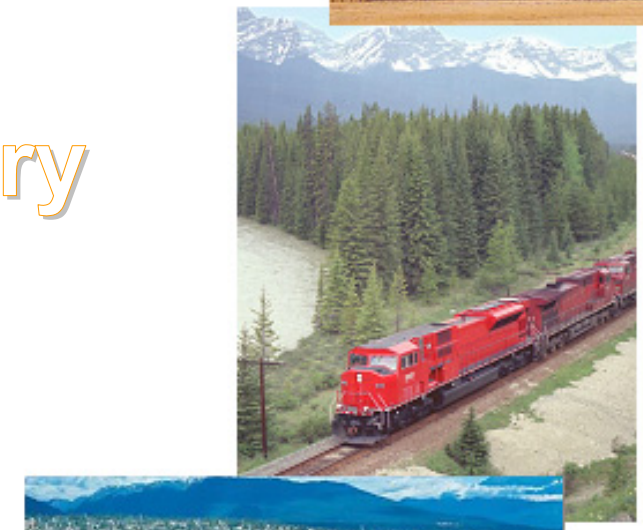
First Quarter
2002-2003 Crop Year



1 Summary Report

Monitoring the Canadian Grain Handling and Transportation System

Submitted to:

Government of Canada / Gouvernement du Canada

Quorum Corporation

Foreword

In keeping with the federal government's Grain Monitoring Program (GMP), the ensuing report focuses on the performance of the Canadian Grain Handling and Transportation System (GHTS) for the three-month period ended October 31, 2002. In addition to providing a current accounting of the indicators maintained under the GMP, its also outlines the trends and issues manifest in the movement of Western Canadian grain during the first quarter of the 2002-03 crop year.

As established towards the end of the 2001-02 crop year, the quarterly reports of the Monitor are now issued in two volumes: the Summary Report (volume 1); and the Data Tables (volume 2). The former provides a general overview of the most noteworthy findings, trends or industry activity, and contains a series of abridged data tables that summarize the various indicators used in assessing GHTS performance. The companion volume, Data Tables, is home to the more detailed indicator statistics that are the cornerstone of the GMP. Those interested in this latter volume are directed to the Monitor's website (www.quorumcorp.net), from which a copy may be directly downloaded.

This report constitutes the fifth in a series of quarterly and annual submissions prescribed by the GMP. Intended as part of a larger time series, the indicators that follow largely compare current year GHTS performance to that of the preceding 2001-02 crop year. Nevertheless, comparisons are also drawn to both the 1999-2000 and 2000-01 crop years whenever a broader contextual framework is deemed appropriate.

QUORUM CORPORATION

Edmonton, Alberta
March 2003

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Findings

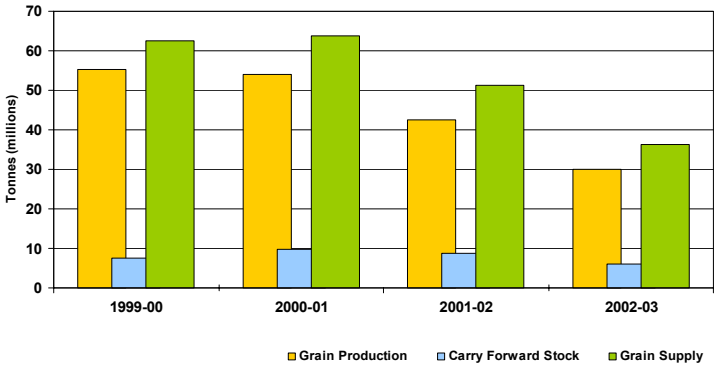
The 2002-03 crop year is proving to be another difficult year for many of the stakeholders in Canada's Grain Handling and Transportation System (GHTS). At the heart of this difficulty is the significant decline in the volume of grain made available for movement as a result of worsening drought conditions in Western Canada.

1.0 Industry Overview

1.1 Grain Production and Supply

Activity in the GHTS has been heavily influenced by the widespread drought that has adversely impacted Western Canadian grain production for the second growing season in a row. Overall grain production for the 2002-03 crop year fell by 29.3% from the year before to 30.1 million tonnes. Moreover, the severity of the drought is reflected in the fact that this level of production is about half – 55.1% – of the 54.6-million-tonne average produced for the 1999-2000 and 2000-01 crop years.

Figure 1: Western Canadian Grain Supply

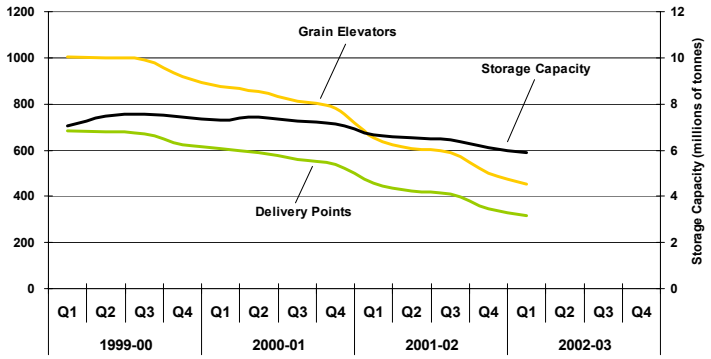


Coupled with a decline of 30.6% in carry-forward stocks, the overall volume of grain made available for movement in the 2002-03 crop year totalled 36.1 million tonnes – some 15.2 million tonnes (or 29.6%) less than the year before. This is mirrored in deteriorating country elevator throughput, railway traffic volume, and terminal elevator handlings for the first three months of the 2002-03 crop year – each having fallen by a factor of about one-third from that recorded for the same period a year earlier.

1.2 Country Elevator Infrastructure

Against this backdrop, the grain companies have continued to rationalize their network of country elevators. During the first three months of the 2002-03 crop year, a further 48 elevators (or 9.6%) were culled from the system. This leaves but 452 of the 1,004 elevators recorded as at August 1, 1999, still licensed. Similarly, the number of grain delivery points has dropped proportionately. As at October 31, 2002, the number of grain delivery points had fallen to 314 – a 9.0% reduction from the 345 observed at the end of the 2001-02 crop year; and a 54.1% reduction from the 684 seen at the beginning of the GMP. Much of this reduction has centred on the elevators located in Saskatchewan – which continues to account for slightly more than half of all such facilities in Western Canada.

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



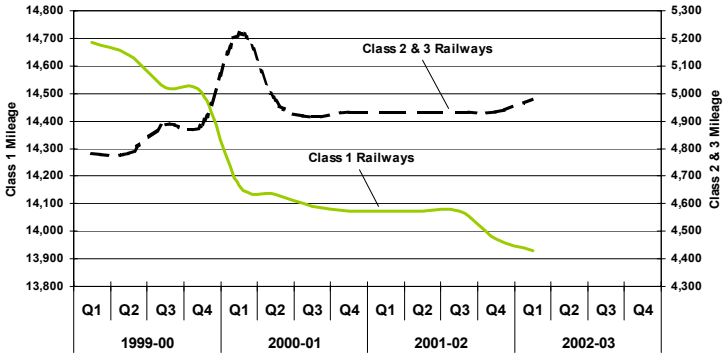
At the same time, the associated storage capacity of the system decreased by 3.7% since the beginning of the current crop year – to 5.9 million tonnes. Despite this comparatively modest reduction, the 2002-03 crop year was the first to witness a fall in overall storage capacity to a level below 6.0 million tonnes. Since the beginning of the GMP, a total of 1.1 million tonnes of net storage capacity (or 16.0%) has been removed from the system as a whole. In contrast with the sharper decline noted with respect to the number of country elevators, much of this reduction in associated storage has occurred over the course of the past 15 months.

The differential between the rate of decline in elevators, and associated storage capacity, reflects the GHTS's continuing evolution into a network of fewer facilities, having comparatively higher storage capacities, and the ability to load railcars in larger block sizes. Whereas only 29.8% of the system's elevators were able to load 25 or more railcars at a time at the beginning of the GMP, by the end of the first quarter of the 2002-03 crop year, that proportion had effectively doubled – to 62.4%.

1.3 Railway Infrastructure

During the latter half of the 2001-02 crop year, CN had reached tentative agreements for the transfer of two separate branch lines to two new shortline operators. These transactions entailed the leasing of some 260 route-miles of infrastructure located in Saskatchewan.

Figure 3: Western Canadian Railway Infrastructure (route-miles)



The first of these involved the leasing of the Cudworth subdivision to the Wheatland Railway – an entity established by six Saskatchewan municipalities in an effort to preserve rail service to their communities. The lease took effect on August 1, 2002. Under the provisions of the lease, the Wheatland Railway will maintain responsibility for all line maintenance, as well as securing all originating traffic – widely expected to comprise producer-loaded grain cars. At the same time, CN will be the sole provider of rail and contractor services to the new shortline railway under a special arrangement that calls for the use of CN personnel and equipment during off-peak periods.

Also slated for transfer at the beginning of the 2002-03 crop year, was a second group of branch lines encompassing the Robinhood, Turtleford, and a portion of the Blaine Lake, subdivisions. The operation of these lines was to have been assumed by the Prairie Alliance for the Future (PAFF) under arrangements similar to those developed with respect to the Wheatland Railway. By the end of the first quarter, however, this transfer had yet to take place.[1]

And while the number of shortline railways increased during the first quarter of the 2002-03 crop year, they have also been particularly hard-hit by the decline in overall grain volume. Compared to the larger Class 1 carriers – whose quarterly volume fell by 33.9% to 3.3 million tonnes – the shortline carriers saw their originated grain volume fall by a much steeper 51.6% to 248,800 tonnes.

