Monitoring the Canadian Grain Handling and Transportation System

Second Quarter 2007-2008 Crop Year



Government Gouvernement of Canada du Canada



Foreword

In keeping with the federal government's Grain Monitoring Program (GMP), the ensuing report focuses on the performance of the Canadian Grain Handling and Transportation System (GHTS) for the six-month period ended 31 January 2008. In addition to providing a current accounting of the indicators maintained under the GMP, it also outlines the trends and issues manifest in the movement of western Canadian grain during the first half of the 2007-08 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 2006-07 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 (<u>www.quorumcorp.net</u>).

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Table of Contents

Findings	1
1.0 Industry Overview	1 1 2 2 4
2.0 Commercial Relations 2.1 Tendering Program 2.2 Advance Car Awards Program 2.3 Other Commercial Developments	6 6 9 10
3.0System Efficiency and Service Reliab3.1Trucking3.2Country Elevators3.3Railway Operations3.4Terminal Elevator and Port Performant3.5The Supply Chain	ility14 14 14 14 15 16 17 18 19
4.0 Producer Impact	21 21 22
Synopsis – Industry Overview	24
Synopsis – Commercial Relations	26
Synopsis – System Efficiency	28
Synopsis – Service Reliability	30
Synopsis – Producer Impact	32
Appendix 1: Program Background	37
Appendix 2: Producer Netback Calculat	or39
Appendix 3: Acknowledgements	41

Comparatively hotter and drier growing conditions across much of the prairies proved largely responsible for a reduction in yield for the 2007-08 crop year. Harvesting was also slowed by the prevalence of cool, wet weather throughout much of the fall, which contributed to a reduction in overall grain quality. Still, global grain prices moved sharply higher in the face of tighter overall grain supplies brought on by drought conditions in Australia and the Ukraine, which served to propel the price of most grains to record highs under the Grain Monitoring Program (GMP).

1.0 Industry Overview

1.1 Grain Production and Supply

Overall grain production for the 2007-08 crop year fell to 47.7 million tonnes, a decrease of 3.1% from the previous crop year's 49.3 million tonnes. This ranked as the fourth smallest crop witnessed under the GMP, falling well below the record-setting 56.0 million tonnes produced in the 2005-06 crop year. Despite a second consecutive year of reduced output, total grain production remained well above that recorded in recent drought years.¹ Much of this decline can be traced to the overshadowing effects of a 23.0% decrease in wheat production, which fell to 14.7 million tonnes from 19.1 million tonnes a year earlier. As was the case with most other grains, special crop production actually rose, increasing by 11.8% to 4.4 million tonnes.

Production for most of the producing provinces reflected the broader decline, with Alberta, Manitoba and Saskatchewan posting reductions of 5.9%, 3.4% and 1.3% respectively.² In keeping with this, the overall grain supply decreased by 10.5%, falling to 55.2 million tonnes from 61.7 million tonnes a year earlier. This reduction was amplified by the effects of a 40.0% decrease in the amount of stocks carried forward from the preceding crop year, which fell to a more normative 7.5 million tonnes that had been stockpiled a year earlier. Much of the

Figure 1: Western Canadian Grain Supply



impetus for this drawdown came as a result of the increasing global demand for grain and rising commodity prices.

Notwithstanding the decline in Canadian grain production, heightened worldwide demand did much to increase the GHTS's handlings in the first six months of the 2007-08 crop year. Railway shipments for the period, which surpassed 13.1 million tonnes, increased 3.6% from that handled a year earlier. Building on the record 7.3 million tonnes that were moved in the first quarter, this proved to be the largest six-month volume recorded since the 2000-01 crop year.³ Much of this gain was tied to a 90.6% increase in barley shipments, although gains were also registered by a variety of non-CWB grains. The most noteworthy declines in railway shipments

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

² Grain production in British Columbia totalled 208,600 tonnes for the 2007-08 crop year, an increase of 57.3% from that recorded a year earlier. However, this gain had a negligible impact on total grain production given the comparatively larger reductions posted by Manitoba, Saskatchewan and Alberta.

³ A record 13.5 million tonnes were moved under the GMP in the first half of the 2000-01 crop year. Despite this second place ranking, railway shipments for the first three months of the 2007-08 crop year, which totalled 7.3 million tonnes, easily surpassed the 7.0-million-tonne threshold that had been set as the period record in the 2000-01 crop year.

were posted by wheat, durum and canola, which fell by 2.6%, 13.0% and 8.7% respectively. Collectively, special crop shipments posted a better-than-average gain of 20.2%, rising to 1.7 million tonnes in comparison to 1.4 million tonnes a year earlier.

1.2 Country Elevator Infrastructure

As outlined in the Monitor's previous reports, although the country elevator network has diminished dramatically in size, the pace of that reduction has abated significantly in recent years. The first quarter of the 2007-08 crop year marked a modest reversal of this trend, with a net increase of just four licensed elevators recorded for the period. With another three having been added in the second quarter, the total increase for the first six months of the crop year amounted to seven, or 1.9%. Still, the 378 facilities forming the network at the end of January 2008 entailed a net decrease of 62.4% from the 1,004 elevators that were in place at the beginning of the GMP.

The decline in elevator facilities has been accompanied by a largely parallel reduction in the number of grain delivery points at which they were located. However, during the first half, four grain delivery points were added to the existing system, increasing the total by 1.5% to 276. All four operations can be classified as single facility, owned by smaller operators, and all located on branch lines⁴.

As with the elevator infrastructure itself, the delivery points that remained constituted just 40.3% of the 685 that were in place at the beginning of the GMP. Although these installations are distributed generally throughout western Canada, grain deliveries have been concentrated at





about one-third of the system's delivery points. In the 2005-06 crop year, the last for which data is available, 80% of the tonnage delivered into the system was gathered at just 90 locations.⁵

When contrasted with the decline in the number of elevators and delivery points, the reduction in associated storage capacity has not been nearly as pronounced. Moreover, it reflects the rate at which the storage capacity of high-throughput facilities has replaced that of smaller elevators. As such, even though licensed storage capacity declined by over 1.2 million tonnes in the first eight years of the GMP, from 7.0 million tonnes to 5.8 million tonnes, the reduction amounted to just 17.3%. However, in the first six months of the 2007-08 crop year 144,300 tonnes of storage capacity was added to the system. This had the effect of increasing the overall storage capacity by 2.5%, to a total of almost 6.0 million tonnes.

These changes provide a clear indication of the evolution that has been taking place within the industry since the beginning of the GMP. The elevator network now comprises significantly fewer facilities, many with larger storage capacities and the ability to load railcars in trainload lots. It is worth noting that while only 11.9% of the system's elevators were able to load 50 or more railcars at a time when the GMP began, by the end of the second quarter that proportion had risen to a significantly greater 46.6%.

1.3 Railway Infrastructure

⁴ The classification of single facility small operations has grown more than three fold since the start of the GMP. In August of 1999 there were 11 such facilities which have since grown to 36. These companies are most often involved in specific markets and commodities such as pulses or malt.

⁵ The most recent statistics available from the Canadian Grain Commission for grain deliveries by station are those from the 2005-06 crop year.

In comparison with the country elevator system, there has been only a modest change in the scope of the railway network in western Canada since the beginning of the GMP. By the end of the 2006-07 crop year the network had been reduced by just 5.0%, to a total of 18,495.3 route-miles of track. Although 84.0% of this 972.9-route-mile reduction was derived from the abandonment of grain-dependent branch lines, the remaining network showed more significant compositional changes. Much of this change stemmed from the transfer by CN and CP of various branch line operations to a host of new shortline railways; a process that began in the mid 1990s. Although this was but one element in a wider industry restructuring, it resulted in slightly more than one-quarter of the railway network being operated by smaller regional and shortline carriers.

However, the subsequent decline in the financial health of many of these shortlines prompted several of them into either selling or rationalizing their operations. In most instances, this resulted in their reverting back to the control of the Class 1 carrier that had spun them off in the first place. Perhaps the most vivid example of this came in January 2006 when RailAmerica Inc. sold most of its holdings in western Canada back to CN.⁶ Such reversions significantly realigned the holdings of the Class 1 and non-Class 1 railways over the course of the last four years. By the end of the 2006-07 crop year, the networks directly managed by





CN and CP had increased to 16,047.8 route-miles; a gain of 8.2% over the 14,827.9 route-miles they held at the beginning of the GMP. In comparison, the network operated by western Canada's Class 2 and 3 carriers declined by 47.3%, from 4,640.3 route-miles to 2,447.5 route-miles.

The second quarter of the 2007-08 crop year produced yet another such reacquisition when CN purchased the Athabasca Northern Railway (ANY) from its Manitoba-based parent, Cando Contracting Ltd., in December 2007 for \$25 million.⁷ As was the case with the line's previous operator, RailAmerica Inc., which had leased the 203.5-route-mile line from CN before withdrawing service in 2000, the ANY had struggled to make the operation financially viable.⁸ Although the railway's traffic volume had increased five-fold as a result of its efforts to market its services to the oil-sands industry based in Fort McMurray, the physical condition of the infrastructure had deteriorated significantly.⁹ Moreover, the carrier reported that it could not afford the \$125-million investment in plant improvements that were needed to keep the line in service. As a result, in June 2007 the railway's owner filed for abandonment with an eye towards withdrawing service by year's end. CN's decision to purchase the ANY proved to have been an eleventh-hour one, which came only in response to a

⁶ This 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.

⁷ Although originally organized in 1978 as an industrial track installation and maintenance company, Brandon-based Cando Contracting Ltd. branched out into shortline railway operations in 1998. Prior to the sale discussed here, the company had three shortline operations in Canada: the Barrie-Collingwood Railway; the Central Manitoba Railway; and the Athabasca Northern Railway.

⁸ The infrastructure used by the Athabasca Northern Railway had originally been leased to RaiLink Ltd. by CN in 1997, and formed the backbone of what became that company's Lakeland and Waterways Railway (LWR). In 2000, about a year after RaiLink Ltd. was itself taken over by RailAmerica, Inc., operations over a large portion of the LWR's territory were suspended. Ultimately, these unwanted sections of infrastructure reverted back to CN control, which then moved for immediate abandonment. Although some 151.2 route-miles were ultimately abandoned as a result, CN sold the northernmost section of its Lac La Biche subdivision (which extended northward from Boyle, Alberta) as well as its Waterways subdivision to Cando Contracting Ltd. in the fall of 2000. The company's newly created Athabasca Northern Railway (ANY) reinstituted service over the line shortly afterwards. The ANY continued to interchange traffic with what remained of the LWR until RailAmerica Inc. sold its railway holdings in Alberta back to CN in January 2006.

⁹ Grain has not been shipped from any point served by the Athabasca Northern Railway since the mid 1990s.

long-term traffic guarantee negotiated with concerned shippers.¹⁰ Although the purchase meant that railway service would continue, it is worth noting that it left no other freight-based shortline operating in Alberta.

As was the case in the commercial demise of other shortlines, the failure of the ANY was ultimately rooted in the insufficiency of its existing traffic base. Despite the best efforts of most shortline railways in western Canada, they have generally been unable to build the volumes needed to sustain them. Moreover, many were unable to stem the traffic declines that steadily chipped away at their financial viability. Those with a significant interest in moving grain also proved incapable of reshaping the economics that gave rise to the elevator rationalization efforts of the larger grain companies. Even though an increase in producer-car loading helped compensate for the closure of some local elevators, this often served only to postpone the cessation of shortline operations.

In evidence of this, shortline volumes fell by 43.5% in the first six months of the 2007-08 crop year while those of Class 1 carriers increased by 5.8%. Although there was no reduction in the number of licensed elevators served by shortline railways during the first half, the net reduction posted since the beginning of the GMP amounted to 82.9%, with just 14 remaining. This proved significantly greater than the 61.2% reduction in facilities served by the Class 1 railways during this same period. Equally telling has been the comparative decline in the associated storage capacities of these two elevator networks, which fell by 83.9% versus 10.0% respectively.

A further 169.7 route miles of infrastructure were removed from the railway system in the first six months of the 2007-08 crop year, all of which related to the abandonment of track in Saskatchewan. Much of this reduction came in the second quarter when CN abandoned large sections of its Northgate and Lewvan subdivisions.¹¹ An additional 24.5 route-miles came from the first-quarter abandonment of a portion of CP's Outllook subdivision. In conjunction with the discontinuances that preceded these, by the end of the second quarter the railway network in western Canada has been reduced by 1,142.6 route-miles, or 5.9%, since the beginning of the GMP. Even so, the network plans for both CN and CP showed over 900 route-miles of railway infrastructure still being targeted for discontinuance over the next three years.¹²

These transfers and abandonments had the effect of tilting the balance even further in favour of the Class 1 carriers. As of the end of the first half of the 2007-08 crop year, railway infrastructure under CN and CP management had increased by another 0.2%, reaching a record height under the GMP of 16,081.6 route-miles. In comparison, the network operated by Class 2 and 3 carriers shrank by another 8.3%, falling to a GMP low of 2,244.0 route-miles.

