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

### **Second Quarter** 2003-2004 Crop Year



### Summary Report





### **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 2004. 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 2003-04 crop year.

This report constitutes the tenth in a series of quarterly and annual submissions prescribed under the GMP. Although the indicators that follow largely compare the GHTS's current-year performance with that of the preceding 2002-03 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 Monitor's report is comprised of two parts: a Summary Report which provides a general overview of the most noteworthy findings, trends or industry activity; and the Data Tables, published in a separate report and which contains the detailed indicator statistics that are the cornerstone of the GMP. Both parts can be downloaded separately from the Monitor's website (www.quorumcorp.net).

### **QUORUM CORPORATION**

Edmonton, Alberta May 2004

### **Table of Contents**

Findings	1
1.0     Industry Overview       1.1     Grain Supply and Railway Traffic       1.2     Country Elevator Infrastructure       1.3     Railway Infrastructure       1.4     Terminal Elevator Infrastructure	
2.0     Commercial Relations       2.1     Tendering       2.2     Other Commercial Developments	_
3.0 System Efficiency and Service Reliability  3.1 Trucking  3.2 Country Elevators  3.3 Railway Operations  3.4 Terminal Elevator and Port Performance  3.5 The Supply Chain  4.0 Producer Impact  4.1 Revisions to the Calculation of Producer Netback – CWB Grains  4.2 Producer Netback for CWB Grains – 1999-2000 Through 2002-03 Crop Years (Restated)  4.3 Producer Netback – Expectations for the 2003-04 Crop Year	13 13 15 16 19 19
	29 30
1.3 Railway Infrastructure  1.4 Terminal Elevator Infrastructure  2.0 Commercial Relations  2.1 Tendering  2.2 Other Commercial Developments  3.0 System Efficiency and Service Reliability  3.1 Trucking  3.2 Country Elevators  3.3 Railway Operations  3.4 Terminal Elevator and Port Performance  3.5 The Supply Chain  4.0 Producer Impact  4.1 Revisions to the Calculation of Producer Netback – CWB Grains  4.2 Producer Netback for CWB Grains – 1999-2000 Through 2002-03 Crop Years (Restated)	32 34
	36
	38
Appendix 1: Program Background	41
Appendix 2: Acknowledgements	43

### **Findings**

Following two difficult growing seasons characterized by widespread drought, the 2003-04 crop year brought the first upturn in commercial activity for many of the stakeholders in Canada's Grain Handling and Transportation System (GHTS). This was evident in virtually every sector of the system, and is broadly reflected in improved quarterly and year-to-date values for the various measures used under the Grain Monitoring Program (GMP).

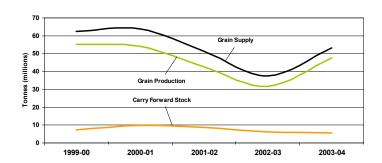
### 1.0 Industry Overview

### 1.1 Grain Supply and Railway Traffic

Overall grain production for the 2003-04 crop year climbed to 47.7 million tonnes – a gain of 51.1% over that of the 2002-03 crop year. Representing about 90% of the 54.6-million-tonne average for the 1999-2000 and 2000-01 crop years, this rebound marked the first time in three years that Western Canadian grain production approached a near-normal level.

In conjunction with 5.5 million tonnes in carry-forward stocks, the overall volume of grain available for movement during the 2003-04 crop year totalled 53.1 million tonnes – 15.5 million tonnes (or 41.3%) more than in the 2002-03 crop year. The magnitude of this improvement in the grain supply was widely mirrored in GMP statistics that showed significantly elevated levels of country elevator throughput, railway traffic volume, and terminal elevator handlings during the first half of the 2003-04 crop year.

Figure 1: Western Canadian Grain Supply



Total railway grain volumes for the first six months increased by 61.3% to 10.2 million

tonnes. Shortline railways, whose operations had been particularly hard hit in the last two years, saw their volumes virtually double during the period to 0.9 million tonnes. Almost 5.6 million tonnes (54.8%) of the total was directed to Vancouver; 3.3 million tonnes (32.3%) to Thunder Bay; 0.9 million tonnes (9.1%) to Prince Rupert; and 0.4 million tonnes (3.8%) to Churchill.

It should also be noted that significant year-over-year fluctuations in the volumes directed to both Vancouver (which increased by 245.3%) and Prince Rupert (which declined by 49.8%) arise from comparisons with a period affected by the labour dispute at the port of Vancouver.<sup>1</sup>

### 1.2 Country Elevator Infrastructure

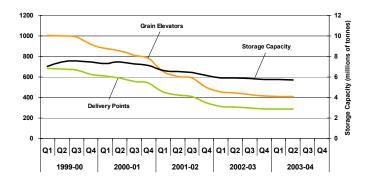
As outlined by the Monitor in its annual report for the 2002-03 crop year, the rationalization of the country elevator network continues, although the pace of that restructuring has slowed significantly. During the first six months of the 2003-04 crop year, a total of eight facilities – six in the first quarter, and two in the second – were removed from the GHTS. As at 31 January 2004 the total number of country elevators remaining in the system

<sup>&</sup>lt;sup>1</sup> The British Columbia Terminal Elevator Operators Association locked out employees of the Vancouver Grain Workers Union in August 2002. This action effectively prevented grain from being moved through the port of Vancouver for much of the first half of the 2002-03 crop year. Although the dispute was settled in December 2002, the redirection of grain traffic to Prince Rupert effectively distorted traditional shipping patterns on the west coast during this period. Caution is, therefore, urged when making any direct year-over-year comparisons.

had fallen to 408 – just 1.9% less than the 416 in place at the end of the previous crop year. This network represents but 40.6% of the 1,004 facilities in place at the outset of the 1999-2000 crop year.

The decline in elevator facilities has also been paralleled by a reduction in the number of grain delivery points. For the first half of the 2003-04 crop year, the total number of grain delivery points fell by three (or 1.0%) to 286 – with all of the closures having taken place during the first quarter alone. As with the elevator infrastructure, the remaining delivery points represented just over two-fifths – 41.8% – of the 684 benchmarked at the beginning of the GMP. In the 2002-03 crop year, 80% of all producer grain deliveries were made at just 89 – about one-third – of these locations.<sup>2</sup>

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



At the same time, the associated storage

capacity of the country elevator network decreased by 0.8% in the first six months of the 2003-04 crop year. This modest reduction effectively left the 5.7 million tonnes of storage capacity recorded as at 31 July 2003 unchanged. And while the overall reduction since the beginning of the GMP has resulted in almost 1.3 million tonnes of storage capacity being removed from the GHTS, the remaining elevator network still encompasses 81.1% of the storage capacity that existed four-and-one-half years earlier.

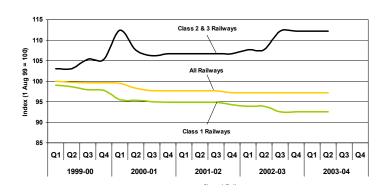
These patterns of decline underscore the fact that the GHTS is continuing to evolve into a network of comparatively fewer facilities, with higher storage capacities, and an ability to load railcars in greater numbers than ever before. On this latter point, it is worth noting that whereas only 119 of the elevators in place at the beginning of the GMP were able to load 50 or more railcars at a time, that number had increased to 175 as of the end of the second quarter. What is more, their relative proportion in comparison to all licensed elevator facilities has gone from 11.9% to 42.9%.

### 1.3 Railway Infrastructure

Since the end of the 2001-02 crop year, total railway infrastructure in Western Canada has remained unchanged at 18,923.9 route-miles. Furthermore, despite a 59.4% reduction in the number of licensed elevators that it supports, the railway network is only 2.8% smaller than it was at the beginning of the GMP.<sup>3</sup>

Despite this modest overall change, the transfer of various branch line operations by the Canadian National (CN) and Canadian Pacific (CP) railways to a number of new shortline carriers has changed the face of the industry. This devolution has helped place 5,207.8 route-miles — or

Figure 3: Relative Change in Railway Infrastructure



27.5% of Western Canada's railway infrastructure – under the administration of 16 distinct regional and shortline railways.

<sup>&</sup>lt;sup>2</sup> The most recent statistics available for grain deliveries by station are those from the 2002-03 crop year.

<sup>&</sup>lt;sup>3</sup> The railway infrastructure denoted here includes both grain-dependent and non-grain-dependent lines. Of the 544.3 route-miles of infrastructure retired since the beginning of the GMP, the majority – 458.9 route-miles (or 84.3%) – were grain-dependent branch lines.

And while the most recent transfers saw two new shortlines created during the course of the 2002-03 crop year, none were added in the last six months. Moreover, there were indications that one shortline carrier, the Great Western Railway, might actually cease operating altogether.

### 1.31 Sale of the Great Western Railway

The Great Western Railway (GWR), which owns 329.1 route-miles of grain-dependent infrastructure in southwestern Saskatchewan, indicated that it was no longer prepared to accept the financial losses that it had been incurring in recent years. Notwithstanding a significant gain in producer car volume, the closure of local GWR elevators combined with the incentives paid by grain companies to draw grain into their larger mainline facilities had effectively reduced the carrier's total grain handlings to about one-quarter of the area's potential.

As a result, the railway's parent company stated that it was looking to either sell the line or abandon it entirely. With an asking price of \$5.5 million, however, few appeared ready to make the investment. Nevertheless, the second quarter saw a group of concerned area farmers mount an effort to save the railway, and to raise the \$0.6 million required as a down payment by the end of March 2004. Assuming that they are able to secure the additional capital needed to complete the purchase, a sale could be concluded by the fall of 2004.

Beyond the mileage inherent in the potential closure of the GWR, another 129.1 route-miles of infrastructure have been slated for abandonment in the 2003-04 crop year. This is comprised of 64.0 route-miles of track belonging to the Southern Manitoba Railway (about 40% of its network), as well as another 65.1 route-miles of CP infrastructure in the provinces of Saskatchewan and Alberta.<sup>5</sup>

### 1.32 Sale of BC Rail

In addition to a potential sale of the GWR, the Government of British Columbia also brought its plans for the privatization of BC Rail closer to a conclusion in the second quarter. After having considered the proposals brought forward by four carriers – CN, CP, OmniTRAX in partnership with Burlington Northern Santa Fe, and RailAmerica – the provincial government announced in November 2004 that it had accepted CN's bid to become the new operator of BC Rail in a commercial deal valued at \$1.0 billion.<sup>6</sup>

If approved by the Competition Bureau, the transaction is widely expected to have a legal impact on the movement of grain from BC Rail origins. In specific terms, since extending operational control of BC Rail to CN would bring it under federal jurisdiction, its commercial activities would then be subject to the Canada Transportation Act. Among the direct changes, grain moving from former BC Rail delivery points will be subject to the revenue cap.<sup>7</sup>

### 1.4 Terminal Elevator Infrastructure

The number of licensed terminal elevators located within Western Canada was reduced by one (or 5.9%) at the beginning of the 2003-04 crop year with the closure of the 91,000-tonne Agricore United "M" facility at Thunder Bay. As at 31 January 2004, the network comprised a total of 16 facilities and had an associated storage capacity of 2.6 million tonnes – a 3.3% decline from the 2.7 million tonnes in place throughout the 2002-03 crop year.

<sup>&</sup>lt;sup>4</sup> The Great Western Railway is owned by Westcan Rail Ltd. of Abbottsford, British Columbia.

<sup>&</sup>lt;sup>5</sup> The section to be abandoned by the Southern Manitoba Railway extends westward from Mariapolis to Elgin, Manitoba, and encompasses sections of CN's former Miami and Hartney subdivisions, which were sold to the company in 1999. The sections to be abandoned by CP encompass 39.6 route-miles of infrastructure in Saskatchewan (including portions of its Arcola, Burstall, and Rocanville subdivisions) and another 25.5 route-miles in Alberta (made up of segments of its Cardston and Sterling subdivisions).

<sup>&</sup>lt;sup>6</sup> The transaction specifies that CN will pay \$1.0 billion to acquire the outstanding shares of BC Rail Ltd., along with the right to operate a freight railway over the BC Rail network under a 60-year lease, with an option to renew for another 30 years thereafter. Actual ownership of the railway's physical infrastructure – including rights-of-way, roadbed, and track – is to remain with the province of British Columbia.

<sup>&</sup>lt;sup>7</sup> Former BC Rail grain shippers will also be given equal treatment under the Act with other CN and CP shippers. This includes its provisions for rates and conditions of service that must be commercially fair and reasonable.

### 2.0 Commercial Relations

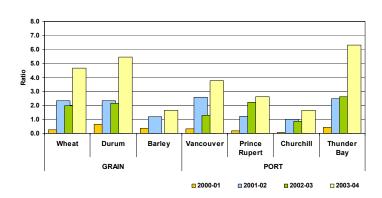
### 2.1 Tendering

Following consultations with its 26 agents in the latter part of the 2002-03 crop year, the Canadian Wheat Board (CWB) brought forward a series of changes to its tendering program for the 2003-04 crop year. Specifically, the CWB committed itself to moving a fixed 40% of the grain it ships to the four ports in Western Canada using a combination of tendering and advance car awards. Under this new arrangement, the CWB had the option of tendering up to a <u>maximum</u> of 20% of its overall volume, rather than the 50% minimum commitment that had prevailed in the 2002-03 crop year.<sup>8</sup>

During the first six months of the 2003-04 crop year, the CWB issued 99 tender calls for the movement of just over 1.3 million tonnes of grain. These were met by 978 bids offering to move an aggregated 5.4 million tonnes – over four times the amount sought by the CWB.

The scope of this response stands in sharp contrast to that witnessed in any of the three preceding crop years. In general terms, the bidding observed during the first half of the 2003-04 crop year proved significantly more intense than at any other period under the GMP. This applied equally to all grains, although the bidding

Figure 4: Tendered Volume – Ratio of Tonnage Bid to Tonnage Called



activity with respect to wheat and durum was substantially greater than for barley.

Of particular interest was the fact that while the bidding activity surrounding each of the four ports in Western Canada was intensified, the response rate on tenders calling for delivery to Thunder Bay was considerably greater than for any other port. One potential explanation appears rooted in the fact that the port has not only a larger number of terminal elevators than any other, but also more storage capacity, and a broader ownership base. In addition, the mix of grains and grades could also have had a bearing. Specifically, the largest proportion of the tendered durum program called for movement to Thunder Bay. With the freight consideration given by the CWB for some tendered durum movements, this might have expanded the catchment area from which these shipments could have originated.

To some extent, this heightened aggressiveness was also reflected in a decline in the proportion of the tender-call volume that went unfilled in the first half -14.4%. This marked a virtual halving of the proportion observed in both the 2001-02 and 2002-03 crop years.

With the labour dispute that had affected west coast operations during the first half of the 2002-03 crop year settled, the port of Vancouver re-emerged as the principal destination in the movement of tendered grain. A full 44.0% of the CWB's tenders called for delivery in Vancouver. This was followed by Thunder Bay with an allocation of 27.0%; Prince Rupert with 25.4%; and Churchill with 3.6%.

It is worth noting that the 25.4% allocated by the CWB to the port of Prince Rupert during the first half was significantly above the 14.5% it had been accorded for the 2001-02 crop year as a whole. What is more, the second quarter saw Prince Rupert allocated 34.1% of the tender volume called – a proportion that only slightly trailed the 39.1% assigned to Vancouver. A gain was also observed with respect to the 5.3% garnered by the

<sup>&</sup>lt;sup>8</sup> These modifications to the CWB's tendering program are outlined more fully in section 2.21.

