



**Monitoring the Canadian
Grain Handling and
Transportation System**

**Second Quarter
2009-2010 Crop Year**

Foreword

In keeping with the federal government's Grain Monitoring Program (GMP), the ensuing report focuses on the performance of the Canadian Grain Handling and Transportation System (GHTS) for the six-month period ended 31 January 2010. In addition to providing a current accounting of the indicators maintained under the GMP, it also outlines the trends and issues manifest in the movement of western Canadian grain during the first half of the 2009-10 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 2008-09 crop year, they are also intended to form part of a time series that extends forward from the 1999-2000 crop year. As such, comparisons to earlier crop years are also made whenever a broader contextual framework is deemed appropriate.

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

QUORUM CORPORATION
Edmonton, Alberta

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Findings

From its outset, the 2009-10 crop year looked as though it would be a difficult one. Beginning with a dry spring, followed by abnormally cooler temperatures, led to widespread concerns over the size and quality of the crops that would be harvested in the fall. But an unusually warm September shielded the late plant development from the potential effects of a killing frost, and largely preserved both the quantity and quality of the grain that was harvested. Despite this, an excess of supply in most grain markets, coupled with the reverberations of the financial crisis that were still being felt around the world, brought further downward pressure on international grain prices. Although still widely superior to those observed previously by the GMP, the reductions posted to the end of the second quarter of the 2009-10 crop year suggested further erosion in the financial returns accruing to Canadian grain producers.

1.0 Industry Overview

1.1 Grain Production and Supply

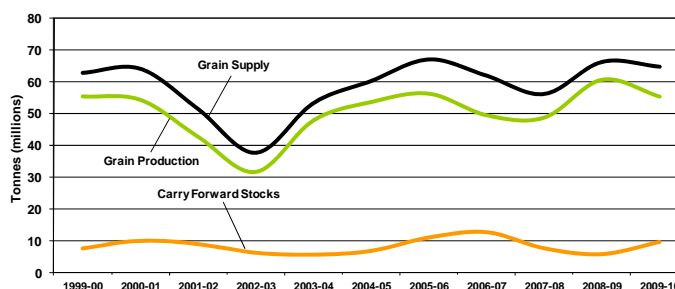
Overall grain production for the 2009-10 crop year fell to 55.1 million tonnes, a decrease of 8.7% from the previous crop year's record-setting 60.4 million tonnes. Despite the reduction in output, the crop ranked as the fourth largest in the last eleven years, and well above the 50-million-tonne norm. In keeping with this, the production of all major crops, save that of flaxseed, fell in comparison to the tonnage harvested a year earlier. The largest decline in output could be traced to a 2.3-million-tonne reduction in the size of the barley crop, which fell by 20.4% to a three-year low of 8.9 million tonnes in addition to a 1.5-million-tonne reduction in oats (down 37.7%); a 1.1-million-tonne decrease in wheat (down 5.3%); and a 0.8-million-tonne drop for canola (down 6.4%). Running counter to this general pattern were special crops, which saw production increase by 7.7% to reach a GMP record of 5.6 million tonnes.

Production for all provinces but British Columbia also declined, the most significant in Alberta.¹ Owing to comparatively poorer growing conditions, the province's total production fell by 21.6%, to 15.7 million tonnes from 20.0 million tonnes a year earlier. This decrease accounted for over 80% of the net decline in prairie production. In Manitoba and Saskatchewan, output fell by 0.6 million tonnes (down 5.4%) and 0.4 million tonnes (down 1.3%) respectively.

Notwithstanding the above mentioned decline in production, the overall grain supply decreased by a more modest 2.3%, falling to 64.5 million tonnes from 66.0 million tonnes a year earlier. Much of the potential fall was cushioned by a 66.6% increase in the amount of stocks carried forward from the preceding crop year, which rose to 9.4 million tonnes from 5.6 million tonnes. Much of the impetus for this came as a result of mounting global grain supplies and softening commodity prices.

Despite an overall decrease in Canadian grain production, the GHTS's handlings in the first six months of the 2009-10 crop year actually increased. Railway shipments for the period rose by 13.1%, climbing to 13.7 million tonnes from 12.1 million tonnes a year earlier. Significant gains were noted for most commodities, with CWB grains up by a collective 12.1%, and non-CWB grains by a marginally greater 14.4%. Wheat and barley were the strongest performers among the CWB grains, with volume gains of 15.8% and 10.8% respectively. Running counter to this was durum which, owing to a sharp decline in second quarter tonnage, posted an accumulated 1.9% reduction in volume for the first half. Much of the increase among non-CWB grains was

Figure 1: Western Canadian Grain Supply



¹ Grain production in British Columbia actually increased by 22.4%, climbing to 190,800 tonnes from 155,900 tonnes a year earlier.

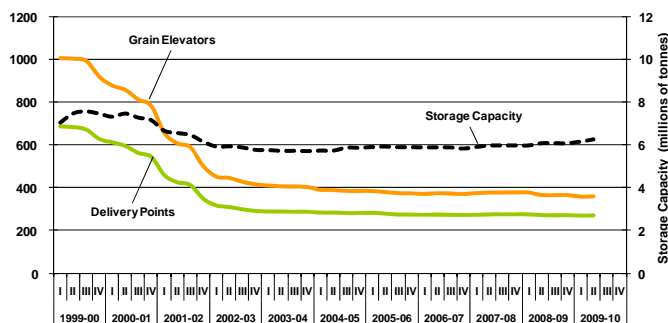
driven by the continuing strong export demand for canola, which rose by 13.2% in the first half to produce a record movement of 3.5 million tonnes.² Special crop shipments, which had a particularly strong showing in the second quarter, posted an overall increase of 6.2% in the same six-month period, generating a total of 1.4 million tonnes of traffic.

1.2 Country Elevator Infrastructure

Although the country elevator network has continued to diminish in size, the pace of that reduction has abated significantly in recent years. The first quarter of the 2009-10 crop year saw another seven licensed elevators removed from this network. This, however, was partially reversed in the second quarter when one elevator was reopened. By the end of January 2010 the remaining network encompassed a total of 360 facilities, which represented just over one-third, 35.9%, of the 1,004 elevators that had been in place at the beginning of the GMP.

Reflecting the decline in elevator facilities has been a largely parallel reduction in active grain delivery points. As was the case with licensed elevators, there was a modest reduction of two delivery points in the first quarter, which was partially offset by an increase of one in the second. This served to reduce the 272 points still actively gathering grain at the end of the 2008-09 crop year to 271 by the close of the first half. On the whole, this meant that the number of locations accepting grain had been reduced by 60.4% from the 685 listed at the beginning of the GMP. Although these sites are distributed generally throughout western Canada, the majority of grain deliveries have been concentrated at about one-third of them. In the 2008-09 crop year, the last for which data is available, 80% of the tonnage delivered into the system was gathered at just 89 locations.³

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



The reduction in elevator storage capacity has not been nearly as dramatic as either the decline in the number of elevators or grain delivery points. This facet of the country elevator system's transformation reflects the incremental gain made as a result of the industry's focused investment in high-throughput facilities. Despite a 64.1% reduction in the number of total elevators, the system's storage capacity has never declined by more than 19.0% from the 7.0 million tonnes gauged at the outset of the GMP. Moreover, since reaching a low of 5.7 million tonnes at the close of the 2003-04 crop year, this investment in high-throughput facilities had added back another 0.4 million tonnes of storage capacity into the system by the end of the 2008-09 crop year. This process continued into the 2009-10 crop year with another 180,400 tonnes being added to the system in its first six months. By the close of the first half, total storage capacity had climbed to slightly above 6.2 million tonnes; a mere 11.2% below the level recorded at the beginning of the GMP.

These broad trends provide a clear indication of the evolution that has been taking place within the industry since the beginning of the GMP. The elevator network now comprises far fewer facilities, many with significantly larger storage capacities and the ability to load railcars in trainload lots. It is worth noting that when the GMP began only 11.9% of the system's elevators were able to load 50 or more railcars at a time. However, this proportion has been steadily building as a result of elevator rationalization. With the close of the second quarter, high-throughput facilities accounted for more than half, 52.2%, of the GHTS's remaining licensed elevators.

² While the demand from traditional customers such as Japan and Mexico has remained relatively constant, the increase in Chinese demand has served to raise railway shipments of non-CWB grains to record levels. More importantly, canola exports to China in the first six months of the 2009-10 crop year reached a record 1.3 million tonnes.

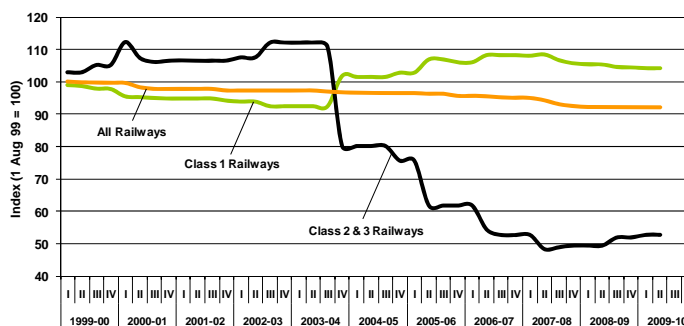
³ The most recent statistics available for grain deliveries by station are those from the 2008-09 crop year.

1.3 Railway Infrastructure

Total railway infrastructure in western Canada has undergone a comparatively modest transformation since the beginning of the GMP. By the end of the 2008-09 crop year the railway network had been reduced by just 8.0%, to encompass a total of 17,904.7 route-miles of track. Although 87.2% of this 1,563.5-route-mile reduction was derived from the abandonment of grain-dependent branch lines, there were equally significant changes in the makeup of the system that remained. Much of this related to the fact that CN and CP had transferred a variety of uneconomic 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 first significant change in this strategy came in 2004 when CN acquired the operations of what was then western Canada's only Class 2 carrier, BC Rail Ltd. Since then, the waning financial health of many of those shortline carriers established in the 1990's has led several into selling or rationalizing their own operations. It has also resulted in some reverting back to the control of the Class 1 carrier that had spun them off in the first place, the most striking of these reversals in January 2006 when RailAmerica Inc. sold most of its holdings in western Canada back to CN.⁴ The amalgamation of some of these lines has served to again realign the scope of Class 1 and non-Class 1 railway operations.

Figure 3: Relative Change in Railway Infrastructure



It must be noted that many of these shortline operations had been established with an eye towards preserving railway service on what the Class 1 carriers had come to regard as uneconomic branch lines. While many of these were dependent on the movement of grain, most shortline railways proved incapable of reshaping the economics that gave rise to the grain industry's broader elevator-rationalization programs. Although these smaller carriers could point to some success in attracting new business – much of which has been tied to increased producer-car loading – they could not prevent the grain companies from continuing to systematically close the smaller elevators they still served.

The effect of these shortline closures could be seen in the division of the railway network itself. Whereas, shortline railways had controlled 23.8% of the western Canadian system at the outset of the GMP, by the close of the 2008-09 crop year that share had fallen to a much lesser 13.7%. The infrastructure still being operated by these carriers had fallen by 48.0%, to 2,411.3 route-miles from 4,640.3 route-miles a decade earlier. Moreover, even with abandonments, the infrastructure under CN and CP control actually increased by 4.2% during this same period, climbing to 15,493.4 route-miles from 14,827.9 route-miles.

The 2009-10 crop year brought still more examples of the changing face of shortline operations in western Canada. After more than a decade of service, the Okanagan Valley Railway suspended operations altogether in September 2009.⁵ But the failure of the OVR stood in contrast to the creation of yet another Saskatchewan-based shortline, the Last Mountain Railway, which began operating over an 84.5-mile stretch of former CN

⁴ 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.

⁵ The Okanagan Valley Railway operated over a 94-mile network situated in the British Columbia interior. Much of this was accessed through the exercising of trackage rights over infrastructure formerly owned by CN, and later transferred to the Kelowna Pacific Railway. But the company also leased a 46.3-mile section of connecting track from CP, which extended south from the CP main line at Sicamous to Vernon. When the OVR ceased operating, this leased section reverted back to CP control. CP is reportedly now considering the abandonment of this line.

track extending southward from Davidson to Regina in October 2009.⁶ Following the lead set down by the Great Western Railway several years before, the takeover was spearheaded by a consortium of local municipal and business interests led by Mobil Grain Ltd. The new railway was also able to secure a portion of its immediate capital needs from the provincial government, which extended the carrier a \$1.6 million interest-free loan.

Even with a recent surge in new shortlines, the traffic collectively originated by these smaller carriers has remained on the decline.⁷ Although total hopper car shipments in the first six months of the 2009-10 crop year increased by 11.8%, much of the gain was attributable to the Class 1 carriers, which saw their originations increase by 12.0%. In comparison, the volume originated by the shortlines increased by a lesser 5.7%. To a large extent, these results reflect the broader changes that have taken place in the underlying elevator infrastructure. Since the beginning of the GMP the shortlines have seen the number of elevators they service fall by 76.8%; against a 64.0% reduction for the major carriers. Even more telling has been the comparative decline in the storage capacities of these two networks, with that serviced by the shortlines falling by 76.2% against a mere 6.3% for the Class 1 carriers. [what was lost on the shortlines]

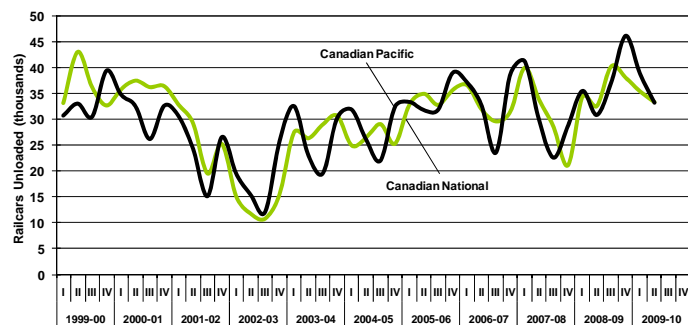
There were no track abandonments in the first six months of the 2009-10 crop year.⁸ The overall railway network in western Canada remained unchanged at 17,904.7 route-miles. Still, the transfers already noted produced a 38.2-route-mile shift in the balance between the Class 1 and non-Class 1 carriers. By the end of January 2010 CN and CP operated over a marginally smaller 15,455.2 route-miles of track, which constituted a year-to-date reduction of just 0.2%. In comparison, the shortline network grew by 1.6%, climbing to 2,449.5 route-miles of track.