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 2007-08 crop year. At the close of the period, the network comprised a total of 16 facilities with an associated storage capacity of 2.6 million tonnes.

A total of 144,501 carloads of grain were unloaded at these facilities during the first half. This represented an increase of 4.6% from the 138,177 handled during the same period a year earlier. Having

Figure 4:Terminal Elevator Unloads – Railway Carrier



¹⁰ The traffic guarantee negotiated with Suncor Energy Inc., OPTI Canada Inc., and Nexen Inc. was central to CN's agreeing to make a \$135-million investment in upgrades to this infrastructure over the next three years.

¹¹ The abandonments noted here encompassed 38.4 route-miles of CN's Northgate subdivision and 106.8 route-miles of its Lewvan subdivision. Although both sections had effectively been "retired in place" for more than a decade, they were formally added to the company's Three Year Network Plan as discontinuation candidates in October 2005.

¹² CP infrastructure accounted for about two-thirds of the route-miles still targeted for discontinuance at the end of January 2008.

originated 50.9% of the cars that were unloaded during this period, CN marginally nudged out CP as the largest handler of export grain in western Canada. The year-to-date result was largely due to the carrier's stronger showing in the second quarter, where CN's share rose to 53.1% from its 49.2% in the first quarter. Moreover, CN's share grew by 1.4 percentage points in comparison to the 49.5% it had secured in the first half of the previous crop year.

Although the record is somewhat mixed, CN has often trailed CP'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 more recent efforts to promote its Prince Rupert gateway appear to have done much to help compensate for this. Through reduced freight rates and a better allocation of cars to the corridor, CN has improved its market share, even if that gain has come partially at the expense of its own handlings into Vancouver. Despite a year-over-year increase in the number of cars unloaded at Vancouver by both CN and CP in the first half, CN's share of these handlings has declined substantially. Although, at 38.6%, CN's share for the period was consistent with what it had been in the first half of the previous crop year, it marked a 10-percentage-point reduction from the value that it had typically secured through to the end of the 2004-05 crop year. In comparison, the number of cars unloaded by CN at Prince Rupert has continued to climb. With a year-over-year increase of 14.3% for the first half, the number of cars unloaded at the port during this period reached a record 30,440.

2.0 Commercial Relations

2.1 Tendering Program

Owing to the changes brought forth in the 2003-04 crop year, the CWB continues to target a fixed 40% of its overall grain movements to the four ports in western Canada using a combination of tendering and advance car awards. Under the terms of the arrangement it has with its agents, the CWB is expected to tender up to a maximum of 20% of this volume in the 2007-08 crop year.

During the first six months of the 2007-08 crop year the CWB issued a total of 111 tenders calling for the movement of 1.1 million tonnes of grain. This marked a 39.3% reduction from the 1.8 million tonnes put out for tender in the first half of the preceding crop year. As in most crop years, the largest portion of this tonnage, 78.9%, related to the movement of wheat.¹³ Durum accounted for the remaining 21.1% as there were no calls issued for barley during this period.

Prince Rupert again displaced Vancouver as the designated principal gateway for tendered grain in the first half, with 38.3% of the tonnage called having specified delivery there. Vancouver's allocation slipped for a third consecutive year, falling to 31.6% in comparison to a record 70.9% in the 2004-05 crop year. The share of tender calls issued in favour of Thunder Bay trailed only marginally, having risen to 30.1% in comparison to the 11.4% garnered a year earlier. Much of this gain was attributable to the CWB's allocation of all its durum tenders to the port in the first quarter. Also for a third consecutive year, no tenders calling for the delivery of grain to Churchill were issued during this period.

The calls issued by the CWB were met by 422 tender bids offering to move an aggregated 2.9 million tonnes of grain, over two-and-a-half times the volume sought. The scope of this bidding generally showed a marked increase in intensity compared to that exhibited in either of the three preceding crop years.¹⁴ Using the ratio of tonnage-bid to tonnagecalled to measure grain company reaction, a broad increase in the response rates of the bidders was observed. Durum showed the steepest relative gain in the response rates tied to individual grains, its ratio having climbed by 63.8%, to 2.9 compared to 1.8 for the previous crop year

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



as a whole. Similarly, the response rate for wheat also rose, albeit by a lesser 29.9%, to 2.6 from 2.0 in the 2006-07 crop year. Only barley showed a marked decrease in bidding activity as no tenders, save for that of malting barley, were issued in the first half.

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 Prince Rupert increased by 79.4%, to 2.6 for the first half compared to a ratio of 1.5 for the previous crop year as a whole. The ratios noted for Vancouver and Thunder Bay also reached substantially above the 2.0 mark, attaining values of 2.3 and 3.1 respectively.¹⁵

¹³ Since the inception of the CWB's tendering program, wheat has always comprised the largest proportion of the tonnage put out for tender in any given crop year. However, there have been instances where the quarterly volumes have favoured other commodities. Such was the case in the first quarter of the 2005-06 crop year when, owing to a sizable short-term sales opportunity, tenders issued in favour of barley easily displaced those put out for wheat.

¹⁴ The contrast presented here largely relates to the bidding activity exhibited since the 2001-02 crop year, since meaningful comparisons with the 2000-01 crop year cannot be drawn as a result of the industry's limited participation in the CWB's new tendering program at that time.

¹⁵ With no tender calls having been issued for Churchill, the ratio of tonnage-bid to tonnage-called remained at zero.

In large part, these better response rates reflected the competition that had been stimulated as a result of a reduction in the amount of grain put out for tender. This was also reflected in a reduction in the proportion of the tender calls that went unfilled, which fell to 14.4% in the first half compared to 33.9% for the 2006-07 crop year as a whole. Even so, this overall value ignores the proportions attributable to specific ports. A closer examination of these individual values reveals that over two-thirds of the unfilled volume, 67.3%, was tied to tender calls issued in favour of Prince Rupert. Moreover, the port's unfilled proportion, 25.3%, proved to be significantly greater than that for either Vancouver (4.9%) or Thunder Bay (10.5%)

The skewed nature of these results continued to reflect the disinclination of grain companies having terminal facilities in Vancouver to bid as aggressively on tenders issued in favour of Prince Rupert. This apparent preference for Vancouver has led to somewhat less competitive bids on the tenders issued for Prince Rupert.¹⁷ Whereas there was little difference between the maximum discounts advanced on wheat tenders to Vancouver and Prince Rupert in the 2005-06 crop Figure 6: Tendered Grain – Cumulative Volume to 31 January 2008



year, the discounts put forward by the major grain companies tended to favour Vancouver by as much as \$9.00 per tonne just a year later. With the differential having increased marginally to \$9.15 per tonne in the first quarter of the 2007-08 crop year, this preference appeared undiminished. However, the gap was narrowed substantially in the second quarter, with the differential falling to just \$1.08 per tonne.

In large measure, this reduction was reflective of a broader decline in the discounts bid for the movement of tendered wheat and durum, which fell sharply in comparison to those put forward in the 2006-07 crop year.¹⁸ The maximum discounts recorded in the first three months of the 2007-08 crop year declined by 13.2% in the case of wheat, to \$21.28 per tonne; and by a more substantial 51.2% on movements of durum, to \$10.52 per tonne.¹⁹ Moreover, they continued to decline in the second quarter as well, falling to \$16.85 per tonne in the case of wheat, and to \$7.52 per tonne on durum. There were no instances where the CWB was required to pay a premium for tendered grain movements.²⁰

¹⁶ For the 2006-07 crop year as a whole, the unfilled proportion attributable to tender calls issued for Prince Rupert, Vancouver and Thunder Bay amounted to 43.8%, 29.7% and 20.7% respectively.

¹⁷ Shareholders of the Prince Rupert Grain facility all hold a larger stake in facilities in Vancouver, which provides them with an incentive to give preference to a Vancouver routing where they do not have to share terminal revenues. Some shareholders are also concerned with the lack of a competitive alternative to the single-carrier service provided by CN into Prince Rupert.

¹⁸ The tender bids advanced by the grain companies are typically expressed as a discount to the CWB's Initial Payment.

¹⁹ These discounts fell below the 2006-07 crop year's maximums of \$24.51 per tonne on wheat, and \$21.56 per tonne on durum.

²⁰ In the 2006-07 crop year, the CWB was required to pay premiums of as much as \$16.00 per tonne on tendered movements of feed barley.

During the first six months of the 2007-08 crop year, the CWB awarded a total of 162 contracts for the movement of 1.1 million tonnes of grain.²¹ This represented a decrease of 9.8% from the 1.3 million tonnes handled in the first half of the previous crop year. As opposed to the destinations specified in the tender calls, the largest proportion of the grain shipped, 36.6%, was sent to the port of Vancouver. Prince Rupert and Thunder Bay followed in turn with shares of 35.1% and 28.3% respectively. As for the composition of the movement, wheat accounted for 77.2% of the overall volume, while 17.1% was accorded to durum and a final 5.7% to barley.

As previously observed by the Monitor, the vast majority of the grain moved under the CWB's tendering program did so in blocks of 25 or more railcars. For the first six months of the 2007-08 crop year, 89.2% of the tendered grain volume moved in such blocks. This proportion proved to be slightly below the 93.2% recorded for the 2006-07 crop year as a whole. In addition, movements in blocks of 50 or more cars also decreased in the first half, falling to 68.3% from the previous crop year's overall 77.7% proportion. This was due in large part to an increase in movements incorporating blocks of 25-49 cars, which rose by 5.5 percentage points to take a 21.0% share.

High-throughput elevators remained the leading originators of tendered grain shipments. During the first half, 88.6% of the tendered tonnage was shipped from these larger facilities. Although this proportion was consistent with the values that have been posted since the 2001-02 crop year, it proved somewhat greater than the 86.2% recorded for the 2006-07 crop year as a whole.²²

Owing to its strong placement in the second quarter, CN displaced CP as the largest handler of tendered grain in the first six months of the 2007-08 crop year. With 52.2% of the volume, the carrier easily outdistanced the 47.8% share secured by CP. Moreover. this represented a considerable gain over the 42.5% share the carrier had garnered for the 2006-07 crop year as a whole. During this same period, CN also took the lion's share of tendered malting barlev shipments. garnering 86.9% of the movement compared to CP's 13.1% share.23





In aggregate, 15.1% of the CWB's total grain shipments moved under tender to

western Canadian ports in the first six months of the 2007-08 crop year. Even though the 1.1 million tonnes of tendered grain handled during this period fell 0.2 million tonnes short of what it had been for the same period a year earlier, the CWB reported that its Transportation Savings increased by 1.2%, rising to \$16.8 million from \$16.6 million.²⁴

²¹ The volumes cited as moving under the CWB's tendering program also include malting barley, although such movements are administered apart from other CWB grains.

²² Although the 2000-01 crop year saw 90.3% of the tendered grain volume moved from high-throughput facilities, the limited activity recorded during the initial year of the CWB's tendering program makes any comparison unfair. Since that time, the proportion drawn from high-throughput facilities has ranged from a low of 83.0% in the 2002-03 crop year to a high of 86.2% in the 2006-07 crop year.

²³ Comparatively, CN generally originates a significantly greater amount of barley – whether tendered or non-tendered – than does CP. This extends somewhat naturally from the more northerly latitudes in which barley is grown, and in which CN operates.

²⁴ The CWB defines its Transportation Savings as the savings in transportation costs it realizes from the discounts advanced by the successful bidders under the tender program, all freight and terminal rebates, and any financial penalties it may assess for non-performance.

2.2 Advance Car Awards Program

With the 2007-08 crop year, the CWB marked the beginning of the fifth season for its advance car awards program, with just under 0.9 million tonnes of grain having moved under the program in the first half. This constituted just 11.5% of the total volume shipped by the CWB to western Canadian ports during this period. Moreover, when considered alongside the 1.1 million tonnes of tendered grain already discussed, just 26.6% of the CWB's total grain shipments moved under the umbrella of these two programs.²⁵

Despite periodic variations, the grain shipped under the CWB's advance car awards program has often reflected what has moved under its tendering program. Compositionally, this was again the case in the first half, even though a significantly lesser amount of barley was shipped under the advanced car awards program. As a result, wheat and durum took modestly larger shares of the movement. Wheat, which continued to be the foremost grain handled, accounted for almost 0.7 million tonnes and 78.9% of the program's overall volume. This was followed in turn by another 0.2 million tonnes of durum, which represented 20.9% of the total, and a residual 2,100 tonnes of barley, which made up the remaining 0.2%.



Figure 8: Advance Car Awards – Destination Port



case with tendered grain shipments, no movements under the advance car awards program were made to Churchill.