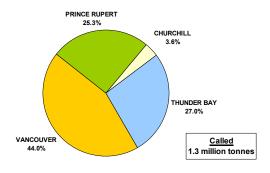
The 2001-02 crop year represents the last directly comparable period given the distortion of traffic patterns brought on in the 2002-03 crop year as a result of a labour dispute at the port of Vancouver.

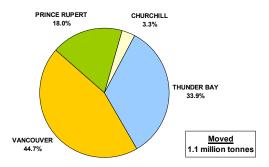
port of Churchill in the first quarter. <sup>10</sup> Although these short-term changes are significant, it remains to be seen whether they reflect a fundamental shift in the CWB's traditional shipping patterns.

The first six months of the 2003-04 crop year saw the CWB award a total of 199 contracts for the movement of an aggregated 1.1 million tonnes of grain. As was the case for tonnage called, the largest portion of this volume – 44.7% – was delivered to Vancouver. This was in turn followed by Thunder Bay with a 33.9% share, Prince Rupert with 18.0%, and Churchill with 3.3%.

It should be noted that Vancouver's share of the CWB's tendered grain movement fell by about 14.3 percentage points from the 59.0% it garnered in the 2001-02 crop year. Almost two-thirds of this reduction – 8.3 percentage points – was transformed into increased handlings for Prince Rupert, while the ports of Thunder Bay and Churchill posted more modest gains of 4.2 and 1.8 percentage points respectively.

Figure 5: Tendered Grain - Cumulative Volumes to 31 January 2004





As observed in previous reports of the Monitor, the vast majority of the CWB's tendered grain moved in blocks of 25 or more railcars. As at 31 January 2004, the proportion so moving stood at 93.5% – only slightly greater than the 91.2% noted for the 2002-03 crop year as a whole. Likewise, the proportion originated at high-throughput elevators during the first half was only marginally greater than that of the previous crop year – 85.4% versus 83.0% respectively.

In addition, there has been a clear rise in the proportion of tendered grain that moved in blocks of 50 or more cars -71.5% for the first half as compared to 62.1% for the 2002-03 crop year. Moreover, much of that gain came as a result of a migration away from the use of the 25-49-car block, where the incentives supporting them were either reduced or eliminated by the railways. 12

In aggregate, the grain volume moved under tender by the CWB in the first six months of the 2003-04 crop year represented 18.1% of its overall movement to Western Canadian ports, and was only marginally lower than the 20% maximum that the CWB had committed itself to.

### 2.2 Other Commercial Developments

### 2.21 The Canadian Wheat Board's Tendering Program

The CWB's tendering program was originally implemented in accordance with a Memorandum of Understanding between it and the federal Minister responsible for the CWB. This document, which defined the federal government's policy respecting the adoption of a tendering program by the CWB and took effect on 1

<sup>&</sup>lt;sup>10</sup> The CWB specified the port of Churchill as the destination in the movement of 5.3% of its tendered grain during the first quarter. This share was noticeably greater than the 3.6% that had constituted its previous quarterly best. Since the port's shipping season normally ends in late October or early November, second quarter comparisons are not possible.

<sup>&</sup>lt;sup>11</sup> The volumes cited as moving under the CWB's tendering program also include those for malting barley – which is administered independent of other CWB grains.

<sup>&</sup>lt;sup>12</sup> A fuller discussion of the recent changes in railway incentives can be found in section 3.32.

August 2000, also outlined the volumes that were to be tendered in the first three years of the program. This period – which covered the 2000-01 through 2002-03 crop years – effectively committed the CWB to tender a minimum of 25% of the overall volume destined to Western Canadian ports in the first and second crop years, and a minimum of 50% in the third crop year.

With that set commitment ending with the 2002-03 crop year, the CWB moved to establish a new agreement with the industry. Consequently, in the spring of 2003, the CWB and its 26 agents began to discuss the level of tendering that would be appropriate for the 2003-04 crop year. Ultimately, these consultations led to a new industry agreement supported by a large majority of the participants.<sup>13</sup>

Beginning with the 2003-04 crop year, the agreement prescribed that a fixed 40% of the CWB's grain movements to the four ports in Western Canada be accomplished through a program that combined tendering as well as advance car awards. In specific terms, the CWB's tendering commitment was to extend to a <u>maximum</u> of 20% of its overall volume – a significant change from the 2002-03 crop year's minimum commitment of 50%. Building on this, a further 20% was to be moved under an advance car awards program. Moreover, in the event that the CWB decided to ship less than 20% of its grain under the tender program, the shortfall was to be assigned to the movements made under the advance car awards program. In this way, the CWB would be held to its wider 40% commitment.

It is important to mention that the movement made under the advance car awards program involves a corridor-specific allocation of railcars. That is to say that the grain companies may deploy the awarded railcars at any facility, and in any quantity deemed appropriate, within a given port's specified catchment area. This process, to a large extent, is intended to provide the grain companies with the same kind of flexibility given to them in distributing railcars under the tendering program itself. Moreover, the entire mechanism is designed to provide them with an improved planning ability.

For the 60% of CWB shipments not governed by this agreement, railcars are subject to a weekly general allocation based on an equal weighting of actual elevator deliveries over a preceding 18-week period, and farmers' future delivery intentions. Actual elevator deliveries, however, will be adjusted to exclude any tendered grain that may have moved during the period. This same general approach will also apply in the apportionment of railcars under the advance car awards program.

The CWB has also indicated that it intends to distribute the tendered grain movement in a manner that reflects its overall sales program. That is to say that the amount of wheat and durum to be tendered by the CWB will be proportional to the total movement of each commodity. In the case of barley, however, the CWB has reserved the discretionary right to tender a greater or lesser amount.

In the case of shipments to be made using advance car awards, the CWB has committed to provide the grain companies with beforehand indications of the grains and grades required, as well as any restrictions that may be applicable. This is intended to help the grain companies in their planning activities, and to give them greater flexibility in ordering and deploying railcars – be it through advance car awards or the general allocation process.

Although these measures came into effect in the first quarter of the 2003-04 crop year, they were gradually implemented, with few operational difficulties having been experienced during the transition. This is not to say that the philosophical differences that had separated the stakeholders were also bridged. They in fact still remained. Yet the evidence garnered thus far into the 2003-04 crop year fails to support those stakeholders who contended that total CWB savings would fall as a result of a rollback in the proportion of grain to move under tender.

\_

<sup>&</sup>lt;sup>13</sup> Of the 26 grain companies involved in these consultations, 24 supported the final agreement. The two that did not were the largest handlers of grain in Western Canada – Agricore United and Saskatchewan Wheat Pool.

<sup>&</sup>lt;sup>14</sup> Farmer's future delivery intentions are based on contract sign-ups with grain companies.

For the first half of the 2003-04 crop year, the CWB reported that its transportation savings amounted to \$19.1 million – a full \$6.3 million (or 49.2%) more than the \$12.8 million recorded for the same period a year earlier.  $^{15}$  Furthermore, this gain was realized despite a 38.1% decline in the volume of grain moved under tender during the first half – 1.1 million tonnes versus 1.8 million tonnes the year before.

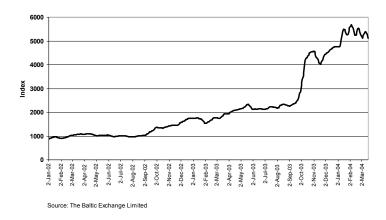
Although an expansion in these savings may have been unexpected by many stakeholders, it strongly suggests that the competition between grain companies – at least in regards to tendered grain – has intensified. This is also mirrored in a comparison of the maximum discounts put forward by the grain companies in their tender bids. Specifically, the first half of the 2003-04 crop year saw maximum accepted discounts that were about one-third more than those reached during the preceding crop year: \$23.04 per tonne versus \$16.99 in the case of wheat; and \$24.07 per tonne versus \$17.27 in the case of durum. What remains uncertain is whether these bidding patterns reflect short-term marketplace tactics or a new competitive dynamic.

### 2.22 Ocean Freight Rates

Towards the end of 2002, rates for the ocean movement of freight began to rise. To be sure, these increases came only after a protracted period of depressed prices. Yet, by the end of the 2002-03 crop year, ocean freight rates had virtually doubled from those in place a year earlier.

Moreover, towards the end of the first quarter these rates began to again rise sharply. By 31 January 2004, ocean freight rates had climbed to five-and-a-half times what they were just 24 months before. The scope of this increase can be seen in changes to the Baltic Dry Index – a price index based on a composite of daily rate quotes for 24 shipping routes, with representation for Panamax, Capesize, and Handymax vessels.<sup>16</sup>

Figure 6: The Baltic Dry Index of Ocean Freight Rates



The sharp rise in rates has largely been attributed to the heightened demand for vessels occasioned by China's growing trade in both raw materials and finished goods. This has had a significant impact on the export programs for CWB as well as non-CWB grains. Not only has it added significantly to the cost of Canadian grain, the shortage of vessels has also brought unavoidable disruptions and delays to its movement. Nowhere is the concern over this more apparent than in the decision-making of Canada's export grain customers. In some cases, they have consciously deferred purchasing Canadian grain in the hope that ocean freight rates would moderate. In others, they have turned to less distant grain-exporting nations in an effort to contain these rising costs.

<sup>&</sup>lt;sup>15</sup> The CWB defines its transportation savings as the total value of all reductions in transportation costs realized from discounts advanced by successful bidders under its tendering program, all freight and terminal rebates it received, and any financial penalties it assessed against the grain companies for non-performance.

<sup>&</sup>lt;sup>16</sup> The Baltic Dry Index is produced by The Baltic Exchange Limited, a London-based organization that provides independently gathered real-time freight market information such as daily fixtures, indices for the cost of shipping wet and dry cargos, route rates, as well as a market for the trading of freight futures. Use of the copyrighted information presented here is done with the express permission of The Baltic Exchange Limited.

### 2.23 Port of Churchill Experiences a Sharp Increase in Grain Volumes

As was mentioned by the Monitor in its annual report for the 2002-03 crop year, the volume of grain moving through the port of Churchill had been steadily declining for several years, and reached a recent low of 351,900 tonnes in the 2002-03 crop year. In early 2003, the Port of Churchill Advisory Board warned that another such shipping season might well prove ruinous.

With Churchill considered of vital economic interest to the province, the Manitoba government moved to provide the port with an interim package of financial support. Aimed at helping ensure a sustainable economic future for both the port and the Hudson Bay Railway, this support package was complemented by additional funds from the federal government. Further, towards the end of the 2002-03 crop year, the port's owner had also entered into a new marketing agreement for the port with the internationally-known grain company, Louis Dreyfus.

Along with the harvest that enhanced the grain supply within the Churchill catchment area, these efforts appeared to have produced positive results during the 2003 shipping season.<sup>17</sup> Terminal throughput at



(photo used with the permission of the Hudson Bay Port Company)

**Figure 7:** A dockside view of two marine vessels arriving to load at the grain-handling facilities of the Hudson Bay Port Company in Churchill, Manitoba

the port in the first half of the 2003-04 crop year increased to 542,700 tonnes – a gain of 94.4% over the 279,200 tonnes handled in the same period a year earlier. In addition to increasing its handlings of CWB grains, it also broadened its traffic base to include 144,700 tonnes of peas, canola, and other non-CWB grains.

Despite these gains, and the overall improvement recorded for the 2003 shipping season as a whole, the volume of grain shipped through Churchill still fell below the 1.0-million tonne level deemed necessary for the port's long-term success.

### 2.24 Railway Car Supply

Given the increase in the grain supply, the demand for railcars in the 2003-04 crop year also increased. And as was noted in the Monitor's annual report for the 2002-03 crop year, the carrying capacity of the covered hopper fleet is a function of not only its size, but of the speed with which the cars are moved. The amount of time taken in delivering a load of grain to destination, and then repositioning it for another shipment, is directly proportional to the number of trips – and volume of grain – that a railcar can move within a specified period of time. And it must be remembered that the car cycle can be undermined by physical impediments such as derailments, congestion within receiving terminals, or a lack of sufficient locomotives and train crews.

This relationship between a railcar's cycle time and its carrying capacity can be seen when considering year-over-year changes in first quarter data. For a two-day (or 10.6%) reduction in the first quarter's average car cycle (16.8 days versus 18.8 a year earlier), the GHTS was able to forward an additional 2.0 million tonnes of grain to the four ports in Western Canada (5.6 million tonnes versus 3.6 a year earlier). In simplified terms, this translated into about 1.0 million tonnes of additional carrying capacity per reduced car-cycle day. And as can be seen from the second quarter's results, this efficiency gain was in turn lost when the average car cycle rose to 17.8 days (an increase of one full day), and originated tonnage fell to 4.2 million tonnes (a drop of 1.4 million tonnes).

<sup>&</sup>lt;sup>17</sup> The port of Churchill's catchment area encompasses grain delivery points situated primarily in northeastern Saskatchewan, as well as northwestern Manitoba. Churchill-destined grain is generally loaded into vessels during a shipping season that normally extends from mid July to early November.

Part of this drop in carrying capacity is attributable to normal winter operations. <sup>18</sup> Yet car supply problems, and particularly those experienced by CP shippers, began to appear in the first quarter. And while these appeared to be contained to producer-car loading activity, shipper complaints in the second quarter had become widespread. To many the problem seemed rooted in the effects of an early harvest, but others cited both CN's and CP's failing to safeguard sufficient cars, locomotives, and crews to handle the increased volume. Where possible, grain companies tried to circumvent CP car supply problems by redirecting deliveries to facilities served by CN. <sup>19</sup> By late January 2004, however, the situation at CP had worsened and extreme winter weather in the Rockies compelled the carrier to place an embargo on further grain movements to Vancouver, and into declaring *Force Majeure*. <sup>20</sup>

This effectively disrupted the flow of grain to Vancouver, and heightened the grain companies' risk of having demurrage charges imposed on them for ocean-going vessels delayed in port.<sup>21</sup> Although CP restored mainline operations early in February, the re-establishment of normalized service, and the clearing of backlogged traffic had an impact on the GHTS well into the third quarter.

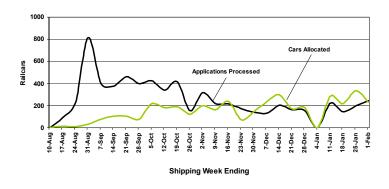
### 2.25 Producer-Car Loading

At the beginning of the 2003-04 crop year, a new licence-exempt producer-car loading facility was established at Hartney, Manitoba. This served to increase the total number of such facilities established since 2002 by 3.3% to 31. The vast majority of these -83.9% - are situated in Saskatchewan, while another three can be found in Manitoba, and two in Alberta. Just over half - 17 in all - are serviced by shortline railways.

Although the need for railcars is common to all grain shippers, the demand for producer-car loading has been particularly strong during the first six months of the 2003-04 crop year. The 3,902 producer-cars loaded in the first half was more than four times the 975 loaded during the same period a year earlier.

Yet this number represented just under two-thirds – 58.9% – of the actual 6,626 applications for railcars that the Canadian Grain Commission received in the period. As a result, car supply emerged as a specific problem for those

Figure 8: Producer-Car Loadings



who wanted to load producer-cars. This was particularly the case in the first quarter when the number of cars ordered often exceeded those supplied by a factor of three-to-one.