1.4 Terminal Elevator Infrastructure

No changes to the licensed terminal elevator network in western Canada were recorded during the first six months of the 2009-10 crop year. At the close of the period, the network still comprised a total of 15 facilities with 2.5 million tonnes of associated storage capacity.

A total of 140,481 carloads of grain were unloaded at these facilities during the first six months of the 2009-10 crop year. This represented an increase of 5.6% from the 132,974 handled during the same period a year earlier. Having originated 51.2% of the cars that were unloaded during this period, CP again constituted the largest handler of export grain in western Canada. This share was moderately larger than the 49.8% secured by CP during the first half of the previous crop year.

Figure 4: Terminal Elevator Unloads – Railway Carrier



Although the record remains mixed, CP has often outdistanced CN's quarterly handlings since the 2002-03 crop year. In large part, this can be explained by a distribution in crop production that has tended to benefit CP rather than CN. Still, CN's efforts to promote its Prince Rupert gateway appear to have done much to help compensate for this. Through reduced freight rates

⁶ The line embodies the southern section of CN's Craik subdivision. Under the terms of the agreement, the Last Mountain Railway purchased the 67.0-mile section between Davidson and Lumsden, and leased the remaining 17.5-mile section leading into Regina.

⁷ In addition to the Last Mountain Railway, three other shortlines had been established since the beginning of the 2007-08 crop year: Torch River Rail; the Great Sandhills Railway; and the Boundary Trail Railway.

⁸ Despite the fact that no track was abandoned during the first six months of the 2009-10 crop year, the network plans of both CN and CP continued to show another 830 route-miles of Class 1 railway infrastructure being targeted for discontinuance over the next three years. About two-thirds of this was earmarked for discontinuance by CP.

and a better allocation of cars to the corridor, CN appears to have narrowed the overall differential in market share substantially – even if the gain has come partially at the expense of the carrier's own handlings into Vancouver.⁹

⁹ CN's handlings into Vancouver are substantially lower than they were in the first years of the GMP. In fact, CN's share in this traffic for the first half of the 2009-10 crop year amounted to 38.5%, well below the 46.4% share benchmarked for the carrier in the 1999-2000 crop year. Much of the volume that CN would have handled into Vancouver has now found its way to Prince Rupert.

2.0 Commercial Relations

2.1 Tendering Program

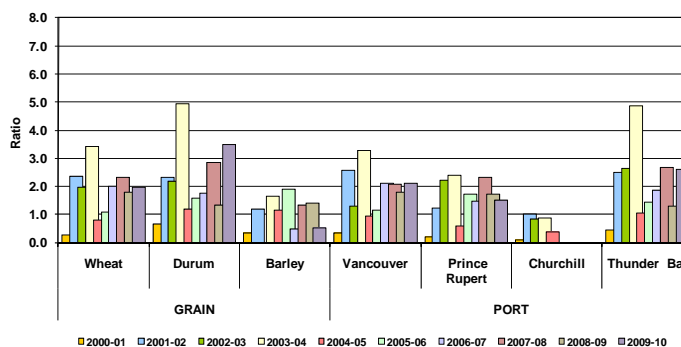
The 2009-10 crop year denotes the tenth for the Canadian Wheat Board's tendering program. Initially established with a three-year life under a Memorandum of Understanding between the Minister Responsible for the Canadian Wheat Board and the CWB, the program has evolved significantly since the MOU expired at the end of the 2002-03 crop year. The most fundamental change involved the establishment of a protocol between the CWB and its agents that called for 40% of the CWB's overall grain movements to the four ports in western Canada to be accomplished through a combination of tendering and advance car awards. While shipments under these two programs always fell short of this target, the proportion moving under them has fallen noticeably in the last three crop years. Between the 2006-07 and 2008-09 crop years the proportion of these movements had slid from 33.6% to 26.5%. Much of this decline reflected the CWB's adoption of a less rigid target, and one that gave them a greater degree of flexibility in moving grain.

In the first six months of the 2009-10 crop year the CWB issued a total of 128 tenders calling for the movement of 1.4 million tonnes of grain. This represented a 3.4% reduction from the tonnage put out for tender in the same period a year earlier. As in most previous crop years, the most substantive portion of this tonnage, 72.6%, related to the movement of wheat. Barley accounted for another 14.5%, with the residual 12.9% moving to durum.

The majority of the tender calls issued in the first half, 45.7%, favoured the delivery of grain to Prince Rupert. This proved consistent with the 43.3% share the port secured during the same six-month period of the 2008-09 crop year. Vancouver followed with a 33.2% share, gaining substantially against both the third-place ranking and 26.8% share it garnered a year earlier.¹⁰ With a noticeably lesser 21.1% share of the tonnage called, Thunder Bay ranked as the third largest intended destination, surrendering a sizeable portion of the previous crop year's 29.9% share. For a fifth consecutive year, no tenders calling for delivery of grain to Churchill were issued.

The calls issued by the CWB were met by 448 bids offering to move an aggregated 2.7 million tonnes of grain, almost twice the volume sought. Bidding proved more intensive than in the preceding crop year, driven predominantly by the activity surrounding durum. Using the ratio of tonnage-bid to tonnage-called to gauge the response rates of the grain companies, the intensity of the bidding on durum tenders proved second only to that of the 2003-04 crop year. The response rate rose by 165.2%, producing a ratio of 3.5 in comparison to 1.3 for the previous crop year as a whole. The increase in the response rate on wheat tenders proved significant less, with a gain of 9.2% raising the associated ratio to 2.0 from the 2008-09 crop year's 1.8 value. Only barley showed a marked decrease in bidding activity, with the ratio falling by 64.5%, to 0.5 from 1.4 a year earlier.

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



Some pronounced changes in the response rates for the port specified in the tender calls were also evident. In particular, the ratio associated with grain intended for delivery at Thunder Bay doubled, climbing to 2.6 compared to 1.3 for the previous crop year as a whole. Vancouver's ratio saw a far more modest 18.4% gain,

¹⁰ 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.

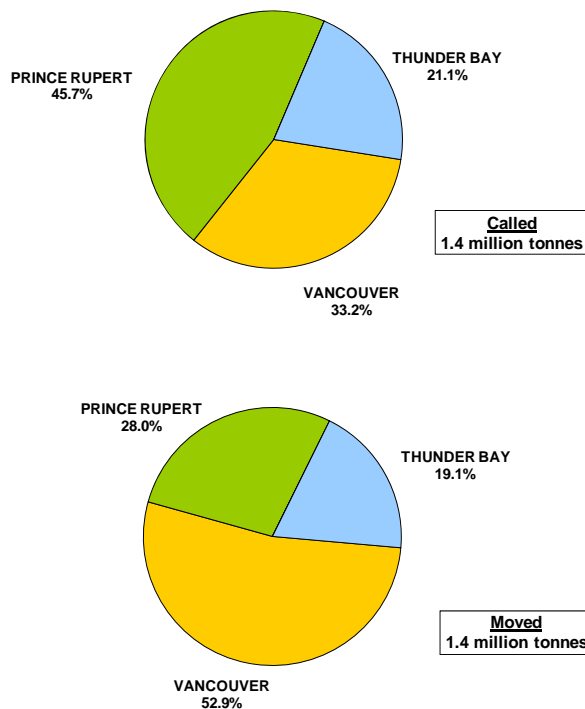
rising to 2.1 from the previous year's 1.8. Only Prince Rupert saw the ratio decrease, falling by 11.8% to 1.5 from 1.7 for the 2008-09 crop year as a whole.¹¹

In part, these better response rates reflected the competition that had been spurred as a result of a further reduction in the amount of grain put out for tender. This was particularly evident in the movement of durum to Thunder Bay. Owing to a surplus occasioned by the sizeable quantity of stocks carried forward from the previous crop year as well as a comparatively large harvest, the grain companies appeared desirous of clearing as much from their houses as possible. This was reflected in the more aggressive bids being put forward by the grain companies. Whereas the maximum discount on tendered durum shipments reached \$14.95 per tonne in the 2008-09 crop year, they increased by 45.6% to \$21.76 per tonne in the first half.¹²

Aside from the heightened activity relating to durum, the discounts bid to secure wheat tenders moved steadily lower in the first six months of the crop year, with the first and second quarters' maximum bids falling from the previous crop year's high of \$23.01 per tonne to \$21.28 per tonne and \$18.34 per tonne respectively. This pattern appeared to be consistent with previous observations to the effect that tender bids generally peak at harvest time, when the grain companies are anxious to maintain elevator fluidity. Despite this, there was still evidence to the effect that the bidding on movements to Vancouver were more aggressive than on those to Prince Rupert.¹³ It should be noted, however, that the differential in the discounts put forward by the grain companies on these movements narrowed in the first half. Whereas the difference between the maximum discounts advanced on wheat tenders to Vancouver and Prince Rupert in the 2008-09 crop year amounted to \$5.66 per tonne, those put forward by the close of the second quarter tended to favour Vancouver by a noticeably lesser \$3.29 per tonne.

During the first six months of the 2009-10 crop year the CWB awarded a total of 191 contracts for the movement of an aggregated 1.4 million tonnes of grain.¹⁴ This represented a gain of 14.2% over the 1.2 million tonnes contracted for in the same period a year earlier. Unlike the tonnage specified in the tender calls, the largest proportion of the grain contracted for movement, 22.8%, was destined to the port of Vancouver. Prince Rupert and Thunder Bay followed in turn with shares of 17.9% and 14.2% respectively.

Figure 6: Tendered Grain – Cumulative Volumes to 31 January 2010



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

¹² The tender bids advanced by the grain companies are typically expressed as a discount to the CWB's Initial Payment.

¹³ Prince Rupert Grain's shareholders all have wholly-owned facilities in Vancouver. This provides them with a monetary incentive to direct grain through Vancouver, as they do not have to share terminal revenues to the same extent as they do on movements through Prince Rupert. Some shareholders are also concerned with the single-carrier service entailed in moving grain to Prince Rupert, preferring the availability of two carriers in the movement of grain to Vancouver.

¹⁴ The volumes cited as moving under the CWB's tendering program also extend to tendered malting barley – which is administered independent of other tendered CWB grains.

As previously observed by the Monitor, the vast majority of the grain moved under the CWB's tendering program did so in blocks of 25 or more railcars. During the first six months of the 2009-10 crop year, 91.4% of the tendered grain volume moved in such blocks. This proportion proved to be marginally above the 91.0% recorded for the 2008-09 crop year as a whole. There was also an increase in the proportion moving in blocks of 50 or more cars, which rose to 70.1% from the previous crop year's 61.9% average. Equally telling was the fact that the proportion of shipments moving in blocks of 100 or more cars also increased, taking a 20.8% proportion of the total against just 11.9% in the previous crop year.

High-throughput elevators continued to be the primary source for tendered grain shipments. During the first six months of the 2009-10 crop year, 98.3% of the tendered grain tonnage was shipped from these larger facilities. Although consistent with the higher shares observed in recent years, this proved to be slightly greater than the 97.7% share moved through these facilities for the 2008-09 crop year as a whole.

In terms of originating carriers, CP retained its position as the largest handler of tendered grain in the first half. With 58.4% of the volume, the carrier easily outdistanced CN's 41.6% share. CP's share also proved to be substantially greater than the 41.8% it had garnered for the entire 2008-09 crop year.

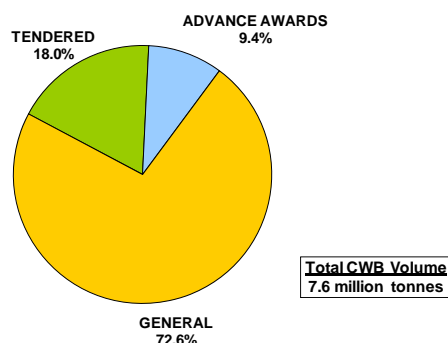
In aggregate, 18.0% of the CWB's total grain shipments moved under tender to western Canadian ports in the first six months of the 2009-10 crop year. Paralleling the gain in tonnage handled, the CWB reported that its Transportation Savings for the period had increased by 12.8%, rising to \$18.5 million from \$16.4 million.¹⁵

2.2 Advance Car Awards Program

The 2009-10 crop year marked the commencement of the seventh season for the CWB's advance car awards program, with slightly more than 0.7 million tonnes of grain having been moved under it in the first half. This constituted just 9.4% of the total grain volume shipped by the CWB to western Canadian ports during the period. When considered alongside the 1.4 million tonnes of tendered grain already discussed, 27.7% of the 7.6 million tonnes of grain shipped by the CWB in the first six months of the crop year moved under the umbrella of these two programs. This proved marginally greater than the 26.3% of these programs in the same period a year earlier.

The composition of the grain shipped under the CWB's advance car awards program once again proved broadly similar to that moved under its tendering program. Even so, there were some notable differences, the most significant being that, while almost a quarter of the volume moved under the tendering program was comprised of barley, none moved under the advance car awards program. As a result, wheat and durum took up comparatively larger shares of the overall movement. Wheat, which continued to be the foremost grain handled, accounted for almost 0.6 million tonnes and 83.0% of the program's overall volume. This was followed by some 0.1 million tonnes of durum, which constituted the residual 17.0% share.

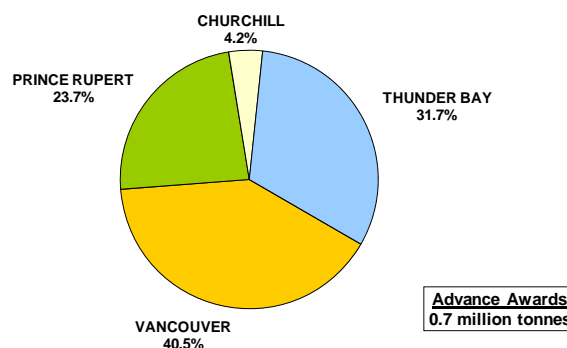
Figure 7: Western Canadian CWB Grain Volumes



¹⁵ 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.

While Vancouver's share fell to 40.5% of the total movement, it again ranked first among tendered grain destinations. Contrary to the situation seen with tendered grain shipments, the second largest share was seen in Thunder Bay, which accounted for 31.7% of the grain moved under the advance car awards program. Ranking third was Prince Rupert, which took a 23.7% share of the advance car awards movement in comparison to the 28.0% it secured under the CWB's tendering program. To an extent, some of this attrition was attributable to a substantive increase in the amount of grain moved through Churchill. Although no grain was directed to the port under the tendering program, 4.2% of the volume was moved under the advance car awards program.