Another contrast related to the fact that CP handled the majority of the grain moved under the advance car awards program, where it took a 60.7% share compared to its 47.8% share on tendered grain. Notwithstanding this carrier preference, there was little to differentiate the movement's broader attributes. The vast majority of the grain moved under the advance car awards program, 88.0%, originated at high-throughput elevators. This value proved only marginally below the 88.6% share cited earlier for tendered grain shipments. In equal measure, the car cycle attributable to advance-car-awards movements amounted to an average of 14.0 days in the first half compared to that of 13.8 days on the movement of tendered grain.

Still, when compared to tendered shipments, a significantly lesser volume of the grain shipped under the advance car awards program moved in blocks of 25 or more cars. This is because the cars allocated to shippers under the advance car awards program are often integrated with those obtained through the tendering program as a means of optimizing individual block or train movements. As such, this practice effectively dilutes the values that are obtained for the aggregate volume moved under the two programs. By way of example, 84.7% of this total volume moved in blocks of 25 or more railcars compared to 89.2% for tendered grain alone. Similarly, the average overall size of these blocks amounted to 51.5 cars versus an average of 55.3 cars for tendered grain.

²⁵ Since the 2003-04 crop year, the CWB has targeted to move 40% of the grain it ships to the four ports in western Canada using a combination of tendering and advance car awards.

2.3 Other Commercial Developments

2.31 Grain Industry Again Seeks Redress on Railway Service Issues

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

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

In July 2007, the Agency determined that CN's car allocation practices had resulted in a significant deterioration in the service provided to GNG. Moreover, it found that CN had in fact breached its common carrier obligations and that GNG would likely suffer substantial commercial harm if the breach went unchecked.²⁶ Of particular interest was the fact that the Agency also found the difficulties encountered by GNG were not isolated, but rather the product of a widespread systemic failure.

In addition to directing that CN make reasonable accommodation for GNG's specific transportation needs, the Agency also ordered the carrier to undertake a number of broader corrective measures. Foremost among these were the requirement that CN allot and distribute equipment used in the movement of grain in a manner that was fully transparent and nondiscriminatory; that this equipment be maintained in sufficient number so as to allow the carrier to meet its level-of-service obligations; that at least 50% of its available hopper car fleet be set aside for general distribution to grain shippers; and that the maximum block size under its advance products be set at 50 cars (which could then be combined to form 100-car blocks by shippers wishing to do so).

With its implications for the industry at large, many of the GHTS's smaller shippers looked upon the Agency's decision with favour. Moreover, as CN had been ordered to implement these remedies by 1 August 2007, they anticipated a significant improvement in their ability to secure equipment and compete more fully in the 2007-08 crop year. In the weeks that followed, CN met with a variety of these smaller shippers in an effort to address the issues that had been raised by the Agency in its decision. Ultimately, however, the parties could not find the common ground needed to reconcile their differences. As a result, the structural changes brought forward by CN in August 2007 did little to mollify the concerns that these stakeholders had raised.

On 5 September 2007 the CWB, along with five other companies, filed a series of new complaints with the Agency regarding the level of service they were receiving from CN.²⁷ Each alleged that the carrier was still failing to provide them with adequate rail service owing to what they perceived to be the inherent failings of the car allocation process. In arguments that largely paralleled those put forward by GNG six months before, it was asserted that CN's advance products were still discriminatory and ultimately hindered the efficient movement of grain. More specifically, it was alleged that owing to the inherent preference given by CN in allocating cars to shippers capable of guaranteeing 100-car train movements over a consecutive 42-week period, smaller shippers were simply unable to get the cars that they needed for their own operations.

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

²⁷ There were in fact six separate complaints filed with the Canadian Transportation Agency on the issue of CN service. In addition to that filed by the Canadian Wheat Board, these included filings from North East Terminal Ltd., North West Terminal Ltd., Paterson Grain, Parrish & Heimbecker Limited, and Providence Grain Group Inc. All complainants were members of what had came to be known as the CARS Group, which was formed with the aim of sharing the cars allocated to them in the aftermath of the advance products introduced by CN. Since all six filings dealt with a similar complaint, the Agency chose to address the complaints collectively.

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

In January 2008 the Agency issued an interim decision that found that CN's advance products had caused the complainants substantial commercial harm in the 2006-07 crop year, and that the carrier was in breach of its level-of-service obligations.²⁸ Moreover, the Agency found that further harm was likely to be incurred if some form of corrective action was not taken. However, the Agency recognized that CN had made some effort at revising its advance products in order to better reflect the wider needs of shippers as the 2007-08 crop year got underway. Still, the Agency concluded that it simply could not gauge the effects of these changes in the absence of the data necessary to make such an assessment. Accordingly, the Agency deferred a final decision in the matter until all of the requisite data could be assembled and analyzed.²⁹ A final decision was not expected before July 2008.

2.32 Federal Government Concludes New Operating Agreements with CN and CP

Following the federal election of 23 January 2006, the newly installed Conservative government reversed the previous Liberal government's decision to transfer its fleet of covered hopper cars to the Farmer Rail Car Coalition (FRCC).³⁰ These 11,900 cars had been provided to both CN and CP under an operating agreement that allowed both carriers to use them as part of their general grain fleets.³¹ While both railway companies supplemented these cars with their own equipment in order to meet prevailing market demand, the public fleet has always been the principal asset employed in moving grain. In choosing to retain ownership of the fleet, the federal Minister of Transport, Infrastructure and Communities indicated that this had been done to maximize the benefits accruing to farmers and taxpayers alike.

In the year that followed, Transport Canada began to negotiate new agreements with CN and CP to replace the former operating agreement. Under the general terms of the agreements that had been individually concluded with CN and CP by the beginning of the 2007-08 crop year, the government would continue to provide these cars to the railways free of ownership costs so long as they were used to transport grain. These agreements cover the refurbishment, maintenance and operation of the cars. This meant that there would be no resultant increase in the carriers' revenue caps as a result of any car hire incurred from their transfer to a third party such as the FRCC. One condition of the agreements will see the government performing annual inspections of the fleet to ensure the agreed upon refurbishment has been undertaken and biannual inspections to ensure that the cars are being maintained at an acceptable level.

One of the more contentious issues that arose during the debate over the future of the hopper car fleet related to the actual costs incurred in maintaining them. A subsequent examination into the matter revealed that the railways' actual maintenance costs did in fact fall well below the allowances granted for this under the revenue cap. To correct this, the federal government brought forward an amendment to the *Canada Transportation Act* that would permit a one-time adjustment to the maintenance allowances accorded to CN and CP under the

²⁸ Collective reference is made here to the six decisions simultaneously brought down by the Canadian Transportation Agency. See Canadian Transportation Agency Decision Numbers 20-R-2008 through 25-R-2008, all dated 18 January 2008.

²⁹ The Canadian Transportation Agency ordered that each of the parties submit detailed information on grain movements during the first 36 weeks of the 2007-08 crop year. In general terms, the information requested was aimed at identifying the number of cars actually ordered, allocated and moved during this period.

³⁰ A more detailed reporting on the events leading up to this decision can be found in the Monitor's Annual Report for the 2005-06 crop year.

³¹ Over time, attrition has diminished the 13,000 covered hopper cars that were originally in the federal government's fleet. By the beginning of the 2007-08 crop year an estimated 11,900 cars remained. In addition, this fleet had at one time also been supplemented by another 6,000 cars: 2,000 of which were owned by the CWB; 2,000 administered by the CWB on leases paid by the federal government; 1,000 owned by the government of Alberta, and 1,000 owned by the Saskatchewan Grain Car Corporation.

revenue cap.³² Towards the close of the 2006-07 crop year, the federal Minister of Transport, Infrastructure and Communities formally requested that the Canadian Transport Agency make this adjustment. However, by the close of the second quarter the Agency had still not made its final determination, although the railways had already been advised of an interim estimate and its impact on the Volume Related Composite Price Index.

Notwithstanding this adjustment, an important facet of the new agreements provided for the refurbishment, and longer term replacement, of this aging fleet.³³ An important dimension to this was that although the capacity lost through attrition would be replaced, it need not necessarily be on a car-for-car basis. That is to say that the railways could replace these comparatively smaller, older cars with the equivalent capacity provided by their substitution with jumbo hoppers, which has become the industry norm. Similarly, an improvement in the car cycle could also be used to counter capacity lost through attrition without replacing a car physically.

By the end of the first half this process appeared to be well under way. More specifically, CN was reported to have already begun scrapping many of the aluminum hopper cars that had been identified as unfit for further service.

2.33 Port of Churchill Witnesses a Sharp Increase in Volume

As has been noted in previous reports issued by the Monitor, the port of Churchill has struggled with declining volumes for several years. In the 2002-03 crop year, shipments moving through the port reached a GMP low of 351,900 tonnes. At that time the Port of Churchill Advisory Board warned that another such shipping season might well prove ruinous.

In response, the Manitoba government moved to provide the port with an interim package of financial support, which was complemented by additional funds from the federal government. With a renewed focus on attracting new business to the port, these efforts appeared to have yielded positive results in the 2003-04 crop year, where throughput increased to 542,700 tonnes and the traffic base broadened to include peas, canola and other non-CWB grains. Even so, the amount of grain passing through this northern port over the course of the next three crop years seldom exceeded 0.5 million tonnes.³⁴ Furthermore, this volume constituted about half of the 1.0 million tonnes that many claimed was necessary for the port's long-term commercial success.

However, the volume of grain that passed through Churchill in the first half of the 2007-08 crop year proved to be the largest since the 2000-01 crop year: a total of 611,900 tonnes.³⁵ More importantly, there were a number of distinctions for the port in this result. Perhaps the most noteworthy pertained to a modest shipment of milling wheat to Halifax. Using an arctic supply vessel that would otherwise have returned empty to Montreal, a total of 11,600 tonnes was shipped as a domestic backhaul movement. This constituted the first instance where marine transportation was employed to move grain between Churchill and a destination within Canada. Although such movements are constrained by the limited number of vessels engaged in bringing supplies to the country's northern communities, it clearly demonstrated that an alternative to interregional railway and seaway shipments was possible.

At the same time, a vessel carrying an inbound load of fertilizer from Russia also called at the port. This proved to be an important milestone for Churchill in as much as it marked the first time in many years that foreign imports actually entered the country through the port. Moreover, since this ship also picked up a load of wheat bound for Italy, it also demonstrated that two-way trade – a long-cherished goal of the port – was in fact possible.

³² By more closely aligning this compensation with the actual cost of maintaining the hopper cars, it was estimated that allowable carrier revenues would be reduced by as much as \$2.00 per tonne.

³³ The refurbishment centered on upgrading the cars to reflect the railways commitment to maintain the cars in good operating condition throughout the remainder of their service life. Some cars are to be upgraded to allow for heavier axle loading.

³⁴ Churchill-destined grain is loaded into vessels during a shipping season that normally extends from late July to early November, but which straddles two crop years.

³⁵ The port's throughput volume of 593,200 tonnes in the first quarter actually set a GMP record, surpassing the 580,500 tonnes that had passed through Churchill in the first-quarter of the 2000-01 crop year.

Finally, all of this served as a backdrop for Canada's prime minister in announcing that an additional \$68 million in federal, provincial and private funds would be invested in the railway line that serves the port, as well as additional port facilities. The largest portion of this, \$60 million, was earmarked for improvements to the infrastructure operated by the Hudson Bay Railway, with contributions being divided equally between the Government of Canada, the Government of Manitoba and the railway's owner, OmniTRAX Inc. The line has reportedly suffered from the effects of chronic maintenance underfunding, which has not only slowed trains moving over it, but also resulted in the periodic interruption of service altogether. The remaining \$8 million, which was largely reserved for the expansion of storage facilities at Churchill, was to be shared evenly by the federal and provincial governments.

2.34 Amendments to the Canada Grain Act Introduced

In September 2006 the federal government tabled a report completed by Compas Inc., a Toronto-based research firm, which had been selected to lead an independent statutory review of the Canadian Grain Commission (CGC) and the *Canada Grain Act*. Built on its consultations with hundreds of stakeholders, the Compas report recommended a number of substantive changes to the mandate of the CGC, many of which would fundamentally alter the way the GHTS works today.³⁶ Of particular importance were the implications arising from the report's recommendation regarding quality assurance, and the possible changing of a grading system that has long been based solely on Kernel Visual Distinguishability (KVD).

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

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

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

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

Finally, the elimination of the producer payment security program was aimed at reducing costs and bringing the western Canadian grain industry in line with that of eastern Canada and other agricultural sectors. The program, commonly referred to as "bonding", was seen as a barrier to potential new entrants. Its removal was intended to open the door to producer driven initiatives, such as the development of a "commodity clearing house," in order to manage commercial risks in a more cost-effective manner.³⁷

³⁶ These recommendations were outlined more fully in section 2.35 of the Monitor's Annual Report for the 2006-07 Crop Year.