And while significantly more orders were filled in the second quarter, a group of farmers in northeastern Saskatchewan filed a formal level-of-service complaint with the Canadian Transportation Agency (CTA) for CP's failure to spot cars for producer loading at three sites along its White Fox subdivision.<sup>22</sup> CP had de-listed

<sup>&</sup>lt;sup>18</sup> Winter railway operations typically result in reduced train lengths and trailing tonnages. Without a corresponding increase in the actual number of trains operated, average transit times generally increase.

<sup>&</sup>lt;sup>19</sup> The redirection of grain deliveries into CN local elevators during the second quarter is observable in terms of carrier handlings. Despite the price leadership that appeared to have given CP a 54.3% share of terminal handlings in the first quarter, customer dissatisfaction appeared to have reduced this share to 46.6% in the second quarter.

<sup>&</sup>lt;sup>20</sup> CP declared Force Majeure retroactively to 25 January 2004. Force Majeure is a contractual provision that is intended to excuse a party from liability if some unforeseen event beyond the control of the party prevents it from performing its obligations under the contract – typically a natural disaster or other "Act of God", war, or even the failure of third party suppliers. Force Majeure provisions are intended to excuse a party only if the failure to perform could not have been avoided with the exercise of due care by that party.

<sup>&</sup>lt;sup>21</sup> The per-day charges for vessel demurrage were reported to have more than doubled as a result of escalating ocean freight rates.

<sup>&</sup>lt;sup>22</sup> The sites specifically referred to are Choiceland, Garrick, and White Fox.

these sites at the end of the 2002-03 crop year as a result of declining volumes, and suggested that producer-car loading could easily be centralized at Nipawin instead. Using the mediation services offered by the CTA, CP has reportedly committed itself to servicing two of the sites – Choiceland and White Fox – for the remainder of the 2003-04 crop year as long as producers respected a 25-car minimum loading commitment.<sup>23</sup>

The increase in producer-car shipments along with the expansion of license-exempt facilities suggests that this option is gaining favour with some farmers. In point of fact, producer-car shipments grew to about 3.6% of the overall grain volume moved in covered hoppers during the first half – a significant gain over the 2.4% it was estimated to have constituted in the 2002-03 crop year. However, had producers been able to secure the railcars for which they had placed orders during this period, the proportion might well have reached 6.1%.

<sup>&</sup>lt;sup>23</sup> The Canadian Transportation Agency provides mediation services to resolve disputes between various parties as an alternative to the more formal adjudicative process. By design, this service is confidential, as is the settlement that may be reached between the parties. The specifics presented here are drawn from published press accounts and should, therefore, be considered unofficial. A formal decision in the complaint filed with the CTA remains pending since the parties must agree beforehand to an indefinite extension of any statutory deadlines in order to allow the mediation process to be completed or – in the event that the case should be return to the Agency for resolution through traditional means – subsequent adjudication.

### 3.0 System Efficiency and Service Reliability

### 3.1 Trucking

Commercial trucking rates were reported to have remained unchanged through the first half of the 2003-04 crop year. To a large extent, the rates relating to the movement of grain have been contained in recent years by an excess of capacity in the face of reduced demand. In addition, the competition existing between the largest grain companies offering commercial trucking services has also been instrumental in containing these rates.

### 3.2 Country Elevators

Total country elevator throughput (measured as shipments from primary elevators) escalated substantially in the first six months of the 2003-04 crop year. Aggregate volume for the period increased by a full 4.0 million tonnes (or 40.4%) to reach 13.9 million tonnes. This increase in volume also produced a 42.1% rise in the primary elevator system's capacity turnover ratio – which climbed to 2.7 turns versus 1.9 the year before.

With a weekly average of 2.9 million tonnes, grain held in primary elevator storage showed a year-over-year gain of 19.5% for the first half. And while the average stock level increased by 0.4 million tonnes, the average amount of time that grain spent in inventory continued to decline. The second quarter's average of 38.8 days was a full one-third lower than the 59.9-day peak it recently attained. Moreover, it also compared more favourably to the values observed in both the 2000-01 and 2001-02 crop years.

Further evidence of this upturn in country elevator activity was reflected in a reduction to the average weekly stock-to-shipment ratio. Over the course of the past nine months, this ratio has fallen from an extreme value of 8.8, to a more normal 5.3. While still denoting more than adequate on-hand stocks, the reduction indicates that grain companies were able to ease the burden brought on by the previous crop year's decline in CWB and non-CWB grain sales.

### 3.3 Railway Operations

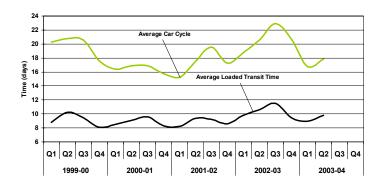
### 3.31 Car Cycles

The upsurge in grain traffic saw total railway grain volumes for the first half of the 2003-04 crop year increase by 60.4% – to 9.8 million tonnes from 6.1 million tonnes a year earlier. Shortline railways, the most adversely impacted by the last two years of drought, experienced a more pronounced increase in originated tonnage – 99.2% versus 57.1% for the Class I carriers.

This gain in volume also positively impacted the railway's average car cycle. Although the second quarter's average of 17.8 days was up by 6.0% from the first quarter – due largely to the advent of winter operations – the year-to-date average of 17.3 days was still 11.8% less than the 19.6-day average recorded a year earlier. What is more, these results denote the best observed in almost two years.

Improvement was noticed in both the loaded and empty transit portions of the cycle as well. Specifically, the first half's average loaded transit time of 9.3 days fell by 8.1% from the 10.2-day average

Figure 9: Railway Car Cycle



<sup>&</sup>lt;sup>24</sup> The 59.9-day average referred to was reached in the third quarter of the 2002-03 crop year.

observed in the same period a year earlier. On a year-to-date basis, the average empty transit time fell by a day-and-a-half (or 15.7%) to 7.9 days.

### 3.32 Railway Freight Rates

Although the revenue cap accorded both CN and CP greater freedom in setting freight rates since it was introduced in the 2000-01 crop year, their pricing decisions have generally been similar. At the beginning of the 2003-04 crop year, however, both carriers implement decidedly different rate structures. With minor exception, CN maintained the rate structure that had prevailed throughout the preceding crop year. In contrast, CP effectively chose to roll back its rates by approximately 1.0% across the board.

In addition, both carriers made significant changes to their respective incentive programs – the first since the beginning of the 2000-01 crop year. Firstly, CN eliminated its incentives for grain moving in blocks of 25-49 railcars, while CP cut its corresponding incentive from \$1.00 per tonne to \$0.50. Neither carrier chose to alter their existing \$4.00-per-tonne discount for movements in blocks of 50-99 railcars. But whereas CN also elected to maintain the discount it offered for movements in blocks of 100 or more cars at \$6.00 per tonne, CP increased its discount to \$7.00 per tonne.

Both carriers also changed the discounts that applied to their Shuttle services.<sup>27</sup> Building on its 100-car discounts, CN moved to add a separate efficiency payment of \$8,700 per train, which effectively raised its Shuttle discount from \$6.50 per tonne to \$7.00. CP, however, substantially restructured its incentives to create a scale of discounts based on the number of Shuttle trains a shipper committed itself to over time. Compared with that offered by CN, the scope of CP's discounts greatly enhanced the potential savings that could be realized by shippers.<sup>28</sup>

These actions served to make CP the more price-competitive Class 1 carrier in Western Canada. With 54.3% of the total unloads at the four ports in Western Canada in the first quarter, it initially appeared that CP had gained some competitive ground against CN.<sup>29</sup> However, the second quarter saw CP's share fall to 46.6%, and to 50.8% on a year-to-date basis. To a large extent, this decline appears to simply reflect the effects of a difficult winter on CP's operations. Yet it undoubtedly also reflects how shippers disaffected by CP's operating problems were moved to employ CN as a secondary service provider.<sup>30</sup>

With the elimination of the CN discount for shipments in blocks of 25-49 railcars, the relative proportion of grain moving under the railways' incentive programs initially declined to 71.6% in the first quarter from 74.8% for the 2002-03 crop year as a whole, but then rebounded to 79.6% in the second quarter. Further, the enhanced discounts offered by both railways appeared to have promoted increased shipments in blocks of 100 or more cars. Such shipments increased from an estimated 19.2% for the 2002-03 crop year as a whole, to 23.3% in the first quarter, and to 27.1% in the second quarter.

14

<sup>&</sup>lt;sup>25</sup> CN increased some rates, but these were selectively applied, and largely pertained to origins in northern Saskatchewan and the Peace River area.

<sup>&</sup>lt;sup>26</sup> While differences between the incentive programs offered by CN and CP exist, both were structured around movements in blocks of 25-49 railcars; 50-99 railcars; and 100 or more railcars. Since the beginning of the 2000-01 crop year, these movements could earn per-tonne discounts of \$1.00, \$4.00, and \$6.00 respectively. CP also offered a fourth grouping, based on movements in blocks of 112 or more railcars.

<sup>&</sup>lt;sup>27</sup> The Shuttle services offered by CN and CP are built on a shipper's commitment to move a defined number of unit trains (of 100 or more railcars) within a specified period of time.

<sup>&</sup>lt;sup>28</sup> The discounts offered by CP could exceed \$9.00 per tonne.

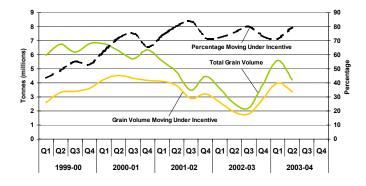
<sup>&</sup>lt;sup>29</sup> During the first two years of the GMP, CP's share of the total unloads at the four ports in Western Canada averaged 47.3%. In the 2002-03 crop year, that share jumped to 57.8% chiefly in reflection of the fact that the drought had had a harsher impact in CN's service area. With more equitable distribution of grain production in the 2003-04 crop year, it is assumed that CP's share should have reverted to something approaching that seen initially under the GMP. The fact that CP secured a 54.3% share in the first quarter strongly suggests that the carrier's pricing actions served to enhance its market position.

<sup>&</sup>lt;sup>30</sup> During this period, shippers that had the option of using either CN or CP, reported shifting grain volumes over to CN-served elevators in order to mitigate the impact of CP service problems on their own operations.

The volume of grain that moved under railway incentives in the first half climbed to 7.4 million tonnes — a gain of 63.0% over the 4.5 million tonnes moved during the same period a year earlier. What is more, the value of the discounts earned by shippers is estimated to have reached \$33.3 million — an increase of 82.3% over the \$18.3 million earned in the first six months of the 2002-03 crop year.

With the larger proportion of grain moving in blocks of 50 or more cars, the average-earned discount continued to climb, and reached a record \$4.60 per tonne in the second quarter. The year-to-date average

Figure 10: Railway Volume Moving Under Incentive



of \$4.53 per tonne stood 14.1% above the \$3.97-per-tonne average of the 2002-03 crop year as a whole.

### 3.4 Terminal Elevator and Port Performance

### 3.41 Terminal Elevators

As with other volume-related indicators, port throughput (measured as shipments from terminal elevators and bulk loading facilities) showed a marked increase in the first half of the 2003-04 crop year. Aggregate volume increased by 61.8% to 9.6 million tonnes from 6.0 million tonnes a year earlier.

On the west coast, Vancouver posted a six-month volume of 4.8 million tonnes – more than four times that of the same period a year earlier. Although a larger grain supply was an important factor, the magnitude of the gain was enhanced by settlement of the labour dispute that had closed most of the port's terminal elevators for four months a year earlier. Prince Rupert's volume fell by 49.6% to 0.9 million tonnes for precisely the same reason.

The port of Churchill saw its volume for the first half climb by 94.4% to 0.5 million tonnes – the best performance recorded at the port for this period since the 2000-01 crop year. At Thunder Bay, grain throughput increased by 21.8% to 3.4 million tonnes. To a large extent, Thunder Bay's more moderate gain in volume simply reflected the fact that it posted a comparatively stronger throughput in the 2002-03 crop year owing to the demand for domestic milling wheat and export durum. During the course of the GMP, the volumes moving through the Thunder Bay gateway have generally proven to be the most consistent.

Terminal elevator inventories for the first half increased by 10.2% from that of a year ago – to an average of 1.1 million tonnes – but remained largely comparable to levels observed in the first two years of the GMP. It must be remembered, however, that a 91,000-tonne reduction in licensed storage capacity implies that there has been a real rise in the use of available terminal space (measured in terms of average terminal inventories per unit of storage capacity), which climbed to a ratio of 0.43 in the first half from an average of 0.37 for the preceding crop year as a whole.

At the same time, the average amount of time spent by grain in inventory in the first half fell by 2.0% – to 20.0 days versus 20.4 a year earlier.<sup>31</sup> This, however, masks the improvement made since the quarterly average reached a record 27.7 days in the third quarter of the 2002-03 crop year. Again, much of this improvement was derived from a general upsurge in commercial activity.

<sup>&</sup>lt;sup>31</sup> Direct comparisons of the overall average number of days-in-store at terminal elevators are also influenced by the effects of the labour disruption at Vancouver during the first half of the 2002-03 crop year. Caution is advised in drawing conclusions from any direct year-over-year comparison using these values.

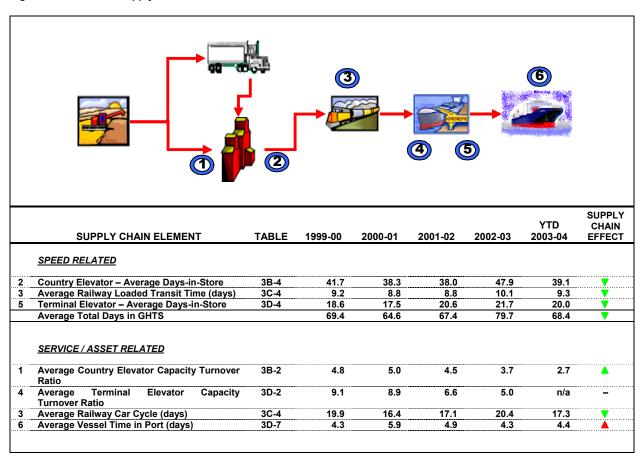
### 3.42 Port Performance

A total of 386 vessels called at Western Canadian ports during the first six months of the 2003-04 crop year. This marks a significantly higher rate of arrival than observed during the same period a year earlier when 282 vessels arrived. This too reflects the sharp increase in grain volumes previously discussed. Yet the amount of time spent by these vessels in port remained comparable to the previous crop year. The year-to-date average of 4.4 days was only 4.8% higher than the 4.2-day average of a year earlier. The greater proportion of ships loading in Vancouver during the reporting period, rather than in Prince Rupert as was the case a year before, was chiefly responsible for this rise.

### 3.5 The Supply Chain

As outlined in earlier editions of the Monitor's quarterly and annual reports, the supply chain model provides a framework for examining the workings of the GHTS as a whole. The Monitor's annual report for the 2002-03 crop year concluded that the amount of time taken by grain as it moved through the supply chain had increased to an average of 79.7 days – a significant deterioration from the 67.4 days realized in the 2001-02 crop year. Even so, the year-to-date average of 68.4 days for the first six months of the 2003-04 crop year suggests a significant improvement. What is more, it also marks a 1.3-day betterment over the first quarter's 69.7-day average.