Figure 8: Advance Car Awards – Destination Port



As was the case with tendered grain shipments, the vast majority of the grain moved under the advance car awards program, 94.4%, originated at high-throughput elevators. This proved only marginally below the 98.3% share cited earlier for tendered grain shipments. CP also handled the majority of this grain, taking a 65.5% share in comparison to its 58.4% share on tendered grain.

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, 87.4% of this total volume moved in blocks of 25 or more railcars compared to 91.4% for tendered grain alone. Similarly, the average overall size of these blocks amounted to 56.5 cars versus an average of 63.3 cars for tendered grain.

2.3 Other Commercial Developments

2.31 Market Access Issues Impact the GHTS

The commercial dangers of being overly reliant on foreign markets was brought into sharp focus early in the 2009-10 crop year when a German laboratory found a telltale marker from genetically modified (GM) Canadian flaxseed in European food products. With a zero tolerance on unapproved GM traits having been imposed by the European Union (EU), this discovery effectively led to the suspension of all Canadian sales to Europe, and the loss of Canada's largest flaxseed market.

The gene marker in question was ultimately traced back to a genetically-modified flaxseed variety, known as Triffid, which had been developed by the University of Saskatchewan's Crop Development Centre (CDC) in the late 1980s. Although developed further in the 1990s, Triffid was ultimately deregistered in 2001 over growing concerns that European regulators would not approve its GM traits. Triffid never actually went into commercial production, and the grain industry believed that all traces of the variety had been expunged through pedigreed seed recovery or processing.

The Canadian Grain Commission moved quickly to test samples taken from all recent flaxseed shipments. In doing so, three tested positive for the presence of CDC Triffid. At the same time, the Canadian flaxseed industry began working with the EU's director general for health and consumer affairs to establish an acceptable protocol for the sampling, testing and documentation of all future shipments. Although flaxseed shipments to Europe remained embargoed through the remainder of the first quarter, by the beginning of the second quarter a stringent set of new rules that allowed for the resumption of Canadian exports had been

agreed upon.¹⁶ And while flaxseed exports to Europe resumed in December 2009, total shipments through to the end of January 2010 proved well below normal, with 109,800 tonnes having been exported versus 288,900 tonnes in the same six-month period a year earlier. Further relief came in the form of shipments to new markets, with Canadian flaxseed exports to China in the first half of the 2009-10 crop year reaching a total of 98,000 tonnes.

At about this same time, the United States Food and Drug Administration (FDA) identified yet another rail shipment of canola meal bound for the California dairy market that was found to contain salmonella bacteria. The problem had first arisen in the fall of 2008, when a shipment from a Canadian canola crusher was identified as having been contaminated. Under American law, the discovery of such contamination results in the crusher automatically being placed on an "import alert list," with all subsequent movements to the US from that shipper being subjected to thorough testing, resulting in delayed border crossings and possible entry refusals. By the fall of 2009, six, or about half of Canada's crushers had been placed on the alert list. Little change was noted in this regard during the second quarter, save for the fact that the restrictions on the Cargill crushing facility at Clavet, Saskatchewan, were lifted in December 2009.

The impetus for the increased FDA scrutiny stemmed from a number of high-profile incidents in which people had become ill as a result of the bacteria. Although the Canadian canola industry argued that these canola meal shipments were intended to be used as animal feed, and therefore subject to lower standards than when directed towards human consumption, the FDA remained unmoved. As a result, Canada's canola crushers were forced to scale back production, searching for alternative domestic and foreign canola-meal markets.

The canola industry was setback even further in October 2009 when China informed the Canadian Food Inspection Agency that all canola imported into that country as of 15 November 2009 would require certification as to it being free of black-leg; a soil-borne pathogen found around much of the world, including China.¹⁷ China claimed that the embargoing of non-certified canola was mandated since the variant of black-leg present in Canada (as well as Australia) was more virulent than its own domestic strain. The potential disruption to trade with China, which purchased 2.9 million tonnes of canola seed in the 2008-09 crop year was of paramount concern to the canola industry.

Officials from the Canadian government as well as the Canola Council of Canada moved quickly to find a solution to the problem. These high-level discussions, however, failed to find an effective alternative to the pending ban on the Chinese importation of non-certified canola. Even so, the Canadians did gain an important concession: the Chinese would allow non-certified canola to be landed at three ports in non-canola growing regions of the country (where the fear of contamination was considered substantially less) for the remainder of the 2009-10 crop year. The Chinese also indicated that the country was prepared to substantially increase its canola oil imports in 2010, to 350,000 tonnes from about 150,000 tonnes.

With the close of the second quarter, the Canadian grain industry was coming to accept the realities of these new market-access issues. Moreover, there was the growing recognition that there could be far-reaching consequences for the entire GHTS. Beyond its immediate implications, the industry was beginning to acknowledge that the system's capacity could be significantly constrained if greater product segregation was going to be required in both the short and longer-term future. In addition, the industry realized the fact that trade barriers, regardless of their legitimacy, could arise very quickly, and leave marketers with little lead time in developing alternative commercial strategies.

2.32 CN Delists Producer Car Loading Sites

In September 2009 CN announced that it was closing 53 of its 218 producer-car loading sites. The carrier noted that the closures were being made as the sites had produced little or no traffic in several years. On a

¹⁶ The protocol required grain handlers to retain samples of all the flaxseed delivered from farms for testing in the event that GM traits were later discovered. Composite samples of the flaxseed loaded into railcars were to be tested by CGC-accredited laboratories, which would be able to identify any contaminated shipments prior to their arrival at a port terminal. Finally, the CGC was required to certify that flaxseed loaded into vessels destined for Europe was GM-free (0.01% or less).

¹⁷ Black-leg can cause plant disease resulting in significant yield losses. It is not a significant threat in Canada due to the development of black-leg resistant varieties of canola.

provincial basis, the 53 to be delisted encompassed nine from Manitoba; 24 from Saskatchewan, and 20 from Alberta. The announcement followed the 60-day notification period set out for such closures in the *Canada Transportation Act*.¹⁸

This announcement, however, was met with widespread backlash from a number of affected communities and stakeholder groups. Producer-car loading advocates decried the loss, of what they perceived, as viable competitive options for moving grain given the significant rationalization of elevators and branch lines that had already taken place. They also attacked CN for having posted its planned closure notices during a period when farmers were preoccupied with the pending harvest, and less likely to take notice or respond. Through all of this, there were numerous calls for the federal government to intervene on the farmer's behalf, and to impose a moratorium on such closures until a broader legislative review into the rights of the producer to load their own grain could be undertaken. The subject was even broached in hearings held by the House of Commons Standing Committee on Agriculture and Agri-Food in October 2009.

CN renewed its argument to the effect that there had been no producer-car shipments from the majority of these sites in the preceding five years, and little traffic from those that did. Moreover, many had an alternative producer-car loading site situated within 25 kilometres of the ones slated for closure. The railway also stressed that the cost of track inspection and maintenance, required regardless of the site's actual usage, did not justify their continued support.

In light of what was quickly turning into a public-relations disaster, CN agreed to partially pull back on its plans. First, it agreed to properly reissue the notices that it had published concerning the planned closure of 13 of its 53 sites.. The railway also committed to delay any attempt to remove the physical infrastructure associated with these sidings pending further consultation with affected parties.

Not all producers, however, were satisfied with the concessions that had been advanced by CN. In December 2009 a Saskatchewan farmer, Cam Goff, launched a formal level-of-service complaint with the Canadian Transportation Agency in an effort to block the railway's planned closure of these sites. In a parallel measure, Manitoba's Keystone Agricultural Producers moved to have the Agency mediate a similar complaint over the future of these sites with CN, but the effort ultimately failed and the matter dropped.¹⁹ At the close of the second quarter, the Goff challenge remained undecided.

2.33 Railway Service Complaints Diminish

As reported in previous editions of the Monitor's reports, complaints over railway service and car allocation have been on the rise in recent years. Of particular concern has been a perceived decline in the consistency and reliability with which that service has been delivered. Grain shippers have frequently cited costly instances where railcars have not been spotted in a timely manner at country elevators for loading, or at destination terminals for unloading. The general car allocation process – always a contentious matter – also came under fire from shippers who argued that they were continually being shorted, often in preference to other shippers.

Since 2007, a number of grain shippers, all frustrated with the service they were receiving from CN, have brought their complaints to the Canadian Transportation Agency for redress. In most instances, the Agency found that the carrier had in fact breached its common carrier obligations, finding – as in the case undertaken by Great Northern Grain Terminals Ltd. – that the breach even had a wider “systemic” dimension.²⁰ In all such cases, the Agency directed CN to undertake specific remedial actions. In the year that followed, CN appeared to have taken a number of steps towards addressing at least some of these service issues. In fact, shipper complaints became less vociferous in consideration of improved railway service.

¹⁸ The *Canada Transportation Act* requires that CN and CP maintain a current listing on their corporate websites of the sidings they provide for producer-car loading. Any such siding may be closed by the railway following a 60-day notice of the planned closure in a newspaper with a general circulation in the area where the siding is located.

¹⁹ As a means of informally addressing complaints brought against federally-regulated carriers, the Canadian Transportation Agency offers a confidential dispute-resolution service to the parties involved. This consists primarily of employing the Agency as a facilitator or a mediator before a formal complaint is lodged with the Agency.

²⁰ See Canadian Transportation Agency Decision Number 344-R-2007, dated 6 July 2007.

Still, in March 2009, Western Grain Trade Ltd. (WGTL) launched a similar complaint with the Agency concerning 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 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 Agency, which would direct the carrier to provide service that better reflected the shipper's specific needs. By the close of the second quarter, however, a decision in the matter had still not been rendered.

2.34 Review of Rail Freight Service

In response to the concerns that had been raised by a wide number of shippers regarding the state of railway service in Canada, the federal government committed itself to a review of railway service in early 2008²¹. This undertaking was but one facet in a broader initiative aimed at enhancing the shipper protection provisions already contained in the Canada Transportation Act. The general focus of this review was to examine the performance of the freight logistics system in Canada with an eye towards identifying any problems or issues respecting railway service. This was also to include those issues stemming from the operations and activities of stakeholders other than the railways, including shippers, receivers and other logistics partners.

The review was to be conducted in two distinct phases. The first of these phases centred on gathering and analyzing the pertinent data relating to the railways' performance during a specific timeframe. The second would see a panel of eminent person's appointed to review the work completed in the first phase, and to further that investigation by consulting with a number of the parties within the broader stakeholder community regarding the problems that had been identified. The panel would then develop its recommendations, ultimately submitting its final report to the Minister of Transport, Infrastructure and Communities.

By the end of the second quarter of the 2009–10 crop year, the work associated with the first phase of the review had essentially been completed, with the appointed panel having already begun its consultations with the stakeholder community. Representatives from various corners of the grain industry were actively involved in this process, and voiced anew their long-standing belief in the need for better shipper protection measures as well as railway service. The panel's final report was not expected to be released until the autumn of 2010²².

²¹ The events leading up to this commitment are outlined in the Monitor's annual report for the 2007-08 crop year.

²² Additional information concerning the Review of Railway Service, along with its preliminary reports, can be found on its website at: <http://www.tc.gc.ca/eng/policy/acg-rfs-review-examen-sfm-rvw-eng-442.htm>

3.0 System Efficiency and Service Reliability

3.1 Trucking

Short-haul trucking rates have risen substantially since the 2004-05 crop year. Through to the end of the 2008-09 crop year, commercial trucking rates had risen by a factor of 32.2% from what they had been a decade earlier. Ultimately, this increase reflected the effects of rising fuel and labour costs. To an extent, increased grain shipments also served to heighten the demand for carrying capacity, which gave service providers a greater degree of latitude in passing these costs onto their customers.

Despite the reduction in fuel prices that ensued as a result of a sharp fall in the underlying cost of crude oil in the latter months of 2008, commercial trucking costs for the movement of grain remained unchanged from the relative highs they reached in the first quarter of the 2008-09 crop year. Moreover, the demand for their trucking services remained comparatively high in light of the large volumes of grain still being moved at that time.

The composite price index remained unchanged from the 132.2 recorded at the close of the previous crop year.

3.2 Country Elevators

Total country elevator throughput, measured by shipments from primary elevator facilities, remained largely unchanged for the first six months of the 2009-10 crop year, increasing by just 0.4% to 16.3 million tonnes.²³ Even so, the primary elevator system's capacity turnover ratio moved marginally lower, falling by 2.6% to 3.0 turns in the first half. Much of this reduction was attributable to an 118,900-tonne increase in the system's overall storage capacity, which rose to almost 5.5 million tonnes. Notwithstanding the immediate effects of this recent increase, the effects of an accumulated 0.9-million-tonne net reduction in storage capacity over the course of the last decade have helped to boost the turnover ratio substantially. The resultant rise in the value indicates that the GHTS's remaining primary elevator network has been handling comparatively more grain than it did ten years earlier.²⁴

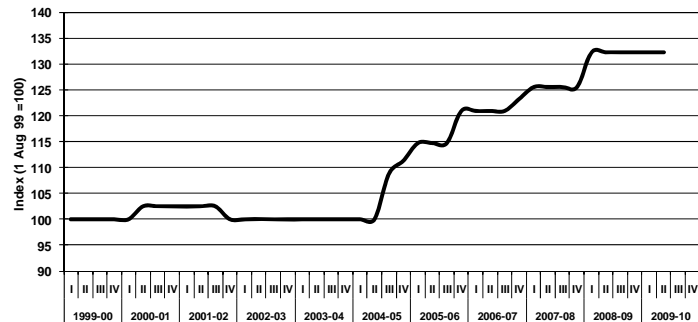
The amount of grain maintained in inventory increased by 9.5% in the first six months of the 2009-10 crop year, rising to a weekly average of 2.9 million tonnes compared to the 2.7-million-tonne average posted in the same period twelve months earlier. Although much of this increase appears to have been tied to an overall slow-down in system activity since the end of the last crop year, the total stock level still proved consistent with the lower values recorded in recent years, and well below those posted in the first two years of the GMP.²⁵ The amount of time spent by grain in inventory also increased in the first half, rising by 8.5% to an average of 33.1 days compared to 30.5 days the year previous. This suggests that grain inventories were turning over more slowly as a consequence of reduced commercial activity.