³⁷ For more information on producer payment security models, see Appendix A of the "Government Response to the Fifth Report of the Standing Committee on Agriculture and Agri-Food on the Review of the *Canada Grain Act* and the Canadian Grain Commission Conducted by Compas Inc.," tabled 16 April 2007.

3.0 System Efficiency and Service Reliability

3.1 Trucking

Over the course of the previous three crop years, commercial trucking rates for the movement of grain in western Canada had risen by a factor of 23.2%%. Ultimately, this increase reflected the effects of rising input costs, the most notable being fuel and labour. 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.

During the first three months of the 2007-08 crop year, short-haul trucking rates rose a further 1.9%. This increased inflationary pressure resulted in the



composite price index rising to 125.5 by the close of the first quarter. Much of this inflationary pressure was again due to the escalating price of fuel, which had been rising in conjunction with crude oil prices since the end of the 2006-07 crop year. By the end of the first quarter the price of West Texas Intermediate crude oil had increased by a factor of 20%, rising from about \$75 US per barrel to \$90 US per barrel. And although the second quarter saw the price of crude fluctuate around this level, the per-barrel price at the end of January 2008 had not materially changed.

It must be noted here that the composite price index used by the GMP was based on the rates posted by the larger grain companies for their "in-house" trucking services. Owing to recent industry consolidations, this data is no longer being made available to the Monitor. Accordingly, although alternatives that would allow for the continuation of this measure are actively being examined, second quarter data is unavailable.

3.2 Country Elevators

Total country elevator throughput for the first six months of the 2007-08 crop year, as measured by shipments from primary elevator facilities, increased by just 0.9%, rising to 17.5 million tonnes from 17.3 million tonnes a year earlier. As was the case twelve months before, this denoted the attainment of yet another throughput record for the period under the GMP. However, this increase in tonnage was not reflected in a higher capacity turnover ratio for the primary elevator system as a whole, which fell by 2.9% to 3.3 turns as a result of a 74,300-tonne increase in associated storage capacity. In spite of this immediate weakening, the quarterly turnover ratio has moved steadily higher in the face of an accumulating 1.1-million-tonne net reduction in storage capacity. Notwithstanding a periodic fluctuation in quarterly volume, this progressive increase in the quarterly ratio has underscored the efficiency gains being made by the GHTS's remaining primary elevators. To be sure, by the end of January 2008 they were handling comparatively more grain than at any other point in the GMP's eight-year history.³⁸

The amount of grain maintained in inventory decreased by 3.4% in the first half, falling to a weekly average of 2.9 million tonnes compared to 3.0 million tonnes a year earlier. Although much of the reduction appears to have been tied to a short-term surge in system activity, the period's average inventory level was not inconsistent with the quarterly averages observed over the four previous crop years. Moreover, the average

Figure 9: Composite Index – Short-Haul Trucking

³⁸ For comparative purposes, the 3.3 turns realized as the capacity turnover ratio for the first half of the 2007-08 crop year would equate to 6.6 turns on an annualized basis. This ratio exceeds the overall values recorded in each of the GMP's first eight years, including a GMP record of 6.5 turns in the 2006-07 crop year. This affirms that the GHTS now employs fewer elevator assets to handle an equivalent volume of grain than it did at the beginning of the GMP.

still remained well below the values posted in the first two years of the GMP.³⁹ Along with this reduction in the overall stock level came a 5.6% reduction in the amount of time grain spent in inventory. This resulted in a year-to-date average of 30.5 days for the first half compared to that of 32.3 days twelve months before. The larger scope of this reduction also suggests that grain inventories were being turned over somewhat faster in the face of increased commercial activity.

The reduction in grain inventories served to reduce the overall average weekly stock-to-shipment ratio for the period by 6.5%, which fell to 4.3 from the 4.6 scored in the first half of the previous crop year. Even so, this value affirms that grain inventories were still more than sufficient to meet the prevailing demand, and that the grain companies faced comparatively few challenges in sourcing product in the country during this period.

3.3 Railway Operations

The volume of grain moved in covered hopper cars during the first half increased by 3.1%, climbing to 12.8 million tonnes from 12.4 million tonnes a year earlier. With originations of 12.4 million tonnes, the Class 1 carriers posted a gain in volume of 0.7 million tonnes, or 5.8%, for the period. This represented a share of 97.0%, which denoted a gain over the 94.5% share these carriers held twelve months earlier. Shortline-originated volumes, which totalled almost 0.4 million tonnes in the first half, fell by 43.5%. Although this traffic gain was largely attributable to recent shortline acquisitions by CN, it also underscored the broader trend that has increasingly disfavoured shipments from the grain-dependent network.⁴⁰ The volume originated by the grain-dependent network in the first six months of the 2007-08 crop year increased by just 0.4%, while those forwarded from points along the non-grain-dependent network increased by 4.3%.

3.31 Car Cycles

As has often been the case, the onset of winter had an adverse impact on railway car cycles in the second quarter, which rose to an average of 16.2 days from the first quarter's 15.0-day average. Even so, the year-to-date average for the first six months of the 2007-08 crop year still declined by 5.9% from that of the same period a year earlier, to 15.5 days from 16.5 days.

Without exception, improvements were noted in each of the operating corridors. The Prince Rupert corridor posted the largest of these, with a decrease of 8.7%, which drew down the average to 13.9

Figure 10: Average Railway Car Cycle



days from 15.3 days a year earlier. The Vancouver corridor posted the next largest reduction, with its overall average falling by 6.1% to 16.7 days. A 4.9% improvement in the Thunder Bay corridor resulted in a 15.3-day average versus that of 16.1 days twelve months before.

These improvements extended equally to the car cycle's loaded and empty transit time components. In the case of the former, the average loaded transit time for the first half fell by 4.1%, to an average of 7.8 days from 8.1 days a year earlier. As for the average empty transit time, the betterment amounted to 7.6%, with the year-to-date average having fallen to 7.8 days from 8.4 days.

CN and CP both contributed to these broader improvements, posting reductions in their overall car cycles that amounted to 9.0% and 2.4% respectively. The results were somewhat mixed with respect to their loaded and

³⁹ Country elevator stocks have generally been falling in conjunction with the overall reduction in the system's storage capacity. Despite periodic fluctuations, the year-to-date average of 2.9 million tonnes remains well below the 4.1-million-tonne average set as a record in the second quarter of the 1999-2000 crop year.

⁴⁰ The acquisition of various shortline railways by CN has resulted in their originated traffic volumes being reclassified as Class-1 originations. The volume comparisons made here reflect the impact of this change in ownership.

empty transit times. The most marked improvement was reflected in a 9.4% reduction in the average empty transit time posted by CN while the CP average fell by 5.6%. The results for the two railways differed sharply with respect to their loaded transit times, with the CN average falling by 8.7% while the CP average rose by 1.6%.

Despite the onset of winter, which normally leads to comparatively longer car cycles in the second and third quarters, the 15.5-day average posted for the first half of the 2007-08 crop year proved to be among the best yet recorded for the period under the GMP. To an extent, the strides made by CN in narrowing the performance gap that it had opened with CP almost three years before has been a significant factor in this achievement.⁴¹ And while a greater emphasis on unit train operations has had a positive effect on the car cycles posted in both the Vancouver and Thunder Bay corridors, it is the increased volume of grain moving to Prince Rupert – which consistently posts some of the lowest corridor averages under the GMP – that has had the greatest impact on these results.

3.32 Railway Freight Rates

As outlined in the Monitor's previous reports, CN and CP broke with the practice of advancing largely parallel rate adjustments at the beginning of the 2003-04 crop year. They also made the first substantive changes to the incentive discounts that they had been offering for movements in multiple-car blocks at that time. Over the next four crop years, a process involving the setting of new rates at the beginning of the crop year followed by at least one adjustment in the second half emerged. This new process was aimed at maximizing the revenues that the carriers were entitled to receive under the revenue cap. Moreover, both CN and CP have become quite skilful at managing their revenues within this regulatory framework.

The 2006-07 crop year brought even more fundamental changes to the prevailing rate structure. The most striking element in this was CN's decision to phase out its wholesale per-tonne rates, and to replace them with commodity-specific, per-car charges.⁴² And while CP did not immediately follow suit with this kind of a change to its rate structure, both carriers increased their rates substantially. Due in large measure to the inflationary pressures brought on by higher fuel costs, the rates associated with moving a single carload of wheat were raised by anywhere between 7.3% and 12.1% depending on the corridor and carrier involved. These proved to be some of the largest year-over-year increases yet recorded under the GMP.

For the 2007-08 crop year, both railways brought forward rate increases that clearly exceeded the 3.3% reduction that the Canadian Transportation Agency indicated would likely ensue as a result of a one-time adjustment to its Volume-Related Composite Price Index.⁴³ By the end of the first quarter CN had increased its single-car rates in most corridors by a factor of 1.0%, although it again reduced those applicable on movements to Prince Rupert by about 5.5%. This action served to widen the differential that had been opened between Vancouver and Prince Rupert rates to about 7.5% in the latter's favour.⁴⁴ CN also finalized its transition to the

⁴¹ CN returned to the practice of using grain to fill-out its manifest trains early in the 2004-05 crop year. This resulted in a significant elongation of the loaded and empty transit times for CN movements. With CP's continued focus on moving grain in unit trains, the comparative averages for these two carriers began to diverge. This ultimately manifested itself in a measurable performance advantage for CP. Since CN renewed its focus on moving grain in unit-train service early in the 2005-06 crop year, this gap in comparative performance has narrowed appreciably.

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

⁴³ The revenue cap is adjusted annually for inflation by the Canadian Transportation Agency. For the 2007-08 crop year, the Agency had initially determined that the Volume-Related Composite Price Index used to accomplish this was to be increased by 3.2%. See Canadian Transportation Agency Decision Number 211-R-2007 dated 27 April 2007. However, since the federal Minister of Transport, Infrastructure and Communities had requested the Agency make a one-time adjustment to this index in order to remove an excess allowance given over to the maintenance of the government's hopper car fleet, this inflationary increase was later varied, with a projected 3.3% reduction being substituted. See Canadian Transportation Agency Decision Number 388-R-2008 dated 31 July 2007. Both CN and CP indicated that they would be appealing aspects of this latter decision to the Federal Court.

⁴⁴ 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 traditional pricing strategy, and one that has resulted in a substantial increase in volume for this more northerly port.

publication of these rates as per car, rather than per tonne, charges.⁴⁵ CP did much the same, increasing its rates in the Vancouver and Thunder Bay corridors by 0.8% and 0.3% respectively, while also converting their tariffs to per-car charges.

The second quarter saw more significant adjustments to these rates. With the exception of the rates applicable on movements to Churchill, which remained unchanged, CN increased its rates early in the second quarter by a further 2.2%%. Similarly, CP applied an across-the-board increase of 3.0% on its movements to both Vancouver and Thunder Bay. With these adjustments, the overall increase in rates since the beginning of the GMP was brought to 20.1% for movements in the Vancouver corridor, and to 21.9% for movements in the Thunder Bay corridor. Although similar for both CN and CP, the increases posted by CN have marginally exceeded those put forward by CP during this eight-and-a-half year period.



There were no significant changes to the monetary incentives offered by the railways on multiple-car movements in the first half of the 2007-08 crop year. For CN the discounts offered on movements in blocks of 50-99 cars remained at \$3.00 per tonne, as did the \$7.00 per tonne incentive offered on movements of 100 or more cars. By the same standard, the \$4.00-per-tonne discount advanced by CP for movements in blocks of 56-111 cars was also unaltered, as was its \$7.50-per-tonne maximum on shipments in blocks of 112 cars.⁴⁷ Both carriers, however, continued to emphasize the advance booking options to which these discounts have been linked.⁴⁸ As was cited earlier, these programs – and more particularly, those offered by CN – have come under increasing attack from those who argue that they discriminate against smaller shippers. However, it remains to be seen whether the level-of-service complaints launched early in the first quarter will precipitate any significant future change in these programs.⁴⁹

The quantity of grain moved under the railways' incentive programs during the first six months of the 2007-08 crop year increased by 6.9%, to 9.7 million tonnes from 9.1 million tonnes a year earlier. This resulted in a 9.6% increase in the value of the discounts earned by shippers, which rose to a total of \$53.4 million from \$48.7 million a year earlier. This latter gain was aided in part by a further migration towards the use of larger car blocks, which helped increase the average-earned discount by 2.5%, to \$5.48 per tonne from \$5.35 per tonne twelve months before.

⁴⁹ See section 2.31 for a fuller discussion of these complaints.

