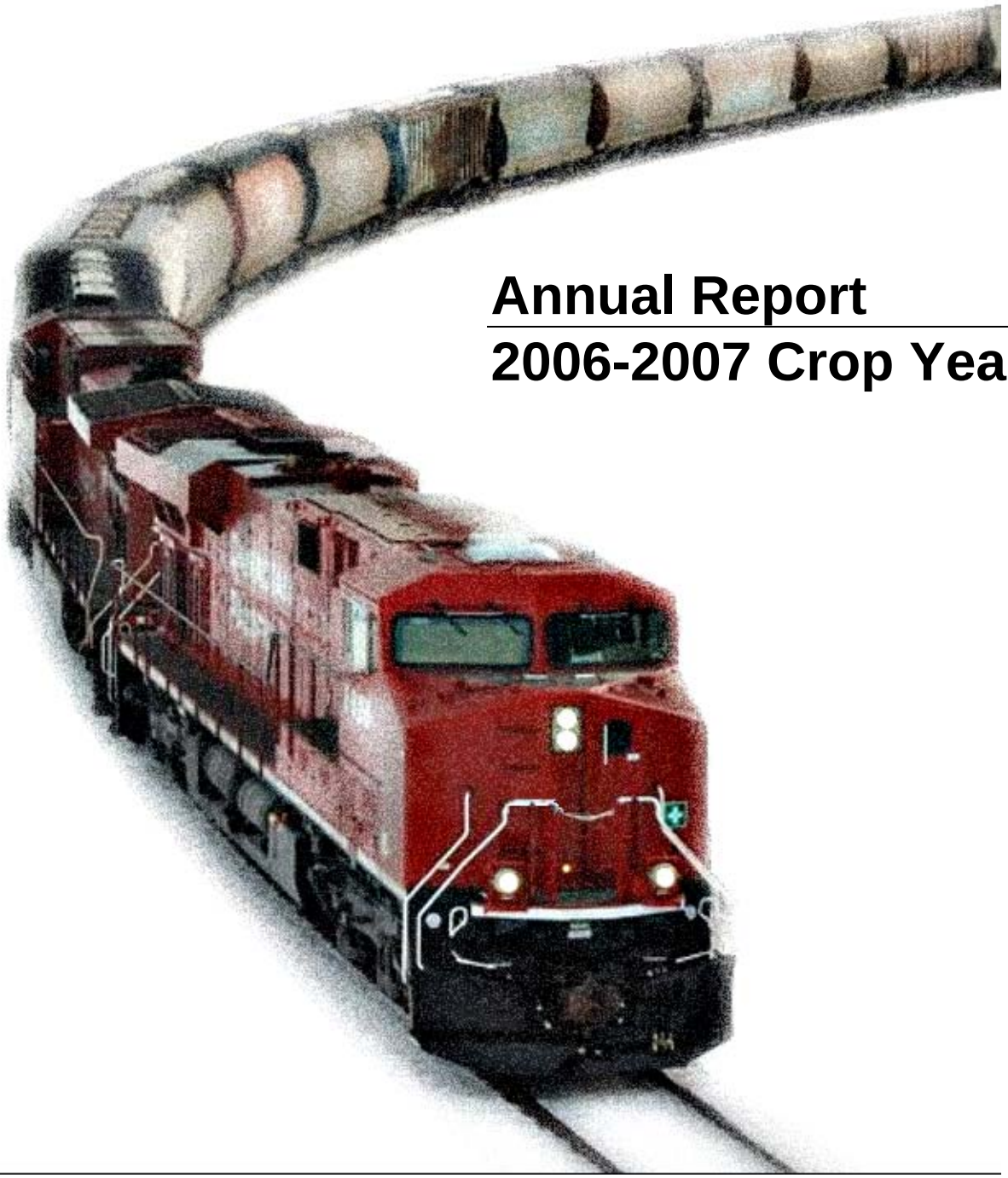
Monitoring the Canadian Grain Handling and Transportation System

1 Summary Report



Annual Report
2006-2007 Crop Year

Government of Canada / Gouvernement du Canada

Quorum Corporation

Foreword

The following report details the performance of Canada's Grain Handling and Transportation System (GHTS) for the crop year ended 31 July 2007, and focuses on the various events, issues and trends manifest in the movement of Western Canadian grain during the past year. This is the seventh annual report submitted by Quorum Corporation in its capacity as the Monitor appointed under the Government of Canada's Grain Monitoring Program (GMP).

As with previous quarterly and annual reports, the report is structured around a number of performance indicators established under the GMP, and grouped under five broad series, namely:

Series 1 – Industry Overview
Series 2 – Commercial Relations
Series 3 – System Efficiency
Series 4 – Service Reliability
Series 5 – Producer Impact

Each series is the subject of an in-depth examination presented in Sections 1 through 5 respectively. The analysis is founded on data collected by the Monitor from the industry's various stakeholders, and uses year-over-year performance comparisons to frame the discussion. To that end, performance in the 2006-07 crop year is largely gauged against that of the 2005-06 crop year.

The GMP is also intended to frame recent performance against the backdrop of a longer time series. Beginning with the 1999-2000 crop year – referred to as the "base" year under the GMP – the Monitor has now assembled relatable quarterly performance data in a time series that spans eight crop years. This data constitutes the backbone of the GMP, and is used widely to identify significant trends and changes in GHTS performance over the course of this interval. Readers interested in a fuller examination of the time series data collected are encouraged to consult the detailed data tables found in Appendix 4 as required.

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

QUORUM CORPORATION

Edmonton, Alberta
December 2007

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Executive Summary

The federal government's Grain Monitoring Program (GMP) was initiated in 2001 in order to facilitate a continuous gathering of data, the preparation of detailed measures and an assessment of the performance of Canada's Grain Handling and Transportation System. This report is the seventh under the GMP and covers eight crop years worth of collected data, starting with the 1999-2000 crop year, and culminating with the 2006-07 crop year.

Under its mandate, Quorum Corporation provides the government with a series of quarterly and annual reports that track and analyze the impact of overall changes in the structure of the grain handling and transportation system, the effectiveness of the Canadian Wheat Board's tendering process, commercial relations, the efficiency and reliability of the system, short-term operational performance and producer impacts.

The Monitor's annual reports are intended to provide a wide-ranging examination and assessment of Canada's Grain Handling and Transportation System (GHTS). These findings are summarized below.

Production and Volumes

Overall grain production for the 2006-07 crop year fell to 49.3 million tonnes, a decrease of 12.0% from the GMP record of 56.0 million tonnes set a year earlier and well below the 53.1-million-tonne average for output in the program's non-drought years. The decrease in production was mostly in Saskatchewan and Alberta where their first overall reductions in four years were seen. The majority of the 6.7-million-tonne reduction was seen in CWB grains (5.1 million tonnes), predominantly durum (2.8 MMT) and barley (2.6 MMT). Slight reductions in canola (1.1 MMT) and special crops (.7 MMT) made up the remainder. Despite this, the quality of grain produced in the 2006-07 crop year proved significantly better than that witnessed in either of the two previous crop years.

Carry forward stocks hit a record 12.4 million tonnes, bringing the overall grain supply for the 2006-07 crop year totalled 61.7 million tonnes. The amount of grain moved by rail to western Canadian ports decreased marginally, falling by 3.9%, to 24.3 million tonnes from 25.3 million tonnes the year before, the majority of which flowed through the Port of Vancouver (53%). This reflected a reduction in the percentage of volume as Prince Rupert rose by 17.1%, to reach a GMP record of 4.9 million tonnes. The increases seen in Prince Rupert throughput in the last two crop years can be attributed to a combination of more competitive railway freight rates and a better car supply within this corridor.

Infrastructure

The reduction in the number of licensed country elevators in western Canada remains one of the most visible facets of the GHTS's continuing evolution. Since the start of the GMP monitoring period (the 1999-2000 crop year) we have seen 637 elevators closed, going from 1,004 licensed elevators to just 367. The associated storage capacity fell by a comparatively modest 18.0% in this same period. The program of reductions has abated some in the last four crop years which suggest that grain companies have effectively concluded their elevator rationalization programs.

There were 99.7 route-miles removed from the Western Canadian rail network in the 2006-07 crop year. The majority of this came from the Southern Manitoba Railway's abandonment of its entire 78.6-route-mile network, with the remaining 21.1 route-miles of track being abandoned by CN and CP. With a remaining network comprised of 18,495.3 route-miles, this enlarged the scope of the reductions made since the beginning of the GMP to 5.0%, or 972.9 route-miles.

The licensed terminal elevator network in western Canada remained at 16 terminals in the 4 port locations. While there were no physical alterations to the network during the 2006-07 crop year, there were a number of significant changes in ownership. The first of these related to the sale of the former United Grain Growers terminal in Vancouver, which the Competition Bureau

had ordered Agricore United to divest itself of in 2001. The terminal was acquired in June 2007 by a consortium of smaller grain companies, known as Alliance Grain Terminal Ltd. The sale was significant in as much as it would provide the consortium's constituent companies with direct access to their own west coast terminal elevator.

The second change in ownership stems from the takeover of Agricore United by Saskatchewan Wheat Pool in the fourth quarter. Under the terms of this arrangement, SWP agreed to an exchange of its Vancouver terminal elevator interests with those of Cargill Ltd. In specific terms, Cargill was to assume ownership of what had been the SWP terminal elevator, while SWP took control of Cargill's interest in Cascadia Terminal, making it a wholly-owned SWP facility.

CWB Tendering and Advance Car Awards

The 2006-07 crop year marked the seventh year for the Canadian Wheat Board's (CWB) tendering program and the fourth year in which the CWB targeted to move a fixed 40% of its overall grain movements to the four ports in western Canada using a combination of tendering and advance car awards. Under the terms of this arrangement, about half of this volume – representing a maximum of 20% of its overall grain movements – was to be tendered.

The CWB issued a total of 260 tenders calling for the shipment of approximately 3.8 million tonnes of grain, 29.3% less than was sought a year earlier. These were met by 862 bids offering to move 6.8 million tonnes of grain, about three-quarters more than the amount sought. A total of 323 contracts were subsequently signed for the movement of almost 2.7 million tonnes of grain, 70.4% of the amount called. This represented 17.8% of the tonnage shipped by the CWB to western Canadian ports during the 2006-07 crop year.

Improved market conditions in the 2006-07 crop year brought about a restoration of the bidding patterns that had been observed in the first three years of the CWB's tendering program. Premiums were effectively eliminated, and the maximum discounts bid moved noticeably higher against those put forth a year earlier. In the second quarter these bids surpassed the four-year-old benchmark of $23.04 per tonne to set a new record of $24.51 per tonne. This was largely supported by like bids in the third quarter before falling back to a maximum of $16.73 per tonne at year's end.

With an increase in the discounts offered by the grain companies in their tender bids, as well as the elimination of premiums paid on select tendered movements, the transportation savings accruing to the CWB – and ultimately passed back to producers through its pool accounts – climbed substantially in the 2006-07 crop year. The CWB estimates the net savings generated from these activities to have increased by 53.7%, to $35.2 million from $22.9 million a year earlier.

A total of 2.4 million tonnes of grain moved under the CWB's advance car awards program during the 2006-07 crop year. This represented 15.8% of the CWB's total shipments to western Canadian ports, which constituted a gain of 0.2 percentage points from the 15.6% share garnered a year earlier. In conjunction with the volume that moved under its tendering program, a combined 33.6% of the CWB's total shipments moved under these two programs. This fell short of the 40% that had been targeted but marginally above the 31.8% achieved in the 2005-06 crop year.

The major grain companies continue to dominate the primary elevator network. As of 31 July 2007, the major grain companies still held over 63.3% of the facilities and 67.2% of the storage capacity, although these constituted significant reductions from the 86.5% and 80.7% shares respectively held at the end of the GMP's first year. Despite a concern raised by a number of stakeholders over the potential ability of major grain companies to displace their smaller competitors in the marketplace, the overall market share secured by the larger grain companies has not changed significantly in the last eight crop years, and has in fact fallen to 79.2% from 81.1%.

These shifts are at odds with the expectations of those who, at the outset of the GMP, voiced the concern that industry rationalization would significantly reduce competition. To some extent, these shifts indicate that the level of competition in the GHTS has actually been heightened. The emergence of various independent elevator operations has undoubtedly helped to build the market position of the non-major grain companies. In addition, the establishment of licence-exempt producer-car loading facilities, and the relative gain in producer-

car movements, has also been a contributory factor. It remains to be seen whether the same resilience will be observed in the face of some of the changes being advanced in the 2006-07 crop year.

Commercial Relations

Among those that were expected to have some impact on the commercial workings of the GHTS were:

Government Moves Forward With Marketing Choice: In its 2006 election platform, the federal Conservative Party had committed to provide western Canadian farmers with greater choice in the marketing of their grain. The first step of this platform item saw the establishment of an eight-person task force in mid September 2006. The mandate given them by the Minister of Agriculture and Agri-Food was to consider the technical and transitional issues that would be required to convert the CWB to a "marketing choice" environment. The task force's report to the Minister, which was submitted on 25 October 2006, recommended a four-stage transition period extending over several years.

Within days of receiving the committee's recommendations the Minister announced that the government planned to move forward in the matter of initially extending marketing choice to barley. The government followed this by initiating and executing a farmer plebiscite. The plebiscite, which employed a mail-in ballot, extended from early February through mid March 2007. With a minority of 37.8% having voted to retain the CWB's single-desk authority, the government declared that it was going to proceed with the regulatory changes required to give producers a choice in the marketing of their barley by the commencement of the 2007-08 crop year.

In light of the market uncertainty that had enveloped the issue by the end of April 2007, the CWB lowered the Pool Return Outlook (PRO) on malting barley for the 2006-07 crop year, and suspended its PRO and Producer Payment Options on barley for the upcoming 2007-08 crop year. Although disappointed by the CWB's move, the government continued to progress with amendments to the *Canadian Wheat Board Regulations.* Having argued that its mandate could only be varied through a legislative change to the *Canadian Wheat Board Act* itself, the CWB moved to have the Federal Court review the legality of the government's actions following the Minister's announcement that these regulatory amendments had been finalized in June.

During a two-day hearing held in late July 2007, both parties argued the merits of their respective positions. In the end, the court sided with the CWB, ruling that legislative amendments enacted in 1998 clearly showed that Parliament had reserved unto itself the power to change the CWB's mandate. As a result, the government's attempt to remove the CWB's single-desk control over the marketing of barley through regulatory change was set aside, at least temporarily.

Grain Industry Seeks Redress on Railway Service Issues: Stakeholder complaints over railway service and car allocation have increased in recent years. Of particular concern has been a perceived decline in the consistency and reliability with which that service has been delivered. The general car allocation process also came under increasing fire from shippers who argued that they were being shortchanged by the preference given to unit trains ordered through the railways' advance booking products as well as by what they claimed to be the railways' lack of accountability. Arguing that regulatory change provided the only practical means of rectifying these perceived failings, they joined forces with shippers of other commodities in raising their complaints to the federal government for attention.

Transport Canada and the "Coalition of Rail Shippers" had begun discussions in May 2006, and a little over a year later, on 30 May 2007, the Minister of Transport tabled changes to the Canada Transportation Act in the House of Commons. In general terms, Bill C-58 was aimed at protecting rail shippers from the potential abuse of market power by the railways, and included more effective means of addressing their concerns over service and rates. Furthermore, the government also committed itself to a review of railway service within 30 days of the Bill being passed into law.

One aggrieved grain shipper, Great Northern Grain Terminals Ltd. (GNG), opted to file a level-of-service complaint with the Canadian Transportation Agency. In its complaint, filed on 8 March 2007, GNG alleged that CN's advance products discriminated against it and other small shippers in the allocation of railcars and that CN had failed to provide the complainant with an adequate level of rail service under its general railcar allocation program thus rendering them uncompetitive in the marketing of grain. The case acted as a lightning rod for a host of smaller shippers, with over 20 separate organizations having sought intervenor status in the

case. All of the intervenors offered evidence respecting how the CN car allocation program worked and why its application resulted in an inadequate level of service.

In early July 2007, the Agency released its decision stating that CN's car allocation practices had resulted in a significant deterioration in the service being provided to GNG and that CN had in fact breached its common carrier obligations and that GNG would likely suffer substantial commercial harm if the breach went unchecked. Further, they determined that the difficulties encountered by GNG in obtaining an adequate and suitable car supply were not isolated, but rather systemic in nature with widespread effect.

The Agency directed CN to make reasonable accommodation for GNG's specific transportation needs and to undertake a number of other, broader corrective measures. With its implications for the industry at large, many of the GHTS's smaller shippers looked upon the Agency's decision with favour. Moreover, as CN had been ordered to implement these remedies by 1 August 2007, they anticipated a significant improvement in their ability to secure equipment and compete more fully in the upcoming 2007-08 crop year.

Port of Prince Rupert Experiences Unprecedented Growth: Prince Rupert posted and increase of 17.1% over the previous year in the 2006-07 crop year moving a total of over 4.9 million tonnes of grain, the largest amount moved since the GMP was initiated.

Much of this growth can be traced to recent CN rate reductions. In the first year of the GMP, the rate for single car movements to Prince Rupert was higher than Vancouver rates by a factor of 13%. These rates were gradually moved to a point where parity was realized during the 2004-05 crop year.
While Prince Rupert's share of the total grain volume seldom exceeded 14% before the elimination of the rate differential, by the end of the 2006-07 crop year it had climbed to 20.3%. Supported in large part by the allocation of more hopper cars to movements in the Prince Rupert corridor, these actions promoted CN's broader strategic aim of increasing the amount of traffic handled over its less utilized route through northern British Columbia.

Review of CGC and Canada Grain Act - In September 2006, the federal government tabled its commissioned report reviewing of the Canadian Grain Commission (CGC) and the *Canada Grain Act (the Compas Report) culminating a* six month built on the consultations with hundreds of stakeholders. The report advanced nearly 100 recommendations that ranged from changes to the CGC's mandate and governance structure and licensing and security provisions to the elimination of certain weighing and inspections services and the dispute resolution process. Some of the recommendations, such as the proposal that inward weighing and inspection services at terminal elevators be made optional, imply a significant degree of change in the way the GHTS works today. The implications arising from the report's recommendation regarding quality assurance, and the changing of a grading system that has long been based solely on Kernel Visual Distinguishability (KVD) are also significant.

After a review of the report by the House of Commons Standing Committee on Agriculture and Agri-Food, 12 recommendations were made to the Government. In addition to proposing that the CGC's governance structure be altered, they recommended that farmers maintain their access to producer-car loading, and that inward inspection services be made optional. The committee also suggested that KVD be abandoned, and replaced with a system of farmer declarations supported by science-based mechanisms of quality control. To ensure compliance, it was proposed that a series of monetary penalties accompany these declarations.

The government determined initial actions in response to the standing committees recommendations were to target 2010 for the elimination of KVD as the basis for quality assurance in all classes of western wheat. In order to facilitate a measured transition, the government requested that the CGC report by 31 December 2009 on the experience gained from doing away with KVD when grading minor western wheat classes. The CGC was also requested to furnish an update on any related technological developments, as well as the evolution of the verification and declaration systems.

Saskatchewan Wheat Pool Launches Bid for Agricore United - In November 2006, Saskatchewan Wheat Pool Inc. (SWP) announced that it was launching a bid to acquire Agricore United (AU). After several exchanges and believing the SWP to be financially inadequate, AU's Board of Directors unanimously recommended in December 2006 that its shareholders reject what it deemed to be a hostile takeover bid. This view was echoed by Archer Daniels Midland Co. (ADM), in AU, and which indicated that it could not support the deal as then

structured. More importantly, the AU board signalled that Archer Daniels Midland (which held a 28%) interest was supporting its efforts to solicit a better offer for the company's shareholders, whether be it from SWP or another potential bidder.

SWP extended the deadline on its offer to 7 March 2007 and enhanced its original offer to include a cash component. AU board recommended in early February 2007 that the revised offer also be rejected and on 21 February 2007, in move that shocked most in the industry, the AU board announced on that it had agreed to combine with James Richardson International Limited (JRI) after receiving what it considered to be a better offer from JRI's parent, James Richardson & Sons Limited, and the Ontario Teachers' Pension Plan. SWP was not to be swayed by this action and continued to negotiate with an objective of consummating a deal, including at one point Cargill in answer to concerns brought forward by the Canadian Competition Bureau

In late May, after a series of negotiations between all of the interested parties and some that included the Canadian Competition Bureau, it was announced that an agreement had been reached that saw the formal transfer of various AU assets to Cargill and JRI, as well as the Vancouver terminal elevator that the Competition Bureau had ordered AU to divest itself of six years earlier. As the 2006-07 crop year came to a close, the company that would soon emerge as Viterra seemed poised to exercise its unchallenged role as the largest grain handler in western Canada. Viterra's market share was expected to exceed 40% as a result of the merger.

Extreme Weather Impacts Rail Service - In late October 2006 British Columbia found itself at the beginning of what was to be a three month onslaught of storms bringing strong winds, drenching rains and heavy snows. These storms brought unusually intense rainfalls which set the stage for serious flooding problems. The water level on every river in the Lower Mainland, the south coast, and the southern half of Vancouver Island, rose to heights expected only once in every 50 years. It triggered widespread mudslides, washouts and floods that closed highways and resulted in the evacuation of hundreds of residents from their homes. Followed by other storms that continued to batter the coast with even more rain and strong winds the Lower Mainland with blanketed with record snowfalls and unusually low temperatures. The result was the wettest November on record.

The consequence for railway service was significant as mudslides brought on by these heavy rains resulted in the closure of CN's mainline through the Fraser Canyon temporarily halting train operations between Edmonton and Vancouver. It was in mid December that the Lower Mainland was again sent reeling by the back-to-back arrival of three powerful storms – each packing winds with gusts well in excess of 100 km/h – that the GHTS showed signs of being affected. The storms caused over $100 million in property damage and significantly impacted power and telephone service and continued well into January before subsiding.

Not surprisingly, the railways' average car cycle in the Vancouver corridor moved steadily higher during this period: from an average of 16.6 days in the first quarter, to 19.0 days in the second, and finally to 20.1 days in the third. At the same time, grain companies reported a sharp downturn in the number of railcars that were being made available to them for loading in the country.

The impact on the GHTS could also be observed from the elongation of the average times spent by vessels in port, since these adverse weather conditions frequently prevented ships from loading. For the port of Vancouver, these stays climbed from averages of 7.0 days and 7.1 days in November and December respectively, to 10.7 days in January and 13.8 days in February. Similarly, the longest time spent by any one vessel in port jumped from 18 days in December to 34 days in January. In light of this, the demurrage cost for ships waiting to load in the harbour reportedly climbed to as much as $175,000 per day.

Labour Disruptions Undermine Rail Service - The United Transportation Union (UTU) members at CN, representing about 2,800 conductors and yard-service employees throughout Canada, walked out on strike on 10 February 2007 following the failure of contract negotiations a day earlier. The essence of the dispute was wages and working conditions. CN responded by pressing its management personnel into train and yard service in an effort to keep its trains moving. An unsuccessful attempt by CN to have the strike declared illegal by the Canada Industrial Relations Board was followed the with the UTU refusing CN's request for a two-month cooling-off period. By the tenth day of the strike, shippers were demanding that the federal government take decisive action to resolve what they had come to regard as an increasingly serious economic problem.

The Minister of Labour appointed a mediator in an ultimately failed attempt to help the parties settle their differences and end the strike. On 23 February 2007 the Minister tabled the back-to-work legislation needed to terminate the UTU's action against CN. That legislation was suspended after the two sides reached a tentative settlement the following day and the unions returned to work based on a ratification vote slated for 9 April 2007,

On 10 April 2007, the UTU notified the railway that its membership had rejected the tentative settlement and as a result, the UTU initiated rotating strike action the next day. As picket lines formed, CN responded by locking out the striking employees with management personnel again assume their duties. Further attempts to broker a national agreement ultimately failed and consequently the federal government moved to progress its previously suspended back-to-work legislation through Parliament. The bill came into effect on 19 April 2007 and was followed a few days later by the federal labour minister's appointment of an arbitrator in the dispute. In the end, the arbitrator found in favour of the employer rather than the employees, selecting CN's final contract offer as the basis for a new labour agreement that would run through July 2010.

CP also experience labour challenges as 1,200 CP maintenance-of-way employees walked out on 15 May in a strike centred on wages. Unlike the action against CN, the impact of this action on the GHTS was less significant in as much as the company's train movements were not affected. Federal mediation efforts in early June were largely responsible for the tentative contract agreement that was reached between the two parties on 6 June 2007.

System Efficiency

The GMP utilizes a supply chain model to provide a framework by which to examine the speed with which grain moves through the GHTS. For the 2006-07 crop year grain took an average of 58.1 days to move through the supply chain. Although increases in both country and terminal elevator storage times, which rose by a combined 1.9 days were realized and was 1.5 days more than the 2005-06 crop year's average, it remains among the better values recorded under the GMP. Other observations concerning the supply chain's performance during the crop year include:

- Firstly, despite a 7.6% reduction in the grain supply, which totalled 61.7 million tonnes as compared to the previous crop year's 66.8 million tonnes, it proved to be one of the largest made available for movement under the GMP. Moreover, until volumes fell off sharply in the third quarter, the throughput of Canada's western ports was within but a few percentage points of previous records. As a result, the pressures brought to bear on the GHTS early in the 2006-07 crop year can be deemed to have been comparable to some of the busiest periods experienced thus far under the GMP.

- Secondly, the quality of the grain that moved through the GHTS was superior to that moved in each of the last two crop years. At such, the mix of grains and grades passing through the system more closely resembled those depicted at the beginning of the GMP. Even so, changes in both the international marketplace as well as the competitive environment – perhaps best exemplified by the increasing demand for canola along with CN's efforts to sway more traffic to Prince Rupert – are working to alter these traditional traffic flows.

- Finally, there is evidence to suggest that grain is moving through the supply chain at a noticeably faster pace than it was eight years before. Much of this improvement is tied to a reduction in the amount of time spent by grain as inventory in the country elevator network. Although this has clearly been driven by the rationalization of these same facilities, improvement is now also being observed in the loaded transit times posted by the railways. Although the 8.2-day average noted for the 2006-07 crop year rivals some of the best yet recorded under the GMP, problems with car supply and railway service continued to be a concern for many GHTS stakeholders.

Producer Impact

One of the methods the GMP utilizes in examining the impact of changes made to the GHTS on producers is an examination of the per-tonne financial returns to producers of wheat, durum, canola, and large yellow peas. This years analysis results indicate once again that all have improved since the 1999-2000 crop year. The

gains range from a low of 10.5% in the case of 1CWRS wheat, to as much as 39.2% for large yellow peas. In all instances, these improvements came primarily as a result of increases in the market price of the commodity itself.

Still, the export basis for all commodities has changed over the course of the GMP, albeit with demonstrably less volatility than exhibited by price. With respect to the CWB grains, the scope of that net change was an increase of 15.8% (or $8.62 per tonne) in the case of wheat, and 12.6% (or $8.55 per tonne) for durum. As for the non-CWB commodities, the changes proved somewhat more beneficial: a decrease of 12.8% (or $6.71 per tonne) in the case of canola; and an increase of 13.5% (or $7.41 per tonne) for large yellow peas.

To a large extent, the export basis of both wheat and durum has profited from the financial benefits received by producers, whether in the form of trucking premiums or CWB transportation savings. These increased benefits, which amounted to $4.62 per tonne and $4.07 per tonne for wheat and durum respectively, acted as counterweights to the escalation in such direct costs as transportation, elevation, cleaning, and storage.

This, however, was not the case for non-CWB commodities. Both canola and large yellow peas receive significantly less in terms of these per-tonne premiums than CWB grains do. More importantly, the trucking premiums paid for both commodities have declined significantly over the course of the past eight crop years. In the case of canola, trucking premiums have all but been eliminated, having fallen from $2.48 per tonne in the 1999-2000 crop year to just $0.50 in the 2006-07 crop year. This decline is consistent with the grain companies' stated preference to use a single pricing tool, namely the basis, as the competitive mechanism by which they attract these commodities into their facilities.

Also worth noting is the degree to which the export basis can vary between the nine geographic areas used to assess producer impact under the GMP, both in absolute as well as relative terms. These variations encompass a myriad of individual differences in the applicable cost of freight, the FAF, elevation, and producer benefits. As a result, the export basis within any one area can vary significantly from the western Canadian average.

Section 1: 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 – 2006-07 Crop Year

Grain Production and Supply

- *Grain production decreased by 12.0% to 49.3 million tonnes.*
  - *Due to less favourable growing conditions across the prairies.*
    - *Saskatchewan – down 22.5% to 23.8 million tonnes.*
    - *Alberta – down 15.5% to 16.5 million tonnes.*
  - *Sharp upturn for Manitoba – increased 60.6% to 8.8 million tonnes.*
    - *Vastly improved growing conditions.*
  - *Significant improvement in overall grain quality.*
    - *Higher-quality grades readily available.*
  - *Production gains limited to a few key commodities.*
    - *Wheat – up 1.2% to 19.1 million tonnes.*
    - *Durum – down 43.4% to 3.3 million tonnes.*
    - *Barley – down 24.0% to 8.9 million tonnes.*
    - *Canola – down 11.7% to 8.5 million tonnes.*
- *Carry forward stock increased by 15.4% to 12.4 million tonnes.*
  - *Largest level recorded under the GMP.*
- *Total grain supply decreased by 7.6% to 61.7 million tonnes.*

Railway Traffic

- *Railway grain volume decreased 3.9% to 24.3 million tonnes.*
  - *Vancouver volume decreased 8.6% to 12.9 million tonnes.*
  - *Thunder Bay volume decreased 8.7% to 6.0 million tonnes.*
  - *Prince Rupert volume increased 17.1% to a GMP record of 4.9 million tonnes.*
    - *Share of traffic increased to 20.3% from 16.6% a year earlier.*
  - *Churchill volume increased 15.2% to 0.5 million tonnes.*

Country Elevator Infrastructure

- *Fifth consecutive year of limited changes to elevator network.*
  - *Grain delivery points reduced by 2.5% to 268.*
  - *Number of elevators fell by 1.9% to 367.*
- *Elevator storage capacity decreased by 1.9% to 5.8 million tonnes.*
- *Elevators capable of loading in blocks of 25 or more cars fell 4.4% to 239.*
  - *Share of GHTS elevators fell marginally to 65.1% from 66.8%.*
  - *Share of GHTS storage capacity fell marginally to 88.6% from 89.2%.*

Railway Infrastructure

- *Western Canadian railway network reduced by 0.5% to 18,495.3 route-miles.*
  - *CN and CP abandon a combined 21.1 route-miles of track.*
  - *Southern Manitoba Railway discontinues operations; abandons 78.6 route-miles.*
- *Discontinuance plans for over 1,200 route-miles of CN and CP infrastructure remains.*
- *CN reacquires Savage Alberta Railway in December 2006 for $25 million.*

Terminal Elevator Infrastructure

- *Licensed GHTS terminal elevators remained unchanged at 16.*
  - *Storage capacity held at 2.6 million tonnes.*
- *Significant ownership changes in Vancouver terminal elevators.*
  - *Former UGG terminal sold to Alliance Grain Terminal Ltd. consortium.*
    - *Serves to give smaller grain companies their own facility.*
  - *SWP acquisition of AU prompts exchange of terminal interests.*
    - *SWP takes control of Cascadia Terminal.*
    - *Cargill assumes ownership of former SWP terminal.*
- *Terminal elevator unloads decreased by 3.9% to 261,204 railcars.*
  - *CP's share increased marginally to 50.5% from 50.0% a year earlier.*
  - *CN efforts to promote Prince Rupert gateway produced 21.1% decline in handlings to Vancouver.*

Indicator Series 1 – Industry Overview

Table	Indicator Description	Notes	BASE 1999-00	CURRRENT REPORTING PERIOD (1) 2005-06	2006-07	% VAR	
	Production and Supply [Subseries 1A]						
1A-1	Crop Production (000 tonnes)	(2)	55,141.7	56,002.7	49,264.6	-12.0%	▼
1A-2	Carry Forward Stock (000 tonnes)	(2)	7,418.2	10,768.0	12,424.7	15.4%	▲
	Grain Supply (000 tonnes)	(2)	62,559.9	66,770.7	61,689.3	-7.6%	▼
1A-3	Crop Production (000 tonnes) – Special Crops	(2)	3,936.7	5,169.5	3,938.1	-23.8%	▼
	Rail Traffic [Subseries 1B]						
1B-1	Railway Grain Volumes (000 tonnes) – Origin Province						
1B-2	Railway Grain Volumes (000 tonnes) – Primary Commodities		26,441.0	25,304.7	24,311.7	-3.9%	▼
1B-3	Railway Grain Volumes (000 tonnes) – Detailed Breakdown						
1B-4	Railway Grain Volumes (000 tonnes) – Special Crops		2,103.4	2,608.2	2,344.3	-10.1%	▼
	Country Elevator Infrastructure [Subseries 1C]						
1C-1	Grain Delivery Points (number)		626	275	268	-2.5%	▼
1C-1	Grain Elevator Storage Capacity (000 tonnes)		7,443.9	5,870.8	5,758.4	-1.9%	▼
1C-1	Grain Elevators (number) – Province						
1C-2	Grain Elevators (number) – Railway Class		917	374	367	-1.9%	▼
1C-3	Grain Elevators (number) – Grain Company						
1C-4	Grain Elevators Capable of Incentive Loading (number) – Province						
1C-5	Grain Elevators Capable of Incentive Loading (number) – Railway Class		317	250	239	-4.4%	▼
1C-6	Grain Elevators Capable of Incentive Loading (number) – Railway Line Class						
1C-7	Grain Elevator Openings (number) – Province						
1C-8	Grain Elevator Openings (number) – Railway Class		43	10	44	440.0%	▲
1C-9	Grain Elevator Openings (number) – Railway Line Class						
1C-10	Grain Elevator Closures (number) – Province						
1C-11	Grain Elevator Closures (number) – Railway Class		130	21	51	242.9%	▲
1C-12	Grain Elevator Closures (number) – Railway Line Class						
1C-13	Grain Delivery Points (number) – Accounting for 80% of Deliveries		217	90	n/a	n/a	–
	Railway Infrastructure [Subseries 1D]						
1D-1	Railway Infrastructure (route-miles) – Grain-Dependent Network		4,876.6	4,221.6	4,137.7	-2.0%	▼
1D-1	Railway Infrastructure (route-miles) – Non-Grain-Dependent Network		14,513.5	14,373.4	14,357.6	-0.1%	–
1D-1	Railway Infrastructure (route-miles) – Total Network		19,390.1	18,595.0	18,495.3	-0.5%	–
1D-2	Railway Grain Volumes (000 tonnes) – Grain-Dependent Network		8,686.5	7,601.2	6,988.8	-8.1%	▼
1D-2	Railway Grain Volumes (000 tonnes) – Non-Grain-Dependent Network		16,975.8	17,119.6	16,748.1	-2.2%	▼
1D-2	Railway Grain Volumes (000 tonnes) – Total Network		25,662.3	24,720.8	24,736.9	-4.0%	▼
1D-3	Shortline Railway Infrastructure (route-miles)		3,043.0	2,445.6	2,023.2	-17.3%	▼
1D-3	Shortline Railway Grain Volumes (000 tonnes)		2,090.5	1,709.2	1,059.1	-38.0%	▼
1D-5	Railway Grain Volumes (000 tonnes) – Class 1 Carriers		23,571.8	23,011.6	22,677.8	-1.5%	▼
1D-5	Railway Grain Volumes (000 tonnes) – Class 2 and 3 Carriers		2,090.5	1,709.2	1,059.1	-38.0%	▼
1D-6	Grain Elevators (number) – Grain-Dependent Network		371	127	117	-7.9%	▼
1D-6	Grain Elevators (number) – Non-Grain-Dependent Network		513	233	235	0.9%	–
1D-6	Grain Elevator Storage Capacity (000 tonnes) – Grain-Dependent Network		2,475.4	1,628.8	1,575.6	-3.3%	▼
1D-6	Grain Elevator Storage Capacity (000 tonnes) – Non-Grain-Dependent Network		4,847.6	4,188.9	4,119.7	-1.7%	▼
	Terminal Elevator Infrastructure [Subseries 1E]						
1E-1	Terminal Elevators (number)		15	16	16	0.0%	–
1E-1	Terminal Elevator Storage Capacity (000 tonnes)		2,678.6	2,642.6	2,642.6	0.0%	–
1E-2	Terminal Elevator Unloads (number) – Covered Hopper Cars		278,255	271,714	261,204	-3.9%	▼

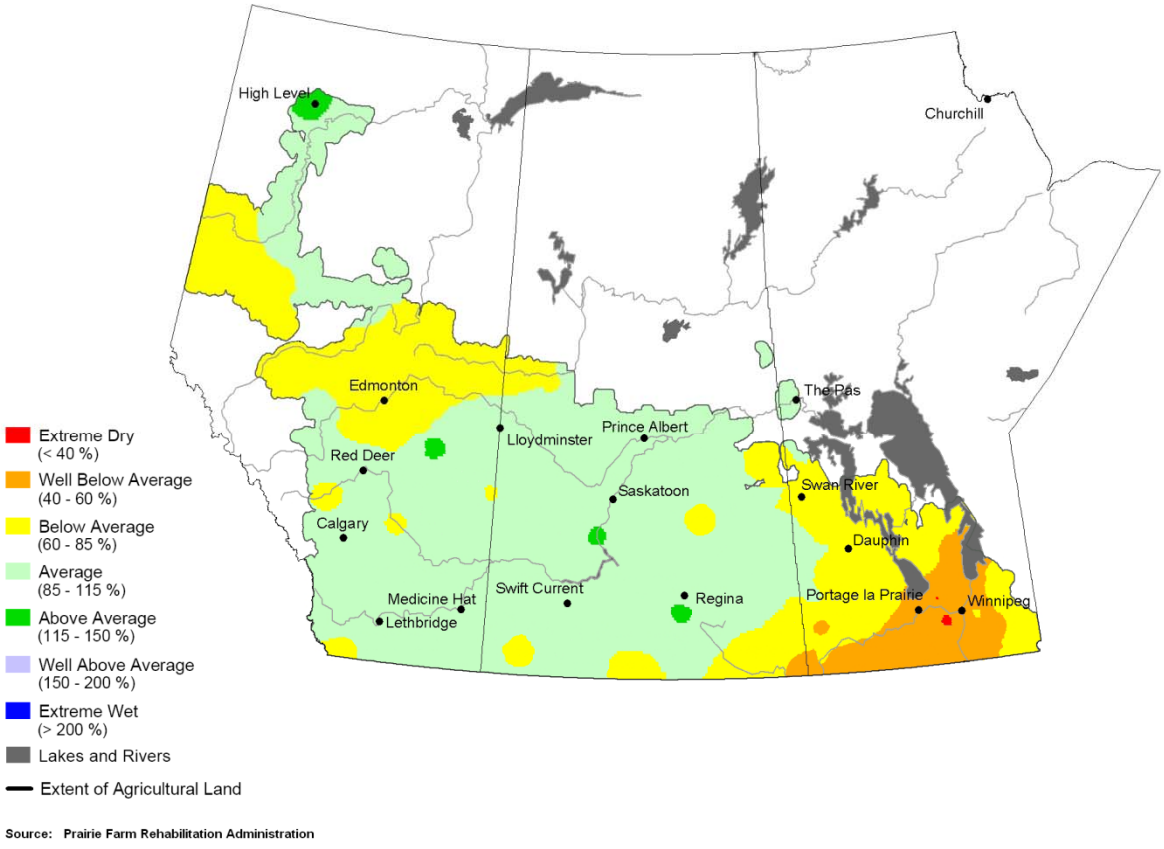
(1) – In order to provide for more direct comparisons, the values for the 1999-2000 through 2006-07 crop years are "as at" or cumulative to 31 July unless otherwise indicated.
(2) – Values quoted represent the supply available for movement during the crop year.

1.1 Production and Supply *[Measurement Subseries 1A]*

The 2006-07 growing season was warmer and drier than the one that preceded it. The above average temperatures experienced on the prairies helped advance crop production by a factor of almost two weeks. This was supported by exceptionally good harvesting conditions, which contributed to the reaping of the first high-quality crop since the 2003-04 crop year. At the same time, a continuing strong demand for Canadian grain coupled with production problems in Europe and Australia helped elevate grain prices for the first time in four years.

However the decline in western Canadian grain production, even when coupled with larger-than-normal carry-forward stocks, resulted in a modest downturn in GHTS activity. This was broadly reflected in corresponding changes to the indicators employed in the Grain Monitoring Program (GMP).

Figure 1: Percentage of Average Precipitation – 1 April to 31 August 2006



Source: Prairie Farm Rehabilitation Administration

For most areas of western Canada, the amount of precipitation received in the 2006 growing season proved to be consistent with the historical norm.[1] Still, July heat, accompanied by low precipitation resulted in reduced yields across the prairies.[2] Overall grain production for the 2006-07 crop year fell to 49.3 million tonnes, a

[1] The comparisons made here are based on historical data gathered by the Prairie Farm Rehabilitation Administration for the 30-year period between 1961 and 1990.

[2] Earlier projections from provincial agricultural agencies had been pointing to a larger "bumper" crop.

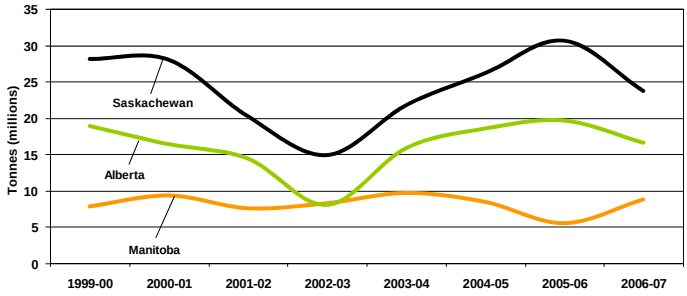
decrease of 12.0% from the GMP record of 56.0 million tonnes set a year earlier.[3] This ranked as the fifth largest production volume in western Canada since the GMP was initiated, and fell well below the 53.1-million-tonne average for output in the program's non-drought years.[4] Despite the comparative decrease in output, the quality of the grain produced in the 2006-07 crop year proved significantly better than that witnessed in either of the two previous crop years. [See Table 1A-1 in Appendix 4.]

Provincial Grain Production

The overall decrease in production reflected declines for most producing provinces. Chief among these were Saskatchewan and Alberta, which posted their first overall reductions in four years. Much of this was attributable to comparatively less favourable growing conditions. The most significant reduction was seen in Saskatchewan, where output dropped by 22.5%, falling to 23.8 million tonnes from a GMP record high of 30.7 million tonnes a year earlier. This decline also saw the province's share of western Canadian production fall to 48.2% from a record-setting 54.8% the year before.[5]

Alberta production volumes also realized a decrease, falling to 16.5 million tonnes, down 15.5%,from the previous year's GMP record of 19.6 million tonnes. While British Columbia reported the most significant year-over-year decline in production, 49.5%, its harvest ranked as the smallest under the GMP, totalling little more than 0.1 million tonnes.[6]

Figure 2: Major Grain Production – Provincial Distribution



Despite a below-average amount of precipitation, a significant improvement in growing conditions in Manitoba actually resulted in a 60.6% increase in production for the 2006-07 crop year. Overall grain production totalled 8.8 million tonnes as compared to 5.5 million tonnes a year earlier.[7] This marked a sharp rebound for the province, and a return to better-than-normal production levels.

Reflecting the broader provincial declines discussed above, the production of specific grains moved generally lower as well. A 5.1-million-tonne decrease in CWB grain production accounted for the majority of the 6.7-million-tonne reduction in total output. Much of this was due to net declines of 2.8 million tonnes in barley, and 2.6 million tonnes in durum. Only a 0.2-million-tonne increase in the size of the wheat crop served to counteract the losses witnessed in wheat and durum. The wheat crop totalled 19.1 million tonnes and accounted for slightly more than one-third of the total harvest.

With 8.5 million tonnes of production, canola accounted for slightly less than half of the 18.0 million tonnes of non-CWB grains harvested in the 2006-07 crop year.[8] Moreover, the 1.1-million-tonne decrease in canola

[3] As a result of the 2006 Census of Agriculture, Statistics Canada reduced its earlier production estimate for the 2006-07 crop year of 52.3 million tonnes to 49.3 million tonnes. The production values presented here, whether in regard to a specific grain or province, differ from those published in the Monitor's report for the first quarter of the 2006-07 crop year.

