12.6 days in the third. To be sure, this latter value proved to be the lowest quarterly average yet achieved under the GMP.<sup>53</sup> Moreover, the strong second and third quarter showings were largely responsible for drawing down the nine-month average to just 14.0 days, the best year-to-date performance for the period under the GMP.

While some of the improvement witnessed in recent years can be traced to operating practices in the primary corridors, a significant portion of the gain can also be attributed to the comparatively greater amount of grain being shipped to Prince Rupert.<sup>54</sup> Even so, it is difficult to ignore the benefit that may have arisen from the economic downturn that caused overall railway volumes to plummet in the 2008-09 crop year. It is entirely

Figure 11: Average Railway Car Cycle



<sup>52</sup> 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.

<sup>53</sup> The previous record, an average of 14.5 days, had been set in the preceding quarter.

<sup>54</sup> Movements in the Prince Rupert corridor have consistently posted some of the lowest average cycle times. In conjunction with recent increases in the volume of grain moving to the port, this has had a beneficial impact on the calculation of the weighted average used to gauge movements in western Canada.

possible that this decline in traffic may well have freed more capacity for the movement of grain during this period.

### 3.32 Railway Freight Rates

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

The 2006-07 crop year brought even more changes to the prevailing rate structure. The most striking element in this was CN's decision to phase out its wholesale per-tonne rates, and to replace them with commodity-specific, per-car charges.<sup>55</sup> 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.<sup>56</sup>

Layered on top of this had also been an initial move towards seasonal pricing, which tied rates to the prevailing demand for railway carrying capacity at various points in the crop year. This introduced a new element of complexity to the movement of grain. An example of this is found in the actions taken by CP at the close of the 2007-08 crop year when it reduced its single-car rates to Vancouver by a factor of 10%, while leaving those applicable on movements to Thunder Bay unchanged. At the outset of the 2008-09 crop year, CP initiated a general increase in its single-car rates, raising those in the Vancouver corridor by an average of 19.9%, effectively pulling back the 10%, plus. Conversely the increase in the Thunder Bay corridor was kept to 8.0%. Had CP maintained these single-car rates at the levels prevailing towards the end of May 2008, the 19.9% increase noted on Vancouver shipments in the first quarter would have been contained to a more moderate 7.9%, and more in keeping with that advanced on movements to Thunder Bay.

Conversely, CN's approach was to keep rates 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. On the surface, 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.<sup>57</sup>

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

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<sup>55</sup> 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.

<sup>56</sup> 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.

<sup>57</sup> 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.

further reductions, with the single car rates again reduced by about 6% on movements to the west coast, and by another 10% on those to Thunder Bay.

The adjustments advanced by CP in the second and third quarters produced equally striking reductions in the rate structure. In December 2008 CP rolled back its rates on movements to Vancouver by 5.0% while leaving those applicable on movements to Thunder Bay unchanged. In February 2009 CP initiated a reduction of 9.0% on its rates to Vancouver. This was followed by a 10.0% reduction on its rates to Thunder Bay in April 2009.

It should be remembered that both railways had moved to legally challenge an earlier decision of the Canadian Transportation Agency concerning a one-time adjustment to the Volume-Related Composite Price Index for the 2007-08 crop year.<sup>58</sup> Moreover, while appealing this decision to the Federal Court of Appeal, neither carrier had moved to incorporate the adjustment mandated by the Agency in their prevailing rate structures. This meant that both CN and CP ran the risk of again exceeding their revenue caps by a substantial margin if the court ultimately failed to find in its favour. When the Federal Court of Appeal sided with the Agency, the stage was set for a significant roll back of the carriers' existing rate structures as a means of precluding a large secondary overage in revenue.<sup>59</sup>

The reductions instituted by CN and CP in the second and third quarters effectively underscored the rapidity with which they moved to prevent this from occurring. By the end of the third quarter CN had brought forward year-to-date reductions of about 4.1% on the carrier's single-car rates to Vancouver; 2.3% on those to Prince Rupert; and 19.2% on those to Thunder Bay. The corrective actions undertaken by CP produced somewhat different results, with a 3.7% gain registered against single-car shipments to Vancouver, while those to Thunder Bay fell by 2.8%.

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

Figure 12: Railway Pricing – Vancouver and Thunder Bay Corridors

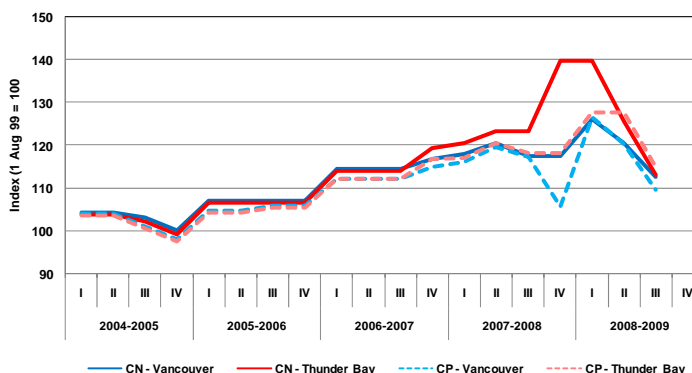
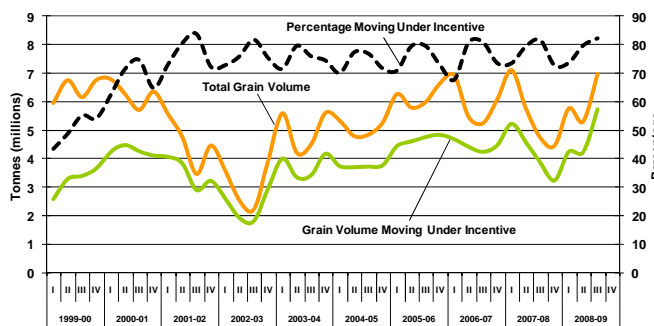


Figure 13: Railway Volume Moving Under Incentive



<sup>58</sup> In essence, the Agency's decision reduced the maintenance allowances accorded to CN and CP under the revenue cap by a combined \$72.2 million. Since neither carrier moved to amend their prevailing rates in the face of this, the Agency later determined that the carriers had exceeded their allowable revenues for the 2007-08 crop year by \$59.8 million. For a fuller discussion of this one-time adjustment, please see the Monitor's annual report for the 2007-08 crop year.

<sup>59</sup> Although the Federal Court of Appeal upheld the Agency's decision in November 2008, both CN and CP moved to appeal the matter to the Supreme Court of Canada. In April 2009, however, the Supreme Court dismissed the carriers' application for leave to appeal, thereby ending the railways' legal challenge.

The quantity of grain moved under the railways' incentive programs during the first nine months of the 2008-09 crop year increased by 4.0%, to 14.2 million tonnes from 13.7 million tonnes a year earlier. Although this was largely in keeping with the overall increase in grain shipments discussed earlier, the value of the discounts earned by shippers rose by a more substantive 16.0%, totalling \$87.5 million as opposed to \$75.4 million a year earlier. This latter result was the product of not only a further migration towards the use of larger car blocks, but the larger discounts brought to bear on these movements. This was reflected in an 11.6% increase in the period's average-earned discount, which rose to an estimated \$6.15 per tonne from \$5.51 per tonne twelve months before.