Figure 11: The GHTS Supply Chain



This 11.3-day (or 14.2%) reduction in the pace at which grain moved through the GHTS stemmed mainly from a substantial decline in the amount of time grain spent in inventory. To be sure, over three-quarters of the reduction came from an 8.8-day (or 18.4%) decline in the primary elevator system's average number of days-in-store – which fell to an average of 39.1 days for the first half from the 2002-03 crop year's 47.9-day average.

This was furthered by a 1.7-day (or 7.8%) reduction in the amount of time grain spent in inventory at terminal elevators – which fell to an average of 20.0 days from the preceding crop year's 21.7-day average. An additional 0.8 days was derived from a reduction in the railways' average loaded transit time – which fell by 7.9% from the preceding crop year's 10.1-day average to 9.3 days.

With these results, a few general observations concerning the supply chain's performance during the first six months of the 2003-04 crop year are warranted:

- Firstly, an increase in the volume of grain handled by the GHTS has brought about noticeable improvements in the effectiveness of the supply chain. With increased activity, country elevator inventories turned over faster, and grain spent 18.4% less time in storage. This in turn brought about adjustments in railway service to meet prevailing demand, and reduced the average loaded transit time by 7.9%. The greater volume that also passed through the terminal elevator system also helped reduce the amount of time grain spent in inventory by 7.8%.
- Secondly, despite an increase in the volume already handled, the 2003-04 crop year's potential grain movement as represented by a grain supply of 53.1 million tonnes still falls short of the 62.6 million tonnes set in the first year of the GMP. In representing 84.9% of that first year's grain supply, the pressures brought to bear on the GHTS cannot be fully indicative of those that would be occasioned by a return to higher operating levels. As such, the performance of the GHTS in the 2003-04 crop year must be viewed as a partial test of the system's capabilities.
- Thirdly, the overall effectiveness of the GHTS remains largely unchanged. That is to say, grain still
  moves through the system in much the same way, and in much the same timeframe, as it did four years
  previously. This is reflected in average country and terminal elevator storage times, as well as the
  railways' average loaded transit time, that are within but a few percentage points of their previous bests
  under the GMP.<sup>32</sup>
- Finally, the GHTS's continuing evolution into a network of comparatively fewer elevator facilities, with higher storage capacities, and the ability to load railcars in greater numbers than ever before, has allowed the grain companies and the railways to reduce their overall costs. To be sure, the savings derived from these improvements in financial efficiency are being shared at least in part with producers through such competitive mechanisms as trucking premiums. These benefits have in turn ultimately allowed producers to offset but not fully neutralize escalations in the direct cost of country elevator handling, rail transportation, and terminal elevator handling.

\_

<sup>&</sup>lt;sup>32</sup> An exception must be noted for the average number of days-in-store for grain at terminal elevators. The first half's year-to-date average of 20.0 days is 14.3% higher than the 17.5-day record established in the 2000-01 crop year.

### 4.0 Producer Impact

### 4.1 Revisions to the Calculation of Producer Netback - CWB Grains

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."

As outlined in the Monitor's annual report for the 2002-03 crop year, the CWB changed the manner by which it treated certain expense items to conform with the recommendations advanced by the federal Auditor General. These were designed to make the CWB's operating statements more transparent, relevant, and understandable.<sup>33</sup>

As a result, the Monitor was required to adapt its analysis to reflect the changes made by the CWB. Among the more significant changes was the presentation of ocean freight as a direct cost, rather than netting it out against ocean freight revenues in determining corporate revenues. In making this change, the Monitor was compelled to base its analysis on the total revenues reported for wheat and durum in the CWB's pool accounts rather than on in-store Vancouver and St. Lawrence prices. Accordingly, a weighted average price for both wheat and durum replaced the CWB Final Prices for 1CWRS wheat and 1CWA durum that had previously been used in calculating the producer's netback.<sup>34</sup> This meant that the generalized results obtained in the calculations pertaining to CWB grains could no longer be directly compared with those calculated for non-CWB commodities.

In order to allow for the grade-specific analysis that had originally been started under the GMP, the CWB agreed to provide the Monitor with a sufficiently detailed reporting of the wheat and durum pool accounts so as to re-establish an in-store price comparison of 1CWRS wheat and 1CWA durum at their Vancouver and St. Lawrence positions. As a result, the Monitor has been able to re-determine the values presented in its annual report for the 2002-03 crop year to be consistent with the methodology used previously under the GMP. The data used in the re-determination is both comparable on a year-over-year basis, and with the non-CWB commodities used in the analysis of producer netback.

These revisions are presented in section 4.2 as supplemental information for the benefit of all GHTS stakeholders. Although certain elements in the calculation of both the export basis and the producer's netback have necessarily been changed, it has not materially altered the conclusions drawn by the Monitor in its annual report: that significant improvement in the market price of 1CWRS wheat and 1CWA durum have offset increases in the export basis for both products, and resulted in improved per-tonne returns for producers.

<sup>&</sup>lt;sup>33</sup> These recommendations were made by the Auditor General in "Canadian Wheat Board – Special Audit Report," and were presented to the CWB's Board of Directors on 27 February 2002.

<sup>&</sup>lt;sup>34</sup> It is important to note that the use of a weighted average price makes it impossible to focus on a particular grade of wheat and durum in determining the producer's netback.

### **Indicator Series 5 – Producer Impact (Restated)**

			BASE		NT REPORT		١(
Table	Indicator Description	Notes	1999-00	2001-02	2002-03	% VAR	
	Export Basis [Subseries 5A]						
5A-1A	Manitoba East 1 CWRS Wheat (\$ per tonne)	(2)	\$54.20	\$47.40	\$54.26	14.5%	ļ
5A-1A 5A-1B	1 CWA Durum (\$ per tonne)	(2) (2)	\$60.29	\$56.57	\$66.34	17.3%	
5A-1C	1 Canada Canola (\$ per tonne)	(2)	\$61.58	\$52.37	\$58.40	11.5%	}
A-1D	Canadian Large Yellow Peas – No. 2 or Better (\$ per tonne)	(2)	\$54.93	\$71.61	\$82.71	15.5%	[
							1
	Manitoba West	(0)		251.00	05000		ļ
5A-2A 5A-2B	1 CWRS Wheat (\$ per tonne) 1 CWA Durum (\$ per tonne)	(2)	\$57.80 \$65.37	\$54.32 \$60.99	\$59.68 \$69.53	9.9% 14.0%	ļ
A-2D A-2C	1 Canada Canola (\$ per tonne)	(2)	\$58.67	\$52.42	\$58.66	11.9%	ļ
A-2D	Canadian Large Yellow Peas – No. 2 or Better (\$ per tonne)	(2)	\$54.93	\$71.61	\$82.71	15.5%	<u>.</u>
		<u></u>					ſ
	Saskatchewan Northeast	(2)					ļ
A-3A	1 CWRS Wheat (\$ per tonne)	(2)	\$58.10	\$51.98	\$57.49	10.6%	ļ
A-3B A-3C	1 CWA Durum (\$ per tonne) 1 Canada Canola (\$ per tonne)	(2)	\$68.31 \$54.38	\$66.05 \$47.60	\$75.29 \$52.99	14.0% 11.3%	ł
A-3D	Canadian Large Yellow Peas – No. 2 or Better (\$ per tonne)	(2)	\$54.93	\$70.96	\$83.33	17.4%	ŀ
		<del></del>			T		Ì
Λ 4 Λ	Saskatchewan Northwest	(2)	PEC 40	ØE4 00	<b>650.70</b>	10.00/	ļ
A-4A A-4B	1 CWRS Wheat (\$ per tonne) 1 CWA Durum (\$ per tonne)	(2)	\$56.42 \$70.53	\$51.23 \$66.26	\$56.76 \$75.15	10.8% 13.4%	ł
А-4В А-4С	1 CWA Durum (\$ per tonne)  1 Canada Canola (\$ per tonne)	(2) (2)	\$70.53 \$50.88	\$66.26	\$75.15 \$49.72	13.4%	۱.
A-4D	Canadian Large Yellow Peas – No. 2 or Better (\$ per tonne)	(2)	\$54.84	\$71.43	\$82.87	16.0%	ŀ
		<u></u>					[
	Saskatchewan Southeast	(0)		250.01	604.47	0.00/	ļ
A-5A	1 CWRS Wheat (\$ per tonne)	(2)	\$59.40	\$56.21	\$61.17	8.8%	ļ
A-5B A-5C	1 CWA Durum (\$ per tonne) 1 Canada Canola (\$ per tonne)	(2)	\$65.22 \$57.47	\$61.92 \$46.97	\$71.14 \$52.82	14.9% 12.4%	ł
A-5D	Canadian Large Yellow Peas – No. 2 or Better (\$ per tonne)	(2)	\$54.72	\$71.60	\$83.31	16.4%	}
,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	Odriddian Edigo Tollow Todo 110. 2 of Bottol (4 por formo)	<u>\_/</u>	φοτιτ	ψ, 1.00	Ψ00.01	10.470	ľ
	Saskatchewan Southwest	(2)					ļ
A-6A	1 CWRS Wheat (\$ per tonne)	(2)	\$57.22	\$51.49	\$57.02	10.7%	ļ
6A-6B 6A-6C	1 CWA Durum (\$ per tonne) 1 Canada Canola (\$ per tonne)	(2)	\$68.12 \$55.75	\$64.10 \$43.71	\$74.52 \$50.67	16.3% 15.9%	ļ
A-6D	Canadian Large Yellow Peas – No. 2 or Better (\$ per tonne)	(2)	\$54.66	\$70.67	\$83.17	17.7%	}
71.00	Odriddia Edigo Tollow Todo 110. 2 of Botto (4 por tollito)	<u> </u>	Ψ04.00	ψ/ O.O/	ψου. 17		Ì
	Alberta North						l
A-7A	1 CWRS Wheat (\$ per tonne)	(2)	\$53.20	\$48.59	\$51.83	6.7%	ļ
A-7B	1 CWA Durum (\$ per tonne)	(2)	\$71.67	\$67.61	\$76.50	13.1%	ļ
A-7C A-7D	1 Canada Canola (\$ per tonne)  Canadian Large Yellow Peas – No. 2 or Better (\$ per tonne)	(2)	\$50.39 \$54.29	\$40.76 \$70.04	\$40.88 \$82.71	0.3% 18.1%	ŀ
A-7D	Canadian Large Tellow Feas – No. 2 of Better (3 per torine)	(2)	<b>Ф</b> 04.29	\$70.04	φοz./ I	10.170	}
	Alberta South						L
A-8A	1 CWRS Wheat (\$ per tonne)	(2)	\$48.81	\$44.23	\$47.26	6.9%	ļ.
A-8B	1 CWA Durum (\$ per tonne)	(2)	\$66.06	\$59.75	\$70.12	17.4%	ļ.,
A-8C A-8D	1 Canada Canola (\$ per tonne) Canadian Large Yellow Peas – No. 2 or Better (\$ per tonne)	(2)	\$48.07 \$54.93	\$35.53 \$69.60	\$41.12 \$82.71	15.7% 18.8%	ļ.,
A-0D	Canadan Large reliuw reas - NO. 2 Or better (\$ per tonne)	(2)	<b>დ</b> ე4.93	φ09.0U	φο∠./ Ι	10.0%	}
	Peace River						
A-9A	1 CWRS Wheat (\$ per tonne)	(2)	\$53.57	\$49.75	\$56.31	13.2%	L
A-9B	1 CWA Durum (\$ per tonne)	(2)	\$71.00	\$69.27	\$77.02	11.2%	١
A-9C A-9D	1 Canada Canola (\$ per tonne) Canadian Large Yellow Peas – No. 2 or Better (\$ per tonne)	(2) (2)	\$52.14 \$54.93	\$41.08 \$71.61	\$42.87 \$82.63	4.4% 15.4%	ļ
A-9D	Canadian Large Tellow Feas - IVO. 2 OF Better (\$ per tonne)	(८)	φυ4.93	ا 1.0 ا	φο∠.03	13.4%	'n
	Western Canada						
A-10A	1 CWRS Wheat (\$ per tonne)	(2)	\$54.58	\$50.39	\$56.65	12.4%	ļ
A-10B	1 CWA Durum (\$ per tonne)	(2)	\$67.63	\$63.05	\$73.05	15.9%	ļ
A-10C	1 Canada Canola (\$ per tonne)  Canadian Large Yellow Peas – No. 2 or Better (\$ per tonne)	(2)	\$52.51	\$42.01	\$48.97	16.6%	ļ
A-10D	Canadian Large Tellow Feas - No. 2 of Better (\$ per toffie)	(2)	\$54.76	\$70.97	\$83.19	17.2%	) 
	Producer Leading (Subseries 5P)						ĺ
iB-1	Producer Loading [Subseries 5B] Producer Loading Sites (number) – Class 1 Carriers		415	386	381	-1.3%	
ъ- 1 БВ-1	Producer Loading Sites (number) – Class 1 Carriers  Producer Loading Sites (number) – Class 2 and 3 Carriers		120	127	137	7.9%	)
5B-1	Producer Loading Sites (number) – Slass 2 and 3 Same is		535	513	518	1.0%	ſ
5B-2	Producer Car Shipments (number) – Covered Hopper Cars		3,441	6,583	3,209	-51.3%	ſ¨
				T			en.

 <sup>(1) –</sup> In order to provide for more direct comparisons, the values for the 1999-2000 through 2002-03 crop years are "as at" or cumulative to 31 July unless otherwise indicated.
 (2) – The export basis includes the following elements where applicable: freight (adjusted by the FAF and CFAR); trucking; elevation; dockage; weighing and inspection; CWB costs; trucking premiums; and CWB transportation savings.