[4] Grain production in the 2001-02 and 2002-03 crop years was adversely impacted by drought, and fell from values in excess of 50 million tonnes annually to 42.5 million tonnes and 31.5 million tonnes respectively.

[5] Saskatchewan's share of total production under the GMP has seldom exceeded 50%.

[6] With an annual average of about 0.3 million tonnes, British Columbia is the smallest grain-producing province in western Canada. At 132,600 tonnes, production for the 2006-07 crop year proved to be about 60% less than its record high of 327,600 tonnes under the GMP, which was set in the 2003-04 crop year.

[7] Manitoba's output of 5.5 million tonnes in the 2005-06 crop year represented the lowest recorded for the province under the GMP.

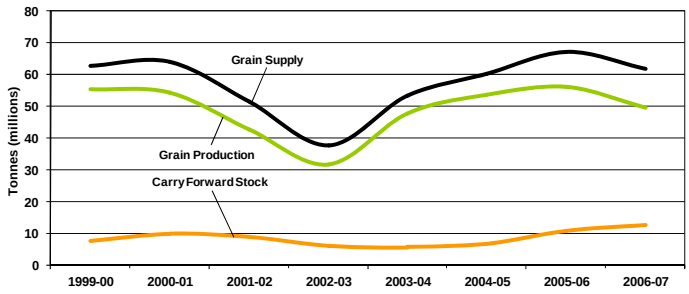
production accounted for about two-thirds of the 1.6-million-tonne contraction in non-CWB grains. Oats and rye were the exception, posting production gains of 13.2% and 10.4% respectively. This was supplemented by lesser reductions in the output of other related grains.

Special crops witnessed an even steeper decline, with production having fallen by 23.8% to 3.9 million tonnes. Year-over-year reductions of 0.7 million tonnes in the output of lentils, coupled with a decline of another 0.6 million tonnes of dry peas, accounted for virtually all of the variance. [See Table 1A-3 in Appendix 4.]

Carry-Forward Stock and Western Canadian Grain Supply

Although grain production has the most direct impact on the overall supply of grain, the volume held over in inventory from the previous crop year also has a bearing. In fact, these carry-forward stocks typically account for about one-sixth of the grain supply.[9] These stocks tend to move in conjunction with changes in grain production, albeit with less pronounced variations. They are also heavily weighted in favour of the CWB grains, which typically represent over three-quarters of the total.

Figure 3: Western Canadian Grain Supply



The general deterioration in production witnessed throughout the first few years of the GMP was mirrored in steadily diminishing carry-forward stocks. These stocks fell from 9.8 million tonnes at the end of the 1999-2000 crop year, to a low of 5.5 million tonnes at the close of the 2002-03 crop year.[10] These stocks increased as grain production itself climbed over the next three crop years. With grain production under the GMP having reached a record 56.0 million tonnes in the 2005-06 crop year, the amount of stock carried forward into the 2006-07 crop year also rose to reach a record 12.4 million tonnes.[11] When combined with 49.3 million tonnes of new production, the overall grain supply for the 2006-07 crop year totalled 61.7 million tonnes, which constituted a decrease of 7.6% from the previous crop year's GMP record of 66.8 million tonnes. [See Table 1A-2 in Appendix 4.]

Although increases in carry-forward stocks were generally the norm, the changes recorded in those posted for individual provinces and grains varied widely. On a provincial basis, these variations ranged from a gain of 27.1% for Alberta, to a reduction of 18.6% in Manitoba. Despite the effect of a 0.3-million-tonne reduction in Manitoba's carry-forward stocks, the gains posted by Saskatchewan and Alberta had the largest overall impact, increasing by 1.0 million tonnes and 0.9 million tonnes respectively. Similarly, build-ups in the quantity of CWB grain stocks accounted for slightly more than three-quarters of the overall increase, with the durum carry climbing by 0.7 million tonnes, wheat by 0.6 million tonnes, and barley remaining largely unchanged. Among the non-CWB grains, canola and flaxseed stocks accounted for the largest gains, increasing by almost 0.3 million tonnes apiece in the face of modest reductions for other commodities.

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[8] The Canadian Wheat Board Act gives the CWB sole marketing authority for wheat and barley produced by western Canadian farmers for export and domestic human consumption. Those not specifically identified in the Act are designated as non-CWB grains under the Grain Monitoring Program.

[9] Carry-forward stocks are defined as inventories on hand, be it on farms or at primary elevators, at the close of any given crop year (i.e., 31 July). As such, they are also deemed to be the stocks on hand as the new crop year begins (i.e., 1 August). The carry-forward stocks cited here are derived from data provided by Statistics Canada and the Canadian Grain Commission.

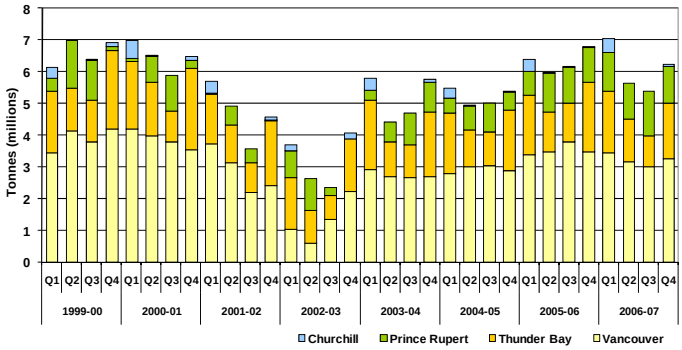
[10] This pattern can best be seen when gauging a 42.8% decline in grain production against a 43.9% reduction in carry-forward stocks during the first four years of the GMP.

[11] Rising prices also played a role in this unusually large build-up, with many farmers choosing to stockpile a larger proportion of their lower-quality grain in the hopes of being able to sell it at a better price in the fall of 2006.

1.2 Rail Traffic *[Measurement Subseries 1B]*

The amount of regulated grain moved by rail to western Canadian ports decreased marginally in the 2006-07 crop year. Total volume fell by 3.9%, to 24.3 million tonnes from 25.3 million tonnes the year before.[12] This decrease, however, was well below the previously noted 7.6% reduction in the grain supply. [See Tables 1B-1 through 1B-4 in Appendix 4.]

Figure 4: Railway Grain Volumes



The differential between these two rates of decline underscores the fact that the railways carried a greater proportion of the grain supply to western Canadian ports than they did a year earlier, 39.4% versus 37.9% respectively. More importantly, to the extent that these shares are less than those observed at the beginning of the GMP, a somewhat larger proportion of the overall grain supply appears to be destined for the North American market.[13]

Origins by Province

Railway shipments for the 2006-07 crop year tended to reflect changes in provincial grain supplies. The only substantive gain was attributable to Manitoba, where rail shipments increased by 2.9% to 2.5 million tonnes. Shipments from Alberta proved largely unchanged, falling by just 0.5% to 9.3 million tonnes. Movements from Saskatchewan posted the most significant reduction in total volume, falling by a full one million tonnes, or 7.4%, from the previous crop year's 13.4 million tonnes. Total rail shipments from origins in British Columbia decreased to just over 0.2 million tonnes.[14]

Destination Ports

The port of Vancouver remained the principal export destination for western Canadian grain in the 2006-07 crop year. Traffic to Vancouver totalled 12.9 million tonnes, falling 8.6% from 14.1 million tonnes a year earlier. More importantly, the port's share of the total volume also declined, falling to 53.0% from 55.7% the previous year.[15] In comparison, Prince Rupert reported a second year of significant increases in both tonnage and share. Total shipments to the port rose by 17.1%, to reach a GMP record of 4.9 million tonnes. At the same time its overall share jumped to a record-setting 20.3% from 16.6% a year earlier.

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[12] The railway grain traffic referred to includes only that portion moving to a designated western Canadian port in accordance with the provisions of the Canada Transportation Act. As such, it does not include grain traffic that may have originated in western Canada but that was destined to other points in North America, be it those of eastern Canada, the United States of America, or Mexico.

[13] These share values fall short of the record 42.3% estimated to have been moved by the railways to the four ports in western Canada during the 1999-2000 crop year.

[14] Under the GMP, statistics relating to the railway movement of grain in western Canada centre on the volume handled by federally regulated carriers. With CN's acquisition of BC Rail in the closing days of the 2003-04 crop year, the volumes that would have moved under provincial jurisdiction previously became subject to federal regulation, and were incorporated into CN's overall traffic statistics. Total traffic volume from British Columbia in the 2006-07 crop year amounted to 204,600 tonnes, down 11.0% from the 229,700 tonnes recorded a year earlier.

[15] 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 moving through the port of Vancouver for much of the first half of the 2002-03 crop year. As a result, Vancouver's share of the total railway volume in the 2002-03 crop year fell to its lowest level under the GMP, 40.6%. Although the port's share has since rebounded, it remains below the 60.8% last achieved in the 2001-02 crop year.

Like Vancouver, the volume and share of traffic directed to Thunder Bay declined in the face of the advances made by Prince Rupert. Although Thunder Bay still ranked as the second largest export destination within the GHTS, its railway volume decreased by 8.7%, to 6.0 million tonnes from 6.5 million tonnes, while its overall share fell to 24.6% from 25.9% a year earlier. Running counter to the trend was the port of Churchill, where the railway shipment of 0.5 million tonnes of grain produced a 15.2% increase in volume, and a 0.3-percentage-point gain in share, which reached a three-year high of 2.1%.[16]

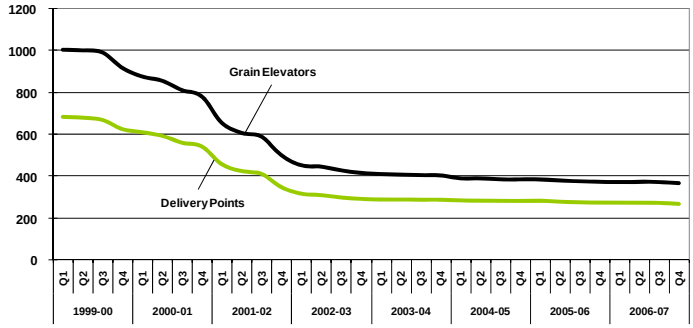
It is worth noting that as a result of the relative gains made by Prince Rupert in the last two crop years. There can be little doubt that the upturn in traffic destined to Prince Rupert is the product of more competitive railway freight rates and a better car supply within this corridor. Moreover, these forces are reshaping the roles of other ports within the GHTS, with the most measurable impact being on the port of Vancouver.

1.3 Country Elevator Infrastructure *[Measurement Subseries 1C]*

The decline in the number of licensed country elevators in western Canada remains one of the most visible facets of the GHTS's continuing evolution. At the outset of the 1999-2000 crop year, there were 1,004 licensed primary and process elevators on the prairies. By the time the 2006-07 crop year began seven years later, that number had already fallen by 62.7% to 374.[17] [See Tables 1C-1, and 1C-2 in Appendix 4.]

In fact, during the first three years of the GMP, the rate at which these facilities were declining was rapidly accelerating. A total of 87 facilities were removed from the network in its first year, followed by 136 in the second, and 281 in the third. However, this pace clearly showed signs of relaxing when only 84 elevators were removed from the system in the 2002-03 crop year. This deceleration was affirmed with very modest elevator reductions in each of the following three crop years: 12 in the 2003-04 crop year; 19 in the 2004-05 crop year; and 11 in the 2005-06 crop year.

Figure 5: Licensed Grain Elevators and Delivery Points



The 2006-07 crop year saw an additional seven facilities removed from the system. Representing a reduction of 1.9%, this lowered the total number of licensed elevators in western Canada to just 367. This brought the total reduction in elevator facilities recorded since the beginning of the GMP to 637, or 63.4%. Despite this broader reduction, the modest scope of the changes recorded in the last four crop years continues to suggest that the grain companies have effectively concluded their elevator rationalization programs.

The same is true of grain delivery points, which have been declining in conjunction with the reduction in licensed elevators. In the 2006-07 crop year, the number of active delivery points fell by just 2.5%, to 268 from 275 a year earlier. As a result, 60.9% of the 685 delivery points in place at the beginning of the GMP have now been closed. This means that all of the licensed elevators in some 417 communities have been closed in the last eight crop years.

Since the beginning of the GMP, grain deliveries have been concentrated at a comparatively small number of delivery points. In any given crop year, about one-third of the GHTS's active delivery points accounted for 80%

[16] The port of Churchill's overall share of railway grain volumes reached a maximum of 2.7% in the 2002-03 crop year.

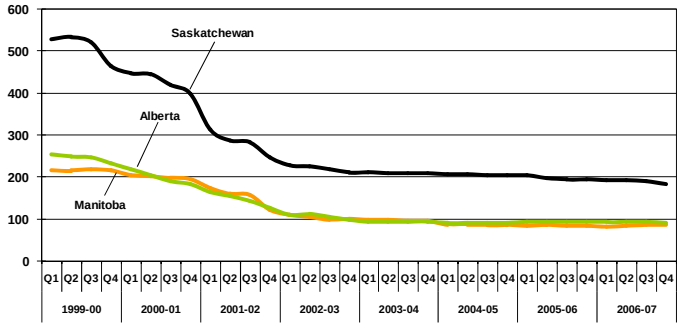
[17] The reduction in licensed elevators cited here reflects the net change arising from elevator openings and closures over a given period. This net reduction should not be construed as elevator closures alone. Elevator openings and closures are discussed elsewhere in this report, and the statistics relating to them are presented in Tables 1C-7 through 1C-12.

of the producers' grain deliveries. In the 2005-06 crop year – the last for which statistics are available – this amounted to 90, or 37.7%, of the GHTS's 239 active grain delivery points. Proportionally, although this share proved marginally greater than the 33.5% recorded in the GMP's base year, it was consistent with the more elevated values observed since the 2003-04 crop year. To a large extent, this wider distribution is correlated with the general reduction in the size of the elevator network itself, which resulted in more grain being delivered to secondary locations. [See Table 1C-13 in Appendix 4.]

Provincial Distribution

With the close of the 2006-07 crop year, 183 of western Canada's licensed elevators were situated in Saskatchewan. This constituted 49.9% of the system's active total, and proved to be consistent with the proportion held by the province since the beginning of the GMP. This was followed in succession by Alberta and Manitoba, whose respective 90 and 86 elevators accounted for about another one-quarter each. The GHTS's remaining eight facilities were divided between British Columbia and Ontario.[18]

Figure 6: Licensed Grain Elevators – Provincial Distribution

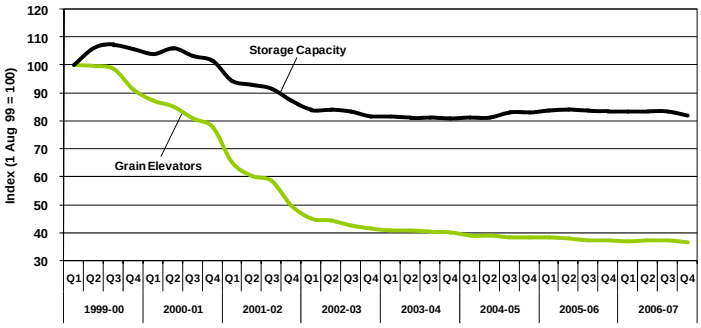


In addition to posting the largest reduction in licensed facilities, Saskatchewan's closure of 344 elevators also produced the largest relative decline since the beginning of the GMP, 65.3%. This was followed closely by the 64.3%, or 162-elevator, reduction registered in Alberta and the 60.2%, or 130-elevator, decline posted in Manitoba. These similarities highlight the fact that elevator rationalization activities have been broad based, and that they have not unduly targeted the facilities of any one province.

Elevator Storage Capacity

Despite a 63.4% decline in the overall number of elevators, the GHTS's storage capacity fell by a comparatively modest 18.0% in this same period. As outlined in the Monitor's previous reports, this lower rate of decline simply reflects the fact that while grain companies were methodically closing their less-efficient smaller elevators, they were also expanding and opening larger ones. In fact, during the first year of the GMP, the capacity added through investment in larger facilities actually outpaced that removed by the closure of smaller elevators. This initially produced a 7.4% increase in storage capacity, which peaked at 7.5 million tonnes in the third quarter of the 1999-2000 crop year.

Figure 7: Relative Change in Grain Elevators and Storage Capacity



Over the course of the following four crop years, however, the system's storage capacity fell largely in concert with the general decline in elevators, dropping at a rate of about 3,500 tonnes per facility closed. By the end of

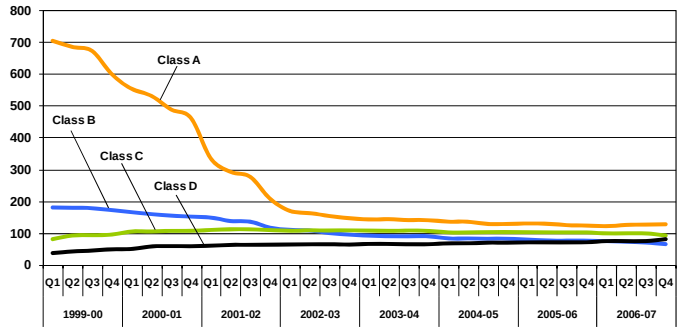
[18] There were eight licensed elevators located outside the provinces of Manitoba, Saskatchewan, and Alberta as at 31 July 2007. Specifically, these included one in Ontario, and seven in British Columbia. Changes in the elevator infrastructure of these provinces are generally not highlighted given their limited influence, but are included in the wider statistics pertaining to the GHTS as a whole.

the 2003-04 crop year, total GHTS storage capacity had fallen by 19.0%, to 5.7 million tonnes from 7.0 million tonnes. This trend was temporarily reversed in the 2004-05 and 2005-06 crop years when total storage capacity increased by 157,000 tonnes and 25,200 tonnes respectively.[19] However, the 2006-07 crop year produced a reduction of 112,400 tonnes, which left the GHTS's overall storage capacity at 5.8 million tonnes.

Facility Class

For comparative purposes, the GMP groups elevators into four classes. These classes are based on the loading capability of each facility, which is in turn defined by the number of car spots each possesses. Those with less than 25 car spots are deemed to be Class A facilities; those with 25-49, Class B; those with 50-99, Class C; and those with 100 or more, Class D.[20] In addition, the GMP deems Class C and D facilities to be high-throughput elevators given their ability to load railcars in larger numbers.

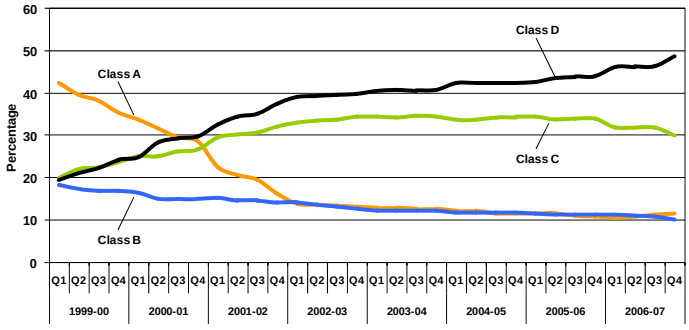
Figure 8: Licensed Grain Elevators – Facility Class



Within this framework, the composition of the elevator network can be seen to have changed significantly over the past eight crop years. The most striking aspect of this change has been the 81.8% decline in the number of Class A facilities, which dropped to 128 from 705, and the 64.4% reduction in Class B facilities, which fell to 64 from 180. At the same time, the trade's growing use of high-throughput elevators proved equally pronounced: Class C facilities increased by 14.8%, to 93 from 81; and Class D facilities increased by 115.8%, to 82 from 38.

Clearly, these statistics illustrate that the primary target in elevator rationalization has been the conventional wood-crib facility. Of the 844 elevator closures recorded since the beginning of the GMP, 657 related to the closure of Class A facilities.[21] This is largely because the economic efficiency of the high-throughput elevator had rendered these facilities obsolete as well as the inducement offered through the railways' system of financial incentives that encouraged grain to move in blocks of 25 or more railcars at a time.

Figure 9: Share of Storage Capacity – Facility Class



These same forces also disfavoured the Class B facilities, albeit to a lesser degree. More particularly, even though grain movements from these facilities were eligible to receive discounts under the railways' incentive programs, they were not as generous as those accorded shipments from high-throughput elevators. Moreover, these

[19] As was the case in the first year of the GMP, this arose because an expansion in high-throughput storage capacity more than offset the reduction that came from the closure of smaller facilities.

[20] The facility classes employed here mirror the shipment thresholds delineated by Canada's major railways for the movement of grain in multiple-car blocks at the beginning of the GMP. At that time, these thresholds were shipments of 25, 50 and 100 railcars. First introduced in 1987, these incentives are aimed at drawing significantly greater grain volumes into facilities that can provide for movement in either partial, or full, trainload lots.

[21] Statistics associated with elevator closures and openings are gross measures and do not distinguish between licensed facilities that may have been closed by one operator but, as a result of its subsequent sale, reopened by another later.

discounts were later progressively reduced and eliminated.[22] As a result, over the course of the past eight crop years, a total of 128 Class B facilities also closed. Together, Class A and B facilities account for 93.0% of all recorded elevator closures. [See Tables 1C-10 through 1C-12 in Appendix 4.]

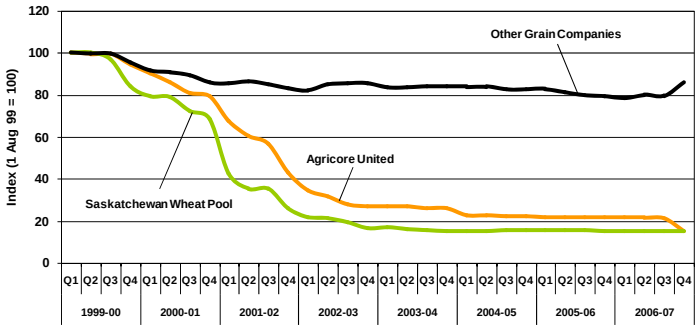
In contrast to their share of elevator closures, only 53.6% of the 207 elevators opened during this period were Class A and B facilities.[23] This differential calls attention to the fact that high-throughput facilities accounted for a much greater proportion of elevator openings than closures, 46.4% versus 7.0% respectively. As one would expect, Class C and D elevators were the only ones to have posted net increases since the 1999-2000 crop year. Considered together, these changes underscore the industry's continuing migration towards the use of high-throughput elevators. By the end of the 2006-07 crop year, high-throughput facilities accounted for 47.7% of all elevators, and 78.6% of overall storage capacity. These values differ considerably from the 11.9% and 39.4% shares they respectively held at the beginning of the GMP. [See Tables 1C-7 through 1C-9 in Appendix 4.]

When taking into account all facility classes, the number of elevators having the ability to load cars in blocks of 25 or more can be seen to have fallen by 20.1% over the course of the past eight years, to 239 from 299. In contrast its associated storage capacity has actually increased by 26.0%, to 5.1 million tonnes from 4.1 million tonnes.[24] More importantly, by the end of the 2006-07 crop year, these facilities accounted for 65.1% of the system's elevators, and 88.6% of its storage capacity. As was the case with high-throughput elevators, these stakes are significantly greater than the 29.8% and 57.7% shares respectively held at the beginning of the GMP. [See Tables 1C-4 through 1C-6 in Appendix 4.]

Grain Companies

For a number of grain companies, the key to improving the economic efficiency of their grain-gathering networks has been to rationalize their elevator assets. With the cornerstone of this strategy being the replacement of smaller elevators by larger high-throughput facilities, it follows that this would better lend itself to those grain companies having the largest physical networks. In fact, the two largest grain companies at the beginning of the GMP, Agricore United (AU) and Saskatchewan Wheat Pool (SWP), have been the main practitioners of elevator rationalization. When taken together, 93.2% of the net reduction in the GHTS elevators was derived from actions taken by these two companies.

Figure 10: Licensed Grain Elevators – Grain Company



Comparatively, SWP has proven to be the more aggressive of the two companies. Through to the end of the 2006-07 crop year, SWP reduced the number of its licensed elevators by 84.8%, to 48 from 316 (268 elevators). Of this 268-facility reduction, half occurred in a single crop year, specifically that of 2001-02, when the company culled 134 elevators from its network. With only minor changes over the course of the past four crop years, the evidence would strongly suggest that the company had largely concluded its rationalization program.

[22] With the commencement of the 2003-04 crop year, CN eliminated the $1.00-per-tonne discount that had been given to movements from Class B facilities since the beginning of the GMP, while CP reduced it to $0.50 per tonne. By the close of the 2005-06 crop year, CP had also eliminated its discount on movements in blocks of 25-49 cars.

[23] Many of the 207 Class A and B elevator openings recorded during this period reflect the acquisition of previously closed facilities, and their subsequent reopening by a different grain company.

[24] The inclusion of Class B facilities, which declined from 180 to 64 during this period, effectively counters the comparatively smaller numerical increases made by the Class C and D elevators to produce a net reduction.

However, the fourth quarter of the 2006-07 crop year saw SWP take control of AU.[25] Upon doing so, it immediately disposed of 24 of the 82 AU elevators it had just acquired. This inflated the scope of the net reduction in AU elevators from a pre-acquisition 78.6% to a post-acquisition 84.9%, with the total falling to 58 from 384. As with SWP, almost half of the AU reductions were made in the 2001-02 crop year, and were largely fuelled by the rationalization opportunities afforded through the merger of its two predecessor companies.[26] Until the divestitures prompted by SWP's acquisition of the company, the limited reduction in AU elevators over the course of the preceding two crop years had also suggested that its rationalization program had largely come to an end.

Amongst the other large grain companies, Pioneer Grain and Cargill posted the next deepest cuts in the elevator network. However, with reductions of 40.0% and 27.1% respectively, their rationalization efforts were notably less than that presented by SWP and AU. Moreover, these values were moderated as a result of the AU-elevator acquisitions made by these two companies in the fourth quarter of the 2006-07 crop year.[27] The 23.1% and 12.0% reductions respectively posted by Parrish and Heimbecker and Paterson Grain proved even less pronounced.

Not all of these reductions marked a permanent facility closure. In some instances, elevators closed by the larger grain companies were sold, later re-emerging as facilities operated by smaller, independent grain companies such as Delmar Commodities, FGDI, Providence Grain Group, and Westlock Terminals.[28] As a result, the number of elevators operated by these smaller grain companies actually increased by 53.6% in the last eight crop years, climbing to 86 from 56.[29]

The collective number of elevators operated by companies other than SWP and AU has fallen by only 14.1%, to 261 from 304, over the course of the GMP. What is more, in the face of the deeper cuts made by SWP and AU, these companies now account for about two-thirds of the GHTS's total elevators and associated storage capacity.[30] Despite what amounts to a reversal of position, SWP and AU have remained the dominant handlers of grain in western Canada, shipping over half of the annual volume. And while these two companies have built up the efficiency of their elevator networks, it has been equally clear that their smaller rivals have also been adept at adjusting to these changes in the competitive environment. It remains to be seen whether the amalgamation of SWP and AU will present a more difficult business challenge to them in the 2007-08 crop year. [See Table 1C-3 in Appendix 4]

1.4 Railway Infrastructure *[Measurement Subseries 1D]*

At the outset of the 1999-2000 crop year, the railway network in western Canada encompassed 19,468.2 route-miles of track. Of this, Class 1 carriers operated 76.2%, or 14,827.9 route-miles, while the smaller Class 2 and 3 carriers operated the remaining 23.8%, or 4,640.3 route-miles.[31] The dramatic changes to the makeup of the

[25] See section 2.36 for a fuller discussion of this transaction.

[26] On 1 November 2001, Agricore Cooperative Ltd. formally merged with United Grain Growers Limited to form Agricore United.

[27] Pioneer Grain acquired 15 of the former AU elevators sold by SWP in the fourth quarter of the 2006-07 crop year, while Cargill acquired the remaining nine.

[28] In some cases, such as in the merger that led to the creation of Agricore United, Canada's Competition Bureau mandated that the company divest itself of specific facilities. Some of the smaller grain companies now operate these elevators.

[29] The reference to smaller grain companies can be misleading since it refers to the scope of a company's activities within western Canada. By way of example, the 86 elevators cited here include six facilities operated by ADM Agri-Industries Ltd., a subsidiary of the larger US-based Archer Daniels Midland.

[30] By the end of the 2006-07 crop year, grain companies other than SWP and AU accounted for 71.1% of the elevators, and 67.2% of the associated storage capacity. This marks a significant increase over the 30.3% and 41.7% shares respectively held at the outset of the GMP. The shares attributable to SWP and AU have fallen correspondingly in this same period to 28.9% of the elevators, and 32.8% of the associated storage capacity.

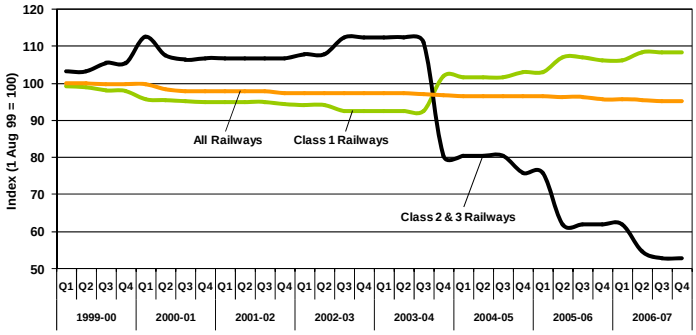
GHTS's elevator system contrasts sharply with the more modest one posted by the railway network. During the first seven years of the GMP, the net reduction in western Canadian railway infrastructure amounted to just 4.5%, with the network's total mileage reduced to 18,595.0 route-miles overall. The largest share of this 873.2-route-mile reduction came from the abandonment of 733.1 route-miles of light-density, grain-dependent branch lines.

Even so, there were noteworthy changes to the makeup of the system itself. The most significant of these involved the transfer by CN and CP of numerous branch line operations to a variety of new shortline railways. This practice, which began in the mid 1990s, was one of the cornerstones in an industry restructuring that ceded control over almost one-third of the railway network in western Canada to a collection of smaller regional and shortline carriers.

Yet, recent events suggest that the shortline railway industry in western Canada is in difficulty. The waning financial health of shortlines at large has prompted several of them into either selling or rationalizing their own operations over the course of the past three crop years. In most instances, this has resulted in shortlines reverting back to the control of the Class 1 carrier that had spun them off in the first place. Perhaps the most vivid example of this came in January 2006 when RailAmerica Inc. sold most of its western Canadian holdings back to CN.[32] Naturally, these variations resulted in a significant realignment of Class 1 and non-Class 1 railway operations. By the beginning of the 2006-07 crop year, the total number of route-miles managed by CN and CP had increased by 6.1%, to 15,725.1 route-miles from 14,827.9 route-miles at the beginning of the GMP. Conversely, the scope of the network operated by western Canada's non-Class 1 carriers had declined by 38.2%, to 2,869.9 route-miles from 4,640.3 route-miles.

A similar reacquisition was recorded in December 2006 when CN purchased the Savage Alberta Railway from its Utah-based parent, Savage Companies, for $25 million. Interestingly, the sale came only eighteen months after Savage Companies purchased what had formerly been Alberta RailNet, Inc., a shortline created in June 1999 following CN's divestiture of several branch lines in the Peace River region of Alberta.[33] Although largely focused on serving the coal and forest industries, grain reportedly represented about one-fifth of the shortline's overall shipments. In addition to several producer-car loading sites, the 343.8 route-mile network also served several licensed elevators, including three high-throughput facilities located at Rycroft, Alberta.

Figure 11: Relative Change in Route-Miles – Railway Infrastructure



The 2006-07 crop year also brought the first outright cessation of operations by a shortline railway on the prairies since 2005.[34] In January 2007, the Southern Manitoba Railway (SMR) received approval from that

[31] The classes used here to group railways are based on industry convention: Class 1 denotes major carriers such as the Canadian National Railway or the Canadian Pacific Railway; Class 2, regional railways such as the former BC Rail; and Class 3, shortline entities such as the Central Manitoba Railway or the Great Western Railway.

[32] The sale, valued at $26 million, encompassed 702.8 route-miles of railway infrastructure grouped under three separate operations: the Central Western Railway; the Lakeland and Waterways Railway; and the Mackenzie Northern Railway. The CN purchase denoted a reacquisition of the very operations it had sold off several years earlier.

[33] Alberta RailNet, Inc. was established as a wholly owned subsidiary of North American RailNet, Inc. Headquartered in Bedford, Texas, the company was the parent of several shortline railways until May 2005, when its American operations were folded in with those of Denver-based OmniTrax, Inc. Savage Companies acquired the operations of Alberta RailNet at that time, renaming it the Savage Alberta Railway.

[34] The last cessation of shortline operations on the prairies came in May 2005 following the financial failure of the Prairie Alliance for the Future (PAFF). However, with the 211.5-route-mile network of leased grain-dependent branch lines over which PAFF had been

province's Motor Transport Board to abandon the last 78.6 route-miles of its network, which stretched from Mariapolis to Morris. Also established in 1999 following the purchase of CN's former Miami and Hartney subdivisions, the SMR had been unable to stem the steady erosion of its traffic base. Such difficulties had already prompted the carrier to abandon its westernmost operations three years earlier.[35]

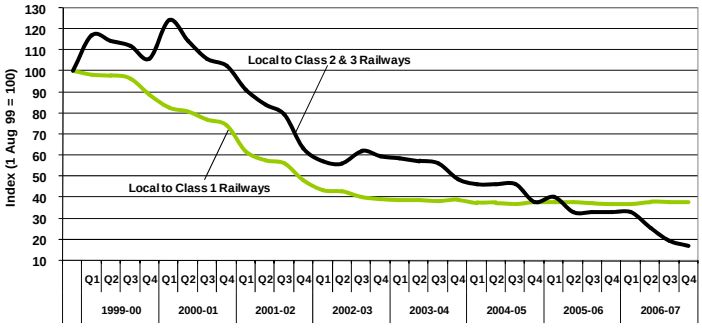
Along with the abandonment of another 21.1 route-miles by CN and CP, these changes had the effect of tilting the balance even further in favour of the Class 1 carriers.[36] By the end of the 2006-07 crop year, the railway infrastructure under CN and CP management had increased another 2.1%, to 16,047.8 route-miles. In comparison, the network operated by Class 2 and 3 carriers shrank by 14.7%, falling to a GMP low of 2,447.5 route-miles. Even with these changes, another 1,200 route-miles of infrastructure still remain targeted for discontinuance by CN and CP. [See Table 1D-1 in Appendix 4.]

These declines do not bode well for the future of the shortline industry in western Canada. Although gains in producer-car loading has helped mitigate the adverse impact of local elevator closures, the tonnage originated by shortline carriers has clearly been faltering in comparison to that of the Class 1 carriers. Moreover, the theoretical framework that suggested shortline operations could prevent or forestall the closure of the smaller wood-crib elevators, along with many of the grain-dependent branch lines that serve them, now appears to have largely been repudiated. Despite their best efforts, most shortline railways have simply been unable to reshape the economics that gave rise to the elevator rationalization strategies of the grain companies in the first place. As a result, few of these smaller carriers have actually been able to avoid the need to scale down operations or to abandon parts of their own networks.

Branch Line Discontinuances

A total of 99.7 route-miles were removed from the western Canadian railway network in the 2006-07 crop year. The majority of this came from the Southern Manitoba Railway's abandonment of its entire 78.6-route-mile network at the end of the second quarter. The remaining 21.1 route-miles of track abandoned was comprised of a 15.8-route-mile stretch of CP's Kimberley subdivision, which was closed in November 2006, along with a 5.3-route-mile section of CN's Preeceville subdivision, which the carrier abandoned in April 2007. In total, this represented a mere 0.5% reduction from the network that existed at the beginning of the crop year. With a remaining network comprised of 18,495.3 route-miles, this enlarged the scope of the reductions made since the beginning of the GMP to 5.0%, or 972.9 route-miles. The modest nature of this change continues to contrast sharply against that of licensed elevators, which as previously discussed, fell by 63.4% in the same period.

Figure 12: Relative Change in Local Elevators – Railway Class



Local Elevators

As discussed earlier, while the railway network has changed little over the course of the past eight crop years, the elevators it serves have declined significantly. In broad terms, these facilities have decreased by 64.0%, to 352 from 979 elevators. The associated storage capacity also decreased by 17.9%,, to 5.7

operating having reverted back to the control of CN, railway service was not suspended. Nevertheless, CN did add these lines to its list of abandonment candidates in October 2005.

[35] In March 2004 the Southern Manitoba Railway abandoned a 64.0-route-mile section of its network. This section extended from Elgin to Mariapolis, Manitoba, and constituted just under 45% of the carrier's overall infrastructure.

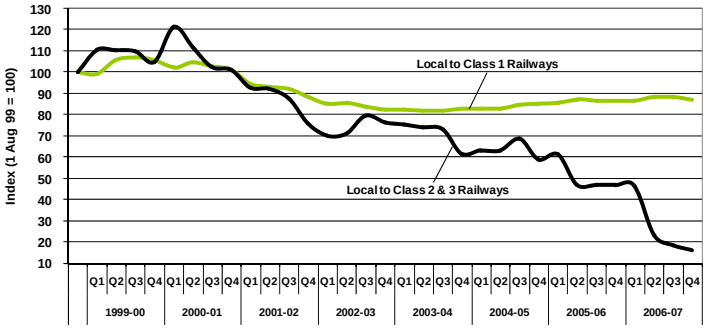
[36] The 21.1 route-miles noted here comprised 15.8 route-miles of CP's Kimberley subdivision, which was abandoned in November 2006; and 5.3 route-miles of CN's Preeceville subdivision, which was abandoned in April 2007.

million tonnes from 6.9 million tonnes.[37]

Moreover, the recent collapse of several shortline railways has widened the differential between the decline in elevators tied to the Class 1 railways and those affiliated with the smaller non-Class 1 railways. Those local to Class 1 carriers fell by 62.3%, to 338 from 897, while those associated with the non-Class 1 carriers declined by 82.9%, to 14 from 82. This differential proved even more significant when gauging the decline in associated storage capacity: 13.0% in the case of elevators local to Class 1 carriers versus 83.9% for those tied to non-Class 1 carriers. Even without these recent shifts, it has been clear for some time that the grain companies have been investing in the facilities served by CN and CP rather than those served by the shortlines. To a large extent, this is reflected in the industry's decision to situate virtually all of its high-throughput elevators along the primary routes of both major railways.[38] [See Table 1D-6 in Appendix 4.]

Still, these net declines ignore some of the intermittent gains that were made by the non-Class 1 carriers over the course of the GMP. Specifically, they fail to recognize that the number and storage capacity of elevators tied to shortline railways actually increased in the initial years of the GMP, before later starting to fall. This was due chiefly to the establishment of new shortline operations, which at the time included those of the Southern Manitoba Railway, Red Coat Road and Rail, and the Great Western Railway. Despite these periodic gains, the elevator network these carriers served continued to shrink fairly rapidly.

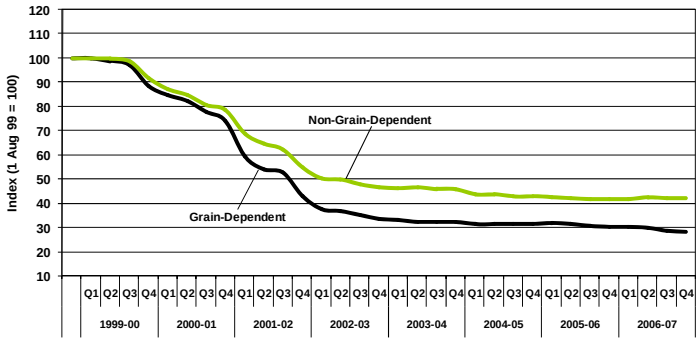
Figure 13: Relative Change in Storage Capacity – Railway Class



Grain-Dependent Network

Differing rates of decline are also evident between facilities local to the grain-dependent, and non-grain-dependent, railway networks.[39] Elevators situated along the grain-dependent network fell by 72.1% over the course of the past eight crop years, to 117 from 420. In the case of those situated along the non-grain-dependent network, the decline was a lesser 58.0%, having fallen to 235 from 559. These patterns clearly indicate that the elevators tied to the grain-dependent railway network have been diminishing at a noticeably faster pace. This trend became particularly evident in the 2001-02 crop year when elevator reductions for the period reached a record 281.

Figure 14: Relative Change in Local Elevators – Railway Line Class



[37] The reductions cited here relate only to those facilities directly served by rail. These reductions differ somewhat from those reported for the entire elevator network, including off-track facilities.

[38] As at 31 July 2007 a total of 171, or 97.7%, of the GHTS's 175 high-throughput elevators were served directly by CN and CP.

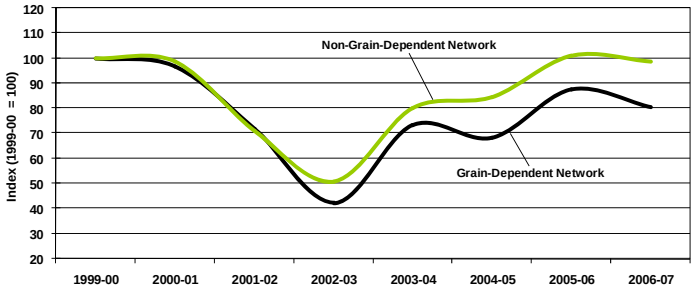
[39] The term "grain-dependent branch line", while largely self-explanatory, denotes a legal designation under the Canada Transportation Act. Since the Act has application to federally regulated railways only, grain-dependent branch lines transferred to provincially regulated carriers lose their federal designation. As a result, the legally defined grain-dependent branch line network is a continuously changing one. For comparison purposes only, the term has been affixed to those railway lines so designated under Schedule I of the Canada Transportation Act (1996) regardless of any subsequent change in ownership or legal designation.

The rate of decline for both networks has, however, substantially abated over the course of the last four crop years, largely in a reflection of the broader slowdown discussed previously. In fact, for the first time since the beginning of the GMP, the number of elevators tied to the non-grain-dependent network actually posted a small increase, albeit just that of two, or 0.9%, for the 2006-07 crop year as a whole. In comparison, the facilities served by the grain-dependent network continued to decline, dropping by a further ten in number, or 7.8%.

Traffic Volumes

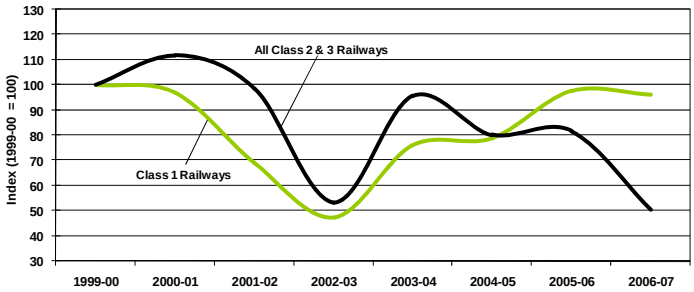
The composition of the traffic moved by the GHTS continues to reflect the changes that have been made in both the elevator and railway networks. In the 2006-07 crop year, the tonnage that originated on the remaining non-grain-dependent network decreased by 2.2%, to 16.7 million tonnes from 17.1 million tonnes a year earlier. At the same time, traffic originating at points on the remaining grain-dependent network decreased by 8.1%, to 7.0 million tonnes from 7.6 million tonnes.

Figure 15: Relative Change in Grain Volumes – Railway Line Class



Moreover, the gap in originations that had opened between the two networks four years earlier was widened. With the close of the 2006-07 crop year, the tonnage forwarded from points along the non-grain-dependent network proved to be consistent with what had been moved in the GMP's base year. In comparison, the volume originated by the grain-dependent network had declined by 19.5%. As a consequence, the non-grain-dependent network's share of the total grain volume has climbed to 70.6% from the GMP's base year value of 66.2%.[40] [See Table 1D-2 in Appendix 4.]

Figure 16: Relative Change in Grain Volumes – Railway Class



These same structural influences are also apparent in the relative volumes of grain originated by large and small carriers, which has become particularly pronounced as a result of CN's reacquisition of several shortline railways. The tonnage originated by the major carriers decreased by 1.5% in the 2006-07 crop year. By contrast the volume originated by the smaller carriers decreased by a much greater 38.0%. The creation and elimination of several shortline operations in recent years has obscured the real change in volume. The overall trend clearly shows the tonnage originated by shortline carriers has declined far more precipitously than that of the Class 1 carriers since the beginning of the GMP, by 49.3% and 3.8% respectively. [See Tables 1D-3 and 1D-5 in Appendix 4.]

However, the volume of traffic originated by shortline railways has not fallen as sharply as the number of licensed elevators they serve, which were reduced by 82.9% in the same period. In fact, the data indicates that increased producer-car loading has helped replace a significant portion of the grain volume that would otherwise have been lost following the closure of these licensed facilities.[41] This is evidenced by the fact that

[40] The proportion of grain shipments originating on the non-grain-dependent network proved extremely stable during the first three years of the GMP: 66.2% in the 1999-2000 crop year; 66.6% in 2000-01; and 65.9% in 2001-02. However, beginning with the 2002-03 crop year this proportion has moved noticeably higher, reaching a record 70.7% in the 2004-05 crop year.