### **3.4 Terminal Elevator and Port Performance**

#### 3.41 Terminal Elevators

A total of 18.2 million tonnes of grain passed through the terminal elevators of Canada's four western ports in the first nine months of the 2008-09 crop year. This marked a 5.7% increase over the 17.2 million tonnes handled in the same period a year earlier, as well as a new record under the GMP. Once again Vancouver proved itself to be the largest export gateway. Moreover, it was the only port to register an actual increase in throughput, with total shipments for the period having risen by 16.8% to 10.4 million tonnes. Much of this gain was driven by a 61.0% increase in third quarter volume. Although Prince Rupert also posted a 65.0% increase in its third quarter throughput, its cumulative handlings to the end of the period trailed the previous year's 3.6 million tonnes by 6.3%, falling to 3.4 million tonnes.<sup>60</sup>

In comparison, the results for the eastern gateways of Churchill and Thunder Bay were somewhat weaker. With a 28.4% decrease in terminal throughput, Churchill's handlings totalled just 0.4 million tonnes, a significant pull-back from the more aggressive programs witnessed in the two previous crop years. Much of the decline was attributable to a lack of durum, canola and pea shipments. To be sure, for the first time since the beginning of the GMP, Churchill's handlings focused almost exclusively on wheat, and posted a modest 1.0% gain against the previous year's handlings.<sup>61</sup> In comparison, the port of Thunder Bay saw its nine-month volume decrease by a much smaller 2.8%, falling to 4.0 million tonnes in total. This result was driven by a broader reduction in the port's handlings of wheat as well as a number of non-CWB commodities.

Terminal inventories averaged 1.4 million tonnes in the first nine months of the 2008-09 crop year, which represented a reduction of 3.4% from the average posted for the same period a year earlier. Notwithstanding this minor decline in the year-to-date average, terminal inventories have steadily increased over the course of the last five years, gaining about 0.4 million tonnes over the 1.0-million-tonne average that was typical of the 2002-03 and 2003-04 crop years. Although some of this gain appears to be tied to the increase in terminal throughput recorded during this period, the prevailing stock level still stands about 15% above the 1.2 million tonnes that was typical when terminal shipments were more comparable.

The average amount of time spent by grain in inventory decreased by 10.7%, falling to an average of 17.5 days for the first nine months, compared to 19.6 days a year earlier. This reduction was driven largely by a 17.5% decrease in the Vancouver average, which fell to 12.7 days. Equally influential was a sharp reduction in the storage times posted by all ports in the third quarter. The third quarter's 13.3-day average proved to have been the lowest yet recorded under the GMP.<sup>62</sup>

In the face of a sharp rise in third quarter throughput, there were some noticeable changes in terminal inventories. With much of this volume centred on the sale of wheat, durum and canola, the stocks in these commodities moved generally higher, thereby displacing the space available for other grains. For the most part, this meant that the stock-to-shipment ratios tied to the most wanted of these grains moved generally lower in the third quarter. The year-to-date values, however, often indicated the opposite owing to comparatively

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<sup>60</sup> 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 were due largely to a reduction in CN freight rates as well as an improvement in the car allocation.

<sup>61</sup> Wheat typically constitutes the largest single commodity handled through the port of Churchill. Under the GMP, however, its handlings have often been complemented by additional volumes of durum, canola and peas. With the exception of some 1,200 tonnes of screenings, none of these other commodities were handled in the first nine months of the 2008-09 crop year.

<sup>62</sup> The previous record of 15.7 days was set in the fourth quarter of the 2005-06 crop year.

lower activity in the first and second quarters. Even so, the average ratios for most major commodities remained comfortably above the 1.0 threshold.<sup>63</sup> This does not mean that shortages were fully avoided, or that inventories were not tight at certain times. Canola stocks at Vancouver proved to be the principal exception, with shortages having been experienced throughout much of the third quarter.

### 3.42 Port Performance

Some 560 vessels called at western Canadian ports during the first nine months of the 2008-09 crop year, a decrease of 4.3% from the 585 vessels that called during the same period a year earlier. The average amount of time these vessels spent in port decreased by 15.5%, falling to an average of 4.9 days for the period from 5.8 days the year before. Although year-over-year reductions were noted in each quarter, much of the overall improvement could be traced to a 32.6% drop in the first quarter's posted average. At that time, lower throughput in the face of sustained stock levels helped to reduce the time vessels spent in port to a quarterly value that rivalled the best yet recorded under the GMP, just 3.1 days.<sup>64</sup>

On the whole, much of the overall decrease was attributable to shorter vessel-waiting times, which fell by 27.6%, or 0.8 days, to an average of 2.1 days. A good deal of the decline was derived from a significant reduction in the waiting times reported for vessels at west coast ports, especially Prince Rupert, where the wait time was halved to 2.7 days overall. In comparison, the average amount of time devoted to vessel loading during this period declined by a much lesser 3.4%, or 0.1 days, to an average of 2.8 days. While average loading time remained unchanged at Vancouver, the ports of Prince Rupert, Churchill and Thunder Bay all posted reductions that ranged from a low of 8.3% to a high of 20.0%.

When examining the amount of time spent by vessels at individual ports, most reported overall reductions. The largest decline in the average length of these stays was at Prince Rupert, where a 37.2% reduction pulled the average down to 5.4 days from 8.6 days a year earlier. Vancouver posted a 13.6% decrease in the first nine months, with the average falling to 7.0 days from 8.1 days. The duration of vessel layovers at Churchill fell by a much lesser 3.9%, to an average of 4.9 days as compared to 5.1 days the year before. No change was reported in the average posted by Thunder Bay, which remained at 1.7 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.

The overall amount of time involved in moving grain through the supply chain fell by 6.5 days in the first nine months of the 2008-09 crop year, to an average of 53.6 days. This result was shaped by significant reductions in each of the primary supply chain elements: country elevator storage time; loaded railway transit time; and terminal elevator storage time. Moreover, this average proved to be the lowest yet witnessed under the GMP.

A few comments concerning the performance of the GHTS in the first nine months 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 potential movement of grain under the GMP – some 66.0 million tonnes in all – laid waiting in farmers' bins and country elevators. Even so, an easing of demand brought on by good harvests in many countries and

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<sup>63</sup> 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.

<sup>64</sup> The quarterly record of 3.1 days was first set in the fourth quarter of the 2006-07 crop year.

replenished world supplies, resulted in lower volumes passing through western Canadian ports in the first six months of the 2008-09 crop year. As a result, the pressures brought to bear on the GHTS at that time proved comparatively modest.

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	
<b><u>SPEED RELATED</u></b>									
2	Country Elevator – Average Days-in-Store	3B-4	41.7	29.5	30.1	30.7	31.1	29.0	▼
3	Average Railway Loaded Transit Time (days)	3C-4	9.2	8.7	8.6	8.2	8.0	7.1	▼
5	Terminal Elevator – Average Days-in-Store	3D-4	18.6	19.9	17.9	19.2	21.0	17.5	▼
Average Total Days in GHTS			69.4	58.1	56.6	58.1	60.1	53.6	▼
<b><u>SERVICE / ASSET RELATED</u></b>									
1	Average Country Elevator Capacity Turnover Ratio	3B-2	4.8	5.6	6.2	6.5	6.0	6.7 *	▲
4	Average Terminal Elevator Capacity Turnover Ratio	3D-2	9.1	7.5	8.7	8.3	8.5	n/a	–
3	Average Railway Car Cycle (days)	3C-4	19.9	18.7	17.3	16.8	15.9	14.0	▼
6	Average Vessel Time in Port (days)	3D-7	4.3	4.9	4.8	5.3	5.0	4.9	▼

\* For comparative purposes, the value of 6.7 presented here represents an annualized equivalent for the 5.0 actually recorded as the country elevator's capacity turnover ratio in the first nine months of the 2008-09 crop year.