1.4 Terminal Elevator Infrastructure

No changes to the licensed terminal elevator network in Western Canada were recorded during the first quarter of the 2002-03 crop year. As at October 31, 2002, the network comprised some 17 facilities with an associated storage capacity of 2.7 million tonnes.

[1] In January 2003, PAFF obtained a certificate of fitness from the Canadian Transportation Agency. A certificate of fitness is a prerequisite for any carrier seeking to operate under the regulatory provisions of the Canada Transportation Act.

2.0 Commercial Relations

2.1 Tendering

In accordance with the Memorandum of Understanding (MOU) between the Canadian Wheat Board (CWB) and the Minister responsible for the CWB, the 2002-03 crop year saw the CWB move to a higher minimum commitment in its tendering program. Effectively doubling the amount pledged during the initial two years of the program, the CWB has committed to move at least half of its overall grain shipments to the four western ports under tender during the 2002-03 crop year.

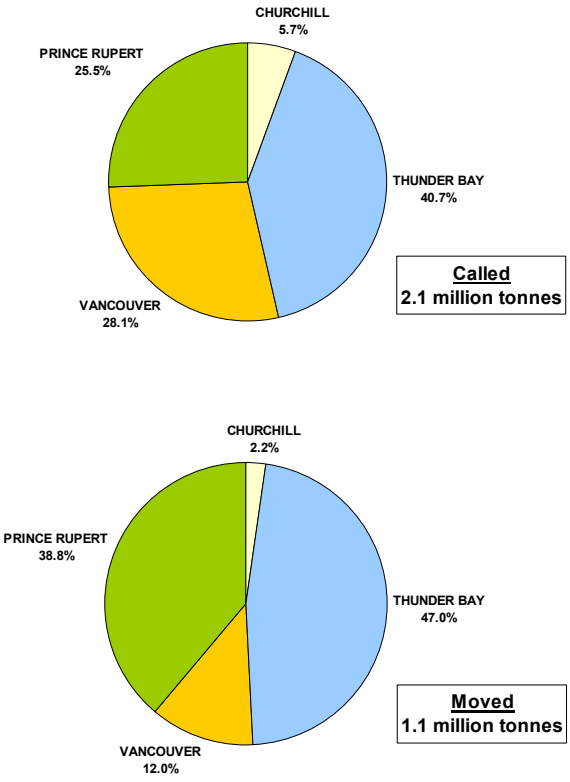
During the first quarter, the CWB issued 134 tender calls for the movement of just under 2.1 million tonnes of grain. These tender calls were met by 411 bids offering to move an aggregated 2.0 million tonnes – 5.2% less than the volume sought by the CWB. This response contrasts sharply with the pattern witnessed during the preceding crop year. At that time, the volume bid exceeded the volume called by a factor of more than two-to-one. One factor in this tamer response stems from the structural change brought on by the merger of Agricore Cooperative and United Grain Growers into a single commercial entity – Agricore United. In combining these two corporate entities, the separate bidding activities of the predecessor companies were effectively united under that of the successor company.

Additionally, four of the smaller grain companies that had advanced bids in the 2001-02 crop year, chose to refrain from bidding altogether during the first quarter of the 2002-03 crop. This resulted in the comparative number of bidders declining from 22 in the previous crop year to 17 in the first quarter.[2]

Furthermore, the average volume bid by most grain companies proved significantly less than it had been in the previous crop year. This suggests that grain companies are being more selective in their approach to tendering. To some extent this is reflected in the increased volume and number of tender calls that went unfilled – 0.9 million tonnes (92 tenders) in the first quarter of the 2002-03 crop year, versus 0.6 million tonnes (72 tenders) during the same period a year earlier.

Similarly, the CWB has also indicated that the tender bids advanced by the grain companies in the first quarter were less financially aggressive than they were during the 2001-02 crop year. Various factors, including the drought, the regional availability of certain grades of grain, and the lockout of grain workers at the port of Vancouver (see ensuing discussion), served to limit the competitiveness of these bids. It is worth noting, however, that this pattern supports the contention of those industry observers who had speculated that the CWB's move to tender 50% of its overall grain movement would naturally instil greater discipline within the bidding process.

Figure 4: Tendered Volume – Destination Port



[2] The differential cited depicts a reduction of five bidders from the year before. Beyond the four smaller grain companies referred to, the merger of Agricore Cooperative and United Grain Growers into Agricore United accounts for the disappearance of the fifth bidder.

Regardless, the first quarter saw the CWB award a total of 222 contracts for the movement of an aggregated 1.1 million tonnes of grain. In marked contrast with the preceding two crop years, the largest proportion of this volume – 47.0% – was directed to the port of Thunder Bay for delivery. This arose as a result of the labour disruption that effectively closed the port of Vancouver for much of the first quarter. During this period, much of the CWB's westbound grain was redirected through the port of Prince Rupert. As a result, 38.8% of the tendered volume involved delivery to Prince Rupert; 12.0% to Vancouver; and a significantly lesser 2.2% to Churchill.

In aggregate, the volume tendered represented 46.9% of the CWB's overall movement to Western Canadian ports, and fell marginally short of the 50% commitment established under the MOU.[3] This proportion would have been slightly higher had not a small number of CWB contracts been cancelled or deferred as a result of the labour disruption in Vancouver.

2.2 Other Commercial Developments

2.21 Labour Disruption at the Port of Vancouver

Although Vancouver's Grain Workers Union (GWU) and the British Columbia Terminal Elevator Operators Association (BCTEOA) had been working towards a new collective agreement to replace the one that had expired on December 31, 2000, they could not resolve their differences over the critical issues of seniority and work scheduling. Following the failure of the GWU to vote on what had been deemed a final offer, the BCTEOA locked out its GWU employees on August 25, 2002. Four days later, the GWU's membership formally rejected the offer that had been advanced by the BCTEOA. This set the stage for what would prove to be a protracted labour dispute, and the virtual closure of Vancouver as the principal gateway for export grain on the west coast.

In the days that followed, the Vancouver Grain Exchange issued an "event of delay" notice to its membership (a group that encompasses a wide portion of the GHTS stakeholder community). As a result, the Canadian Wheat Board and the grain companies immediately invoked the force majeure provisions found within their respective contracts to limit the financial obligations that could arise from any delay in the movement of grain brought on by the labour disruption. This was done largely to provide protection against the potentially heavy assessment of vessel demurrage.[4]

In an effort to minimize the impact of the labour disruption on export programs, grain that had been destined to Vancouver was soon redirected to Prince Rupert. Although out of operation since May 2002 as a result of low grain volumes, Prince Rupert Grain (PRG) reopened and began to unload its first lot of redirected railcars on September 3, 2002. Both Vancouver Wharves and Neptune Terminals – non-BCTEOA-affiliated facilities located on the north shore of Burrard Inlet – were unaffected by the labour strife, and continued to handle non-CWB grains while Vancouver's principal terminal elevators were closed by the lock-out.

(photo used with permission of the Grain Workers Union)

Figure 5: Locked-out employees of the Grain Workers Union on the picket line in Vancouver late last summer.

[3] The 50% commitment established under the MOU relates to the relative volume of grain to be moved by the CWB under tender in the crop year. Quarterly variations – both above and below this objective – are generally expected in a dynamic operating environment.

[4] Invoking the provisions of force majeure did not protect the CWB from the further assessment of demurrage on those vessels already delayed in port. However, no vessels were being assessed demurrage at the time of the lockout.

In response to the use of Prince Rupert as an alternative port, the GWU established a picket line at the terminal facilities of PRG on September 10. Although this action initially interrupted the flow of grain moving through the port, service resumed three days later when a court injunction granted to PRG ordered the removal of the picketers. The GWU subsequently applied to the Canada Industrial Relations Board to have the BCTEOA and PRG declared a common employer, claiming that the diversion of grain to Prince Rupert facilitated "business as usual" even though workers were locked out in Vancouver.[5] Despite these actions, grain continued to move through PRG for the remainder of the first quarter of the 2002-03 crop year without further interruption. A total of 9,481 railcars were unloaded by PRG during this period – almost 80% of the volume handled by the facility during the entire 2001-02 crop year.

Although vessel-waiting times at Prince Rupert were extended as a result of grain being redirected, the CWB reports that the needs of its sales program were met throughout the period. To a large extent, the reduced harvest brought on by the severity of the drought cited earlier, effectively relieved the pressure that might have otherwise been brought to bear on the GHTS during what is – traditionally – the heaviest shipping period in the crop year.[6]

2.22 Restructuring Grain Company Indebtedness

The financial difficulties faced by producers and grain companies alike are widely known within the industry. The droughts that have plagued production, have taken an increasingly heavier toll on the financial positions of all stakeholders. As the largest publicly-owned grain companies operating in Western Canada, the challenges confronting Agricore United and Saskatchewan Wheat Pool as they struggle with the realities of reduced grain volumes, depressed revenues, and increased losses, are among the most visible. The financial losses for these two firms during the first quarter of the 2002-03 crop year amounted to $33.8 million and $15.6 million respectively.

Servicing their accumulated debts in the face of such losses has been a pressing issue for both of these companies. In October, Agricore United announced that it was working to restructure its existing indebtedness, and had received a commitment from its bankers to provide it with a secured $500 million credit facility. This credit was intended to refinance the company's existing revolving credit, a portion of its long-term debt, and other general corporate needs.

Saskatchewan Wheat Pool (SWP) also moved to secure new financing in an effort to meet its ongoing operational requirements, and help in the rebuilding of its competitive position. In amending the credit arrangements it had with its banks, SWP secured needed operating credit to November 30, 2003, and an agreement to defer its principal repayments for 12 months.