²³ The discussion entered into here pertains specifically to the primary elevator system. As such, some of the measurements presented here differ from those outlined in section 1, which relate to the larger collection of primary and process elevators.

²⁴ Comparatively, the annualized equivalent of the volume of grain that was shipped from the primary elevator system in the first half would have yielded a capacity turnover ratio of 6.0. This ratio compares favourably with the better values recorded under the GMP, including the 6.6 realized as its best in the 2008-09 crop year.

²⁵ Country elevator stocks have generally been falling in conjunction with the overall reduction in the system's storage capacity. Despite periodic fluctuations, the quarterly values have remained well below the record average of 4.1 million tonnes, which was set in the second quarter of the 1999-2000 crop year.

Figure 9: Composite Index – Short-Haul Trucking



These forces served to elevate the overall average weekly stock-to-shipment ratio for the period by 9.5%, which grew to 4.6 from the 4.2 scored a year earlier. This value affirms that grain inventories were still more than sufficient to meet the prevailing demand, and that the grain companies faced few challenges in sourcing product during this period.

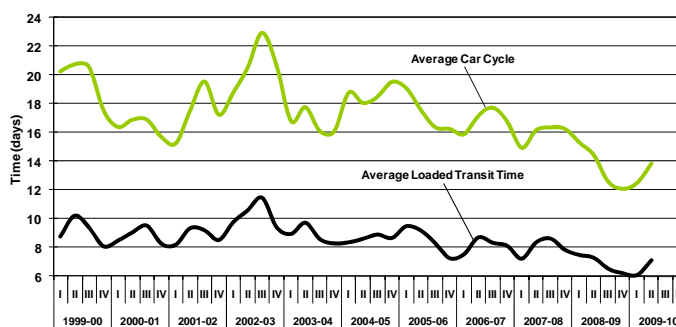
3.3 Railway Operations

The volume of grain moved in covered hopper cars during the first six months of the 2009-10 crop year increased by 11.8%, to 13.2 million tonnes from 11.8 million tonnes a year earlier. With originations of 12.9 million tonnes, the Class 1 carriers saw a 1.4-million-tonne increase in volume, representing a gain of 12.0%, for the period. This constituted an overall share of 97.4%, and a gain of 0.2 percentage points from the 97.2% share garnered in the same period a year earlier. In comparison, shortline-originated volumes, which totalled 0.3 million tonnes in the same six-month period, increased by 5.7%.²⁶ In addition, there was a noticeably sharper rise in the amount of grain originated by the grain-dependent network rather than the non-grain-dependent network, 24.3% versus 6.7% respectively.

3.3.1 Car Cycles

The railways' average car cycle continued to show improvement, with the average for the first six months of the 2009-10 crop year declining by 11.4% from that posted for the same period a year earlier, falling to 13.2 days from 14.9 days. The year-to-date average built upon the gains that had been made in both the first and second quarters, and easily broke the record low set for the first half just a year earlier.²⁷ Once again, the reduction proved broadly based, with improvements noted in each of the three primary corridors. The most substantive gain was noted in the Vancouver corridor, where the six-month average fell by 12.5% to 13.8 days. This was followed closely by an 11.8% reduction in the Thunder-Bay corridor's average, which fell to 13.1 days. Although the average posted in the Prince Rupert corridor also declined, the reduction proved a more modest 6.7%, falling to 11.9 days.

Figure 10: Average Railway Car Cycle



This was followed closely by an 11.8% reduction in the Thunder-Bay corridor's average, which fell to 13.1 days. Although the average posted in the Prince Rupert corridor also declined, the reduction proved a more modest 6.7%, falling to 11.9 days.

The improvement extended equally to the loaded and empty portions of the car cycle. In the case of the former, the average time under load fell by 10.7%, to 6.6 days from 7.4 days a year earlier. A marginally greater reduction of 12.2% was observed for the empty portion of the movement, with the average falling to 6.6 days from 7.5 days.

The two main carriers showed equally significant improvements, with the CN average falling by 17.4% against a 12.0% reduction for CP. There were also some differences in respect to the loaded and empty portions of each carrier's car cycle. CN posted a more substantive 19.8% reduction in the loaded portion of its average cycle against a 14.6% reduction in the empty portion. The reverse was true for CP, which posted a comparatively modest 6.1% reduction on the loaded portion of its movement versus a much deeper 16.9% reduction on the empty component.

²⁶ Given a 2.5% decrease in producer car shipments in the first half, the increase in originated shortline volume proved surprising. Much of the increase in volume was attributable to new entrants, and more specifically to that of the Great Sandhills Railway.

²⁷ The averages posted in the first and second quarters amounted to 12.5 days and 13.9 days respectively. Although these did not constitute the lowest quarterly averages observed under the GMP, they still proved significantly better than the 15.3-day and 14.5-day averages posted for these same periods a year earlier. These individual gains were instrumental in reducing the first half's overall average to a new record low under the GMP.

The same kind of improvement was in evident in the movement of non-special as well as special crops. The average car cycle for non-special crops fell by 12.0% to 13.0 days in the first half of the 2009-10 crop year. This value proved to be 17.7% less than the 15.8-day average tied to special crops, which posted a more modest reduction for the period of 4.9%. On the whole, these results continue to suggest that there is a structural difference in the service provided by the railways in the movement of special crops.

While the railways' continued focus on better asset utilization serves to explain some of this improvement, the more basic force underscoring this appears to have been the overarching benefit derived from the fact that grain did not have to compete for railway capacity to the same degree as it had in past crop years. This was due to an unprecedented global financial crisis that began to take hold in the late summer of 2008, and which caused overall railway volumes to plummet. Because of such a widespread decline in traffic levels, both CN and CP have both been able to direct a larger share of their carrying capacity towards the movement of those commodities that remained. Export grain shipments, which have remained at comparatively higher-than-normal levels, continued to benefit from this freeing of capacity.

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 same time. Over the next four crop years, a process involving the setting of new rates at the beginning of the crop year followed by at least one adjustment in the second half emerged. This new process was aimed at maximizing the revenues that the carriers were entitled to receive under the revenue cap; a task for which CN and CP have both shown a substantial aptitude.

But the largely mileage-based, per-tonne rate structure that gave rise to these across-the-board adjustments was itself beginning to change. One of the most striking elements in this evolution came at the beginning of the 2006-07 crop year when CN initiated a partial changeover to commodity-specific, per-car charges.²⁸ And while CP appeared to lag in this transition, by the close of the 2007-08 crop year a wholesale conversion in the rate structures of both carriers had been completed. In addition, the 2007-08 crop year brought about a renewed emphasis on differential pricing, with more substantive rate increases being applied on shipments to Thunder Bay and Churchill rather than those to the west coast. At the same time, CN also widened the advantage it had begun by giving preference to single-car rate structures in the Prince Rupert corridor.²⁹

The railways also made an initial move towards seasonal pricing, which tied rates to the prevailing demand for railway carrying capacity at various points in the crop year. All of this introduced a new element of complexity to the movement of grain, with the railways' single-car rates either rising or falling accordingly. This pattern, however, was unduly complicated in the 2008-09 crop year by legal challenges undertaken by the railways.³⁰ As a result, the single-car freight rates posted during the 2008-09 crop year fluctuated dramatically, initially moving substantially higher and then sharply lower. By the end of the crop year, these freight rates had moved to levels lower than those observed twelve months earlier.

²⁸ In adopting per-car charges, CN grouped its single-car rates according to the average loading weights for commodities having similar densities. As a result, the per-car charges published for a given group differed 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.

²⁹ 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.

³⁰ CN and CP 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. While appealing this decision to the Federal Court of Appeal, neither carrier moved to incorporate the adjustment mandated by the Agency in their rate structures. This meant that both CN and CP ran the risk of exceeding their revenue caps by a substantial margin for a second consecutive year if the court ultimately failed to find in its favour. When the Federal Court of Appeal sided with the Agency, and the Supreme Court dismissed the carriers' later application for leave to appeal that decision, the stage was set for a reduction of the carriers' rate structures in order to preclude another large overage in revenue.

The 2009-10 crop year saw yet another dimension of complexity being added to the rate structure,. CP actually extended its single-car rates in all corridors through to the end of the first quarter. While CN initially took much the same action on shipments to the west coast, the carrier advanced a more complex mix of rate increases and decreases in early October 2009. On the whole, while single-car movements of wheat to Vancouver on CN lines benefited from an average rate reduction of about 6.1%, these varied widely in relation to origin. For example, single-car shipments from Alberta fell by 3.1%; from Saskatchewan by 5.9%; and from Manitoba by 10.7%.³¹ Much the same was true of the single-car rates that CN advanced on shipments to Prince Rupert, which fell collectively by an average of 3.7%, but which saw an increase of 1.7% on movements from Alberta, with reductions of 3.1% and 10.6% respectively from Saskatchewan and Manitoba.³²

CN's single-car rates on grain moving to Thunder Bay saw a similar restructuring, although these rates were escalated at the very beginning of the 2009-10 crop year by as much as 10%. Once again, however, the adjustment appeared to be tied to distance, with significant geographic variation. While single-car rates from points in central and southern Manitoba incurred no increase at all, escalations that ranged from 5% in parts of northern Manitoba and northeastern Saskatchewan, to 10% in western Saskatchewan and Alberta. Even so, these rates were largely rolled back by about 6.5% in mid October 2009. By the close of the first quarter, the net effect of all this was an overall increase of about 1.9%, although this result was shaped by a reduction of 1.2% on single-car shipments from Manitoba, and increases of about 1.8% and 2.8% on movements from Saskatchewan and Alberta respectively.³³

Rate adjustments in the second quarter largely centred on those applicable on the movement of grain to Thunder Bay, with CP reducing its single-car rates by an across-the-board factor of 6.0% while CN again posted geographically-based rollbacks that averaged about 5.1%.³⁴ There were adjustments to the westbound rates as well, but these proved more selective in nature. In the case of CN, the carrier left its single-car rates on movements to Vancouver unaltered, but reduced those applicable on shipments to Prince Rupert from points in British Columbia and Alberta by an average of 2.7% and 2.3% respectively.³⁵ CP appeared to be moving in much the same direction, selectively reducing its single-car rates on movements to Vancouver from Alberta and Saskatchewan by an average of 2.1% and 1.7% respectively, which served to lower the carrier's average single-car rate in this corridor by 1.3%.

Running counter to these pricing actions was a reduction in the single-car rates applicable on grain moving to Churchill, which were cut by an average of 14.3% at the outset of the crop year.³⁶ Here too, the reductions also varied according to distance, and generally ranged from a low in the area of 10% to high of 22%. The smaller reductions were tied to rates from points in northern Manitoba and Saskatchewan, while the steepest were associated with points in southern Saskatchewan.

³¹ Comparatively, this meant that the single-car rates on movements to Vancouver from points in Manitoba were about 1.2% less than they had been at the beginning of the GMP; those from points in Saskatchewan, 6.7% more; and those from points in Alberta, 9.3% more.

³² A provincially based examination of the net change in the single-car rates applicable on grain shipments to Prince Rupert since the beginning of the GMP reveals a significantly lesser degree of price variation in comparison to that identified in the Vancouver corridor. In this same timeframe, the single-car rates on grain movements from Manitoba had fallen by 11.0%; Saskatchewan, 12.1%; and Alberta, 9.1%.

³³ The net change in single-car rates since the beginning of the GMP showed a modest degree of provincial variation, with those applicable on grain movements from Manitoba having risen by 16.4%; Saskatchewan, 16.3%; and Alberta, 13.5%.

³⁴ The pricing reductions posted by CN in the second quarter ranged from a low of 4.6% on movements from Alberta to a high of 5.2% on those from Saskatchewan.

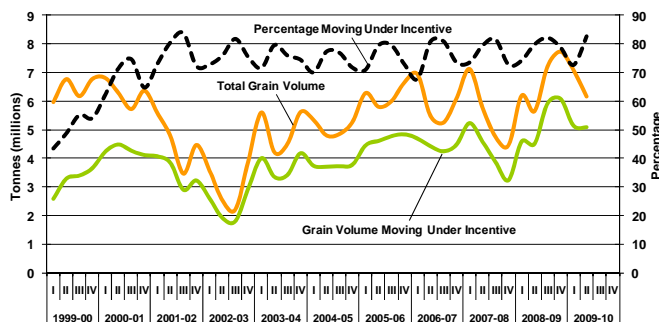
³⁵ The overall impact arising from these specific pricing adjustments was a modest 0.6% reduction in the average single-car rate for movements to Prince Rupert.

³⁶ CN is the only carrier that publishes single-car rates for the movement of grain to Churchill. In the 2008-09 crop year, however, the validity of its tariffs was made to correspond more directly with the port's shipping season. As a result, single-car rates to Churchill typically become effective in early summer and expire in the autumn. This effectively means that no rates are in place for the movement of grain to Churchill for as much as eight months out of any given crop year. For comparative purposes, the pricing variations cited here pertain to those observed between the current and preceding shipping season.

The net change in single-car rates over the course of the last decade provides some interesting insight into the evolution of railway pricing. By the close of the 2009-10 crop year's second quarter, the single-car rates on grain movements in the Vancouver corridor had increased by a factor of 7.0%, while those in the Thunder Bay corridor had risen by a greater 8.9%.³⁷ For the more northerly ports, the compound effect of CN's adjustments saw the rates on movements to Prince Rupert actually decline by 11.6%, while those applicable on Churchill-bound shipments were raised by 19.5%.³⁸ Taken altogether, these patterns continue to suggest that the railways tend to favour shipments to the west coast, and that they have become more willing to use price in an effort to influence that movement.

There have been equally significant changes to the structure of the financial incentives both carriers have used to promote the movement of grain in multiple car blocks. The most noteworthy of these involved the ultimate elimination of the smaller-block discounts, and the escalation of those tied to the largest.³⁹ Moreover, there can be little doubt that – as in the restructuring of single-car freight rates – the monetary emphasis that has been added to the largest block movements has served to draw even more grain into the high-throughput elevator system. Over the course of the last decade, the discount applicable on these

Figure 11: Railway Volume Moving Under Incentive



latter movements has risen by a factor of 60%, climbing from \$5.00 per tonne to \$8.00 per tonne. The 2009-10 crop year produced no further changes in these incentives. For CN the discounts offered on movements in blocks of 50-99 cars remained at \$4.00 per tonne, as did the \$8.00 per tonne incentive offered on movements of 100 or more cars. In equal measure, the \$5.00-per-tonne discount advanced by CP for movements in blocks of 56-111 cars was also unaltered, as was its \$8.00-per-tonne maximum on shipments in blocks of 112 cars.