- Secondly, just as the new crop was beginning to move, the severe financial crisis that began to spread across the globe added an unprecedented level of anxiety to markets around the world, with the demand and price for many commodities sent plummeting as an economic recession began to take hold. Although grain was perhaps spared the worst of this, other sectors of the Canadian economy did not fare as well. In a reflection of the weakening demand for Canadian resources, railway traffic fell sharply during this period. From the vantage point of the GHTS, however, proved advantageous in as much as the freed capacity allowed the railways to readily accommodate the surge in grain volume that came in the third quarter. Moreover, the volume handled by the GHTS in the third quarter far surpassed that moved during any other quarter in the GMP's history.
- Finally, although the pace at which grain moved through the GHTS proved initially slower than in the previous crop year, it accelerated rapidly; falling from an average of 60.3 days in the first quarter, to 56.5 days in the second, and a record-setting 46.2 days in the third. Much of the overall improvement came from a reduction in the amount of time spent by grain as inventory, particularly when at port. Complimenting this, however, was an equally significant improvement in the railways' average loaded transit time. The GHTS's performance through the first nine months of the crop year marked its most productive period under the GMP, and revealed how effective the system can be when all of its elements are working in closer harmony.

## 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.<sup>65</sup>

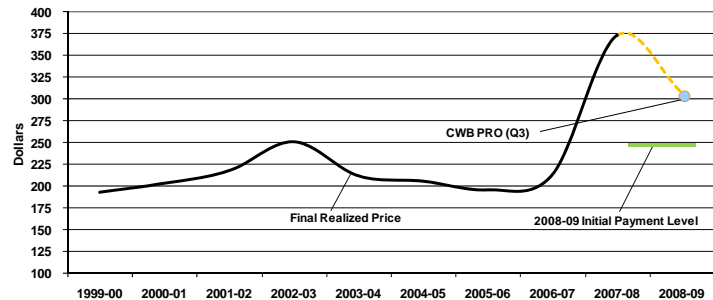
In its earlier reports, the Monitor described how increased commodity prices had largely been responsible for the improvement in the per-tonne returns accruing to producers of wheat, durum, canola, and yellow peas in the first four crop years of the GMP. During this same period, the export basis also 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, by which point these returns had 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, providing producers at large with a substantial improvement in their financial returns.

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 three quarters 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. The CWB's PRO for 1 CWRS wheat moved steadily lower in the opening months of the 2008-09 crop year, falling 17.5% from the previous crop year's final realized price of \$372.06 per tonne to 307.00 per tonne by the end of the first quarter. Stabilizing around this value, the PRO changed comparatively little over the course of the next six months, closing out the third quarter unaltered at \$307.00 per tonne. This value proved 23.2% above the \$249.20 per tonne that had been set as the farmer's initial payment for the 2008-09 crop year.

Figure 14: Recent Price Changes – 1CWRS Wheat (dollars per tonne)



Much of the impetus for this decline in price stemmed from an increase in global wheat supplies along with the uncertainty that gripped most commodity markets in the latter half of 2008. Although favourable harvests in most exporting countries helped produce a record world wheat crop, strong competition from Europe and the Black Sea region worked to maintain downward pressure on prices. Coupled with this was the additional pressure brought to bear as a result of the credit crisis that gripped the world's financial markets. These forces all served to undermine the PRO, which retreated speedily from the record high wheat prices realized just a year earlier. In consideration of this, the financial return accruing to wheat producers in the 2008-09 crop year is expected to decline significantly, while still measuring favourably against most of those produced in the last decade.

<sup>65</sup> Among other elements, the export basis includes the cost of trucking, elevator handling and railway movement. It also includes where applicable, the CWB's pooling costs, and other incidental charges. Similarly, it also includes a deduction for any of the financial benefits accruing to producers as a result of the receipt of trucking or any similar premiums, as well as the CWB's transportation savings.

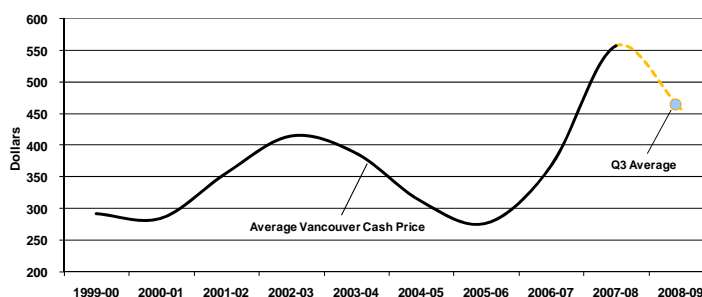


#### 4.12 Non-CWB Grains

Virtually equalling the decline posted for wheat, the average Vancouver cash price for 1 Canada canola declined by 17.9% in the first nine months of the 2008-09 crop year, falling to \$456.87 per tonne as compared to the previous crop year's overall average of \$556.76 per tonne. This price drop was triggered by the wider expectations of the global oilseed market, which reacted negatively to news of an anticipated oversupply, along with the mounting concerns over the deepening financial crisis.

A record 12.6 million tonnes of Canadian canola production, along with the expectation that this would result in larger year-end stocks, led to generally lower prices. In equal measure, oilseed production in other regions of the world was also expected to bolster supplies. Australian canola exports were expected to be strong in the aftermath of an earlier drought. Compounding this were rapeseed exports from Russia and Ukraine, which were also expected to be heavy. Increased palm oil production from countries such as Indonesia added to the downward price pressure. Countering these forces, however, was the growing Chinese demand for vegetable oil. Aimed largely at building their own reserve, Canadian exports to China were the driving force behind the heaviest canola movement yet observed under the GMP. The sustained nature of this demand helped raise the spot price for canola in the third quarter. Even so, the magnitude of the overall decrease in the average price 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, these returns are still expected to compare favourably with historical standards.

Figure 15: Recent Price Changes – 1 Canada Canola (dollars per tonne)



Rising input costs seemed likely to further erode these returns. Among the most pronounced of these were the increases tied to various country and terminal elevator activities. In the case of the former, these increases ranged from a low of 2.7% for cleaning to a high of 7.1% for storage. Similarly, the escalation on the tariff rates tied to terminal elevation and storage activities amounted to about 2.5% and 6.2% respectively. It is more difficult to gauge the impact of the observed change in railway freight rates since they largely rose in the first quarter, but declined substantially in the second and third quarters. In comparative terms, the year-over-year changes produced by these actions varied widely, and ranged from reductions of about 19.2% on CN shipments to the port of Thunder Bay, to an increase of 3.7% on CP movements to Vancouver.