[41] A number of producer-car loading sites have been established using elevator assets purchased from grain companies. In most cases, these elevators are used by local producers for trackside storage, and to facilitate the loading of railcars in larger lot sizes than was previously possible.

producer-car loadings accounted for about one-third of the overall volume originated by shortline carriers in the 2006-07 crop year.[42] This proportion represents an effective doubling of the 14.8% it constituted in the first year of the GMP, and underscores the emergence of producer cars as an important revenue source for these carriers.

1.5 Terminal Elevator Infrastructure *[Measurement Subseries 1E]*

Since the beginning of the GMP, the licensed terminal elevator network in western Canada has increased by 14.3%, to 16 from 14, with its associated storage capacity having climbed by just 3.3%, to 2.6 million tonnes. With eight of the elevators and 50.7% of the storage capacity, Thunder Bay held the largest share of these assets. Vancouver held second place with six facilities and 36.1% of the system's storage capacity. Prince Rupert and Churchill both followed with one terminal elevator apiece, and storage capacity shares of 7.9% and 5.3% respectively. [See Table 1E-1 in Appendix 4.]

Despite these overall gains, the changes to the system have not been truly physical. Rather, as the product of having licensed three pre-existing facilities and de-licensed one other, it has largely been illusionary.[43] And while no physical alterations to the network were made during the 2006-07 crop year, there were a number of significant changes in ownership.

The first of these related to an order, originally issued in 2001 by the Competition Bureau, directing the newly-formed Agricore United (AU) to divest itself of the former United Grain Growers terminal in Vancouver.[44] Although the company had actively searched for a potential buyer, it had ultimately been unable to conclude a sale over the course of the succeeding four years. Following the abandonment of a legal challenge launched by AU in 2005, the terminal was finally turned over to a trustee for disposal towards the end of the 2005-06 crop year.[45] Some nine months later, in April 2007, the Bureau announced that the trustee had selected Terminal West Ltd., which represented a consortium of smaller grain companies, to become the new owner of the facility.[46] The sale was significant in as much as it would provide the consortium's constituent companies with direct access to their own west coast terminal elevator. The final sale to Alliance Grain Terminal Ltd. was completed just prior to the commencement of the 2007-08 crop year.[47]

The second change in ownership also stemmed from an agreement with the Competition Bureau; albeit as a result of the takeover of AU by Saskatchewan Wheat Pool (SWP) in the fourth quarter.[48] Under the terms of this agreement SWP was to terminate its venture with James Richardson International (JRI) for the joint operation of their adjacent terminal elevators, which were situated on the north shore of Burrard Inlet.[49] At the same time, SWP agreed to an exchange of its Vancouver terminal elevator interests with those of Cargill Ltd.

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[42] The proportion given over to producer-car loadings is based on data obtained from the Canadian Grain Commission.

[43] The last physical addition to the GHTS terminal elevator network occurred in 1985 with the opening of Prince Rupert Grain Ltd.

[44] The sale of this terminal elevator was a condition set by the Competition Bureau for its approval of the planned merger of Agricore Cooperative Ltd. and United Grain Growers Limited, which combined to form Agricore United in November 2001.

[45] More specific details relating to this case can be found in Section 2.32 of the Monitor's Annual Report for the 2005-06 crop year.

[46] The principal owners in Terminal West Ltd. were: Paterson Globalfoods Inc.; Parrish & Heimbecker Ltd.; Prairie West Terminal Ltd.; Weyburn Inland Terminal Ltd.; Great Sandhills Terminal Marketing Centre Ltd.; and North West Terminal Ltd. Since none of these companies owned terminal elevator facilities of their own along the west coast, they had been obligated to enter into handling agreements with those that did. The establishment of their own facility allowed these companies to lessen their dependency on the use of facilities belonging to their larger rivals.

[47] By the time the sale was finalized in June 2007, Terminal West Ltd. had changed its name to Alliance Grain Terminal Ltd.

[48] The details surrounding this transaction are presented more fully in Section 2.36.

[49] The Competition Bureau had launched a challenge against the proposed joint venture under Section 92 of the Competition Act in November 2005. This challenge, which remained unresolved at the time Saskatchewan Wheat Pool launched its takeover bid for Agricore United, was withdrawn as a result of the new agreement. Interested readers can find more details relating to this case in Section 2.32 of the Monitor's Annual Report for the 2005-06 crop year.

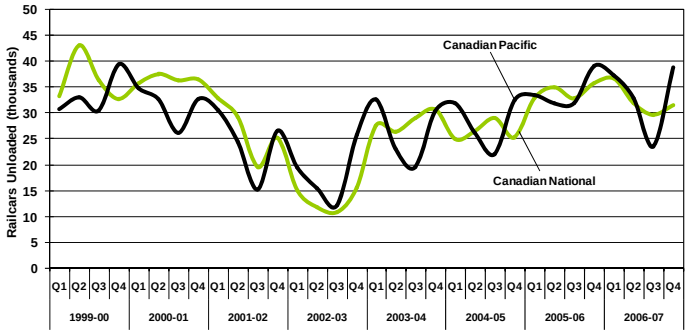
In specific terms, Cargill was to assume ownership of what had been the SWP terminal elevator, while SWP took control of Cargill's interest in Cascadia Terminal, making it a wholly-owned SWP facility.[50] On the whole, these changes were mandated by the Competition Bureau as a means of ensuring that the amalgamation of the country's two largest grain companies did not result in a substantial lessening of competition.

Terminal Elevator Unloads

The number of covered hopper cars unloaded at terminal elevators during the 2006-07 crop year decreased by 3.9%, falling to 261,204 carloads from 271,714 carloads the year before.[51] As might be expected, both CN and CP witnessed reductions in their respective handlings. Of the two major carriers operating in western Canada, however, CP posted the smallest overall decrease in the number of carloads originated. Where CN's handlings dropped by 4.9% CP's fell by a noticeably smaller 2.8%. This allowed CP to again nudge out CN as the GHTS's largest grain carrier in the 2006-07 crop year, with overall shares of 50.5% versus 49.5% respectively.

These values, however, disguise some extraordinary changes in underlying traffic patterns. Of particular interest is the shift between movements to Vancouver and Prince Rupert. While movements to these two west coast ports were down by 5.5% in total, falling to 182,334 carloads as compared to 192,939 a year earlier, Vancouver's handlings fell by 12.2% in comparison to an increase of 15.2% for Prince Rupert. Moreover, the number of cars unloaded at Prince Rupert reached a GMP record of 54,651.[52] Much of this shift away from Vancouver was attributable to changes in CN's rate structure, which has increasingly favoured Prince Rupert with comparatively lower rates.

Figure 17: Relative Change in Terminal Unloads – CN and CP Origins



These actions were largely responsible for a 21.1% reduction in CN's handlings into Vancouver for the 2006-07 crop year. Moreover, this accentuated the reduction in CN's share on traffic moving into Vancouver, which fell to just 38.9% as compared to 61.1% for CP. CN also posted a decline of 8.8% on its handlings into Thunder Bay, which fell to 20,317 carloads. All the while, CN's unloads at Prince Rupert have moved steadily higher. So too did its handlings for Churchill, which rose by 20.6% to 4,728 carloads.[53]

In comparison, CP's reduced handlings, which fell by just 2.8% to 131,923 carloads from 135,777 carloads a year earlier, appear far more modest. The carrier's handlings into Vancouver posted the most significant reduction, declining by 5.5% to 78,049 carloads. Although CP's shipments into Thunder Bay remained second only to Vancouver, the 52,719 cars unloaded there were 2.2% above what had been handled the year before. Moreover, CP was again the dominant carrier in this corridor, where it originated 72.2% of the 73,036 cars unloaded. This too denoted a modest gain over the 69.8% share earned the year before. [See Table 1E-2 in Appendix 3.]

[50] Cargill Limited had a 50% interest in Cascadia Terminal. With its acquisition of Agricore United, Saskatchewan Wheat Pool gained ownership of the other half. By transferring Cargill's interest in this facility, SWP was left with full control of the facility.

[51] The statistics cited here are drawn from the records of the Canadian Grain Commission. Although consistent with the volumes cited as having been handled by the railways, these counts vary as a result of differing data collection and tabulation processes.

[52] As a CN-served destination, movements to Prince Rupert from CP-served origins have been comparatively limited, amounting to just 49 cars for the entire 2006-07 crop year. With the exception of the 2002-03 crop year, where a labour disruption in Vancouver resulted in a substantial amount of western Canadian grain being directed to Prince Rupert, CP's handlings into Prince Rupert have seldom exceeded 1,000 cars per year.

[53] The Hudson Bay Railway directly serves the Port of Churchill. Traffic destined to Churchill is received in interchange from CN at The Pas, Manitoba.

Although the record is somewhat mixed, CP has often outpaced CN's quarterly and annual handlings since the 2002-03 crop year. This can be explained by a distribution in crop production that has tended to benefit CP rather than CN. Still, CN's more recent efforts to promote its Prince Rupert gateway appear to have done much to compensate for this. Through reduced freight rates and a better allocation of cars to the corridor, CN appears to be gaining market share – even if that gain has come at the expense of reduced handlings into Vancouver.[54]

1.6 Summary Observations

Overall grain production for the 2006-07 crop year fell to 49.3 million tonnes, a decrease of 12.0% from the GMP record of 56.0 million tonnes set a year earlier. This ranked as the fifth largest production volume in western Canada since the GMP was initiated, and fell well below the 53.1-million-tonne average for output in the program's non-drought years. Despite the decrease in output, the quality of grain produced in the 2006-07 crop year proved significantly better than that witnessed in either of the two previous crop years. The overall decrease in production reflected declines for most producing provinces. Chief among these were Saskatchewan and Alberta, which posted their first overall reductions in four years.

A 5.1-million-tonne decrease in CWB grain production accounted for the majority of the 6.7-million-tonne reduction in total output. Much of this was due to net declines of 2.8 and 2.6 million tonnes of barley and durum respectively. Only a 0.2-million-tonne expansion in the size of the wheat crop, which totalled 19.1 million tonnes and accounted for slightly more than one-third of the total harvest, served to counteract these losses. With 8.5 million tonnes of production, canola accounted for slightly less than half of the 18.0 million tonnes of non-CWB grains harvested. Moreover, a 1.1-million-tonne decrease in canola production accounted for about two-thirds of the 1.6-million-tonne contraction in non-CWB grains. Special crops witnessed an even steeper decline, with production having fallen by 23.8% to 3.9 million tonnes. Reductions of 0.7 million tonnes in the output of lentils, coupled with a decline of another 0.6 million tonnes of dry peas, accounted for virtually all of the variance.

When combined with a record 12.4 million tonnes of carry-forward stocks, the overall grain supply for the 2006-07 crop year totalled 61.7 million tonnes, which resulted in a decrease of 7.6% from the previous crop year's GMP record of 66.8 million tonnes. The amount of grain moved by rail to western Canadian ports decreased marginally, falling by 3.9%, to 24.3 million tonnes from 25.3 million tonnes the year before. The port of Vancouver remained the principal export destination, although volume fell by 8.6% to 12.9 million tonnes. More importantly, the port's share also declined, falling to 53.0% from 55.7% the year previous. In comparison, total shipments to Prince Rupert rose by 17.1%, to reach a GMP record of 4.9 million tonnes. Prince Rupert's overall share also jumped to a record-setting 20.3% from 16.6% a year earlier.

It is worth noting that as a result of the relative gains made by Prince Rupert in the last two crop years, the roles accorded to the remaining ports have clearly begun to change. There can be little doubt that the upturn in traffic destined to Prince Rupert is the product of more competitive railway freight rates and a better car supply within this corridor. Moreover, these forces are reshaping the roles of other ports within the GHTS, with the most measurable impact being on the port of Vancouver. Like Vancouver, the volume and share of traffic directed to Thunder Bay declined in the face of the advances made by Prince Rupert. Although Thunder Bay still ranked as the second largest export destination within the GHTS, its railway volume decreased by 8.7% to 6.0 million tonnes, while its overall share fell to 24.6% from 25.9% a year earlier. Running counter to the trend was the port of Churchill, where the shipment of 0.5 million tonnes of grain produced a 15.2% increase in volume, and a 0.3-percentage-point gain in share, which reached a three-year high of 2.1%.

The decline in the number of licensed country elevators in western Canada remains one of the most visible facets of the GHTS's continuing evolution. At the outset of the 1999-2000 crop year, there were 1,004 licensed primary and process elevators on the prairies. The 2006-07 crop year saw an additional seven facilities removed from the system, which lowered the total number of licensed elevators in western Canada to just 367,

[54] In terms of cars unloaded at Vancouver, CN's handlings in the 2006-07 crop year fell by 21.1 %. This resulted in CN's share of the handlings at Vancouver falling to just 38.9%. Conversely, CN's unloads at Prince Rupert climbed by 16.5% to a record 54,602 carloads.

and brought the total reduction since the beginning of the GMP to 637, or 63.4%. However, the modest scope of the changes recorded in the last four crop years continues to suggest that the grain companies have effectively concluded their elevator rationalization programs.

Despite the decline in the overall number of elevators, the associated storage capacity fell by a comparatively modest 18.0% in this same period. This lower rate of decline simply reflects the fact that while grain companies were methodically closing their less-efficient smaller elevators, they were also expanding and opening larger ones. By the end of the 2006-07 crop year, high-throughput facilities accounted for 47.7% of all elevators, and 78.6% of overall storage capacity. These values differ considerably from the 11.9% and 39.4% shares they respectively held at the beginning of the GMP. Much of this transformation came as a result of the initiatives taken by the two largest grain companies in western Canada, Agricore United and Saskatchewan Wheat Pool, and whose actions accounted for 93.2% of the overall net reduction in licensed elevators.

The dramatic changes to the makeup of the elevator system contrasts sharply with the more modest one posted by the railway network. During the first seven years of the GMP, the net reduction in western Canadian railway infrastructure amounted to just 4.5%, with the network's total mileage reduced to 18,595.0 route-miles overall. The largest share of this 873.2-route-mile reduction came from the abandonment of 733.1 route-miles of light-density, grain-dependent branch lines. Another 99.7 route-miles were removed in the 2006-07 crop year. The majority of this came from the Southern Manitoba Railway's abandonment of its entire 78.6-route-mile network, with the remaining 21.1 route-miles of track being abandoned by CN and CP. With a remaining network comprised of 18,495.3 route-miles, this enlarged the scope of the reductions made since the beginning of the GMP to 5.0%, or 972.9 route-miles.

The composition of the traffic moved by the GHTS continues to reflect the changes that have been made in both the elevator and railway networks. Although the tonnage forwarded from points along the non-grain-dependent network proved to be consistent with what had been moved eight years earlier, the volume originated by the grain-dependent network has declined by 19.5%. These same influences are also apparent in the relative volumes of grain originated by large and small carriers, which has become particularly pronounced as a result of CN's reacquisition of several shortlines, including the Savage Alberta Railway in December 2006. The overall trend clearly shows the tonnage originated by shortline carriers to have declined far more precipitously than that of the Class 1 carriers since the beginning of the GMP, by 49.3% and 3.8% respectively.

Since the beginning of the GMP, the licensed terminal elevator network in western Canada has increased by 14.3%, to 16 from 14, with its associated storage capacity having climbed by just 3.3%, to 2.6 million tonnes. And while no physical alterations to the network were made during the 2006-07 crop year, there were a number of significant changes in ownership. The first of these related to the sale of the former United Grain Growers terminal in Vancouver, which the Competition Bureau had ordered Agricore United to divest itself of in 2001. The terminal was acquired in June 2007 by a consortium of smaller grain companies, known as Alliance Grain Terminal Ltd. The sale was significant in as much as it would provide the consortium's constituent companies with direct access to their own west coast terminal elevator.

The second change in ownership resulted from the takeover of Agricore United by Saskatchewan Wheat Pool in the fourth quarter. Under the terms of this arrangement, SWP agreed to an exchange of its Vancouver terminal elevator interests with those of Cargill Ltd. In specific terms, Cargill was to assume ownership of what had been the SWP terminal elevator, while SWP took control of Cargill's interest in Cascadia Terminal, making it a wholly-owned SWP facility.

Section 2: 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 was the introduction, and gradual expansion of tendering for Canadian Wheat Board (CWB) grain shipments to western Canadian ports. For the 2006-07 crop year, the CWB has once again committed itself to moving 40% of its grain shipments using a combination of tendering and advance car awards.

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 – 2006-07 Crop Year

Tendering

- *CWB's tendering commitment held to a maximum of 20% for fourth consecutive year.*
- *260 tender calls were issued by the CWB during the 2006-07 crop year.*
  - *Called for the movement of 3.8 million tonnes to export positions.*
    - *Reduction of 29.3% from the 5.3 million tonnes sought a year earlier.*
- *862 bids received; offered an aggregate 6.8 million tonnes.*
  - *Modest increase in bidding activity.*
    - *Reflects improved availability of higher-quality grains.*
- *323 contracts concluded for the movement of 2.7 million tonnes.*
  - *Increase of 8.3% from the 2005-06 crop year.*
  - *CWB directed more west coast grain to Prince Rupert.*
    - *Prince Rupert's share increased to 33.1% from 26.9%.*
    - *Vancouver's share decreased to 46.4% from 54.6%.*
    - *Thunder Bay increased marginally to 20.5 from 18.5%.*
    - *Churchill received no tendered grain for a second consecutive year.*
  - *Five contracts for the movement of 152,800 tonnes of malting barley.*
  - *Represented 17.8% of CWB volume moved to ports in western Canada.*
    - *Marginally below established 20% maximum commitment.*
- *Tenders for 33.9% of the tonnage called either partially, or not at all, filled.*
  - *Significant reduction from previous year's 54.7%.*
- *Proportion moving in multiple car blocks increased marginally to 93.2%.*
  - *Proportion in blocks of 50 or more cars increased to 77.7% from 59.7%.*
- *Estimated $35.2 million in savings from grain company tendering, freight and terminal rebates, and financial penalties for non-performance.*
  - *Increased 53.7% from $22.9 million a year earlier.*

Advance Car Awards

- *2.4 million tonnes of grain moved under the CWB's advance car awards program.*
  - *Represented 15.8% of CWB volume moved to ports in western Canada.*
    - *Fell short of the 20% targeted by the CWB.*
- *33.6% of all CWB movements in western Canada moved under its tendered and advance-car-awards programs.*
  - *Fell short of the 40% committed to by the CWB.*
- *Grain moved under the CWB's advance car awards program largely moved in tandem with that of tendered grain.*
  - *Consisted primarily of wheat and durum.*
  - *81.5% sourced from high-throughput elevators.*
- *Usage of smaller car blocks more prevalent under advance car awards program.*
  - *Stems from railcar allocation process and number of less-than-50-railcar shipments made by the non-major grain companies.*
  - *Supplements larger tendered grain movements.*

Other

- *Federal government moves forward with promise to introduce marketing choice.*
  - *Seeks to first apply concept to barley through regulatory changes.*
  - *Loses initial challenge brought forward by CWB in Federal Court.*
- *Grain shippers seek redress on railway service issues.*
  - *Federal government tables amendments to Canada Transportation Act.*
  - *Great Northern Grain wins level-of-service complaint against CN.*
- *Prince Rupert traffic climbs due to changes in CN rates and car allocation practices.*
- *USFDA allows claims of qualified health benefits on canola-based products.*
- *Federal government moves on recommendations for CGC and the Canada Grain Act.*
- *SWP acquires AU following protracted bidding war with JRI.*
  - *Sells a variety of elevator and terminal assets to JRI and Cargill.*
  - *Emerges as Viterra, the largest grain handler in western Canada.*
- *Extreme weather and labour disruptions undermine rail service in midyear.*

Indicator Series 2 – Commercial Relations

Table	Indicator Description	Notes	BASE 1999-00	CURRRENT REPORTING PERIOD (1) 2005-06	2006-07	% VAR	
	Tendering Program [Subseries 2A]						
2A-1	Tenders Called (000 tonnes) – Grain		n/a	5,325.7	3,765.1	-29.3%	▼
2A-2	Tenders Called (000 tonnes) – Grade						
2A-3	Tender Bids (000 tonnes) – Grain		n/a	7,131.0	6,753.6	-5.3%	▼
2A-4	Tender Bids (000 tonnes) – Grade						
2A-5	Total CWB Movements (000 tonnes)	(2)	n/a	15,132.6	14,932.2	-1.3%	▼
2A-5	Tendered Movements (%) – Proportion of Total CWB Movements	(2)	n/a	16.2%	17.8%	9.9%	▲
2A-5	Tendered Movements (000 tonnes) – Grain	(2)	n/a	2,447.5	2,651.6	8.3%	▲
2A-6	Tendered Movements (000 tonnes) – Grade	(2)					
2A-7	Unfilled Tender Volumes (000 tonnes)		n/a	2,913.9	1,276.6	-56.2%	▼
2A-8	Tendered Movements (000 tonnes) – Not Awarded to Lowest Bidder		n/a	130.5	46.3	-64.5%	▼
2A-9	Tendered Movements (000 tonnes) – FOB		n/a	155.6	152.8	-1.8%	▼
2A-9	Tendered Movements (000 tonnes) – In-Store		n/a	2,291.9	2,498.8	9.0%	▲
2A-10	Distribution of Tendered Movements – Port	(3)					
2A-11	Distribution of Tendered Movements – Railway	(3)					
2A-12	Distribution of Tendered Movements – Multiple-Car Blocks	(3)					
2A-13	Distribution of Tendered Movements – Penalties	(3)					
2A-14	Distribution of Tendered Movements – Province / Elevator Class	(3)					
2A-15	Distribution of Tendered Movements – Month	(3)					
2A-16	Distribution of Tender Delivery Points (number) – Contracted Cars	(3)					
2A-17	Average Tendered Multiple-Car Block Size (carloads) – Port		n/a	54.4	64.7	18.9%	▲
2A-18	Railway Car Cycle (days) – Tendered Grain		n/a	15.7	14.7	-6.4%	▼
2A-18	Railway Car Cycle (days) – Non-Tendered Grain		n/a	16.8	16.4	-2.4%	▼
2A-19	Maximum Accepted Tender Bid ($ per tonne) – Wheat		n/a	-$18.58	-$24.51	31.9%	▲
2A-19	Maximum Accepted Tender Bid ($ per tonne) – Durum		n/a	-$18.05	-$21.56	19.4%	▲
2A-20	Market Share (%) – CWB Grains – Major Grain Companies		n/a	76.1%	75.6%	-0.7%	–
2A-20	Market Share (%) – CWB Grains – Non-Major Grain Companies		n/a	23.9%	24.4%	2.1%	▲
	Advance Car Awards Program [Subseries 2B]						
2B-1	Advance Award Movements (%) – Proportion of Total CWB Movements		n/a	15.6%	15.8%	1.3%	▲
2B-1	Advance Award Movements (000 tonnes) – Grain		n/a	2,365.1	2,362.9	-0.1%	–
2B-2	Distribution of Advance Award Movements – Port	(4)					
2B-3	Distribution of Advance Award Movements – Railway	(4)					
2B-4	Distribution of Advance Award Movements – Province / Elevator Class	(4)					
2B-5	Distribution of Advance Award Movements – Month	(4)					
2B-6	Railway Car Cycle (days) – Advance Award Grain		n/a	15.6	15.1	-3.2%	▼
2B-7	Distribution of Advance Award Movements – Multiple-Car Blocks	(4)					
2B-8	Average Advance Award Multiple-Car Block Size (carloads) – Port		n/a	46.0	53.9	17.2%	▲

(1) – In order to provide for more direct comparisons, the values for the 1999-2000 through 2006-07 crop years are "as at" or cumulative to 31 July unless otherwise indicated.
(2) – Includes tendered malting barley volumes.
(3) – Indicators 2A-10 through 2A-16 examine tendered movements along a series of different dimensions. This examination is intended to provide greater insight into the movements themselves, and cannot be depicted within the summary framework presented here. The reader is encouraged to consult the detailed data table found in Appendix 4 as required.
(4) – With the exception of indicator 2B-6, indicators 2B-2 through 2B-7 examine advance car award 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 detailed data table found in Appendix 4 as required.

2.1 Tendering Program *[Measurement Subseries 2A]*

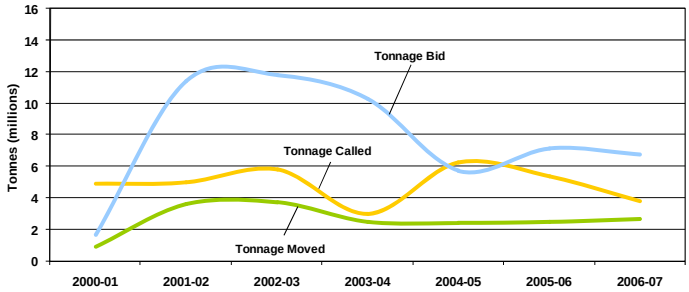
The 2006-07 crop year denoted the seventh for the Canadian Wheat Board's (CWB) tendering program. More significantly, it was the fourth year in which the CWB targeted to move a fixed 40% of its overall grain movements to the four ports in western Canada using a combination of tendering and advance car awards.[55] Under the terms of this arrangement, about half of this volume – representing a maximum of 20% of its overall grain movements – was to be tendered.

Special mention must be made of the fact that with the quality of the grain produced for movement in the 2006-07 crop year having been generally superior to that of the two previous crop years, the behavioural patterns of the industry reflected those that had existed three years earlier. As such, the grain companies were unable to exploit the market demand pressures that had allowed them to assess premiums against the movement of higher-quality tendered grain in both the 2004-05 and 2005-06 crop years.

Tender Calls

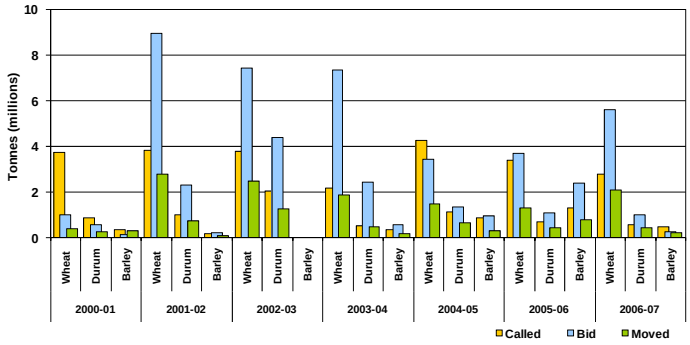
During the 2006-07 crop year, the CWB issued a total of 260 tenders calling for the shipment of approximately 3.8 million tonnes of grain, 29.3% less than the 5.3 million tonnes sought a year earlier. To a large extent, this reduction reflected the reduced number of tender calls issued by the CWB for the movement of barley.

Figure 18: Total Tonnage Called, Bid and Moved Through Tendering



As in past years, the vast majority of the grain put out to tender, 73.8%, called for the movement of wheat. For the 2006-07 crop year this entailed a potential movement of 2.8 million tonnes, 17.9% less than the previous crop year's 3.4 million tonnes. Durum reasserted its traditional position as the second largest commodity for which tenders were issued. These amounted to 0.5 million tonnes, and constituted 14.4% of the overall total as compared to 12.7% the year before. Barley calls, which fell to an 11.8% share from a 23.8% share a year earlier, accounted for the remaining 0.4 million tonnes.

Figure 19: Tonnage Called, Bid and Moved Through Tendering – Grain



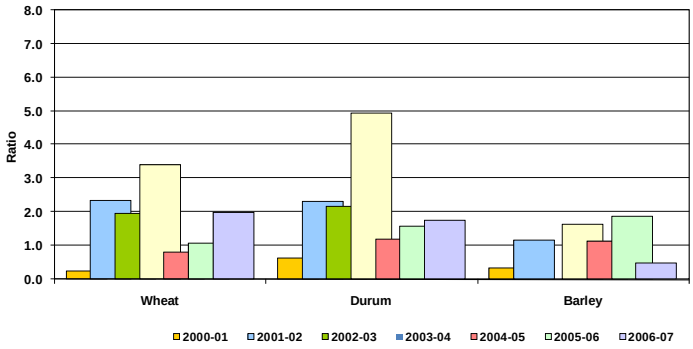
There was also a noticeable shift in the comparative amounts these tenders sought to direct to the four ports in western Canada. Of the total volume called, 81.8% was intended for export through the west coast ports of Vancouver and Prince Rupert. Although this was marginally below the previous crop year's record-setting 84.6% share, it remained considerably above the 64.9% average presented in the first four years of the CWB's tendering program. However, there was a further shift in the allocation between these two ports. Prince Rupert's share climbed to a record 41.5% from 26.3% a year earlier, while Vancouver's declined to 40.3% from 58.3%. The share accorded to the port of Thunder Bay also increased, albeit less sharply, to 18.2% from 15.4% a year earlier. For the second consecutive year, no calls were issued in favour of Churchill. [See Tables 2A-1 and 2A-2 in Appendix 4]

[55] The CWB's tendering program was significantly modified for the 2003-04 crop year following consultations with its 26 agents. The 2002-03 crop year was the last in which the CWB had been committed to tender a ***minimum*** of 50% of its overall volume.

Tender Bids

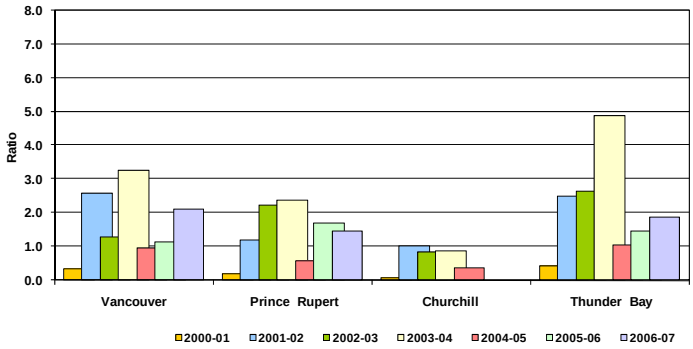
The CWB's tender calls were met by 862 bids offering to move 6.8 million tonnes of grain, about three-quarters more than the amount sought. The majority of these bids, 82.6%, responded to calls for the movement of wheat. Another 14.2% responded to those issued for durum, while the remaining 3.2% answered those for barley. With the exception of barley, the bidding proved more substantive than in the 2005-06 crop year, with a noticeable preference having been given to both wheat and durum.

Figure 20: Ratio of Tonnage Bid to Tonnage Called – Grain



When examined with respect to the port specified in the tender call, 47.4% of the bids were given over to Vancouver movements, 33.6% to Prince Rupert, and 19.0% to Thunder Bay. In this regard, although the bidding again proved largely reflective of the tonnage called, it also showed less of a preference for Prince Rupert. [See Tables 2A-3 and 2A-4 in Appendix 4.]

Figure 21: Ratio of Tonnage Bid to Tonnage Called – Port



In general terms, the bidding proved somewhat stronger than in the 2005-06 crop year. The comparative change in the intensity of this bidding can best be gauged through an examination of the tonnage-bid-to-tonnage-called ratio, where higher values denote a much stronger response to a tender call than lower ones. With few exceptions, these ratios moved generally higher in the 2006-07 crop year. Even so, they remained more subdued than in the 2003-04 crop year, when bidding under the CWB's tendering program proved most intense. Although the bids put forward with respect to barley and Prince Rupert garnered comparatively weaker responses than did others, the overall pattern presented for the 2006-07 crop year again proved largely non-discriminatory.

Contracts Awarded

A total of 323 contracts were subsequently signed for the movement of almost 2.7 million tonnes of grain, 70.4% of the amount called. This represented 17.8% of the tonnage shipped by the CWB to western Canadian ports during the 2006-07 crop year, and fell somewhat short of its 20% target.[56] [See Tables 2A-5 and 2A-6 in Appendix 4.]

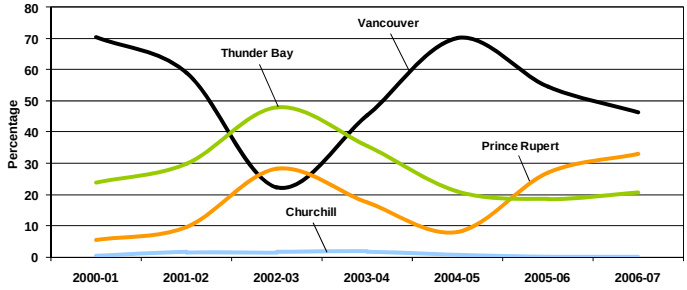
Of the 2.7 million tonnes moved, 46.4% was shipped to Vancouver, 33.1% to Prince Rupert, and 20.5% to Thunder Bay. Owing to the increased volume directed to Prince Rupert these rankings differ significantly from those observed in the 2004-05 crop year. In addition to showing a diminished role for Vancouver and Churchill

[56] Since the tendering of malting barley predates adoption of the Memorandum of Understanding that gave rise to the CWB's current tendering program, malting barley volumes are normally considered independent of the grain volumes tendered under it, but nevertheless are included in the calculation of the total tendered grain volumes moved by the CWB.

in the movement of tendered grain, these results mark the second instance were Thunder Bay failed to place at least second in terms of the largest export gateways for tendered grain in the program's seven-year history.[57]

Although broader market forces also had a hand in shaping these results, much of the impetus for the changes witnessed over the course of the last two crop years came from the freight rate reductions brought forward by CN on movements to Prince Rupert. Supported by comparatively better car allocation within the corridor, the CWB could not ignore the economic advantages inherent in trying to direct a larger proportion of its overall grain shipments to Prince Rupert.[58]

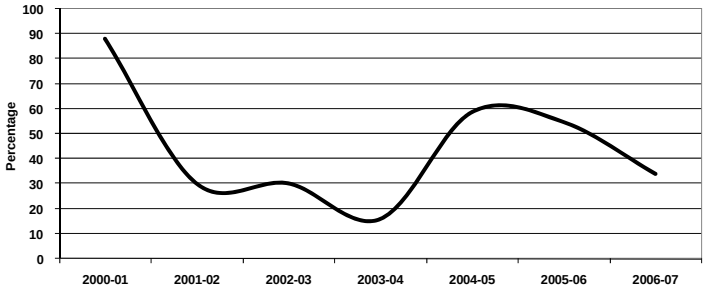
Figure 22: Tendered Grain – Destination Port



Tendered Volumes Not Filled

The ready availability of high-quality grain was responsible for both the heightened response rate on tender calls issued by the CWB as well as the reduced proportion that went unfilled in the 2006-07 crop year. Tenders for a total of 1.3 million tonnes of grain went either partially, or completely, unfilled. This constituted 33.9% of the overall volume called, and marked a sharp reduction from the 54.7% recorded a year earlier. In addition, this value proved to be the lowest observed in the last three crop years, and more consistent with those produced in the first few years of the CWB's tendering program.[59]

Figure 23: Composition of Tendered Volumes Not Filled



Special mention must also be made that the CWB did not issue nearly as many tenders for the movement of feed barley in the 2006-07 crop year as it did a year earlier. Since the CWB was not engaged in the kind of speculative grain gathering that had led to the issuance of nearly 0.2 million tonnes in surplus tenders at that time, no such excess was produced.[60]

Chief among the specific failings identified in this result was the fact that grain companies chose not to bid on some 0.5 million tonnes for which the CWB had issued tender calls. This represented 42.8% of the total unfilled volume. Another 0.4 million tonnes, or 30.7%, went unfilled because an insufficient quantity was bid.

[57] While in the 2002-03 crop yearThunder Bay became the GHTS's largest handler of tendered grain as a result of a labour dispute that impeded the movement of grain through Vancouver, tendered grain shipments through the port of Thunder Bay had always ranked second to those of Vancouver until the 2005-06 crop year. The 2006-07 crop year constituted the second consecutive one in which the volume of tendered grain shipped through the port of Thunder Bay ranked behind that of both Vancouver and Prince Rupert.

[58] More information on the rate reductions that led to this growth in traffic for Prince Rupert is presented in Section 2.33.

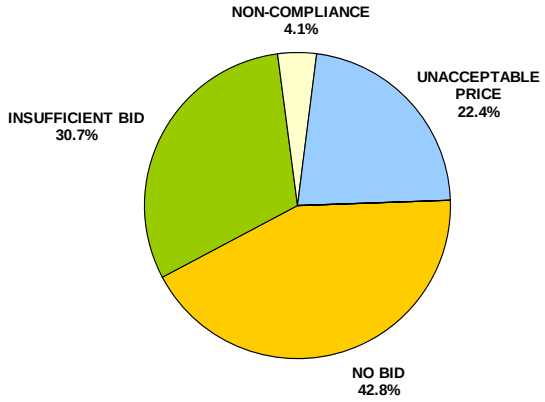
[59] With the exception of the 2000-01 crop year, where the initial lack of industry participation resulted in 88.2% of the tenders called having gone unfilled, the proportion going unfilled in the first three years of CWB's tendering program typically amounted to about 30%.

[60] As opposed to the CWB's normal practice of issuing a tender call only when it has a specific sales contract to fill, the tender calls issued for feed barley were largely speculative, with the CWB anticipating that it could ultimately sell the grain gathered beforehand. This, however, was not always the case. In the 2005-06 crop year the CWB issued tenders for 171,600 tonnes of feed barley that ultimately was not needed.

For 0.3 million tonnes, or 22.4%, the bid price was unacceptable. The bidders' failure to comply with the specifications set out in the tender also resulted in almost 0.1 million tonnes, or 4.1%, having received no award. [See Table 2A-7 in Appendix 4.]

Of the 323 tender calls issued, 11 resulted in contracts being awarded to companies that did not put forward the lowest-priced bid. This involved an aggregate volume of 46,288 tonnes, about one-third of that awarded the year before.[61] In these cases, the lowest-priced bid often failed to secure an award because it included conditions that could not be accommodated. [62] [See Table 2A-8 in Appendix 4.]

Figure 24: Composition of Tendered Volumes Not Filled



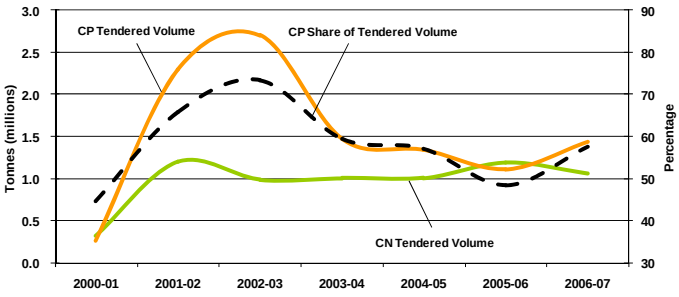
Malting Barley

During the 2006-07 crop year, four tender calls were issued by the CWB for the movement of malting barley. In response, a total of 13 bids were received. This resulted in the awarding of five contracts for the subsequent shipment of 152,800 tonnes to Vancouver, the third largest amount recorded since 280,800 tonnes were forwarded in the 2000-01 crop year. As has been the case throughout the GMP, malting barley constituted the sole grain to have been sold Free on Board (FOB). All other tendered grain shipments were sold on an "in-store" basis. Tendered malting barley shipments in the 2006-07 crop year represented 5.8% of the overall tonnage moved under tender to the port of Vancouver, and just 1.0% of that directed to the four ports in western Canada. [See Table 2A-9 in Appendix 4.]

Originating Carrier

Well over half, 57.6%, of the volume moved under tender during the 2006-07 crop year originated at points local to CP. This was noticeably greater than the 47.7% share the carrier secured a year earlier. In fact, the 2005-06 crop year marked only the second instance where CP did not carry the majority of the CWB's tendered grain.[63] [See Table 2A-11 in Appendix 4.]

Figure 25: Tendered Movements – Originated Carrier



To an extent, the generally larger market share secured by CP in the movement of tendered grain reflects its somewhat

[61] In the 2005-06 crop year, a record 130,504 tonnes were awarded to bidders who did not put forward the lowest bids.

[62] Mention should be of the fact that if these bids were made in accordance with the bidder's agreement with the CWB, they were not automatically rejected. The CWB, the Western Grain Elevator Association, and the Inland Terminal Association of Canada entered into a tri-party agreement that laid out the criteria to be used by the CWB in awarding tenders: the lowest price (greatest savings to farmers); the consolidation of stocks at three terminals or less; and where the full amount of the tender award can not be determined by the first two criteria, the past performance of each grain company with respect to the execution of tender movements is to be used in determining the successful bid.

[63] CP also took a lesser share of the CWB's tendered grain movement in the 2000-01 crop year, 44.6% as compared to CN's 55.4% share.

stronger competitive position relative to that of CN. Much of this stems from the distribution of crop production itself, and the generally better availability of higher-quality grains in CP's service area.

CP also benefits from the fact that it serves a larger number of high-throughput facilities than its rival. Although CN has increased the number of high-throughput elevators it services to 74 from 71 a year earlier, these constituted just 44.8% of the 165 Class C and D facilities situated across western Canada. However, with 87 such facilities local to its lines, CP provided service to slightly more than half of the high-throughput elevators, 52.7%. Shortline railways provided service to the network's four remaining large facilities. Clearly, with a broader base of high-throughput customers, CP can reasonably be expected to win a greater proportion of the volume shipped from these facilities, be it tendered or non-tendered grain.

Multiple-Car Blocks

As mentioned above, tendered grain moved largely under the incentive discount programs of both major railways. In fact, since the beginning of the CWB's tendering program, the proportion moving in blocks of 25 or more railcars never amounted to less than 85.9%. While the proportion of tendered grain that moved in this way during the 2006-07 crop year proved slightly higher at 93.2%, it still ranked as only the third largest value observed in the past seven crop years.

In addition to being somewhat larger than the preceding crop year's 88.6% share, there were some noticeable differences in the car blocks employed. There was a 10.5-percentage-point increase in tendered shipments using blocks of 50-99 cars, which climbed to 59.1% from 48.6%. There was also a 7.5-percentage-point gain in those using blocks of 100 or more cars, which rose to 18.6% from 11.1%. Much of the gains cited here migrated from shipments previously made in blocks of 25-49 cars, which decreased to 15.5% of the total from 28.9% a year earlier. Movements in blocks of less than 25 cars also fell, to 6.8% from 11.4% a year earlier. [See Table 2A-12 in Appendix 4.]

Despite the comparatively small variations that have been observed from year to year, these measurements underscore the fact that successful bidders generally attempt to ship tendered grain in the largest car blocks possible in order to realize the financial benefits available from doing so. Even with the greater latitude given to the planning for these shipments, the proportion moving in blocks of 50 or more railcars has not significantly outpaced that of non-tendered grain. With an estimated 74.9% of all non-tendered movements having qualified for the same discounts offered by the railway in the 2006-07 crop year, tendered grain shipments held only a marginal 2.8-percentage-point advantage.

Figure 26: Tendered Movements – Multiple Car Blocks

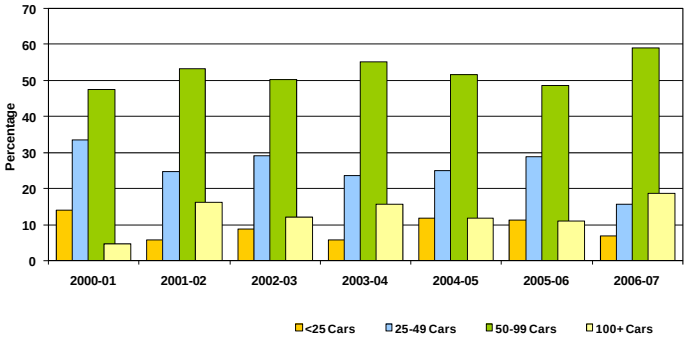
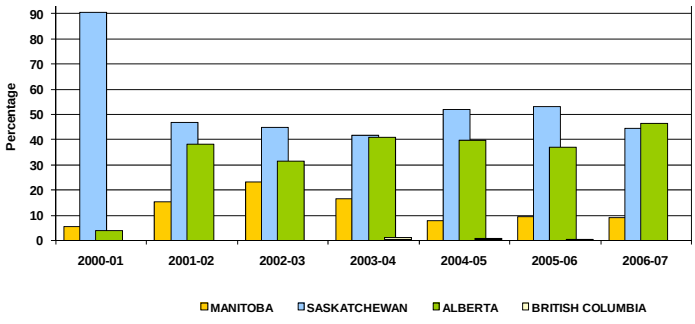


Figure 27: Tendered Grain – Provincial Origin



Tendered Origins

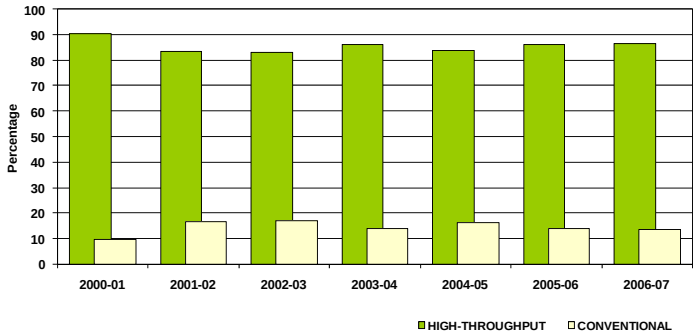
As opposed to previous crop years, the largest amount of grain shipped under the CWB's tendering program was drawn from Alberta. Totalling almost 1.2 million tonnes, these shipments accounted for slightly less than half, 46.3%, of all tendered grain movements in the 2006-07 crop year. Although this represented a modest increase from its previous crop year's 37.2% share, it proved to have

been the first instance where Saskatchewan was displaced as the leading originator of tendered grain. This 9.1-percentage-point gain translated into modest losses for the other three producing provinces.