The quantity of grain moved under the railways' incentive programs during the first six months of the 2009-10 crop year increased by 12.4%, to 10.2 million tonnes from 9.1 million tonnes a year earlier. This proved marginally greater than the 11.8% increase in grain shipments discussed previously, and underscored still further erosion in non-incentive based movements. In addition, there was a 30.1% increase in the value of the discounts earned by shippers, which rose to an estimated \$68.6 million from \$52.8 million a year earlier. Much of this was fuelled by the increased discounts that both CN and CP implemented in the second quarter of the preceding 2008-09 crop year. As a result, the average-earned discount rose by 15.7%, to \$6.71 per tonne from \$5.80 per tonne twelve months before.

3.4 Terminal Elevator and Port Performance

3.41 Terminal Elevators

A total of 12.4 million tonnes of grain passed through the terminal elevators of Canada's western ports in the first six months of the 2009-10 crop year. This marked an 8.5% increase from the 11.5 million tonnes handled

³⁷ While these composite values help underscore overall escalation of single-car rates in the two corridors, they also obscure some of the differences between the carriers. CN's single-car rate increases during this period amounted to an average of 5.7% on movements to Vancouver, and 9.7% on those destined to Thunder Bay. CP's corresponding average increases amounted to 8.3% and 8.1% respectively.

³⁸ Owing to the limitations of consistent pricing data over the full span of the GMP, inter-carrier comparisons of the single-car rates on CN and CP originated traffic to Prince Rupert and Churchill are not possible. The averages inherent in the increases posted by CN provide the best indication of price movement in both corridors.

³⁹ There are structural differences in the blocks sizes used by CN and CP. Although both define two sizes, CN's program segments these into blocks of 50-99 cars, and 100 or more cars. This contrasts with the segmentation used by CP, which employs larger block sizes, namely those involving shipments of 56-111 cars, and those consisting of 112 or more.

in the same period a year earlier. Much of the gain was concentrated at terminals situated along the west coast, which collectively handled an additional 1.3 million tonnes of grain.

Accounting for over half of the overall throughput, Vancouver again proved itself to be the largest export gateway. Total throughput for the port in the first half rose by 12.4%, increasing to 7.0 million tonnes from 6.3 million tonnes a year earlier. Although Prince Rupert's throughput ranked well behind that of Vancouver, its volume rose by a more substantial 34.3%, jumping to 2.2 million tonnes from the previous crop year's handlings of 1.7 million tonnes.⁴⁰ In both instances, these gains were largely tied to increased shipments of CWB grains.

Comparatively, the results for the eastern gateways of Churchill and Thunder Bay were mixed. With a 24.4% increase in terminal throughput, Churchill's volume totalled slightly more than 0.5 million tonnes. This denoted a significant resurgence in volume for the port, as well as its fourth largest throughput since the beginning of the GMP. Conversely, the port of Thunder Bay saw its volume decrease by 14.9% in the first half, falling to 2.7 million tonnes from 3.1 million tonnes a year earlier. This decline was broadly based, and attributable to reductions in a variety of CWB as well as non-CWB grain shipments.

Although terminal inventories moved higher in the second quarter, the year-to-date average of 1.3 million tonnes proved 7.3% lower than the 1.4-million-tonne average posted a year earlier. Much of the overall decline was attributable to a reduction in canola stocks, which fell by 36.2%. Inventories for most ports moved lower as well. These reductions ranged from a low of 6.2% at Thunder Bay, to 8.3% at Vancouver, and a more substantive 45.8% at Churchill. Running counter to this pattern were the inventories maintained at Prince Rupert, which posted an increase of 20.2%.

In conjunction with the build-up in second-quarter inventories, the average amount of time spent by grain in inventory also began to climb. Even so, the average for the first half of the crop year stood marginally below that posted a year earlier, falling by 1.5% to an average of 20.1 days from 20.4 days. This was derived from storage-time reductions at all ports save that of Thunder Bay, with the most significant declines having been posted by Churchill and Vancouver, which fell by 35.7% and 18.1% respectively to produce corresponding averages of 14.8 days and 12.2 days. Complementing these was an 11.0% reduction at Prince Rupert, which saw stocks being held in inventory for an average of 14.6 days. A 30.4% increase in the storage time at Thunder Bay raised the port's average to 42.0 days, the highest yet recorded for the period covered by the GMP.

Variations in individual terminal throughputs and inventories produced widely varying shifts in the stock-to-shipment ratios for each of the major grains. At Vancouver, most moved lower, while those associated with Prince Rupert generally increased. Although Thunder Bay saw an increase in the ratios tied to wheat and durum, changes in those for barley and canola proved decidedly negative. So too was the change in the ratio for wheat at Churchill, which fell by 53.6%. Although few ratios fell below the all-important 1.0 threshold, there were some noteworthy exceptions.⁴¹ Among these was the posting of a 0.5 ratio for canola moving through Vancouver in the first quarter. Although shortages can never be fully avoided, and inventories can be tight at specific periods, few concerns were registered during the first six months of the 2009-10 crop year.

3.42 Port Performance

Some 405 vessels called at western Canadian ports during the first six months of the 2009-10 crop year, an increase of 6.6% from the 380 vessels that called during the same period a year earlier. The average amount of time these vessels spent in port during this period increased by 34.8%, rising to an average of 6.2 days from 4.6 days a year earlier. This result was driven by sharp increases in the first and second quarter averages, both of which reached record highs of 5.3 days and 7.2 days for their respective periods.

⁴⁰ In terms of comparative size, Prince Rupert's throughput for the period ranked third among the four ports in western Canada. Even so, the volume gains made by the port reflect the economic advantages that have been given to it in recent years: A reduction in CN's applicable freight rates; and an improvement in the corridor's overall car allocation.

⁴¹ 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.

On the whole, much of the increase was attributable to a sharp rise in vessel waiting time, which climbed by 55.0%, to an average of 3.1 days from the preceding crop year's 2.0-day average. Much of this was in turn derived from substantial increases in the waiting times of vessels loading at Vancouver and Prince Rupert, which climbed by 31.3% and 182.6% respectively to post corresponding averages of 4.2 days and 6.5 days. To a large extent these delays were occasioned by inclement west-coast weather, particularly in the second quarter, which also contributed to the build up in terminal inventories. Although the average loading time also rose, the gain proved considerably less, climbing by 19.2% to an average of 3.1 days from 2.6 days a year earlier.

Not surprisingly, the amount of time spent by vessels in port rose most significantly at the west coast ports of Vancouver and Prince Rupert. The most substantive increase related to Prince Rupert, where the length of the typical layover jumped by 98.0%, to an average of 9.9 days from 5.0 days a year earlier. The duration of the stays at Vancouver rose by a lesser 16.9%, increasing to an average of 8.3 days from 7.1 days. Once again, the second quarter's averages proved among the highest yet recorded for the two ports, with both standing at ten or more days. Although Churchill posted an 18.4% increase, its first-half average rose to 5.8 days from 4.9 days. The elongation of total vessel time in port proved even less at Thunder Bay, where a 6.2% increase raised the year-to-date average to 1.7 days from 1.6 days a year earlier.

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 2008-09 crop year, it was observed that this process required an average of 50.1 days; the lowest annual average recorded since the beginning of the GMP. Much of this was shaped by significant reductions in each of the supply chain's principal time components: while in storage at a country elevator; while in transit as a railway shipment; and while in inventory at a terminal elevator.

The overall amount of time involved in moving grain through the supply chain rose by 17.6% in the first six months of the 2009-10 crop year, to an average of 58.9 days. This was due to the additional time spent by grain in storage, which increased by an average of 5.4 days when in the country elevator system, and by another 3.4 days when it entered the terminal elevator system. In comparison, the railways' average loaded transit time remained unchanged.⁴²

Despite the overall increase this represented, the amount of time spent by grain in moving through the GHTS in the first half remains one of the better values recorded since the beginning of the GMP. In addition to the preceding, a few other comments concerning the performance of the GHTS in the first six months of the 2009-10 crop year are warranted:

⁴² Until recently, the Monitor employed a broader measure of the railways' loaded transit time in gauging the speed with which grain moved through the GHTS. This definition incorporated the time associated with unloading the railcar at destination. Owing to a potential overlap with terminal elevator storage times, the Monitor has opted to employ a narrower measure of the railways' loaded transit time – one that excludes the unloading time – in gauging the speed with which grain moves through the GHTS. The numbers presented with respect to the railways' loaded transit time in this discussion, as well as in Table 1, have been revised to reflect this change. In order to differentiate these time values from the broader measure that still incorporates unloading time – and which is used elsewhere in this report – the latter is now referred to as the loaded portion of the movement and/or car cycle.

Table 1: The GHTS Supply Chain

SUPPLY CHAIN ELEMENT	TABLE	1999-00	2005-06	2006-07	2007-08	2008-09	YTD 2009-10	SUPPLY CHAIN EFFECT	
<u>SPEED RELATED</u>									
2	Country Elevator – Average Days-in-Store	3B-4	41.7	30.1	30.7	31.1	27.7	33.1	▲
3	Railway – Average Days in Loaded Transit	3C-4	8.0	6.9	6.8	6.5	5.7	5.7	-
5	Terminal Elevator – Average Days-in-Store	3D-4	18.6	17.9	19.2	21.0	16.7	20.1	▲
Average Total Days in GHTS			68.3	54.9	56.7	58.6	50.1	58.9	▲
<u>SERVICE / ASSET RELATED</u>									
1	Average Country Elevator Capacity Turnover Ratio	3B-2	4.8	6.2	6.5	6.0	6.7	6.0 *	▼
4	Average Terminal Elevator Capacity Turnover Ratio	3D-2	9.1	8.7	8.3	8.5	10.0	n/a	-
3	Average Railway Car Cycle (days)	3C-4	19.9	17.3	16.8	15.9	13.4	13.2	▼
6	Average Vessel Time in Port (days)	3D-7	4.3	4.8	5.3	5.0	4.6	6.2	▲

* For comparative purposes, the value of 6.0 presented here represents an annualized equivalent for the 3.0 actually recorded as the country elevator's capacity turnover ratio in the first six months of the 2009-10 crop year.

- Firstly, although the grain supply declined by 2.3%, falling to 64.5 million tonnes from 66.0 million tonnes, the 13.7 million tonnes of grain moved in the first six months of the 2009-10 crop year proved to be the largest volume for the period in the GMP's history. As a result, the pressures brought to bear on the GHTS in the first half were the greatest yet experienced.
- Secondly, the effects of the financial crisis seen in the 2008-09 crop year were still reverberating a year later. North American railway shipments remained substantially below what they had been before the onset of what became a deep economic recession. From the vantage point of the GHTS, however, this proved advantageous in as much as it continued to free capacity that could be directed towards the movement of grain. This was reflected in a 13.2-day average car cycle, the lowest yet achieved the beginning of the GMP. Moreover, there were few complaints heard from grain shippers regarding the service that they received from the railways during this period.
- Finally, although grain was moving through the GHTS at a slower pace than in the previous crop year, it still continued to move at a substantially faster pace than in the first few years of the GMP. Much of the overall improvement has come from an almost nine-day reduction in the amount of time spent by grain as inventory in the country elevator network, which has clearly been driven by the rationalization of these same facilities. Complimenting this has been the gain made from improvements in the railway's loaded transit time, which at the close of the first half stood roughly two days less than that observed in the GMP's base year. Running counter to this has been the time grain spent in storage at terminal elevators, which remains not too far removed from that reported ten years earlier.

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.⁴³

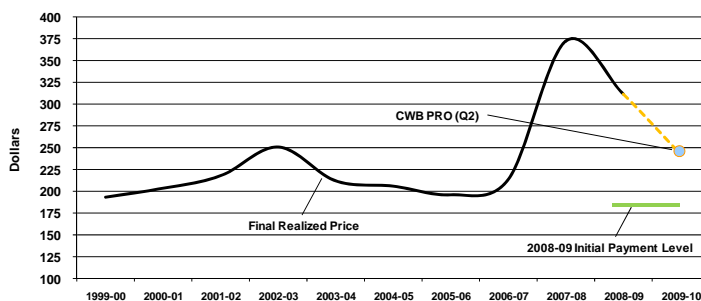
In its earlier reports, the Monitor described how increased commodity prices had largely been responsible for the improvement in the per-tonne returns accruing to producers of wheat, durum, canola, and yellow peas. Even in those years when the export basis fell, the financial gain derived from the reduction proved far less than that gained from better grain prices. But the escalation in grain prices has been highly erratic. In the first four years of the GMP, grain prices moved steadily higher. This, however, was followed by a three-year decline beginning in the 2003-04 crop year. But prices rallied sharply in the 2006-07 crop year, with even more substantial gains having been posted a year later. By the 2007-08 crop year, the financial returns accruing to farmers had reached its peak. Unfortunately, the global financial crisis significantly impacted commodity markets in the opening months of the 2008-09 crop year, only adding further downward pressure on weakening grain prices brought about by increased world supplies. Although the producers' netback moved sharply lower as a result, they remained superior to those initially realized in the 1999-2000 crop year.

The GMP only includes these indicators in the Monitor's annual reports since certain elements integral to the calculation are not available until after the close of the crop year itself. Nevertheless, current price and input-cost data is collected for both wheat and canola as a means of providing some insight into their probable impact on the per-tonne financial return arising to producers. Some of the changes observed during the first half of the 2009-10 crop year are summarized below.

4.11 CWB Grains

The GMP uses the CWB's Pool Return Outlook (PRO) for 1 CWRS wheat (13.5% protein) as the principal barometer of changing CWB grain prices. Throughout much of the first six months of the 2009-10 crop year, the CWB's PRO for 1 CWRS wheat moved steadily downwards. Gauged against the 2008-09 crop year's final realized price of \$311.36 per tonne, the PRO fell by a further 22.3%, closing out the second quarter at \$242.00 per tonne. This, however, still proved to be well above the farmer's initial payment, which had opened the year at \$186.30 per tonne.