#### 4.2 Producer-Car Loading

As related in the Monitor's 2007-08 annual report, the aggregate number of producer-car loading sites had fallen from 709 to 454 over the course of the last nine crop years. Much of this net decline was the product of a reduction in the number of sites maintained by CN and CP. Still, the operation of a portion of these was assumed by various shortline railways, which resulted in their count rising from 65 to a height of 166 by the end of the 2003-04 crop year. However, the subsequent demise of several small carriers resulted in some of these reverting back to Class-1-carrier control. By the end of the 2007-08 crop year only 108 producer-car loading sites remained under the umbrella of shortline operators.

However, the first nine months of the 2008-09 crop year brought some significant changes to the makeup of this network. Much of this was tied to the closure of several sites by the Carlton Trail Railway, but also included the adoption of several CP sites by the Great Sandhills Railway. At the end of the third quarter the number of sites operated by Class 1 carriers had fallen to 340 from 346, while those operated by shortline railways had fallen to 105 from 108.

Despite the reduction in sites, producer-car shipments during this period increased by 13.9% from that handled a year earlier, rising to 9,026 carloads from 7,925. In relation to the volume of grain shipped in covered hoppers, producer-car loadings accounted for just 4.5% of the overall total. This share increased to 8.3% when

gauged against CWB grains alone, which constituted the majority of producer car movements. Both values were somewhat greater than the 4.0% and 6.7% 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. Moreover, they may also be catalysts that shift traditional traffic patterns, the demand for particular services, and the utilization of assets.

### **Highlights – Third 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 nine months increased by 1.7% to 18.2 million tonnes.
  - Exceptionally heavy volume in the third quarter offsets lower tonnage in the first half.
    - Third quarter volume reached a record 7.2 million tonnes.
- Most western Canadian ports saw decreased volume in the first nine months.
  - Vancouver – up by 14.4% to 11.5 million tonnes.
    - Least impacted by traffic downturn in the first half.
  - Prince Rupert – down by 6.7% to 3.4 million tonnes.
  - Thunder Bay – down by 19.0% to 3.2 million tonnes.
  - Churchill – down by 27.6% to 0.4 million tonnes.

#### **Country Elevator Infrastructure**

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

#### **Railway Infrastructure**

- Western Canadian rail network reduced by 0.3% to 17,918.7 route-miles.
  - Reflected abandonment of CN's Matador, White Bear and Stettler subdivisions.
- Great Sandhills Railway established as newest Saskatchewan-based shortline in March 2009.
- Discontinuance plans for over 850 route-miles of CN and CP infrastructure remain.

#### **Terminal Elevator Infrastructure**

- Licensed GHTS terminal elevators remained unchanged at 15.
  - Licensed storage capacity remained unchanged at 2.5 million tonnes.
- Terminal elevator unloads for the first nine months increased by 7.5% to 210,231 carloads.

## Indicator Series 1 – Industry Overview

											2008-09	
Table	Indicator Description	Notes	1999-00	2005-06	2006-07	2007-08	Q1	Q2	Q3	YTD (1)	% VAR	
<b>Production and Supply [Subseries 1A]</b>												
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%	▲
<b>Rail Traffic [Subseries 1B]</b>												
1B-1	Railway Grain Volumes (000 tonnes) – Origin Province	(1)	26,440.8	25,304.7	24,311.7	22,766.5	5,891.1	5,446.0	7,158.0	18,495.1	1.7%	▲
1B-2	Railway Grain Volumes (000 tonnes) – Primary Commodities	(1)										
1B-3	Railway Grain Volumes (000 tonnes) – Detailed Breakdown	(1)										
1B-4	Railway Grain Volumes (000 tonnes) – Special Crops	(1)	2,103.4	2,608.2	2,344.3	2,481.0	789.9	511.7	996.3	2,297.9	3.0%	▲
<b>Country Elevator Infrastructure [Subseries 1C]</b>												
1C-1	Grain Delivery Points (number)	(2)	626	275	272	276	276	272	272		-1.4%	▼
1C-1	Grain Elevator Storage Capacity (000 tonnes)	(2)	7,443.9	5,870.8	5,808.2	5,952.5	5,952.5	6,059.0	6,059.0		1.8%	▲
1C-1	Grain Elevators (number) – Province	(2)	917	374	371	378	378	366	366		-3.2%	▼
1C-2	Grain Elevators (number) – Railway Class	(2)										
1C-3	Grain Elevators (number) – Grain Company	(2)										
1C-4	Grain Elevators Capable of Multiple Car Loading (number) – Province	(2)	317	250	240	243	244	244	244		0.4%	-
1C-5	Grain Elevators Capable of Multiple Car Loading (number) – Railway Class	(2)										
1C-6	Grain Elevators Capable of Multiple Car Loading (number) – Railway Line Class	(2)										
1C-7	Grain Elevator Openings (number) – Province	(2)	43	10	48	10	0	18	18		80.0%	▲
1C-8	Grain Elevator Openings (number) – Railway Class	(2)										
1C-9	Grain Elevator Openings (number) – Railway Line Class	(2)										
1C-10	Grain Elevator Closures (number) – Province	(2)	130	21	51	3	0	30	30		900.0%	▲
1C-11	Grain Elevator Closures (number) – Railway Class	(2)										
1C-12	Grain Elevator Closures (number) – Railway Line Class	(2)										
1C-13	Grain Delivery Points (number) – Accounting for 80% of Deliveries	(2)(3)	217	90	97	91	n/a	n/a	n/a		n/a	-
<b>Railway Infrastructure [Subseries 1D]</b>												
1D-1	Railway Infrastructure (route-miles) – Grain-Dependent Network	(2)	4,876.6	4,221.6	4,137.7	3,658.8	3,605.6	3,605.6	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	14,319.2	14,313.1		0.0%	-
1D-1	Railway Infrastructure (route-miles) – Total Network	(2)	19,390.1	18,595.0	18,495.3	17,978.0	17,924.8	17,924.8	17,918.7		-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	1,662.9	1,416.5	1,861.6	4,941.1	-5.9%	▲
1D-2	Railway Grain Volumes (000 tonnes) – Non-Grain-Dependent Network	(1)	16,975.8	17,119.6	16,748.1	15,435.1	4,105.8	3,892.9	5,121.1	13,119.8	6.0%	▲
1D-2	Railway Grain Volumes (000 tonnes) – Total Network	(1)	25,662.3	24,720.8	23,736.9	22,084.0	5,768.7	5,309.4	6,982.7	18,060.8	2.5%	▲
1D-3	Shortline Railway Infrastructure (route-miles)	(2)	3,043.0	2,445.6	2,023.2	1,870.7	1,870.7	1,870.7	1,987.0		6.2%	▲
1D-3	Shortline Railway Grain Volumes (000 tonnes)	(1)	2,090.5	1,709.2	1,059.1	578.3	155.9	96.9	142.2	395.0	-19.1%	▼
1D-5	Railway Grain Volumes (000 tonnes) – Class 1 Carriers	(1)	23,571.8	23,011.6	22,677.8	21,505.7	5,612.8	5,212.4	6,840.5	17,665.8	3.1%	▲
1D-5	Railway Grain Volumes (000 tonnes) – Class 2 and 3 Carriers	(1)	2,090.5	1,709.2	1,059.1	578.3	155.9	96.9	142.2	395.0	-19.1%	▼
1D-6	Grain Elevators (number) – Grain-Dependent Network	(2)	371	127	117	117	116	114	114		-2.6%	▼
1D-6	Grain Elevators (number) – Non-Grain-Dependent Network	(2)	513	233	238	240	240	234	234		-2.5%	▼
1D-6	Grain Elevator Storage Capacity (000 tonnes) – Grain-Dependent Network	(2)	2,475.4	1,628.8	1,575.6	1,593.9	1,589.5	1,614.5	1,614.5		1.3%	▲
1D-6	Grain Elevator Storage Capacity (000 tonnes) – Non-Grain-Dependent Network	(2)	4,847.6	4,188.9	4,169.0	4,274.7	4,274.7	4,370.8	4,370.8		2.2%	▲
<b>Terminal Elevator Infrastructure</b>												
1E-1	Terminal Elevators (number)	(2)	15	16	16	15	15	15	15		0.0%	-
1E-1	Terminal Elevator Storage Capacity (000 tonnes)	(2)	2,678.6	2,642.6	2,642.6	2,475.6	2,475.6	2,475.6	2,475.6		0.0%	-
1E-2	Terminal Elevator Unloads (number) – Covered Hopper Cars	(1)	278,255	271,714	261,204	245,213	69,699	63,275	77,257	210,231	7.5%	▲