At the same time, SWP indicated that it also intended to work with its senior debt holders, the banks, and the holders of $300 million in medium-term notes, to restructure the company's debt by January 31, 2003. The proposal advanced by SWP, however, was met with substantial opposition – particularly from the medium-term note holders. Their opposition effectively threatened to push the company into receivership. Last-minute amendments to the restructuring plan ultimately secured the necessary support of these creditors, and avoided the company's immediate failure.

2.23 Government-Owned Hopper Cars

Between 1972 and 1986, the federal government spent approximately $570M to purchase 13,000 covered hopper cars devoted to the movement of Western Canadian grain. Another 5,750 cars owned or leased by the Canadian Wheat Board, as well as the governments of Alberta and Saskatchewan, complement the federal government's fleet.[7] These cars were provided to CN and CP under an operating agreement that allowed the

[5] The grain companies forming the consortium that owns Prince Rupert Grain, also own the individual terminal elevator facilities in Vancouver that had locked out the GWU.

[6] The labour dispute was subsequently resolved when on December 14, 2002, the BCTEOA and the GWU concluded a new collective agreement. Although a few issues remained outstanding, these were referred to binding arbitration. Limited grain shipments to Vancouver resumed shortly thereafter.

[7] These 5,750 covered hopper cars are comprised of: 2,000 owned by the CWB; 1,750 administered by the CWB on leases paid by the federal government; and 2,000 owned by the governments of Alberta and Saskatchewan.

cars to be used as part of their general fleets. In practice, both CN and CP supplement these cars with their own equipment in order to meet prevailing market demands.[8]

Despite their age and increasing obsolescence, these cars remain critically important assets in the movement of grain through the GHTS. As a result, the efficient deployment of these assets in meeting prevailing market demand has always been at the forefront of stakeholder concerns. Any potential change in the ownership of these cars – or in the resultant means by which they are allocated between shippers – has, therefore, been a matter of continuing interest.

In 1996, the federal government announced that it intended to sell its fleet of covered hopper cars. Under the operating agreement governing the use of these cars, however, the railways held the right of first refusal (ROFR) in any potential sale. With the expiry of the railways' ROFR on June 30, 2002, interest in the subject appears to have been revitalized.[9]

In recent months, the Farmer Rail Car Coalition (FRCC) – an organization representing farmers in the potential sale of the fleet – has been lobbying hard to garner support for a plan that would see ownership of the cars transferred to a non-profit, farmer-owned company for a nominal sum. The government, however, has yet to make a decision regarding any such sale. More importantly, the government's ownership of these cars was alleged by the United States to constitute an unfair subsidy under a trade complaint it brought against Canadian grain-trading practices (see ensuing discussion).

2.24 US Trade Complaint

In September 2002, the North Dakota Wheat Commission and the US Durum Growers Association filed petitions with the United States government seeking countervailing and anti-dumping duties on wheat and durum imports from Canada. The petition alleged that the Government of Canada and the Canadian Wheat Board subsidized both of these products; that the CWB sold these products for less than full market value in the United States; and that American industry was being injured as a result of their importation. A month later, the US Department of Commerce (DOC) announced that it would proceed with an investigation into these allegations.[10]

In March 2003, the DOC rendered a preliminary determination in its countervail investigations, and found that subsidies were being employed. As a result, a 3.94% duty on imports of Canadian wheat and durum was imposed – comprised of a 3.59% duty relating to government guarantees of CWB borrowings, and a 0.35% duty tied to the railways' use of government-owned hopper cars.[11]

In pronouncing that it had made the preliminary determination that dumping was also taking place, the DOC ordered duties of 6.12% on spring wheat and 8.15% on durum in May 2003. These were in addition to the 3.94% levy already applied under the countervailing duty action. Both the countervailing and anti-dumping duties are subject to a final determination by the DOC expected later in 2003. Either a US court or a bi-national panel established under the North American Free Trade Agreement can review these final determinations. The Canadian government is defending its policies, and those of the CWB, in both respects.

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[8] Throughout the 1990s, the effective annual size of the hopper fleet is estimated to have varied between 22,000 and 28,000 cars.

[9] Exercising a five-year termination provision contained in the operating agreement, the federal Minister of Transport issued notice in 1996 that he was terminating the agreement as of December 31, 2001. The railways' right of first refusal expired six months later.

[10] Such investigations denote a domestic trade action under the laws of the United States, and are conducted by the US Department of Commerce, which renders both a preliminary and final determination based on its findings.

[11] A countervailing duty can only be applied if it has been established in an investigation that imported goods have been subsidized, and that such subsidized imports are either causing or are threatening to cause injury to US domestic industry. The countervailing investigation initially focused on several areas of alleged subsidy: Canadian government guarantees of CWB borrowings; export credits and initial payments; the free supply of government-owned hopper cars to the railways; the imposition of a revenue cap on major railways; and support for shortline and branchline railways. The DOC's preliminary determination dismissed all allegations of subsidy save those for which duties were applied: government guarantees of CWB borrowings; and the railways' use of government-owned hopper cars.

In a concurrent action, the United States also requested WTO consultations with Canada on matters concerning the operation of the CWB and the treatment accorded American grain imported into Canada. These consultations were held in late January 2003, with a WTO panel formed two months later. The panel will examine US allegations that the actions of the Canadian government and the CWB are inconsistent with the non-discriminatory and commercial principles governing state-owned trading enterprises under the General Agreement on Tariffs and Trade. As with the US domestic trade actions, the Canadian government is defending its policies against these allegations as well.

2.25 License-Exempt Producer-Car Loading Facilities

In late April, 2002, the Canadian Grain Commission (CGC) announced that producer-car loading facilities would be exempted from the licensing provisions of the Canada Grain Act as long as certain minimum conditions were met. As of the end of the 2001-02 crop year, the CGC had issued a total of five licensing exemptions to producer-car loading facilities in Saskatchewan. During the course of the first quarter of the 2002-03 crop year, the number of such license-exempt facilities increased almost five-fold – to 24.

Twenty of these facilities – 83.3% – are found in Saskatchewan, while the provinces of Manitoba and Alberta account for two apiece. The division between facilities located along the rights-of-ways of major railways, and those tied to shortline carriers, only marginally favours the latter – 11 versus 13 respectively.

Noteworthy is the fact that a full one-third of these 24 facilities are local to the lines of the Great Western Railway (GWR) – a shortline carrier operating in southwestern Saskatchewan. This comparatively high concentration of facilities results from the focused effort of the GWR to promote producer-loading sites. Indeed, approximately one-fifth of all producer-cars loaded during the 2001-02 crop year originated from sites local to the GWR.

3.0 System Efficiency and Service Reliability

3.1 Country Elevators

Total country elevator throughput (measured as shipments from primary elevators) showed a marked decline during the first quarter of the 2002-03 crop year. Aggregate volume fell by 26.6% to 5.8 million tonnes from the 7.9 million tonnes recorded for the same period a year earlier. This decline in volume is also reflected in a comparatively lower capacity turnover ratio for the primary elevator system as a whole – which fell by 16.0% to 1.1 turns. To a large extent, the effects of a 0.2-million-tonne reduction in primary elevator capacity helped moderate the fall in the latter indicator.

Inventory levels for the period were also down sharply – falling by 29.4% to an average of 2.2 million tonnes from 3.1 million tonnes the year before. The reduced inventory level is also reflected in its use of primary storage capacity, which fell to 42.0% from 52.3% a year earlier. In equal measure, the average amount of time spent by grain in inventory fell by a modest 4.9% – to 36.5 days versus 38.4 days a year earlier – indicating a somewhat faster rate of turnover. The overall average weekly stock-to-shipment ratio fell by 5.7% to 5.0 turns in reflection of both reduced inventories and shipments.

3.2 Railway Operations

Railway car cycles, rose to an overall average of 18.9 days for the first three months of the 2002-03 crop year as compared to the 17.2 days recorded for the 2001-02 crop year as a whole. Much of this is tied to the relative inactivity of the railcar fleet as a result of further reductions in grain volume. This is evidenced in the elongation of the empty movement portion of the overall cycle – which increased to 9.1 days in the first quarter from 8.3 days for the 2001-02 crop year as a whole. At the same time, a lengthening of the loaded transit portion of the cycle proved even greater – rising to 9.7 days on average during the first quarter from 8.8 days for the 2001-02 crop year as a whole. Much of this appears to be the result of a greater amount of time taken in moving grain to west coast ports.[12]

Figure 6: Railway Car Cycle

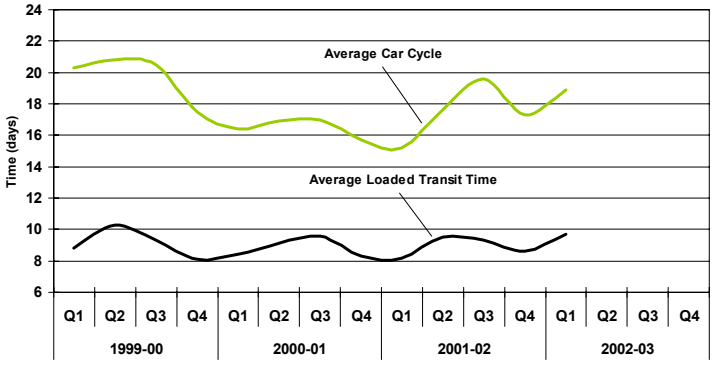
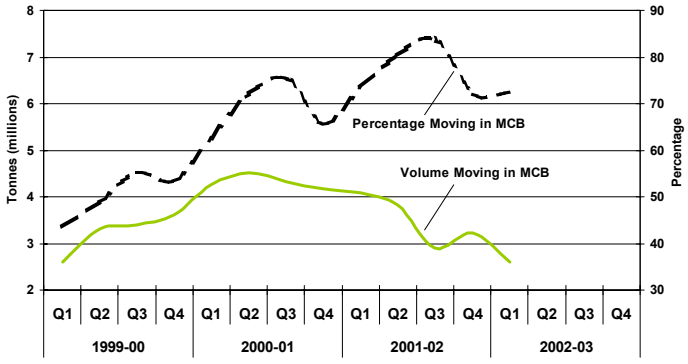


Figure 7: Railway Volume Moving in Multiple-Car Blocks (MCB)



During the first quarter of the 2002-03 crop year, an estimated 3.6 million tonnes of grain moved to export positions in blocks of 25 or more cars. This is some 35.6% less than that observed during the same period a year earlier, and is in keeping with the decline noted earlier with respect to overall grain volumes. More importantly, the proportion of the total volume moving in such blocks amounted to 72.6%. This is only marginally lower than the 73.4% observed during the first quarter of the

[12] Increases in the average loaded transit time for movements to both Prince Rupert and Vancouver were noted during the first quarter of the 2002-03 crop year. Changes in these averages were undoubtedly affected by delays to traffic in the immediate aftermath of the GWU lockout in Vancouver, and the subsequent redirection of traffic to Prince Rupert.

preceding crop year, and the 76.9% recorded for the crop year as a whole.