Figure 12: Recent Price Changes – 1CWRS Wheat (dollars per tonne)



Much of the impetus for this decline in price stemmed from the expectation of increased global supplies in the face of weaker overall demand. Although North American production factored into this, it was largely the increase in European, Russian and Ukrainian production that served to exert the most downward pressure on wheat prices. A two-million-tonne increase in the estimate for Canadian wheat production, put forward by Statistics Canada in December 2009, only contributed to further erosion in the market price. Owing to these forces, the financial returns accruing to producers are expected to decline sharply in the 2009-10 crop year, although they are still likely to compare reasonably well against those witnessed earlier in the GMP.

⁴³ Among other elements, the export basis includes the cost of trucking, elevator handling and railway movement. It also includes where applicable, the CWB's pooling costs, and other incidental charges. Similarly, it also includes a deduction for any of the financial benefits accruing to producers as a result of the receipt of trucking or any similar premiums, as well as the CWB's transportation savings.

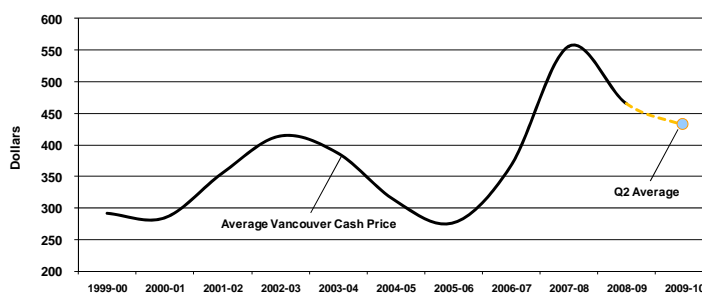
4.12 Non-CWB Grains

Although not nearly as significant a decline as that posted for wheat, the Vancouver cash price for 1 Canada Canola also fell steadily throughout the first six months of the 2009-10 crop year, decreasing by 7.3% to an average of \$431.28 per tonne compared to the previous crop year's final average of \$465.22-per-tonne. A late finish to the fall harvest ultimately resulted in 11.8 million tonnes of canola being binned in 2009. This large supply, second only to the record 12.6 million tonnes harvested the previous year, coupled with steady producer deliveries, weighed significantly on price in the first half. Further downward pressure ensued when the US Congress failed to extend the blender's tax credit, an important catalyst in the growth of the American bio-diesel production.⁴⁴

The magnitude of the price decrease noted for 1 Canada canola strongly suggests that there will be a negative impact on the per-tonne financial returns of western Canadian grain producers in the 2009-10 crop year, although as with wheat, prices and returns are still expected to be strong by historical standards.

Rising input costs seemed likely to erode these returns even further. 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 0.5% for elevation, to a high of 5.4% for storage. To a lesser degree, the escalation on the tariff rates tied to terminal elevation and storage activities amounted to about 1.2% and 1.9% respectively. Running counter to these pricing initiatives were various reductions by CN and CP in their freight rates. By the close of the second quarter, these reductions stretched from a low of about 1.3% on CP movements to Vancouver, to a high of 14.3% on CN movements to Churchill.

Figure 13: Recent Price Changes – 1 Canada Canola (dollars per tonne)



4.2 Producer-Car Loading

As related in the Monitor's 2008-09 annual report, the aggregate number of producer-car loading sites had fallen from 709 to 437 over the course of the last decade. Much of this net decline was the product of a reduction in the number of sites maintained by CN and CP, which fell from 644 to 333. Still, a portion of these were initially taken over by a variety of shortline railways, which served to raise their count from 65 at the outset of the GMP to a height of 166 by the end of the 2003-04 crop year. The subsequent demise of several small carriers, however, resulted in some of these reverting back to Class-1-carrier control. By the end of the 2008-09 crop year only 104 producer-car loading sites remained under the umbrella of shortline operators. The first six months of the 2009-10 crop year saw the Class 1 carriers close a further 40 producer-car loading sites, which reduced their number by 12.0% to 293. With no change in the number operated by the shortline carriers, the total number of producer-car loading sites slid from 437 to 397.

Following a comparatively weak first-quarter start, where producer-car shipments fell by 13.7%, a second-quarter rally helped gain back a substantial portion of this lost ground. By the close of the first half, producer-car shipments stood just 2.5% behind those handled a year earlier, totalling 5,281 carloads compared to 5,415 carloads. In relation to the volume of grain shipped in covered hoppers, producer-car loadings accounted for just 3.6% of the overall total. This share increased to 6.3% when gauged against CWB grains alone, which constituted the majority of producer car movements. Both values stood below the 4.1% and 7.1% shares respectively secured twelve months before.

⁴⁴ The blender's tax credit, which amounted to \$1.00 per US gallon, was regarded as critical to the profitability of bio-diesel production in the United States. The loss of this tax credit, along with the uncertainty surrounding its possible renewal, led to the shutdown of several plants during this period.

Synopsis – Industry Overview

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

Highlights – Second Quarter 2009-10 Crop Year

Grain Production and Supply

- Grain production decreased by 8.7% to 55.1 million tonnes.
 - Consistent with normal crop production under the Grain Monitoring Program.
- Carry forward stocks increased by 66.6% to 9.4 million tonnes.
 - Increase prompted by heightened grain production in the 2008-09 crop year.
- Overall grain supply decreased by 2.3% to 64.5 million tonnes.

Railway Traffic

- Railway tonnage for the first half increased 13.1% to 27.3 million tonnes.
 - Reflected heightened export demand for CWB grains.
- Traffic to most western Canadian ports increased in the first half.
 - Vancouver – up by 21.6% to 8.2 million tonnes.
 - Thunder Bay – down by 14.2% to 2.7 million tonnes.
 - Prince Rupert – up by 29.7% to 2.3 million tonnes.
 - Churchill – up by 13.5% to 0.4 million tonnes.

Country Elevator Infrastructure

- Moderate reductions recorded during the first half.
 - Grain delivery points decreased by 0.4% to 271.
 - Number of country elevators decreased by 1.6% to 360.
- Elevator storage capacity increased by 3.0% to 6.2 million tonnes.
- Elevators capable of loading in blocks of 25 or more cars decreased by 0.4% to 242.
 - Accounted for 67.2% of total elevators.
 - Accounted for 90.1% of total storage capacity.
- Elevators capable of loading in blocks of 50 or more cars increased by three to 188.
 - Accounted for 52.2% of total elevators.
 - Accounted for 81.9% of total storage capacity.

Railway Infrastructure

- Western Canadian rail network remained unchanged at 17,904.7 route-miles.
- Okanagan Valley Railway suspends shortline operations in September 2009.
- CN transferred 84.5 route-miles of its Saskatchewan infrastructure to new shortline, Last Mountain Railway.
 - Commenced operations between Davidson and Regina in October 2009.
- Discontinuance plans for some 830 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 half increased by 5.6% to 140,481 carloads.

Indicator Series 1 – Industry Overview

		2009-10										
Table	Indicator Description	Notes	1999-00	2006-07	2007-08	2008-09	Q1	Q2	Q3	YTD (1)	% VAR	
Production and Supply [Subseries 1A]												
1A-1	Crop Production (000 tonnes)	(1)	55,141.7	49,264.6	48,517.3	60,351.7	55,093.9	-	-	55,093.9	-8.7%	▼
1A-2	Carry Forward Stock (000 tonnes)	(1)	7,418.2	12,424.7	7,450.6	5,646.6	9,405.3	-	-	9,405.3	66.6%	▲
	Grain Supply (000 tonnes)	(1)	62,559.9	61,689.3	55,967.9	65,998.3	64,499.2	-	-	64,499.2	-2.3%	▲
1A-3	Crop Production (000 tonnes) – Special Crops	(1)	3,936.7	3,938.1	4,404.3	5,157.4	5,556.3	-	-	5,556.3	7.7%	▲
Rail Traffic [Subseries 1B]												
1B-1	Railway Grain Volumes (000 tonnes) – Origin Province	(1)	26,440.8	24,311.7	22,766.5	27,338.4	7,288.6	6,384.9	-	13,673.5	13.1%	▲
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	2,344.3	2,481.0	2,645.4	722.3	688.1	-	1,410.4	6.2%	▲
Country Elevator Infrastructure [Subseries 1C]												
1C-1	Grain Delivery Points (number)	(2)	626	272	276	272	270	271	-	-	-0.4%	-
1C-1	Grain Elevator Storage Capacity (000 tonnes)	(2)	7,443.9	5,808.2	5,952.5	6,059.0	6,133.1	6,239.4	-	-	3.0%	▲
1C-1	Grain Elevators (number) – Province	(2)	917	371	378	366	359	360	-	-	-1.6%	▼
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	240	243	243	241	242	-	-	-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	48	10	18	9	13	-	-	-27.8%	▼
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	51	3	30	16	19	-	-	-36.7%	▼
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	97	91	89	n/a	n/a	n/a	n/a	n/a	-
Railway Infrastructure [Subseries 1D]												
1D-1	Railway Infrastructure (route-miles) – Grain-Dependent Network	(2)	4,876.6	4,137.7	3,658.8	3,591.6	3,951.6	3,951.6	-	-	0.0%	-
1D-1	Railway Infrastructure (route-miles) – Non-Grain-Dependent Network	(2)	14,513.5	14,357.6	14,319.2	14,313.1	14,313.1	14,313.1	-	-	0.0%	-
1D-1	Railway Infrastructure (route-miles) – Total Network	(2)	19,390.1	18,495.3	17,978.0	17,904.7	17,904.7	17,904.7	-	-	0.0%	-
1D-2	Railway Grain Volumes (000 tonnes) – Grain-Dependent Network	(1)	8,686.5	6,988.8	6,648.9	7,586.4	2,276.8	1,956.9	-	4,233.6	24.3%	▲
1D-2	Railway Grain Volumes (000 tonnes) – Non-Grain-Dependent Network	(1)	16,975.8	16,748.1	15,435.1	19,173.6	4,792.1	4,199.5	-	8,991.6	6.7%	▲
1D-2	Railway Grain Volumes (000 tonnes) – Total Network	(1)	25,662.3	23,736.9	22,084.0	26,760.0	7,068.9	6,156.4	-	13,225.3	11.8%	▲
1D-3	Shortline Railway Infrastructure (route-miles)	(2)	3,043.0	2,023.2	1,870.7	1,987.0	2,071.5	2,071.5	-	-	10.7%	▲
1D-3	Shortline Railway Grain Volumes (000 tonnes)	(1)	2,090.5	1,059.1	578.3	761.5	189.7	157.6	-	347.3	5.7%	▲
1D-5	Railway Grain Volumes (000 tonnes) – Class 1 Carriers	(1)	23,571.8	22,677.8	21,505.7	25,998.5	6,879.2	5,998.8	-	12,878.0	12.0%	▲
1D-5	Railway Grain Volumes (000 tonnes) – Class 2 and 3 Carriers	(1)	2,090.5	1,059.1	578.3	761.5	189.7	157.6	-	347.3	5.7%	▲
1D-6	Grain Elevators (number) – Grain-Dependent Network	(2)	371	117	117	113	115	116	-	-	2.7%	▲
1D-6	Grain Elevators (number) – Non-Grain-Dependent Network	(2)	513	238	240	234	226	226	-	-	-3.4%	▲
1D-6	Grain Elevator Storage Capacity (000 tonnes) – Grain-Dependent Network	(2)	2,475.4	1,575.6	1,593.9	1,611.1	1,662.3	1,713.9	-	-	6.4%	▲
1D-6	Grain Elevator Storage Capacity (000 tonnes) – Non-Grain-Dependent Network	(2)	4,847.6	4,169.0	4,274.7	4,370.8	4,398.3	4,448.2	-	-	1.8%	▲
Terminal Elevator Infrastructure												
1E-1	Terminal Elevators (number)	(2)	15	16	15	15	15	15	-	-	0.0%	-
1E-1	Terminal Elevator Storage Capacity (000 tonnes)	(2)	2,678.6	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	261,204	245,213	294,335	74,059	66,422	-	140,481	5.6%	▲

- (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 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 2008-09 crop year.

Synopsis – Commercial Relations

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

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

Highlights – Second Quarter 2009-10 Crop Year

Tendering Program

- 128 tender calls were issued by the CWB during the first six months of the 2009-10 crop year.
 - Calls for the movement of 1.4 million tonnes to export positions in western Canada.
 - Prince Rupert delivery – 45.7%; Vancouver – 33.2%; Thunder Bay – 21.1%; and Churchill – 0.0%.
- 448 bids received; offered an aggregated 2.7 million tonnes.
 - Response rates more intense than in the 2008-09 crop year.
 - Strongest response rates tied to durum and Thunder Bay tender calls.
- 191 contracts concluded for the movement of 1.4 million tonnes.
 - Vancouver delivery – 52.9%; Prince Rupert – 28.0%; Thunder Bay – 19.1%; and Churchill – 0.0%.
 - Represented 18.0% of volume shipped by CWB to port positions in Western Canada.
- Tenders for 27.2% of the tonnage called either partially, or not at all, filled.
 - 194,700 tonnes – not required.
 - 102,100 tonnes – no bid.
 - 35,800 tonnes – unacceptable price.
 - 28,600 tonnes – insufficient quantity bid.
 - 8,800 tonnes – noncompliance with specifications.
- Proportion of tendered grain volume moving in multiple car blocks increased marginally to 91.4%.
 - Proportion moving in blocks of 50 or more cars increased to 70.1% from 61.9% in the 2008-09 crop year.
- 98.3% of all tendered movements originated at high-throughput elevators.
 - Marginally greater than the 97.7% observed in the 2008-09 crop year.

Other Commercial Developments

- First half sees the emergence of several significant issues relating to market access for Canadian grain.
 - European Union embargoes Canadian imports of flaxseed.
 - Follows discovery in processed goods of a genetically modified variety known as Triffid.
 - Canadian industry moves to develop protocol for the sampling, testing and documentation of future shipments.
 - Discovery of salmonella-contaminated canola meal shipments from Canada leads the United States to impose stricter testing on all cross-border railcar movements.
 - Six Canadian crushers placed on US "import alert list."
 - Canadian crushers forced to curtail production while seeking alternative markets.
 - China demands that all Canadian canola shipments be certified as "black-leg free" by mid November 2009.
 - Extends from the view that the Canadian strain is more virulent than the Chinese pathogen.
 - Given the size of the Chinese market, the Canadian industry moves quickly to address the issue.
- CN moves to close 53 producer-car loading sites in September 2009.
 - Prompts a widespread backlash from a number of affected communities and producer groups.
 - Spurs calls for federal government intervention, and possible imposition of a moratorium.
 - CN responds by agreeing to delay its immediate closure plans.
- Complaints about railway service diminish in the face of improvements.
 - CTA decision in the level-of-service complaint undertaken by Western Grain Trade Ltd. remains outstanding.