Figure 11: Railway Volume Moving Under Incentive

⁴⁵ The rates applicable on the movement of non-CWB grains had been converted to per-car charges a year earlier. Those pertaining to CWB grains were changed to per-car charges beginning with the 2007-08 crop year.

⁴⁶ The Thunder Bay and Vancouver corridors are deemed the most competitive since both CN and CP offer direct rail services to these ports. Notwithstanding minor differences, the rate increases noted here reflect the general pricing actions of both carriers in these two corridors. With only one serving carrier at the ports of Churchill and Prince Rupert, inter-carrier comparisons of rate changes are not possible. An examination of CN's published rates to these ports shows a net increase of about 20.4% for Churchill, and a net decrease of about 2.0% for Prince Rupert, over the same period of time.

⁴⁷ To earn the maximum discount of \$7.50 per tonne, a shipper must load the 112 cars in a 10-hour window. Shippers unable to do so can instead earn the \$7.00-per-tonne discount that is available for cars loaded in a 24-hour window.

⁴⁸ These programs, which are supported by a diverse series of financial rewards and penalties, allow shippers to contract with the railways for unit train movements over an extended period of time.

3.4 Terminal Elevator and Port Performance

3.41 Terminal Elevators

A total of 12.8 million tonnes of grain passed through the terminal elevators of Canada's western ports in the first half of the 2007-08 crop year. This marked a 6.9% increase over the 12.0 million tonnes handled in the same period a year earlier. Accounting for almost half of the overall volume, Vancouver again proved itself to be the largest export gateway. The port's total throughput increased by 7.4%, climbing to 6.3 million tonnes in comparison to the 5.9 million tonnes reported a year earlier. Even so, this gain was marginally outpaced by Prince Rupert, where a 9.6% increase resulted in the posting of a record 2.6 million tonnes of throughput for the first six months of the crop year. For the most part, the gains registered by Prince Rupert in recent years have reflected the economic advantage given to moving grain through the port, which has been precipitated in large part by reduced CN freight rates and an improvement in car allocation.

The results for the eastern gateways of Churchill and Thunder Bay were somewhat mixed. With a 21.6% increase in terminal throughput, Churchill posted the largest year-over-year increase in volume, which reached 0.6 million tonnes. Despite a 0.2-million-tonne rise in wheat and durum sales, the gain was tempered by a loss of 0.1 million tonnes in canola and pea exports. In comparison, the port of Thunder Bay saw its six-month volume increase by a much smaller 1.8%, falling just shy of 3.3 million tonnes in total. Increases in the port's CWB-grain handlings, the most noteworthy being an eight-fold gain in barley shipments, were offset by reductions for most non-CWB grains.

Terminal inventories averaged 1.4 million tonnes for the first six months of the 2007-08 crop year, which represented a reduction of just 1.0% from that recorded in the same period of the previous crop year. Notwithstanding this minor decline in the year-to-date average, terminal inventories have steadily increased over the course of the last three years, gaining about 0.4 million tonnes over the 1.0-million-tonne average typical of the 2002-03 and 2003-04 crop years.⁵⁰ Although much of this gain parallels the increase in terminal throughput recorded over this same timeframe, terminal stocks have grown to a level well beyond those observed when terminal shipments were comparable earlier in the GMP.

Even so, the average amount of time spent by grain in inventory declined by 5.5%, falling to an average of 18.9 days for the first six months in comparison to 20.0 days a year earlier. This reduction was derived from storage-time decreases in all ports save that of Prince Rupert, which reported a 23.3% increase. As was the case with primary elevator stocks, this suggests that terminal grain inventories were being turned over faster as a result of increased commercial activity.

With throughput increasing in the face of comparatively small changes in terminal grain inventories, stock-toshipment ratios were observed to have moved generally lower. Although this was particularly true of the CWB grains, it extended to some of the non-CWB commodities as well, most notably peas. Even so, the average ratios all remained above the 1.0 threshold.⁵¹ However, this does not mean that shortages were fully avoided, or that inventories were not tight at specific periods in either the first or second quarter. Shortages were signalled most frequently in the minimum ratios produced by the ports of Vancouver and Prince Rupert, where about two-thirds of the overall throughput was processed.

3.42 Port Performance

Some 444 vessels called at western Canadian ports during the first six months of the 2007-08 crop year, an increase of 13.8% over the 390 vessels that called during the same period a year earlier. The average amount of time these vessels spent in port increased by 10.0%, rising to an average of 5.5 days for the period from 5.0 days the year before. This increase in the year-to-date average was largely driven by a 1.9-day escalation of the second quarter average, which climbed to 6.5 days from the first quarter's 4.6-day average.

⁵⁰ A record 1,425,400 tonnes in average terminal stocks was recorded in the second quarter of the 2006-07 crop year. The current crop year's year-to-date average of 1,393,300 tonnes falls just 2.3% below this benchmark.

⁵¹ 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 overall increase was attributable to longer vessel-waiting times, which rose by 22.7%, or 0.5 days, to an average of 2.7 days. A good deal of the rise was derived from sharp increases in the waiting times reported for vessels loading at Vancouver and Churchill. In comparison, the average amount of time devoted to vessel loading in the first half actually remained unchanged at 2.8 days. Interestingly, reductions at Vancouver, Churchill and Thunder Bay were offset by a 36.4% increase in the average loading time at Prince Rupert.

When examining the amount of time spent by vessels at individual ports, only those calling at Vancouver were observed to have posted an overall increase. The average length of these stays at Vancouver increased by 15.5% in the first half, rising to 8.2 days from 7.1 days a year earlier. The duration of vessel layovers at Prince Rupert fell by 2.7%, declining to an average of 7.1 days from 7.3 days. More substantive reductions were posted by Churchill and Thunder Bay, which both saw their averages decline by 10.5%. At Churchill, the average stay in port fell to 5.1 days from 5.7 days. While at Thunder Bay, the decrease resulted in layovers that averaged 1.7 days compared to 1.9 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 2006-07 crop year, it was observed that this process required an average of 58.1 days; some 1.5 days more than had been the case a year earlier when the GMP's record-setting average of 56.6 days was achieved.

				3)	•	5	•	0	
	SUPPLY CHAIN ELEMENT	TABLE	1999-00	2003-04	2004-05	2005-06	2006-07	YTD 2007-08	SUPPLY CHAIN EFFECT
	SPEED RELATED		[
2	Country Elevator – Average Days-in-Store	3B-4	41.7	34.4	29.5	30.1	30.7	30.5	
3	Average Railway Loaded Transit Time (days)	3C-4	9.2	8.9	8.7	8.6	8.2	7.8	•
5	Terminal Elevator – Average Days-in-Store	3D-4	18.6	19.0	19.9	17.9	19.2	18.9	V
	Average Total Days in GHTS		69.4	62.3	58.1	56.6	58.1	57.2	
	SERVICE / ASSET RELATED								
1	Average Country Elevator Capacity Turnover Ratio	3B-2	4.8	5.6	5.6	6.2	6.5	6.6 *	
4	Average Terminal Elevator Capacity Turnover Ratio	3D-2	9.1	7.0	7.5	8.7	n/a	n/a	-
3	Average Railway Car Cycle (days)	3C-4	19.9	16.7	18.7	17.3	16.8	15.9	V
6	Average Vessel Time in Port (days)	3D-7	4.3	4.0	4.9	4.8	5.3	5.5	
* =	For comparative purposes, the value of 6.6 presented	l horo ropro			uivalant for t	ho 3 3 actur			untru (

Table 1: The GHTS Supply Chain

* For comparative purposes, the value of 6.6 presented here represents an annualized equivalent for the 3.3 actually recorded as the country elevator's capacity turnover ratio in the first six months of the 2007-08 crop year.

Much of this increase was driven by a 1.3-day rise in the amount of time spent by grain in storage at port. A 0.6-day rise in the amount of time spent in country elevator storage also contributed to the broader increase. Only a 0.4-day reduction in the loaded railway transit time served to counteract these forces.

The overall amount of time involved in moving grain through the supply chain fell by 0.9 days in the first six months of the 2007-08 crop year, to an average of 57.2 days. This result was shaped by modest reductions in each of the primary supply chain elements: country elevator storage time; loaded railway transit time; and terminal elevator storage time. And while this average is somewhat greater than the record low established two years earlier, it still ranks amongst the lowest values yet witnessed under the GMP.

In addition to the preceding, a few other comments concerning the performance of the GHTS in the first half of the 2007-08 crop year are warranted:

- Firstly, despite a 10.5% reduction in the grain supply, which totalled 55.2 million tonnes, a GMP record of 7.1 million tonnes ultimately passed through western Canadian ports during the first three months of the 2007-08 crop year. The same was true for the first half, where a record 12.8 million tonnes was also handled by the GHTS. As a result, the pressures brought to bear on the GHTS during this six-month period proved to be the most demanding yet felt under the GMP.
- Secondly, the heightened demand for Canadian export grain in the face of tight global supplies accentuated the pressures exerted on the GHTS during this period. Many of the problems encountered during this period focused on car supply and the need for more responsive railway service.
- Finally, there is evidence to suggest that, despite the problems encountered during this period, grain has been moving through the supply chain at a consistently faster pace than it was in the first few years of the GMP. To be sure, much of the overall improvement has come from a reduction in the amount of time spent by grain as inventory in the country elevator network, which has clearly been driven by the rationalization of these same facilities. Complementing this, however, has been the benefit of recent improvements in the railways' average loaded transit time. Although the impact of winter operations was again evident in the second quarter's higher average, it is still worth noting that the 7.3-day average posted in the first quarter proved to be the best yet recorded under the GMP.

4.0 Producer Impact

4.1 Producer Netback

One of the GMP's key objectives is to determine the impact on producers arising from changes in the GHTS. The principal measure in this regard is the *producer netback*, an estimation of the per-tonne financial return to producers after the various logistics costs, collectively known as the export basis, are deducted from the actual price realized in a grain sale.⁵²

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

The GMP only includes these indicators in the Monitor's annual reports since certain elements integral to the calculation are not available until after the close of the crop year itself. Nevertheless, current price and inputcost 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 2007-08 crop year are summarized below.

4.11 CWB Grains

The GMP uses the CWB's Pool Return Outlook (PRO) for 1 CWRS wheat (13.5% protein) as the principal barometer of changing CWB grain prices. Throughout the first quarter of the 2007-08 crop year, the CWB's PRO for 1 CWRS wheat moved steadily upwards from the 2006-07 crop year's final realized price of \$212.89 per tonne. By the end of October, the PRO had risen 38.6% to \$295.00 per Moreover, the PRO climbed a tonne. further 21.7% over the next three months, reaching an unprecedented \$359.00 per tonne by the end of January 2008. This value well exceeded the \$233.15 per





tonne that had been set as the farmer's initial payment for the 2007-08 crop year by 54.0%.

Much of the impetus for this rise in price stemmed from a significant tightening of the global wheat supply. In fact, worldwide stock levels were reputed to have fallen to their lowest point in almost three decades as a result of varying production problems. These included droughts in Australia and the Ukraine; hot, dry growing conditions in Canada; a cool, wet summer in Europe; and excessive rain at harvest for US crops. In the face of strong export demand, all of these forces served to lift the PRO to its highest level under the GMP. Accordingly, the financial returns accruing to producers are expected to improve significantly in the 2007-08 crop year.

⁵² Among other elements, the export basis includes the cost of trucking, elevator handling and railway movement. It also includes where applicable, the CWB's pooling costs, and other incidental charges. Similarly, it also includes a deduction for any of the financial benefits accruing to producers as a result of the receipt of trucking or any similar premiums, as well as the CWB's transportation savings.

4.12 Non-CWB Grains

Although not as impressive as the gain posted for wheat, the Vancouver cash price for 1 Canada canola rose by an equally significant 28.7% in the first half of the 2007-08 crop year, reaching an average of \$472.50 per tonne compared to the previous crop year's final \$367.25-per-tonne average. This gain was stimulated by the wider expectations of the global oilseed market, which reacted negatively to an anticipated 6% reduction in world soybean production. Much of the reduction could be traced to an expected 20% decline in US output, as farmers diverted more land towards the production of corn.

Moreover, the prospect of heightened oilseed production in other parts of the world did little to blunt these forces as the overall demand for vegetable oils was expected to rise by another 5% in the face of the growing need for feedstock in US and European biodiesel production. Even a near-record amount of Canadian canola proved inadequate in holding prices. The magnitude of the price increase noted for 1 Canada canola strongly suggests that there will be a positive impact on the pertonne financial returns of western Canadian grain producers in the 2007-08 crop year.