### Considerations in the Calculation of the Export Basis and Producer Netback (Restated)

ELEMENT	CWB GRAINS	NON-CWB COMMODITIES
Grain Price	The price for 1 Canada Western Red Spring Wheat and 1 Canada Western Amber Durum are the Final Realized Prices in-store at Vancouver or St. Lawrence as reported by the CWB in the Statistical Tables accompanying its Annual Report.  Since Final Realized Prices are expressed net of CWB operating costs, and the Export Basis includes a separate provision for these costs, CWB Costs (net) are added back to produce Adjusted CWB Final Prices.	The price for 1 Canada Canola is the weighted average Vancouver cash price.¹ The weights used reflect monthly exports as recorded by the Canadian Grain Commission (CGC).²  The price for Canadian Large Yellow Peas is based on the average weekly dealer closing price, track Vancouver, reported by Stat Publishing for the months of October and November.³
Weighted Applicable Freight	For every station in a given geographic area, the producer pays the lesser of either the single-car railway freight rate to Vancouver <sup>4</sup> , or that of the corresponding rate to Thunder Bay plus the Freight Adjustment Factor (FAF). <sup>5</sup> The applicable freight rate depicted is a weighted average for the area as a whole based on the proportion of deliveries made to each of the stations included in the area.	
Churchill Freight Advantage Rebate	The Churchill Freight Advantage Rebate was introduced in the 2000-01 crop year as a mechanism to return the market sustainable freight advantage to farmers in the Churchill catchment area.	
Trucking Costs	The trucking costs are based on the commercial short-haul trucking rates for an average haul of 40 miles as presented in Table 3A-1.	The trucking costs are based on the commercial short-haul trucking rates for an average haul of 40 miles as presented in Table 3A-1.
	The Monitor is aware that producers' trucking costs vary widely as a result of the type of equipment used, the use of owner-supplied versus carrier-supplied services, and the length of haul involved. Detailed information relating to the structure of these costs is not currently available, and has necessitated use of an assumed value. <sup>6</sup>	The Monitor is aware that producers' trucking costs vary widely as a result of the type of equipment used, the use of owner-supplied versus carrier-supplied services, and the length of haul involved. Detailed information relating to the structure of these costs is not currently available, and has necessitated use of an assumed value.
Primary Elevation Costs	Primary elevator licensees are required to post primary elevation tariffs with the CGC at the beginning of each crop year, and at any time the rates for elevation, dockage (cleaning), storage, and related services change. The costs depicted for primary elevation are based on the applicable provincial average presented in Table 3B-6 as at August 1 of each crop year.	
Dockage Costs	Primary elevator licensees are required to post primary elevation tariffs with the CGC at the beginning of each crop year, and at any time the rates for elevation, dockage (cleaning), storage, and related services change. The costs depicted for dockage are based on the applicable provincial average presented in Table 3B-6 as at August 1 of each crop year.	
CGC Weighing and Inspection Costs	The costs of CGC weighing and inspection are assessed in various ways by the individual grain companies. Some include a provision for this in their primary elevation tariffs. Others deduct this amount directly from their cash tickets.	
	The per-tonne average deduction from cash tickets used here has been adjusted in order to avoid an overlap with the tonnage already covered under the primary elevation tariffs, and a possible distortion of the export basis.	
CWB Costs	CWB Costs (gross) represent the per-tonne operating costs of each pool account at an in-store export port position, plus the apportioned value of its overall transportation savings. <sup>7</sup>	

ELEMENT	CWB GRAINS	NON-CWB COMMODITIES
Price Differential		For 1 Canada Canola, a price differential – or spread – is calculated between the weighted Vancouver cash price and the weighted average spot price in each of the nine regions.
		For yellow peas, a price differential is calculated using the average weekly dealer closing price, track Vancouver, and the average weekly grower bid closing price for the months of October and November.
		These differentials effectively represent the incorporated per-tonne cost of freight, elevation, storage and any other ancillary elements. As such, it encompasses a large portion of the Export Basis.
Canola Growers and Pulse Associations		All elevator deliveries of canola are subject to a \$0.50 per tonne "check-off" for provincial canola association dues. Similarly, a levy of 0.5% is deducted for provincial Pulse Growers Associations on the delivery of yellow peas. <sup>5</sup>
Trucking Premiums	Grain companies report on the trucking premiums they pay to producers at each of the facilities identified in the sampling methodology. The amounts depicted reflects the average pertonne value of all premiums paid for the designated grade of wheat or durum within the reporting area.	Grain companies use their basis (the spread between their cash and the nearby futures price) as the mechanism to attract producer deliveries. Narrowing their basis, resulting in higher return to producers, is the signal that a company needs a commodity. Conversely a wide basis signals a lack of demand for the product. Some companies, however, offer premiums over and above their basis in order to attract delivery of some non-Board commodities. These premiums, illustrated as "trucking premiums", are therefore factored into the GMP export basis, and are presented as a producer benefit. When weighted based on the applicable tonnage, and factored in at a regional level, they are relatively small sums due to the limited number of companies using this mechanism.
CWB Transportation Savings	The CWB Transportation Savings is an apportioned per-tonne amount representing the total financial returns to the pool accounts as a result of grain-company tendering, freight and terminal rebates, and any penalties for non-performance.	
Other Deductions	Other deductions, such as drying charges, GST on services, etc., may also be applied to, and appear as an itemized entry on the cash ticket of, any grain delivery. No attempt is made to capture these deductions within the framework employed here	Other deductions, such as drying charges, GST on services, etc., may also be applied to, and appear as an itemized entry on the cash ticket of, any grain delivery. No attempt is made to capture these deductions within the framework employed here.

- 1) The Winnipeg Commodity Exchange (WCE) collects Vancouver cash prices and spot prices at selected country elevator locations weekly.
- Forward contracting and deferred delivery provisions make it impossible to accurately weight the canola price data. Testing was done with weekly producer delivery data and with weekly and monthly export data. In consultation with the WCE, weighting based on monthly exports was deemed the most appropriate.
- 3) Data provided by Stat Publishing. Using a "snapshot" period of two months during the fall, when pricing of the new crop is relatively heavy, was deemed 3) - Data provided by State Publishing. Osing a shapshot, period of two fromis during the rain, when prioring or the new or to be an appropriate representation of producer prices, thereby avoiding the need to incorporate a weighting factor.
   4) - The single-car railway freight rates employed reflect those found in posted tariffs at the end of each crop year (July 31).
- 5) Freight Adjustment Factors (FAF) were introduced in the 1995-96 crop year to account for a change in the eastern pooling basis point, from Thunder Bay to the Lower St. Lawrence, and for the location advantage of accorded shipments from delivery points near Churchill and markets in the United States.
- FAFs are established prior to the beginning of each crop year to reflect changes in sales opportunities, cropping patterns and Seaway freight rates.

  6) An examination into the actual trucking costs of producers was recommended in the Quorum Corporation study "Report on the Identification of Producer Impacts Over and Above those Identified in the Producer Netback Methodology," May 2002, which can be downloaded from the Monitor's website (www.quorumcorp.net). The issue of trucking costs is discussed further in Section 5.5.
- 7) The costs published in the CWB's Annual Report are net of any transportation savings.
- Levies for Manitoba and Alberta producers are refundable. The Saskatchewan levy stood at 0.75% on 1 August 2002, and rose to 1.00% on 1 August 2003.
- 9) Various terms are used by grain companies to describe the premiums they offer to producers in an effort to attract deliveries to their facilities i.e., trucking premiums, marketing premiums, and location premiums. The most common term, however, remains "trucking premium," and it is utilized generically in the calculation of the Export Basis.

### 4.2 Producer Netback for CWB Grains - 1999-2000 Through 2002-03 Crop Years (Restated)

### 4.21 Grain Prices

The Final Realized Price of 1CWRS wheat rose from \$192.43 per tonne in the 1999-2000 crop year, to \$202.58 in the 2000-01 crop year. Shrinking global wheat stocks, and the prospect of tighter supplies were the chief forces underlying this first rebound in price since the 1995-96 crop year. Drought conditions in both Canada as well as other producing countries helped to push prices even higher - to \$217.02 per tonne in the 2001-02 crop year, and then \$250.20 in the 2002-03 crop year. This latter price was the highest witnessed in five years, and the second highest on record.

Similarly, durum prices also improved following several years of decline. The Final Realized Price for 1CWA durum initially rose from \$206.79 per tonne in the 1999-2000 crop year, to \$234.17 in the 2000-01 crop year. Limited supplies of high-grade milling durum as a result of reduced North American production helped push the price to \$257.12 per tonne a year later. And in the 2002-03 crop year, it reached \$266.88 per tonne.

### 4.22 The Export Basis - 1CWRS Wheat

The export basis for 1CWRS wheat declined steadily throughout the first three crop years of the GMP. From a value of \$54.58 per tonne in the 1999-2000 crop year, the export basis fell to \$52.29, and then \$50.39 in the succeeding two crop years. From this low, it then climbed 12.4% to \$56.65 per tonne in the 2002-03 crop year. This constituted a net increase of \$2.07 per tonne (or 3.8%) over the entire four-year period of the GMP.

The export basis has two structural components. The first relates to the direct costs incurred by producers in delivering These include freight, grain to market. trucking, elevation, dockage, weighing and inspection, as well as the applicable operating costs of the CWB. The second component encompasses all of the financial benefits accruing to producers through the receipt of any offset to these expenses; typically trucking premiums and CWB transportation savings.

In the past four crop years, the direct cost component of the export basis climbed from an average of \$56.90 per tonne to

slightly - to 54.9%.

CLEANING CGC FEES ELEVATION CWB COSTS 17.7% TRUCKING

Figure 12: Wheat Export Basis - Direct Costs

FAF & CFAR

RAIL FREIGHT \$63.31 - a net increase of 11.3%. The largest single element in these direct costs is the applicable freight, which incorporates not only the per-car charges for a railway shipment, but the applicable CWB Freight Adjustment Factor (FAF). In the 1999-2000 crop year, the average weighted applicable freight for 1CWRS wheat in Western Canada amounted to \$31.87 per tonne, and represented 56.0% of direct costs. Although the

Among the other elements in the direct costs attributable to 1CWRS wheat were:

• Trucking Costs: The commercial costs tied to a 40-mile haul are deemed to have fallen from \$6.10 per tonne to \$5.94 for the 2002-03 crop year. This decline was a result of a rollback in the fuel surcharges that had been applied throughout much of the 2000-01 and 2001-02 crop years. And although this means that the cost of trucking returned to the value recorded in the first year of the GMP, its share of total direct costs has fallen from 10.4% to 9.4%.

per-tonne average climbed to \$34.73 by the end of the 2002-03 crop year, its proportion of direct costs declined

23

These savings, comprised of the accepted bids from the tendering process, freight and terminal rebates, and financial penalties for non-performance, are paid to producers through the CWB's pool accounts.

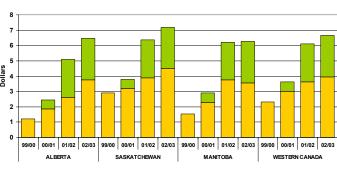
- Primary Elevation Costs: These costs averaged \$9.75 per tonne in the 1999-2000 crop year, and comprised 17.1% of the total direct costs for 1CWRS wheat. Increased tariff rates raised the average cost of elevation by 15.0% to \$11.22 per tonne in the 2002-03 crop year, and pushed its share of total direct costs up marginally to 17.7%. It should be noted that the posted tariffs reflect the maximum rates that grain companies may charge producers for services at their facilities. Although grain companies can charge less, cash-ticket data suggests that this is seldom the case.
- Dockage Costs: The cost of terminal cleaning averaged \$3.56 per tonne in the 1999-2000 crop year, and comprised 6.3% of total direct costs. Although these costs increased by 10.4% to an average of \$3.93 per tonne for the 2002-03 crop year, their contribution to total direct costs remained essentially unchanged at 6.2%. As with primary elevation tariffs, the rates posted therein represent the maximum that grain companies may charge. Cash-ticket data indicates that this is typically the norm.
- CGC Weighing and Inspection Fees: These costs remained unchanged at an average of \$0.38 per tonne throughout the course of the past four crop years. On a proportional basis, they constitute a mere 0.6% of total direct costs.<sup>36</sup>
- Gross CWB Costs: These costs effectively reflect the per-tonne operating costs of the CWB, and are
  ultimately paid by producers through the CWB's pool accounts. Gross CWB costs averaged \$5.40 per
  tonne in the 1999-2000 crop year, and comprised 9.5% of the total direct costs for 1CWRS wheat. By
  the 2002-03 crop year, however, they had increased to an average of \$7.72 per tonne, and accounted
  for 12.2% of the total direct costs.

As already mentioned, the direct costs discussed above are offset by the financial benefits that accrue to producers through the receipt of any trucking premiums and CWB transportation savings. The trucking premiums paid by grain companies for 1CWRS wheat deliveries in the GMP's nine sampling areas rose by 70.7% between the 1999-2000 and 2002-03 crop years – from an average of \$2.32 per tonne to \$3.96. On a proportional basis, these premiums offset an increasingly larger amount of the producer's direct costs: 4.1% in the 1999-2000 crop year; 5.4% in the 2000-01 crop year; and 6.3% in both the 2001-02 and 2002-03 crop years.

The grain companies' use of such premiums to attract grain into their facilities is neither new, nor a result of recent reforms to the GHTS. To be sure, their use is a long established practice. Even so, the available evidence suggests that the competitive environment has been pushing these premiums ever higher.

The transportation savings identified by the CWB stem directly from the implementation of its tendering program in the 2000-01 crop year. In that crop year, these savings totalled \$0.61 per tonne, and offset the direct costs tied to 1CWRS wheat by just 1.1%. By the 2001-02 crop year, however,

Figure 13: Wheat Export Basis – Producer Benefits (dollars per tonne)



■ Trucking Premiums
■ CWB Transportation Savings

these savings had increased four-fold – to 2.47 per tonne – and countered 4.4% of total direct costs. Data for

<sup>&</sup>lt;sup>36</sup> The CGC weighing and inspection costs reported here have been adjusted in order to avoid overlap with the portion of such charges assessed by the grain companies through their primary elevation tariffs, and a possible distortion of the export basis.

<sup>&</sup>lt;sup>37</sup> There are a number of other methods that grain companies use to compete to get grain to their elevator driveways - what they refer to as their toolbox. In addition to trucking premiums, grade promotions, discounts on farm supplies, favourable credit terms, or even the absorption of trucking cost, are also employed. These benefits, which flow to producers, are not consistently tracked through grain company accounting processes. The producer benefits component of the export basis does not attempt to quantify these benefits. By the grain companies' own admission, an accurate tracking of these benefits on a system-wide basis would not be feasible. Data pertaining to these methods of attracting grain would contain a significant degree of subjectivity and is, therefore, not included in these calculations.

the 2002-03 crop year shows a further gain in these savings – which climbed by 9.3% to \$2.70 per tonne. In the face of rising input costs, however, its offset value fell to a marginally lower 4.3%.

Nevertheless, when combined with the trucking premiums discussed previously, the overall value of these producer benefits has steadily risen – from 2.32 per tonne (with an offset value of 4.1%) in the 1999-2000 crop year; to 3.62 (or 6.5%) in the 2000-01 crop year; 6.09 (or 10.8%) in the 2001-02 crop year; and 6.66 (or 10.5%) in the 2002-03 crop year.

### Contributory Changes to Producer Netback - 1 CWRS Wheat (dollars per tonne)

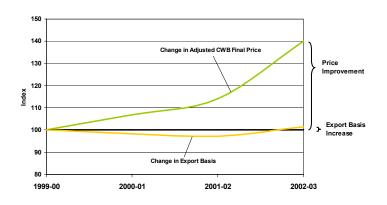
			2001-02		2002-03 / 1999-2000			
	1999-2000	2000-01		2002-03	VARIANCE	% VAR		
Price	\$197.83	\$207.72	\$218.16	\$255.22	\$57.39	29.0%	<b>A</b>	
Direct Costs Less: Trucking Premiums CWB Savings	56.90 -2.32 0.00	55.91 -3.01 -0.61	56.48 -3.62 -2.47	63.31 -3.96 -2.70	6.41 -1.64 -2.70	11.3% 70.7% N/A	<b>A</b>	
Export Basis	54.58	52.29	50.39	56.65	2.07	3.8%	A	
Producer Netback	\$143.25	\$155.43	\$167.77	\$198.57	\$55.32	38.6%	A	

### 4.23 Producer Netback - 1CWRS Wheat

The visible netback accruing to producers from the delivery of 1CWRS wheat has increased from an average of \$143.25 per tonne in the 1999-2000 crop year, to \$198.57 in the 2002-03 crop year. This represents an improvement of \$55.32 per tonne (or 38.6%) since the beginning of the GMP. Yet it must reiterated that this improvement was derived chiefly from a net increase of \$57.39 per tonne in the price of 1CWRS wheat. Increases in a variety of input costs, however, worked to draw down this financial gain by \$2.07 per tonne (or 3.6%).