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

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

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

## Synopsis – Commercial Relations

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

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

### Highlights – Third Quarter 2008-09 Crop Year

#### Tendering Program

- 210 tender calls were issued by the CWB during the first nine months of the 2008-09 crop year.
  - Calls for the movement of 2.5 million tonnes to export positions in western Canada.
    - Prince Rupert delivery – 48.9%; Vancouver – 29.5%; Thunder Bay – 21.6%; and Churchill – 0.0%.
- 719 bids received; offered an aggregated 4.8 million tonnes.
  - Response rates moderately weaker than in the 2007-08 crop year.
    - Reflected ready availability of grain for export movement.
- 282 contracts concluded for the movement of 2.0 million tonnes.
  - Prince Rupert deliveries – 40.7%; Vancouver – 40.0%; Thunder Bay – 19.4%; and Churchill – 0.0%.
  - Represented 19.2% of volume shipped by CWB to port positions in western Canada.
    - Fell marginally below maximum 20% target.
- Tenders for 30.3% of the tonnage called either partially, or not at all, filled.
  - Sharp increase from the 11.0% recorded for the 2007-08 crop year.
    - 290,600 tonnes – unacceptable bid price.
    - 214,700 tonnes – tonnage not required
    - 184,100 tonnes – no bid.
    - 52,100 tonnes – insufficient quantity bid.
    - 18,600 tonnes – non-compliance with bid specifications.
- Proportion of tendered grain volume moving in multiple car blocks increased to 91.9% from 88.8% in the 2007-08 crop year.
  - Proportion moving in blocks of 50 or more cars decreased to 63.4% from 66.7%.
- 98.7% of all tendered movements originated at high-throughput elevators.
  - Significantly greater than 91.8% observed in the 2007-08 crop year.
  - CWB estimated that the overall transportation savings for the first nine months increased by 5.8% to \$23.8 million.

#### Other Commercial Developments

- CTA provided 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 decided in favour of four of the six applicants
    - Implemented 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.
- Financial turmoil continued to have a significant impact on international shipping and ocean freight rates.
  - Baltic Dry Index fell to 700 before rebounding; settles out at the end of the third quarter near 1,900.
- Railways' appeal of the one-time adjustment to its revenue cap comes to a close.
  - Railways had appealed the CTA's decision on a \$72.2-million adjustment to its revenues to the Federal Court of Appeal.
    - The court rules against the railways in November 2008, allowing the adjustment to stand.
  - The railways' subsequent application for leave to appeal the lower court's ruling is dismissed without costs by the Supreme Court of Canada in April 2009.

## Indicator Series 2 – Commercial Relations

											2008-09	
Table	Indicator Description	Notes	1999-00	2005-06	2006-07	2007-08	Q1	Q2	Q3	YTD (1)	% VAR	
<b>Tendering Program [Subseries 2A]</b>												
2A-1	Tenders Called (000 tonnes) – Grain	(1)	n/a	5,325.7	3,765.1	1,891.2	782.7	662.0	1,060.3	2,505.0	58.2%	▲
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	1,854.2	1,402.0	1,588.7	4,844.9	25.1%	▲
2A-4	Tender Bids (000 tonnes) – Grade	(1)										
2A-5	Total CWB Movements (000 tonnes)	(1)(2)	n/a	15,132.6	14,932.2	13,332.3	2,984.6	3,637.3	3,791.5	10,413.4	3.7%	▲
2A-5	Tendered Movements (%) – Proportion of Total CWB Movements	(1)(2)	n/a	16.2%	17.8%	14.3%	18.5%	17.6%	21.3%	19.2%	21.5%	▲
2A-5	Tendered Movements (000 tonnes) – Grain	(1)(2)	n/a	2,447.5	2,651.6	1,900.0	551.7	640.1	806.8	1,998.6	25.9%	▲
2A-6	Tendered Movements (000 tonnes) – Grade	(1)(2)										
2A-7	Unfilled Tender Volumes (000 tonnes)	(1)	n/a	2,913.9	1,276.6	207.9	234.0	126.8	399.3	760.1	287.3%	▲
2A-8	Tendered Movements (000 tonnes) – Not Awarded to Lowest Bidder	(1)	n/a	130.5	46.3	18.7	4.9	0.0	0.0	4.9	-50.0%	▼
2A-9	Tendered Movements (000 tonnes) – FOB	(1)(2)	n/a	155.6	152.8	65.1	0.0	115.9	138.6	254.5	291.1%	▲
2A-9	Tendered Movements (000 tonnes) – In-Store	(1)	n/a	2,291.9	2,651.6	1,835.0	551.7	524.2	668.2	1,744.1	14.5%	▲
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	60.2	61.7	61.5	61.2	6.1%	▲
2A-18	Railway Car Cycle (days) – Tendered Grain		n/a	15.7	14.7	13.9	11.4	13.2	10.9	11.8	-15.1%	▼
2A-18	Railway Car Cycle (days) – Non-Tendered Grain		n/a	16.8	16.4	15.2	15.3	14.1	12.1	13.7	-8.7%	▼
2A-19	Maximum Accepted Tender Bid (\$ per tonne) – Wheat		n/a	-\$18.58	-\$24.51	-\$23.78	-\$23.01	-\$16.08	-\$11.15	-\$23.01	1.1%	▲
2A-19	Maximum Accepted Tender Bid (\$ per tonne) – Durum		n/a	-\$18.05	-\$21.56	-\$10.52	-\$14.95	-\$6.01	-\$3.17	-\$14.95	42.1%	▲
2A-20	Market Share (%) – CWB Grains – Major Grain Companies		n/a	76.1%	75.6%	74.3%	76.3%	70.5%	72.4%	72.8%	-1.2%	▼
2A-20	Market Share (%) – CWB Grains – Non-Major Grain Companies		n/a	23.9%	24.4%	25.7%	23.7%	29.5%	27.6%	27.2%	3.4%	▲
<b>Advance Car Awards Program [Subseries 2B]</b>												
2B-1	Advance Award Movements (%) – Proportion of Total CWB Movements		n/a	15.6%	15.8%	13.7%	10.2%	6.8%	17.1%	11.5%	-5.7%	▼
2B-1	Advance Award Movements (000 tonnes) – Grain		n/a	2,365.1	2,362.9	1,831.0	304.7	246.0	649.7	1,200.4	-2.0%	▼
2B-2	Distribution of Advance Award Movements – Port	(4)										
2B-3	Distribution of Advance Award Movements – Railway	(4)										
2B-4	Distribution of Advance Award Movements – Province / Elevator Class	(4)										
2B-5	Distribution of Advance Award Movements – Month	(4)										
2B-6	Railway Car Cycle (days) – Advance Award Grain		n/a	15.6	15.1	14.4	14.6	14.0	11.1	12.5	-11.3%	▼
2B-7	Distribution of Advance Award Movements – Multiple-Car Blocks	(4)										
2B-8	Weighted Average Tendered and Advance Award Multiple-Car Block Size (railcars) – Port		n/a	46.0	53.9	52.0	51.8	54.7	55.9	54.4	4.6%	▲