Even rising input costs seemed likely to be dwarfed by these gains. Among the most pronounced of these were the increases tied to various country and terminal elevator activities. In the case of the former, these increases ranged from a low of 0.3% for elevation to a high of 4.9% for storage.⁵³ Similarly, the escalation on the tariff rates tied to terminal elevation and storage activities amounted to about 2.9% and 3.6% respectively. In equal measure, the rates associated with moving wheat by rail rose by as much as 3.9% from those in place at the end of the previous crop year.⁵⁴

4.2 Producer-Car Loading

As related in the Monitor's 2006-07 annual report, the aggregate number of producer-car loading sites had fallen from 709 to 474 over the course of the last eight crop years. Much of this net decline was the product of a reduction in the number of sites maintained by CN and CP. Still, the operation of a portion of these was assumed by various shortline railways, which resulted in their count rising from 65 to a height of 166 by the end of the 2003-04 crop year. However, the subsequent demise of several small carriers resulted in some of these reverting back to Class-1-carrier control. By the end of the 2006-07 crop year only 106 producer-car loading sites remained under the umbrella of shortline operators. The first six months of the 2007-08 crop year produced only minor changes in these totals with the number operated by Class 1 carriers having declined from 368 to 359, while those tied to the shortline carriers increased by two to 108.

Producer-car shipments during the first half of the 2007-08 crop year increased by 3.7% from that handled a year earlier, rising to 5,188 from 5,002. In relation to the volume of grain shipped in covered hoppers, producer-car loadings accounted for just 3.7% of the overall total. This share increased to 5.9% when gauged against CWB grains alone, which constituted the majority of producer car movements. Both values were consistent with the 3.6% and 6.0% shares respectively secured twelve months before.

⁵³ Primary elevator tariffs posted significant reductions in the second quarter of the 2007-08 crop year. The increases noted here reflect the net impact of these reductions, and the overall escalation in these rates since the beginning of the crop year.

⁵⁴ Changes in the posted tariff rates for single car movements of wheat varied widely depending on the carrier and corridor involved. These ranged from a net reduction of about3.4% on CN movements to Prince Rupert to an increase of about 3.9% on CP movements to Vancouver.

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

Highlights – Second Quarter 2007-08 Crop Year

Grain Production and Supply

- Grain production decreased by 3.1% to 47.7 million tonnes.
 - General decline in overall grain quality due to poorer weather.
- Carry forward stocks decreased by 40.0% to 7.5 million tonnes.
 - Drawdown prompted by heightened global demand for grain.
- Overall grain supply decreased by 10.5% to 55.2 million tonnes.

Railway Traffic

- Railway tonnage during the first half increased 3.6% to 13.1 million tonnes.
 Reflected upturn in barley and special crop shipments.
 - Traffic to most western Canadian ports increased in the first half.
 - Vancouver up by 5.8% to 7.0 million tonnes.
 - Thunder Bay down by 9.5% to 3.0 million tonnes.
 - Prince Rupert up by 12.2% to 2.6 million tonnes.
 - Showed further increase in volume as a result of CN inducements.
 - Churchill up by 22.1% to 0.5 million tonnes.

Country Elevator Infrastructure

- Minimal changes recorded during the first half.
 - Grain delivery points increased by four to 276.
 - Number of country elevators increased by seven to 378.
- Elevator storage capacity increased by 2.5% to 6.0 million tonnes.
- Elevators capable of loading in blocks of 25 or more cars increased by three to 243.
 - Accounted for 64.3% of total elevators.
 - Accounted for 88.3% of total storage capacity.
- Elevators capable of loading in blocks of 50 or more cars remained unchanged at 176.
 - Accounted for 46.6% of total elevators.
 - Accounted for 78.0% of total storage capacity.

Railway Infrastructure

- Western Canadian rail network reduced by 0.9% to 18,325.6 route-miles.
 - Reflected abandonment of 169.7 route-miles of CN and CP track in Saskatchewan.
- Discontinuance plans for over 900 route-miles of CN and CP infrastructure remain.
- CN reacquires Athabasca Northern Railway in December 2007 for \$25 million.

Terminal Elevator Infrastructure

- Licensed GHTS terminal elevators remained unchanged at 16.
 - o Licensed storage capacity remained unchanged at 2.6 million tonnes.
- Terminal elevator unloads for the first six months increased by 4.6% to 144,501 carloads.

Indicator Series 1 – Industry Overview

	2007-08												
Table	Indicator Description	Notes		1999-00	2004-05	2005-06	2006-07	Q1	Q2	Q3	YTD (1)	% VAR	
													-
	Production and Supply [Subseries 1A]												
1A-1	Crop Production (000 tonnes)	(1)		55,141.7	53,401.3	56,002.7	49,264.6	47,739.5	-	-	47,739.5	-3.1%	
1A-2	Carry Forward Stock (000 tonnes)	(1)		7,418.2	6,647.5	10,768.0	12,424.7	7,450.6	-	-	7,450.6	-40.0%	
	Grain Supply (000 tonnes)	(1)		62,559.9	60,048.8	66,770.7	61,689.3	55,190.1	-	-	55,190.1	-10.5%	
1A-3	Crop Production (000 tonnes) – Special Crops	(1)		3,936.7	5,109.2	5,169.5	3,938.1	4,404.3	-	-	4,404.3	11.8%	
	Rail Traffic (Subseries 1B)												
1B-1	Railway Grain Volumes (000 tonnes) – Origin Province	(1)											
1B-2	Railway Grain Volumes (000 tonnes) – Primary Commodities	(1)	<u> </u>	26 440 8	20 832 5	25 304 7	24 311 7	7 284 2	5 860 5	-	13 144 6	3.6%	
1B-3	Railway Grain Volumes (000 tonnes) – Detailed Breakdown	(1)		20,11010	20,002.0	20,00	21,0111		0,00010		10,1110	0.070	
1B-4	Railway Grain Volumes (000 tonnes) – Special Crops	(1)		2.103.4	2.210.6	2.608.2	2.344.3	1.039.1	666.1	-	1.705.2	20.2%	
•					_,	_,	_,• •	.,					
	Country Elevator Infrastructure [Subseries 1C]												<u> </u>
1C-1	Grain Delivery Points (number)	(2)		626	282	275	272	274	276	-		1.5%	
1C-1	Grain Elevator Storage Capacity (000 tonnes)	(2)		7,443.9	5,845.6	5,870.8	5,808.2	5,884.5	5,952.5	-		2.5%	
1C-1	Grain Elevators (number) – Province	(2)	<u> </u>										<u> </u>
1C-2	Grain Elevators (number) – Railway Class	(2)	_≻_	917	385	374	371	375	378	-		1.9%	
1C-3	Grain Elevators (number) – Grain Company	(2)											
1C-4	Grain Elevators Capable of Multiple Car Loading (number) – Province	(2)	<u> </u>										<u> </u>
1C-5	Grain Elevators Capable of Multiple Car Loading (number) – Railway Class	(2)	_≻_	317	256	250	240	242	243	-		1.3%	
1C-6	Grain Elevators Capable of Multiple Car Loading (number) – Railway Line Class	(2)											
1C-7	Grain Elevator Openings (number) – Province	(2)	<u> </u>										
1C-8	Grain Elevator Openings (number) – Railway Class	(2)	<u> </u>	43	18	10	48		10	-		-79.2%	
1C-9	Grain Elevator Openings (number) – Railway Line Class	(2)											
1C-10	Grain Elevator Closures (number) – Province	(2)						-	-				
1C-11	Grain Elevator Closures (number) – Railway Class	(2)	≻_	130	37	21	51	3	3	-		-94.1%	
1C-12	Grain Elevator Closures (number) – Railway Line Class	(2)											4
1C-13	Grain Delivery Points (number) – Accounting for 80% of Deliveries	(2)(3)		217	94	90	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	4 390 3	4 221 6	4 137 7	4 113 2	4 006 4	-		-3.2%	
1D-1	Railway Infrastructure (route-miles) – Non-Grain-Dependent Network	(2)		14 513 5	14 373 4	14 373 4	14 357 6	14 357 6	14 319 2	-		-0.3%	1 <u> </u>
1D-1	Railway Infrastructure (route-miles) – Total Network	(2)		19.390.1	18,763,7	18.595.0	18,495,3	18,470.8	18.325.6	-		-0.9%	1 -
1D-2	Railway Grain Volumes (000 tonnes) – Grain-Dependent Network	(1)		8.686.5	5.936.7	7.601.2	6.988.8	2.080.4	1.682.6	-	3,763,1	0.4%	-
1D-2	Railway Grain Volumes (000 tonnes) – Non-Grain-Dependent Network	(1)		16.975.8	14.323.2	17,119.6	16,748,1	5.028.9	3,994,1	-	9.023.0	4.3%	
1D-2	Railway Grain Volumes (000 tonnes) – Total Network	(1)		25.662.3	20.259.9	24.720.8	23.736.9	7,109,4	5.676.7	-	12.786.1	3.1%	
1D-3	Shortline Railway Infrastructure (route-miles)	(2)		3,043.0	3,088.2	2,445.6	2,023.2	2,023.2	1,819.7	-		-10.1%	
1D-3	Shortline Railway Grain Volumes (000 tonnes)	(1)		2,090.5	1,676.3	1,709.2	1,059.1	209.7	173.8	-	383.5	-43.5%	
1D-5	Railway Grain Volumes (000 tonnes) – Class 1 Carriers	(1)		23,571.8	18,583.6	23,011.6	22,677.8	6,899.6	5,503.0	-	12,402.6	5.8%	
1D-5	Railway Grain Volumes (000 tonnes) - Class 2 and 3 Carriers	(1)		2,090.5	1,676.3	1,709.2	1,059.1	209.7	173.8	-	383.5	-43.5%	
1D-6	Grain Elevators (number) – Grain-Dependent Network	(2)		371	132	127	117	119	122	-		4.3%	
1D-6	Grain Elevators (number) – Non-Grain-Dependent Network	(2)		513	239	233	238	240	240	-		0.8%	-
1D-6	Grain Elevator Storage Capacity (000 tonnes) – Grain-Dependent Network	(2)		2,475.4	1,659.2	1,628.8	1,575.6	1,606.4	1,614.2	-		2.4%	
1D-6	Grain Elevator Storage Capacity (000 tonnes) – Non-Grain-Dependent Network	(2)		4,847.6	4,133.4	4,188.9	4,169.0	4,214.5	4,274.7	-		2.5%	
	Terminal Elevator Infrastructure	(0)										0.051	4
1E-1	I erminal Elevators (number)	(2)		15	16	16	16	16	16	-		0.0%	
1E-1	reminal Elevator Storage Capacity (UUU tonnes)	(2)		2,678.6	2,642.6	2,642.6	2,642.6	2,642.6	2,642.6	-	444.504	0.0%	
[1E-2	i erminal Elevator Unloads (number) – Covered Hopper Cars	(1)		278,255	217,666	2/1,/14	261,204	81,083	63,418	-	144,501	4.6%	

(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 as compared to

that at the end of the preceding crop year. (3) – Statistics relating to grain deliveries by station, as produced by the Canadian Grain Commission, are generally produced a full six months after the close of the crop year. The most recent statistics available are those from the 2005-06 crop year.

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 2006-07 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 2007-08 Crop Year

Tendering Program

- 111 tender calls were issued by the CWB during the first six months of the 2007-08 crop year.
 - Calls for the movement of 1.1 million tonnes to export positions in western Canada.
 - Prince Rupert delivery 38.3%; Vancouver 31.6%; Thunder Bay 30.1%; and Churchill 0.0%.
- 422 bids received; offered an aggregated 2.9 million tonnes.
 - Response rates significantly greater than in any of the three preceding crop years.
 - Reflected heightened demand and availability of export grains.
 - 162 contracts concluded for the movement of 1.1 million tonnes.
 - Vancouver deliveries 36.6%; Prince Rupert 35.1%; Thunder Bay 28.3%; and Churchill 0.0%.
 - o Represented 15.1% of volume shipped by CWB to port positions in western Canada.
 - Fell below maximum 20% target.
 - Tenders for 14.4% of the tonnage called either partially, or not at all, filled.
 - Sharp reduction from the 33.9% recorded for the 2006-07 crop year.
 - 78,500 tonnes non-compliance with bid specifications.
 - 50,500 tonnes unacceptable bid price.
 - 18,100 tonnes insufficient quantity bid.
 - 9,900 tonnes no bid.
- Proportion of tendered grain volume moving in multiple car blocks decreased to 89.2%.
- Proportion moving in blocks of 50 or more cars decreased to 68.3% from 77.7% in the 2006-07 crop year.
- 88.6% of all tendered movements originated at high-throughput elevators.
 - Marginally greater than 86.2% observed in the 2006-07 crop year.
 - CWB estimated that the overall transportation savings for the first half increased by 1.2% to \$16.8 million.