Although this analysis indicates that producers are clearly enjoying better pertonne returns, this does not mean that

Figure 14: Relative Change in Producer Netback – 1CWRS Wheat



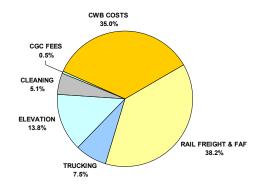
gross farm receipts from the sale of wheat have been on the rise. In fact, a 50.1% decline in shipments of wheat from Western Canadian elevators over the course of the past four crop years – from 16.5 million tonnes in the 1999-2000 crop year to 8.3 million tonnes in the 2002-03 crop year – suggests that the benefit has been largely minimized.

### 4.24 The Export Basis - 1CWA Durum

The 2002-03 crop year saw the export basis for 1CWA durum rise by 15.9% to \$73.05 per tonne. And while this is 8.0% more than the \$67.63 per tonne recorded in the 1999-2000 crop year, the inter-year variances have proven to be considerably more erratic than that observed for 1CWRS wheat. This was largely reflective, however, of certain key changes in its underlying direct costs.

The direct costs associated with 1CWA durum have climbed by 12.3% over the past four crop years - from an average of \$70.77 per tonne in the 1999-2000 crop year, to \$79.48 in the 2002-03 crop year. As was the case with 1CWRS wheat, freight represents the single largest cost element within it. But unlike wheat, it is less encumbered by a FAF component.<sup>38</sup> For the 2002-03 crop year, the average applicable freight for 1CWA durum amounted to \$30.34 per tonne, and accounted for 38.2% of total direct costs. This proportion was, however, a reduction from the 42.5% it constituted in the first year of the GMP.

Figure 15: Durum Export Basis - Direct Costs



Much of this decline is attributable to an increase in gross CWB costs, which rose from \$21.32 per tonne in the 1999-2000 crop year, to \$27.83 in the 2002-03 crop year. Notwithstanding year-to-year fluctuations, this cost element assumed a larger share of the total direct costs tied to 1CWA durum, which increased from 30.1% to 35.0% over the same interval.

Among the other elements in the direct costs attributable to 1CWA durum were:

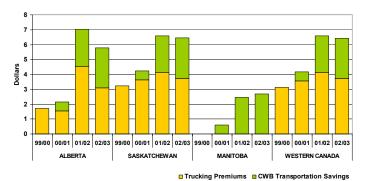
- Trucking Costs: The commercial costs tied to a 40-mile haul fell from \$6.10 per tonne to \$5.94 in the 2002-03 crop year. These are the same values cited earlier with respect to wheat, and denote a similar return to the commercial trucking costs first recorded in the 1999-2000 crop year. On a proportion basis, however, they now account for a lesser share of total direct costs 7.5% in the 2002-03 crop year versus 8.4% four years earlier.
- Primary Elevation Costs: These costs averaged \$9.44 per tonne in the 1999-2000 crop year, and comprised 13.3% of total direct costs. Increases in the tariff rates pushed the cost of elevation up by 16.1% to an average of \$10.96 per tonne in the 2002-03 crop year. This, however, only marginally raised its share of total direct costs to 13.8%.
- Dockage Costs: The cost of terminal cleaning averaged \$3.62 per tonne in the 1999-2000 crop year, and comprised 5.1% of total direct costs. Although these costs have increased by 11.3% to an average of \$4.03 per tonne in the 2002-03 crop year, their share of total direct costs has effectively remained unchanged.
- CGC Weighing and Inspection Fees: These costs remained unchanged at an average of \$0.38 per tonne throughout the course of the past four crop years. On a proportional basis, they constitute only 0.5% of total direct costs.

The trucking premiums paid by grain companies for 1CWA durum deliveries rose by 31.5% between the 1999-2000 and 2001-02 crop years – from an average of \$3.14 per tonne to \$4.13. In the 2002-03 crop year, however, these premiums actually fell by 9.7% to an average of \$3.73 per tonne. As an offset, they have typically provided a reduction of about 5.0% against total direct costs – 4.7% in the 2002-03 crop year itself. It should be noted, that due in large part to the much lower volumes of durum handled in Manitoba, the premiums paid out to producers there have been insignificant.

<sup>&</sup>lt;sup>38</sup> For 1CWA durum, the FAF constitutes a very small portion of the overall applicable freight – 1.4% in the 1999-2000 crop year. Moreover, the average FAF for 1CWA durum has been steadily decreasing. Although not large in absolute terms, the average FAF dropped from \$0.41 per tonne in the 1999-2000 crop year, to a credit of \$0.16 in the 2002-03 crop year since many of the shipping points located in southern Manitoba and southeastern Saskatchewan actually had negative values. When treated as a credit, the FAF actually reduced the freight paid by producers.

The CWB transportation savings reported earlier are equally applicable in the movement of 1CWA durum. In the 2000-01 crop year, this savings amounted to \$0.61 per tonne, and helped reduce total direct costs by 0.8%. By the 2001-02 crop year, however, this savings had increased four-fold - to \$2.47 per tonne - and accounted for an offset to total direct costs of 3.5%. Although the per-tonne savings increased to \$2.70 in the 2002-03 crop year, the offset remained largely unchanged at 3.4%.

Figure 16: Durum Export Basis – Producer Benefits



When examined on a combined basis, these producer benefits have steadily risen

producer benefits have steadily risen

from a total \$3.14 per tonne in the 1999-2000 crop year, to \$4.17 in the 2000-01 crop year, and to \$6.60 in the 2001-02 crop year. However, given the previously noted reduction in the trucking premiums for the 2002-03 crop year, the total value of these benefits fell slightly to \$6.43 per tonne. Nevertheless, their offset value to total direct costs almost doubled during this period – climbing from 4.4% to 8.1%.

### Contributory Changes to Producer Netback - 1 Canada Western Amber Durum (dollars per tonne)

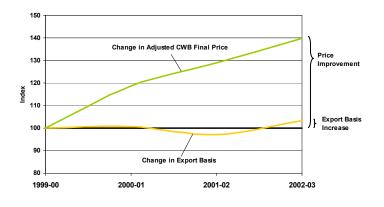
		2000-01	2001-02		2002-03	2002-03 / 1999-2000		
	1999-2000			2002-03	VARIANCE	% VAR		
			Г				1	
Price	\$228.11	\$258.14	\$274.47	\$292.01	\$63.90	28.0%	A	
Direct Costs	70.77	72.88	69.65	79.48	8.71	12.3%	<b>A</b>	
Less: Trucking Premiums CWB Savings	-3.14 0.00	-3.56 -0.61	-4.13 -2.47	-3.73 -2.70	-0.59 -2.70	18.8% N/A	<b>A</b>	
Export Basis	67.63	68.71	63.05	73.05	5.42	8.0%		
Deadwar Natharl	C1C0 10	£400.40	C044 40	£040.00	050.40	20.40/		
Producer Netback	\$160.48	\$189.43	\$211.42	\$218.96	\$58.48	36.4%		

### 4.25 Producer Netback – 1CWA Durum

As in the case of wheat, the visible netback to 1CWA durum producers has risen from an average of \$160.48 per tonne in the 1999-2000 crop year, to \$218.96 in the 2002-03 crop year – a gain of \$58.48 per tonne (or 36.4%) over the course of the past four crop years. And as with wheat, the preponderance of the overall improvement stemmed chiefly from a rise in the price of 1CWA durum.

Of course, these gains do not imply a corresponding increase in gross farm receipts since Western Canadian shipments of durum fell by 9.8% during this period – from 3.7 million tonnes in the 1999-2000 crop year, to 3.3 million tonnes in the 2002-03 crop year.

Figure 17: Relative Change in Producer Netback - Durum



### 4.3 Producer Netback – Expectations for the 2003-04 Crop Year

As discussed in the Monitor's annual report for the 2002-03 crop year, and again briefly in the preceding section, an improvement in the market prices of wheat, durum, canola, and yellow peas, along with changes in their respective export basis, produced steadily greater per-tonne returns for grain producers over the course of the past four crop years.

Moreover, the data revealed that the single largest force behind the improvement in the producer's netback was a positive change in the market price of these grains. And while producers realized significantly higher per-tonne returns than in previous years, sharply diminished volumes also served to contain their overall financial gains.

The GMP provides for the calculation of the producer's netback at the end of any given crop year. This arises chiefly because certain elements integral to that calculation are not available until after the close of the crop year itself. Despite this, the gathering of general price, and input-cost, data provides some insight into the broader financial impact that is likely to be experienced by the producer in the 2003-04 crop year.

### 4.31 Current Price Movements

Throughout much of the first half of the 2003-04 crop year, the CWB's Pool Return Outlook (PRO) for 1CWRS wheat (13.5% protein) floated in a range defined by a low of \$195.00 per tonne, and a high of \$206.00 per tonne. As of January 2004, the PRO was holding to its modest gain, and stood at a level of \$206.00 per tonne. Although this marked a 17.7% decline from the final realized price of \$250.20 per tonne for the 2002-03 crop year, it still surpassed the farmer's initial payment of \$169.95 per tonne by 21.2%.

Much of this general price erosion stemmed from the combined forces of higher global wheat production, continuing export competition, and weaker global demand. Although a moderation in the value of the Canadian dollar lent some degree of price support, it has not been enough to counter these forces.

Similarly, the Vancouver cash price for 1 Canada Canola has also fallen by about 8.5% – from a monthly average of \$414.36 per tonne for the 2002-03 crop year, to about \$379.00 by the end of the first half. As in the case of wheat, much of this price movement stemmed from changes in global market conditions, and reflected the fact that the volume of grain available for sale around the world had increased.

The scope of these price declines suggests that the financial returns accruing to Western Canadian producers – particularly as regards CWB grains – are likely to be reduced in the 2003-04 crop year.

In addition, increases in the area of 3% for both country and terminal elevator handling suggests that the export basis is also likely to post a modest rise. This would have the effect of further eroding the overall financial returns for farmers.

Figure 18: Price Changes – 1CWRS Wheat (dollars per tonne)

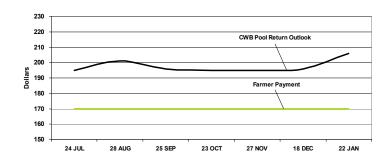
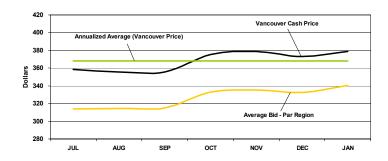


Figure 19: Price Changes – 1 Canada Canola (dollars per tonne)



### 4.4 Producer-Car Loading

As related in the Monitor's annual report for the 2002-03 crop year, the aggregate number of producer-car loading sites had fallen from 706 to 518 over the course of the initial four years of the GMP. This net decline stemmed largely from a reduction of 263 sites local to both CN and CP. To be sure, shortline carriers assumed operation of some 75 of these – pushing their count from 63 to 138. And while the number tied to these latter carriers remained unchanged during the first six months of the 2003-04 crop year, the major railways closed another 20 sites.<sup>39</sup> The overall number in place at the end of the second quarter thus fell by 3.9% to 498.

Nevertheless, the resurgence in grain volumes also brought about a renewed demand for producer-car loading. In point of fact, producer-car shipments during the first half of the 2003-04 crop year increased by 300.2% over that of the same period a year earlier. More importantly, producer-car loadings accounted for about 5.5% of the overall grain volume moved in covered hoppers during the second quarter. On a year-to-date basis, this proportion reached 3.6%. Both values are notably higher than the 2.4% it was estimated to have constituted in the 2002-03 crop year, and underscores the build-up in demand.

As outlined previously, the fundamental issue surrounding the expansion of producer-car loading relates to the producers' ability to secure an adequate supply of railcars. Assuming that producers had been able to secure the 6,626 for which they had placed orders during the first half, its proportion of the overall movement might well have reached 6.1%.

\_

<sup>&</sup>lt;sup>39</sup> The closure of 20 producer-car loading sites by the Class I carriers represents a net reduction. The number of sites operated by Class I carriers actually declined by 26 in the first quarter of the 2003-04 crop year – from 380 to 354. The addition of six other sites during the second quarter, however, increased their number to 360.

# Synopsis – Industry Overview

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

# Highlights – Second Quarter 2003-04 Crop Year

## Grain Production and Supply

- Grain production increased by 51.1% to 47.7 million tonnes.
- First reprieve from widespread drought in the past three growing seasons. Current production level slightly less than 90% of the average for the 1999-2000 and 2000-01 crop years. 0
  - Carry forward stock decreased by 9.6% to 5.5 million tonnes.
- Overall grain supply increased by 41.3% to 53.1 million tonnes.

### Railway Traffic

- Railway movements during the first half increased by 61.3% from the same period a year earlier to 10.2 million tonnes.
  - Reflects greater volume of grain available for movement. 0
- Traffic to all Western Canadian ports experienced an increase 0
- Reflected the settlement of the labour dispute that had disrupted movements in the 2002-03 crop year. Volume to Vancouver increased by 245.2% to 5.6 million tonnes.
- Prince Rupert volume fell by 49.8% to 0.9 million tonnes. 0
  - Volume to Thunder Bay increased 23.4% to 3.3 million tonnes. 0 0

services, and the utilization of shift traditional traffic patterns,

the demand for particular

- Churchill volume increased by 111.8% to 0.4 million tonnes.

## Country Elevator Infrastructure

- Rationalization efforts of the major grain companies moderated significantly
  - Grain delivery points reduced by 1.0% to 286. 0
- Number of country elevators fell by 1.9% to 408. 0

Elevator storage capacity reduced by 0.8% to 5.7 million tonnes.

- Elevators capable of loading in blocks of 25 or more cars fell by five to 264.
  - Accounted for 64.7% of total GHTS elevators. 0
- Share of GHTS primary storage capacity rose to 87.2%

### Railway Infrastructure

0

- Western Canadian rail network remained unchanged at 18,924 route-miles.
  - Abandonment of 129.1 route-miles of infrastructure pending. Southern Manitoba Railway – 64.0 route-miles.
    - 0
- Canadian Pacific Railway 65.1 route miles.
- Great Western Railway placed its 329.1-route-mile operation up for sale in the second quarter.
- Local farmers mounted an effort to purchase the line; transaction contingent on financing. 0
  - CN made a successful bid to purchase BC Rail in a deal valued at \$1.0 billion.
    - Awaits approval of the Competition Bureau. 0

# Terminal Elevator Infrastructure

- Licensed GHTS terminal elevators reduced to 16 from 17.
- Terminal elevator unloads for the first six months increased by 77.8% to 109,116 railcars.