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

## Synopsis – System Efficiency

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

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

### **Highlights – Third Quarter 2008-09 Crop Year**

#### **Trucking**

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

#### **Country Elevators**

- Throughput increased by 5.0% to 26.3 million tonnes in the first nine months of the crop year.
  - Buoyed by a record 10.0 million tonnes in the third quarter.
- The average elevator capacity turnover ratio increased 6.4% to a record 5.0 turns.
  - Reflected combined effects of increased tonnage and reduced storage capacity.
- Average inventory level decreased by 4.0% to 2.8 million tonnes.
- Average number of days-in-store reduced by 9.1% to 29.0 days.
- Average weekly stock-to-shipment ratio decreased by 10.9% to 4.1 for the first nine months.
- Average posted tariff rates for elevation, cleaning and storage increased by up to 7.1% in the first nine months.

#### **Rail Operations**

- Average car cycle decreased by 10.9% to 14.0 days for the first nine months of the crop year.
  - Improvement in underlying empty and loaded transit time averages.
    - Average empty transit time decreased 10.3% to 6.9 days.
    - Average loaded transit time decreased 11.5% to 7.1 days
  - Marks the lowest quarterly and year-to-date values yet observed under the GMP.
- Proportion of grain moving under incentive programs increased to 78.8% from 76.7% in the 2007-08 crop year.
- Railway incentive payments estimated to have increased by 16.0% to \$87.5 million.
  - Reflected increases in tonnage as well as applicable discounts.
- Single car freight rates show significant change in the 2008-09 crop year.
  - Initial increases in the third quarter denoted application of seasonal pricing by CN and CP.
  - Reductions in the second and third quarters denoted the restructuring of rates to reflect a prescribed one-time adjustment in their revenue caps.
  - Scope of year-to-date changes in single-car freight rates:
    - CN: Vancouver – down by 4.1%; Prince Rupert – down by 2.3%; Thunder Bay – down by 19.2%.
    - CP: Vancouver – up by 3.7%; Thunder Bay – down by 2.8%

#### **Terminal Elevators and Port Performance**

- Terminal throughput increased by 5.7% to 18.2 million tonnes in the first nine months of the crop year.
  - Heavy shipments in the third quarter were instrumental in setting a new volume record.
- Average inventory level decreased by 3.4% to 1.4 million tonnes.
- Average number of days-in-store reduced by 10.7% to 17.5 days.
  - Denoted the lowest value yet recorded under the GMP.
- 560 vessels loaded at western Canadian ports in the first nine months of the crop year.
  - Average time in port decreased by 15.5% to 4.9 days.
- Average posted tariff rates for elevator handling and storage increased by up to 6.2% in the first nine months.

## Indicator Series 3 – System Efficiency

		2008-09										
Table	Indicator Description	Notes	1999-00	2005-06	2006-07	2007-08	Q1	Q2	Q3	YTD (1)	% VAR	
<b>Trucking [Subseries 3A]</b>												
3A-1	Composite Freight Rate Index – Short-haul Trucking	(2)	100.0	120.9	123.2	125.5	125.5	125.5	125.5		0.0%	–
<b>Primary Country Elevators [Subseries 3B]</b>												
3B-1	Grain Volume Throughput (000 tonnes)	(1)	32,493.9	32,105.2	33,452.6	31,886.4	8,270.9	7,980.0	10,027.8	26,278.7	5.0%	▲
3B-2	Average Elevator Capacity Turnover Ratio	(1)	4.8	6.2	6.5	6.0	1.6	1.5	1.9	5.0	6.4%	▲
3B-3	Average Weekly Elevator Stock Level (000 tonnes)	(1)	3,699.3	2,651.2	2,814.7	2,705.5	2,608.8	2,746.0	2,921.9	2,759.2	-4.0%	▼
3B-4	Average Days-in-Store (days)	(1)	41.7	30.1	30.7	31.1	29.6	31.3	26.5	29.0	-9.1%	▼
3B-5	Average Weekly Stock-to-Shipment Ratio – Grain	(1)	6.2	4.3	4.5	4.5	4.2	4.2	3.8	4.1	-10.9%	▼
3B-6	Average Handling Charges – Country Delivery Points	(3)										
<b>Rail Operations [Subseries 3C]</b>												
3C-1	Hopper Car Grain Volumes (000 tonnes) – Province	(1)	25,662.3	24,720.8	23,736.9	22,084.0	5,768.7	5,309.4	6,982.7	18,060.8	2.5%	▲
3C-2	Hopper Car Grain Volumes (000 tonnes) – Primary Commodities	(1)										
3C-3	Hopper Car Grain Volumes (000 tonnes) – Detailed Breakdown	(1)										
3C-4	Railway Car Cycle (days) – Empty Transit Time	(1)	10.7	8.8	8.7	7.9	7.8	7.1	6.1	6.9	-10.3%	▼
3C-4	Railway Car Cycle (days) – Loaded Transit Time	(1)	9.2	8.6	8.2	8.0	7.5	7.4	6.5	7.1	-11.5%	▼
3C-4	Railway Car Cycle (days) – Total Transit Time	(1)	19.9	17.3	16.8	15.9	15.3	14.5	12.6	14.0	-10.9%	▼
3C-5	Railway Car Cycle (days) – Non-Special Crops	(1)	19.3	17.2	16.6	15.7	15.2	14.3	12.4	13.9	-10.7%	▼
3C-6	Railway Car Cycle (days) – Special Crops	(1)	25.8	19.5	20.0	18.1	16.3	17.0	14.7	15.8	-13.2%	▼
3C-7	Railway Car Connections (days)	(1)(3)										
3C-8	Hopper Car Grain Volumes (000 tonnes) – Non-Incentive	(1)	12,716.9	6,037.9	5,888.5	5,149.5	1,514.3	1,074.3	1,235.0	3,823.5	-2.8%	▼
3C-8	Hopper Car Grain Volumes (000 tonnes) – Incentive	(1)	12,945.5	18,682.9	17,848.4	16,934.5	4,254.4	4,235.1	5,747.7	14,237.3	4.0%	▲
3C-9	Hopper Car Grain Volumes (\$ millions) – Incentive Discount Value	(1)	\$31.1	\$89.9	\$96.5	\$93.3	\$23.3	\$25.9	\$38.4	\$87.5	16.0%	▲
3C-10	Traffic Density (tonnes per route mile) – Grain-Dependent Network	(1)	442.5	439.0	418.0	427.5	461.2	392.9	516.3	456.8	3.5%	▲
3C-10	Traffic Density (tonnes per route mile) – Non-Grain-Dependent Network	(1)	292.4	297.8	291.5	269.3	286.7	271.9	357.8	305.5	6.1%	▲
3C-10	Traffic Density (tonnes per route mile) – Total Network	(1)	330.3	330.5	320.1	303.1	321.8	296.2	389.7	335.9	4.6%	▲
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	–
<b>Terminal Elevator and Port Performance [Subseries 3D]</b>												
3D-1	Annual Port Throughput (000 tonnes) – Grain	(1)	23,555.5	23,722.7	22,823.9	22,026.4	5,603.3	5,847.1	6,750.8	18,201.2	5.7%	▲
3D-2	Average Terminal Elevator Capacity Turnover Ratio	(1)(5)	9.1	8.7	8.3	8.5	n/a	n/a	n/a	n/a	n/a	–
3D-3	Average Weekly Terminal Elevator Stock Level (000 tonnes)	(1)	1,216.2	1,281.7	1,385.3	1,432.7	1,386.8	1,377.0	1,332.1	1,364.9	-3.4%	▼
3D-4	Average Days-in-Store – Operating Season (days)	(1)	18.6	17.9	19.2	21.0	23.2	17.9	13.3	17.5	-10.7%	▼
3D-5	Average Weekly Stock-to-Shipment Ratio – Grain	(1)(3)										
3D-6	Average Weekly Stock-to-Shipment Ratio – Grade	(1)(3)										
3D-7	Average Vessel Time in Port (days)	(1)	4.3	4.8	5.3	5.0	3.1	6.0	5.6	4.9	-15.5%	▼
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 compared to the same period a year earlier.
- (2) – Quarterly values for non-volume-related indicators (i.e., Composite Freight Rate Index) are "as at" the end of the reporting period. The accompanying percentage variance denotes the relative change in the value of the most recent reporting period compared to that at the end of the preceding crop year.
- (3) – Changes in the indicator cited cannot be depicted within the summary framework presented here. The reader is encouraged to consult the corresponding data table directly.
- (4) – Statistics relating to effective railway freight rates, as determined by the Canadian Transportation Agency, are generally produced about six months after the close of the crop year. The most recent statistics available are those from the 2005-06 crop year.
- (5) – The GMP provides for the calculation of this indicator on an annual basis. Quarterly values are not available.