Indicator Series 2 – Commercial Relations

											2009-10	
Table	Indicator Description	Notes	1999-00	2006-07	2007-08	2008-09	Q1	Q2	Q3	YTD (1)	% VAR	
Tendering Program [Subseries 2A]												
2A-1	Tenders Called (000 tonnes) – Grain	(1)	n/a	3,765.1	1,891.2	3,416.2	678.3	716.6	-	1,394.9	-3.4%	▼
2A-2	Tenders Called (000 tonnes) – Grade	(1)										
2A-3	Tender Bids (000 tonnes) – Grain	(1)	n/a	6,753.6	4,396.7	5,622.1	1,384.4	1,322.5	-	2,706.9	-16.9%	▼
2A-4	Tender Bids (000 tonnes) – Grade	(1)										
2A-5	Total CWB Movements (000 tonnes)	(1)(2)	n/a	14,932.2	13,332.3	15,612.8	4,181.7	3,384.7	-	7,566.4	14.3%	▲
2A-5	Tendered Movements (%) – Proportion of Total CWB Movements	(1)(2)	n/a	17.8%	14.3%	14.4%	13.9%	23.0%	-	18.0%	0.0%	-
2A-5	Tendered Movements (000 tonnes) – Grain	(1)(2)	n/a	2,651.6	1,900.0	2,246.6	580.9	780.0	-	1,360.9	14.2%	▲
2A-6	Tendered Movements (000 tonnes) – Grade	(1)(2)										
2A-7	Unfilled Tender Volumes (000 tonnes)	(1)	n/a	1,276.6	207.9	1,445.3	177.0	193.0	-	370.0	2.5%	▲
2A-8	Tendered Movements (000 tonnes) – Not Awarded to Lowest Bidder	(1)	n/a	46.3	18.7	4.9	0.0	0.0	-	0.0	-100.0%	-
2A-9	Tendered Movements (000 tonnes) – FOB	(1)(2)	n/a	152.8	65.1	284.9	67.8	242.9	-	310.8	168.2%	▲
2A-9	Tendered Movements (000 tonnes) – In-Store	(1)	n/a	2,651.6	1,835.0	1,961.7	513.0	537.1	-	1,050.1	-2.4%	▼
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	64.7	57.5	59.7	61.4	65.1	-	63.3	3.9%	▲
2A-18	Railway Car Cycle (days) – Tendered Grain		n/a	14.7	13.9	11.8	10.3	11.2	-	10.8	-13.6%	▼
2A-18	Railway Car Cycle (days) – Non-Tendered Grain		n/a	16.4	15.2	13.0	13.0	13.6	-	13.3	-8.9%	▼
2A-19	Maximum Accepted Tender Bid (\$ per tonne) – Wheat		n/a	-\$24.51	-\$23.78	-\$23.01	-\$21.28	-\$18.37	-	-\$21.28	-7.5%	▲
2A-19	Maximum Accepted Tender Bid (\$ per tonne) – Durum		n/a	-\$21.56	-\$10.52	-\$14.95	-\$21.13	-\$21.76	-	-\$21.76	41.3%	▲
2A-20	Market Share (%) – CWB Grains – Major Grain Companies		n/a	75.6%	74.3%	72.9%	76.3%	73.0%	-	74.6%	2.1%	▲
2A-20	Market Share (%) – CWB Grains – Non-Major Grain Companies		n/a	24.4%	25.7%	27.1%	23.7%	27.0%	-	25.4%	-5.6%	▼
Advance Car Awards Program [Subseries 2B]												
2B-1	Advance Award Movements (%) – Proportion of Total CWB Movements		n/a	15.8%	13.7%	12.1%	8.3%	10.6%	-	9.4%	13.3%	▲
2B-1	Advance Award Movements (000 tonnes) – Grain		n/a	2,362.9	1,831.0	1,896.5	348.7	360.1	-	708.8	28.7%	▲
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	15.1	14.4	12.2	11.1	13.1	-	12.2	-15.3%	▼
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	53.9	52.0	52.5	54.3	58.6	-	56.5	6.2%	▲

(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 – First Second 2009-10 Crop Year

Trucking

- Composite Freight Rate Index for short-haul trucking remained unchanged at 132.2 for the first half.
 - Demand for carrying capacity continued to contain costs.

Country Elevators

- Throughput for the first half increased by 0.4% to 16.3 million tonnes.
 - Heightened CWB grain movement tempered effects of weaker non-CWB grain sales.
- Average elevator capacity turnover ratio for the first half decreased by 2.6% to 3.0 turns.
 - Reflected impact of increased storage capacity.
- Average inventory level increased by 9.5% to 2.9 million tonnes.
- Average number of days-in-store increased by 8.5% to 33.1 days.
- Average weekly stock-to-shipment ratio increased by 9.5% to 4.6 for the first half.
- Average posted tariff rates increased in the first half.
 - Elevation – up by 0.5%.
 - Dockage removal – up by 3.5%.
 - Storage – up by 5.4%.

Rail Operations

- Average car cycle decreased by 11.4% to 13.2 days during the first half of the crop year.
 - Similar reductions in underlying empty and loaded movements.
 - Average empty movement decreased 12.2% to 6.6 days.
 - Average loaded movement decreased 10.7% to 6.6 days.
- Proportion of grain moving under incentive programs decreased to 77.4% from 78.9% for the 2008-09 crop year.
- Railway incentive payments estimated to have increased by 30.1% to \$68.6 million in the first half.
 - Reflected increase in applicable per-tonne discounts.
- Single car freight rates show more signs of differentiation in the 2009-10 crop year.
 - CP adjusts the rates in place at the end of the 2008-09 crop year only in the second quarter.
 - Net reductions: Vancouver – down by 1.2%; Thunder Bay – down by 6.0%.
 - CN makes significant changes to prevailing rate structure in the first and second quarters.
 - Net changes to Vancouver – down by 6.1%; Prince Rupert – down by 4.0%.
 - Net changes to Thunder Bay – down by 2.8%; Churchill – down by 14.4%.

Terminal Elevators and Port Performance

- Terminal throughput increased by 8.5% to 12.4 million tonnes for the first half.
- 405 vessels loaded at western Canadian ports during the first six months of the crop year.
 - Average time in port increased 34.8% to 6.2 days.
 - Largely related to delays occasioned by inclement west-coast weather.
- Average posted tariff rates increased in the first half.
 - Elevation – up by 1.2%.
 - Storage – up by 1.9%.

Indicator Series 3 – System Efficiency

											2009-10	
Table	Indicator Description	Notes	1999-00	2006-07	2007-08	2008-09	Q1	Q2	Q3	YTD (1)	% VAR	
Trucking [Subseries 3A]												
3A-1	Composite Freight Rate Index – Short-haul Trucking	(2)	100.0	123.2	125.5	132.2	132.2	132.2	-	-	0.0%	—
Primary Country Elevators [Subseries 3B]												
3B-1	Grain Volume Throughput (000 tonnes)	(1)	32,493.9	33,452.6	31,886.4	35,349.1	8,246.5	8,064.1	-	16,310.6	0.4%	—
3B-2	Average Elevator Capacity Turnover Ratio	(1)	4.8	6.5	6.0	6.6	1.5	1.5	-	3.0	-2.6%	▼
3B-3	Average Weekly Elevator Stock Level (000 tonnes)	(1)	3,699.3	2,814.7	2,705.5	2,686.7	2,830.4	3,038.0	-	2,930.0	9.5%	▲
3B-4	Average Days-in-Store (days)	(1)	41.7	30.7	31.1	27.7	31.9	34.3	-	33.1	8.5%	▲
3B-5	Average Weekly Stock-to-Shipment Ratio – Grain	(1)	6.2	4.5	4.5	3.9	4.5	4.6	-	4.6	9.5%	▲
3B-6	Average Handling Charges – Country Delivery Points	(3)										
Rail Operations [Subseries 3C]												
3C-1	Hopper Car Grain Volumes (000 tonnes) – Province	(1)	25,662.3	23,736.9	22,084.0	26,760.0	7,068.9	6,156.4	-	13,225.3	11.8%	▲
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 Movement	(1)	10.7	8.7	7.9	6.6	6.4	6.7	-	6.6	-12.2%	▼
3C-4	Railway Car Cycle (days) – Loaded Movement	(1)	9.2	8.2	8.0	6.8	6.1	7.1	-	6.6	-10.7%	▼
3C-4	Railway Car Cycle (days) – Total Movement	(1)	19.9	16.8	15.9	13.4	12.5	13.9	-	13.2	-11.4%	▼
3C-5	Railway Car Cycle (days) – Non-Special Crops	(1)	19.3	16.6	15.7	13.3	12.4	13.6	-	13.0	-12.0%	▼
3C-6	Railway Car Cycle (days) – Special Crops	(1)	25.8	20.0	18.1	15.6	14.4	17.1	-	14.4	-4.9%	▼
3C-7	Railway Car Connections (days)	(1)(3)										
3C-8	Hopper Car Grain Volumes (000 tonnes) – Non-Incentive	(1)	12,716.9	5,888.5	5,149.5	5,650.4	1,930.3	1,065.0	-	2,995.3	9.7%	▲
3C-8	Hopper Car Grain Volumes (000 tonnes) – Incentive	(1)	12,945.5	17,848.4	16,934.5	21,109.6	5,138.6	5,091.4	-	10,229.9	12.4%	▲
3C-9	Hopper Car Grain Volumes (\$ millions) – Incentive Discount Value	(1)	\$31.1	\$96.5	\$93.3	\$132.0	\$34.2	\$34.4	-	\$68.6	30.1%	▲
3C-10	Traffic Density (tonnes per route mile) – Grain-Dependent Network	(1)	442.5	418.0	427.5	526.5	633.9	544.9	-	589.4	24.8%	▲
3C-10	Traffic Density (tonnes per route mile) – Non-Grain-Dependent Network	(1)	292.4	291.5	269.3	334.8	334.8	293.4	-	314.1	6.8%	▲
3C-10	Traffic Density (tonnes per route mile) – Total Network	(1)	330.3	320.1	303.1	373.4	394.8	343.8	-	369.3	11.9%	▲
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	\$29.88	\$30.45	\$30.92	n/a	n/a	n/a	n/a	n/a	—
Terminal Elevator and Port Performance [Subseries 3D]												
3D-1	Annual Port Throughput (000 tonnes) – Grain	(1)	23,555.5	22,823.9	22,026.4	25,639.0	6,457.0	5,971.5	-	12,428.5	8.5%	▲
3D-2	Average Terminal Elevator Capacity Turnover Ratio	(1)(5)	9.1	8.3	8.5	10.0	n/a	n/a	n/a	n/a	n/a	—
3D-3	Average Weekly Terminal Elevator Stock Level (000 tonnes)	(1)	1,216.2	1,385.3	1,432.7	1,346.4	1,240.2	1,325.7	-	1,281.2	-7.3%	▼
3D-4	Average Days-in-Store – Operating Season (days)	(1)	18.6	19.2	21.0	16.7	18.1	22.3	-	20.1	-1.5%	▼
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	5.3	5.0	4.6	5.3	7.2	-	6.2	34.8%	▲
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	\$15.1	\$23.3	\$11.2	n/a	n/a	n/a	n/a	n/a	—
3D-10	Annual Dispatch Earnings (\$millions)	(5)	\$14.5	\$24.6	\$29.3	\$37.6	n/a	n/a	n/a	n/a	n/a	—
3D-11	Average Handling Charges – Terminal Elevators	(2)(3)										

- (1) – Year-To-Date values are reported for volume-related indicators only (i.e., Grain Volume Throughput). The accompanying percentage variance denotes the relative change in the current YTD value compared to the same period a year earlier.
- (2) – Quarterly values for non-volume-related indicators (i.e., Composite Freight Rate Index) are "as at" the end of the reporting period. The accompanying percentage variance denotes the relative change in the value of the most recent reporting period compared to that at the end of the preceding crop year.
- (3) – Changes in the indicator cited cannot be depicted within the summary framework presented here. The reader is encouraged to consult the corresponding data table directly.
- (4) – Statistics relating to effective railway freight rates, as determined by the Canadian Transportation Agency, are generally produced about six months after the close of the crop year. The most recent statistics available are those from the 2008-09 crop year.
- (5) – The GMP provides for the calculation of this indicator on an annual basis. Quarterly values are not available.

Synopsis – Service Reliability

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

Highlights – Second Quarter 2009-10 Crop Year

Port Performance

- Average weekly stock-to-vessel-requirements ratios decline fairly substantially in the first half of the 2009-10 crop year.
 - Vancouver
 - Wheat – 2.3 for the first six months of the 2009-10 crop year, down by 37.6%.
 - Canola – 1.7, down by 29.1%.
 - Thunder Bay
 - Wheat – 6.6 for the first six months of the 2009-10 crop year, up by 25.0%.
 - Canola – 3.5, down by 33.5%.
 - Reflects strong movement but suggests that grain inventories were largely sufficient to meet short-term demand.
 - Shortages of specific grains and grade, especially canola, proved more prevalent.
- Average stock-to-shipment ratios provide similar evidence of the ability of these ports to meet short-term demand.
 - Vancouver
 - CWB grains – 2.4 for the first six months of the 2009-10 crop year, down by 25.9%.
 - Non-CWB grains – 2.0, down by 17.8%.
 - Thunder Bay
 - CWB grains – 5.1 for the first six months of the 2009-10 crop year; up by 11.1%.
 - Non-CWB grains – 5.8, up by 31.7%.