### Indicator Series 1 - Industry Overview

П		_	<b>)</b> 1			<b>&gt;</b>			1	1 1	4	<b>4</b> *	<b>4</b> 1	4	4	<b>4</b>	<b>)</b> 1	<b>&gt;</b>	1		<b>&gt;</b> )	▶ •	◀
%VAR	51.1% -9.6% 41.3%	61.3%	-1.0% -0.8%	-1.9%	-1.9%	-77.4%	-87.0% n/a		0.0%	%0.0 0.0%	78.6%	52.6%	0.4% 0.0%	99.2%	57.1%	99.2% V 3%	4.3% -0.4%	-3.1%	0.2%		-5.9%	-3.3%	77.8%
YTD (1)	47 655.3 5,488.9 53,144.2	10,198.6									3,267.8	6,539.7	ΩΩ.	947.7	8,859.7	947.7						077	109,116
2003-04 Q3	1 1	1		-	-		- n/a					•				-	' '	,	-		-	-	-
, ,		4,408.3	286 5,699.9		264	7	15 n/a		4,495.8	18,923.9	1,324.3	2,883.1	3.363.7	494.6	3,712.9	494.6	260	1,520.6	4,132.0		16	2,642.6	49,214
ð	47,655.3 5,488.9 53,144.2	5,790.2	286 5,736.9	410	267	3	9 17/8		4,495.8	18,923.9	1,943.4	3,656.6	3,363.7	453.1	5,146.9	453.1 138	258	1,543.7	4,140.0		16	2,642.6	208,802
2002-03	31,539.9 6,070.8 37,610.7	12,736.4	289 5,747.3	416	269	31	115 89		4,495.8	8,923.9	3,670.1	8,601.2	3 363 7	1,111.7	1,159.6	1,111./	261	1,569.3	4,123.5		17	2,733.6	125,339
2001-02 20	42,5414 3 8,750.6 51,292.0	18,765.1	345 6,125.2	500	292	29	310 107		495.8		228.7	048.0	270.0 106.0	061.0	215.7	180						2,733.6	
2000-01	54 072.6 9,775.6 63,848.2	25.885.5	540 7,137.0	781	319	23	159 145		4,592.8	19,020.9	8,407.3	16,749.6	3 106 0	2,335.1	22,821.7	2,335.1	440	2,243.7	4,776.6		16	2,703.6	2/1,606
1999-00	55,141,7 7,418.2 62,559.9	26,441.0	623 7,443.9	917	317	43	130		4,876.6	19,390.1	8,683.6	16,976.0	3.043.0	2,090.5	23,569.1	2,090.5	513	2,475.4	ά		15	2,678.6	2/8/25
Notes	(1) (1) (1)	(1)	(2)	2 2 2 2 2 3	(2) (2) (2)	(2) (2)	(2) (2) (2) (3) (2) (3)			(2)	(1)	(1)	(1)		(1)						_	(2)	_
Indicator Description	Production and Supply (Subseries 1A) Crop Production (000 tonnes) Garry Forward Stock (000 tonnes) Garri Supply (000 tonnes)	Rail Traffic [Subseries 1B] Railway Grain Volumes (000 tonnes) – Origin Province Railway Grain Volumes (000 tonnes) – Primary Commodities Railway Grain Volumes (000 tonnes) – Detailed Breakdown	Country Elevator Infrastructure (Subseries 1C) Grain Delivery Points (number) Grain Elevator Storage Capacity (000 tonnes)		Grain Elevators Capable of Incentive Loading (number) – Province Grain Elevators Capable of Incentive Loading (number) – Railway Class Grain Elevators Capable of Incentive Loading (number) – Railway Line Class	Grain Elevator Openings (rumber) – Province Grain Elevator Openings (rumber) – Railway Class Grain Elevator Openings (rumber) – Railway Line Class	Grain Elevator Closures (number) – Province Grain Elevator Closures (number) – Raliway Diass Grain Elevator Closures (number) – Raliway Line Class Grain Delivery Points (number) – Accounting for 80% of Deliveries	Railway Infrastructure [Subseries 1D]	Railway Infrastructure (route-miles) – Grain-Dependent Network		Railway Grain Volumes (000 tonnes) – Grain-Dependent Network			Shortline Railway Grain Volumes (000 tonnes)		Railway Grain Volumes (UUU tonnes) – Class 2 and 3 Carriers Grain Flavators (number) – Grain-Danandant Natwork	Grain Elevators (number) – Grain-Dependent Network Grain Elevators (number) – Non-Grain-Dependent Network	Grain Elevator Storage Capacity (000 tonnes) – Grain-Dependent Network	Grain Elevator Storage Capacity (000 tonnes) – Non-Grain-Dependent Network	Terminal Elevator Infrastructure	Teminal Elevators (number)	Terminal Elevator Storage Capacity (000 tonnes)	Iemnia Elevator Unloads (number)
Table	1A-1 1A-2	18-1 18-2 18-3		10-1 10-2 10-3			10-10 10-12 10-12 13		1D-1						1D-5		10,6	10-6	1D-6				1E-2

<sup>(1) –</sup> 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 value as compared to the same period a year earlier. (2) – Ata the value of the most recent reporting period as compared to that the value of the most recent reporting period as compared to that at the end of the preceding reporting period 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 reporting 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 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.

# Synopsis – Commercial Relations

CWB is committed to tender at the introduction, and gradual element of these reforms is One of the objectives of the commercial orientation. To reforms was to provide the Thunder Bay and Churchill. (CWB) grain shipments to the 2002-03 crop year, the expansion of tendering for Vancouver, Prince Rupert, Western Canadian ports. shipments to the ports of government's regulatory Canadian Wheat Board this end, a comerstone least half of its grain GHTS with a more

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

## Highlights – Second Quarter 2003-04 Crop Year

### Tendering

- The Canadian Wheat Board's (CWB) tendering commitment was reduced to a maximum of 20% effective 1 August 2003.
  - 99 tender calls were issued by the CWB during the first six months of the 2003-04 crop year.
- Calls for the movement of 1.3 million tonnes to export positions in Western Canada. 0
- Vancouver delivery 44.0%; Thunder Bay 27.0%; Prince Rupert 25.4%; and Churchill 3.6%
  - 978 bids received; offered an aggregated 5.4 million tonnes.
    - Response rate during the first half was sharply higher than in previous crop years. 0
      - Denoted heightened competition between grain companies.
- Vancouver deliveries 44.7%; Thunder Bay 33.9%; Prince Rupert 18.0%; and Churchill 3.3%. 199 contracts concluded for the movement of 1.1 million tonnes.
- Represented 18.1% of volume shipped by CWB to port positions in Western Canada. No contracts concluded for the movement of malting barley in the first six months.

0 0 0

- Fell marginally below the CWB's maximum commitment of 20%. Tenders for 14.4% of the tonnage called either partially, or not at all, filled.
  - 121,000 tonnes unacceptable bid price. 0
    - 41,900 tonnes insufficient quantity bid. 0
- 22,000 tonnes non-compliance with tender specifications.
- 6,600 tonnes no bid. 0
- Proportion moving in blocks of 50 or more cars climbed to 71.5% from 62.1% in the 2002-03 crop year. Proportion of tendered grain volume moving in multiple car blocks increases slightly to 93.5%.
- 85.4% of all tendered movements originated at high-throughput elevators.
  - Marginally higher than the 83.0% observed in the 2002-03 crop year. 0
- CWB estimated that the overall transportation savings for the first half rose by 49.2% to \$19.1 million.
  - Underscored heightened competition in tender bids. 0

- Other Commercial Developments

   CWB restructured its tendering program, and reduced its commitment from 50%.
- Now focused on a fixed 40% of the CWB's overall Western Canadian grain movement.
- Specific provisions for up to one-half to move under tendering, and the remainder under an advance car awards program Ocean freight rates more than doubled in the first half.
  - Attributed to a high demand for vessels to service China's growing international trade. 0
    - Has had an adverse impact on both CWB and non-CWB grain sales. 0
- Sharp increase in grain volume moved through the port of Churchill.
- Prompted by a financial aid package from the governments of Canada and Manitoba, and the assumption of responsibility for marketing of the port by Louis Dreyfus. 0
- Railway car supply problems began to significantly impact GHTS operations in the second quarter.
- Hard-hit by adverse winter operating conditions, CP embargoed grain traffic to the west coast in late January 2004. CP customers redirect grain traffic through CN-served facilities wherever possible. 0 0
- Producer-car loading increased by a factor of four in the first quarter to 3,902 railcars.
  - Car supply appeared to be the chief limitation to greater growth. 0

## Indicator Series 2 - Commercial Relations

			<b>-</b>		4		4	<b>-</b>	<b></b>		<b></b>	•	1	•								•	-	<b>-</b>	4	•	<u> </u>	◀	
	%VAR		-53.9%		26.6%		74.8%	-62.2%	-38.1%		-80.4%	-1.0%	0.0	-38.1%								%8:9	-11.5%	-11.3%	63.2%	123.7%	4.8%	14.2%	
	YTD (1)		1,327.9		5,432.8		5,990.9	18.1%	1,083.7		191.5	51.2	0.0	1,083.7								39.3	16.9	17.2	-\$23.04	-\$24.07	71.1%	28.9%	
2003-04	Q3		1		-			,			•	-	1	1								•						1	
	<b>Q2</b>		419.3		1,962.5		2,563.5	14.7%	376.4		51.1	29.7	0.0	376.4								36.8	16.3	17.5	-\$23.04	-\$24.07	70.8%	29.2%	
	Q		908.6		3,470.3		3,427.4	20.6%	707.3		140.4	21.6	0.0	707.3								40.7	17.3	17.0	-\$22.09	-\$22.02	71.3%	28.7%	
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	2002-03		5,794.2		11,778.1		8,000.6	46.1%	3,685.2		1,742.5	126.8	0.0	3,685.2								35.6	19.3	20.0	-\$16.99	-\$17.27	72.9%	27.1%	
	2001-02		4,961.4		11,400.8		12,787.3	27.9%	3,566.0		1,487.3	96.1	71.3	3,494.7								38.3	14.8	16.7	-\$18.07	-\$14.17	77.2%	22.8%	
	2000-01		4,888.0		1,629.2		15,892.7	5.4%	858.6		4,312.4	0.0	280.8	577.8								n/a	n/a	n/a	n/a	n/a	n/a	n/a	
	1999-00		n/a		n/a		n/a	n/a	n/a		n/a	n/a	n/a	n/a								n/a	n/a	n/a	n/a	n/a	n/a	n/a	
;	Notes		(E)	(t)	(1)	<u>(£</u>	(1)(2)	(1)(2)	1~	(1)(2)	$\overline{}$	(1)	(1)(2)		(3)			(3)											
1	Indicator Description	Tendering [Subseries 2A]	Tenders Called (000 tonnes) – Grain	Tenders Called (000 tonnes) – Grade	Tender Bids (000 tonnes) – Grain	Tender Bids (000 tonnes) – Grade	Total CWB Movements (000 tonnes)	Tendered Movements (%) – Proportion of Total CWB Movements	Tendered Movements (000 tonnes) – Grain	Tendered Movements (000 tonnes) – Grade	_	Ε'	Tendered Movements (000 tonnes) – FOB	Tendered Movements (000 tonnes) – In-Store	Distribution of Tendered Movements – Port	Distribution of Tendered Movements – Railway	Distribution of Tendered Movements – Multiple-Car Blocks	Distribution of Tendered Movements – Penalties	Distribution of Tendered Movements – Province	Г	Distribution of Tender Delivery Points (number ) – Contracted Cars	Average Tendered Multiple-Car Block Size (railcars) – Port	Railway Car Cycle (days) – Tendered Grain	iain	/heat			Market Share (%) – CWB Grains – Non-Major Grain Companies	
	Table		2A-1	2A-2	2A-3	2A-4	2A-5	2A-5	2A-5	2A-6	2A-7	2A-8	2A-9	2A-9	2A-10	2A-11	2A-12	2A-13	2A-14	2A-15	2A-16	2A-17	2A-18	2A-18	2A-19	2A-19	2A-20	2A-20	

<sup>(1) –</sup> Year-To-Date values are reported for volume-related indicators only (i.e., Tenders Called). The accompanying percentage variance denotes the relative change in the current YTD value as compared to the same period a year earlier. Significant variances may be observed as a result of a change in the Canadian Wheat Board's tendering commitment.
(2) – Includes tendered malting barley volumes.
(3) – Includes tendered malting barley volumes.
(3) – Includes 24-16 swamine 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 table in volume 2 of the quarterly report (Data Tables).

# Synopsis – System Efficiency

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

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

## Highlights – Second Quarter 2003-04 Crop Year

### Trucking

Composite Freight Rate Index for short-haul trucking remained unchanged at 100.0 for the first half

### Country Elevators

- Throughput increased by 40.4% to 13.9 million tonnes in the first six months of the crop year.
  - The average elevator capacity turnover ratio increased by 42.1% to 2.7 turns.
    - Average weekly stock level increased by 19.5% to 2.9 million tonnes.
- Average number of days-in-store fell 14.8% to 39.1 days.
- Significant reduction from 59.9-day average reached in the third quarter of the 2002-03 crop year.
  - Average weekly stock-to-shipment ratio declined by 18.2% to 5.4 for the first six months.
- Denotes reduction in the overburden of elevator stocks.
- Posted tariff rates for elevator handling activities increased by approximately 3% at the beginning of the crop year.

### Rail Operations

0

0

- Average car cycle decreased by 11.8% to 17.3 days during the first half of the crop year. Significant reduction reflected the effects of increased grain volumes.
- Average empty transit time decreased 15.7% to 7.9 days.
- Average loaded transit time decreased 8.1% to 9.3 days.
- Second quarter's average climbed to 17.8 days from 16.8 days in the first quarter.
- Proportion of grain traffic moving under incentive programs climbed marginally to 75.0% in the first half. Reflected impact of winter on railway operations.
  - Impacted by a restructuring of the railways' incentive programs 0
    - CP significantly increased the discounts for movements in 100 or more railcars. CN eliminated all discounts for movements in blocks of 25-49 railcars.
- Migration towards movements in blocks of 100 or more cars

0

0

- First and second quarter proportions increased to 23.3% and 27.1% respectively.
  - Up sharply from the 2002-03 crop year's 19.2% average.
- Railway incentive payments estimated at \$33.3 million for the first half up 82.3%. Reflected effects of increased grain volumes and higher discounts.
- Average-earned discount reached \$4.53 per tonne in the first half.
- A significant change to the complementary structure of CN and CP's posted freight rates was made at the beginning of the crop year. CN's rates were generally maintained at 2002-03 crop year levels. CP's rates generally decreased by about 1.0% from most origins. 0
  - Appeared to have prompted an increase in CP's market share in the first quarter.

### Terminal Elevators and Port Performance

- Terminal throughput increased by 61.8% to 9.6 million tonnes during the first half.
- 386 vessels loaded at Western Canadian ports during the first six months of the crop year
  - Average time in port increased by 4.8% to 4.4 days.
- Posted tariff rates for elevator handling activities increased by approximately 3% in the first quarter.