## Synopsis – Service Reliability

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

### **Highlights – Third Quarter 2008-09 Crop Year**

#### **Port Performance**

- Average weekly stock-to-vessel-requirements ratios posted mixed results for the first nine months of the 2008-09 crop year.
  - Vancouver
    - Wheat – 3.4 for the first nine months of the 2008-09 crop year, up by 2.6%.
    - Canola – 1.8, down by 49.2%.
  - Thunder Bay
    - Wheat – 5.2 for the first nine months of the 2008-09 crop year, down by 1.6%.
    - Canola – 5.0, down by 45.0%.
  - Indicates that grain inventories were generally sufficient to meet short-term demand.
- Average stock-to-shipment ratios provide similar evidence of the ability of these ports to meet short-term demand.
  - Vancouver
    - CWB grains – 3.1 for the first nine months of the 2008-09 crop year, up by 13.0%.
    - Non-CWB grains – 2.6, down by 19.9%.
  - Thunder Bay
    - CWB grains – 5.4 for the first nine months of the 2008-09 crop year; up by 11.6%.
    - Non-CWB grains – 4.2; down by 29.1%.

## Indicator Series 4 – Service Reliability

		2008-09										
Table	Indicator Description	Notes	1999-00	2005-06	2006-07	2007-08	Q1	Q2	Q3	YTD (1)	% VAR	
<b>Port Performance [Subseries 4A]</b>												
4A-1	Avg. Weekly Stock-to-Vessel Requirements Ratio – VCR – Wheat	(1)	3.1	3.4	3.3	3.6	3.5	4.0	2.8	3.4	2.6%	▲
4A-1	Avg. Weekly Stock-to-Vessel Requirements Ratio – VCR – Canola	(1)	2.5	2.3	2.8	3.7	3.3	1.4	0.7	1.8	-49.2%	▼
4A-1	Avg. Weekly Stock-to-Vessel Requirements Ratio – TBY – Wheat	(1)	5.6	6.6	7.0	5.0	5.6	4.8	5.1	5.2	-1.6%	▼
4A-1	Avg. Weekly Stock-to-Vessel Requirements Ratio – TBY – Canola	(1)	2.8	4.4	5.3	8.3	6.5	3.8	4.5	5.0	-45.0%	▼
4A-2	Avg. Weekly Stock-to-Vessel Requirements Ratio – Grade	(1)(2)										
4A-3	Avg. Weekly Stock-to-Shipment Ratio – VCR – CWB Grains	(1)	3.5	3.2	2.9	2.9	3.3	3.2	3.0	3.1	13.0%	▲
4A-3	Avg. Weekly Stock-to-Shipment Ratio – VCR – Non-CWB Grains	(1)	3.6	3.2	3.6	3.6	2.8	2.1	2.8	2.6	-19.9%	▼
4A-3	Avg. Weekly Stock-to-Shipment Ratio – TBY – CWB Grains	(1)	4.6	6.8	6.2	5.2	4.4	4.8	7.7	5.4	11.6%	▲
4A-3	Avg. Weekly Stock-to-Shipment Ratio – TBY – Non-CWB Grains	(1)	3.3	3.6	4.4	5.7	5.5	3.5	3.3	4.2	-29.1%	▼
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 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 – Third 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 \$249.20 per tonne.
    - Represented a 33.0% 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 third quarter.
    - Represented a 23.2% premium to the farmer’s initial payment.
    - Price decline largely a result of increased global wheat supplies coupled with the uncertainty brought on by the international credit crisis.
- 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 – downward pressure brought to bear in most corridors during the second and third quarters.
    - Net decreases of up to 19.2% on CN movements to Thunder Bay
    - A net increase of 3.7% on CP shipments to Vancouver.
  - Terminal elevator handling – up by as much as 6.2% for storage.
- While changes in the PRO for 1 CWRS wheat, and input costs to the export basis, suggests significant drop in the producer’s per-tonne netback for CWB grains in the 2008-09 crop year, 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 \$456.87 per tonne for the first nine months of the 2008-09 crop year.
    - Represented a 17.9% increase from the 2007-08 crop year’s monthly average of \$556.76 per tonne.
    - Price decrease largely driven by ample global oilseed supplies.
- Recent changes in input costs:
  - Country elevator handling – up by an average of 4.4% for elevation; 2.7% for cleaning.
    - Storage charges increased by an average 7.1%.
  - Rail transportation – seasonal pricing produces significant charges to the rates in most corridors.
    - Net decreases of up to 19.2% on CN movements to Thunder Bay
    - A net increase of 3.7% on CP shipments to Vancouver.
  - Terminal elevator handling – up by as much as 6.2% for storage.
- While 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, returns are expected to remain strong by historical standards.