With 1.1 million tonnes of tendered grain having originated in Saskatchewan, the province's share fell to 44.7% from 53.2% a year earlier. A modest decline was recorded by Manitoba, where despite a 3.2% increase in originated volume, which totalled 0.2 million tonnes, the province's share fell to 9.0% from 9.5%. The most substantive decline in the 2006-07 crop year was from British Columbia, which fell to zero from just 967 tonnes a year earlier.

As mentioned previously, high-throughput elevators have proven to be the principal facilities employed in moving tendered grain. In fact, in the initial year of the tendering program, these facilities originated 90.3% of the volume. Even in the face of two consecutive years of drought, this proportion changed comparatively little, declining to a low of only 83.0% in the 2002-03 crop year. The result was little different for the 2006-07 crop year, which saw 86.3% of the volume originated by such facilities.

Figure 28: Tendered Grain – Elevator Class

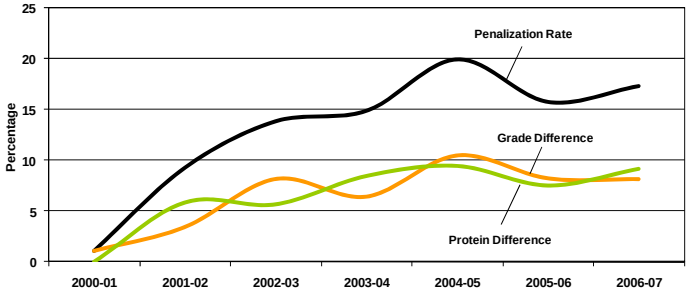


This represented a modest gain over the 86.0% reported as having been originated at high-throughput elevators a year earlier. A comparison of the provincial values reveals only marginal differences. For Manitoba, the originations at these larger facilities rose to 85.4% from 85.2% a year earlier. In the case of Saskatchewan, the proportion originating at high-throughput facilities increased to 87.2% from 85.9%. Alberta posted a modest reduction in the share originating at these facilities, 85.7% as compared to 86.3% the year before. [See Table 2A-14 in Appendix 4.]

Applied Penalties

For the 2006-07 crop year, a total of 5,218 tendered carloads were assessed with financial penalties following their arrival at the four designated ports in western Canada.[64] This marked a 19.1% increase from the 4,383 carloads penalized a year earlier. In addition, the penalization rate also increased, to 17.3% from 15.8%.

Figure 29: Tendered Grain – Penalized Shipments



The penalization rate has risen substantially since the tendering program was instituted in the 2000-01 crop year. At that time, only 1.1% of the cars unloaded were penalized for having failed to meet the grade or protein level specified in the tender.[65] Even when benchmarked against the 9.3% of shipments that were penalized in the 2001-02 crop year, the penalization rate can be seen to have risen substantially. Nevertheless, it must be noted that this rate is consistent with the mis-shipment rate of 18% tied to grain movements at large.[66]

[64] Shipments falling below the specified grade or protein level are assessed a penalty of $200 per railcar. Those exceeding the specifications are penalized an amount equal to the price differential commanded by the received grade or protein, and that of the initial payment for the contracted grain.

[65] The penalization rate of 1.1% cited for the 2000-01 crop year is not deemed comparable to that of later crop years given the limited volume of grain actually moved under the CWB's tendering program.

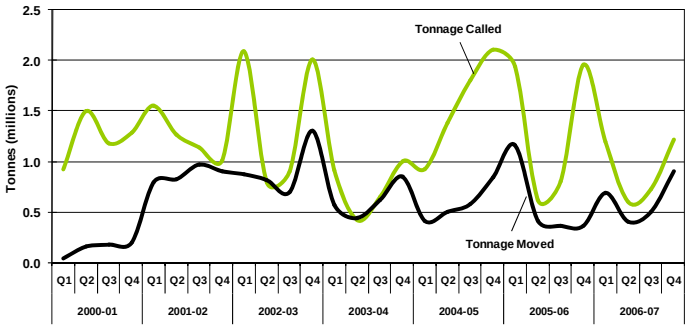
[66] The 18% mis-shipment rate cited here is an estimate provided by the CWB.

Shipments that failed to comply with the tender's required protein content marginally exceeded those that failed to meet the specified grade, 9.1% versus 8.2% respectively. Much of the overall increase in the penalization rate can be traced to a 1.6-percentage-point rise in the proportion of shipments failing to meet the specified protein content, which had fallen to a recent low of 7.5% the year before.[67] However, individual failure rates have increased fairly steadily over the past several years as well. Moreover, they have done so largely in tandem, with no one element having proved to be the single most dominant problem. The pattern exhibited thus far clearly shows that both failings present themselves in roughly equal proportion, although the ranking frequently alternates. [See Table 2A-13 in Appendix 4.]

Distribution

For the 2006-07 crop year, the CWB issued tenders at an average rate of 312,100 tonnes per month. However, the actual amounts varied from a low of 73,600 tonnes to a high of 626,200 tonnes. The quarterly distribution of these values shows an equally significant amount of variability, with relative lows in the second and third quarters sandwiched between sharply higher first and fourth quarter values. Interestingly, there was little meaningful difference between the total tonnage called in the first and second halves of the crop year.

Figure 30: Quarterly Distribution of Tendered Grain

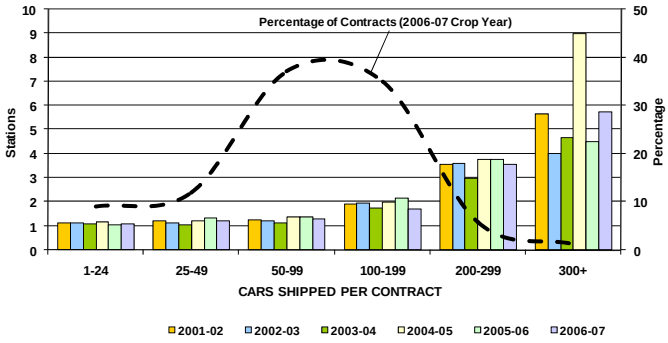


The monthly volume of grain actually shipped under the tendering program showed a similar, albeit dampened, distribution pattern. Averaging 208,200 tonnes per month, these shipments varied from a low of 90,000 tonnes to a high of 345,600 tonnes. The quarterly distribution continues to show a general correlation with the tonnage called, although the relationship proved far stronger than that witnessed a year earlier. The forces underscoring this appear to be twofold: a structural lag that sees much of the tendered volume actually moved some four to six weeks after the call was issued by the CWB; and the volume that went unfilled. Much of the improved strength in the correlation appears related to the latter, which saw the proportion of tender calls that went unfilled decrease to 33.9% from 54.7% a year earlier. [See Table 2A-15 in Appendix 4.]

Delivery Points per Tender Contract

Tendered grain shipments can originate at one or more delivery points. Of the 323 contracts signed for the movement of tendered grain in the 2006-07 crop year, 62.2% involved grain drawn from a single delivery point. This proved only marginally different from the 63.7% observed a year earlier. The average number of delivery points observed for shipments made in blocks of less than 25 cars, 25-49 cars, and 50-99 cars, showed only minor variation, averaging somewhat less than 1.3 stations per contract in all three cases. Moreover, the average for these groupings has remained relatively stable since the 2001-02 crop year. [See Table 2A-16 in Appendix 4.]

Figure 31: Tendered Grain – Delivery Points per Contract



[67] In comparison, the penalization rate on shipments failing to meet the specified grade fell to 8.2% from 8.3% the year before.

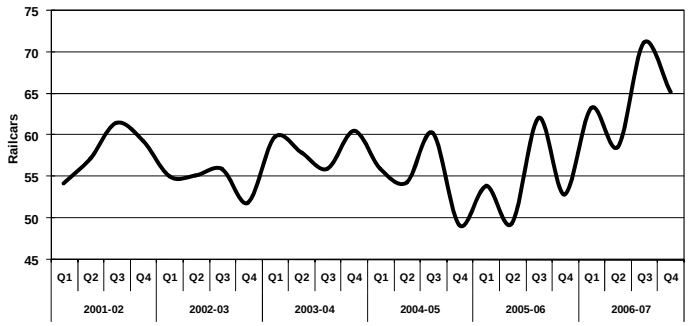
Contracts calling for the shipment of 100 or more cars typically drew grain from a greater number of delivery points. This relates simply to the larger amount of grain involved, and the fact that it often had to be drawn from a larger geographic area. In the case of shipments comprised of 100 to 199 cars, grain was drawn from an average of 1.7 delivery points; 3.6 stations for shipments of between 200 and 299 cars; and 5.8 stations for shipments involving 300 or more cars. With the exception of this last grouping, which has demonstrated more significant variability, these averages have changed comparatively little from those first observed in the 2001-02 crop year.

Of all contracts signed in the 2006-07 crop year, 58.2% involved movements of less than 100 carloads of grain. Although this was somewhat less than the 75.8% observed a year earlier, the result was consistent. Still, the greater part of this, 37.1%, moved in lots of 50-99 cars. This was little changed from the 40.0% recorded a year earlier, and only marginally less than the 38.4% garnered in the 2001-02 crop year. On the whole, these observations reinforce earlier ones to the effect that grain companies have generally attempted to ship tendered grain in larger car blocks whenever possible.

Multiple-Car Block Size

As mentioned previously, 93.2% of the tendered grain shipped in the 2006-07 crop year moved in blocks of 25 or more cars. In general, these multiple-car shipments averaged 64.7 cars in size, a value well above the 50-car threshold used to define movements from high-throughput elevators. What is more, this denoted an 18.9% increase from the 54.4-car average of the previous crop year. Much of the impetus for this stemmed from a sharp rise in the average car blocks moving to Vancouver and Thunder Bay. [See Table 2A-17 in Appendix 4.]

Figure 32: Tendered Grain – Weighted Average Car Block



The annualized averages of car block sizes produced in the Vancouver, Thunder Bay and Prince Rupert corridors proved to have been the largest recorded under the GMP so far.[68] The exception was in the Churchill corridor, where the CWB's decision not to issue tenders for a second consecutive year resulted in another zero average.[69] In the case of Vancouver, the 2006-07 crop year's average climbed by 26.0%, reaching 66.4 cars as compared to 52.7 cars a year earlier. Movements in the Thunder Bay corridor experienced a similar gain, increasing by 26.7%, to an average of 61.6 cars from 48.6 cars. The annualized average exhibited in the Prince Rupert corridor also rose, but by a more modest 4.7%, to 64.4 cars from 61.5 cars the year before.

On the whole, the quarterly averages have shown a large degree of variability. To a large extent, these values presented an undulating pattern very much in keeping with the pattern portrayed a year earlier, although the upward momentum proved more significant in the 2006-07 crop year.

Car Cycles

The average car cycle for tendered grain shipments amounted to 14.7 days in the 2006-07 crop year. This represented a 6.4% reduction from the 15.7-day average recorded a year earlier. This reduction proved slightly better than the 2.8% improvement in the period's overall car cycle.[70] [See Table 2A-18 in Appendix 4.]

[68] The values cited here are based on annualized averages, and not the individual quarterly records that may have been attained in any of the six crop years for which data has been collected.

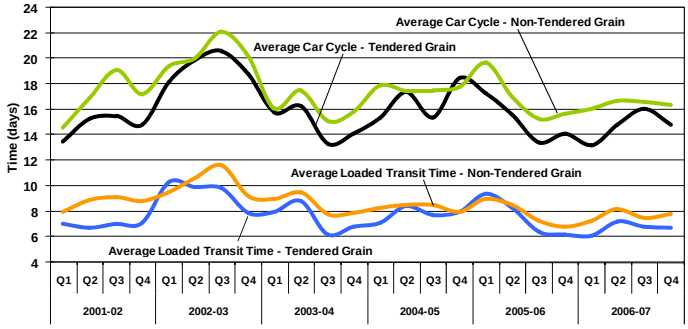
[69] Tendered grain shipments destined to Churchill in the 2004-05 crop year produced the largest annualized average car block on record, 89.3 cars.

[70] General car cycles are discussed more fully in Section 3.3.

With 86.3% of the tendered grain volume originating at high-throughput elevators, the car cycle associated with these movements was noticeably lower than those of non-tendered grain shipments. In fact, the average car cycle for tendered grain was 10.4% less than that of non-tendered grain in the 2006-07 crop year, 14.7 days versus 16.4 days respectively.

By their very nature, high-throughput elevators aim to construct grain shipments in the largest car blocks possible. In general terms, this allows for faster railway movement since the grain is typically gathered from one point rather than multiple, smaller conventional elevators.[71] Over the course of the past six crop years, the time advantage enjoyed by tendered grain shipments has proven fairly consistent, amounting to an average of 1.2 days, or 7.1%, less than that of the car cycle for non-tendered movements. Although the greater portion of this advantage came from faster loaded transit times, it proved only modestly superior to that of the empty transit time.

Figure 33: Car Cycles – Tendered and Non-Tendered Grain



In the 2006-07 crop year, tendered grain's average loaded transit time amounted to 6.7 days. This represented a 17.3% improvement over the previous crop year's 8.1-day average. When the six-year record is examined against that of non-tendered grain shipments, the loaded transit time advantage can be seen to have amounted to about 0.7 days, or 8.7%. The benefit derived from the difference between the average empty transit times for tendered and non-tendered grain proved somewhat less, and amounted to about 0.5 days, or 5.7%.

The proportion of grain that actually moves in trainload lots has also had a bearing on the car cycle. Although this volume has been increasing, a significant proportion still moves in less-than-trainload lots. Tendered grain's multiple-car-block average of 64.7 carloads underscores this. As long as tendered grain moves in less-than-trainload lots, whether because the tender contracts largely specified an insufficient volume or because the facility at which it originates cannot physically accommodate their assembly, further improvement is likely to be hampered. Even so, the statistics presented here continue to indicate that the major grain companies have been moving steadily towards this objective.

Accepted Bids

The CWB's tendering program was intended to stimulate competition The Monitor uses a series of indicators to assess market dominance. With a number of stakeholders having raised concern over the potential ability of major grain companies to outbid their smaller competitors in an effort to win tender contracts, the first of these involves measuring the bids advanced by both the major, and non-major, grain companies.[72]

Although the actual winning bids remain confidential, the CWB discloses the range of bids received for each tender issued. As "price takers," it is in the CWB's best interest to accept the most remunerative bid put forward.[73] As a result, the maximum discount offered by grain companies, and generally accepted by the

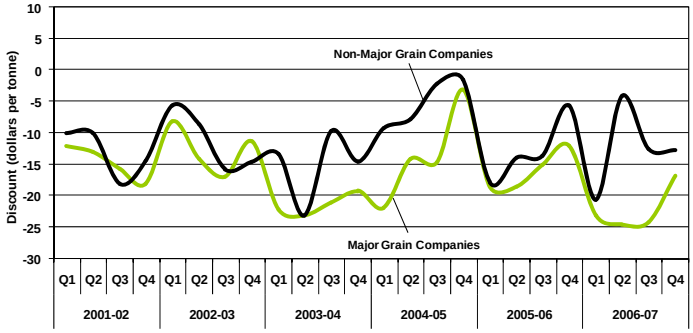
[71] A pilot project conducted by Saskatchewan Wheat Pool and CN in 2002 showed that back-to-back movements of 100-car shuttle trains from high-throughput elevators could achieve an average car cycle of 6.5 days.

[72] As used here, the term "major grain companies" refers to Agricore United, Saskatchewan Wheat Pool, Cargill Limited and Pioneer Grain Company, Limited. These companies effectively constitute the four largest firms sourcing grain within western Canada, and also possess terminal elevator facilities at Thunder Bay and the west coast ports of Vancouver and Prince Rupert.

[73] The bids submitted are expressed as a per-tonne discount to the CWB's initial price for wheat, durum and barley.

CWB, provides a reasonable basis by which to compare differences in the bidding behaviours of both the major, and non-major, grain companies.

Figure 34: Maximum Discount from Initial Price – Wheat



The maximum discounts put forward by both groups shows a significant degree of variation over the course of the past six crop years, be it on a quarterly or annual basis. To a large extent, these fluctuations reflected their response to changing marketplace conditions. As a rule, however, the maximum discounts offered by the major grain companies generally exceeded those offered by their smaller competitors by a factor of at least 25%, although there were numerous instances where the non-major grain companies outbid their larger rivals. In the 2001-02 crop year, the value of the bids put forward for the right to move tendered wheat increased steadily, reaching a maximum of $18.07 per tonne by year's end. In the 2002-03 crop year these bids retreated somewhat, pulling back to a lesser $16.99 per tonne. Although the bidding became more erratic in the 2003-04 crop year, the maximum discount again increased to a record $23.04 per tonne. [See Table 2A-19 in Appendix 4.]

With tight supplies of high-quality grain, the nature of the bidding in the 2004-05 crop year was dramatically altered. The discounts that the CWB had been able to extract from the grain companies began to decline. From an initial high of $21.86 per tonne in the first quarter, the maximum discount bid ultimately fell to just $3.06 per tonne by year's end. Despite this reduction in the discounts offered, what distinguished the 2004-05 crop year from those that preceded it was the fact that the bids advanced by the grain companies quickly began to require that the CWB pay a premium to move tendered grain. At its height, the CWB was paying a premium of as much as $10.75 per tonne over the initial price to ensure that grain was moved into position for export.

Given the realities tied to marketing another crop of comparatively poorer quality, the CWB proved more adept at refocusing its sales program in the 2005-06 crop year. With less emphasis on the movement of higher-quality grain, the CWB was better positioned to address the tendering of an abundant supply of lower-quality grains. With limited exception, premiums were dramatically reduced, reaching no more than $2.25 per tonne on select movements of high-quality wheat. Discounts also rebounded substantially, rising to as much as $18.58 per tonne in the first quarter before then settling back to $12.00 per tonne in the fourth.

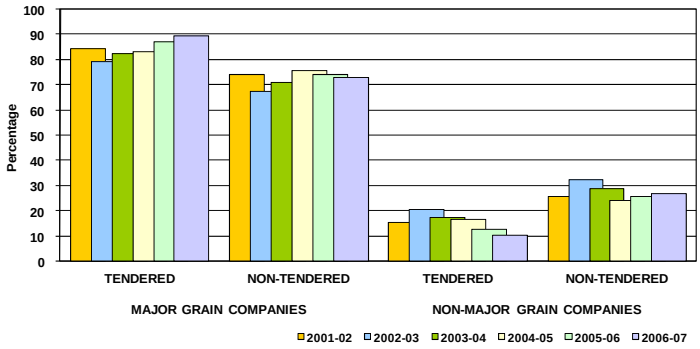
Improved market conditions in the 2006-07 crop year brought about a restoration of the bidding patterns that had been observed in the first three years of the CWB's tendering program. Premiums were effectively eliminated, and the maximum discounts bid moved noticeably higher against those put forth a year earlier. In the second quarter these bids surpassed the four-year-old benchmark of $23.04 per tonne to set a new record of $24.51 per tonne, which was largely supported by like bids in the third quarter before falling back to a maximum of $16.73 per tonne at year's end.

Despite these market gyrations, the major grain companies can still be seen to have maintained their position as the industry's price leaders. Whether offering deeper discounts, or demanding higher premiums, these actions continue to suggest that the major grain companies have adopted a more aggressive approach to tendering than have the non-majors. Moreover, what ultimately appears to distinguish the two groups is the non-majors' proclivity to respond more selectively to any of the tender calls issued by the CWB, while the major grain companies appear far less discriminatory.

Market Share

The best indicator of market dominance is the relative share held by both the major, and non-major, grain companies. Interestingly, the share secured by the larger grain companies in the movement of CWB grain, be it tendered or non-tendered, while having fluctuated over the course of the past six crop years, has not materially changed. In the 2001-02 crop year, the major grain companies controlled 84.6% of the tendered volume. Six years later, that share had increased only marginally to 89.6%. Much the same was true of non-tendered CWB grains, with the majors' share having declined to only 72.9% from 74.4%. [See Table 2A-20 in Appendix 4.]

Figure 35: Market Share – CWB Grains



The market shares held by the non-major grain companies also showed limited change. Over the course of the past six crop years they have lost 5.0 percentage points from their share of the tendered grain movement while adding 1.5 percentage points to its share of non-tendered grain movements. These differentials are more significant to the non-majors, particularly when it comes to a steadily diminishing role in moving tendered grain, but they are too restricted in scope to be indicative of a meaningful reduction in overall business activity. Moreover, the limited nature of the changes observed suggests that the major grain companies, despite their apparent competitive advantages, have not been able to easily displace their smaller rivals.[74]

This result can partially be explained by the heightened degree of competition that has existed between the grain companies themselves, whether it be in terms of the deeper discounts they put forward in their bids to secure tendered grain movements or in the higher trucking premiums they have been willing to pay producers in order to draw grain into their facilities. Another factor relates to the fact that tendered grain movements are effectively capped at 20% of the CWB's shipments to the four ports. Given the nature of the general car allocation mechanism used to accommodate the remaining 80% of this overall volume, this limit has helped maintain the market position currently held by the smaller grain companies.

Financial Savings

With an increase in the discounts offered by the grain companies in their tender bids, as well as the elimination of premiums paid on select tendered movements, the transportation savings accruing to the CWB – and ultimately passed back to producers through its pool accounts – climbed substantially in the 2006-07 crop year. Although derived largely from the savings in transportation costs arising from the bidding process itself, these proceeds also include freight and terminal rebates, as well as financial penalties for non-performance. The CWB estimates the net savings from these activities have increased by 53.7%, to $35.2 million from $22.9 million a year earlier.

2.2 Advance Car Awards Program *[Measurement Subseries 2B]*

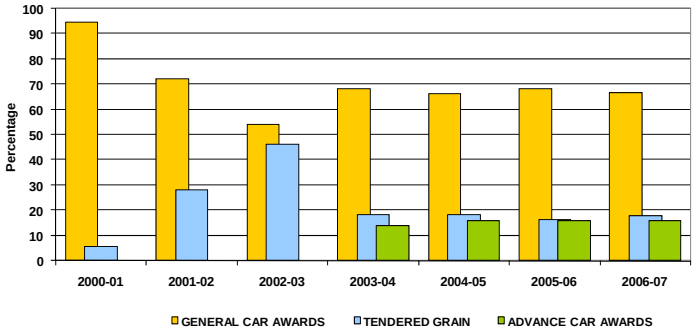
A total of 2.4 million tonnes of grain moved under the CWB's advance car awards program during the 2006-07 crop year. This represented 15.8% of the CWB's total shipments to western Canadian ports, which constituted a gain of 0.2 percentage points from the 15.6% share garnered a year earlier. In conjunction with the volume

[74] The competitive advantage referred to here relates specifically to the number of high-throughput elevators operated by the major grain companies. With over 80% of tendered grain shipments moving in multiple-car blocks from high-throughput elevators, the major grain companies are deemed to have more of the strategic assets needed to exploit these efficiencies than do their non-major rivals. In addition, the major grain companies also operate their own terminal elevators. This makes their smaller rivals entirely reliant on them for any terminal handling services needed.

that moved under its tendering program, a combined 33.6% of the CWB's total shipments moved under these two programs. This fell somewhat short of the 40% that had been targeted, and marginally above the 31.8% achieved in the 2005-06 crop year.[75]

In keeping with the very small increase in its share of total CWB shipments, the total tonnage moved under the advance car awards program remained largely unchanged from that handled in the 2005-06 crop year, falling by just 0.1%. This proved to be consistent with the marginal reduction of 1.3% in total CWB shipments for the period. Quarterly shipments under the advance car awards program increased somewhat steadily throughout the year, rising from 0.5 million tonnes and a 12.5% share in the first quarter, to 0.8 million tonnes and an 18.9% share in the fourth.

Figure 36: CWB Grain Movements – Western Canada



These gains reflected modest reductions in advanced awards shipments, which slid from 1.2 million tonnes in the first quarter to 1.0 million tonnes in the third, before then climbing to 1.7 million tonnes in the fourth. When expressed as a percentage of total CWB grain shipments, the quarterly share of the grain moved under both programs proved quite stable: amounting to 29.4% in the first quarter; 29.2% in the second; 29.9% in the third, and finally 40.2% in the fourth.

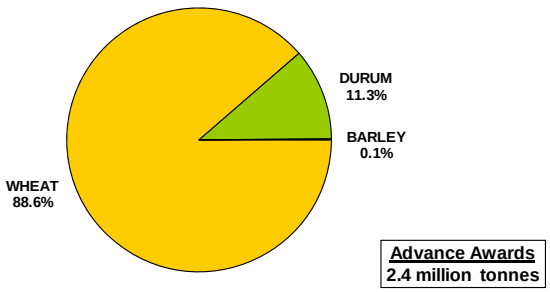
Traffic Composition

In a number of respects, the grain shipped under the advance car awards program paralleled that moved under the tendering program. The vast majority of the 2.4 million tonnes shipped consisted of wheat, some 2.1 million tonnes, or 88.6%. This was in turn followed by another 0.3 million tonnes, or 11.3%, of durum, and a residual barley component of 2,700 tonnes, or 0.1%. As compared to tendered grain movements, wheat secured an additional 10.7 percentage points in share while those for durum and barley lost 3.8 and 6.8 percentage points respectively. [See Table 2B-1 in Appendix 4]

As in the case of tendered grain, the largest portion of the volume moved under the advance car awards program was also destined to the port of Vancouver, just over 0.8 million tonnes, or 35.3%. This, however, significantly trailed the 46.4% share the port secured in the movement of tendered grain.

Vancouver was followed in turn by Thunder Bay with 0.8 million tonnes and a 33.9% share; Prince Rupert with 0.7 million tonnes and a 30.7% share; and Churchill with 2,200 tonnes and a 0.1% share. [See Table 2B-2 in Appendix 4.]

Figure 37: Advance Car Awards – Grain Composition



As with tendered grain shipments, Vancouver realized a loss in its share of the movements made under the advance car awards program. Of the 5.8 percentage points in share surrendered by Vancouver in the 2006-07 crop year, 2.2 percentage points were shifted to Prince Rupert and another 3.7 percentage points to Thunder

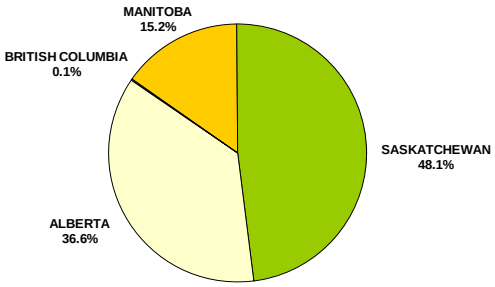
[75] Advance car awards are administered on the same basis as the CWB's general car awards program, but with an additional two-week lead time, and an early indication of the grains and grades required, in order to provide shippers with increased flexibility in managing their logistics programs.

Bay. The decreased seen for Vancouver witnessed in the last two years is manifest in other measures under the GMP regarding tendered as well as non-tendered grain movements.

Originating Carrier

Over half, 55.6%, of the volume moved under the advance car awards program during the 2006-07 crop year originated at points local to CP. This proved marginally greater than the 52.5% the carrier had secured a year earlier, but was somewhat less than the 57.6% obtained as its share of the tendered grain movement. As in past years, this value was somewhat greater than what the carrier garnered with respect to the overall movement of grain in western Canada. [See Table 2B-3 in Appendix 4.]

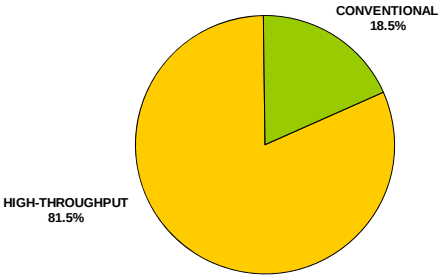
Figure 38: Advance Car Awards – Provincial Origin



Traffic Origination

As opposed to tendered grain shipments, the largest volume moved under the CWB's advance car awards program came from Saskatchewan with 1.1 million tonnes. This volume also secured a marginally greater share of the total tonnage, 48.1% versus 44.7% for tendered grain. Shipments from Alberta and Manitoba followed, with originations of 0.9 million tonnes and 0.4 million tonnes respectively. A total of 3,500 tonnes was also shipped from British Columbia. [See Table 2B-4 in Appendix 4.]

Figure 39: Advance Car Awards – Elevator Origin



The shares accorded to these latter provinces under the advance car awards program also differed from those obtained through tendering. In the case of Alberta, this amounted to 36.6% as compared to the tendering program's 46.3% share. However, Manitoba's 15.2% share of the advance car awards movement proved to be well above the 9.0% it secured for tendered grain. Although comparatively small, the share of movements from British Columbia accounted for 0.1% of the total under the advance car awards program versus zero under the tendering program.

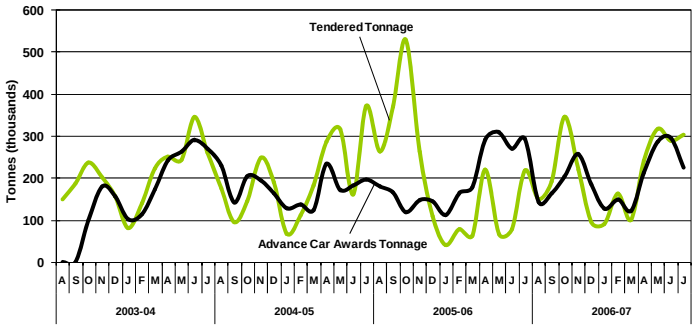
As was the case with tendered grain, the majority of the grain shipped under the advance car awards program, 81.5%, came from high-throughput elevators. This was only marginally greater than the 80.3% originated from these facilities a year earlier. This share was also consistent with, but somewhat lower than, the 86.3% reported earlier for tendered grain movements.

Saskatchewan and Alberta posted the greatest overall use of high-throughput elevators, with both reporting that 84.6% of their originated volumes came from such facilities. Manitoba trailed with 64.8% of its advance car award tonnage having originated at these elevators. These share values were consistent with those observed for tendered grain shipments, with the exception of Manitoba, where the proportion of tendered grain originating at high-throughput facilities reached a notably greater 85.4%.

Monthly Distribution

The volume of grain moved under the CWB's advance car awards program averaged 196,900 tonnes per month, and varied from a low of 121,400 tonnes in March 2007, to a high of 295,800 tonnes in June 2007. Moreover, the distribution of these movements presented a pattern similar to that of tendered grain.

Figure 40: Advance Car Awards – Monthly Distribution

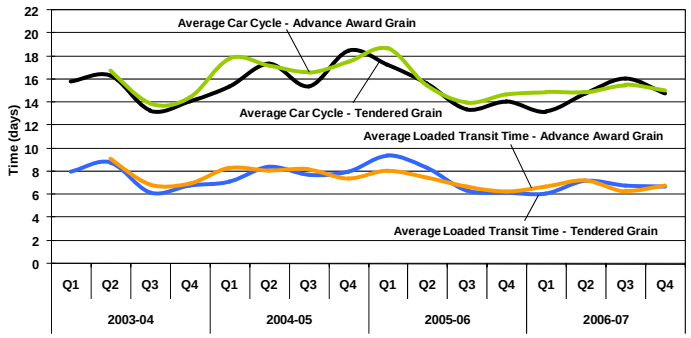


The similarity in these patterns effectively underscores what has been suggested by other indicators under the GMP: that grain moving under the advance car awards program does so largely in tandem with shipments made under the tendering program. It also indicates that the grain companies have been exploiting the flexibility that the advance car awards program was intended to bring to their planning activities. By coupling together these movements the grain companies have been able to maximize the cost-saving potential of larger block shipments whenever possible.

Car Cycles

The average car cycle for grain shipped under the CWB's advance car awards program amounted to 15.1 days in the 2006-07 crop year. This value proved to be 3.2% less than the 15.6-day average recorded in the 2005-06 crop year, little different from the 14.7-day average observed for tendered grain shipments. In fact, quarterly car-cycle values for advance car awards movements closely tracked those observed under the tendering program, and were equally consistent with the broader improvement in the overall car cycle for the period. [See Table 2B-6 in Appendix 4.]

Figure 41: Advance Car Awards – Car Cycle



The 6.8-day average loaded transit time for grain moved under the advance car awards program was also consistent with the 6.7 days for tendered grain shipments. Similarly, the average empty transit time proved only marginally greater than that of tendered grain, 8.3 days versus 8.0 days respectively.

Although the comparative averages for advance car awards movements proved to be higher than those of tendered grain, they were somewhat lower than those posted for non-tendered movements in general. With the overall car cycle of non-tendered movements averaging 16.4 days, this difference amounted to 7.9%. These similarities support the observation that grain shipped under the CWB's tendering and advance car awards programs move largely in concert with each other.

Multiple-Car Blocks

As mentioned previously, the proportion of grain moving in multiple-car blocks has been increasing under the GMP. Moreover, with 93.2% of tendered grain shipments moving in blocks of 25 or more cars, the usage rate easily outpaced that of non-tendered grain. This was equally the case for movements in blocks of 50 or more cars, which represented 77.7% of the overall tendered volume in the 2006-07 crop year.

These values attest to the comparative strength of the major grain companies in moving tendered grain from high-throughput elevators in larger car blocks. Yet it is this very dominance that led the CWB and its agents to collectively roll back the proportion of total CWB movements that would be tendered, beginning in the 2003-04 crop year, from a minimum of 50% to a maximum of 20%. At the same time, this volume was to be complemented by another 20% that would move through the CWB's new advance car awards program. To an extent, the allocation mechanisms inherent in the advance car awards program partially protected the smaller grain companies, and ensured that they would be able to exercise a comparatively greater role in the movement of this 40% than they had been under the tendering program alone.[76]

Given the generally smaller facilities used by the non-major grain companies, shipments made using the equipment provided through advance car awards are comparatively smaller in size than those moved under the tendering program alone. This is equally true of shipments made by the major grain companies since they frequently fill-out their tendered movements whenever possible to take advantage of the higher discounts available to them from doing so. When combined for comparative purposes, the result is an increased concentration of movements made in blocks of less than 50 cars, and a dilution of those made in blocks of 50 or more cars. Whereas 22.3% of tendered grain movements were in blocks of less than 50 cars, the proportion climbed to 43.2% when pooled with those made using advance car awards. Conversely, the proportion moving in blocks of 50 or more cars decreased from 77.7% in the case of tendered grain shipments alone, to 56.7% when combined with those moved under the advance car awards program. [See Table 2B-7 in Appendix 4.]

Figure 42: Grain Volumes Moved in Multiple Car Blocks

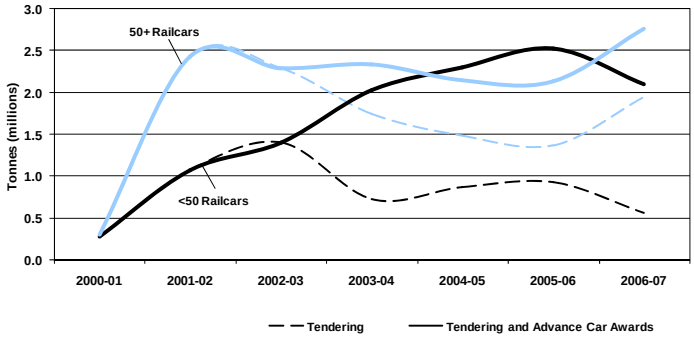
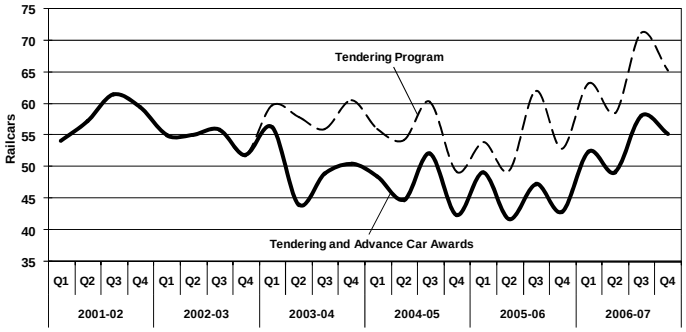


Figure 43: Average Car Block – Tendering and Advance Awards



Multiple-Car Block Size

In a parallel illustration of these same forces, the average car-block size also increased. As seen earlier, car blocks averaged 64.7 cars under the CWB's tendering program in the 2006-07 crop year. When combined with movements under the advance car awards program, this average was reduced by 16.7% to 53.9 cars. [See Table 2B-8 in Appendix 4.]

Despite only four years of data from the advance car awards program, the available statistics indicate that the joint movement of tendered and advance-car-awards grain has pulled down the tendering program's higher average by about eleven cars. Moreover, these averages display patterns that again draw attention to the complementary nature of these movements.

[76] The 40% cited here refers to the total derived from combining tendering and advance car awards. Advance car awards are granted on the same administered basis as the general CWB car awards, with 50% based on the recent 18 weeks of producer deliveries and 50% based on future deliver intentions, with no bidding on the part of the grain companies.

2.3 Commercial Relations – Other Developments

2.31 Government Moves Forward With Marketing Choice

As one of the planks in its 2006 election platform, the federal Conservative Party had promised to provide western Canadian farmers with greater choice in the marketing of their grain. In general terms, this pledge suggested that the CWB would no longer have exclusive jurisdiction over the sale of wheat, durum and barley grown in western Canada for export as well as domestic human consumption. In fact, the term "marketing choice" was intended to mean that farmers would be given the ability to sell the wheat and barley they grew to any domestic or foreign buyer they chose, including a transformed CWB.

From its earliest history, the debate surrounding the role to be played by the CWB in selling western Canadian grain has been politically charged. Strong opinions, both for and against the maintenance of the CWB's legislated monopoly, re-emerged towards the end of the 2005-06 crop year as the newly-elected Conservative government signalled that it was preparing to act on its pledge to introduce marketing choice.

In mid September 2006, as one of the first formal steps in this process, the Minister of Agriculture and Agri-Food announced the creation in of an eight-person task force to examine the options open to the government in this regard.[77] Over the course of the next month, the task force considered the technical and transitional issues that would be manifest in making this changeover. The task force's report to the Minister, which was submitted on 25 October 2006, recommended a four-stage transition period extending over several years.

The first of these stages would deal with the legislative changes required to repeal the Canadian Wheat Board Act and provide authorization for the new commercial entity that would replace it, dubbed CWB II. The second would address the actual formation of this new entity, and the introduction of choice for barley marketing. The extension of choice to the marketing of wheat and durum would signal the beginning of a third stage, where governmental financial supports for CWB II would be gradually withdrawn. By July 2013, when the task force envisioned the transitional process being complete, CWB II would emerge as a fully self-sufficient commercial entity operating in a completely open market environment.

Within days of receiving these recommendations the Minister announced that the government planned to move forward in the matter of initially extending marketing choice to barley. Specifically, the government outlined its intention to hold a farmer plebiscite on the issue early in the coming year. By the end of January 2007 the eligibility requirements of the voters had been established, and the question to be voted upon made public. The plebiscite, which employed a mail-in ballot, extended from early February through mid March. With a minority of 37.8% having voted to retain the CWB's single-desk authority, the government declared that it was going to proceed with the regulatory changes required to give producers a choice in the marketing of their barley by the commencement of the 2007-08 crop year.[78]

As matters progressed, the CWB began to suggest that transitioning completely out of the marketing of barley might be the only real option in the face of the government's stated intensions and an actual loss of its single-desk authority. Furthermore, in light of the market uncertainty that had enveloped the issue by the end of April, the CWB lowered the Pool Return Outlook (PRO) on malting barley for the 2006-07 crop year, and suspended its PRO and Producer Payment Options on barley for the upcoming 2007-08 crop year. Although disappointed by the CWB's move, the government continued to progress with what it maintained were the requisite amendments to the *Canadian Wheat Board Regulations.* Having argued that its mandate could only be varied through a legislative change to the *Canadian Wheat Board Act* itself, the CWB moved to have the Federal Court review the legality of the government's actions following the Minister's announcement that these regulatory amendments had been finalized in June.

During a two-day hearing held in late July 2007, both parties argued the merits of their respective positions. In the end, the court sided with the CWB, ruling that legislative amendments enacted in 1998 clearly showed that

[77] As originally constituted, the task force was to include a representative to be named by the CWB. However, the CWB declined to name one, which reduced the size of the task force to a seven-member panel. Notwithstanding this, the CWB responded to the questions directly put before it by the task force.

[78] The votes were tabulated by the accounting firm of KPMG, and made public by the Minister on 28 March 2007.

Parliament had reserved unto itself the power to change the CWB's mandate.[79] As a result, the government's attempt to remove the CWB's single-desk control over the marketing of barley through regulatory change was set aside, at least temporarily.[80]

2.32 Grain Industry Seeks Redress on Railway Service Issues

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

Moreover, grain shippers were troubled by what they claimed to be the railways' lack of accountability. Arguing that regulatory change provided the only practical means of rectifying these perceived failings, they joined forces with shippers of other commodities in raising their complaints to the federal government for attention. In response, the railways contended that no such remedy was necessary, and that most problems could satisfactorily be remedied through private dispute resolution mechanisms.

Even so, the shipping community continued to press for legislative change, allying themselves in a broader governmental lobbying effort. In May 2006, Transport Canada advised shippers that the government intended to address their complaints about railway service with an amendment to the *Canada Transportation Act*. A little over a year later, on 30 May 2007, the Minister of Transport tabled these promised changes to the Act in the House of Commons. In general terms, Bill C-58 was aimed at protecting rail shippers from the potential abuse of market power by the railways, and included more effective means of addressing their concerns over service and rates. Furthermore, the government also committed itself to a review of railway service within 30 days of the Bill being passed into law. Although these actions were welcomed by shippers, they could do little to retroactively correct the service problems that many grain shippers had been experiencing since the beginning of the 2006-07 crop year (see section 2.37 for a broader discussion of railway service during this period).

One aggrieved grain shipper, Great Northern Grain Terminals Ltd. (GNG), opted to file a level-of-service complaint with the Canadian Transportation Agency. In its complaint, filed on 8 March 2007, GNG alleged that CN's advance products discriminated against it and other small shippers in the allocation of railcars, thus rendering them uncompetitive in the marketing of grain. Furthermore, GNG also alleged that CN had failed to provide the complainant with an adequate level of rail service under its general railcar allocation program. In many ways the case acted as a lightning rod for a host of smaller shippers, with over 20 separate organizations having sought intervenor status in the case.[81] All of the intervenors offered evidence respecting how the CN car allocation program worked and why its application resulted in an inadequate level of service.

In early July 2007, after considering the matter for almost four months, the Agency determined that CN's car allocation practices had resulted in a significant deterioration in the service being provided to GNG. Moreover, it found that CN had in fact breached its common carrier obligations and that GNG would likely suffer substantial commercial harm if the breach went unchecked.[82] Of particular interest was the fact that the

[79] See decision of the Federal Court, *The Canadian Wheat Board v. Attorney General of Canada*, Docket T-1124-07, dated 31 July 2007.

[80] The federal government later decided to appeal the Federal Court's ruling. The Federal Court of Appeal, however, was not slated to hear the case until 26 February 2008.

[81] The Agency accepted interventions from Weyburn Inland Terminal Ltd., Providence Grain Group Inc., Paterson Grain, North West Terminal Ltd., North East Terminal Ltd., the Canadian Wheat Board, Parrish & Heimbecker, Battle River Producer Car Group, Prairie West Terminal Ltd., Agricultural Producers Association of Saskatchewan, Pulse Depot, Briercrest Grain Limited, Saskatchewan Association of Rural Municipalities, South West Terminal Ltd., National Farmers Union, Pulse Canada, Great Sandhills Terminal Marketing Centre, Canadian Federation of Agriculture, R & J Wiens Farms Ltd., and Alberta Agriculture and Food. All of the interventions were in support of the GNG complaint.