### Indicator Series 3 – System Efficiency

	1	<b>44</b>	4		44	4444	1		
% VAR	%0.0	40.4% 42.1% 19.5% -14.8%	60.4%	-15.7% -8.1% -11.8%	52.8% 63.0%	82.3% 78.6% 52.6% 60.4%	n/a	61.8%	
YTD (1)		13,900.5 2,918.6 39.1 5.4	9,807.4	7 6 7	7,356.5	\$33.3 363.4 226.6 259.1		9,642.8 1,134.2 20.0 4.4	
2003-04 Q3			1	1 1 1		1 1 1 1	n/a		
<b>Q2</b>	100.0	6,819.4 1.3 2,904.6 38.8 5.3	4,207.4	8.0 9.8 17.8	3,347.1	\$15.4 294.6 199.8 222.3	n/a	4,765.1 1,088.4 1,088.4 1,18.7 1,4.5 n/a	
δ	100.0	7.081.1 2.931.5 39.3 5.5	5,600.0	7.8	1,590.7	\$17.9 432.3 253.4 295.9	n/a	4877.7 1194.9 2 2 4 4 2 2 4 4 2 2 4 4 3 ne	
2002-03	100.0	19.052.1 3.7 2.502.0 47.9	12,271.3	10.2	3,093.3 9,178.0	\$36.4 204.1 149.0 162.1	\$24.52	11,806.9 5.0 1,016.5 21.7 4.3 4.3 \$50.8	
2001-02	100.0	25,923.8 4.5 2.699.8 38.0 5.4	18,276.6	8.3 8.8 17.1	4,219.3	\$57.2 340.8 208.8 240.5	\$25.28	18.004.6 6.6 1.113.6 20.6 4.9 \$2.9	
2000-01	102.5	33,281.9 3,494.7 3,833 38.3 5,4	25,156.8	7.6 8.8 16.4	7,906.2 17,250.7	\$60.1 450.3 289.4 328.6	\$25.83	23.941.3 8.9 1.192.7 17.5 17.5 5.9 \$16.1	
1999-00	100.0	32,493.9 3 699.3 41.7 6.2	25,659.6	10.7 9.2 19.9	12,735.5 12,924.2	\$31.1 442.3 292.4 330.3	n/a	23,666.6 9.1 1,216.2 18.6 18.6 4.3 \$7.6 \$7.6	
Notes	(2)	(1) (1) (1) (1) (1) (3)			1 1 1		(2)(4)	(1) (1) (1) (1) (1) (1) (1) (1) (1) (2) (3) (2) (3)	
Indicator Description	Trucking [Subseries 3A] 3A-1 Composite Freight Rate Index – Short-haul Trucking	Country Elevators [Subseries 3B]  3B-1 Grain Volume Throughput (100 tonnes) 3B-2 Average Elevator Capacity Turnover Ratio 3B-3 Average Weekly Elevator Stock Level (1000 tonnes) 3B-4 Average Days-In-Store (1ays) 3B-5 Average Days-In-Store (1ays) 3B-6 Average Weekly Stock-to-Shipment Ratio – Grain 3B-6 Average Handling Charges – Country Delivery Points	1 1 1	Railway Car Cycle (days) – Empty Transt Time Railway Car Cycle (days) – Loaded Transt Time Railway Car Cycle (days) – Loaded Transt Time		Popper Car Grain Volumes (\$ millions) – incentive Discount Value Traffic Density (tonnes per route mile) – Grain-Dependent Network Traffic Density (tonnes per route mile) – Non-Grain-Dependent Network Traffic Density (tonnes per route mile) – Total Network Composite Freight Rates (\$ per route mile) – Total Network	Multiple-Car Shipment Incentives (\$ per tonne) – Rail Effective Freight Rates (\$ per tonne) – CTA Revenue Cap	Terminal Elevator and Port Performance (Subseries 3D)  Annual Port Throughput (000 tonnes) – Grain  Average Veekly Terminal Elevator Capacity Turnover Ratio  Average Weekly Terminal Elevator Stock Level (100 tonnes)  Average Weekly Stock-to-Shipment Ratio – Grain  Average Weekly Stock-to-Shipment Ratio – Grade  Average Weekly Stock-to-Shipment Ratio – Grade  Average Vessel Time in Port (14ys)  Distribution of Bertis per Vessel  Annual Denurrage Costs (Smillions)  Annual Denurrage Costs (Smillions)  Average Handling Charges - Terminal Elevators	
Table	3A-1	38-1 38-2 38-3 38-4 38-5 38-6 38-6 38-6 38-6 38-6	3C-1 3C-2 3C-3	3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3	3C-5 3C-5	90-74 90-74 90-74 90-8	30-9 30-10	3D-1 3D-2 3D-2 3D-6 3D-6 3D-6 3D-6 3D-10 3	

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

(2) – Quarterly values for non-volume-related indicators (i.e., Composite Freight Rate Index) are "as at" the end of the reporting period. The accompanying percentage variance denotes the relative change in the value of the most recent reporting period as nonpared to that at the end of the preceding crop year.

(3) – Changes in the indicator of the preceding of the value of the summary framework presented here. The reader is encouraged to consult the corresponding table in volume 2 of the quarterly report (Data Tables).

(4) – Statistics relating to effective raliway 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 2002-03 crop year.

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

# Synopsis – Service Reliability

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

## Highlights - Second Quarter 2003-04 Crop Year

### Port Performance

- Average weekly stock-to-vessel-requirements ratios show that sufficient grain inventories were on hand in both Vancouver and Thunder Bay to meet short-term demand.
- Wheat -4.3 for the first six months of the 2003-0 crop year. Vancouver 0
  - Canola 3.0.

    - Thunder Bay

0

- Wheat 5.0 for the first six months of the 2003-04 crop year; down by 29.7%. Canola 3.6; down by 6.1%.
- Average stock-to-shipment ratios provide similar evidence of the ability of these ports to meet short-term demand through the first three months of the 2003-04 crop year.
  - Vancouver 0
- CWB grains 3.5 for the first six months of the 2003-04 crop year
  - Non-CWB grains 3.4. Thunder Bay

- CWB grains 5.9 for the first six months of the 2003-04 crop year; down by 15.4%.
  - Non-CWB grains 3.7; down 14.6%

### Indicator Series 4 - Service Reliability

			, I	1	-	<b>-</b>		1	1	<b>-</b>	<b>-</b>	1	1	1	1
	%VAR		n/a	n/a	-29.7%	-6.1%		n/a	n/a	-15.4%	-14.6%	n/a	n/a	n/a	n/a
	YTD (1)		4.3	3.0	5.0	3.6		3.5	3.4	6.9	3.7				
2003-04	Q3			-	-	•		-	•	•	•	n/a	n/a	n/a	n/a
	Q2		4.1	2.8	4.7	5.2		3.5	2.6	5.2	5.0	n/a	n/a	n/a	n/a
	Ω1		4.6	3.1	5.3	2.7		3.5	4.3	6.2	2.3	n/a	n/a	n/a	n/a
	2002-03		4.9	2.9	6.8	4.3		4.3	4.3	9.9	5.0	\$49.7	\$58.6	\$22.4	\$30.1
	2001-02		2.3	3.3	4.3	2.6		3.1	4.1	5.5	2.9	\$139.7	\$64.2	\$49.1	\$34.4
	2000-01		2.5	1.9	5.3	1.9		2.9	2.6	5.2	2.8	\$198.9	\$75.5	\$48.2	\$34.4
	1999-00		3.1	2.5	5.6	2.8		3.5	3.6	4.6	3.3	\$192.7	\$82.1	\$63.3	\$31.3
	Notes		(1)(2)	(1)(2)	(1)	(1)	(1)(3)	(1)(2)	(1)(2)	(1)	(1)	(1)(4)	(1)(4)	(1)(4)	(1)(4)
	Indicator Description	Port Performance [Subseries 4A]	Avg. Weekly Stock-to-Vessel Requirements Ratio – VCR – Wheat	Avg. Weekly Stock-to-Vessel Requirements Ratio – VCR – Canola	Avg. Weekly Stock-to-Vessel Requirements Ratio – TBY – Wheat	Avg. Weekly Stock-to-Vessel Requirements Ratio – TBY – Canola	Avg. Weekly Stock-to-Vessel Requirements Ratio – Grade	Avg. Weekly Stock-to-Shipment Ratio – VCR – CWB Grains	Avg. Weekly Stock-to-Shipment Ratio – VCR – Non-CWB Grains	Avg. Weekly Stock-to-Shipment Ratio – TBY – CWB Grains	a.	Terminal Handling Revenue (\$millions) – Vancouver	Terminal Handling Revenue (\$millions) – Thunder Bay	CWB Carrying Costs (\$millions) – Pacific Seaboard	CWB Carrying Costs (\$millions) – Thunder Bay
	Table		4A-1	4A-1	4A-1	4A-1	4A-2	4A-3	4A-3	4A-3	4A-3	4A-4	4A-4	4A-4	4A-4

(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 as compared to the same period a

year earlier.

(2) — The lock-out of the GWU in Vancouver effectively prevented grain from being moved through the port's licensed terminal elevators for much of the first half of the 2002-03 crop year. Owing to the limited availability of relatable data during this period, direct camparisons are not possible.

(3) — Changes in the indicator cited cannot be depicted within the summary framework presented here. The reader is encouraged to consult the corresponding table in volume 2 of the quarterly report (Data Tables).

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

# Synopsis – Producer Impact

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

0

## Highlights – Second Quarter 2003-04 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 \$169.95 per tonne.
- Represents a 32.1% reduction from the final realized price for the 2002-03 crop year of \$250.20 per tonne. Reduction largely fuelled by better crop production in 2003; and increased international competition.
  - PRO reaches \$206.00 per tonne by the end of the second quarter. 0
    - Represents a 21.2% gain over farmer's initial payment.

      - Recent changes in input costs:
- Country elevator handling up by about 3% for most activities and commodities. 0
- Rail transportation down by as much as 1.0% for most CP origins; CN rates largely unchanged. Terminal elevator handling up by 3% for most activities and commodities.
  - 0
- Changes in the PRO for 1 CWRS wheat, and input costs to the export basis, suggests a reduction in the producer's netback for CWB grains in the 2003-04 crop year

# Export Basis and Producer Netback – Non-CWB Commodities

- Price reaches \$379.00 per tonne by the end of the second quarter. Changes in Vancouver cash price for 1 Canada canola:
- Represents a 8.5% reduction from the monthly average of \$414.36 per tonne for the 2002-03 crop year.
  - Reduction largely fuelled by better crop production in 2003; and changes in global market conditions.
- Recent changes in input costs:
- Country elevator handling up by about 3% for most activities and commodities. 0
- Rail transportation down by as much as 1.0% for most CP origins; CN rates largely unchanged. 0
  - Terminal elevator handling up by 3% for most activities and commodities. 0
- Changes in the price of 1 Canada canola, and input costs to the export basis, suggests a reduction in the producer's netback for non-CWB commodities in the 2003-04 crop year.

### Producer-Car Loading

- Number of producer-car-loading sites fell by 3.9% to 498 in the first half.
- Producer-car shipments increased by 300.2% to 3,902 railcars in the first six months.
  - Growth contingent on an adequate supply of railcars.

### Indicator Series 5 - Producer Impact

									<b>•</b>	1	<b>-</b>	◀	
	%VAR								-5.3%			300.2%	
	YTD (1)										-	3,902	
2003-04	<b>Q</b> 3								-				
	Q2								360	138	498	2,580	
	Q1								354	138	492	1,322	
	2002-03			\$56.65	\$73.05	\$48.97	\$83.19		380	138	518	3,209	
	2001-02			\$50.39	\$63.05	\$42.01	\$70.97		386	127	513	6,583	
	2000-01 2001-02			\$52.29	\$68.71	\$49.11	\$72.72		381	122	503	4,724	
	1999-00						\$54.76		415			3,441	
	Notes			(1)(3)	(1)(3)	(1)(3)	(1)(3)		(2)	ers (2)	(2)	(1)	
	Indicator Description	Export Basis	Western Canada	CWRS Wheat (\$ per tonne)	CWA Durum (\$ per tonne)	1 Canada Canola (\$ per tonne)	Canadian Large Yellow Peas – No. 2 or Better (\$ per tonne)	Producer-Car Loading	ites (number) – Class 1 Carriers	Έ	Producer-Car-Loading Sites (number) – All Carriers	5B-2 Producer-Car Shipments (number) – Covered Hopper Cars (	
	Table	Expc	Wesi	5A-10 1	5A-10 1	5A-10 1	5A-10 Canadian I	Prod	5B-1 Prod	ш.	ľ	5B-2 Prod	

<sup>(1) –</sup> Year-To-Date values are reported for volume-related indicators only (i.e., Producer-Car Shipments). The accompanying percentage variance denotes the relative change in the current YTD value as compared to the same period a year earlier. (2) – Quartenty values for non-volume-related indicators (i.e., Producer-Car-Loading Sites) are "as ai" the end of the reporting period. The accompanying percentage variance denotes the relative change in the value of the most recent reporting period as compared to that at the end of the preceding crop year.

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

### Appendix 1: Program Background

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

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

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

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

### • Series 1 – Industry Overview

Measurements relating to annual grain production, traffic flows and changes in the GHTS infrastructure (country and terminal elevators as well as railway lines).

### • Series 2 – Commercial Relations

Measurements focusing on the tendering activities of the Canadian Wheat Board as it moves towards a more commercial orientation as well as changes in operating policies and practices related to grain logistics

### • <u>Series 3 – System Efficiency</u>

Measurements aimed at gauging the operational efficiency with which grain moves through the logistics chain.

### • Series 4 – Service Reliability

Measurements focusing on whether the GHTS provides for the timely delivery of grain to port in response to prevailing market demands.

### • Series 5 – Producer Impact

Measurements designed to capture the value to producers from changes in the GHTS, and is focused largely on the calculation of "producer netback."

### Appendix 2: Acknowledgements

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

Agricore United

Agricultural Producers Association of Saskatchewan

Agriculture and Agri-Food Canada

Alberta Agriculture, Food and Rural Development

Alberta Transportation
Alberta RailNet

British Columbia Railways

Canadian Canola Growers Association

Canadian Grain Commission

Canadian Maritime Chamber of Commerce

Canadian National Railway
Canadian Pacific Railway

Canadian Ports Clearance Association Canadian Ship Owners Association Canadian Special Crops Association Canadian Transportation Agency

Canadian Wheat Board Cando Contracting Ltd.

Cargill Limited

CMI Terminal

ConAgra Grain, Canada
Gardiner Dam Terminal
Government of BC
Grain Growers of Canada
Great Sandbills Terminal

Great Sandhills Terminal
Great Western Rail

Inland Terminal Association of Canada

James Richardson International Ltd. (Pioneer Grain)

Keystone Agricultural Producers Louis Dreyfus Canada Ltd. Mainline Terminal Ltd. Manitoba Agriculture

Manitoba Transportation and Government Services

Mid-Sask Terminal Ltd.

Mission Terminal Inc.

National Farmers Union

North East Terminal Ltd.
North West Terminal Ltd.

OmniTRAX Canada, Inc.

Parrish & Heimbecker Ltd.

N.M. Paterson & Sons Limited

Port of Churchill

Port of Prince Rupert

Port of Thunder Bay

Port of Vancouver

Prairie West Terminal

Prince Rupert Grain Ltd.

Rail America

Red Coat Road and Rail

Saskatchewan Agriculture and Food

Saskatchewan Highways and Transportation

Saskatchewan Association of Rural Municipalities

Saskatchewan Wheat Pool

South West Terminal Statistics Canada

Terminal 22 Inc

Transport Canada

Vancouver Wharves Ltd. (BCR Marine)

Western Barley Growers Association

Western Canadian Wheat Growers Association

Western Grain By-Products Storage Ltd.

Western Grain Elevator Association

Weyburn Inland Terminal Ltd.

Wild Rose Agricultural Producers

Winnipeg Commodity Exchange



### Members of the Quorum Corporation Advisory Board (as of 31 May 2004)

Mark A. Hemmes

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

J. Marcel Beaulieu

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

Richard B. Boyd

Senior Vice President, Canadian National Railway Company (retired) Edmonton, Alberta

A. Bruce McFadden

Director – Research and Analysis, Quorum Corporation Edmonton, Alberta

Shelley J. Thompson

President, SJT Solutions Southey, Saskatchewan

### Members of the Quorum Corporation Grain Monitoring Team

Mark Hemmes President

Marcel Beaulieu Director – Research and Analysis Bruce McFadden Director – Research and Analysis

Vincent Roy Senior Technical Officer Hongliang (Bill) Zhuang Senior Developer

### **Corporate Offices**

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

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

Website: <a href="www.quorumcorp.net">www.quorumcorp.net</a>
Email: <a href="mailto:info@quorumcorp.net">info@quorumcorp.net</a>

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