#### Producer-Car Loading

- Number of producer-car-loading sites decreased by 2.0% in the first nine months of the current crop year, to 445 from 454.
  - Most of the reduction tied to the closure of several sites by the Carlton Trail Railway.
- Producer-car shipments increased by 13.9% to 9,026 railcars in the first nine months.
  - Represented 4.5% of total covered hopper car movements, and 8.3% of CWB grain movements.

## Indicator Series 5 – Producer Impact

		2008-09									
Table	Indicator Description	Notes	1999-00	2005-06	2006-07	2007-08	Q1	Q2	Q3	YTD (1)	% VAR
<b>Export Basis</b>											
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					
<b>Producer-Car Loading</b>											
5B-1	Producer-Car-Loading Sites (number) – Class 1 Carriers	(2)	415	354	368	346	346	346	340		-1.7%
5B-1	Producer-Car-Loading Sites (number) – Class 2 and 3 Carriers	(2)	122	129	106	108	110	110	105		-2.8%
5B-1	Producer-Car-Loading Sites (number) – All Carriers	(2)	537	483	474	454	456	456	445		-2.0%
5B-2	Producer-Car Shipments (number) – Covered Hopper Cars	(1)	3,441	11,345	12,529	10,729	2,459	2,956	3,611	9,026	13.9%

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

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

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





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## **Appendix 1: Program Background**

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

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

In a larger sense, these reforms are expected to alter the commercial relations that have traditionally existed between the primary participants in the GHTS: producers; the Canadian Wheat Board; grain companies; railway companies; and port terminal operators. Using a series of indicators, the government's Grain Monitoring Program (GMP) aims to measure the performance of both the system as a whole, and its constituent parts, as this evolution unfolds. With this in mind, the GMP is designed to reveal whether the movement of grain from the farm gate to lake- and sea-going vessels (i.e., the supply chain) is being done more efficiently and reliably than before.

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

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



## Appendix 2: Commodities Guide

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

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

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

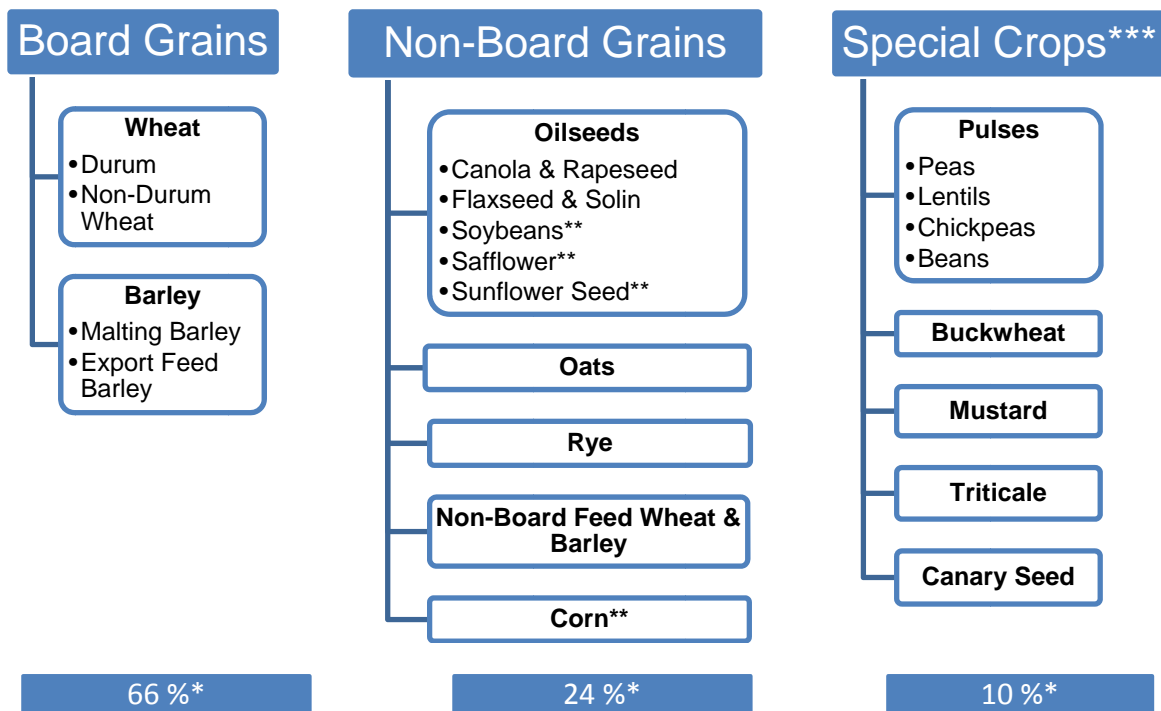
**Non-Board Grain:** Non-Board grain is grain marketed through the open market system. Such grain includes domestic feed wheat and barley, rye, oilseeds and specialty crops.

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

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

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

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



\* Percent of shipments (railway volume) to four western ports in past five years

\*\* Also may be considered special crops

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



## Appendix 3: Producer Netback Calculator

A prime issue with many stakeholders is the impact that the shrinking GHTS network has had on the length of truck haul from farm gate to elevator. While all evidence suggests that truck hauls are increasing because of the reduced number of delivery points, the exact – or even approximate – amount of this increase is unknown. Following discussions with stakeholders and the government, a methodology that would allow the Monitor to gather the data necessary to enhance the quality and reliability of this component of the export basis has been developed.<sup>66</sup> The Producer Netback Calculator (PNC) was designed to provide a cost-effective and non-intrusive means of gathering this data.

At the same time, and in response to producers' requests, the Monitor will provide access to data on the costs associated with moving grain from farm-specific locations to export position (the export basis). These costs are the same ones reflected as deductions on cash tickets. The PNC has been designed to assist farmers in determining the delivery options that may provide the best returns for their wheat, durum and feed barley. When these costs are subtracted from the most recent CWB Pool Return Outlook (PRO), the resulting calculation of producer netback provides the best possible estimate of the real returns to be had for their grain.

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

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

Origin:	<input checked="" type="radio"/> Use my home location	<input type="radio"/> Use this location			
Quarter:	SW	Section:	18	Township:	12
Range:	20	Meridian:	W1	Province:	Manitoba
Delivery Point and Elevator:	Pioneer Grain Company, Limited 4 BRANDON, MB <a href="#">Search Elevator</a>				
Distance to Elevator (Miles):	23	<a href="#">Calculate Mileage</a>			
Commodity:	Wheat	Binned Grade:	#2 CWRS 13.5	Paid At Grade:	#1 CWRS 13.5
Estimated Dockage (%):	1.0	Gross Tonnes to Deliver:	60		
Trucking Rate:	5	per Tonne			
Number of Trips:	2				
Trucking Mode:	Commercial	Truck Type:	Tridom (tri-axle)		
Anticipated Trucking Premium (leave blank if none):	3.50	(\$ per Net Tonne)			
Other Premiums (leave blank if none):		(\$ per Net Tonne)			
<a href="#">Calculate Estimate</a>					

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

<sup>66</sup> The GMP currently incorporates trucking costs based on the commercial short-haul trucking rates for an average haul of 40 miles, as presented in Table 3A-1.

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

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

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

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

## **Appendix 4: Acknowledgements**

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

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