[82] See Canadian Transportation Agency Decision Number 344-R-2007, dated 6 July 2007.

Agency also found the difficulties encountered by GNG in obtaining an adequate and suitable car supply were not isolated, but rather systemic in nature with widespread effect.

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

With its implications for the industry at large, many of the GHTS's smaller shippers looked upon the Agency's decision with favour. Moreover, as CN had been ordered to implement these remedies by 1 August 2007, they anticipated a significant improvement in their ability to secure equipment and compete more fully in the upcoming 2007-08 crop year.

2.33 Port of Prince Rupert Experiences Unprecedented Growth

With 4.9 million tonnes of grain directed to Prince Rupert in the 2006-07 crop year, the port posted a 17.1% increase for the period. Moreover, this constituted the largest volume directed to Prince Rupert in any crop year since the GMP was initiated.[83] And while CWB grains normally account for almost all of the port's handlings, there was also a sizable gain in the amount of canola shipped to it during the period, which reached almost 0.3 million tonnes.

Much of the growth experienced by Prince Rupert can be traced to recent CN rate reductions. In the first year of the GMP, the rate for single car movements to Prince Rupert generally exceeded those for Vancouver by a factor of 13%. This gap was gradually reduced over the next several years, falling first to 7% in the 2000-01 crop year before reaching parity towards the end of the 2004-05 crop year. Although these reductions appeared to have prompted a modest increase in the volume of grain moving to Prince Rupert, it was not until this differential had been entirely eliminated that the impact became appreciable.

Between the 1999-2000 and 2004-05 crop years, Prince Rupert's share of the total grain volume seldom exceeded 14%.[84] By the 2005-06 crop year – the first in which the rate differential between Vancouver and Prince Rupert had been eliminated – Prince Rupert's share increased to a noticeably greater 16.6%. By the end of the 2006-07 crop year this share had climbed to 20.3%. Supported in large part by the allocation of more hopper cars to movements in the Prince Rupert corridor, these actions promoted CN's broader strategic aim of increasing the amount of traffic handled over its less utilized route through northern British Columbia.[85]

The economic sway of these changes was reflected in the CWB's own programming decisions, which directed a noticeably larger share of its total movement in the 2006-07 crop year, 30.6%, to the port of Prince Rupert.[86] Even so, the major grain companies proved themselves less prone to making such a shift. To a large extent, this stemmed directly from the fact that, although the major grain companies had an ownership interest in Prince Rupert Grain Ltd., there was a monetary benefit for them in moving grain through their standalone terminals in Vancouver. This preference, which has increasingly manifested itself in the form of better bids on

[83] The previous record for Prince Rupert was set in the 2005-06 crop year when 4.2 million tonnes of grain were moved.

[84] An exception was noted in the 2002-03 crop year when a labour disruption at the port of Vancouver resulted in 16.7% of the overall grain volume being directed to Prince Rupert.

[85] Much of this renewed emphasis dates from CN's purchase of BC Rail, which was completed in July 2004. In addition to integrating the operations of this carrier, CN moved to promote the Port of Prince Rupert as a major gateway for the movement of bulk export products as well as containers. In 2005 CN announced that, in conjunction with Maher Terminals of Canada Corporation and the Prince Rupert Port Authority, it would be investing in the multi-phased development of a major new container terminal at the port. The new facility, which was to have an initial twenty-foot equivalent container capacity of 500,000, opened in the fall of 2007.

[86] The CWB's direction of 30.6% of its total grain shipments to Prince Rupert represented a marked increase over the 19.8% share accorded to it just two years earlier. Much of this gain came directly from a reduction in the tonnage the CWB directed to Vancouver, whose relative share decreased to 36.2% from 47.4% in the same period.

tendered movements to Vancouver, accounts – to some degree – for the major grain companies' declining share on movements handled into Prince Rupert.

2.34 USFDA Grants Canola Health Claim Labelling

The Canadian canola industry was bolstered by an announcement from the US Food and Drug Administration on 6 October 2006 stating that products made from canola oil could carry labels that included a qualified claim of health benefits. Owing to its unsaturated fat content, canola oil's claim to reduce the risk of cardiovascular disease can now be used in the promotion of consumer products in the US marketplace.

With the increased desire on the part of many North Americans – and in some jurisdictions, the legally mandated obligation – to see trans-fats reduced or eliminated from their diets, this health claim is expected to contribute significantly to the use of canola as the preferred alternative to other mass-market oils. In addition, this ever-increasing demand has been supplemented by the growing use of canola as a feedstock in the production of biodiesel. These forces have helped increase domestic canola production to levels beyond the industry's own expectations, with an average of over nine million tonnes having been harvested in the last two years.

With the demand for both export and domestic crushing continuing to grow, commercial optimism has led to increased industry investment in infrastructure. Some of the more recent indications of this came in September 2006 when both James Richardson International and Louis Dreyfus Canada announced that they intended to build new canola-crushing plants in Yorkton, Saskatchewan. When completed, these facilities are expected to add another 50%, or 1.7 million tonnes, of crushing capacity to that currently in place. When combined with previously stated plans for the expansion of other crushing facilities, along with the expectation of more such investments, these announcements highlight the increasing prominence that is being given to canola's place in western Canadian agriculture.

2.35 Review of CGC and Canada Grain Act

On 18 September 2006, the federal government tabled a report completed by Compas Inc., a Toronto-based research firm, which had been selected to lead an independent statutory review of the Canadian Grain Commission (CGC) and the *Canada Grain Act*. Initiated in February 2006, this review built on the company's consultations with hundreds of stakeholders over the following six months.

In its review, Compas advanced nearly 100 recommendations that included changes to: the CGC's mandate and governance structure; licensing and security provisions; funding for infrastructure and research (including the Grain Research Laboratory); quality and quality assurance; weighing and inspections services; liability; and dispute resolution. Some, such as the recommendation proposing that inward weighing and inspection services at terminal elevators be made optional, imply a significant degree of change in the way the GHTS works today. In this instance, even though the CGC might no longer perform such services in parallel with the grain company operating the elevator, it would still be obligated to ensure that producer car shippers – or any other small shipper – desiring an independent third-party verification of unload weights and grades could still access such services.

Of particular importance, however, were the implications arising from the report's recommendation regarding quality assurance, and the possible changing of a grading system that has long been based solely on Kernel Visual Distinguishability (KVD). While avoiding the complexities inherent in moving away from the existing system, it was recommended that the CGC somehow "balance the interest of those who would priorize [sic] protection of export brands with the interests of those who favour new varieties for feed and feedstock." In addition, it was recommended that the CGC initiate annual consultations with stakeholders to assess the effectiveness of whatever grading and quality-assurance procedures are adopted.

The Compas report was referred to the House of Commons Standing Committee on Agriculture and Agri-Food for further consideration. The committee's report to the House of Commons, tabled on 5 December 2006, contained 12 recommendations. In addition to proposing that the CGC's governance structure be altered, they recommended that farmers maintain their access to producer-car loading, and that inward inspection services be made optional. The committee also suggested that KVD be abandoned, and replaced with a system of

farmer declarations supported by science-based mechanisms of quality control. To ensure compliance, it was proposed that a series of monetary penalties accompany these declarations.

The government tabled its response to the Standing Committee's recommendations on 16 April 2007. While indicating that most recommendations remained under review, the government nevertheless targeted 2010 for the elimination of KVD as the basis for quality assurance in all classes of western wheat. In order to facilitate a measured transition, the government requested that the CGC report by 31 December 2009 on the experience gained from doing away with KVD when grading minor western wheat classes.[87] The CGC was also requested to furnish an update on any related technological developments, as well as the evolution of the verification and declaration systems.

2.36 Saskatchewan Wheat Pool Launches Bid for Agricore United

Early in November 2006, Saskatchewan Wheat Pool Inc. (SWP) announced that it was launching a bid to acquire Agricore United (AU). Although many observers had argued that more consolidation within the industry was to be expected, few anticipated that it would involve the country's two largest grain companies, let alone that the smaller of the two would attempt an outright purchase of its larger rival.

As advanced, the SWP offer largely entailed a stock swap, with each limited voting common share in AU to be exchanged for 1.35 common shares of SWP; each $1,000 in convertible debentures to be traded for 180 common shares of SWP; and each convertible preferred share to be acquired for $24.00 in cash. Worth an estimated $1.0 billion, the SWP offer provided a premium of about 13% over the prevailing value of AU shares, but was contingent upon at least 75% of AU's common shares being tendered by 24 January 2007 as well as the receipt of regulatory approval from the Canadian Competition Bureau.

The SWP proposal envisioned the country's two leading agricultural companies combining to form an entity with a 50% market share and annual revenues in the area of $4.3 billion. Moreover, it was believed that the new entity could better position itself to compete with the multinational grain companies that already dominated the international movement of grain. To this end, SWP suggested that it would finally be able to address what it maintained was a chronic problem of over-capacity, bring new efficiencies to western Canadian agriculture, and realize some $60 million in annual cost savings.

Although many financial analysts appeared to react positively to the prospect of a stronger company with greater earnings potential, a number of other stakeholders questioned what seemed to be a significant reduction in competition. Regardless, after striking a special committee to evaluate the SWP offer, AU's Board of Directors unanimously recommended in December 2006 that its shareholders reject what it deemed to be a hostile takeover bid. To a large extent, this was founded on the view that the SWP offer was financially inadequate, and subject to potentially significant commercial and regulatory risks. This view was echoed by Archer Daniels Midland Co. (ADM), which held a 28% interest in AU, and which indicated that it could not support the deal as then structured.[88] More importantly, the AU board signalled that ADM was supporting its efforts to solicit a better offer for the company's shareholders, whether be it from SWP or another potential bidder.

In light of this, as well as the Canadian Competition Bureau's continuing investigation into the consequences of the proposed merger, SWP extended the deadline on its offer to 7 March 2007. At the same time, SWP also enhanced its original offer to include a cash component.[89] Under the terms of the revised offer, AU's common shareholders could now elect to receive either $11.33 in cash, 1.3601 SWP shares for every AU share they

[87] As part of its ongoing Wheat Quality Assurance Strategy, the CGC will eliminate KVD as a segregation tool for minor classes of western wheat (all but those graded as CWRS and CWAD) by 1 August 2008. These classes typically represent about 15% of the total wheat production.

[88] With the SWP offer having been conditional on 75% of AU's common shares being surrendered, ADM's decision not to tender its 28% interest in the company effectively blocked the SWP's takeover bid.

[89] The stock exchange offer originally put forward by SWP excluded any cash payout to holders of AU common shares and convertible debentures. This was cited by the AU's Board of Directors as one of the offer's major failings, and one that contributed to the significant undervaluing of the company's securities.

held, or any combination thereof.[90] This financial enhancement was underwritten by two subscription rights offerings totalling $225 million.

Despite the apparent acrimony exhibited between the parties, as well as the AU board's recommendation in early February 2007 that the revised offer also be rejected, SWP appeared far from discouraged in its efforts to acquire the company.[91] Moreover, SWP claimed that its plan was progressing largely as expected, and that it had even been encouraged by AU's apparent willingness to consider other offers. But in a move that took the industry by surprise, the AU board announced on 21 February 2007 that it had agreed to combine with James Richardson International Limited (JRI) after receiving what it considered to be a better offer from JRI's parent, James Richardson & Sons Limited, and the Ontario Teachers' Pension Plan.[92]

This endorsement seemed to have sounded the death knell for SWP's plan. To be sure, beyond extending the deadline on its revised offer to 11 April 2007, the SWP's reaction to these developments proved rather muted. Then, on 28 March 2007, SWP revealed that if it was successful in its bid to acquire AU, the company would transfer a number of its elevator assets to Cargill Limited under the terms of a consent agreement reached with the Canadian Competition Bureau.[93] The next day, SWP announced that it was materially increasing its offer for AU in light of the joint JRI deal struck five weeks earlier. Under the new offer, each AU shareholder was to receive $8.00 in cash and 0.95 SWP shares for each limited voting common share held. On a comparative basis, this elevated the per-share value of the SWP offer to a level more than $4.00 higher than that put forward in the JRI deal, an estimated $17.86 versus $13.79 respectively.[94]

In short order, the AU board came forward to say that it was evaluating the proposal and that it would engage SWP in discussions on the matter. This was followed on 13 April 2007 by statements from both parties indicating that in light of SWP's willingness to increase its effective offer to $20.00 per share, the AU board now considered its bid to be superior to the one put forward by JRI. But before it could enter into an acquisition agreement with SWP, AU was obligated to first notify JRI and to provide that company with the opportunity of either matching or bettering the SWP offer.[95] This it did, and on 19 April 2007 AU and JRI announced a renewed plan for the merger of their two companies.

SWP again extended the deadline on its latest offer, this time to 15 May 2007. However, the company chose not to advance a revised offer to AU directly. Instead, SWP first contacted JRI with a proposal calling for the sale of certain AU assets to JRI in exchange for JRI's support of a final SWP bid.[96] Having secured JRI's agreement to stand aside, SWP then tabled what it claimed was its final bid to the AU board: an all-cash buyout of $20.50 per limited voting common share. As a result, on 9 May 2007, the acquisition agreement existing

[90] On 10 January 2007, AU redeemed all of its outstanding convertible debentures for limited voting common shares in the company. As a result, the portion of the SWP offer stipulating that each $1,000 in outstanding AU convertible debentures would be exchanged for 180 common shares of SWP stock was not extended.

[91] The AU board maintained that the revised SWP offer did not provide any meaningful increase in value to the company's shareholders and, as such, did not address the fundamental reasons put forward by the board when it recommended that SWP's original offer be rejected.

[92] Under the proposal advanced, AU shareholders would receive $6.50 in cash and 0.509 shares of the combined company for each limited voting common share held. Holders of the company's convertible preferred shares would receive $24.00 in cash. On completion of the transaction, James Richardson & Sons Limited and the Ontario Teachers' Pension Plan would own the majority of the new entity's outstanding stock (with interests of 50.5% and 20.0% respectively) while AU's existing shareholders would hold the remaining 29.5%.

[93] The consent agreement stipulated that, in the event of a successful bid for AU, SWP was to sell a total of nine country elevators, as well as its Vancouver terminal elevator, to Cargill Limited. In return, Cargill would surrender to SWP its 50% interest in Vancouver's Cascadia Terminal (where AU also had a 50% interest) along with a $70 million equalization payment.

[94] The increased monetary value of the SWP offer was supported by another subscription rights offering worth $275 million.

[95] Under the acquisition agreement already in place with JRI, AU had to provide it with a five-business-day period in which it could either match or better the offer received from SWP. In the event that JRI chose not to do so, AU would be obligated to pay JRI a termination fee of $24 million.

[96] SWP entered into a definitive agreement for the transfer of 15 grain elevators owned by AU as well as nine of its standalone crop input centres. In consideration of these assets, JRI agreed to pay SWP $255 million in cash, plus amounts related to inventory and other closing adjustments estimated at $60 million. This agreement was in addition to that already with Cargill Limited.

between AU and JRI was terminated, and the AU board recommended that its shareholders accept the SWP offer.

In the weeks that followed, SWP revealed that over 80% of AU's common shareholders had ultimately tendered their shares under the company's purchase offer. The acquisition was formalized in mid June, at which time AU became a wholly-owned subsidiary of SWP. In rapid succession, the company concluded the formal transfer of the various AU assets it had committed to sell to Cargill and JRI, as well as the Vancouver terminal elevator that the Competition Bureau had ordered AU to divest itself of six years earlier.[97] More importantly, SWP appeared eager to realize the financial synergies inherent in the integration of what had been two decidedly different organizations. As the 2006-07 crop year came to a close, the company that would soon emerge as Viterra seemed poised to exercise its unchallenged role as the largest grain handler in western Canada.[98] Viterra's market share was expected to exceed 40% as a result of the merger.

2.37 Extreme Weather Impacts Rail Service

With the beginning of the second quarter, British Columbia found itself being frequently hit with strong winds, drenching rains and heavy snows. In early November 2006, a huge storm dubbed the Pineapple Express carried the remnants of Typhoon Cimaron, the strongest to have hit the Philippines in eight years, to the west coast. What proved especially unusual was the intensity of the rainfall – at times amounting to between 10 and 15 mm each hour for 15 consecutive hours – which set the stage for serious flooding problems.

The storm dumped its heaviest load on Chilliwack, which swelled the Chilliwack River with roughly 20 times its normal flow. The water level on every river in the Lower Mainland, the south coast, and the southern half of Vancouver Island, rose to heights expected only once in every 50 years. The rain triggered widespread mudslides, washouts and floods that closed highways and resulted in the evacuation of hundreds of residents from their homes.

This was followed by other storms that continued to batter the coast with even more rain and strong winds. Finally, a series of month-end snowstorms blanketed the Lower Mainland with record snowfalls and unusually low temperatures. With 350.8 mm of rain and snowmelt in the Vancouver area, it proved to have been the wettest November on record. Under such extreme conditions, some disruption to railway service was to be expected. Mudslides occasioned by these heavy rains resulted in the closure of CN's mainline through the Fraser Canyon, which temporarily impeded train operations between Edmonton and Vancouver. However, it wasn't until mid December, when the Lower Mainland was again sent reeling by the back-to-back arrival of three powerful storms – each packing winds with gusts well in excess of 100 km/h – that the GHTS showed signs of being affected.

The strength of the winds tied to these storms brought down thousands of trees, produced over $100 million in property damage, interrupted basic residential services and almost crippled British Columbia's already fragile power grid.[99] The destructive power of the last of these storms was compared to that of Typhoon Freda, whose remnants struck the west coast hard in 1962. Emergency personnel described the storm as the most destructive in the province's history. At its peak, a record 250,000 people were without electricity, with several thousand having to wait days before power and telephone services could be restored.

This type of extreme weather continued to be experienced well into January before subsiding. Even so, the first three months of 2007 proved to be wetter than normal, with the month of March having brought 214.8 mm

[97] The Vancouver terminal elevator specifically referred to here was the former United Grain Growers Limited facility, whose sale was set as a condition by the Competition Bureau in its approval of the merger between Agricore Cooperative Ltd. and United Grain Growers Limited in 2001. The sale of this facility to Alliance Grain Terminal Ltd., a consortium representing several smaller grain companies, was concluded on 29 June 2007.

[98] Viterra was unveiled as the company's new business name on 30 August 2007.

[99] The storm of 15 December 2006 produced the biggest punch, easily surpassing the two that preceded it in intensity. Speed records were shattered by winds that toppled trees that had been standing for almost two centuries, including thousands in Vancouver's renowned Stanley Park. BC Hydro, whose employees had been struggling almost nonstop for a month to keep the strained electrical grid from total collapse, called for the assistance of out-of-province hydro crews as reinforcements.

of rain to Vancouver.[100] These conditions were mirrored in the Rockies, which combined with a heavy build-up in the snowpack, led to more avalanches for the railways to contend with. Not surprisingly, the railways' average car cycle in the Vancouver corridor moved steadily higher during this period: from an average of 16.6 days in the first quarter, to 19.0 days in the second, and finally to 20.1 days in the third. At the same time, grain companies reported a sharp downturn in the number of railcars that were being made available to them for loading in the country.

The impact on the GHTS could also be observed from the elongation of the average times spent by vessels in port, since these adverse weather conditions frequently prevented ships from loading. For the port of Vancouver, these stays climbed from averages of 7.0 days and 7.1 days in November and December respectively, to 10.7 days in January and 13.8 days in February. Similarly, the longest time spent by any one vessel in port jumped from 18 days in December to 34 days in January. In light of this, the demurrage cost for ships waiting to load in the harbour reportedly climbed to as much as $175,000 per day.

2.38 Labour Disruptions Undermine Rail Service

By February the GHTS found itself having to contend with a labour disruption at CN, where members of the United Transportation Union (UTU) – which represented about 2,800 conductors and yard-service employees throughout Canada – walked out on strike on 10 February 2007 following the failure of contract negotiations a day earlier.[101] Claiming that the UTU's wage demands were excessive, CN immediately pressed its management personnel into train and yard service in an effort to keep its trains moving. At the same time, the carrier also moved to have the strike declared illegal by the Canada Industrial Relations Board.[102] The UTU refused CN's request for a two-month cooling-off period, which also called for an immediate return to work by striking employees and the resumption of collective bargaining. As the situation dragged on, shippers from across the country grew more concerned. By the tenth day of the strike, they were demanding that the federal government take decisive action to resolve what they had come to regard as an increasingly serious economic problem. By way of example, the Vancouver Port Authority estimated that $730 million in cargo was being held up as a result of deteriorating CN service.

It was at this point that the Minister of Labour appointed a mediator to help the parties settle their differences and end the strike. But this effort ultimately failed, and on 23 February 2007 the Minister tabled the back-to-work legislation needed to terminate the UTU's action against CN. However, consideration of Bill C-46 was suspended after the two sides reached a tentative settlement the following day. In light of this agreement, and a pending ratification vote slated for 9 April 2007, the UTU directed its members to bring down all picket lines and return to work as soon as possible.[103] Had this agreement been ratified by the UTU's members there would have been no further disruption to CN service.

However, on 10 April 2007, the UTU notified the railway that its membership had rejected the tentative settlement reached six weeks earlier. As a result, the UTU advised CN that rotating strike action would resume the next day. Wherever picket lines formed, CN responded by locking out its striking employees, and having management personnel again assume their duties. Although further attempts to broker a national agreement followed, they ultimately failed.

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[100] Monthly averages from 1971 to 2000 show that 114.3 mm of precipitation is normally received by Vancouver in March. The rainfall experienced in March 2007 proved to be almost double the norm.

[101] Excluded from strike action were UTU members employed on CN's Northern Quebec Internal Short Line, the Algoma Central Railway in northern Ontario, and the Mackenzie Northern Railway in northern Alberta. CN and the UTU also agreed to the maintenance of normal commuter rail operations on CN lines in the Toronto and Montreal areas for the duration of its strike action.

[102] CN argued that the strike notice given on 6 February 2007 was deficient and that, in any event, the general chairmen issuing the notice had not been properly authorized to do so by the UTU. On 19 February 2007 the Canada Industrial Relations Board dismissed CN's application to have the strike declared illegal, ruling that the UTU's strike notice met the basic requirements of the Canada Labour Code, and that the technical nature of the omissions identified did not render the notice invalid. The board also declined to consider the matter of whether the proper bargaining agent had issued the notice, stating that the matter was internal to the workings of the UTU itself.

[103] The ratification vote was initially scheduled to take place on or before 26 March 2007 but was delayed by two weeks in order to accommodate the mailing of ballots to UTU members who had apparently been omitted from the original mailing list.

In light of these developments, and renewed calls for a legislated settlement, the federal government moved to progress its previously suspended back-to-work legislation, Bill C-46, through Parliament. The *Railway Continuation Act*, which provided for an immediate end to the UTU strike and CN's lockout of its employees, came into effect on 19 April 2007. This was followed a few days later by the federal labour minister's appointment of an arbitrator in the dispute.[104] In the end, the arbitrator found in favour of the employer rather than the employees, selecting CN's final contract offer as the basis for a new labour agreement that would run through July 2010.

Despite the significance of the strike at CN, it was not the only carrier to experience labour problems. On 15 May 2007, some 1,200 CP maintenance-of-way employees walked out on strike in a dispute largely centred on wages.[105] Unlike the labour strife that beset CN, however, the impact of this action on the GHTS was less significant in as much as the company's train movements were not directly affected by the absence of these employees. Although picketing employees caused some initial delays at the company's major intermodal terminals, court-ordered restrictions served to later minimize these. Moreover, CP had taken the precaution of training some 1,300 other employees to fill in for the strikers on an interim basis, dedicating them primarily to the maintenance of the company's mainline track. Federal mediation efforts in early June were largely responsible for the tentative contract agreement that was reached between the two parties on 6 June 2007.

2.39 Bio-fuels and the GHTS

Over the last three years bio-fuels have dominated industry discussions and, as reported in last year's annual report, several initiatives had been undertaken in response to government policies and market demands. In the year since, there are no indications that changes to projects planned will be seen, At the same time, there have been no major announcements for new initiatives in Western Canada. There are many reasons for this, but primarily the economics of feedstock would lead the list.

Many of the Western Canadian initiatives for ethanol production viewed corn and feed wheat as the logical feedstock. Since then CWB final price for feed wheat climbed to $176 per tonne and as the new crop year started $300 per tonne was not out of the question. Corn too saw increases that doubled its value on local markets and as such, many began to question the economics of ethanol with feedstock prices moving to such high levels.

The other market for many of these grains, corn in particular, is the livestock feed markets. As prices climbed the cattle and hog industries began to see eroding profits as they competed for the same products as the ethanol and export markets.

The future for bio-fuels remains in question at this time. There have been ethanol and bio-diesel projects and initiatives in the US and Europe placed on hold. There can be no doubt that despite government incentives throughout the Western world, feedstock prices will remain one of the greatest determining factors in the success of present day bio-fuel markets.

2.4 Summary Observations

The 2006-07 crop year denoted the seventh year for the Canadian Wheat Board's (CWB) tendering program. More significantly, it was the fourth year in which the CWB targeted to move a fixed 40% of its overall grain movements to the four ports in western Canada using a combination of tendering and advance car awards. Under the terms of this arrangement, about half of this volume – representing a maximum of 20% of its overall grain movements – was to be tendered.

[104] Andrew Sims, an Edmonton-based lawyer, was appointed by the labour minister to arbitrate in the dispute between the UTU and CN. The Railway Continuation Act set a 90 day timetable for the arbitrator to select between the best "final offers" put forward by both parties, with that selection forming the collective agreement that would exist between them. The appointment of an arbitrator, however, did not prevent the parties from returning to the bargaining table and reaching an agreement before a decision was rendered.

[105] The striking employees were represented by the Teamsters Canada Rail Conference, Maintenance of Way Employees Division (TCRC MWED). The TCRC MWED represented approximately 3,200 employees who build, inspect and maintain the track, bridges and structures used by the Canadian Pacific Railway. The union had been negotiating with the railway for several months to replace the collective agreement that had expired on 31 December 2006.

The CWB issued a total of 260 tenders calling for the shipment of approximately 3.8 million tonnes of grain, 29.3% less than was sought a year earlier. As in past years, the vast majority of the grain put out to tender, 73.8%, called for the movement of wheat. For the 2006-07 crop year this entailed a potential movement of 2.8 million tonnes, an amount 17.9% less than the previous crop year's 3.4 million tonnes. Durum reasserted its traditional position as the second largest commodity for which tenders were issued. These amounted to 0.5 million tonnes, and constituted 14.4% of the overall total as compared to 12.7% the year before. Barley calls, which fell to an 11.8% share from a 23.8% share a year earlier, accounted for the remaining 0.4 million tonnes.

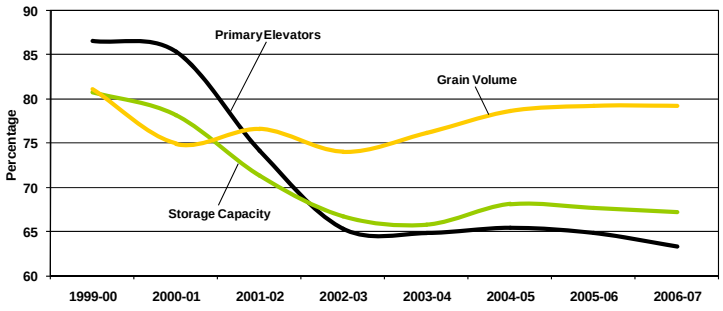
There was also a noticeable shift in the comparative amounts these tenders sought to direct to the four ports in western Canada. Of the total volume called, 81.8% was intended for export through the west coast ports of Vancouver and Prince Rupert. Although this was marginally below the previous crop year's record-setting 84.6% share, there was a further shift in the allocation between these two ports. Prince Rupert's share climbed to a record 41.5% from 26.3% a year earlier, while Vancouver's declined to 40.3% from 58.3%. The share accorded to the port of Thunder Bay also increased, albeit less sharply, to 18.2% from 15.4% a year earlier. For the second consecutive year, no calls were issued in favour of Churchill.

The CWB's tender calls were met by 862 bids offering to move 6.8 million tonnes of grain, about three-quarters more than the amount sought. The majority of these bids, 82.6%, responded to calls for the movement of wheat. Another 14.2% responded to those issued for durum, while the remaining 3.2% answered those for barley. With the exception of barley, the bidding proved more substantive than in the 2005-06 crop year, with a noticeable preference for both wheat and durum.

A total of 323 contracts were subsequently signed for the movement of almost 2.7 million tonnes of grain, 70.4% of the amount called. This represented 17.8% of the tonnage shipped by the CWB to western Canadian ports during the 2006-07 crop year, which fell somewhat short of its 20% target. Of the 2.7 million tonnes moved, 46.4% was shipped to Vancouver, 33.1% to Prince Rupert, and 20.5% to Thunder Bay. Owing to the increased volume directed to Prince Rupert these rankings differ significantly from those observed in the 2004-05 crop year. In addition to showing a diminished role for Vancouver and Churchill in the movement of tendered grain, these results mark the second instance where Thunder Bay failed to place at least second in terms of the largest export gateways for tendered grain in the program's history.

Improved market conditions in the 2006-07 crop year brought about a restoration of the bidding patterns that had been observed in the first three years of the CWB's tendering program. Premiums were effectively eliminated, and the maximum discounts bid moved noticeably higher against those put forth a year earlier. In the second quarter these bids surpassed the four-year-old benchmark of $23.04 per tonne to set a new record of $24.51 per tonne. This was largely supported by like bids in the third quarter before falling back to a maximum of $16.73 per tonne at year's end.

Figure 44: Relative Shares of the Four Largest Grain Companies



With an increase in the discounts offered by the grain companies in their tender bids, as well as the elimination of premiums paid on select tendered movements, the transportation savings accruing to the CWB – and ultimately passed back to producers through its pool accounts – climbed substantially in the 2006-07 crop year. The CWB estimates the net savings generated from these activities to have increased by 53.7%, to $35.2 million from $22.9 million a year earlier.

A total of 2.4 million tonnes of grain moved under the CWB's advance car awards program during the 2006-07 crop year. This represented 15.8% of the CWB's total shipments to western Canadian ports, which constituted

a gain of 0.2 percentage points from the 15.6% share garnered a year earlier. In conjunction with the volume that moved under its tendering program, a combined 33.6% of the CWB's total shipments moved under these two programs. This fell somewhat short of the 40% that had been targeted, and marginally above the 31.8% achieved in the 2005-06 crop year.

In a number of respects, the grain shipped under the advance car awards program largely paralleled the movement under the tendering program. These similarities effectively underscore the fact that grain moving under the advance car awards program did so largely in tandem with that shipped under the tendering program. This strongly hints at a structural dynamic that links the two programs, and suggests that grain companies have been exploiting the flexibility that the advance car awards program was intended to bring to their planning activities.

Despite the concern raised by a number of stakeholders respecting the potential ability of major grain companies to displace their smaller competitors in the marketplace, the overall market share secured by the larger grain companies has not changed significantly in the last eight crop years, falling to 79.2% from 81.1%. Moreover, they still dominate the primary elevator network. As of 31 July 2007, the major grain companies still held sway over 63.3% of the elevators, and 67.2% of the storage capacity, although these constituted significant reductions from the 86.5% and 80.7% shares respectively held at the end of the GMP's first year.

These shifts are at odds with the expectations of those who, at the outset of the GMP, voiced the concern that industry rationalization would significantly reduce competition. To some extent, these shifts indicate that the level of competition in the GHTS has actually been heightened. The emergence of various independent elevator operations has undoubtedly helped to build the market position of the non-major grain companies. In addition, the establishment of licence-exempt producer-car loading facilities, and the relative gain in producer-car movements, has also been a contributory factor. But it remains to be seen whether the same resilience will be observed in the face of some of the changes being advanced in the 2006-07 crop year.

Among those that were expected to have some impact on the commercial workings of the GHTS were:

- The federal government decided to provide western Canadian farmers with greater choice in the marketing of their own grain. As an initial measure, the government moved to first extend that choice to the marketing of barley.

- Concerned over a perceived decline in the consistency and reliability of railway service, shippers at large pressed the federal government for changes to the Canada Transportation Act, which were tabled in the House of Commons as Bill C-58.

- Supported in large measure by reduced CN freight rates and a better car allocation, Prince Rupert experienced a significant growth in traffic, much of it coming at the expense of grain traditionally routed through Vancouver.

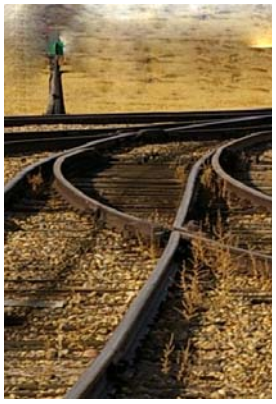
- The federal government tabled a statutory review of the Canadian Grain Commission and the Canada Grain Act. Many of the recommendations stemming from this review have the potential to significantly alter the way the GHTS works today.

- Saskatchewan Wheat Pool acquired its larger rival, Agricore United, creating a commercial entity that, in terms of size, rivals the combined market power of the next two.

Section 3: 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. The preceding section – 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 – 2006-07 Crop Year

Trucking

- *The Composite Freight Rate Index for short-haul trucking climbed by 1.9%.*
  - *Driven by continuing escalation in fuel and labour costs.*
  - *Composite Freight Rate Index climbed to 123.2 by year-end.*

Country Elevators

- *Throughput for 2006-07 crop year increased by 4.2% to a record 33.5 million tonnes.*
- *The average elevator capacity-turnover ratio increased 4.8% to a record 6.5 turns.*
  - *Performance was bolstered by a 1.3-million-tonne reduction in elevator storage capacity over the past eight crop years.*
- *Average weekly stock levels increased 6.2% to 2.8 million tonnes.*
  - *Inventory increases largely tied to heightened throughput.*
  - *Long-term reduction reflects sensitivity to declining storage capacity.*
- *Average number of days-in-store increased by 2.0% to 30.7 days.*
  - *Third lowest average since the beginning of the GMP.*
- *Average weekly stock-to-shipment ratio increased by 4.7% to 4.5.*
  - *Reflected changes in average stock levels.*
  - *Third lowest average since the beginning of the GMP.*
- *Posted tariff rates for elevator handling activities all increased:*
  - *Receiving, elevation and loading – increased by 2.2%.*
  - *Cleaning – increased by 3.2%.*
  - *Storage – increased by 2.0%.*

Rail Operations

- *Average car cycle fell by 2.8% to 16.8 days.*
  - *Empty transit fell by 1.3% to 8.7 days; loaded transit fell 4.4% to 8.2 days.*
  - *Continued narrowing in CN and CP car cycles.*
- *Proportion of grain moving under incentive programs decreased marginally to 75.2%.*
  - *Proportion in blocks of 50 or more railcars increased to 75.2%.*
  - *Reflected elimination of last discounts on smaller car blocks.*
  - *Railway incentive payments estimated at $96.5 million – up 7.3%.*
    - *Driven largely by increased use of larger car blocks.*
    - *Average discount increased 12.3% to $5.41 per tonne.*
- *Posted freight move sharply higher.*
  - *CP raises rates to Vancouver by about 8.7%; Thunder Bay by about 10.8%.*
  - *CN restructures tariffs and raises rates by about 7.0%.*
    - *Rates on non-CWB commodities converted to per-car charges.*
    - *Creates preferential pricing on grain shipped to Prince Rupert.*
- *Canadian Transportation Agency established Revenue Cap of $852.4 million.*
  - *Total grain revenues $854.0 million; $1.7 million more than allowed.*
    - *CN falls $2.1 million below its cap.*
    - *CP exceeds its cap by $3.8 million.*
  - *Average revenue increased 6.9% to $29.90 per tonne.*

Terminal Elevators and Port Performance

- *Terminal throughput decreased by 3.8% to 22.8 million tonnes.*
- *The average elevator capacity-turnover ratio decreased by 4.6% to 8.3 turns.*
- *Average weekly stock level increased 8.1% to 1.4 million tonnes.*
- *Average time in port increased 10.4% to 5.3 days.*
  - *Reflected impact of adverse winter weather on the west coast.*
    - *Third quarter average rose to record high of 9.0 days.*
    - *Thunder Bay posts record-low average of 1.8 days.*
- *Posted tariff rates for terminal elevator handling activities increased.*
  - *Receiving, elevation and loading – increased by 2.7%.*
  - *Storage charges – increased by 4.2%.*

Indicator Series 3 – System Efficiency

Table	Indicator Description	Notes	BASE 1999-00	CURRENT REPORTING PERIOD (1) 2005-06	2006-07	% VAR	
	Trucking [Subseries 3A]						
3A-1	Composite Freight Rate Index – Short-haul Trucking		100.0	120.9	123.2	1.9%	▲
	Primary Country Elevators [Subseries 3B]						
3B-1	Grain Volume Throughput (000 tonnes)		32,493.9	32,105.2	33,452.6	4.2%	▲
3B-2	Average Elevator Capacity Turnover Ratio		4.8	6.2	6.5	4.8%	▲
3B-3	Average Weekly Elevator Stock Level (000 tonnes)		3,699.3	2,651.2	2,814.7	6.2%	▲
3B-4	Average Days-in-Store (days)		41.7	30.1	30.7	2.0%	▲
3B-5	Average Weekly Stock-to-Shipment Ratio – Grain		6.2	4.3	4.5	4.7%	▲
3B-6	Average Handling Charges – Country Delivery Points	(2)					
	Rail Operations [Subseries 3C]						
3C-1	Hopper Car Grain Volumes (000 tonnes) – Province						
3C-2	Hopper Car Grain Volumes (000 tonnes) – Primary Commodities		25,662.3	24,720.8	23,736.9	-4.0%	▼
3C-3	Hopper Car Grain Volumes (000 tonnes) – Detailed Breakdown						
3C-4	Railway Car Cycle (days) – Empty Transit Time		10.7	8.8	8.7	-1.3%	▼
3C-4	Railway Car Cycle (days) – Loaded Transit Time		9.2	8.6	8.2	-4.4%	▼
3C-4	Railway Car Cycle (days) – Total Transit Time		19.9	17.3	16.8	-2.8%	▼
3C-5	Railway Car Cycle (days) – Non-Special Crops		19.3	17.2	16.6	-3.1	▼
3C-6	Railway Car Cycle (days) – Special Crops		25.8	19.5	20.0	2.7	▲
3C-7	Railway Car Connections (days)						
3C-8	Hopper Car Grain Volumes (000 tonnes) – Non-Incentive		12,715.9	6,037.9	5,888.5	-2.5%	▼
3C-8	Hopper Car Grain Volumes (000 tonnes) – Incentive		12,945.5	18,682.9	17,848.4	-4.5%	▼
3C-9	Hopper Car Grain Volumes ($millions) – Incentive Discount Value		$31.1	$89.9	$96.5	7.3%	▲
3C-10	Traffic Density (tonnes per route-mile) – Grain-Dependent Network		442.5	439.0	418.0	-4.8%	▼
3C-10	Traffic Density (tonnes per route-mile) – Non-Grain-Dependent Network		292.4	297.8	291.5	-2.1%	▼
3C-10	Railway Traffic Density (tonnes per route-mile) – Total Network		330.3	330.5	320.1	-3.1%	▼
3C-11	Composite Freight Rates – Rail	(2)					
3C-12	Multiple-Car Shipment Incentives – Rail	(2)					
3C-13	Effective Freight Rates – CTA Statutory Revenue ($ per tonne)		n/a	$27.97	$29.90	6.9%	▲
	Terminal Elevator and Port Performance [Subseries 3D]						
3D-1	Annual Port Throughput (000 tonnes) – Grain		23,555.5	23,722.7	22,823.9	-3.8%	▼
3D-2	Average Terminal Elevator Capacity Turnover Ratio		9.1	8.7	8.3	-4.6%	▼
3D-3	Average Weekly Terminal Elevator Stock Level (000 tonnes)		1,216.2	1,281.8	1,385.3	8.1%	▲
3D-4	Average Days-in-Store – Operating Season (days)		18.6	17.9	19.2	7.3%	▲
3D-5	Average Weekly Stock-to-Shipment Ratio – Grain	(2)					
3D-6	Average Weekly Stock-to-Shipment Ratio – Grade	(2)					
3D-7	Average Vessel Time in Port (days)		4.3	4.8	5.3	10.4%	▲
3D-8	Distribution of Vessel Time in Port	(2)					
3D-9	Distribution of Berths per Vessel	(2)					
3D-10	Annual Demurrage Costs ($millions)		$7.6	$6.7	$15.1	125.1%	▲
3D-10	Annual Dispatch Earnings ($millions)		$14.5	$15.2	$24.6	62.0%	▲
3D-11	Average Handling Charges – Terminal Elevators	(2)					

(1) – In order to provide for more direct comparisons, the values for the 1999-2000 through 2006-07 crop years are "as at" or cumulative to 31 July unless otherwise indicated.
(2) – Changes in the data cited cannot be depicted within the summary framework presented here. The reader is encouraged to consult the detailed data tables found in Appendix 4 as required.

3.1 Trucking *[Measurement Subseries 3A]*

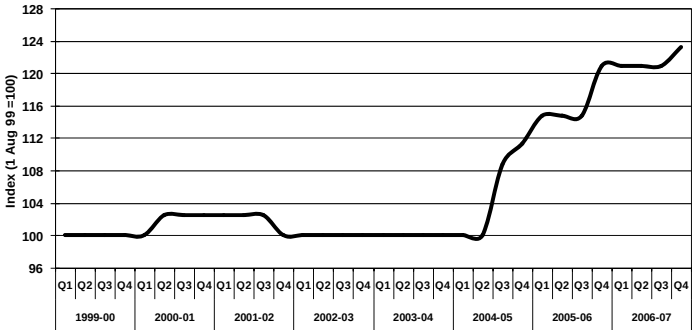
The first step in the process of moving grain through the GHTS typically involves its shipment by truck to a country elevator. Although the distance traveled in doing so can be as little as a few miles, it can also extend to upwards of 100 or more. Furthermore, a wide assortment of equipment is employed to accomplish this. These include not only comparatively smaller producer-owned vehicles, but the higher-capacity trucks used in for-hire trucking operations. In addition, a number of the larger grain companies also offer their own "in-house" trucking services. This gives the producer the option of contracting directly with the grain company for the on-farm pick-up of their grain, and its delivery to the elevator.

The GMP tracks the freight rates posted by the principal grain companies for local grain pick-up and delivery services in, and around, a representative sample of 37 specific delivery points. These rates have been

combined to create a composite rate scale for commercial truck movements within western Canada, and indexed to measure changes in these costs over time.

As outlined in the Monitor's earlier reports, this survey revealed that the larger grain companies offered producers similar trucking services, albeit at marginally differing costs. Moreover, with the exception of fuel surcharges, which were selectively applied over an 18-month period that straddled the 2000-01 and 2001-02 crop years, the underlying structure of these commercial freight rates effectively remained unchanged throughout the course of the GMP's first five years.

Figure 45: Composite Freight Rate Index – Short-Haul Trucking



To a large extent, an excess of capacity in the face of reduced demand also helped to contain these rates. Furthermore, the competition existing between the largest grain companies offering commercial trucking services also proved instrumental. Even so, the input costs for these services – most notably that of fuel – had been rising steadily. Beginning with the 2004-05 crop year, commercial trucking rates began to climb fairly quickly, raising the GMP price index for short-haul trucking by 20.9% over the following twenty-four months. To a large extent, this price shock reflected the unleashing of the pent-up pressures that came from rising labour and fuel costs. Increased grain shipments, which had heightened the demand for carrying capacity, also furnished service providers with a greater degree of latitude in passing these costs onto their customers.

For the first nine months of the 2006-07 crop year, commercial trucking rates remained largely unchanged. Although the pump price for diesel has proven volatile, it generally moderated in the face of reductions in the price of crude oil. This moderation in fuel prices helped to offset the rise in wages and other input costs experienced in the first nine months of the 2006-07 crop year. Still, after reaching a low of about $47 US per barrel in mid January 2007, the benchmark price of West Texas Intermediate crude oil again began to rise. By the end of the fourth quarter the posted price had rebounded to about $75 US per barrel; in keeping with what it had been about twelve months earlier. This rise prompted a 1.9% increase in commercial trucking rates late in the crop year, which pushed the composite price index up to 123.2 at the close of the period. [See Table 3A-1 in Appendix 4.]