Other Commercial Developments

- CWB and five other grain shippers filed level-of-service complaints against CN.
 - o Built on complaints similar to those advanced by Great Northern Grain Terminals Ltd. six months earlier.
 - Alleges that discriminatory car allocation practices are inherent in advance products.
 - CTA interim decision finds service breach but recognizes CN's efforts to correct problems.
 - Defers final decision until additional service-related data can be collected and analyzed.
- Federal government signed new operating agreements with CN and CP for the use of government-owned hopper car fleet.
 Provides for rehabilitation and longer-term replacement of aging railcars.
- Port of Churchill experienced a sharp increase in traffic volume.
 - GMP record first half throughput of 0.6 million tonnes.
 - Included first outbound marine shipment of grain to a Canadian destination.
 - o Received commitment for \$48 million in federal and provincial government assistance.
- Federal government moved to amend the Canada Grain Act.
 - Seeks to clarify the mandate of the Canadian Grain Commission.
 - Proposes to make inward terminal inspections optional.
 - o Intends to eliminate producer payment security system.

Indicator Series 2 – Commercial Relations

							2007-08					
Table	Indicator Description	Notes	1999-00	2004-05	2005-06	2006-07	Q1	Q2	Q3	YTD (1)	% VAR	
												1
04.4	Tendering Program [Subseries 2A]	(4)		0.040.5	E 225 7	0.705.4		EAE A		1002.2	20.20/	
2A-1	Tenders Called (000 tennes) – Grain		n/a	0,218.5	5,325.7	3,705.1	540.8	545.4	-	1092.3	-39.3%	• ••
2A-2	Tenders Called (000 tonnes) – Grade			E 700.0	7 4 2 4 0	0.750.0	4 574 7	1000.0		2 002 0	C1 40/	
2A-3	Tender Bids (000 tennes) – Grain		n/a	5,722.9	7,131.0	0,753.0	1,371.7	1332.2	-	2,903.9	01.4%	
2A-4	Tehder Bids (000 tonnes) – Grade	(1)		40.004.0	45 400 0	110000	4 205 0	2 200 5		7 504 2	2.00/	A 1
2A-5	Total CWB Movements (000 tonnes)	(1)(2)	n/a	13,281.2	10,132.0	14,932.2	4,205.8	3,366.5	-	7,394.3	3.0%	
2A-5	Tendered Movements (%) – Proportion of Total CVVB Movements	(1)(2)	n/a	18.0%	10.2%	17.8%	14.4%	15.9	-	13.1%	-12.2%	
2A-5	Tendered Movements (000 tonnes) – Grain	(1)(2)	n/a	2,387.7	2,447.5	2,001.0	604.5	540.1	-	1,144.5	-9.8%	
2A-0	Lefiled Tender Valumes (000 tennes)			2.054.2	2.012.0	1.070.0	70.0	02.4		457.0	77 40/	-
2A-7	Tendered Meyements (000 tennes)	(1)	n/a	3,051.2	2,913.9	1,270.0	/ 3.0	63.4	-	157.0	-77.4%	
2A-8	Tendered Movements (000 tonnes) – Not Awarded to Lowest Bidder	(1)	n/a	65.9	130.5	40.3	9.9	0.0	-	9.9	-07.1%	
2A-9	Tendered Movements (000 tonnes) – FOB	(1)(2)	n/a	43.2	155.0	152.8	65.1 65.1	0.0	-	65.1	-57.4%	- <u></u> -
2A-9	Distribution of Tandered Maxamente Det	(1)	n/a	2,344.5	2,291.9	2,001.0	539.4	540.1		1,079.5	-3.3%	
2A-10	Distribution of Tendered Movements – Port	(3)										i i
2A-11	Distribution of Tendered Movements – Kallway	(3)										i i
2A-12	Distribution of Tendered Movements – Multiple-Car Blocks	(3)							· · · ·			i i
2A-13	Distribution of Tendered Movements – Penalties	(3)										I .
ZA-14	Distribution of Tendered Movements – Province / Elevator Class	(3)										i i
2A-15	Distribution of Tendered Movements – Month	(3)										l I
2A-16	Distribution of Tender Delivery Points (number) – Contracted Cars	(3)			544	047		55.4		55.0	0.00/	
2A-17	Average Tendered Multiple-Car Block Size (railcars) – Port		n/a	55.5	54.4	64.7	55.5	55.1	-	55.3	-9.6%	
2A-18	Raliway Car Cycle (days) – Tendered Grain		n/a	16.9	15.7	14.7	13.0	14.2	-	13.8	-0.7%	
2A-18	Railway Car Cycle (days) – Non-Tendered Grain		n/a	17.5	16.8	16.4	14.3	15.5	-	14.9	-8.6%	
ZA-19	Maximum Accepted Tender Bid (\$ per tonne) – wheat		n/a	-\$21.86	-\$18.58	-\$24.51	-\$21.28	-\$16.85	-	-\$21.28	-13.2%	
2A-19	Maximum Accepted Tender Bid (\$ per tonne) – Durum		n/a	-\$19.03	-\$18.05	-\$21.56	-\$10.52	-\$7.52	-	-\$10.52	-51.2%	
2A-20	Market Share (%) – CWB Grains – Major Grain Companies		n/a	11.2%	76.1%	75.6%	74.9%	73.1%	-	74.1%	-3.4%	
2A-20	Market Share (%) – CWB Grains – Non-Major Grain Companies		n/a	22.8%	23.9%	24.4%	25.1%	26.9%	-	25.9%	11.2%	µ▲i
												i i
	Advance Car Awards Brogram [Subseries 2P]											i i
2P 1	Advance Award Movements (%) Properties 2D			15 00/	15 69/	15 00/	7 40/	16.6		11 50/	21.20/	
20-1	Advance Award Movements (%) - Proportion of Total CVVB Movements		11/d	2 400 7	10.0%	10.0%	7.4%	10.0 EC1 E	-	074.0	-21.2%	
2D-1	Distribution of Advonce Award Mexempte Dart	(4)	n/a	2,100.7	2,305.1	2,302.9	310.3	001.0	-	0/1.0	-18.8%	
20-2	Distribution of Advance Award Movements – Polit	(4)										i i
20-3	Distribution of Advance Award Movements – Railway	(4)										1
20-4	Distribution of Advance Award Movements – Province / Elevator Class	(4)										1
20-0	Distribution of Auvance Award Movements - Month Reilwoy Cor Cycle (doys) Advonce Award Crein	(4)		17.2	15.6	15 1	12.0	14.6		14.0	E 40/	
20-0	Raliway Gai Cycle (uays) – Auvarice AWalu Grain	(4)	n/a	17.3	15.0	10.1	12.9	14.0	-	14.0	-5.4%	
2D-1	Distribution of Auvance Award Movements – Multiple-Car Blocks	(4)		47.0	40.0	52.0	E0.0	52.0		E4 5	4.00/	
2B-9	(reileare) – Pert		n/a	47.3	46.0	53.9	50.8	52.0	-	51.5	1.2%	I 🔺 I
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(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.

Highlights - Second Quarter 2007-08 Crop Year

<u>Trucking</u>

- Composite Freight Rate Index for short-haul trucking increased 1.9% to 125.5 by the end of the first quarter.
- Data for second quarter unavailable; measurement under review.

Country Elevators

- Throughput increased by 0.9% to 17.5 million tonnes.
 Largest volume recorded for the first half under the GMP.
 - The average elevator capacity turnover ratio decreased 2.9% to 3.3 turns.
- Reflected effects of increased storage capacity.
- Average inventory level decreased by 3.4% to 2.9 million tonnes.
- Average number of days-in-store decreased by 5.6% to 30.5 days.
- Average weekly stock-to-shipment ratio decreased by 6.5% to 4.3 for the first half.
- Average posted tariff rates for elevation, cleaning and storage increased by up to 4.9% in the first half.

Rail Operations

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- Average car cycle decreased by 5.9% to 15.5 days for the first half of the crop year.
 - Improvement in underlying empty and loaded transit time averages.
 - Average empty transit time decreased 7.6% to 7.8 days.
 - Average loaded transit time decreased 4.1% to 7.8 days.
- Proportion of grain moving under incentive programs increases to 76.2% from 75.2% in the 2006-07 crop year.
- Railway incentive payments estimated to have increased by 9.6% to \$53.4 million in the first half.
 - Reflected increase in tonnage and applicable discounts.
- Single car freight rates increased for most destinations.
 - Full conversion to per-car charges for both CN and CP.
 - CP posted the lowest overall increases for wheat at the beginning of the crop year.
 - Thunder Bay up by 0.3%; Vancouver up by 0.8%.
 - Across-the-board secondary rate increase of 3.0% applied in second quarter.
 - CN increased rates on wheat by about 1.0% in most corridors at the beginning of the crop year.
 - Widened preferential pricing on shipments to Prince Rupert with rate reductions of about 5.5%.
 - Secondary rate increase of 2.2% assessed early in the second quarter.

Terminal Elevators and Port Performance

- Terminal throughput increased by 6.9% to 12.8 million tonnes during the first half.
 Largest volume recorded for the period under the GMP.
- 444 vessels loaded at western Canadian ports during the first six months of the crop year. • Average time in port increased by 10.0% to 5.5 days.
- Average posted tariff rates for elevator handling and storage increased by up to 3.6% in the first half.

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.

Indicator Series 3 – System Efficiency

		2007-08										
Table	Indicator Description	Notes	1999-00	2004-05	2005-06	2006-07	Q1	Q2	Q3	YTD (1)	% VAR	
												-
	Trucking [Subseries 3A]	(0)			400.0	400.0					4.004	
3A-1	Composite Freight Rate Index – Short-haul Trucking	(2)	100.0	111.3	120.9	123.2	125.5	n/a	-		1.9%	
	Brimany Country Elevatora (Subcorica 28)											
2B_1	Crain Volume Throughput (000 toppes)	(1)	32 402 0	29 502 5	32 105 2	22 452 6	0.410.8	8 060 1		17 470 0	0.0%	
3B-2	Average Elevator Capacity Turnover Ratio	(1)	32,493.9	20,093.0	52,105.2	6.5	9,410.0	0,000.1	-	17,470.9	-2.9%	
3B-3	Average Weekly Elevator Stock Level (000 tonnes)	(1)	3 600 3	2 31/ 3	2 651 2	2 81/ 7	2 860 5	2 8/3 8	_	2 852 4	-2.570	Ť
3B-4	Average Dave, in-Store (dave)	(1)	3,033.3 /1 7	2,014.0	2,031.2	30.7	2,000.0	2,040.0	_	30.5	-5.6%	Ť.
3B-5	Average Weekly Stock-to-Shipment Ratio – Grain	(1)	62	4.1	4.3	4.5	4 1	4.6	-	4 3	-6.5%	Ť.
3B-6	Average Handling Charges – Country Delivery Points	(3)	0.2		4.0	-1.0		4.0			0.070	
		(0)										i
	Rail Operations [Subseries 3C]											
3C-1	Hopper Car Grain Volumes (000 tonnes) – Province	ר (1)										
3C-2	Hopper Car Grain Volumes (000 tonnes) – Primary Commodities	(1) >	25,662.3	20,259.9	24,720.8	23,736.9	7,109.3	5,676.7	-	12,786.1	3.1%	
3C-3	Hopper Car Grain Volumes (000 tonnes) – Detailed Breakdown	(1)										1
3C-4	Railway Car Cycle (days) – Empty Transit Time	(1)	10.7	10.1	8.8	8.7	7.7	7.8	-	7.8	-7.6%	
3C-4	Railway Car Cycle (days) – Loaded Transit Time	(1)	9.2	8.7	8.6	8.2	7.3	8.4	-	7.8	-4.1%	
3C-4	Railway Car Cycle (days) – Total Transit Time	(1)	19.9	18.7	17.3	16.8	15.0	16.2	-	15.5	-5.9%	
3C-5	Railway Car Cycle (days) – Non-Special Crops	(1)	19.3	18.6	17.2	16.6	14.7	16.0	-	15.3	-6.5%	
3C-6	Railway Car Cycle (days) – Special Crops	(1)	25.8	20.6	19.5	20.0	17.0	19.2	-	17.8	-0.8%	-
3C-7	Railway Car Connections (days)	(1)(3)										
3C-8	Hopper Car Grain Volumes (000 tonnes) – Non-Incentive	(1)	12,716.9	5,294.3	6,037.9	5,888.5	1,878.9	1,159.3	-	3,038.2	-7.4%	
3C-8	Hopper Car Grain Volumes (000 tonnes) – Incentive	(1)	12,945.5	14,965.6	18,682.9	17,848.4	5,230.4	4,517.5	-	9,747.9	6.9%	
3C-9	Hopper Car Grain Volumes (\$ millions) – Incentive Discount Value	(1)	\$31.1	\$67.7	\$89.9	\$96.5	\$28.2	\$25.2	-	\$53.4	9.6%	
3C-10	Traffic Density (tonnes per route mile) – Grain-Dependent Network	(1)	442.5	337.1	439.0	418.0	505.8	420.0	-	463.5	4.4%	
3C-10	Traffic Density (tonnes per route mile) – Non-Grain-Dependent Network	(1)	292.4	249.1	297.8	291.5	350.3	278.9	-	314.6	4.5%	
3C-10	Traffic Density (tonnes per route mile) – Total Network	(1)	330.3	269.8	330.5	320.1	384.9	309.8	-	347.5	4.2%	
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	\$25.85	\$27.97	\$29.90	n/a	n/a	n/a		n/a	_
	Terminal Elevator and Part Parformance (Subscripe 20)											
20.4	Annual Dart Throughout (000 tenners) Crain	(4)		10.042.5	00 700 7	22.022.0	7.444.0	E 000 E		40 777 7	0.00%	
1 30-1	Annual Port Infougnput (000 tonnes) – Grain	(1)	23,555.5	18,943.5	23,122.1	22,823.9	7,141.2	5,636.5	-	12,777.7	6.9%	
3D-2	Average Terminal Elevator Capacity Turnover Ratio	(1)(5)	9.1	7.5	8.7	8.3	n/a	n/a	n/a	1 000 0	n/a	-
30-3	Average Weekly Terminal Elevator Stock Level (000 tonnes)	(1)	1,210.2	1,127.5	1,201.7	1,385.3	1,410.3	1,375.1	-	1,393.3	-1.0%	- -
3D-4	Average Weekly Steek to Shipmont Bation Crain	(1)	10.0	19.9	17.9	19.2	19.0	10.0	-	10.9	-0.0%	
3D-5	Average Weekly Stock-to-Shipment Ratio – Grain	(1)(3)										
30-0	Average Weekly Slock-to-Shipment Ratio – Grade	(1)(3)	10	4.0	4.0	E 0		0.5			10.00/	
30-7	Distribution of Vascal Time in Port	(1)(3)	4.3	4.9	4.0	0.0	4.0	0.0	-	5.5	10.0%	
30-0	Distribution of Boths por Vossol	(1)(3)										
30-3	Appual Domurrage Costs (Smillions)	(1)(3)	¢7 c	\$16.0	\$6.7	\$6.7	n/o	n/2	n/c		n/c	- I
30-10	Annual Dispatch Farnings (\$millions)	(5)	ው	\$10.U	φυ./ \$15.2	φυ./ ¢15.2	n/a	n/a	n/a		n/a	-
3D-10	Annual Dispatch Editilitys (oninituits)	(0) (0)	φ14.D	G. 11¢	φ10.2	\$10.Z	ıı/a	n/a	n/a		n/a	-
	Average Handling Charges – Lerminal Elevators	(2)(3)										