Owing to the overall decline in volume, the quarterly value of the incentive discounts accruing to shippers moving grain in multiple car blocks is estimated to have fallen by 33.7% to $10.7 million. More significantly, the average discount received by this traffic climbed to $4.09 per tonne – 4.0% higher than the $3.93 per tonne posted during the first quarter of the preceding crop year, and comparable to the $4.07 per tonne recorded for the crop year as a whole.

3.3 Terminal Elevator and Port Performance

3.31 Terminal Elevators

As with other volume-related indicators, port throughput (measured as shipments from terminal elevators and bulk loading facilities) showed a marked decline during the first quarter of the 2002-03 crop year. Aggregate volume fell by 38.1% to 3.3 million tonnes from the 5.4 million tonnes recorded for the same period a year earlier.

In this downturn, the port of Churchill has been particularly hard-hit. First quarter volume – which accounts for almost all of the traffic that moves through the port in a given year – fell by 41.5% to 279,200 tonnes. Despite great effort to attract more business through this northern port, the first quarter's throughput is the lowest observed over the course of the last four shipping seasons, and significantly below the threshold deemed necessary to maintain the port's commercial viability.

First quarter inventory levels were also down sharply – falling by 27.4% to an average of 1.0 million tonnes from 1.3 million tonnes the year before. The reduced inventory level is also reflected in its use of licensed storage capacity, which fell to 35.5% from 49.5% a year earlier. In equal measure, the average amount of time spent by grain in inventory fell by 17.9% – to 19.2 days versus 23.4 days a year earlier – indicating a notably faster rate of turnover.

3.32 Port Performance

Some 145 vessels called at Western Canadian ports during the first three months of the 2002-03 crop year. This marks a significantly lower rate of arrival than observed in the 2001-02 crop year, and reflects the 38.1% reduction in throughput volume cited previously. More importantly, the amount of time spent by these vessels in port fell by 8.2% – to an average 4.5 days from 4.9 days for the same period a year earlier.

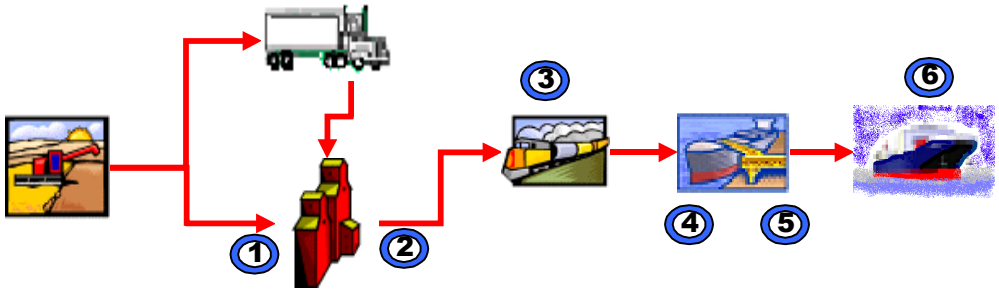
3.4 The Supply Chain

As outlined in earlier editions of the Monitor's quarterly and annual reports, viewing the GHTS as a supply chain provides a valuable framework in which to examine the workings of the GHTS as a whole. The Monitor's Annual Report for the 2001-02 crop year concluded that the amount of time being taken by grain in its movement through the supply chain averaged 67.4 days. Although marginally higher than the 64.6 days recorded for the 2000-01 crop year, it was still some 3.0% better than the 69.5-day average observed during the first year of the GMP.[13]

With an average of 65.4 days, data from the first quarter of the 2002-03 crop year reveals that grain moved through the GHTS distinctly faster than in the preceding crop year, but fell slightly short of besting the 64.6 days achieved during the 2000-01 crop year. This 2.0-day (or 3.0%) improvement stems from a reduction in the amount of time spent by grain in storage in the primary and terminal elevator systems. Time spent in terminal elevators fell from an average of 20.6 days in the 2001-02 crop year to 19.2 days during the first quarter of the 2002-03 crop year. This was furthered by a 1.5-day (or 3.9%) reduction in the amount of time spent by grain in storage in the country elevator system – which fell from a corresponding average of 38.0 days to 36.5 days.

[13] These values have been restated to reflect changes in the methodology employed to calculate car cycles, and the average number of days spent by grain in storage at terminal elevators. This restatement does not alter the Monitor's original conclusions.

Figure 8: The GHTS Supply Chain



	SUPPLY CHAIN ELEMENT	TABLE	1999-00	2000-01	2001-02	YTD 2002-03	SUPPLY CHAIN EFFECT
	SPEED RELATED						
2	Country Elevator – Average Days-in-Store	3B-4	41.7	38.3	38.0	36.5	▼
3	Average Railway Loaded Transit Time (days)	3C-4	9.2	8.8	8.8	9.7	▲
5	Terminal Elevator – Average Days-in-Store	3D-4	18.6	17.5	20.6	19.2	▼
	Average Total Days in GHTS		69.5	64.6	67.4	65.4	▼
	SERVICE / ASSET RELATED						
1	Average Country Elevator Capacity Turnover Ratio	3B-2	4.8	5.0	4.5	1.1	▼
4	Average Terminal Elevator Capacity Turnover Ratio	3D-2	9.1	8.9	6.6	n/a	-
3	Average Railway Car Cycle (days)	3C-4	19.9	16.4	17.2	18.9	▲
6	Average Vessel Time in Port (days)	3D-7	4.3	5.9	4.9	4.5	▼

These improvements were marginally offset by a 0.9-day (or 10.2%) increase in the railways' average loaded transit time – which climbed from an average of 8.8 days in the 2001-02 crop year, to 9.7 days during the first quarter of the 2002-03 crop year.

The effectiveness of the supply chain has undoubtedly been affected by the sharp decline in grain volumes handled – be it through the country elevator, railway, or terminal elevator systems. This decline effectively resulted in a significant proportion of the GHTS's handling capacity being rendered idle. This is reflected in the reduced turnover of country elevator capacity, and in the lengthening of the average railway car cycle. As a result, caution must be used in drawing definitive conclusions regarding the relative change in GHTS efficiency during a period of abnormally lower grain volumes.

In equal measure, the widespread drought in Western Canada makes it extremely difficult to distinguish between changes in efficiency brought on by abnormally lower grain volumes, and those that might have been prompted by governmental reform or other factors. Nevertheless, some specific elements should be highlighted with respect to the supply chain's performance during the first quarter.

Firstly, much of the reduction in the average amount of time spent in storage at terminal elevators is linked to the diminished use of Vancouver as a port of exit during the lockout of the Grain Workers Union. As the only licensed facility with substantial storage capacity left operating on the west coast during this period, westbound grain was effectively redirected through Prince Rupert Grain Ltd. (PRG). Given the demand that was brought

to bear on the port, grain spent relatively little time in actual storage at PRG – an average of 7.4 days overall.[14] This marks a significant improvement over the averages posted by PRG in previous years, and is considerably better than those posted by other ports. Prince Rupert's comparatively stronger performance during this period was the fundamental factor in driving down the overall GHTS average.

Conversely, the greater distance inherent in moving grain to Prince Rupert also played a role in increasing the railways' average loaded transit time from 8.8 days to 9.7 days. Further, the rerouting of grain to Prince Rupert also compelled CP to interchange a significant portion of its westbound traffic to CN at Edmonton. This too contributed to the observed increase in average loaded transit time.[15]

Finally, the redirection of vessels to Prince Rupert for loading produced a backlog – particularly during the initial stages of the GWU lockout – that resulted in a sharp increase in the amount of time these ships spent waiting in port. Accordingly, the average amount of time spent by vessels in Prince Rupert jumped to 10.0 days during the first quarter of the 2002-03 crop year – an increase of 78.6% over the 5.6-day average recorded for the preceding crop year. Nevertheless, reductions in the amount of time spent by vessels in the ports of Vancouver (before the labour disruption) and Churchill effectively produced an 8.2% decline in the overall system average – which fell from an annual average of 4.9 days in the 2001-02 crop year, to 4.5 days in the first quarter.

At the same time, the posted rates for many of the GHTS's component services continued to rise. The nominal input costs tied to country elevator handling, rail transportation, and terminal elevator handling, all increased in the first quarter. Increases for various country elevator handling activities ranged from lows around 1%, to highs in excess of 50%; posted single-car railway freight rates effectively increased by about 4.0%; and the rates for terminal elevator handling activities increased by 1% to 10%.

[14] The average number of days spent in store by wheat – the single largest grain handled by volume at Prince Rupert during this period – was 5.4 days.