3.2 Primary Country Elevators *[Measurement Subseries 3B]*

The 2006-07 crop year provided the GMP with an opportunity to gauge the impact of recent changes in the GHTS on the operational efficiency of the primary country elevator system under a heavy workload. This stemmed from the fact that the system's throughput increased to a GMP record of 33.5 million tonnes.[106] Although this represented a 4.2% increase over the previous crop year's 32.1 million tonnes, it proved only 0.5% greater than the previous record of 33.3 million tonnes, which had been set in the 2000-01 crop year.

All producing provinces save that of Saskatchewan recorded a year-over-year increase in its primary elevator shipments. With a 33.5% increase in throughput, Manitoba posted the largest comparative gain. Moreover, its shipment of 5.8 million tonnes proved to be the largest in three years. This was in turn followed by Alberta, which in addition to posting an increase of 1.6%, also reported a record 10.4 million tonnes of throughput under the GMP. Saskatchewan reported a reduction of 1.8%, with throughput falling to 16.9 million tonnes from 17.2 million tonnes a year earlier. British Columbia trailed the pack with 0.3 million tonnes in primary elevator

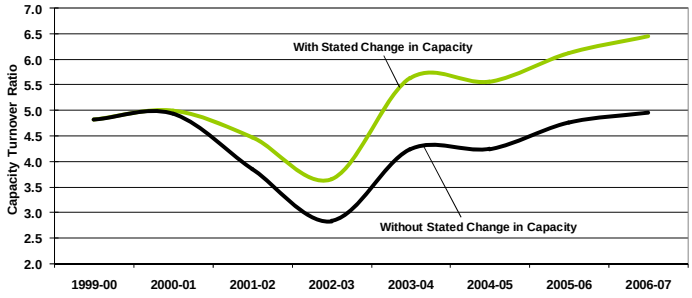
[106] In gauging the throughput of the country elevator system, the GMP focuses on both the truck and railway shipments made from primary elevators. The volume of grain passing through process elevators is excluded from this calculation.

throughput. However, a year-over-year increase of 10.6% was actually the second largest posted among the producing provinces. [See Table 3B-1 in Appendix 4.]

Capacity Turnover

The effect of changes in both throughput and storage capacity are reflected in the primary elevator system's capacity-turnover ratio. With throughput in the 2006-07 crop year rising by 4.2%, the ratio increased by 4.8% to 6.5 turns, the highest value recorded under the GMP. This comparatively larger gain was due in large part to the influence exerted by another 140,700-tonne reduction in storage capacity.

Figure 46: Change in Capacity – Impact on Capacity Turnover Ratio



Significant changes were noted among the ratios of the various provinces. The ratio for Alberta continued its move into higher territory, increasing another 2.7% to 7.6 turns from the previous crop year's record-setting 7.4 turns. An increase was also posted by Manitoba, which reported 6.4 turns as compared to 4.7 turns a year earlier. Rounding out the gainers was British Columbia, where a 16.3% increase pushed its ratio to 5.0 from 4.3. These improvements were chiefly driven by the increases in provincial throughput already mentioned. For Saskatchewan, the only province to have experienced a reduction in throughput, the ratio fell by 3.3%, to 5.9 turns from 6.1 turns the year before. [See Table 3B-2 in Appendix 4.]

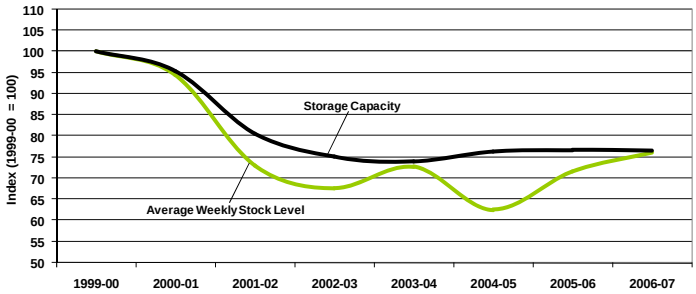
Although the gains recorded since the 2002-03 crop year have largely been volume related, the real improvement in the capacity-turnover ratio made since the beginning of the GMP has come from an 18.0%, or 1.3-million-tonne, reduction in storage capacity. In a broad sense, this reduction reflects the effects of the grain companies' elevator rationalization programs, and their efforts to improve the utilization of these assets.

The progressive decline in throughput over the 2001-02 and 2002-03 crop years effectively camouflaged the efficiencies that were being made. In truth, had storage capacity not been reduced during this period, the 2006-07 crop year's ratio would have been 5.0 turns instead of 6.5 turns. This 1.5-turn differential draws attention to the fact that the primary elevator system has improved its handling efficiency by an estimated 30.2% over the course of the last eight crop years.

Elevator Inventories

In assessing the operational efficiency of the primary elevator system, the GMP also considers the impact of any change in the amount of grain maintained in inventory. Beyond measuring actual stock levels, this examination also takes into account the amount of time grain spent in inventory, as well as its ability to satisfy immediate market demand.

Figure 47: Relative Change in Primary Elevator Storage Capacity and Average Stock Levels

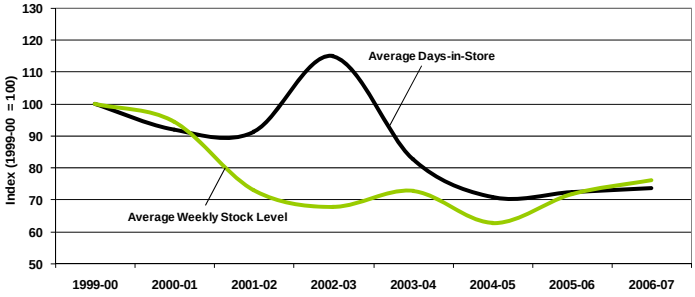


In concert with the general reduction in storage capacity, grain inventories have also been declining. By the end of the 2002-03 crop year, the primary elevator network's average weekly stock level had fallen to 2.5 million tonnes. And even though the 2003-04 crop year's average

climbed to 2.7 million tonnes, it still remained below the GMP's first year benchmark of 3.7 million tonnes. This downward trend was accentuated even further in the 2004-05 crop year when a late harvest heightened the demand for high-quality grain and reduced the average to a record low of 2.3 million tonnes. [See Table 3B-3 in Appendix 4.]

The 2006-07 crop year saw a continuation of the inventory build-up begun a year earlier, with the average rising by 6.2% to 2.8 million tonnes. Moreover, this result reflected the effects of stocks that climbed to 3.0 million tonnes in the third quarter before falling back to 2.4 million tonnes in the fourth quarter as a result of tightening year-end grain supplies.

Figure 48: Relative Change in Average Weekly Stock Levels and Average Days in Store



It is worth noting that the 23.9% net decline in primary elevator inventories over the course of the last eight crop years only marginally exceeded the 20.6% reduction in storage capacity. This means that, despite periodic reductions in average inventories, the amount of grain maintained in inventory per unit of storage capacity in the 2006-07 crop year was comparable to that observed at the beginning of the GMP, 54.0% versus 54.3% respectively.

Just as the average stock level has moved generally lower, so too has the average amount of time spent by grain in inventory. From a benchmark 41.7 days in the GMP's base year, to 29.5 days in the 2004-05 crop year, the average number of days-in-store fell by 29.3%.[107] As was the case with stocks, however, the average number of days grain spent in inventory has since increased. For the 2005-06 crop year the average rose to a marginally higher 30.1 days. The 2006-07 crop year produced a further 2.0% rise, with the average amounting to 30.7 days. Fluctuations in the quarterly values followed the same pattern presented earlier for inventories: rising to an average of 35.2 days in the third quarter before falling back to a low of 24.4 days in the fourth.[108] [See Table 3B-4 in Appendix 4.]

Some of the noteworthy changes to the averages posted by individual provinces and grains are summarized as follows:

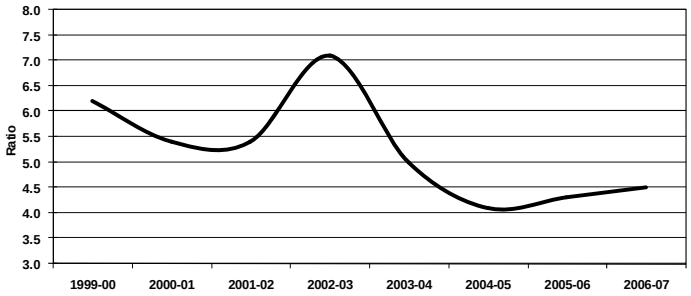
Province	Days-in-Store	Change	Grain	Days-in-Store	Change
Manitoba	32.1 days	Down 20.1%	CWB Grains		
Saskatchewan	30.8 days	Up 4.4%	Durum	35.2 days	Down 15.2%
Alberta	29.2 days	Up 9.4%	Barley	19.5 days	Down 3.5%
British Columbia	41.9 days	Up 12.9%	Wheat	37.5 days	Up 1.9%
			Non-CWB Grains		
			Oats	26.3 days	Down 10.2%
			Canola	21.4 days	Up 7.0%
			Peas	21.2 days	Up 18.4%
			Flaxseed	29.4 days	Up 42.7%

[107] It should be noted that this downward trend was disrupted in the 2002-03 crop year when a sharp reduction in the sales programs for CWB, as well as for non-CWB, grains resulted in the average climbing to a record 47.9 days.

[108] The 24.4-day average recorded in the fourth quarter ranks as the third lowest observed under the GMP. The fourth quarter of the 2003-04 crop year produced a record low of 22.7 days.

The adequacy of country elevator inventories can be gauged by comparing their level at the end of any given shipping week, with the truck and railway shipments actually made in the next seven days. In the event that the ratio of these two values amounts to 1.0, it would mean that country elevator stocks exactly equalled shipments made in the following week. A ratio above this value would denote a surplus supply in the face of short-term needs.[109]

Figure 49: Primary Elevators – Stock-to-Shipment Ratio



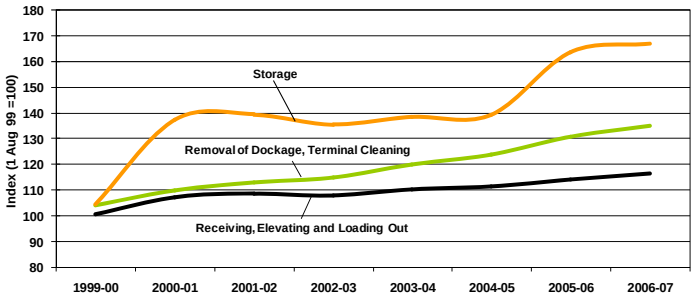
A review of the average weekly stock-to-shipment ratios recorded during the GMP's first five years reveals that the quarterly average seldom fell below a value of 5.0. As such, the inventory on hand at the close of any given week generally exceeded that required in the next by a factor of at least five. Notwithstanding the anomaly of the 2002-03 crop year, when reduced grain sales prompted a build-up in primary-elevator stocks that greatly inflated the ratio, by the 2005-06 crop year the annual average had declined by 30.6%, to 4.3 from 6.2.[110]

The same forces that led to increased stock levels in the 2006-07 crop year also contributed to a 4.7% increase in the year's ratio. This pressure was particularly evident in the third quarter when the average weekly stock-to-shipment ratio climbed to a high of 5.2. And although the ratio subsequently decreased in concert with the reduction in inventories to a low of 3.5 in the fourth quarter, the higher initial quarterly values helped push the annual average up to 4.5. [See Table 3B-5 in Appendix 4.]

Average Handling Charges

The rates assessed by grain companies for a variety of primary elevator handling activities vary widely. These differences reflect not only the specific services offered – be it elevation, cleaning or storage – but the diversity of grains involved and the province in which the service is performed. Given the myriad of tariff rates, the GMP necessarily uses a composite price index to track the movement in these rates.[111]

Figure 50: Relative Change in Elevator Handling Charges



The per-tonne rates assessed by the grain companies for these various services are the primary drivers of corporate revenues. Comparatively, the per-tonne charge assessed for the receiving, elevating and loading out of grain is the most costly for producers. This in turn is followed by the charges levied for the removal of dockage (also referred to as terminal cleaning), as well as storage.

[109] It should be noted that the value of 1.0 constitutes a lower limit for the stock-to-shipment ratio as calculated under the GMP. This arises because primary elevator shipments are effectively constrained by the actual level of grain held in inventory.

[110] The highest annual weekly stock-to-shipment ratio recorded under the GMP was 7.1, and occurred in the 2002-03 crop year. Similarly, a record quarterly value of 8.8 was set in this same crop year's third quarter.

[111] For the purposes of the discussion presented here, price movement with respect to any particular handling activity is based on a composite index of nominal tariff rates.

The rates for all of these services have risen steadily since the beginning of the GMP. The lowest pace has been set by the tariff rates for receiving, elevating and loading out grain. Through to the end of the 2005-06 crop year, these rates had risen by a total of 13.8%. During the 2006-07 crop year they increased a further 2.2%, bringing the cumulative increase for the last eight years to 16.3%.[112]

The rates in place for the removal of dockage are the only ones to have posted increases in each of the last eight crop years.[113] For the 2006-07 crop year, these rates increased by about 3.2%. This resulted in the composite price index for dockage having increased by a total of 34.8% under the GMP.

The most substantive rate escalation observed thus far has been with respect to elevator storage. Much of the initial price shock came towards the end of the 2000-01 crop year, when these rates were raised by a factor of almost one-third. Although these rates pulled back moderately in the 2002-03 crop year, increases were applied in each of the following three crop years. The 2006-07 crop year witnessed a further escalation in storage costs, with rates rising by about 2.0%. As a result, storage charges in place at the end of the 2006-07 crop year were effectively 66.6% higher than at the beginning of the GMP. [See Table 3B-6 in Appendix 4.]

3.3 Rail Operations *[Measurement Subseries 3C]*

The volume of grain moved in covered hopper cars during the 2006-07 crop year posted a year-over-year decrease of 4.0%, falling to 23.7 million tonnes from 24.7 million tonnes the year before.[114] With the exception of Manitoba, railway shipments from every province in western Canada also declined. The most significant net reduction was registered by Saskatchewan, where rail shipments fell by 1.0 million tonnes, or 7.4%, to 12.2 million tonnes. The next largest reduction in volume was posted by Alberta, which saw its rail shipments fall by a significantly lesser 0.1 million tonnes, or 0.9%. Although British Columbia registered a 5.2% reduction in rail volume, total originations amounted to just under 0.2 million tonnes.[115] Running counter to these results was Manitoba, where a 0.1-million-tonne increase in volume boosted total shipments by 3.2% to 2.5 million tonnes.

Significant reductions in the amount of grain shipped to the two largest ports in the GHTS, Vancouver and Thunder Bay, were also recorded. Movements to Vancouver fell by 8.9%, to 12.3 million tonnes from 13.5 million tonnes a year earlier, giving it a 51.9% share of the total railway volume. Thunder Bay saw its volume decrease by 8.7%, to 6.0 million tonnes from 6.5 million tonnes the year before. After an increase of 17.2% from the previous crop year's 4.2 million tonnes, railway shipments to Prince Rupert under the GMP reached a record 4.9 million tonnes. In fourth place was traffic destined to Churchill, which increased by 15.2% to 0.5 million tonnes. [See Tables 3C-1, 3C-2, and 3C-3 in Appendix 4.]

Car Cycles

In the context of the GHTS, the car cycle measures the average amount of time taken by the railways in delivering a load of grain to a designated port in western Canada, and then returning the empty railcar back to the prairies for reloading. The railways' average car cycle for the 2006-07 crop year fell by 2.8%, to 16.8 days

[112] By way of comparison, the Industrial Product Price Index increased by 13.2% during this period.

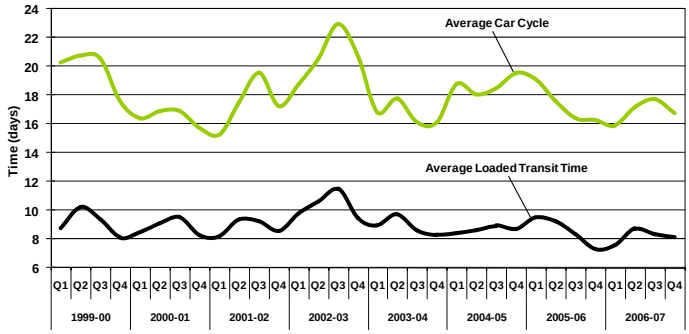
[113] Charges for the removal of dockage (terminal cleaning) fall under the provisions of Licensed Primary Elevator Tariffs and are assessed at the time producers deliver their grain.

[114] The overall volume of grain cited here as having moved by rail to western Canadian export positions in the 2006-07 crop year contrasts with the 24.3 million tonnes mentioned in Section 1.2. This latter value is a broader measurement that includes grain movements in boxcars, trailers and containers. For more consistent comparisons, the values presented here (and in Tables 3C-1 through 3C-3), deal exclusively with that portion moving in covered hopper cars, and through the terminal elevator system only. Such adjustments typically account for a reduction of less than 5.0% from the broader tonnage value.

[115] Statistics relating to the railway movement of grain in western Canada centre on the volume handled by federally regulated carriers. Given that much of the grain originating in British Columbia was handled by BC Rail, the volume handled by federally regulated carriers prior to CN's acquisition of BC Rail in July 2004 proved comparatively small – amounting to well below 100,000 tonnes annually. As a result of the CN acquisition, all grain moving from points formerly served by BC Rail is now federally regulated. The volume cited here for the 2006-07 crop year reflects a third full year of statistics relating to railway grain movements from British Columbia.

from 17.3 days a year earlier.[116] This average proved to have been the third lowest reported under the GMP.[117]

Figure 51: Average Railway Car Cycle



Even so, extreme winter weather conditions had an adverse impact on railway car cycles in the second and third quarters, with the averages for these periods reaching 17.2 days and 17.7 days respectively. Despite the rise in these quarterly values, the first quarter's strong showing helped mitigate their negative impact on the overall average for the 2006-07 crop year. Most noteworthy were the service disruptions occasioned by landslides in the Rockies and a nation-wide strike at CN, which proved particularly bothersome for movements to the west coast. The Vancouver corridor, which was most affected, posted a year-over-year increase of 1.4% in its average car cycle, which rose to 18.6 days from 18.3 days a year earlier. Similarly, the Prince Rupert corridor saw its average increase by 1.6%, rising to 15.9 days in comparison to the previous crop year's 15.6-day average. Running counter to these results was the 9.3% reduction posted by movements in the Thunder Bay corridor, where the average car cycle fell to 15.6 days from 17.2 days a year earlier. See Table 3C-4 in Appendix 4.]

A 4.4% decline in the total loaded transit time, which fell to an average of 8.2 days from 8.6 days a year earlier, proved to have been the key force in drawing down the overall car cycle by 0.5 days. This was furthered by a 1.3% decrease in the average empty transit time, which fell to 8.7 days from 8.8 days a year earlier.

Underpinning these gains were improvements in the car cycles of CN and CP, which fell by 2.5% and 1.7% respectively. The most marked improvement was reflected in a 2.8% reduction in the average loaded transit time posted by CP while the CN average fell by 2.6%. The results were more mixed with respect to their average empty transit times, which fell by 2.3% in the case of CN, and 0.8% for CP.

The average car cycle for non-special crops amounted to 16.6 days in the 2006-07 crop year. This value proved to be 17.0% less than the 20.0-day average tied to special crops. On the whole, these results portray the structural differences associated with the handling of special commodities[118]. Similar differences were noted for the averages posted in both the Vancouver and Thunder Bay corridors. On movements to Vancouver, the average cycle on non-special crops amounted to 18.3 days whereas that of special crops came in 15.3% higher at 21.1 days. For the Thunder Bay corridor, the differential proved less substantial: 15.6 days on non-special crop movements versus 16.1 days for special crops. [See Tables 3C-5 and 3C-6 in Appendix 4.]

These structural differences were equally evident in the loaded and empty transit times of both groups. In the case of loaded transit times, there was a 2.5-day advantage for non-special crop movements, which averaged 8.0 days versus 10.5 days for special crops. The advantage on empty transit times proved somewhat narrower

[116] Western Canada's average car cycle of 16.8 days is derived from 181,488 movements: 71,433 in the Vancouver corridor; 61,103 in the Thunder Bay corridor; and 48,952 in the Prince Rupert corridor. The relative weighting accorded these movements is dependent on the number of acceptable records received, which can vary from period to period. The statistics presented here are intended to reveal general trends respecting the amount of time taken by covered hopper cars in moving grain throughout western Canada.

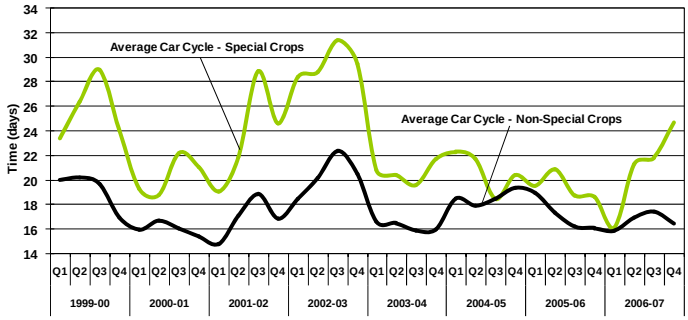
[117] The lowest annualized average car cycle in the history of the GMP, 16.4 days, was recorded in the 2000-01 crop year. Drought-induced reductions in the productivity of the hopper car fleet were largely responsible for the elongations that followed in the 2001-02 and 2002-03 crop years. The upturn in grain traffic since then has had a generally positive impact on the railways' average car cycle, with improvements having been noted in all corridors.

[118] Special crops will typically move from processing facilities in small blocks and are destined to off dock transloading operations located at the ports. At either end of the movement, rail switching service may not be as frequent or efficient as larger scale country elevation facilities or port terminal operations.

at 1.0 days, with non-special crops posting an 8.6-day average in comparison to that of 9.6 days for special crops.

The demand for railway carrying capacity typically surges at harvest time. Moreover, the larger the crop, the more intense the resultant strain on the GHTS becomes. With what amounted to a record grain movement under the GMP in the first quarter, this undoubtedly placed added pressure on the system's railway resources. This was reflected in average loaded transit times that steadily lengthened; a pattern that has often been observed under the GMP. Compounding this, however, were the added burdens of the service disruptions brought on by adverse west coast weather and a strike at CN in the second and third quarters. Even so, the quarterly averages posted in the 2006-07 crop year ranked among the better values recorded under the GMP. CN in particular has made significant strides in narrowing the performance gap that it had opened with CP almost two years before.[119] Although a greater emphasis on unit train operations in the Vancouver and Thunder Bay corridors has been instrumental in this, the increased volume of grain being shipped to Prince Rupert – and which now consistently post some of the lowest corridor averages – has had an equally important effect on improving overall efficiency.

Figure 52: Average Car Cycle – Special and Non-Special Crops

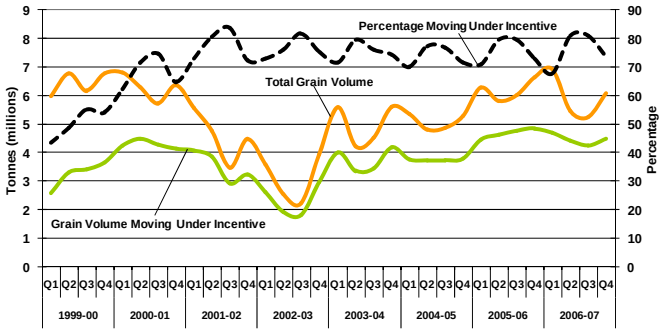


Multiple-Car Blocks

During the course of the 2006-07 crop year, the railways handled a total of 17.8 million tonnes of grain under the incentive programs they use to encourage shippers to move grain in multiple-car blocks. This represented a reduction of 4.8% from the record-setting 18.7 million tonnes handled under these programs a year earlier.

Although the droughts of the 2001-02 and 2002-03 crop years negatively impacted the volumes handled under these programs, the structural changes made to the programs themselves have also had a bearing on their utilization. One of these was CN's decision to eliminate its discount for shipments in blocks of 25-49 railcars at the beginning of the 2003-04 crop year. With the commencement of the 2006-07 crop year, CP also did away with these discounts.

Figure 53: Railway Volume Moving Under Incentive



Even so, the overall proportion of grain that earned incentive discounts remained largely unchanged. In the 2006-07 crop year, this proportion amounted to an estimated 75.2%, and differed very little from the average values recorded in each of the previous five crop years. Moreover, the greatest gains were made in the first three years of the GMP when this proportion rose from an estimated 50.4% for the base year to 76.9% in the 2001-02 crop

[119] Following CN's return to the practice of using grain to fill-out its manifest trains early in the 2004-05 crop year, there was a significant elongation in its loaded and empty transit times. This ultimately manifested itself in a measurable performance advantage for CP, which continued to focus on unit train operations. Since dispensing with this approach early in the 2005-06 crop year, CN has managed to steadily narrow the gap in comparative performance.

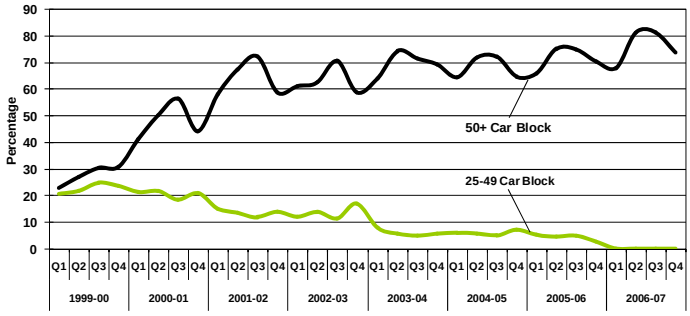
year.[120] Although the quarterly values show a greater degree of seasonal variability, the data suggests that a ceiling in the area of 80% has now formed.[121] [See Table 3C-8 in Appendix 4.]

From the beginning of the GMP, it has been clear that the largest block sizes were the most popular with grain shippers. This stems simply from the fact that they provide the deepest monetary discounts, and allow the grain companies to realize the greatest financial returns. Data gathered through to the end of the 2003-04 crop year showed that movements in blocks of 50-99 cars proved to be the most expansive, going from a 20.2% share in the 1999-2000 crop year to an estimated 45.1% by the end of the 2003-04 crop year. At the same time, movements in blocks of 100 or more railcars went from 7.6% of the total to 24.0%.

However, owing to the restructuring of the incentive discounts offered by both CN and CP in the 2004-05 crop year, the Monitor can no longer examine these shipments in a consistent manner.[122] Rather, the elimination or redefinition of the car blocks used in both programs has effectively reduced the direct comparisons that can be made to two: incentive shipments in blocks of less than 50 cars; and those in blocks of 50 or more cars.

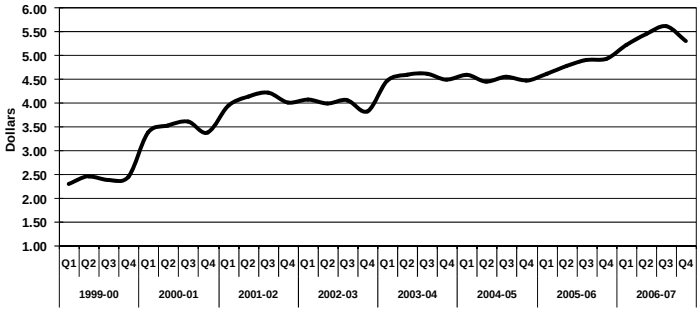
Since the GMP began, the share of the total volume moving in blocks of 50 or more cars has climbed from 27.8% to 75.2%. Although increases in the incentive discounts payable on these larger-block shipments largely fuelled this migration, there can be little doubt that a simultaneous rollback in the discounts applicable on shipments in blocks of 25-49 railcars also had an effect. Until these lesser discounts were eliminated entirely in the 2006-07 crop year, the proportion of shipments earning them had been falling steadily; from an estimated 22.6% share in the first year of the GMP to just 4.2% in the 2005-06 crop year.

Figure 54: Composition of Multiple-Car Block Incentive Movements



The annual value of the discounts earned by grain shippers – estimated as an annual gross savings in railway freight charges – has tripled in the last eight years, climbing to an estimated $96.5 million from $31.1 million. Yet only $11.8 million, or 18.0%, of this $65.4-million increase was derived from the additional volume of grain shipped under these programs. The majority, $53.6 million, came from the expanded use of the larger car blocks, which carried the higher per-tonne discounts offered by the railways.

Figure 55: Average Incentive Discount Earned (dollars per tonne)



The average discount earned underscores the incremental gains realized by the grain companies. Between the 1999-2000 and 2005-06 crop years, the average discount earned under these programs climbed to

[120] Annualized proportions temper the observed variation in quarterly values, which ranged from a low of 43.6% in first quarter of the 1999-2000 crop year, to 83.9% in the third quarter of the 2001-02 crop year.

[121] Non-incentive based movements have accounted for about one-quarter of all grain shipments in each of the last six crop years.

[122] Some of the more significant changes made to the structure of these incentives are presented in the discussion on freight rates found later in this section.

an estimated annualized average of $4.81 per tonne from $2.40 per tonne.[123] The 2006-07 crop year saw this average gain a further 12.3%, climbing to a record $5.41 per tonne. Again, this increase largely reflects the growth in the proportion of movements that went in blocks of 50 or more cars. [See Table 3C-9 in Appendix 4.]

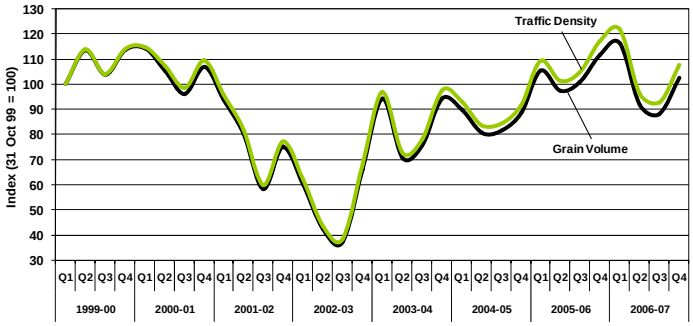
Traffic Density

A broad indicator of railway efficiency is traffic density. With a quarterly average of 320.1 originated tonnes per route-mile, overall density in the 2006-07 crop year was 3.1% less than the 330.5 tonnes per route-mile observed a year earlier. A similar differential was noted with the 330.3 tonnes per route-mile average recorded in the first year of the GMP.[124]

The limited transformation of the railway network over the past eight years has largely sensitized this indicator to changes in traffic volume.[125] This can best be seen when comparing quarterly changes in traffic density with that of grain volume, patterns that are virtually indistinguishable. It is for this same reason that any examination of traffic density, be it with respect to differences between railway classes or railway line classes, ultimately accentuates volume-related changes as well.

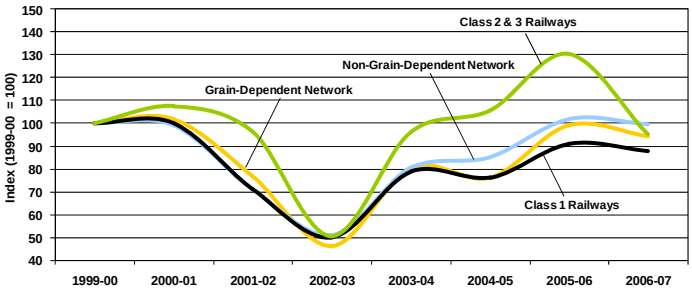
When examining traffic density by railway class, a comparatively greater degree of volatility can be seen with respect to the Class 2 and 3 carriers than with their Class 1 counterparts. Initially, this largely reflected the more significant underlying changes to their infrastructures, be it through sale or abandonment. Although this is still true, the virtual halving of the regional and shortline network has left the measure more sensitive to changes in volume. A 38.0% reduction in the average quarterly tonnage for Class 2 and 3 carriers was the primary force behind a 27.0% decline in this grouping's traffic density in the 2006-07 crop year.

Figure 56: Relative Change in Traffic Density and Grain Volume



Such fluctuations are largely tempered if the networks being examined are less prone to continual redefinition, as is the case when the densities of the grain-dependent, and non-grain-dependent, networks are compared. Through to the end of the 2003-04 crop year, the traffic densities of these lines moved largely in tandem. This arose not as a result of comparatively similar changes in either of the underlying infrastructures or traffic volumes, but because the grain-dependent network's steeper decline in infrastructure tempered the impact of its greater reduction in originated tonnage.

Figure 57: Relative Change in Railway Traffic Density



[123] The estimated discount per tonne deals exclusively with incentive movements to the four ports located in western Canada.

[124] Traffic density is determined by relating grain volumes for a specific period of time to the number of route-miles comprised within the western Canadian railway network at the end of that same period. Although year-over-year measurements are comparable, they cannot be directly gauged against quarterly measurements. For this reason, an average of the year's quarterly values is used as a substitute.

[125] With traffic volume held constant, the resultant effect of all changes to railway infrastructure under the GMP has been a 5.0% improvement in traffic density.

This was not the case in the 2004-05 crop year when a gain in volume for the non-grain-dependent network, coupled with a decline in that for the grain-dependent network, caused their traffic densities to begin moving in opposing directions. Despite the increase in volumes for both networks since then, the relative weakness of grain-dependent originations has been reflected in comparatively lower density values. On the whole, these measurements reflect the effects of further erosion in the grain-dependent network's existing traffic base. For the 2006-07 crop year, an 8.1% decline in volume – tempered by a 3.4% reduction in infrastructure – resulted in the traffic density of the grain-dependent network falling 4.8%, to an average of 418.0 tonnes per route-mile. Conversely, a 2.2% decline in volume for the non-grain-dependent network produced a lesser reduction in density, which fell by 2.1% to 291.5 tonnes per route-mile. [See Table 3C-10 in Appendix 4.]

Railway Freight Rates

As one of the reforms aimed at making the GHTS more commercial, competitive, and accountable, the federal government ended its long-standing policy of regulating maximum railway freight rates for the movement of grain in western Canada. Instead, it adopted a policy that provided the railways with greater latitude in pricing, but limited the overall revenues that they could derive from moving grain in western Canada.[126]

To achieve this, the railways chose a two-pronged approach that involved adjusting both their published single-car freight rates as well as the incentive discounts applicable on the movement of grain in multiple-car blocks. As outlined in the Monitor's previous reports, although the revenue cap accorded both CN and CP greater freedom in setting freight rates, their pricing actions remained largely similar through to the end of the 2002-03 crop year, with nominal freight increasing by about 3.8% from their 1999-2000 crop year levels.[127] At the same time, they had also increased the incentive discounts applicable on larger car-block movements.[128]

With the beginning of the 2003-04 crop year CN and CP broke with the practice of making largely parallel rate adjustments. At the same time, they also made the first substantive changes to the incentive discounts that they had been offering for movements in multiple-car blocks since the beginning of the 2000-01 crop year. Over the following three crop years, a new process appeared to have emerged. Although this primarily involved the setting of new single-car rates at the beginning of the crop year followed by at least one other rate adjustment in the second half, changes to the incentive programs were also noted. There is no doubt that this new process was aimed at maximizing the revenues carriers were entitled to receive under the revenue cap. Moreover, if the narrowness of the margins by which CN and CP have missed these targets serves as any indication, both carriers have become quite skilful at managing their revenues under the current regulatory framework.

For the 2006-07 crop year, both railways brought forward rate increases that were largely consistent with the 6.6% escalation factor approved by the Canadian Transportation Agency's Volume-Related Composite Price Index.[129] Although CN applied an across-the-board increase of 7.0% to all corridors, it restricted the increases applicable on certain high-throughput elevators moving grain to Prince Rupert to about 3.8%.[130] In addition CN also took an initial step towards its stated goal of publishing these rates as per-car, rather than per-tonne,

[126] This "revenue cap" was set at a level 18% below the estimated grain revenues that would have been derived without the reform, and came into effect on 1 August 2000. The revenue cap has specific annual limits for both CN and CP, and was set under the Canada Transportation Act (2000) at a combined level of $710.9 million. Each year, the Canadian Transportation Agency adjusts these "base year" limits to reflect changes arising from inflation, the actual grain tonnage moved, and the average distance over which it was moved.

[127] The 3.8% increase cited here represents a composite average based on published tariff rates for both CN and CP.

[128] As of 1 August 2000, shipments in blocks of 25-49 cars received a discount of $1.00 per tonne from the published tariff rate for a single-car movement; those in blocks of 50-99 cars, $4.00 per tonne; and those in blocks of 100 or more cars, $6.00 per tonne. In addition to the general discounts cited, the railways also provided incentive discounts for shippers who committed to move a multiple number of trainload lots (100 or more cars) during a specified period of time. Deemed generically by the Monitor as "shuttle services," these discounts provided an additional $0.50 per tonne when applied to movements of 100 or more railcars. CP also offered a further $0.50 per tonne discount when these involved trainload movements of 112 railcars.

[129] The revenue cap is adjusted annually for inflation by the Canadian Transportation Agency. For the 2006-07 crop year, the Agency determined that the Volume-Related Composite Price Index used to accomplish this was to be increased by 6.6%.

[130] By restricting the escalation at these strategic points, CN was able to give specified movements to Prince Rupert a financial advantage of at least $1.00 per tonne over those for Vancouver.

charges. Although per-tonne rates were maintained for the movement of CWB grains, the rates applicable on all other commodities were converted to per-car charges.[131] In comparison, CP maintained its existing per-tonne rate structure, increasing its rates in the Vancouver and Thunder Bay corridors by about 6.0% and 6.5% respectively. On 1 June 2007, however, the carrier applied secondary increases of 2.5% and 4.0% on these movements, which brought the total effective rise since the beginning of the 2006-07 crop year to 8.7% in the Vancouver corridor, and 10.8% in the Thunder Bay corridor.[132]

Over the entire span of the GMP, single-car freight rates in the Thunder Bay and Vancouver corridors have increased by about 16.1% and 18.0% respectively, with CN's rates having marginally exceeded those of CP.[133] [See Table 3C-11 in Appendix 4.]

Of particular interest is the fact that CN has gradually reduced its rates to Prince Rupert. At the outset of the GMP, these rates generally exceeded those applicable on the movement of grain to Vancouver by a factor of 13%. In some circles, this differential was considered discriminatory, and prejudicial to the movement of grain to Prince Rupert. Beginning in the 2000-01 crop year, however, CN began to lower its rates in this corridor. By the end of the 2004-05 crop year CN had effectively equalized its rates on movements to Prince Rupert and Vancouver. To an extent, this gradual reduction appears to have helped stimulate the shipment of grain to the more northerly of these two ports. Although larger grain supplies undoubtedly also had a bearing, Prince Rupert's share of the total rail movement continued to gain ground against that of Vancouver.

CN's selective rate increases along with the allocation of more cars to the corridor appears to have had an even more pronounced effect in the 2006-07 crop year, where hopper car shipments to Prince Rupert climbed by 17.2%, to 4.9 million tonnes from 4.2 million tonnes a year earlier. Moreover, the port's share of west coast movements climbed to a record 28.5% under the GMP.

There were also some changes to the incentive programs offered by the railways. In the case of CP, although the carrier chose to maintain the $4.00-per-tonne discount that it had been offering on movements in blocks of 50-111 cars, it increased the minimum threshold for these movements to 56 cars.[134] No changes were noted with respect to the $7.50-per-tonne maximum CP had been offering on shipments in blocks of 112 cars.[135] In comparison, CN opted to reduce its discounts on movements in blocks of 50-99 cars from $4.00 per tonne to $3.00 per tonne, while maintaining the discount for block movements of 100 or more cars at $7.00 per tonne. [See Table 3C-12 in Appendix 4.]

Both carriers, however, added further emphasis to the advance booking options that they had been promoting in recent years.[136] It is worth reiterating that the perceived discriminatory nature of these options, although more specifically those of the products marketed by CN, were at the heart of the level-of-service complaint brought forward in the third quarter by Great Northern Grain Terminals Ltd. (see section 2.32)

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[131] The adoption of per-car rates is not unique to grain, in as much as the railway industry has been moving steadily towards the use of per-car charges as a means of simplifying its accounting processes for several years now. In adopting per-car rates, however, CN grouped the rates for specific commodities according their product densities. As a result, the per-car rates published for heavier grains differ from those published for medium and lighter density products.

[132] CP was the only carrier to initiate a second round of rate increases in the 2006-07 crop year. The single-car rates posted by CN remained unchanged throughout the 2006-07 crop year.

[133] The Thunder Bay and Vancouver corridors are deemed the most competitive since both CN and CP offer direct rail services to these ports. Notwithstanding minor differences, the rate increases noted here are intended to reflect the general pricing actions of both carriers in these two corridors. With only one serving carrier at the ports of Churchill and Prince Rupert, inter-carrier comparisons of rate changes are not possible. An examination of CN's published rates to these ports over this same period of time shows net increases of about 19.1% for Churchill, and 1.6% for Prince Rupert.

[134] The $4.00 per tonne discount cited here was actually reduced temporarily by CP to $3.75 per tonne in mid June 2006, and reinstated at the beginning of the 2006-07 crop year.

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

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

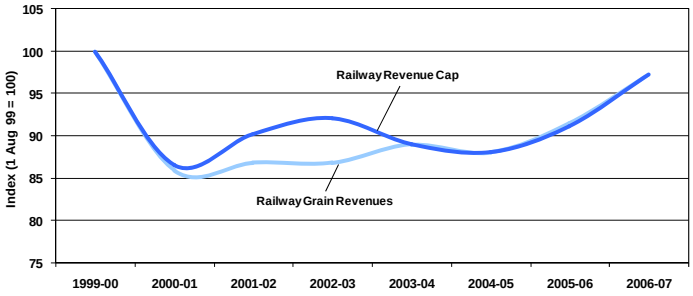
The Revenue Cap

Under the federal government's revenue cap, the revenues that CN and CP were entitled to earn from the annual movement of regulated grain were not to exceed a maximum of $348.0 million and $362.9 million respectively. These amounts had been determined using an estimated annual movement of 12.4 million tonnes for CN and 13.9 million tonnes for CP, with average haulage distances of 1,045 miles and 897 miles respectively.[137]

The revenue cap for each carrier, however, is not a static target. Each year, the limits attributable to CN and CP are adjusted to take into account changes in the actual volumes of grain handled, the average distances over which these volumes moved, and the effects of inflation on railway costs. With the exception of the inflationary component, these adjustments are determined by the Canadian Transportation Agency following a detailed analysis of the traffic data submitted to it by CN and CP.[138] For the 2006-07 crop year, these adjustments resulted in CN and CP being accorded individual revenue caps of $419.0 million and $433.4 million respectively, or $852.4 million on a combined basis.[139] [See Table 3C-13 in Appendix 4.]

At the same time, the Agency determined that the statutory grain revenues for CN and CP amounted to $416.9 million and $437.1 million respectively, or $854.0 million on a combined basis. This meant that the industry's grain revenues came in $1.7 million above the maximum allowed. In this instance, CN's revenues actually fell $2.1 million below its limit, while those of CP totalled $3.8 million more than allowed. As a result, the Agency ordered CP to pay out their excess revenues, along with a 5% penalty, to the Western Grains Research Foundation.

Figure 58: Railway Revenue Cap Compliance



For a fourth consecutive year, the collective result indicates that the amount of revenue the railways actually did earn came within but a small fraction of what they were entitled to earn under the revenue cap. In fact, the comparative margin by which these revenues missed their allowable limit narrowed slightly, to 0.19% from 0.43% a year earlier. More importantly, these values continue to denote much smaller margins of error than those initially achieved in the 2000-01 through 2002-03 crop years.[140]

To an extent, the initial widening of this margin in the 2002-03 crop year was attributable to the expanded use by grain companies of the incentive discounts applicable on grain shipped in blocks of 25 or more railcars. Even so, it must be remembered that statutory revenues are derived not only from the assessment of applicable freight rates and any earned discounts, but from a variety of other elements as well.[141] The

[137] The values cited here in determining the revenue cap were drawn from railway traffic statistics for the 1998 calendar year.

[138] A volume-related composite price index, which is used to adjust for inflation under the revenue cap regime, is determined annually by the Canadian Transportation Agency in advance of the crop year. For the 2006-07 crop year, the Agency determined the value of the volume-related composite price index to be 1.1252, which represented a year-over-year increase of 6.6%. See Canadian Transportation Agency Decision Number 253-R-2006 dated 28 April 2006.

[139] See Canadian Transportation Agency Decision Number 655-R-2007 dated 28 December 2007.

[140] The margins recorded during this period increased from 0.8% in the 2000-01 crop year, to 3.8% in the 2001-02 crop year, and to 5.6% in the 2002-03 crop year.