Indicator Series 4 – Service Reliability

		2009-10										
Table	Indicator Description	Notes	1999-00	2006-07	2007-08	2008-09	Q1	Q2	Q3	YTD (1)	% VAR	
Port Performance [Subseries 4A]												
4A-1	Avg. Weekly Stock-to-Vessel Requirements Ratio – VCR – Wheat	(1)	3.1	3.3	3.6	3.2	2.1	2.6	-	2.3	-37.6%	▼
4A-1	Avg. Weekly Stock-to-Vessel Requirements Ratio – VCR – Canola	(1)	2.5	2.8	3.7	1.5	0.5	2.8	-	1.7	-29.1%	▼
4A-1	Avg. Weekly Stock-to-Vessel Requirements Ratio – TBY – Wheat	(1)	5.6	7.0	5.0	4.5	8.0	4.4	-	6.6	25.0%	▲
4A-1	Avg. Weekly Stock-to-Vessel Requirements Ratio – TBY – Canola	(1)	2.8	5.3	8.3	5.5	2.3	4.9	-	3.5	-33.5%	▼
4A-2	Avg. Weekly Stock-to-Vessel Requirements Ratio – Grade	(1)(2)										
4A-3	Avg. Weekly Stock-to-Shipment Ratio – VCR – CWB Grains	(1)	3.5	2.9	2.9	3.1	2.5	2.4	-	2.4	-25.9%	▼
4A-3	Avg. Weekly Stock-to-Shipment Ratio – VCR – Non-CWB Grains	(1)	3.6	3.6	3.6	2.5	1.4	2.5	-	2.0	-17.8%	▼
4A-3	Avg. Weekly Stock-to-Shipment Ratio – TBY – CWB Grains	(1)	4.6	6.2	5.2	4.6	5.1	5.1	-	5.1	11.1%	▲
4A-3	Avg. Weekly Stock-to-Shipment Ratio – TBY – Non-CWB Grains	(1)	3.3	4.4	5.7	4.2	5.5	6.2	-	5.8	31.7%	▲
4A-4	Terminal Handling Revenue (\$millions) – Vancouver	(1)(3)	\$192.7	\$202.9	\$238.7	\$284.8	n/a	n/a	n/a	n/a	n/a	–
4A-4	Terminal Handling Revenue (\$millions) – Thunder Bay	(1)(3)	\$82.1	\$83.5	\$81.2	\$84.4	n/a	n/a	n/a	n/a	n/a	–
4A-4	CWB Carrying Costs (\$millions) – Pacific Seaboard	(1)(3)	\$63.3	\$93.9	\$77.4	\$124.9	n/a	n/a	n/a	n/a	n/a	–
4A-4	CWB Carrying Costs (\$millions) – Thunder Bay	(1)(3)	\$31.3	\$35.9	\$37.6	\$45.2	n/a	n/a	n/a	n/a	n/a	–

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

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

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

Synopsis – Producer Impact

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

Highlights – Second Quarter 2009-10 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 \$186.30 per tonne.
 - Represented a 40.2% decrease from the final realized price for the 2008-09 crop year of \$311.36 per tonne.
 - PRO decreased to \$242.00 per tonne by the end of the first half.
 - Represented a 29.9% premium to the farmer’s initial payment.
 - Price declined largely as a result of increased global supplies because of weaker overall demand.
- Recent changes in input costs:
 - Country elevator handling – up by an average of 0.5% for elevation; 3.5% for cleaning.
 - Storage charges increased by an average 5.4%.
 - Rail transportation – Largely reduced in the second quarter owing to seasonal pricing considerations.
 - Rates to Vancouver – net reductions of 6.1% for CN and 1.2% for CP.
 - Rates to Thunder Bay – net reductions of 2.8% for CN and 6.0% for CP.
 - Significant restructuring of CN rates appeared tied to geographic considerations.
 - Terminal elevator handling – up by an average of 1.2% for elevation; 1.9% for storage.
- While changes in the PRO for 1 CWRS wheat, and input costs to the export basis, suggest a reduction in the producer’s per-tonne netback for CWB grains in the 2009-10 crop year, these returns are expected to remain above 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 \$431.28 per tonne for the first half of the 2009-10 crop year.
 - Represented a 7.3% decrease from the 2008-09 crop year’s monthly average of \$465.22 per tonne.
 - Price declined in response to expectations of ample supplies and the uncertainty surrounding Canadian exports.
- Recent changes in input costs:
 - Country elevator handling – up by an average of 0.5% for elevation; 3.5% for cleaning.
 - Storage charges increased by an average 5.4%.
 - Rail transportation – Largely reduced in the second quarter owing to seasonal pricing considerations.
 - Rates to Vancouver – net reductions of 6.1% for CN and 1.2% for CP.
 - Rates to Thunder Bay – net reductions of 2.8% for CN and 6.0% for CP.
 - Significant restructuring of CN rates appeared tied to geographic considerations.
 - Terminal elevator handling – up by an average of 1.2% for elevation; 1.9% for storage.
- While changes in the price of 1 Canada canola, and input costs to the export basis, suggest a reduction in the producer’s per-tonne netback for CWB grains in the 2009-10 crop year, these returns are expected to remain above historical standards.

Producer-Car Loading

- Number of producer-car-loading sites declined by 9.2% to 397.
 - Resulted from the closure of 40 sites local to CN.
- Producer-car shipments decreased by 2.5% to 5,281 railcars in the first half.

Indicator Series 5 – Producer Impact

		2009-10									
Table	Indicator Description	Notes	1999-00	2006-07	2007-08	2008-09	Q1	Q2	Q3	YTD (1)	% VAR
Export Basis											
Western Canada											
5A-10	CWRS Wheat (\$ per tonne)	(1)(3)	\$54.58	\$63.20	\$67.65	\$66.74					
5A-10	CWA Durum (\$ per tonne)	(1)(3)	\$67.63	\$76.18	\$84.44	\$87.57					
5A-10	1 Canada Canola (\$ per tonne)	(1)(3)	\$52.51	\$45.80	\$53.47	\$48.63					
5A-10	Canadian Large Yellow Peas – No. 2 or Better (\$ per tonne)	(1)(3)	\$54.76	\$62.17	\$85.51	\$101.57					
Producer-Car Loading											
5B-1	Producer-Car-Loading Sites (number) – Class 1 Carriers	(2)	415	368	346	333	293	293	-		-12.0%
5B-1	Producer-Car-Loading Sites (number) – Class 2 and 3 Carriers	(2)	122	106	108	104	104	104	-		0.0%
5B-1	Producer-Car-Loading Sites (number) – All Carriers	(2)	537	474	454	437	397	397	-		-9.2%
5B-2	Producer-Car Shipments (number) – Covered Hopper Cars	(1)	3,441	12,529	10,729	13,243	2,123	3,158	-	5,281	-2.5%

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

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

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



Members of the Quorum Corporation Advisory Board

Mark A. Hemmes

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

J. Marcel Beaulieu

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

Richard B. Boyd

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

A. Bruce McFadden

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

Shelley J. Thompson

*President, SJT Solutions
Southey, Saskatchewan*

Members of the Quorum Corporation Grain Monitoring Team

Mark Hemmes

President

Marcel Beaulieu

Director – Research and Analysis

Bruce McFadden

Director – Research and Analysis

Vincent Roy

Senior Technical Officer

Corporate Offices

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

Telephone: 780 / 447-2111

Fax: 780 / 447-2630

Website: www.quorumcorp.net

Email: info@quorumcorp.net

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

Appendix 1: Program Background

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

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

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

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

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

Appendix 2: Commodities Guide

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

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

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

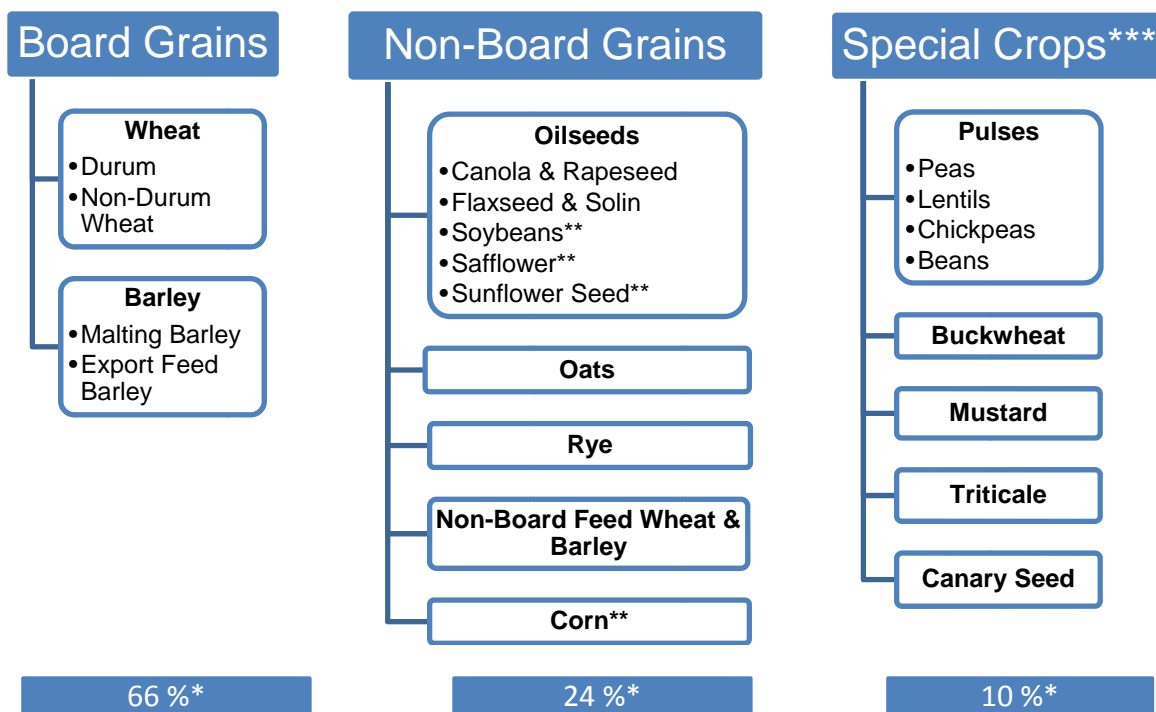
Non-Board Grain: Non-Board grain is grain marketed through the open market system. Such grain includes domestic feed wheat and barley, rye, oilseeds and specialty crops.

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

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

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

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



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

** Also may be considered special crops

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

Appendix 3: Producer Netback Calculator

A prime issue with many stakeholders is the impact that the shrinking GHTS network has had on the length of truck haul from farm gate to elevator. While all evidence suggests that truck hauls are increasing because of the reduced number of delivery points, the exact – or even approximate – amount of this increase is unknown. Following discussions with stakeholders and the government, a methodology that would allow the Monitor to gather the data necessary to enhance the quality and reliability of this component of the export basis has been developed.⁴⁵ The Producer Netback Calculator (PNC) was designed to provide a cost-effective and non-intrusive means of gathering this data.

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

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

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

The screenshot shows the 'Producer Netback Calculation' web interface. At the top, there's a navigation menu with 'My Profile', 'New Calculation', 'My History', 'Logout', and 'Help'. Below the menu, the title 'Producer Netback Calculation' is displayed, followed by the instruction '(Enter the base information for the movement you want to estimate)'. The form is divided into several sections:

- Origin:** Radio buttons for 'Use my home location' (selected) and 'Use this location'.
- Location Fields:** Quarter (SW), Section (18), Township (12), Range (20), Meridian (W1), and Province (Manitoba).
- Delivery Point and Elevator:** Text input for 'Pioneer Grain Company, Limited 4 BRANDON, MB' and a 'Search Elevator' button.
- Distance to Elevator (Miles):** Text input for '23' and a 'Calculate Mileage' button.
- Commodity and Grade:** Commodity (Wheat), Binned Grade (#2 CWRS 13.5), and Paid At Grade (#1 CWRS 13.5).
- Estimated Dockage (%):** Text input for '1.0'.
- Gross Tonnes to Deliver:** Text input for '60'.
- Trucking Rate:** Text input for '5' per Tonne.
- Number of Trips:** Text input for '2'.
- Trucking Mode:** Dropdown menu set to 'Commercial'.
- Truck Type:** Dropdown menu set to 'Tridom (tri-axle)'.
- Anticipated Trucking Premium (leave blank if none):** Text input for '\$3.50' (\$ per Net Tonne).
- Other Premiums (leave blank if none):** Text input for '\$' (\$ per Net Tonne).

A 'Calculate Estimate' button is located at the bottom of the form.

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

⁴⁵ 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.

	Binned		Paid	
	Tonne	Bushel	Tonne	Bushel
CWB Pool Return Outlook	\$192.00	\$5.23	\$196.00	\$5.33
(Adj.) Freight To Vancouver				
(Adj.) Freight To Thunder Bay				
Freight Adjustment Factor				
Applicable Freight	\$32.77			
Trucking	\$5.05			
Primary Elevation	\$12.12			
Dockage Cleaning	\$4.04			
Sub-Total Other Costs	\$21.21			
Trucking Premiums	\$(3.50)			
Other Premiums	\$(0.00)			
Sub-Total Producer Premiums	\$(3.50)			
Total Export Basis	\$50.48	\$50.48		
Producer Netback	\$141.52	\$3.85	\$145.52	\$3.96

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

Appendix 4: Acknowledgements

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

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

Appendix 5: Data Tables

PREFACE

The material presented in the accompanying tables is drawn from data supplied by the various stakeholders in Canada's Grain Handling and Transportation System. These include the Canadian Wheat Board, the Canadian Grain Commission, the Canadian Ports Clearance Association, Statistics Canada, various grain companies, and individual railway companies. The majority of this data is of a secondary nature and reflects the internal data collection practices as well as informational needs of the individual stakeholders. The data also comes in a variety of mediums, structures and levels of detail that require considerable transformation and manipulation in order to be rendered usable.

With this in mind, the reader is cautioned regarding the limitations that must be taken into account when considering the material presented. Firstly, although every reasonable effort has been made to ensure that the data used accurately reflects the activity being reported upon, it is largely drawn from un-audited sources. As such, errors in the data collected – whether by way of inclusion or omission – will also be reflected in the statistics presented. As a result, periodic corrections may result in the restatement of previously calculated measurement values. Where such differences arise, the values presented here should be considered to supersede those found in earlier reports.

Secondly, the point in time at which individual stakeholders collect data often differs, and generally makes exact matches in any direct comparison impossible. These differences, however, do not detract from the relative comparisons and general observations that may be drawn from the statistics.

Thirdly, inconsistent or incomplete reporting makes some estimation necessary. Where such estimations are made, an accompanying footnote will generally detail the specific nature of the approximation.

Finally, not all of the data requested of stakeholders has been made available to the Monitor. As a result, the Monitor is unable to calculate or present a number of the measures originally contemplated under the Grain Monitoring Program.

QUORUM CORPORATION

Edmonton, Alberta

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2.) Totals may not always add nor percentages match, due to rounding