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

(2) - Quarterly values for non-volume-related indicators (i.e., Composite Freight Rate Index) are "as at" the end of the reporting period. The accompanying percentage variance denotes the relative change in the value of the most recent reporting period compared to that at the end of the preceding crop year. (3) – Changes in the indicator cited cannot be depicted within the summary framework presented here. The reader is encouraged to consult the corresponding data table directly.

(4) - Statistics relating to effective railway freight rates, as determined by the Canadian Transportation Agency, are generally produced about six months after the close of the crop year. The most recent statistics available are those from the 2005-06 crop year.

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

Highlights – Second Quarter 2007-08 Crop Year

Port Performance

- Average weekly stock-to-vessel-requirements ratios posted mixed results for the first half of the 2007-08 crop year.
 O Vancouver
 - Wheat 3.1 for the first six months of the 2007-08 crop year, down by 8.0%.
 - Canola 3.7, up by 64.0%.
 - o Thunder Bay
 - Wheat 5.5 for the first six months of the 2007-08 crop year, down by 21.8%.
 - Canola 9.5, up by 51.6%.
 - o Indicates that grain inventories were generally sufficient to meet short-term demand.
 - Most shortages related to movements from Vancouver.
 - Average stock-to-shipment ratios provide similar evidence of the ability of these ports to meet short-term demand.
 - o Vancouver
 - CWB grains 2.7 for the first six months of the 2007-08 crop year, down by 4.4%.
 - Non-CWB grains 3.2, down by 24.9%.
 - o Thunder Bay
 - CWB grains 4.9 for the first six months of the 2007-08 crop year; down by 23.5%.
 - Non-CWB grains 5.8; up by 25.3%.

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

Indicator Series 4 – Service Reliability

							2007-08					
Table	Indicator Description	Notes	1999-00	2004-05	2005-06	2006-07	Q1	Q2	Q3	YTD (1)	% VAR	
	Port Performance [Subseries 4A]											
4A-1	Avg. Weekly Stock-to-Vessel Requirements Ratio – VCR – Wheat	(1)	3.1	2.7	3.4	3.3	3.3	2.9	-	3.1	-8.0%	
4A-1	Avg. Weekly Stock-to-Vessel Requirements Ratio – VCR – Canola	(1)	2.5	2.8	2.3	2.8	3.2	4.2	-	3.7	64.0%	
4A-1	Avg. Weekly Stock-to-Vessel Requirements Ratio – TBY – Wheat	(1)	5.6	6.0	6.6	7.0	6.7	3.2	-	5.5	-21.8%	
4A-1	Avg. Weekly Stock-to-Vessel Requirements Ratio – TBY – Canola	(1)	2.8	2.2	4.4	5.3	7.6	11.5	-	9.5	51.6%	
4A-2	Avg. Weekly Stock-to-Vessel Requirements Ratio – Grade	(1)(2)										-
4A-3	Avg. Weekly Stock-to-Shipment Ratio – VCR – CWB Grains	(1)	3.5	3.2	3.2	2.9	2.8	2.5	-	2.7	-4.4%	V
4A-3	Avg. Weekly Stock-to-Shipment Ratio – VCR – Non-CWB Grains	(1)	3.6	3.6	3.2	3.6	2.8	3.5	-	3.2	-24.9%	
4A-3	Avg. Weekly Stock-to-Shipment Ratio – TBY – CWB Grains	(1)	4.6	7.2	6.8	6.2	5.3	4.1	-	4.9	-23.5%	
4A-3	Avg. Weekly Stock-to-Shipment Ratio – TBY – Non-CWB Grains	(1)	3.3	3.6	3.6	4.4	5.2	6.6	-	5.8	25.3%	
4A-4	Terminal Handling Revenue (\$millions) – Vancouver	(1)(3)	\$192.7	\$150.9	\$150.9	\$150.9	n/a	n/a	n/a		n/a	-
4A-4	Terminal Handling Revenue (\$millions) – Thunder Bay	(1)(3)	\$82.1	\$68.4	\$68.4	\$68.4	n/a	n/a	n/a		n/a	- 1
4A-4	CWB Carrying Costs (\$millions) – Pacific Seaboard	(1)(3)	\$63.3	\$73.8	\$73.8	\$73.8	n/a	n/a	n/a		n/a	-
4A-4	CWB Carrying Costs (\$millions) – Thunder Bay	(1)(3)	\$31.3	\$36.1	\$36.1	\$36.1	n/a	n/a	n/a		n/a	-

(1) - Year-To-Date values are reported for volume-related indicators only (i.e., Average Weely 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.

Highlights – Second Quarter 2007-08 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 \$233.15 per tonne.
 - Represented a 9.5% increase from the final realized price for the 2006-07 crop year of \$212.89 per tonne.
 - PRO increased to \$359.00 per tonne by the end of the second quarter.
 - Represented a 54.0% premium to the farmer's initial payment.
 - Price escalation largely due to significant tightening of global wheat supplies.
 - Recent changes in input costs:
 - Country elevator handling up by a minimum of 0.3% for elevation.
 - Storage charges increased by an average 4.9%.
 - Rail transportation up by as much as 3.9% from CP origins.
 - Terminal elevator handling up by as much as 3.6% for storage.
- Changes in the PRO for 1 CWRS wheat, and input costs to the export basis, suggests significant improvement in the producer's per-tonne netback for CWB grains in the 2007-08 crop year.

Export Basis and Producer Netback – Non-CWB Commodities

- Changes in Vancouver cash price for 1 Canada canola:
 - Price rose to an average of \$472.50 per tonne for the first half of the 2007-08 crop year.
 - Represented a 28.7% increase from the 2006-07 crop year's monthly average of \$367.25 per tonne.
 - Price increase largely fuelled by larger global oilseed demand.
- Recent changes in input costs:

0

- Country elevator handling up by a minimum of 0.3% for elevation.
 - Storage charges increased by an average 4.9%.
- Rail transportation up by as much as 3.9% from CP origins.
- Terminal elevator handling up by as much as 3.6% for storage.
- Changes in the price of 1 Canada canola, and input costs to the export basis, suggests significant improvement in the producer's per-tonne netback for non-CWB commodities in the 2007-08 crop year.

Producer-Car Loading

- Number of producer-car-loading sites decreased by 1.5% to 467.
- Producer-car shipments increased by 3.7% to 5,188 railcars in the first half.
 - Represented 3.7% of total covered hopper car movements, and 5.9% of CWB grain movements.

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.

Indicator Series 5 – Producer Impact

								2007-08					
Table	Indicator Description	Notes	1999-00	2004-05	2005-06	2006-07	Q1	Q2	Q3	YTD (1)	% VAR		
	Export Basis												
	Western Canada												
5A-10	CWRS Wheat (\$ per tonne)	(1)(3)	\$54.58	\$57.77	\$61.81	\$63.20							
5A-10	CWA Durum (\$ per tonne)	(1)(3)	\$67.63	\$70.73	\$72.61	\$76.18							
5A-10	1 Canada Canola (\$ per tonne)	(1)(3)	\$52.51	\$40.97	\$41.76	\$45.80							
5A-10	Canadian Large Yellow Peas – No. 2 or Better (\$ per tonne)	(1)(3)	\$54.76	\$67.98	\$52.94	\$62.17							
	Producer-Car Loading												
5B-1	Producer-Car-Loading Sites (number) – Class 1 Carriers	(2)	415	329	354	368	359	359	-		-2.4%		
5B-1	Producer-Car-Loading Sites (number) – Class 2 and 3 Carriers	(2)	122	155	129	106	108	108	-		1.9%		
5B-1	Producer-Car-Loading Sites (number) – All Carriers	(2)	537	484	483	474	467	467	-		-1.5%		
5B-2	Producer-Car Shipments (number) – Covered Hopper Cars	(1)	3,441	8,061	11,345	12,529	2,396	2,792	-	5,188	3.7%		
			-									••••••	

(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.

Second Quarter Report of the Monitor – Canadian Grain Handling and Transportation System 2007-2008 Crop Year



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Summary Report of the Monitor – Canadian Grain Handling and Transportation System First Quarter, 2002-2003 Crop Year

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:

- <u>Series 1 Industry Overview</u> Measurements relating to annual grain production, traffic flows and changes in the GHTS infrastructure (country and terminal elevators as well as railway lines).
- <u>Series 2 Commercial Relations</u> 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
- <u>Series 3 System Efficiency</u> Measurements aimed at gauging the operational efficiency with which grain moves through the logistics chain.
- <u>Series 4 Service Reliability</u> 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."

Summary Report of the Monitor – Canadian Grain Handling and Transportation System First Quarter, 2002-2003 Crop Year

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.⁵⁵ 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.).

⁵⁵ 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.

net back calculator		Quorum		A	
Q M	y Profile O New Calculation	O My History O	Logout	Q Нер	
	Export	Basis and Producer Netback Es	timate		
	Input	Results		Binned Tonne Bushe	Paid I Tonne Bushe
Origin Point:	SW 18X 12 X 20X W1	CWB Pool Return Outlook		\$192.00 \$5.23	\$196.00 \$5.33
Grain Company: Commodity:	Pioneer Grain Company, Limited 4 Wheat	(Adj.) Freight To Vancouver (Adj.) Freight To Thunder Bay Freight Adjustment Factor	\$43.87 \$22.94 \$9.83		
Binned Grade: Paid At Grade:	#2 CWRS 13.5 #1 CWRS 13.5	Applicable Freight	\$32.77		
Estimated Dockage (%): Trucking Mode: Truck Type:	1.0 Commercial Tridom (tri-axle)	Trucking Primary Elevation	\$5.05 \$12.12		
Number of Trips: Gross Tonnes To Deliver:	2 60	Sub-Total Other Costs	\$4.04		
(Miles): Trucking Premiums:	23 \$3.50	Trucking Premiums Other Premiums	\$(3.50) \$(0.00)		
Outer Premiums:	\$0.00	Sub-Total Producer Premiums	\$(3.50		
		Total Export Basis		\$50.48	\$50.48
		Producer Netback	5 I I	\$141.52 \$3.85	\$145.52 \$3.96
	Print	Create Another Estimate	Create Act	ual Delivery	E

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

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

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