[141] The calculation of prescribed railway's grain revenues under the revenue cap also takes into consideration a number of secondary elements, such as the amounts received for ensuring car supply or premium service. In addition, certain reductions from these revenues are also allowed, and include amortized contributions for the development of grain-related facilities not owned by the railway (Industrial Development Fund contributions), and amounts paid for interswitching. For a complete listing of the elements included in the calculation of statutory grain revenues, please consult Canadian Transportation Agency decisions 114-R-2001.

relatively fixed, rather than variable, nature of some of these latter elements undoubtedly also contributed to the widening of this margin during a period when grain volumes were declining due to drought.[142] Even though increased grain volumes has done much to reduce the gap between allowable, and actual, railway revenues, the narrowness of the margins in the 2003-04 through 2006-07 crop years suggests that both carriers have become very adept at managing their revenues since the inception of the revenue cap regime. Much of this improved ability can be traced to the carriers' adoption of secondary rate adjustments as a mechanism in ensuring that actual revenues came as close as possible to the limits imposed by the revenue cap.

It is worth mentioning that one of the more contentious issues to arise in recent years with respect to the revenue cap has been that of the allowance accorded to the maintenance of the government's fleet of covered hopper cars. This effectively came to a head when the Farmer Rail Car Coalition made a bid to acquire these cars in 2004.[143] The FRCC's proposal was founded largely on the principle that these costs could effectively be reduced to an estimated annual average of $1,500 per car from the $4,329 per car that the railways were provided under the revenue cap.[144] A subsequent examination into these costs suggested that the railways' actual maintenance costs did in fact fall well below the allowance that had been granted.

In light of this, one of the provisions subsequently brought forward by the federal government under Bill C-11 entailed an amendment to the *Canada Transportation Act* so as to permit the Canadian Transportation Agency to make a one time adjustment to the maintenance allowances accorded to CN and CP under the revenue cap.[145] By more closely aligning this compensation with the actual cost of maintaining the hopper cars in regulated grain service, it was estimated that allowable carrier revenues could be reduced by as much as $2.00 per tonne. On 26 June 2007, the federal Minister of Transport, Infrastructure and Communities initiated this re-evaluation by formally requesting that the Agency make the necessary one-time adjustment to the volume-related composite price index.

As the 2006-07 crop year came to a close this process was well under way. Moreover, the Agency had already advised both CN and CP that its adjustment would have application to revenues earned by the carriers over the course of the entire 2007-08 crop year. However, since a final determination was not expected much before the end of January 2008, the Agency issued an interim decision advising the railways that it was rolling back the previously determined volume-related composite price index for the crop year from 1.1611 to 1.0884.[146]

142 The Canadian Transportation Agency does not make public any information pertaining to the specific makeup of the reductions applied when calculating the statutory grain revenues of either CN or CP. Nevertheless, a fixed annual reduction, such as might be embodied in the annualized contributions made by a railway from its Industrial Development Fund, implies that the margin would widen in the face of falling grain volumes. By the same token, a narrowing of this margin would be expected in the face of an increase in grain volumes.

143 More detailed information on the efforts of the Farmer Rail Car Coalition to acquire these cars can be found in the Monitor's annual reports for the 2004-2005 and 2005-2006 crop years.

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

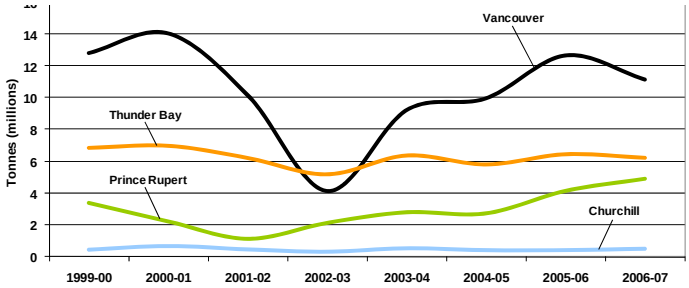
145 Bill C-11, *An Act to amend the Canada Transportation Act and the Railway Safety Act and to make consequential amendments to other Acts*, received Royal Assent on 22 June 2007.

146 See Canadian Transportation Agency Decision Number 388-R-2007 dated 31 July 2007.

3.4 Terminal Elevator and Port Performance *[Measurement Subseries 3D]*

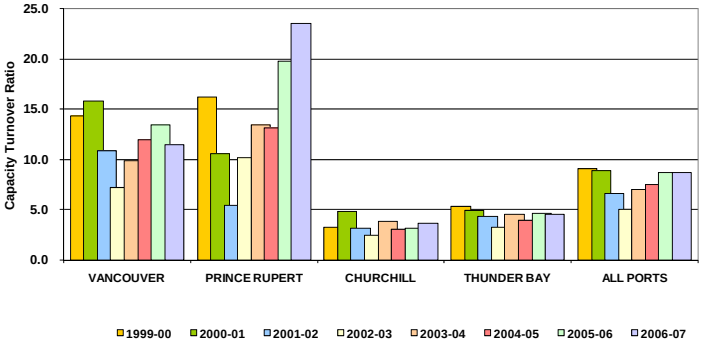
Port throughput, as measured by the volume of grain shipped from the terminal elevator and bulk loading facilities located at Canada's four western ports, totalled 22.8 million tonnes in the 2006-07 crop year.[147] This marked a minor reduction from the previous year, having fallen 3.8% from 23.7 million tonnes. [See Table 3D-1 in Appendix 4.]

Figure 59: Western Canadian Ports – Grain Throughput



Decreases in throughput were noted for the GHTS's two primary ports. For the largest of these, Vancouver, total marine shipments from the port fell by 12.0%, to 11.1 million tonnes from 12.7 million tonnes a year earlier. Moreover, these accounted for just under half, 48.8%, of the GHTS's total throughput volume. Much of the 4.5-percentage-point loss in Vancouver's share was assumed by Prince Rupert, where shipments climbed to their highest level under the GMP, increasing 18.5% to a record 4.9 million tonnes from 4.2 million tonnes a year earlier. When combined, the volume passing through these two west coast ports accounted for 70.4% of the overall total. Although consistent with the 70.9% share these ports secured a year earlier, it marked the second consecutive year in which this share actually reached above the 68.8% garnered in the first year of the GMP.

Figure 60: Average Terminal Elevator Capacity Turnover



Given the limited scope of this net change, there was a minimal impact on the share accorded to the GHTS's other two ports. To be sure, the share secured by the ports of Thunder Bay and Churchill has remained largely unchanged from that witnessed eight years earlier, falling to 29.1% from 31.2% over this period. At Thunder Bay, the dominant eastern gateway, throughput in the 2006-07 crop year declined by 3.5%, to 6.2 million tonnes from 6.5 million tonnes the year before. Churchill, the port with traditionally the lowest volume, saw its throughput increase by 17.0%, to 516,300 tonnes from 441,100 tonnes.

Capacity Turnover

The decreased volume passing through the ports in the 2006-07 crop year was the underlying force behind an overall 4.6% reduction in the terminal elevator system's capacity-turnover ratio, which fell to an average of 8.3 turns from 8.7 turns a year earlier.[148] Even so, not all of the ports reported downturns. The ratio for the port of Prince Rupert itself increased by 18.7%, climbing to a record 23.5 turns from 19.8 turns the year before. Similarly, Churchill, with an increase of 15.2%, posted the next largest comparative gain, 3.7 turns versus 3.2 turns a year earlier. For the most part, these gains reflected increases in throughput volumes. Those ports

[147] Includes grains, oilseeds and special crops covered by the Canada Grain Act as reported by the Canadian Grain Commission. This may differ from the data based on origination as supplied by the railways.

[148] The capacity turnover ratio of the terminal elevator network is a simple average based on each facility's individual handlings. As such, the measures for Vancouver and Thunder Bay, as well as the GHTS at large, can be skewed by outlying values. The magnitude of the year-over-year changes cited here do not necessarily correspond with those of throughput alone.

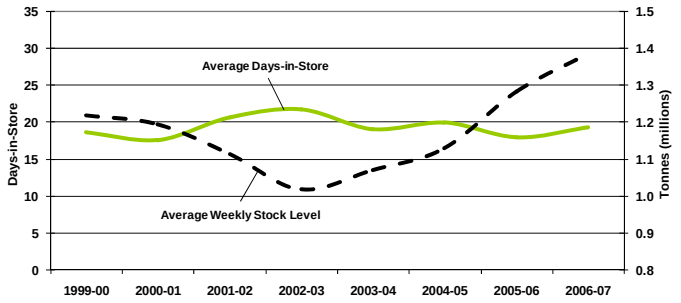
with a reduction in throughput reported corresponding decreases in their ratios: Thunder Bay posted a 1.2% decrease to 4.5 turns; while Vancouver registered a 13.9% decrease to 11.5 turns. [See Table 3D-2 in Appendix 4.]

Owing to the limited transformation of the terminal elevator network over the past eight years, the capacity turnover ratio has shown itself to be highly sensitive to changes in terminal throughput. As such, a comparison of the changes in these measures reveals patterns that are virtually indistinguishable.[149]

Terminal Elevator Inventories

Over the course of the GMP, the amount of grain held in inventory at terminal elevators has proven itself to be sensitive to changes in the system's overall handlings, seldom straying too far from 6% of total throughput. However, despite a 3.8% decrease in throughput for the 2006-07 crop year, the average weekly stock level rose by 8.1% to almost 1.4 million tonnes. This was due primarily to a sharp build-up in inventories at Thunder Bay and Churchill, which rose by 25.8% and 22.8% respectively. These increases were tempered by reductions at Prince Rupert and Vancouver, where average inventories declined by 7.9% and 10.9% respectively.

Figure 61: Terminal Elevators – Weekly Stock Level and Days-in-Store



Wheat stocks have traditionally accounted for about half of the system's overall inventories. However, these have been partially displaced by other commodities in recent years. Increasing by 9.5% to almost 0.6 million tonnes, wheat's share of the overall total rose marginally to 42.7% from 42.1% a year earlier. Canola stocks, which were allocated the second largest amount of storage space, climbed by 15.7% to an average of 0.3 million tonnes. The largest relative stock increases were made by flaxseed and barley, which rose by 71.5% and 37.9% respectively, and accounted for over 0.2 million tonnes collectively. The remaining 0.3 million tonnes of inventory, composed chiefly of durum, but including oats and peas as well, was reduced by about 13.7% from the previous year. [See Table 3D-3 in Appendix 4.]

To a large extent, the increase in terminal stocks was accompanied by an increase in the amount of time grain spent in inventory. The overall average number of days-in-store for the 2006-07 crop year shows a year-over-year increase of 7.3%, climbing to 19.2 days from 17.9 days the year before. Even so, this 1.3-day increase did not reflect an across-the-board jump in average storage times. Mention must be made of the fact that a reduction of 1.7 days at Prince Rupert did much to allay the upward pressure that came as a result of sharp increases at both Thunder Bay and Churchill, which rose by 4.6 days and 4.0 days respectively. [See Table 3D-4 in Appendix 4.]

To a large extent, the scope of activity at west coast ports ensures that inventories maintained in Vancouver and Prince Rupert turn over faster than those of Thunder Bay and Churchill. In fact, the 15.3-day average posted by Vancouver, as well as the record-setting 7.4-day average produced by Prince Rupert, continued to rank among the lowest values observed under the GMP. Some of the more pronounced changes recorded for the 2006-07 crop year are summarized in the table that follows:

[149] The only material change to the capacity turnover ratio came as a result of the de-licensing of Agricore United's "M" terminal in Thunder Bay at the close of the 2002-03 crop year. This was because the removal of the facility's 91,000 tonnes of idle storage capacity helped bolster the handling efficiency of the port as well as the terminal elevator network at large. The de-licensing of this terminal resulted in a 3.3% improvement to the network's handling efficiency.

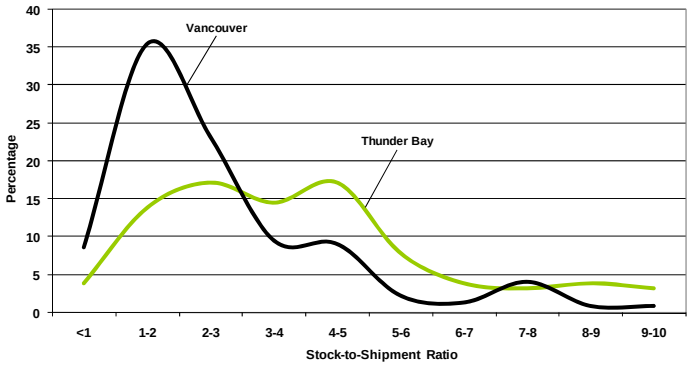
	Days in Store	Change	Remarks
Terminal Ports			
Prince Rupert	7.4 days	Down 18.7%	Lowest average number of days-in-store
Vancouver	15.3 days	Up 2.0%	
Thunder Bay	31.6 days.	Up 17.0%	
Churchill	31.9 days	Up 14.3%	Highest average number of days-in-store
Notable Grains			
Oats	15.9 days	Down 38.4%	Lowest average number of days-in-store
Wheat	17.0 days	Down 0.6%	
Canola	18.1 days	Up 24.0%	
Flaxseed	38.5 days	Up 38.0%	Highest average number of days-in-store
Barley	33.4 days	Up 97.6%	

Whether sufficient stocks were on hand to meet demand can best be gauged by the average weekly stock-to-shipment ratios. This ratio provides an indication of how terminal stock levels are related to the volume of grain loaded onto ships during the course of any particular week.[150] For Vancouver, the average for all stock-to-shipment ratios came in comfortably above a value of 2.0. Aside from wheat, durum and pea stocks, which posted decreases of 1.8%, 60.3% and 12.7% respectively, these ratios all posted increases. These increases ranged from a low of 12.9% on flaxseed, to a high of 106.4% on barley. [See Table 3D-5 in Appendix 4.]

As with Vancouver, the average ratios at Thunder Bay were also well above a value of 2.0. However, since the port's inventories grew in the face of a reduction in throughput, all of the ratios rose. These increases ranged from a statistically insignificant 0.2% for peas, to 67.3% for oats. At Prince Rupert, where throughput increased significantly, the average ratios for wheat and durum fell by 27.4% and 50.8% respectively.[151] The ratios posted by Churchill increased by 42.6% to 2.7 in the case of wheat, while falling 24.6% to 3.1 in the case of durum.

On the whole, these measures affirm that sufficient terminal stocks were generally maintained in the face of prevailing demand, although the measures also indicate that stock shortages were experienced periodically. And while grade-based stock-to-shipment ratios show a greater degree of variability, they too indicate that stock levels were generally sufficient to meet demand throughout much of the crop year. [See Table 3D-6 in Appendix 4.]

Figure 62: Distribution of Weekly Stock-to-Shipment Ratios



When examining the frequency with which weekly stock-to-shipment ratios fell below a value of 1.0, the ports of Vancouver and Thunder Bay both can be seen to have had a greater incidence of such

[150] As a multiple of the volume of grain ultimately shipped in a given week, the stock-to-shipment ratio provides an objective measurement of whether or not sufficient terminal stocks were on hand to meet short-term demand. Ratio values of one or more denote a sufficient amount of stock on hand. By way of example, a ratio of 2.5 would indicate that two-and-a-half times the volume of grain ultimately shipped in a given week had been held in inventory at the beginning of that same week.

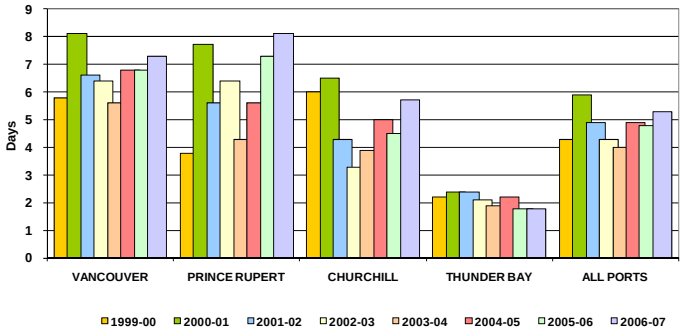
[151] Wheat is the only grain with sufficient consistency in shipments from Prince Rupert to allow for the calculation of stock-to-shipment ratios for each of the seven crop years covered by the GMP.

occurrences in the 2006-07 crop year.[152] In the case of Vancouver this happened in 8.6% of all instances, about one-quarter more often than the preceding crop year's 6.7% rate would indicate. At Thunder Bay the incidence of occurrence climbed more sharply, to 4.0% from just 0.6% a year earlier.

Port Operations

A total of 769 vessels called for grain at western Canadian ports during the 2006-07 crop year. This represented a 1.4% decrease from the 780 ships that arrived for loading a year earlier. While this was consistent with a 3.8% decrease in throughput, it also suggested that larger vessels played a somewhat diminished role in moving export grain. This was particularly evident in the movement of grain from Prince Rupert, where 73.8% of the 107 ships that arrived took on loads in excess of 30,000 tonnes, as compared to 85.5% a year earlier.[153]

Figure 63: Average Vessel Time in Port



Despite the variation in volume witnessed over the course of the GMP's first five years, the amount of time spent by vessels in port generally fluctuated between 4.0 and 4.5 days.[154] However, the quarterly averages posted since the 2004-05 crop year has shown a comparatively greater degree of variability. For the 2006-07 crop year, this again proved to be the case, with the quarterly average having climbed to a record breaking 9.0 days in the third quarter before then descending to a near-record low of 3.1 days in the fourth. The overall impact was a sharp rise in the average for the crop year, which rose by 10.4% to 5.3 days from 4.8 days a year earlier. On the whole, waiting times increased by an average of 30.0% to 2.6 days, while the amount of time given over to the actual loading of these vessels fell by 3.6% to an average of 2.7 days.[155]

Much of the impetus for this can be traced back to the effects of adverse weather on the west coast, and where loading delays proved largely responsible for longer times in port.[156] In Vancouver, the annualized average rose 7.4% to a near-record 7.3 days.[157] In Prince Rupert, the average time spent in port rose by 11.0%, to 8.1 days from 7.3 days the year before.

[152] A stock-to-shipment ratio of less than 1.0 does not mean that the port's terminal elevators were unable to meet vessel demand. Rather, it implies that existing grain inventories were insufficient, and that the shortfall would have to be covered using future railway deliveries. Direct-hit railway movements can effectively accommodate demand while negating any real need for grain to be stored at all.

[153] Feed wheat and feed barley accounted for a large portion of the increased volume of grain passing through Prince Rupert in recent years. These commodities are generally shipped in larger quantities than higher-quality grains. Comparatively, only 66.2% of the ships loaded at Prince Rupert in the 2003-04 crop year took on loads in excess of 30,000 tonnes. This increased to 83.9% in the 2004-05 crop year, and to 85.5% in the 2005-06 crop year, as a result of the shift towards handling more of these commodities. The 2006-07 crop year, however, saw a comparative decline in the shipment of these lower-grade commodities, and a corresponding reduction in the number of larger vessels that called.

[154] During the course of the GMP, there were instances where the quarterly average actually exceeded 4.5 days. The most significant quarterly deviations from this value were observed in the 2000-01 crop year.

[155] The number of days a vessel spent waiting is determined using the difference between the time the vessel passed the inspection of the Port Warden and Canadian Food Inspection Agency, and the time at which actual loading was commenced.

[156] See Section 2.37 for a fuller discussion of the effects of extreme weather on grain shipments in the 2006-07 crop year.

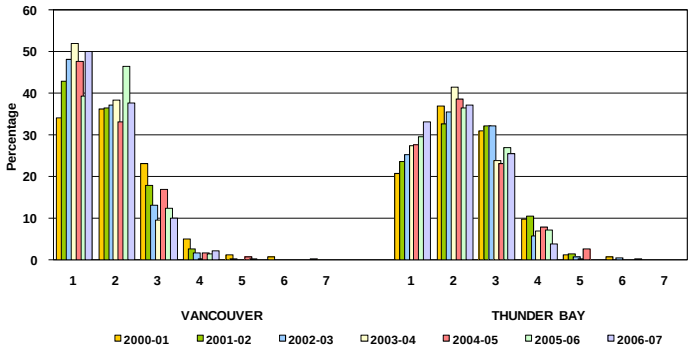
[157] For the 2000-01 crop year, the average amount of time spent by vessels in Vancouver reached a record 8.1 days.

The average for Churchill also rose sharply, increasing by 26.7% to an average of 5.7 days from 4.5 days the year before. This result was driven wholly by a 31.6% increase in the amount of time vessels spent loading at the port, which rose to an average of 5.0 days from 3.8 days a year earlier.

With a 1.8-day average, the overall amount of time spent by vessels in Thunder Bay remained unchanged from that posted a year earlier. Moreover, this average tied for the lowest recorded under the GMP. The component averages also remained unchanged, with the amount of time waiting to load holding at an average of 0.5 days while the average for actual loading stood at 1.3 days. Thunder Bay's averages continue to represent the lowest of the four ports in western Canada. This stems chiefly from the greater regularity with which vessels move through the St. Lawrence Seaway, the port's ample storage capacity, and the limited delays incurred by vessels waiting to berth. [See Table 3D-7 in Appendix 4.]

Despite the increased averages noted above, the distribution of vessel times in port shows that marginally fewer ships needed more than five days to clear. At Vancouver, this proportion fell to 48.5% from 50.5% a year earlier. Similarly, Prince Rupert saw its proportion decrease to 47.7% from 53.0% in the same period. At Thunder Bay, where the proportion is traditionally even lower, 2.1% required stays of this duration versus 2.4% a year earlier. Running counter to these trends was Churchill, which saw the proportion of vessels in port for longer than five days rise sharply, to 46.2% from 13.3% the year before. [See Table 3D-8 in Appendix 4.]

Figure 64: Number of Berths per Vessel



These shifts appear to have been fuelled in part by the reduced number of vessels needing to berth at more than one terminal in order to load their cargoes. The proportion of vessels requiring a multiple berthing at Vancouver decreased to 49.9% from 60.6% a year earlier. At Thunder Bay, the proportion remained largely unchanged, falling only marginally to 66.9% from 70.4% in the same period.[158] [See Table 3D-9 in Appendix 4.]

Demurrage and Dispatch

Members of the WGEA and the CWB reported total vessel demurrage costs and dispatch earnings to the Monitor.[159] This is intended to provide some indication of the effectiveness with which grain flowed through western Canadian ports. For the 2006-07 crop year, net earnings increased by 12.1% from what they had been a year earlier, to $9.5 million from $8.5 million.

Despite this improvement, the gain was tempered by a 125.1% increase in demurrage costs, which rose to $15.1 million from $6.7 million the year before. This was driven by a 122.4% increase in the demurrage costs incurred along the Pacific Seaboard, which climbed to $13.8 million from $6.2 million. In comparison with those from the west coast, the charges arising from the delay of vessels at Churchill, Thunder Bay, and along the St. Lawrence Seaway, increased by an even greater 157.3% in the 2006-07 crop year, to $1.3 million from $0.5 million the year before.

Total dispatch earnings for the 2006-07 crop year increased by 62.0%, rising to $24.6 million from $15.2 million a year earlier. On the west coast, dispatch earnings climbed by 66.0% to $15.9 million. A 55.1% increase in

[158] It should be noted that the number of berths each vessel may make prior to the assessment of any financial penalties is negotiated as part of a charter contract. Larger vessels may have terms permitting them to berth more frequently than smaller ships without incurring any such charges.

[159] Note should be made of the fact that the data – which is both un-audited and aggregated – pertains to vessel shipments made during each crop year and, as such, may vary from the figures presented in the financial statements of these organizations.

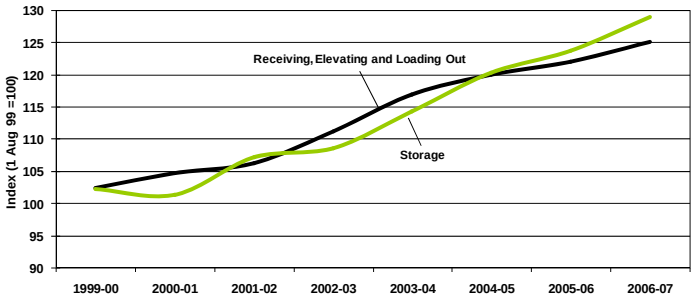
dispatch earnings was posted for Churchill, Thunder Bay, and the St. Lawrence Seaway, which climbed to $8.7 million from $5.6 million a year earlier. [See Table 3D-10 in Appendix 4.]

The sharp rise in demurrage costs experienced in the 2006-07 crop year, along with a similarly large increase in the amount of time vessels spent in port, suggests that a significant number of vessels were unable to be loaded in accordance with the lay days provided in their charters. Nevertheless, these were outnumbered by a larger number that were able to be released more quickly than expected.

Average Handling Charges

As with the rates posted for primary elevator handling activities, those for terminal elevator activities also vary greatly. Here too, an examination of price movement is best performed using a composite index. As was the case for primary elevator handling activities, the rates for the receiving, elevating and loading out of grain are the terminal elevator system's most costly. At the end of the 2006-07 crop year these ranged from a low of about $8.08 per tonne for wheat delivered at Churchill, to a high of $13.71 per tonne for flaxseed shipped to Vancouver. The daily charge for storage ranged from about $0.07 to $0.13 per tonne.

Figure 65: Relative Change in Terminal Handling Charges



With respect to the rates posted for the receiving, elevating and loading out of grain, increases were noted for virtually all commodities in the 2006-07 crop year. Increases posted by Vancouver's terminal elevators ranged from 2.9% to 6.9%. At Prince Rupert, this spread went from 2.4% to 2.9%. Thunder Bay put forward increases that ranged from 1.6% to 3.5%. Churchill, where these rates remained unchanged for a third year in a row, proved to be the exception. The composite price index used by the Monitor shows that the cost of these services effectively rose by a further 2.7% in the last crop year. It also showed that the combined value of all increases made since the beginning of the GMP had reached 25.0%. [See Table 3D-11 in Appendix 4.]

The charges for terminal storage have also risen since the beginning of the GMP. In the 2006-07 crop year, these rates rose by 4.2%, and brought the accumulated price increase over the last eight years to 28.9%. Vancouver reported the largest year-over-year gain, with an increase of 6.7%. The terminals at Thunder Bay and Prince Rupert followed with increases that averaged 5.4% and 2.9% respectively. The overall increase in the composite price index was tempered by the fact that Churchill also chose to extend its existing storage rates a third consecutive year.[160]

3.5 Summary Observations

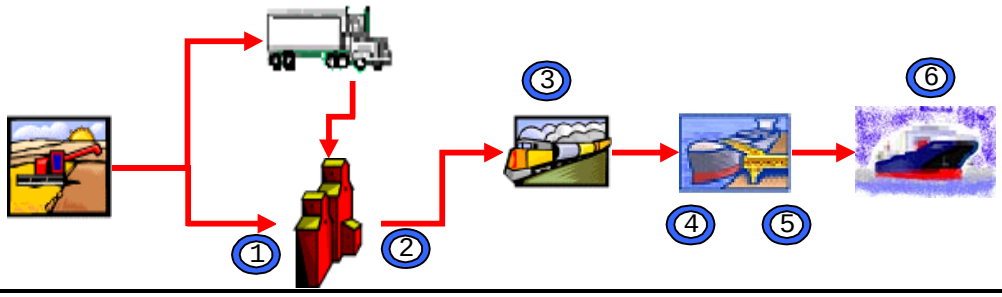
As outlined in earlier editions of the Monitor's quarterly and annual reports, the supply chain model provides a useful framework by which to examine the speed with which grain moves through the GHTS. In this regard, the Monitor's annual report for the 2005-06 crop year concluded that the amount of time taken by grain as it moved through the supply chain had fallen to a record low under the GMP of 56.6 days.

This result was driven largely by a two-day reduction in the amount of time spent by grain in storage in the terminal elevator system, which fell to a record low of 17.9 days. This was also supported by some of the

[160] It should be noted that these observations are based solely on those terminals that did not adopt a system of *escalating storage charges*. These figures should, therefore, be viewed as a lower estimate of posted rate increases. Five terminals – two at Thunder Bay and three along the West Coast – posted tariffs based on a system of escalating storage charges, which define a series of incrementally higher rates as storage time increases. Without average days-in-store data for the terminals using such rates, it is not possible to calculate an accurate rate for incorporation into the wider port averages.

lowest values recorded for time spent in country elevator storage and loaded railway transit, which amounted to 30.1 days and 8.6 days respectively.

Figure 66: The GHTS Supply Chain



	SUPPLY CHAIN ELEMENT	TABLE	1999-00	2002-03	2003-04	2004-05	2005-06	2006-07	SUPPLY CHAIN EFFECT
	SPEED RELATED								
2	Country Elevator – Average Days-in-Store	3B-4	41.7	47.9	34.4	29.5	30.1	30.7	▲
3	Average Railway Loaded Transit Time (days)	3C-4	9.2	10.1	8.9	8.7	8.6	8.2	▼
5	Terminal Elevator – Average Days-in-Store	3D-4	18.6	21.7	19.0	19.9	17.9	19.2	▲
	Average Total Days in GHTS		69.4	79.7	62.3	58.1	56.6	58.1	▲
	SERVICE / ASSET RELATED								
1	Average Country Elevator Capacity Turnover Ratio	3B-2	4.8	3.7	5.6	5.6	6.2	6.5	▲
4	Average Terminal Elevator Capacity Turnover Ratio	3D-2	9.1	5.0	7.0	7.5	8.7	8.3	▼
3	Average Railway Car Cycle (days)	3C-4	19.9	20.4	16.7	18.7	17.3	16.8	▼
6	Average Vessel Time in Port (days)	3D-7	4.3	4.3	4.0	4.9	4.8	5.3	▲

Although the railways' average loaded transit time was reduced by another 0.4 days in the 2006-07 crop year, it was not enough to counteract the net increases in both country and terminal elevator storage times, which rose by a combined 1.9 days. As a result, grain took an average of 58.1 days to move through the supply chain during the 2006-07 crop year. Although this proved to be 1.5 days more than the 2005-06 crop year's average, it remains among the better values recorded under the GMP. Still, a few other observations concerning the supply chain's performance during the crop year are warranted:

- Firstly, despite a 7.6% reduction in the grain supply, which totalled 61.7 million tonnes as compared to the previous crop year's 66.8 million tonnes, it proved to be one of the largest made available for movement under the GMP. Moreover, until volumes fell off sharply in the third quarter, the throughput of Canada's western ports was within but a few percentage points of previous records. As a result, the pressures brought to bear on the GHTS early in the 2006-07 crop year can be deemed to have been comparable to some of the busiest periods experienced thus far under the GMP.

- Secondly, the quality of the grain that moved through the GHTS was superior to that moved in each of the last two crop years. At such, the mix of grains and grades passing through the system more closely resembled those depicted at the beginning of the GMP. Even so, changes in both the international marketplace as well as the competitive environment – perhaps best exemplified by the increasing

demand for canola along with CN's efforts to sway more traffic to Prince Rupert – are working to alter these traditional traffic flows.

- Finally, there is evidence to suggest that grain is moving through the supply chain at a noticeably faster pace than it was eight years before. Much of this improvement is tied to a reduction in the amount of time spent by grain as inventory in the country elevator network. Although this has clearly been driven by the rationalization of these same facilities, improvement is now also being observed in the loaded transit times posted by the railways. Although the 8.2-day average noted for the 2006-07 crop year rivals some of the best yet recorded under the GMP, problems with car supply and railway service continued to be a concern for many GHTS stakeholders.

Section 4: 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 – 2006-07 Crop Year

Port Performance

- *Overall reliability reflected in:*
  - *Adequate terminal stock levels at the ports of Vancouver and Thunder Bay.*
    - *Stock-to-vessel requirement, and stock-to-shipment, ratios generally maintained at levels well above 2.0.*
- *Increased grain inventories reflected in generally higher average weekly stock-to-vessel-requirements ratios.*
  - *Vancouver*
    - *Wheat – 3.3; down by 1.9% from last crop year.*
    - *Canola – 2.8; up by 21.0%.*
  - *Thunder Bay*
    - *Wheat – 7.0; up by 4.7% from last crop year.*
    - *Canola – 5.3; up by 20.1%.*
- *Stock-to-shipment ratios revealed similarly modest changes.*
  - *Vancouver*
    - *CWB grains – 2.9; down by 9.0% from last crop year.*
    - *Non-CWB grains – 3.6; up by 11.8%.*
  - *Thunder Bay*
    - *CWB grains – 6.2; down by 9.9% from last crop year.*
    - *Non-CWB grains – 4.4; up by 22.8%.*
- *Terminal handling revenues decreased by 8.3% to $286.4 million.*
  - *Vancouver revenues totalled $202.9 million.*
    - *Down by 10.0% from last crop year.*
  - *Thunder Bay revenues totalled $83.5 million.*
    - *Down by 3.9% from last crop year.*
- *CWB carrying costs decreased by 3.0% to $129.8 million.*
  - *Pacific Seaboard carrying costs totalled $93.9 million.*
    - *Down by 1.6% from last crop year.*
  - *Thunder Bay carrying costs totalled $35.9 million.*
    - *Down by 6.7% from last crop year.*

Indicator Series 4 – Service Reliability

Table	Indicator Description	Notes	BASE 1999-00	CURRRENT REPORTING PERIOD (1) 2005-06	2006-07	% VAR	
	Port Performance [Subseries 4A]						
4A-1	Avg. Weekly Stock-to-Vessel Requirements Ratio – VCR – Wheat		3.1	3.4	3.3	-1.9%	▼
4A-1	Avg. Weekly Stock-to-Vessel Requirements Ratio – VCR – Canola		2.5	2.3	2.8	21.0%	▲
4A-1	Avg. Weekly Stock-to-Vessel Requirements Ratio – TBY – Wheat		5.6	6.6	7.0	4.7%	▲
4A-1	Avg. Weekly Stock-to-Vessel Requirements Ratio – TBY – Canola		2.8	4.4	5.3	20.1%	▲
4A-2	Avg. Weekly Stock-to-Vessel Requirements Ratio – Grade	(2)					
4A-3	Avg. Weekly Stock-to-Shipment Ratio – VCR – CWB Grains		3.5	3.2	2.9	-9.0%	▼
4A-3	Avg. Weekly Stock-to-Shipment Ratio – VCR – Non-CWB Grains		3.6	3.2	3.6	11.8%	▲
4A-3	Avg. Weekly Stock-to-Shipment Ratio – TBY – CWB Grains		4.6	6.8	6.2	-9.9%	▼
4A-3	Avg. Weekly Stock-to-Shipment Ratio – TBY – Non-CWB Grains		3.3	3.6	4.4	22.8%	▲
4A-4	Terminal Handling Revenue ($millions) – Vancouver		$192.7	$225.5	$202.9	-10.0%	▼
4A-4	Terminal Handling Revenue ($millions) – Thunder Bay		$82.1	$86.9	$83.5	-3.9%	▼
4A-4	CWB Carrying Costs ($millions) – Pacific Seaboard		$63.3	$95.4	$93.9	-1.6%	▼
4A-4	CWB Carrying Costs ($millions) – Thunder Bay		$31.3	$38.5	$35.9	-6.7%	▼

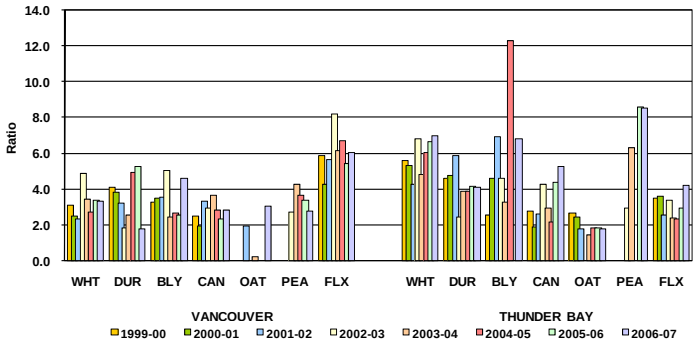
(1) – In order to provide for more direct comparisons, the values for the 1999-2000 through 2006-07 crop years are "as at" or cumulative to 31 July unless otherwise indicated.
(2) – Changes in the data cited cannot be depicted within the summary framework presented here. The reader is encouraged to consult the detailed data tables found in Appendix 4 as required.

4.1 Port Performance *[Measurement Subseries 4A]*

Average weekly stock-to-vessel requirement ratios are calculated for major grains at Vancouver and Thunder Bay using weekly reports of the tonnage held in inventory at terminal elevators, and the coming weeks' forecast of vessel arrivals. By comparing terminal stocks-in-store to the demand requirements of vessels scheduled to arrive, short-term supply can be gauged against short-term demand. By way of example, a ratio of 2.5 would indicate that 2.5 tonnes of grain was being held in inventory for each tonne of grain needed for loading onto vessels arriving in the next week.[161]

With respect to the average weekly stock-to-vessel requirements ratios for grains held in inventory at the port of Vancouver, the 2006-07 crop year produced some sharp year-over-year changes. Among CWB grains, the ratio posted for wheat fell by 1.9%, to 3.3 from 3.4 a year earlier. This was joined by a 65.8% reduction in the average ratio for durum, which fell to 1.8 from 5.2. The ratio for barley, on the other hand, rose by 79.8%, to 4.6 from 2.6 the year before. In the case of non-CWB grains, the results proved equally mixed: gains of 21.0% and 11.5% for canola and flaxseed respectively; with a reduction of 17.8% for peas.

Figure 67: Stock-to-Vessel Requirements Ratio



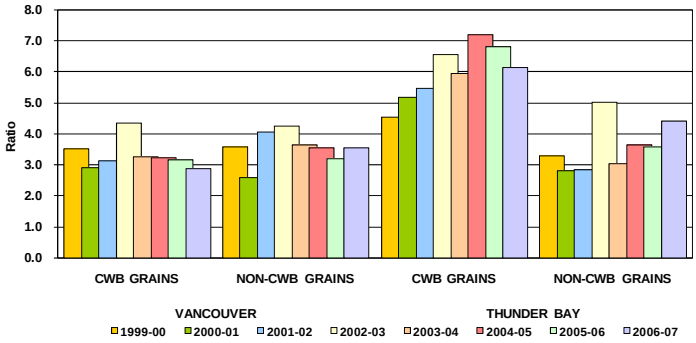
The year-over-year changes in the ratios for Thunder Bay were also mixed, but less dramatic. In the case of CWB grains, the ratio for wheat rose by 4.7% to 7.0, while that of durum fell by 2.4% to 4.1. Among the non-CWB grains, the ratios for canola and flaxseed increased by 20.1% and 43.1% respectively, while that of oats decreased by 4.3%. None of the average ratios, save that for oats, fell below a value of 2.0. [See Table 4A-1 in Appendix 4.]

[161] Ratio values of one or more denote sufficient volume on hand to meet short-term demand. Upward or downward movements in this ratio are indicative of a relative change in short-term inventory levels. It should be noted that these ratios can display great variability owing to the uneven nature of grain flowing into, and through, the ports.

Average weekly stock-to-vessel-requirement ratios by grade were calculated using a similar methodology. The variability in these weekly ratios is even more extreme, and largely distorted by blending, as is necessary for the shipment of "Western Canada Wheat." Even so, comparatively few of the grade-specific averages fell below a value of 1.0. Those that did were largely confined to the Pacific Seaboard, and generally restricted to the lower grades of wheat and durum. [See Table 4A-2 in Appendix 4.]

A related measure involves the calculation of average weekly stock-to-shipment ratios for both CWB and non-CWB grains. This measure provides an indication of how terminal stocks-in-store related to the volume of grain actually loaded – as opposed to that expected to be loaded – onto vessels during the course of any particular week, and is interpreted in the same way as stock-to-vessel requirement ratios.

Figure 68: Stock-to-Shipment Ratio



For the purposes of segmentation, average weekly stock-to-shipment ratios for wheat, durum, and barley are deemed to depict those of CWB grains, although it is acknowledged that a small portion of wheat and barley stocks – as well as shipments – at Thunder Bay are in fact non-CWB feed grains. The ratios for canola, oats and flaxseed are deemed to be representative of the non-CWB grains.

The average stock-to-shipment ratio for CWB grains at Vancouver decreased by 9.0% during the 2006-07 crop year, falling to 2.9 from 3.2 a year earlier. The average ratio for non-CWB grains, on the other hand, increased by 11.8%, to 3.6 from 3.2. At Thunder Bay, the average ratio for CWB grains fell by 9.9%, to 6.2 from 6.8,. An increase of 22.8% in the average for non-CWB grains boosted the ratio to 4.4 from 3.6 the year before. Clearly, these values reveal that ample stocks were generally on hand to meet the prevailing short-term demand. [See Table 4A-3 in Appendix 4.]

Terminal Revenues and CWB Carrying Costs

The GMP includes a provision for an annual reporting of terminal elevator revenues and CWB inventory carrying costs at terminal elevators. The WGEA and its members developed a method of reporting total terminal revenues using a number of key financial measures, and provided data for their terminals at Thunder Bay and Vancouver. The CWB provided a breakdown of their terminal costs using an aggregate for Pacific Seaboard terminals, in addition to that of Thunder Bay. It should be noted here, however, that differences in accounting practices make direct comparisons between total revenues and CWB costs difficult. The terminal revenue and cost data presented is un-audited. [See Table 4A-4 in Appendix 4.]

Total reported terminal revenues for the 2006-07 crop year decreased by 10.0% at Vancouver, falling to $202.9 million from $225.5 million. At Thunder Bay, total reported terminal revenues fell by a lesser 3.9%, to $83.5 million from $86.9 million.

Total CWB carrying costs along the Pacific Seaboard declined marginally in the 2006-07 crop year, falling by just 1.6% to $93.9 million from $95.4 million the year before. At Thunder Bay these carrying costs decreased by a more significant 6.7%, and were reduced to $35.9 million from $38.5 million a year earlier.

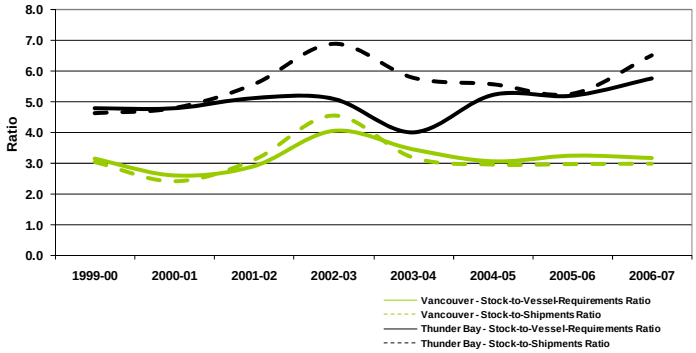
4.2 Summary Observations

As a means of gauging the reliability of the GHTS, the GMP examines terminal stock levels against both the stated requirements and actual shipments of vessels loading at western Canadian ports. The resultant ratios provide an indication of whether or not sufficient quantities of grain were available at the terminals to meet the demand presented by the vessels loading during any particular week. Since the inception of the GMP it has

been observed that these stocks generally exceed the immediate needs of these vessels by a comfortable margin. In fact, when examining the weighted ratios for both Vancouver and Thunder Bay it can be seen that three to five times the tonnage needed to accommodate the loading of these vessels was typically already in inventory. These values are well above those necessary to consider a delivery system as having met the minimum standards for reliability. In short, to the extent that the reliability of any supply chain can be gauged by its ability to actually deliver product at the time and place specified, the western Canadian GHTS can be deemed reliable.

For the GHTS as a whole, stock-to-vessel-requirement, and stock-to-shipment, ratios with values of about 1.0 might be considered optimal targets since they would denote an effective balance between supply and demand. While the higher averages observed under the GMP indicate that the GHTS has proven itself quite reliable in positioning grain for export, the ratios attributable to individual commodities and grades have also been noted to fall below this threshold for short periods of time. In most instances, these occurrences pinpoint the system's failure to deliver grain as required, whether as a result of an inadequate supply of inland grain, covered hopper cars or some other reason. The irregular nature of these events suggests that they are not systemic problems, but rather the product of periodic breakdowns in the GHTS's various subsystems.

Figure: 69: Average Stock-to-Vessel Requirements and Stock - Shipments Ratios – Vancouver and Thunder Bay



Despite some evidence implying that there has been an effort to reduce these ratios for certain grades of grain, the overall values remain comparatively high. In fact, there has been little meaningful change in the values posted since the beginning of the GMP. This strongly suggests that the grain industry, and more particularly those concerned with the operation of the terminal elevators, have focused their efforts on protecting the GHTS's overall reliability in delivering grain to port. While in itself positive, it must be noted that this is generally done at the expense of system efficiency since inventories are often maintained at levels well in excess of those required to meet prevailing demand.