[15] The calculation of car cycle times is dependent on completed trip records. The rerouting of grain to Prince Rupert resulted in a significant reduction in the relative number of acceptable west coast trip records used in this calculation – 40% of the total trip records as opposed to 60-65% normally. The decreased weighting accorded these movements effectively understates the true comparative average car cycle by an estimated 0.6 days. Similarly, the true comparative average for loaded transit time is understated by estimated 0.3 days.

4.0 Producer Impact

4.1 Producer Netback

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."

In its annual report for the 2001-02 crop year, the Monitor described how an improvement in the market prices of wheat, durum, canola, and yellow peas, along with changes in their respective export basis, had produced steadily greater per-tonne returns for grain producers over the course of the preceding three crop years.

Moreover, there can be no doubt that the single largest driver of improvements in the producer's netback has been positive changes in the price of grain. At the same time, these prices are inextricably tied to the actual volume of grain produced, and shipped. While producers realized significantly higher returns than in previous years, the improvement was tempered in conjunction with volumes that had decreased by a factor of 25% or more over the past three crop years.

The GMP provides for the calculation of these indicators at the end of the crop year. This arises chiefly because certain elements integral to the calculation are not made available until after the close of the crop year itself. Despite this, the gathering of general price and input-cost data provides a means of gauging the broader financial impact likely to be borne by the producer.

4.11 First Quarter Price Changes

Throughout much of the first quarter of the 2002-03 crop year, movement in the per-tonne prices of wheat and canola proved generally positive. By the end of October 2002, the CWB's pool return outlook price for 1 CWRS wheat had reached $308.00 per tonne – significantly higher than the $212.68 reflected in its adjusted final price for the 2001-02 crop year.

Similarly, the average monthly Vancouver cash price for 1 Canada Canola had risen from $355.67 per tonne for the 2001-02 crop year as a whole, to about $450.00 by the end of the first quarter. Much of this movement stems from changes in global market conditions, and reflects the fact that the volume of grain available for sale around the world – and not just in Western Canada – had fallen sharply.

Figure 9: Recent Price Changes – 1 CWRS Wheat (dollars per tonne)

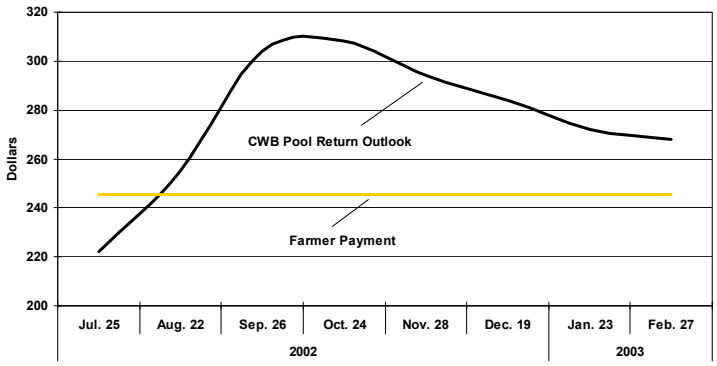
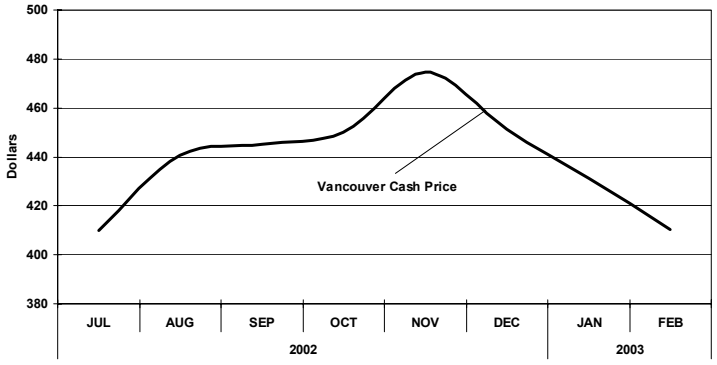


Figure 10: Recent Price Changes – 1 Canada Canola (dollars per tonne)



4.12 Recent Price Movement

Since then – and particularly with respect to canola – prices have abated noticeably. Much of this lost ground appears to be driven by expectations of comparatively better crop production in 2003, increased competition from non-traditional exporting nations, and a stronger Canadian dollar.

As mentioned previously, a number of the nominal input costs used to calculate the export basis – country elevator handling, rail transportation, and terminal elevator handling, being the most prevalent – all registered increases during the first quarter. These higher costs, coupled with the changes noted with respect to the price of both wheat and canola, suggests a modest improvement in the per-tonne producer netback for the 2002-03 crop year. Even so, sharply reduced grain volumes will undoubtedly contain the overall financial returns available to farmers from this improvement.

4.2 Producer-Car Loading

As related in the Monitor's 2001-02 Annual Report, the aggregate number of producer-car loading sites had fallen to 513 over the course of the three years then covered by the GMP. While much of this decline stemmed from a reduction in the number of sites local to the larger railways, those tied to shortline carriers effectively doubled – increasing from 63 to 127. During the course of the first quarter of the 2002-03 crop year, however, no further changes to the composition of this network were recorded.

Coupled with the increase in the number of sites tied to the shortline carriers was a 91.3% rise in the annual number of producer cars shipped – which climbed from 3,441 to 6,583. During the first quarter of the 2002-03 crop year, however, the number of producer-car shipments fell by 53.8% – declining to 318 from 688 for the same period a year earlier. This reduction is in keeping with the overall decline in shortline-originated grain volumes noted previously.

Synopsis – Industry Overview

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

Highlights – First Quarter 2002-2003 Crop Year

Grain Production and Supply

- *Grain production declined by 29.3 % to 30.1 million tonnes due to a widespread prairie drought during the 2002 growing season.*
  - *Second consecutive season of reduced production.*
  - *Current production level slightly more than half of the average for the 1999-2000 and 2000-01 crop years.*
- *Carry forward stock decreased by 30.6% to 6.1 million tonnes.*
- *Overall grain supply declines by 29.6% to 36.1 million tonnes.*

Railway Traffic

- *Railway movements during the first three months fell 35.1% to 3.7 million tonnes.*
  - *Reflects reduced volume of grain available for movement.*
  - *Shortline railways particularly hard-hit.*
    - *Originated tonnage fell by 51.6% to 0.2 million tonnes.*
- *Grain traffic to all Western Canadian ports declined.*
  - *Volume to Vancouver reduced by 72.6% to 1.0 million tonnes as a result of GWU lockout.*
  - *0.8 million tonnes redirected to Prince Rupert.*
    - *Throughput increases by a factor of 24 from the same period a year earlier.*
  - *Volume to Thunder Bay increases by 5.3% to 1.6 million tonnes.*
    - *Overall share of traffic climbs to 44.5%.*
  - *Churchill volume falls by 50.6% to 0.2 million tonnes.*

Country Elevator Infrastructure

- *Rationalization efforts of the major grain companies continues.*
  - *Grain delivery points reduced by 9.0% to 314.*
  - *Number of country elevators fell by 9.6% to 452.*
- *Elevator storage capacity reduced by 3.7% to 5.9 million tonnes.*
  - *Falls below 6.0-million-tonne threshold for the first time since the beginning of the GMP.*
- *Elevators capable of loading in multiple-car blocks falls 3.4% to 282.*
  - *Accounts for 62.4% of total GHTS elevators.*
  - *Share of GHTS capacity rises to 86.2%*

Railway Infrastructure

- *Western Canadian rail network remained unchanged at 18,909 route-miles.*
  - *CN transferred 46.2 route-miles of its Saskatchewan network to the Wheatland Railway.*
    - *Shortline network increases by 1.5% to 3,137 route-miles.*
  - *CN's planned transfer of additional trackage to the Prairie Alliance for the Future (PAFF) delayed to later in the crop year.*

Terminal Elevator Infrastructure

- *Licensed GHTS terminal elevators remained unchanged at 17.*
- *Terminal elevator unloads fall by 45.7% to 34,364 railcars.*

Indicator Series 1 – Industry Overview

Table	Indicator Description	Notes	1999-00	2000-01	2001-02	2002-03 Q1	Q2	Q3	YTD (1)	% VAR	
	Production and Supply [Subseries 1A]										
1A-1	Crop Production (000 tonnes)	(1)	55,141.7	54,072.6	42,541.4	30,062.6	-	-	30,062.6	-29.3%	▼
1A-2	Carry Forward Stock (000 tonnes)	(1)	7,418.2	9,775.6	8,750.6	6,070.8	-	-	6,070.8	-30.6%	▼
	Grain Supply (000 tonnes)	(1)	62,559.9	63,848.2	51,292.0	36,133.4	-	-	36,133.4	-29.6%	▼
	Rail Traffic [Subseries 1B]										
1B-1	Railway Grain Volumes (000 tonnes) – Origin Province	(1)									
1B-2	Railway Grain Volumes (000 tonnes) – Primary Commodities	(1)	26,441.0	25,885.5	18,765.1	3,700.4	-	-	3,700.4	-35.1%	▼
1B-3	Railway Grain Volumes (000 tonnes) – Detailed Breakdown	(1)									
	Country Elevator Infrastructure [Subseries 1C]										
1C-1	Grain Delivery Points (number)	(2)	623	540	345	314	-	-		-9.0%	▼
1C-1	Grain Elevator Storage Capacity (000 tonnes)	(2)	7,443.9	7,137.0	6,125.2	5,901.5	-	-		-3.7%	▼
1C-1	Grain Elevators (number) – Province	(2)									
1C-2	Grain Elevators (number) – Railway Class	(2)	917	781	500	452	-	-		-9.6%	▼
1C-3	Grain Elevators (number) – Grain Company	(2)									
1C-4	Grain Elevators Capable of Incentive Loading (number) – Province	(2)									
1C-5	Grain Elevators Capable of Incentive Loading (number) – Railway Class	(2)	317	319	292	282	-	-		-3.4%	▼
1C-6	Grain Elevators Capable of Incentive Loading (number) – Railway Line Class	(2)									
1C-7	Grain Elevator Openings (number) – Province	(2)									
1C-8	Grain Elevator Openings (number) – Railway Class	(2)	43	23	29	5	-	-		-82.8%	▼
1C-9	Grain Elevator Openings (number) – Railway Line Class	(2)									
1C-10	Grain Elevator Closures (number) – Province	(2)									
1C-11	Grain Elevator Closures (number) – Railway Class	(2)	130	159	310	53	-	-		-82.9%	▼
1C-12	Grain Elevator Closures (number) – Railway Line Class	(2)									
1C-13	Grain Delivery Points (number) – Accounting for 80% of Deliveries	(2)(3)	217	145	107	n/a	-	-		n/a	–
	Railway Infrastructure [Subseries 1D]										
1D-1	Railway Infrastructure (route-miles) – Grain-Dependent Network	(2)	4,876.6	4,577.7	4,480.7	4,480.7	-	-		0.0%	–
1D-1	Railway Infrastructure (route-miles) – Non-Grain-Dependent Network	(2)	14,513.5	14,428.1	14,428.1	14,428.1	-	-		0.0%	–
1D-1	Railway Infrastructure (route-miles) – Total Network	(2)	19,390.1	19,005.8	18,908.8	18,908.8	-	-		0.0%	–
1D-2	Railway Grain Volumes (000 tonnes) – Grain-Dependent Network	(1)	8,683.6	8,407.3	6,228.7	1,094.4	-	-	1,094.4	-40.2%	▼
1D-2	Railway Grain Volumes (000 tonnes) – Non-Grain-Dependent Network	(1)	16,976.0	16,749.6	12,048.0	2,497.3	-	-	2,497.3	-33.3%	▼
1D-2	Railway Grain Volumes (000 tonnes) – Total Network	(1)	25,659.6	25,156.8	18,276.6	3,591.8	-	-	3,591.8	-35.6%	▼
1D-3	Shortline Railway Infrastructure (route-miles)	(2)	3,043.0	3,090.9	3,090.9	3,137.1	-	-		1.5%	▲
1D-3	Shortline Railway Grain Volumes (000 tonnes)	(1)	2,090.5	2,335.1	2,061.0	248.8	-	-	248.8	-51.6%	▼
1D-5	Railway Grain Volumes (000 tonnes) – Class 1 Carriers	(1)	23,569.1	22,821.7	16,215.7	3,343.0	-	-	3,343.0	-33.9%	▼
1D-5	Railway Grain Volumes (000 tonnes) – Class 2 and 3 Carriers	(1)	2,090.5	2,335.1	2,061.0	248.8	-	-	248.8	-51.6%	▼
1D-6	Grain Elevators (number) – Grain-Dependent Network	(2)	371	309	179	156	-	-		-12.8%	▼
1D-6	Grain Elevators (number) – Non-Grain-Dependent Network	(2)	513	440	305	281	-	-		-7.9%	▼
1D-6	Grain Elevator Storage Capacity (000 tonnes) – Grain-Dependent Network	(2)	2,475.4	2,234.6	1,726.7	1,619.9	-	-		-6.2%	▼
1D-6	Grain Elevator Storage Capacity (000 tonnes) – Non-Grain-Dependent Network	(2)	4,847.6	4,776.6	4,334.0	4,217.7	-	-		-2.7%	▼
	Terminal Elevator Infrastructure										
1E-1	Terminal Elevators (number)	(2)	15	16	17	17	-	-		0.0%	–
1E-1	Terminal Elevator Storage Capacity (000 tonnes)	(2)	2,678.6	2,703.6	2,733.6	2,733.6	-	-		0.0%	–
1E-2	Terminal Elevator Unloads (number) – Covered Hopper Cars	(1)	278,255	271,606	202,943	34,364	-	-	34,364	-45.7%	▼

(1) – Year-To-Date values are reported for volume-related indicators only (i.e., Railway Grain Volumes). The accompanying percentage variance denotes the relative change in the current YTD value as compared to the same period a year earlier.
(2) – Quarterly values for non-volume-related indicators (i.e., Grain Delivery Points) are "as at" the end of the reporting period. The accompanying percentage variance denotes the relative change in the value of the most recent reporting period as compared to that at the end of the preceding crop year.
(3) – Statistics relating to grain deliveries by station, as produced by the Canadian Grain Commission, are generally produced a full six months after the close of the crop year. The most recent statistics available are those from the 2001-02 crop year.

Synopsis – Commercial Relations

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

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

Highlights – First Quarter 2002-2003 Crop Year

Tendering

- *The Canadian Wheat Board's minimum tendering commitment doubles to 50% of total volume effective August 1, 2002.*
- *134 tender calls were issued by the Canadian Wheat Board (CWB) during the first quarter of the 2002-03 crop year.*
  - *Calls for the movement of 2.1 million tonnes to export positions in Western Canada.*
    - *Thunder Bay delivery – 40.7%; Vancouver – 28.1%; Prince Rupert – 25.55%; and Churchill – 5.7%.*
    - *Distribution shifts reflect the impact of the labour disruption at the port of Vancouver.*
- *411 bids were received from 17 grain companies; offered an aggregated 2.0 million tonnes.*
  - *Sharply lower response rate than observed in the 2001-02 crop year.*
    - *Partially the result of the merger between Agricore and United Grain Growers.*
    - *Four smaller grain companies also refrained from bidding in the first quarter.*
- *222 contracts concluded for the movement of 1.1 million tonnes.*
  - *Thunder Bay deliveries – 47.0%; Prince Rupert – 38.8%; Vancouver – 12.0%; and Churchill – 2.2%.*
    - *Distribution shifts reflect the impact of the labour disruption at the port of Vancouver.*
  - *No contracts concluded for the movement of malting barley in the first quarter.*
  - *Represents 46.9% of volume shipped by CWB to port positions in Western Canada.*
    - *Marginally below the minimum 50% commitment for the current crop year.*
- *Tenders for 42.2% of the tonnage called – 0.9 million tonnes – either partially, or not at all, filled.*
  - *376,700 tonnes – insufficient quantity bid.*
  - *237,600 tonnes – no bid.*
  - *165,600 tonnes – non-compliance with tender specifications.*
  - *102,300 tonnes – unacceptable bid price.*
- *Proportion of volume moving in multiple car blocks falls slightly to 92.9%.*
  - *A marginally lower 63.6% moved in blocks of 50 or more cars.*
- *85.4% of all tendered movements originated at high-throughput elevators.*
  - *Marginally higher than the 83.6% observed in 2001-02.*
- *CWB estimates sharply lower overall transportation savings for the first quarter at $4.9 million.*

Other Commercial Developments

- *Vancouver's Grain Workers Union locked-out by the British Columbia Terminal Elevator Operators Association on August 25th.*
  - *Extends through the end of the first quarter, and well beyond.*
  - *Effectively closes the port of Vancouver to a large proportion of grain traffic.*
  - *Grain traffic largely redirected to Prince Rupert.*
- *Agricore United and Saskatchewan Wheat Pool initiate restructuring of their respective corporate debts.*
  - *Financial situations for both companies aggravated by lower grain volumes.*
- *Expiry of the railways' right of first refusal in any sale of the government's fleet of 13,000 hopper renews interest of the Farmer Rail Car Coalition.*
- *United States launches trade complaint against the grain trading practices of Canada and the CWB.*
  - *Imposes preliminary countervailing and anti-dumping duties on imports of wheat and durum from Canada.*
  - *Final determinations by the US Department of Commerce expected later this year.*
- *License-exempt producer-car loading facilities increase from 5 to 24 during the first quarter.*

Indicator Series 2 – Commercial Relations

Table	Indicator Description	Notes	1999-00	2000-01	2001-02	2002-03 Q1	Q2	Q3	YTD (1)	% VAR	
	Tendering [Subseries 2A]										
2A-1	Tenders Called (000 tonnes) – Grain	(1)	n/a	4,888.0	4,961.4	2,089.6	-	-	2,089.6	34.7%	▲
2A-2	Tenders Called (000 tonnes) – Grade	(1)									
2A-3	Tender Bids (000 tonnes) – Grain	(1)	n/a	1,629.2	11,400.8	1,981.9	-	-	1,981.9	-48.1%	▼
2A-4	Tender Bids (000 tonnes) – Grade	(1)									
2A-5	Total CWB Movements (000 tonnes)	(1)(2)	n/a	15,892.7	12,787.3	2,349.1	-	-	2,249.1	-39.2%	▼
2A-5	Tendered Movements (%) – Proportion of Total CWB Movements	(1)(2)	n/a	5.4%	27.9%	46.9%	-	-	46.9%	76.3%	▲
2A-5	Tendered Movements (000 tonnes) – Grain	(1)(2)	n/a	858.6	3,566.0	1,102.7	-	-	1,102.7	7.1%	▲
2A-6	Tendered Movements (000 tonnes) – Grade	(1)(2)									
2A-7	Unfilled Tender Volumes (000 tonnes)	(1)	n/a	4,312.4	1,487.3	882.2	-	-	882.2	60.0%	▲
2A-8	Tendered Movements (000 tonnes) – Not Awarded to Lowest Bidder	(1)	n/a	0.0	96.1	7.7	-	-	7.7	-76.2%	▼
2A-9	Tendered Movements (000 tonnes) – FOB	(1)	n/a	280.8	71.3	0.0	-	-	0.0	-100.0%	▼
2A-9	Tendered Movements (000 tonnes) – In-Store	(1)	n/a	577.8	3,494.7	1,102.7	-	-	1,102.7	7.1%	▲
2A-10	Distribution of Tendered Movements – Port	(3)									
2A-11	Distribution of Tendered Movements – Railway	(3)									
2A-12	Distribution of Tendered Movements – Multiple-Car Blocks	(3)									
2A-13	Distribution of Tendered Movements – Penalties	(3)									
2A-14	Distribution of Tendered Movements – Province / Elevator Class	(3)									
2A-15	Distribution of Tendered Movements – Month	(3)									

(1) – Year-To-Date values are reported for volume-related indicators only (i.e., Tenders Called). The accompanying percentage variance denotes the relative change in the current YTD value as compared to the same period a year earlier.
(2) – Includes tendered malting barley volumes.
(3) – Indicators 2A-10 through 2A-15 examine tendered movements along a series of different dimensions. This examination is intended to provide greater insight into the movements themselves, and cannot be depicted within the summary framework presented here. The reader is encouraged to consult the corresponding table in volume 2 of the quarterly report (Data Tables).

Synopsis – System Efficiency

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

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

Highlights – First Quarter 2002-2003 Crop Year

Trucking

- *Composite Freight Rate Index for short-haul trucking remained unchanged at 100.0 during the first quarter.*

Country Elevators

- *Throughput for the first quarter fell by 26.6% to 5.8 million tonnes.*
- *The average elevator capacity turnover ratio declined by 16.0% to 1.1 turns.*
  - *Greater decline avoided due to a 0.2-million-tonne reduction in primary elevator storage capacity.*
- *Average number of days-in-store declined by 4.9% to 36.5 days.*
- *Average weekly stock-to-shipment ratio fell 5.7% to 5.0.*
  - *Indicates a tightening of inventories in the face of lower shipments.*
- *Posted tariff rates for elevator handling activities have increased since the last crop year.*
  - *Receiving, elevation and loading; 4% - 20%.*
  - *Cleaning; 1% - 25% for most commodities.*
  - *Storage; 15% - 50%.*

Rail Operations

- *Average car cycle increased by 23.9% to 18.9 days during the first quarter.*
  - *Significant increase reflects reduced grain volumes, and effects of GWU lockout in Vancouver.*
    - *Average empty transit time increases 29.1% to 9.1days.*
    - *Average loaded transit time increases 19.4% to 9.7 days.*
- *Proportion of grain traffic moving in multiple-car blocks during the first quarter falls marginally to 72.6%.*
  - *Relative use of 25-49 car block continues to decline.*
  - *Railway incentive payments estimated at $10.7 million – down 33.7% largely as a result of reduced volume.*
- *Posted railway freight rates increased by 4.0% in mid-August.*

Terminal Elevators and Port Performance

- *Terminal throughput fell by 38.1% to 3.3 million tonnes during the first quarter.*
- *Proportion directed to West Coast ports falls from almost two-thirds to 44.7%.*
  - *Vancouver throughput falls by 76.4% to 0.7 million tonnes.*
    - *Reflects effects of GWU lockout.*
  - *At 0.8 million tonnes, throughput at Prince Rupert marginally exceeds that of Vancouver.*
  - *Thunder Bay throughput declines by 11.1% to 1.6 million tonnes.*
- *145 vessels loaded at Western Canadian ports during the first quarter.*
  - *Average time in port fell by 8.2% to 4.5 days.*
    - *Overall reductions at Vancouver, Churchill and Thunder Bay offset by sharp increase in waiting times at Prince Rupert.*
- *Selective tariff increases for terminal elevator handling activities.*
  - *Receiving, elevation and loading; 2%-5% for most commodities at Vancouver and Thunder Bay.*
  - *Storage; 1%-3% at Vancouver*
  - *Tariff rates at Prince Rupert and Churchill effectively unchanged.*

Indicator Series 3 – System Efficiency

Table	Indicator Description	Notes	1999-00	2000-01	2001-02	2002-03 Q1	Q2	Q3	YTD (1)	% VAR	
	Trucking [Subseries 3A]										
3A-1	Composite Freight Rate Index – Short-haul Trucking	(2)	100.0	102.5	100.0	100.0	-	-		0.0%	–
	Country Elevators [Subseries 3B]										
3B-1	Grain Volume Throughput (000 tonnes)	(1)	32,493.9	33,281.9	25,923.8	5,777.2	-	-	5,777.2	-26.6%	▼
3B-2	Average Elevator Capacity Turnover Ratio	(1)	4.8	5.0	4.5	1.1	-	-	1.1	-16.0%	▼
3B-3	Average Weekly Elevator Stock Level (000 tonnes)	(1)	3,699.3	3,494.7	2,699.8	2,220.4	-	-	2,220.4	-29.4%	▼
3B-4	Average Days-in-Store (days)	(1)	41.7	38.3	38.0	36.5	-	-	36.5	-4.9%	▼
3B-5	Average Weekly Stock-to-Shipment Ratio – Grain	(1)	6.2	5.4	5.4	5.0	-	-	5.0	-5.7%	▼
3B-6	Average Handling Charges – Country Delivery Points	(3)									
	Rail Operations [Subseries 3C]										
3C-1	Hopper Car Grain Volumes (000 tonnes) – Province	(1)									
3C-2	Hopper Car Grain Volumes (000 tonnes) – Primary Commodities	(1)	25,659.6	25,156.8	18,276.6	3,591.8	-	-	3,591.8	-35.6%	▼
3C-3	Hopper Car Grain Volumes (000 tonnes) – Detailed Breakdown	(1)									
3C-4	Railway Car Cycle (days) – Empty Transit Time	(1)	10.7	7.7	8.3	9.1	-	-	9.1	29.1%	▲
3C-4	Railway Car Cycle (days) – Loaded Transit Time	(1)	9.2	8.8	8.8	9.8	-	-	9.8	19.4%	▲
3C-4	Railway Car Cycle (days) – Total Transit Time	(1)	19.9	16.4	17.2	18.9	-	-	18.9	23.9%	▲
3C-5	Hopper Car Grain Volumes (000 tonnes) – Non-Incentive	(1)	12,735.5	7,898.9	4,217.2	985.0	-	-	985.0	-33.6%	▼
3C-5	Hopper Car Grain Volumes (000 tonnes) – Incentive	(1)	12,924.2	17,257.9	14,059.4	2,606.8	-	-	2,606.8	-36.3%	▼
3C-6	Hopper Car Grain Volumes ($ millions) – Incentive Discount Value	(1)	$31.1	$60.1	$57.2	$10.7	-	-	$10.7	-33.7%	▼
3C-7	Traffic Density (tonnes per route mile) – Grain-Dependent Network	(1)	442.3	451.4	342.0	244.3	-	-	244.3	-38.9%	▼
3C-7	Traffic Density (tonnes per route mile) – Non-Grain-Dependent Network	(1)	292.4	289.4	208.8	173.1	-	-	173.1	-33.3%	▼
3C-7	Traffic Density (tonnes per route mile) – Total Network	(1)	330.3	328.8	240.7	190.0	-	-	190.0	-35.2%	▼
3C-8	Composite Freight Rates ($ per tonne) – Rail	(2)(3)									
3C-9	Multiple-Car Shipment Incentives ($ per tonne) – Rail	(2)(3)									
3C-10	Effective Freight Rates ($ per tonne) – CTA Revenue Cap	(2)(4)	n/a	$25.83	$25.28	n/a	-	-		n/a	–
	Terminal Elevator and Port Performance [Subseries 3D]										
3D-1	Annual Port Throughput (000 tonnes) – Grain	(1)	23,555.5	23,941.3	18,004.6	3,310.3	-	-	3,310.3	-38.1%	▼
3D-2	Average Terminal Elevator Capacity Turnover Ratio	(1)(5)	9.1	8.9	6.6	n/a	-	-		n/a	–
3D-3	Average Weekly Terminal Elevator Stock Level (000 tonnes)	(1)	1,216.2	1,192.7	1,113.6	970.4	-	-	970.4	-27.4%	▼
3D-4	Average Days-in-Store – Operating Season (days)	(1)	18.6	17.5	20.6	19.2	-	-	19.2	-17.9%	▼
3D-5	Average Weekly Stock-to-Shipment Ratio – Grain	(1)(3)									
3D-6	Average Weekly Stock-to-Shipment Ratio – Grade	(1)(3)									
3D-7	Average Vessel Time in Port (days)	(1)	4.3	5.9	4.9	4.5	-	-	4.5	-8.2%	▼
3D-8	Distribution of Vessel Time in Port	(1)(3)									
3D-9	Distribution of Berths per Vessel	(1)(3)									
3D-10	Annual Demurrage Costs ($millions)	(5)	$7.6	$16.1	$2.9	n/a	-	-		n/a	–
3D-10	Annual Dispatch Earnings ($millions)	(5)	$14.5	$13.3	$7.0	n/a	-	-		n/a	–
3D-11	Average Handling Charges – Terminal Elevators	(2)(3)									

(1) – Year-To-Date values are reported for volume-related indicators only (i.e., Grain Volume Throughput). The accompanying percentage variance denotes the relative change in the current YTD value as compared to the same period a year earlier.
(2) – Quarterly values for non-volume-related indicators (i.e., Composite Freight Rate Index) are "as at" the end of the reporting period. The accompanying percentage variance denotes the relative change in the value of the most recent reporting period as compared to that at the end of the preceding crop year.

(3) – Changes in the indicator cited cannot be depicted within the summary framework presented here. The reader is encouraged to consult the corresponding table in volume 2 of the quarterly report (Data Tables).
(4) – Statistics relating to effective railway freight rates, as determined by the Canadian Transportation Agency, are generally produced about six months after the close of the crop year. The most recent statistics available are those from the 2001-02 crop year.
(5) – The GMP provides for the calculation of this indicator on an annual basis. Quarterly values are not available.

Synopsis – Service Reliability

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

Highlights – First Quarter 2002-2003 Crop Year

Port Performance

- *Lower grain shipments at Western Canadian terminal elevators result in mixed changes to the average weekly stock-to-vessel requirements ratios.*
  - *Vancouver*
    - *Wheat – Not applicable owing to GWU lockout.*
    - *Canola – Not applicable owing to GWU lockout.*
  - *Thunder Bay*
    - *Wheat – 7.5; up by 33.2% from the first quarter of 2001-02 crop year.*
    - *Canola – 3.6; up 14.9%.*
- *Stock-to-shipment ratios also reflect reduced throughput.*
  - *Vancouver*
    - *CWB grains – Not applicable owing to GWU lockout.*
    - *Non-CWB grains – Not applicable owing to GWU lockout.*
  - *Thunder Bay*
    - *CWB grains – 6.8; down by 13.6% from the first quarter of 2001-02 crop year.*
    - *Non-CWB grains – 3.5; up 22.9%.*

Indicator Series 4 – Service Reliability

Table	Indicator Description	Notes	1999-00	2000-01	2001-02	2002-03 Q1	Q2	Q3	YTD (1)	% VAR	
	Port Performance [Subseries 4A]										
4A-1	Avg. Weekly Stock-to-Vessel Requirements Ratio – VCR – Wheat	(1)(2)	3.1	2.5	2.3	0.0	-	-	0.0	-100.0%	▼▼
4A-1	Avg. Weekly Stock-to-Vessel Requirements Ratio – VCR – Canola	(1)(2)	2.5	1.9	3.3	0.0	-	-	0.0	-100.0%	▼▼
4A-1	Avg. Weekly Stock-to-Vessel Requirements Ratio – TBY – Wheat	(1)	5.6	5.3	4.3	7.5	-	-	7.5	33.2%	▲▲
4A-1	Avg. Weekly Stock-to-Vessel Requirements Ratio – TBY – Canola	(1)	2.8	1.9	2.6	3.6	-	-	3.6	14.9%	▲▲
4A-2	Avg. Weekly Stock-to-Vessel Requirements Ratio – Grade	(1)(3)									
4A-3	Avg. Weekly Stock-to-Shipment Ratio – VCR – CWB Grains	(1)(2)	3.5	2.9	3.1	0.0	-	-	0.0	-100.0%	▼▼
4A-3	Avg. Weekly Stock-to-Shipment Ratio – VCR – Non-CWB Grains	(1)(2)	3.6	2.6	4.1	0.0	-	-	0.0	-100.0%	▼▼
4A-3	Avg. Weekly Stock-to-Shipment Ratio – TBY – CWB Grains	(1)	4.6	5.2	5.5	6.8	-	-	6.8	-13.6%	▼▼
4A-3	Avg. Weekly Stock-to-Shipment Ratio – TBY – Non-CWB Grains	(1)	3.3	2.8	2.9	3.5	-	-	3.5	22.9%	▲▲
4A-4	Terminal Handling Revenue ($millions) – Vancouver	(1)(4)	$192.7	$198.9	$139.7	n/a	-	-		n/a	–
4A-4	Terminal Handling Revenue ($millions) – Thunder Bay	(1)(4)	$82.1	$75.5	$64.2	n/a	-	-		n/a	–
4A-4	CWB Carrying Costs ($millions) – Pacific Seaboard	(1)(4)	$63.3	$48.2	$49.1	n/a	-	-		n/a	–
4A-4	CWB Carrying Costs ($millions) – Thunder Bay	(1)(4)	$31.3	$34.4	$34.4	n/a	-	-		n/a	–

(1) – Year-To-Date values are reported for volume-related indicators only (i.e., Average Weely Stock-to-Vessel Requirements Ratio). The accompanying percentage variance denotes the relative change in the current YTD value 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 quarter of the 2002-03 crop year. Owing to the limited availability of relatable data during this period, the indicator's value for the first quarter is deemed to be zero.
(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

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

Highlights – First Quarter 2002-2003 Crop Year

Export Basis and Producer Netback – CWB Grains

- *Average price for CWB grains increased sharply between the 1999-2000 and 2001-02 crop years:*
  - *Wheat – increased by 26.2% to $211.54 per tonne; durum – increased by 27.5% to $263.74 per tonne.*
- *Recent changes in the price for 1 CWRS wheat:*
  - *By the end of the first quarter, CWB return outlook price had climbed to $308.00 per tonne.*
  - *Price has since abated.*
    - *Expectations of better crop production in 2003; increased international competition; and a stronger Canadian dollar.*
- *Average Western Canada export basis for CWB grains decreased modestly between the 1999-2000 and 2001-02 crop years.*
  - *Wheat – decreased 7.7% to $50.39 per tonne; durum – decreased 6.8% to $63.05 per tonne.*
- *Recent changes in input costs:*
  - *Country elevator handling – up by 1%-50% depending on activity and commodity.*
  - *Rail transportation – up by 4%.*
  - *Terminal elevator handling – up by 1%-10%.*
- *Changes in the price of 1 CWRS wheat, and input costs to the export basis, suggests a modest improvement in the producer's netback for CWB grains in the 2002-03 crop year.*
  - *Per-tonne financial returns still tempered by sharply reduced grain volumes.*

Export Basis and Producer Netback – Non-CWB Commodities

- *Average prices for non-CWB commodities increased sharply between the 1999-2000 and 2001-02 crop years.*
  - *Canola – increased by 22.0% to $355.67 per tonne; large yellow peas – increased by 38.2% to $279.85 per tonne.*
- *Recent changes in the price for 1 Canada canola:*
  - *By the end of the first quarter, the average Vancouver cash price had climbed to about $450.00 per tonne.*
  - *Price has since abated in the face of an expected improvement in crop production; increased competition; and a stronger dollar.*
- *Changes in the average Western Canada export basis for non-CWB commodities showed marked behavioural differences between the 1999-2000 and 2001-02 crop years:*
  - *Canola – decreased by 20.0% to $42.01 per tonne; large yellow Peas – increased by 29.6% to $70.97 per tonne.*
- *Recent changes in input costs:*
  - *Country elevator handling – up by 1%-50% depending on activity and commodity.*
  - *Rail transportation – up by 4%.*
  - *Terminal elevator handling – up by 1%-10%.*
- *Changes in the price of 1 Canada canola, and input costs to the export basis, suggests a modest improvement in the producer's netback for non-CWB commodities in the 2002-03 crop year.*
  - *Per-tonne financial returns still tempered by sharply reduced grain volumes.*

Producer Loading

- *Number of producer-loading sites remained unchanged at 513 during the first quarter of the 2002-03 crop year.*
- *Producer-cars shipments totalled just 318 cars in the first quarter.*
  - *Well below the quarterly average of 1,646 cars in the 2001-02 crop year.*

Indicator Series 5 – Producer Impact

Table	Indicator Description	Notes	1999-00	2000-01	2001-02	2002-03 Q1	Q2	Q3	YTD (1)	% VAR	
	Export Basis										
	Western Canada										
5A-10	1 CWRS Wheat ($ per tonne)	(1)(3)	$54.58	$52.29	$50.39						
5A-10	1 CWA Durum ($ per tonne)	(1)(3)	$67.63	$68.71	$63.05						
5A-10	1 Canada Canola ($ per tonne)	(1)(3)	$52.51	$49.11	$42.01						
5A-10	Canadian Large Yellow Peas – No. 2 or Better ($ per tonne)	(1)(3)	$54.76	$72.72	$70.97						
	Producer Loading										
5B-1	Producer Loading Sites (number) – Class 1 Carriers	(2)	415	381	386	386	-	-		0.0%	–
5B-1	Producer Loading Sites (number) – Class 2 and 3 Carriers	(2)	120	122	127	127	-	-		0.0%	–
5B-2	Producer Car Shipments (number) – Covered Hopper Cars	(1)	3,441	4,724	6,583	318	-	-	318	-53.8%	▼

(1) – Year-To-Date values are reported for volume-related indicators only (i.e., Producer Car Shipments). The accompanying percentage variance denotes the relative change in the current YTD value as compared to the same period a year earlier.
(2) – Quarterly values for non-volume-related indicators (i.e., Producer Loading Sites) are "as at" the end of the reporting period. The accompanying percentage variance denotes the relative change in the value of the most recent reporting period as compared to that at the end of the preceding crop year.
(3) – The GMP provides for the calculation of this indicator on an annual basis. Quarterly values are not available.

Appendix 1: Program Background

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

- The introduction, and gradual expansion of tendered grain movements by the Canadian Wheat Board; and

- The replacement of the maximum rate scale for rail shipments with a cap on the annual revenues that railways can earn from the movement of regulated grain.

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

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

- *Series 1 – Industry Overview*
  Measurements relating to annual grain production, traffic flows and changes in the GHTS infrastructure (country and terminal elevators as well as railway lines).

- *Series 2 – Commercial Relations*
  Measurements focusing on the tendering activities of the Canadian Wheat Board as it moves towards a more commercial orientation as well as changes in operating policies and practices related to grain logistics

- *Series 3 – System Efficiency*
  Measurements aimed at gauging the operational efficiency with which grain moves through the logistics chain.

- *Series 4 – Service Reliability*
  Measurements focusing on whether the GHTS provides for the timely delivery of grain to port in response to prevailing market demands.

- *Series 5 – Producer Impact*
  Measurements designed to capture the value to producers from changes in the GHTS, and is focused largely on the calculation of "producer netback."

Appendix 2: 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 Sandhills Terminal
Great Western Rail
Inland Terminal Association of Canada
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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

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