Section 5: 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 – 2006-07 Crop Year

Producer Netback and Sampling Methodology

- *Sampling methodology defined 43 grain-delivery stations drawn from 9 geographic areas across western Canada.*

Export Basis and Producer Netback – CWB Grains

- *Producer netback:*
  - *Increases largely price-driven.*
    - *Wheat – increased 10.5% to $156.04 per tonne.*
    - *Durum – increased 16.9% to $174.13 per tonne.*
- *Final Realized Price:*
  - *Modest increase attributable to tighter global grain supplies.*
    - *Wheat – increased 9.1% to $212.89 per tonne.*
    - *Durum – increased 14.1% to $227.55 per tonne.*
- *Export Basis:*
  - *Wheat – increased 2.2% to $63.20 per tonne.*
  - *Durum – increased 4.9% to $76.18 per tonne.*
- *Average direct costs:*
  - *Weighted applicable freight increased 6.8% for wheat, and 8.0% for durum.*
  - *Trucking costs increased by 7.2%.*
  - *Primary elevation costs increased by 2.6% for wheat, and 3.2% for durum.*
  - *Gross CWB costs:*
    - *Wheat – decreased by 11.1%.*
    - *Durum – increased by 4.4%.*
- *Total producer benefits:*
  - *Average trucking premiums:*
    - *Wheat – increased 12.9% to $5.15 per tonne.*
    - *Durum – increased 13.9% to $5.42 per tonne.*
  - *CWB transportation savings increased by 35.6% to $1.79 per tonne.*

Export Basis and Producer Netback – Non-CWB Commodities

- *Producer netback:*
  - *Increases largely price-driven.*
    - *Canola – increased 37.0% to $321.45 per tonne.*
    - *Yellow Peas – increased 39.2% to $165.26 per tonne.*
- *Prices for non-CWB commodities increased as a result of heightened demand.*
  - *Canola – increased 32.9% to $367.25 per tonne.*
  - *Yellow Peas – increased 32.5% to $227.43 per tonne.*
- *Average western Canadian export basis for non-CWB commodities:*
  - *Canola – increased 9.7% to $45.80 per tonne.*
  - *Yellow Peas – increased 17.4% to $62.17 per tonne.*

Producer Car Loading

- *Number of producer-loading sites decreased by nine to 474.*
  - *Class 1 railways gain 14 sites due to shortline acquisitions.*
    - *Posted increase of 4.0% to 368 sites.*
  - *Shortline sales and abandonments result in net reduction of 23 sites.*
    - *Total number falls to 106 sites; lowest recorded under GMP.*
- *Producer-car shipments increased 10.4% to 12,529 carloads.*
  - *Denoted largest producer-car volume recorded under the GMP.*
    - *Share of total hopper car movement climbed to 4.8%.*
    - *Share of CWB movement climbed to 7.4%.*

Indicator Series 5 – Producer Impact

Table	Indicator Description	Notes	BASE 1999-00	CURRRENT REPORTING PERIOD (1) 2005-06	2006-07	% VAR	
	Export Basis [Subseries 5A]						
	Manitoba East						
5A-1A	1 CWRS Wheat ($ per tonne)	(2)	$54.20	$59.64	$61.92	3.8%	▲
5A-1B	1 CWA Durum ($ per tonne)	(2)	$60.29	$65.42	$69.37	6.0%	▲
5A-1C	1 Canada Canola ($ per tonne)	(2)	$61.58	$37.08	$47.44	27.9%	▲
5A-1D	Canadian Large Yellow Peas – No. 2 or Better ($ per tonne)	(2)	$54.93	$52.44	$61.53	17.3%	▲
	Manitoba West						
5A-2A	1 CWRS Wheat ($ per tonne)	(2)	$57.80	$64.80	$64.89	0.1%	–
5A-2B	1 CWA Durum ($ per tonne)	(2)	$65.37	$70.82	$74.82	5.6%	▲
5A-2C	1 Canada Canola ($ per tonne)	(2)	$58.67	$41.80	$51.04	22.1%	▲
5A-2D	Canadian Large Yellow Peas – No. 2 or Better ($ per tonne)	(2)	$54.93	$51.40	$61.53	19.7%	▲
	Saskatchewan Northeast						
5A-3A	1 CWRS Wheat ($ per tonne)	(2)	$58.10	$67.36	$68.81	2.2%	▲
5A-3B	1 CWA Durum ($ per tonne)	(2)	$68.31	$74.46	$79.53	6.8%	▲
5A-3C	1 Canada Canola ($ per tonne)	(2)	$54.38	$47.93	$54.03	12.7%	▲
5A-3D	Canadian Large Yellow Peas – No. 2 or Better ($ per tonne)	(2)	$54.93	$52.51	$62.39	18.8%	▲
	Saskatchewan Northwest						
5A-4A	1 CWRS Wheat ($ per tonne)	(2)	$56.42	$64.60	$64.74	0.2%	–
5A-4B	1 CWA Durum ($ per tonne)	(2)	$70.53	$76.69	$79.21	3.3%	▲
5A-4C	1 Canada Canola ($ per tonne)	(2)	$50.88	$45.97	$49.22	7.1%	▲
5A-4D	Canadian Large Yellow Peas – No. 2 or Better ($ per tonne)	(2)	$54.84	$52.89	$62.07	17.3%	▲
	Saskatchewan Southeast						
5A-5A	1 CWRS Wheat ($ per tonne)	(2)	$59.40	$67.73	$69.98	3.3%	▲
5A-5B	1 CWA Durum ($ per tonne)	(2)	$65.22	$70.96	$74.15	4.5%	▲
5A-5C	1 Canada Canola ($ per tonne)	(2)	$57.47	$44.41	$50.71	14.2%	▲
5A-5D	Canadian Large Yellow Peas – No. 2 or Better ($ per tonne)	(2)	$54.72	$53.05	$62.19	17.2%	▲
	Saskatchewan Southwest						
5A-6A	1 CWRS Wheat ($ per tonne)	(2)	$57.22	$61.66	$63.32	2.7%	▲
5A-6B	1 CWA Durum ($ per tonne)	(2)	$68.12	$72.09	$75.97	5.4%	▲
5A-6C	1 Canada Canola ($ per tonne)	(2)	$55.75	$40.06	$43.45	8.5%	▲
5A-6D	Canadian Large Yellow Peas – No. 2 or Better ($ per tonne)	(2)	$54.66	$52.97	$62.13	17.3%	▲
	Alberta North						
5A-7A	1 CWRS Wheat ($ per tonne)	(2)	$53.20	$58.36	$58.35	0.0%	–
5A-7B	1 CWA Durum ($ per tonne)	(2)	$71.67	$76.24	$81.18	6.5%	▲
5A-7C	1 Canada Canola ($ per tonne)	(2)	$50.39	$37.84	$40.46	6.9%	▲
5A-7D	Canadian Large Yellow Peas – No. 2 or Better ($ per tonne)	(2)	$54.29	$52.82	$62.35	18.0%	▲
	Alberta South						
5A-8A	1 CWRS Wheat ($ per tonne)	(2)	$48.81	$56.28	$54.31	-3.5%	▼
5A-8B	1 CWA Durum ($ per tonne)	(2)	$66.06	$68.04	$69.22	1.7%	▲
5A-8C	1 Canada Canola ($ per tonne)	(2)	$48.07	$34.41	$36.33	5.6%	▲
5A-8D	Canadian Large Yellow Peas – No. 2 or Better ($ per tonne)	(2)	$54.93	$53.03	$62.41	17.7%	▲
	Peace River						
5A-9A	1 CWRS Wheat ($ per tonne)	(2)	$53.57	$61.44	$62.87	2.3%	▲
5A-9B	1 CWA Durum ($ per tonne)	(2)	$71.00	$78.29	$82.15	4.9%	▲
5A-9C	1 Canada Canola ($ per tonne)	(2)	$52.14	$42.04	$46.95	11.7%	▲
5A-9D	Canadian Large Yellow Peas – No. 2 or Better ($ per tonne)	(2)	$54.93	$52.98	$62.41	17.8%	▲
	Western Canada						
5A-10A	1 CWRS Wheat ($ per tonne)	(2)	$54.58	$61.81	$63.20	2.2%	▲
5A-10B	1 CWA Durum ($ per tonne)	(2)	$67.63	$72.61	$76.18	4.9%	▲
5A-10C	1 Canada Canola ($ per tonne)	(2)	$52.51	$41.76	$45.80	9.7%	▲
5A-10D	Canadian Large Yellow Peas – No. 2 or Better ($ per tonne)	(2)	$54.76	$52.94	$62.17	17.4%	▲
	Producer Loading [Subseries 5B]						
5B-1	Producer Loading Sites (number) – Class 1 Carriers		415	354	368	4.0%	▼
5B-1	Producer Loading Sites (number) – Class 2 and 3 Carriers		122	129	106	-17.8%	▼
5B-1	Producer Loading Sites (number) – All Carriers		537	483	474	-1.9%	▼
5B-2	Producer Car Shipments (number) – Covered Hopper Cars		3,441	11,345	12,529	10.4%	▲

(1) – In order to provide for more direct comparisons, the values for the 1999-2000 through 2006-07 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.

5.1 Introduction to the Export Basis and Producer Netback *[Measurement Subseries 5A]*

One of the principal objectives set for the GMP by the Government of Canada involved gauging the overall logistics cost associated with moving prairie grain to market – what is commonly referred to as the "export basis" – and the resultant "netback" arising to producers.[162] By definition, both the export basis and the producer netback are location-specific calculations, and include charges for elevation, elevator cleaning and storage, and transportation (be it road, rail or marine). These charges also take into consideration any incentives or discounts that may be applicable.

With several hundred delivery points scattered across the prairies, and four principal export gateways, the number of distinct origin-destination pairs that can be employed to move western Canadian grain exceeds 1,000.[163] Moreover, given the number of differing grains, grain grades, grain company service charges, and freight rates, the permutations inherent in calculating the export basis' and netbacks of individual producers takes on unimaginable dimensions. Such calculations can easily swell into hundreds of thousands of separate estimates. The only practical means by which to manage this undertaking rests in standardizing the estimates around a representative sample of grains, and grain stations.

In recognition of this, the GMP consciously limited these estimates to four specific grains: wheat; durum; canola; and peas.[164] In addition, a weighted-scale model was then used to select 43 separate grain stations as a representative sample in the calculation of the export basis and producer netback. These grain stations were then grouped into nine geographically based areas, comprising between four and six grain stations each, namely:[165]

- Manitoba East;
- Manitoba West;
- Saskatchewan Northeast;
- Saskatchewan Northwest;
- Saskatchewan Southeast;
- Saskatchewan Southwest;
- Alberta North;
- Alberta South; and
- Peace River.

These areas are depicted in Figure 70. Within a larger context, these 43 grain stations currently encompass:[166]

- 31 stations with one or more high-throughput grain elevators;
- 18 stations with one or more conventional grain elevators;
- 11 stations that are local to the grain-dependent branch line railway network; and
- 4 stations that are directly served by regional and shortline railway carriers.

[162] In its basic form, producer netback equates to the residual left after subtracting the logistics cost from a grain's sale price.

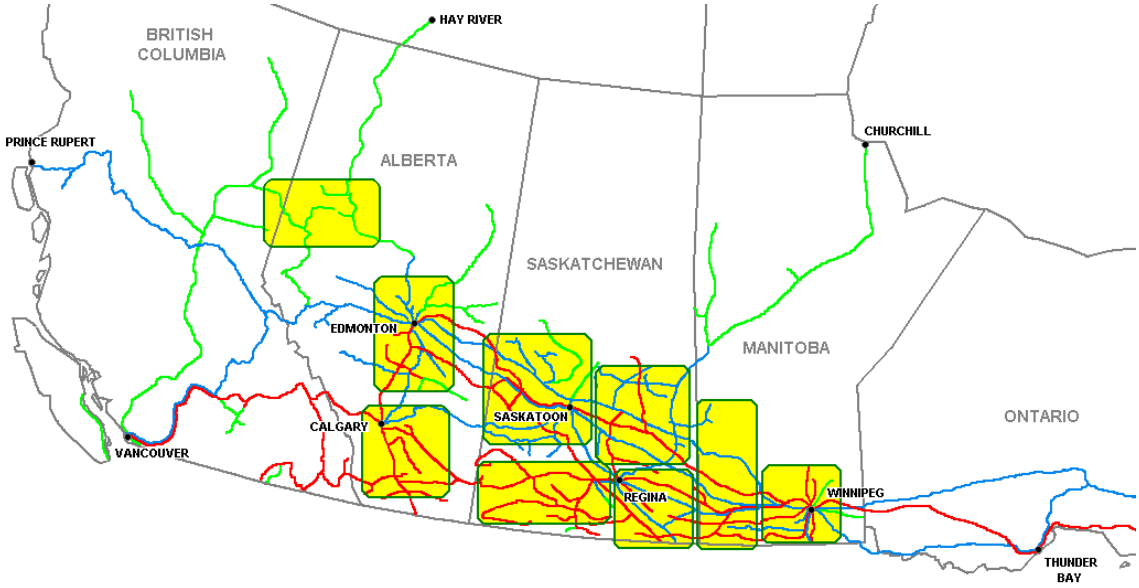
[163] Grain delivery points denote locations where at least one licensed primary elevator is situated. These do not include railway-designated producer-loading sites.

[164] In addition to the grains themselves, the GMP also specified the grades to be used, namely: 1 CWRS Wheat; 1 CWA Durum; 1 Canada Canola; and Canadian Large Yellow Peas (No. 2 or Better).

[165] Owing to competitive pressures, many of the stakeholders in the GHTS use some form of financial incentive to draw grain volumes into their facilities (i.e., country elevators) or over their systems (i.e., railways). Many of these incentives are of a highly sensitive commercial nature. In order to safeguard all such information, estimates of the export basis and producer netback are calculated at a higher-than-grain-station level of aggregation.

[166] Over the course of the GMP, changes in the elevator and railway infrastructure have altered the original station mix. At the outset, this mix encompassed 30 stations with one or more high-throughput grain elevators; 27 stations with one or more conventional grain elevators; 19 stations that were local to the grain-dependent branch line railway network; and 10 stations that were directly served by regional and shortline railway carriers.

Figure 70: Sampling Areas



Components of the Calculation

The means by which the Monitor calculates both the export basis and producer netback was developed through extensive consultation with GHTS stakeholders. Although a number of useful suggestions were made, and many subsequently acted upon, unanimous agreement on the use of a particular methodology ultimately proved elusive. The methodology adopted by the Monitor in calculating the values that follow, was approved for use in the GMP in the summer of 2002.[167]

It is important to remember that every individual producer's cost structure differs. As a result, no general means of calculation can be expected to precisely depict the export basis and netback that is specific to each farmer. The methodology employed here is intended to typify the general case within each of the nine geographic areas identified. Caution, therefore, must be exercised in any comparison between the general values presented, and those arising to individual producers within each of these areas.

Special consideration is given to the distinct merchandising activities tied to CWB and non-CWB commodities, which compels the use of discrete methodologies in calculating the export basis and producer netback for both. The differences between these two methodologies are delineated in the accompanying table. The reader is encouraged to become familiar with this material before attempting to draw any specific conclusions from the information presented in the discussion that follows.

[167] The methodology was approved by Transport Canada and Agriculture and Agri-Food Canada, and is presented in the Quorum Corporation study "*Report on the development and formulation of a methodology for the calculation of Producer Netback Measures*," May 2002. Interested readers can download the report from the Monitor's website (www.quorumcorp.net).

Considerations in the Calculation of the Export Basis and Producer Netback

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[4], or that of the corresponding rate to Thunder Bay plus the Freight Adjustment Factor (FAF).[5] 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 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.[6]	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.
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.[7]	

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 in Manitoba are subject to a $0.50 per tonne "check-off" for provincial canola association dues. The applicable "check-off" on deliveries made in Saskatchewan and Alberta are somewhat higher, amounting to $0.75 per tonne and $1.00 per tonne respectively.[8] Similarly, a levy of 0.5% is deducted for the Manitoba Pulse Growers Association on the delivery of yellow peas, while 1.0% is deducted for the Pulse Growers Associations in Saskatchewan and Alberta.[9]
Trucking Premiums	Grain companies report on the trucking premiums they pay to producers at each of the facilities identified in the sampling methodology.[10] The amounts depicted reflects the average per-tonne 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.
2) – 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 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. Since the 2002-03 crop year, the CWB's Annual Reports has published its receipts at "contract prices." In order to provide a consistent time series, the CWB provides the Monitor with an adjusted reporting to reflect receipts and costs at "in-store" Vancouver or St. Lawrence.
8) – The Saskatchewan check-off was increased from $0.50 per tonne to $0.75 per tonne on 1 January 2005. The Alberta check-off was increased from $0.50 to $1.00 per tonne on 1 August 2003.
9) – Levies for Manitoba and Alberta producers are refundable. Previously set at 0.5%, the Saskatchewan levy stood at 0.75% on 1 August 2002, and rose to 1.0% on 1 August 2003. The Alberta levy also rose to 1.0% on 1 August 2003.
10) – 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.

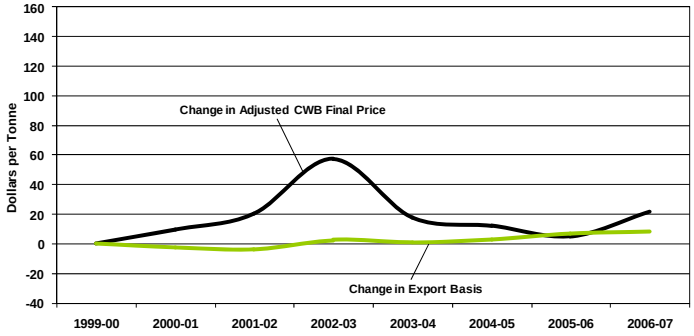
5.2 Export Basis and Producer Netback – CWB Grains (Wheat and Durum)

5.21 1CWRS Wheat

The netback to producers from the delivery of 1CWRS wheat rose steadily in the first four years of the GMP. From an average of $143.25 per tonne in the 1999-2000 crop year, the producer's netback climbed to $198.07 per tonne by the end of the 2002-03 crop year. The vast majority of this $54.82-per-tonne improvement stemmed from a 29.0% increase in the price of 1CWRS wheat itself. In comparison, the export basis increased by only $2.57 per tonne during this period, thereby reducing the benefit from increased prices by just 4.5%.

The gains made during this period began to erode a year later, when a sharp decline in the price of 1CWRS wheat proved largely responsible for a 19.1% reduction in the producers' netback, which fell to $160.28 per tonne. Although this downward pressure eased somewhat over the next two crop years, the price of 1CWRS continued to slide. By the end of the 2005-06 crop year, the Final Realized Price had fallen to $195.14 per tonne. When coupled with further increases in the export basis, the producers' netback was reduced to a GMP low of $141.17 per tonne.

Figure 71: Change in Netback Components – 1 CWRS Wheat



Owing in large measure to an upturn in the price of 1CWRS wheat in the 2006-07 crop year, the producer's netback again rose above the $143.25-per-tonne level set in the GMP's base year, to reach $156.04 per tonne. The run-up in the price of 1CWRS wheat over the 2005-06 and 2006-07 crop years has added a further $21.41 per tonne, or 10.8%, in net revenue to the figure benchmarked eight years earlier. Even so, an $8.62-per-tonne, or 15.8%, increase in the export basis during this same period ate into this price gain. It is worth noting that this rise in the producers' export basis was also tempered by the financial benefits of higher trucking premiums and CWB savings. Even so, the value of these latter items has diminished somewhat in the last three crop years, thereby exposing a more significant portion of the increased direct costs that they had been shielding since the beginning of the GMP. The scope of these changes are summarized in the following table.

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

							2006-07 / 1999-2000		
	1999-00	2002-03	2003-04	2004-05	2005-06	2006-07	$ VAR	% VAR	
CWB Final Price	$192.43	$250.20	$211.14	$205.10	$195.14	$212.89	$20.46	10.6%	▲
Plus: CWB Costs (Net)	5.40	5.02	4.65	5.01	7.84	6.35	0.95	17.6%	▲
Adjusted CWB Final Price	197.83	255.22	215.79	210.11	202.98	219.24	21.41	10.8%	▲
Direct Costs	56.90	63.81	62.90	62.94	67.69	70.14	13.24	23.3%	▲
Less: Trucking Premiums	-2.32	-3.96	-4.25	-3.68	-4.56	-5.15	-2.83	122.0%	▲
CWB Savings	0.00	-2.70	-3.14	-1.49	-1.32	-1.79	-1.79	n/a	▲
Export Basis	54.58	57.15	55.51	57.77	61.81	63.20	8.62	15.8%	▲
Producer Netback	$143.25	$198.07	$160.28	$152.34	$141.17	$156.04	$12.79	8.9%	▲

Final Realized Price

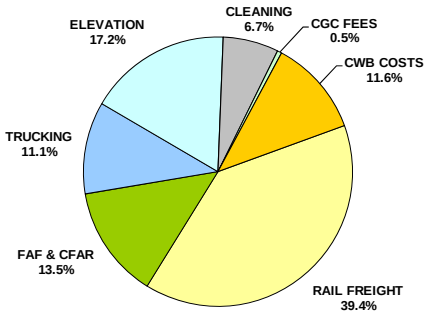
As already mentioned, positive price movements proved to be the chief force underlying improvements in the visible netback to producers of 1CWRS wheat throughout much of the GMP. From an initial value of $192.43 per tonne in the 1999-2000 crop year, shrinking global wheat stocks and the prospect of tighter supplies had proved to be the primary forces underlying the first real increase in world prices since the 1995-96 crop year. Drought conditions in both Canada as well as other producing countries also helped to push prices to a peak of $250.20 in the 2002-03 crop year.

The Final Realized Price for 1CWRS wheat (13.5% protein) tumbled over the course of the following three years, reaching a low of $195.14 per tonne with the close of the 2005-06 crop year. However, prices began to rally in the first half of the 2006-07 crop year as a result of a drought-induced reduction in Australian production. Moreover, the increased demand for Canadian exports in the face of tighter global wheat supplies also served to offset the negative impacts of a strengthening dollar. As a result, the Final Realized Price for 1CWRS wheat in the 2006-07 crop year rose by 9.1%, reaching a four-year high of $212.89 per tonne.

Export Basis

Although the export basis has increased since the beginning of the GMP, the last five crop years have produced the most significant changes. In fact, through to the end of the 2001-02 crop year, the export basis for 1CWRS wheat actually declined by 6.8%, to $50.88 per tonne from its benchmark value of $54.58 per tonne. Since then, the export basis has climbed by $12.32 per tonne, or 24.2%. At $63.20 per tonne, the 2006-07 crop year's export basis marks the highest value attained under the GMP.

Figure 72: Wheat Export Basis – Direct Costs



In considering the forces that have shaped this result, it is important to recognize that the export basis has two distinct structural components. The first of these relates to the direct costs incurred by producers in delivering grain to market. These include the cost of rail freight, trucking, elevation, dockage, CGC weighing and inspection, as well as the associated operating costs incurred by the CWB. The second component encompasses all of the financial benefits accruing to producers through the receipt of any offset to these expenses. These typically include any of the trucking premiums received by producers from the grain companies along with any transportation savings passed on to them by the CWB through its pool accounts.[168] Moreover, it has been the rise in these latter elements that have effectively contained the growth in direct costs, and a potentially larger increase in the export basis itself.

Over the course of the past eight crop years, the direct cost component of the export basis has climbed by 23.3%, from an average of $56.90 per tonne in the 1999-2000 crop year to $70.14 per tonne in the 2006-07 crop year. The largest single element in these costs is the applicable freight, which incorporates not only the charges for an average railway shipment, but the applicable CWB Freight Adjustment Factor (FAF) and the Churchill Freight Advantage Rebate (CFAR) as well. In the 1999-2000 crop year, the average weighted applicable freight for 1CWRS wheat in western Canada amounted to $31.87 per tonne, which represented 56.0% of total direct costs. Although the per-tonne average climbed to $37.11 by the end of the 2006-07 crop year, its proportion of total direct costs declined marginally to 52.9%.

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

[168] 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.

- Trucking Costs: The commercial costs tied to a 40-mile haul are estimated to have increased by 30.6% over the course of the last eight years, to $7.76 per tonne in the 2006-07 crop year from $5.94 per tonne at the beginning of the GMP. Although fuel surcharges had been applied temporarily in the 2000-01 and 2001-02 crop years, a significant rise in the price of fuel precipitated rather sharp rate increases in the last three crop years. Despite the magnitude of the overall increase in these costs, trucking's share of total direct costs has only climbed marginally, to 11.1% from 10.4%.

- 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. Increases in the tariff rates over the next seven years effectively raised the cost of elevation by 23.8%, to an average of $12.07 per tonne in the 2006-07 crop year, thereby pushing up its share of total direct costs to a marginally higher 17.2%. 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 31.5% over the course of the last eight crop years, to an average of $4.68 per tonne in the 2006-07 crop year, their contribution to total direct costs rose only marginally to 6.7%. As with primary elevation tariffs, the rates posted 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 eight crop years. On a proportional basis, they constitute a mere 0.5% of total direct costs.[169]

- Gross CWB Costs: These costs effectively reflect the per-tonne operating costs of the CWB, which are ultimately paid by producers through the CWB's pool accounts. Given the nature of these costs, they can fluctuate substantially from year to year. In the 1999-2000 crop year, gross CWB costs averaged $5.40 per tonne, and constituted 9.5% of the total direct costs for 1CWRS wheat. By the 2006-07 crop year, these costs had increased to an average of $8.14 per tonne, and represented 11.6% of total direct costs.

Under the GMP, the direct costs cited above are typically offset by two financial benefits that accrue to producers. These come in the form of any trucking premiums that may have been received directly from grain companies, as well as the transportation savings they indirectly received from the CWB.[170] In the case of trucking premiums, it has been a long-established practice of the grain companies' to use these as an instrument with which to draw grain into their facilities. Still, the data suggests that the competition between grain companies has pushed these premiums generally higher.

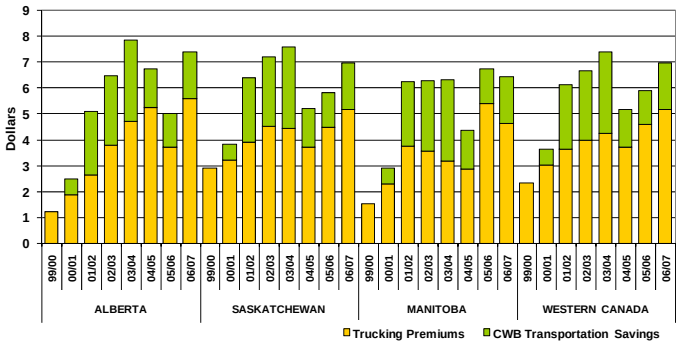
Despite a reduction in the 2004-05 crop year, trucking premiums paid by grain companies for 1CWRS wheat deliveries in the nine sampling areas have more than doubled, increasing from an average of $2.32 per tonne in the 1999-2000 crop year to $5.15 per tonne in the 2006-07 crop year. On a proportional basis, these premiums have been offsetting an increasingly larger amount of the producer's direct costs: 4.1% in the 1999-2000 crop year as compared to 7.3% in the 2006-07 crop year.

[169] 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.

[170] 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 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 initially amounted to an average of $0.61 per tonne, which offset the direct costs tied to 1CWRS wheat by a further 1.1%. By the 2003-04 crop year, these savings had increased more than five-fold, to an average of $3.14 per tonne and 5.0% of total direct costs. However, data collected over the following three crop years showed a considerable reduction in the value of these savings. By the end of the 2006-07 crop year, the savings had fallen to $1.79 per tonne, thereby reducing its direct-cost offset to 2.6%.

Figure 73: Wheat Export Basis – Producer Benefits (dollars per tonne)



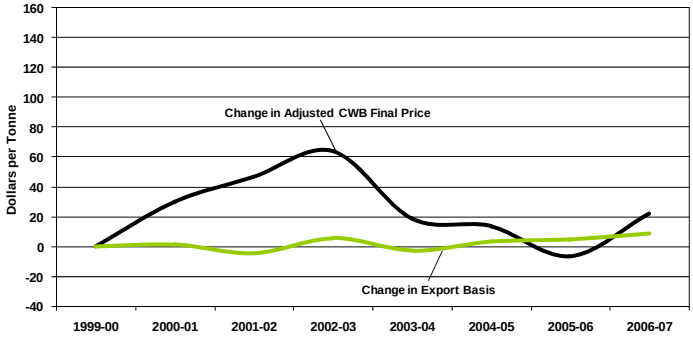
As a result of these forces, the financial benefit to producers in the 2006-07 crop year amounted to an average of $6.94 per tonne, 18.0% more than the $5.88 per tonne recorded a year earlier, but well below the $7.39-per-tonne average noted three years before. What is more, the offset value of these financial benefits was also increased, to 9.9% of total direct costs from 8.7% the year before.

5.22 1CWA Durum

As was the case for 1CWRS wheat, the netback to producers from the delivery of 1CWA durum rose steadily in the first four years of the GMP. From an average of $160.48 per tonne in the 1999-2000 crop year, the producer's netback had climbed to $218.96 per tonne by the end of the 2002-03 crop year, a gain of 36.4% fuelled in large measure by a corresponding increase in the price of 1CWA durum.

But when prices began to fall, so too did the producers' netback. In the 2003-04 crop year, the producers' netback for 1CWA durum fell to $181.80 per tonne. Much the same was true of the following two crop years as world prices continued to slump. By the end of the 2005-06 crop year, falling prices had largely reduced the producers' netback to $148.94 per tonne, the lowest value observed under the GMP.

Figure 74: Change in Netback Components – 1 CWA Durum



However, fortunes were reversed when world prices began to improve in the 2006-07 crop year. Due in large part to this upturn in the price of 1CWA durum, the producer's netback rose above the $160.48-per-tonne level set in the GMP's base year, to reach $174.13 per tonne. Comparatively, this run-up in the price of durum added $22.20 per tonne, or 9.7%, to the net revenues originally witnessed in the base year. Not unexpectedly, an $8.55-per-tonne, or 12.6%, increase in the export basis over this same period also ate into this price gain. Even so, were it not for the tempering effects of a substantive rise in the financial benefits derived from higher trucking premiums and CWB savings, these costs could have been as much as $12.62 per tonne higher.

The changes contributing to this $13.65-per-tonne, or 8.5%, improvement in the producer's netback are summarized in the accompanying table.

Contributory Changes to Producer Netback – 1CWA Durum (dollars per tonne)

	1999-00	2002-03	2003-04	2004-05	2005-06	2006-07	2006-07 / 1999-2000 $ VAR	2006-07 / 1999-2000 % VAR	
CWB Final Price	$206.79	$266.88	$229.20	$220.37	$199.35	$227.55	$20.76	10.0%	▲
Plus: CWB Costs (Net)	21.32	25.13	17.32	21.30	22.20	22.76	1.44	6.8%	▲
Adjusted CWB Final Price	228.11	292.01	246.52	241.67	221.55	250.31	22.20	9.7%	▲
Direct Costs	70.77	79.48	72.54	76.46	78.69	83.39	12.62	17.8%	▲
Less: Trucking Premiums	-3.14	-3.73	-4.68	-4.24	-4.76	-5.42	-2.28	72.6%	▲
CWB Savings	0.00	-2.70	-3.14	-1.49	-1.32	-1.79	-1.79	n/a	▲
Export Basis	67.63	73.05	64.72	70.73	72.61	76.18	8.55	12.6%	▲
Producer Netback	$160.48	$218.96	$181.80	$170.94	$148.94	$174.13	$13.65	8.5%	▲

Final Realized Price

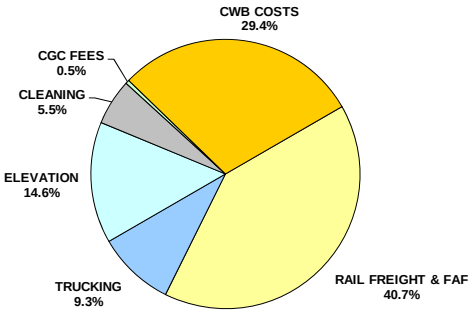
As was the case with 1CWRS wheat, an increase in grain prices proved to be the principal factor underlying the improvement in the netback to producers of 1CWA durum over the first four years of the GMP. During this period, limited supplies of high-grade milling durum in the face of reduced North American production was largely responsible for pushing the Final Realized Price of 1 CWA durum (13.5% protein) steadily upwards, from an initial value of $206.79 per tonne in the 1999-2000 crop year to a height of $266.88 per tonne in the 2002-03 crop year.

For the 2003-04 crop year, however, the Final Realized Price for 1CWA durum tumbled by 14.1% to $229.20 per tonne. A significant factor in this decline was the harvesting of a bumper crop in North Africa, which has traditionally constituted the largest durum-importing region in the world. Plentiful Canadian stocks also helped contribute to a worldwide oversupply of durum. Prices continued to weaken over the following two years, with the Final Realized Price for 1CWA durum ultimately falling to $199.35 per tonne in the 2005-06 crop year. However, prices rallied in the 2006-07 crop year as a result of tightening North American supplies. As a result, the Final Realized Price for 1CWA durum rose by 14.1%, to reach a four-year high of $227.55 per tonne.

Export Basis

As was outlined previously with respect to 1CWRS wheat, the export basis for 1CWA durum has also risen fairly steadily over the course of the GMP. In fact, the cumulative effect of these increases was a 12.6% rise, with the export basis for the 2006-07 crop year amounting to $76.18 per tonne as compared to the $67.63-per-tonne value recorded in the base year.

Figure 75: Durum Export Basis – Direct Costs



As was the case with 1CWRS wheat, the export basis of 1CWA durum has the same two structural components: the direct costs incurred in delivering grain to market; and the financial benefits accruing from the receipt of any offset to these expenses. In fact, gains in these latter elements have been particularly instrumental in containing the growth in direct costs, and ultimately the export basis.

The direct costs tied to 1CWA durum have risen in a somewhat more undulating manner than that presented for 1CWRS wheat. After climbing to $79.48 per tonne in the 2002-03 crop year, these costs dipped slightly before beginning to rise again. By the 2006-07 crop year, these costs had reached a new high under the GMP, amounting to an average of $83.39 per tonne. Although the FAF component was not as great as that of 1CWRS wheat, rail freight also constituted the single largest element in the makeup of these costs, amounting to 40.7% of the total.[171] For the 2006-07 crop year, the weighted average freight for the movement of 1CWA durum totalled $33.93 per tonne, 12.8% more than the $30.07 per tonne it had been eight years earlier. Still, its share of total direct costs has actually fallen from the 42.5% it constituted in the first year of the GMP, to 40.7%.

Gross CWB costs also increased over the course of the past eight crop years: from $21.32 per tonne in the first year of the GMP to $24.55 per tonne in the 2006-07 crop year. Even though changes in year to year costs have been seen, the share of total direct costs attributable to this element has remained largely unchanged, having fallen from 30.1% to 29.4%.

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

- Trucking Costs: The commercial costs tied to a 40-mile haul increased to $7.76 per tonne in the 2006-07 crop year. These are the same values cited earlier with respect to wheat, and are 30.6% greater than the commercial trucking costs first recorded in the 1999-2000 crop year. On a proportional basis they accounted for 9.3% of total direct costs in the 2006-07 crop year as compared to 8.4% eight years earlier.

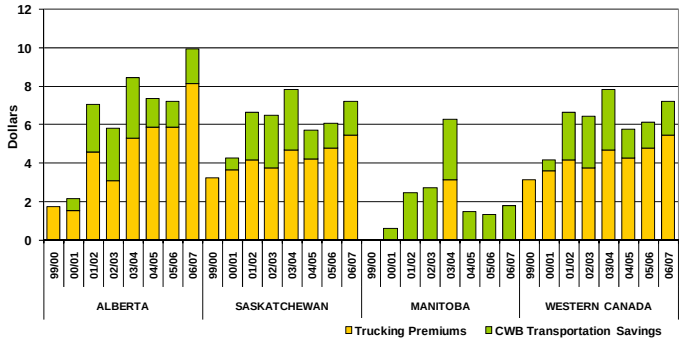
- Primary Elevation Costs: These costs averaged $9.44 per tonne in the 1999-2000 crop year, and comprised 13.3% of total direct costs. Increases in the tariff rates pushed the cost of elevation up by 28.7% to an average of $12.15 per tonne in the 2006-07 crop year. This increase was another key driver in the observed rise in total direct costs over the past eight crop years, and resulted in its share rising to a total of 14.6%.

- 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. These costs increased by 27.6% to an average of $4.62 per tonne in the 2006-07 crop year, and its share of total direct costs advanced to 5.5%.

- CGC Weighing and Inspection Fees: These costs have remained unchanged at an average of $0.38 per tonne throughout the course of the GMP. On a proportional basis, they constitute only 0.5% of total direct costs.

As with wheat, the trucking premiums paid by grain companies for 1CWA durum deliveries also rose between the 1999-2000 and 2003-04 crop years, climbing from an average of $3.14 per tonne to $4.68 per tonne. Similarly, despite having declined somewhat in the 2004-05 crop year as a result of changes in prevailing market conditions, they rebounded to a record $5.42 per tonne in the 2006-07 crop year. At 6.5%, the compensation provided in the 2006-07 crop year proved somewhat greater than the 4.4% provided in the first year of the GMP. It should be noted, that due in large part to the much lower volumes of durum handled in

Figure 76: Durum Export Basis – Producer Benefits (dollars per tonne)



[171] 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 $0.03 in the 2006-07 crop year. When treated as a credit, the FAF actually reduces the freight paid by producers.

Manitoba, the premiums paid out to producers there have been insignificant.[172]

The CWB's transportation savings are also applicable on the movement of 1CWA durum, and are in fact identical to those already presented for 1CWRS wheat. In the 2000-01 crop year, these savings amounted to an average of $0.61 per tonne, which helped reduce total direct costs by 0.8%. By the end of the 2003-04 crop year, they had climbed to an average of $3.14 per tonne. And although it has since declined to $1.79 per tonne, it still stood at a level almost three times as great as in the first year of the CWB's tendering program, and accounted for an offset to total direct costs of 2.1%.

When examined on a combined basis, these producer benefits have moved generally higher, from a total of $3.14 per tonne in the 1999-2000 crop year to a record $7.82 per tonne in the 2003-04 crop year. Even when considering their recent decline to $7.21 per tonne in the 2006-07 crop year, these financial benefits have more than doubled over the last eight crop years. Moreover, as an 8.6% offset to total direct costs, they have helped contain the escalation in the export basis to just 12.6% over this same period.

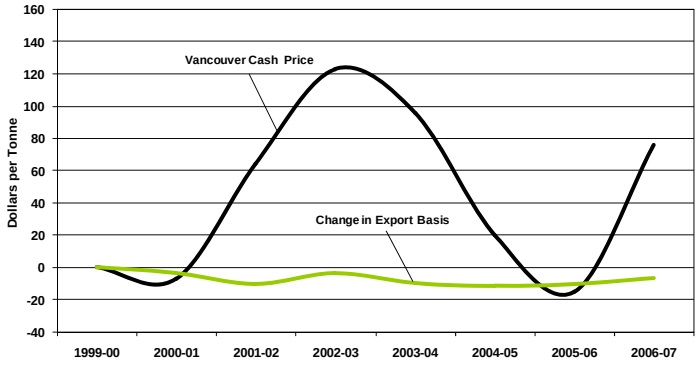
5.3 Export Basis and Producer Netback – Non-CWB Commodities (Canola and Peas)

5.31 1 Canada Canola

As was the case with the CWB grains discussed previously, the visible netback to producers from the delivery of 1 Canada canola increased fairly steadily in the first four years of the GMP, rising from $239.10 per tonne in the 1999-2000 crop year to $365.39 per tonne in the 2002-03 crop year.

However, all of these gains were lost in the face of an ensuing three-year decline in canola prices, with the producer's netback falling to its lowest value under the GMP, $234.62 per tonne. However, market conditions brought about a significant reversal of fortune in the 2006-07 crop year as a result of a sharp run-up in canola prices, with the netback climbing to $321.45 per tonne.

Figure 77: Change in Netback Components – 1 Canada Canola



This marked a net increase of $82.35 per tonne, or 34.4%, from the netback value presented in the first year of the GMP. And while this improvement was largely derived from a $75.64-per tonne net increase in the Vancouver cash price of 1 Canada canola, it was also enlarged by a $6.71-per-tonne reduction in the export basis. It is worth noting that canola is the only commodity for which the export basis has been consistently lower than in the GMP's base year.

The scope of the changes in these individual components is summarized in the accompanying table.

[172] The $3.11-per-tonne average trucking premium reported as having been paid to Manitoba producers in the 2003-04 crop year is derived from deliveries to but one station in southwestern Manitoba. This was the sole instance during the course of the GMP that a sampling station in Manitoba reported having taken delivery of durum.

Contributory Changes to Producer Netback – 1Canada Canola (dollars per tonne)

	1999-00	2002-03	2003-04	2004-05	2005-06	2006-07	2006-07 / 1999-2000 $ VAR	2006-07 / 1999-2000 % VAR	
Vancouver Cash Price	$291.61	$414.36	$387.11	$311.19	$276.38	$367.25	$75.64	25.9%	▲
Direct Costs	54.99	49.08	42.79	41.31	42.19	46.30	-8.69	-15.8%	▼
Less: Trucking Premiums	-2.48	-0.11	-0.28	-0.34	-0.43	-0.50	1.98	-79.8%	▼
Export Basis	52.51	48.97	42.51	40.97	41.76	45.80	-6.71	-12.8%	▼
Producer Netback	$239.10	$365.39	$344.60	$270.22	$234.62	$321.45	$82.35	34.4%	▲

Vancouver Cash Price

As with CWB grains, upward price movement proved to be the key driver in the observed improvement in the netback for 1 Canada canola. Despite a modest decline in the 2000-01 crop year, the average annual price of 1 Canada canola rose by 42.1% between the 1999-2000 and the 2002-03 crop years, climbing from $291.61 per tonne to $414.36 per tonne. With the price of 1 Canada canola being particularly sensitive to the wider influences of international supply and demand, this increase proved to be the product of tightening global supplies.

An increase in international supplies brought about a softening in the price of 1 Canada canola during the 2003-04 crop year, with the Vancouver cash price having fallen to $387.11 per tonne. Although these same forces were also at work in the 2004-05 and 2005-06 crop years, the downward pressure exerted on prices proved far greater. Although record soybean production in South America along with a substantial increase in US output proved to be the chief factors in this, Canadian canola production merely added to what was an already over-supplied global market.

But the 2006-07 crop year brought about a significant shift in market conditions. Notwithstanding 8.5 million tonnes in Canadian production, a large carry-forward stock from the preceding crop year, and a rising dollar, prices rose sharply. A severe drought in Australia, which dramatically reduced production there, essentially removed that country as an export competitor. At the same time, the demand for canola was being stimulated by the growing need for feedstock in US and European biodiesel production. As a result, the average Vancouver cash price closed out the 2006-07 crop year at $367.25 per tonne, 32.9% above the $276.38-per-tonne average benchmarked in the GMP's base year.

Export Basis

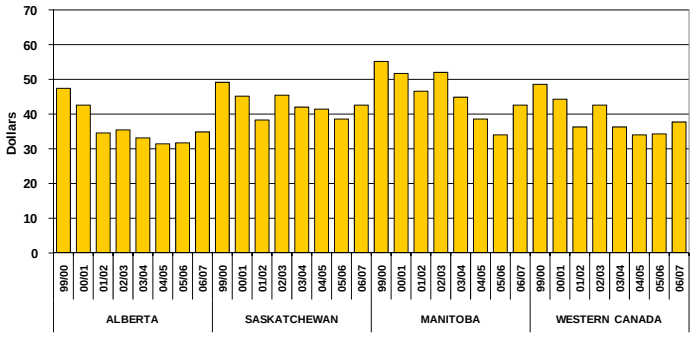
The export basis for 1 Canada canola has decreased by 12.8% over the past eight years, falling from an average of $52.51 per tonne in the 1999-2000 crop year to $45.80 in the 2006-07 crop year. Although the export basis rose in both the 2005-06 and 2006-07 crop years, this has largely proven to be a recent development that ran counter to the downward movement noted since the beginning of the GMP.[173]

The export basis for non-CWB commodities have the same basic structural components as do CWB grains: the direct costs incurred in delivering grain to market; and any financial benefits that serve to offset them. However, over 80% of the direct costs tied to non-CWB commodities cannot be examined directly. Instead, a price differential – or spread – between the Vancouver cash price and the producers' realized price at the elevator or processing plant is calculated. This differential effectively includes the cost of freight, handling, cleaning, storage, weighing and inspection, as well as an opportunity cost or risk premium.

[173] The export basis for 1 Canada canola also spiked in the 2002-03 crop year, rising to $48.97 per tonne before then falling back to $42.51 per tonne a year later.

In contrast to the patterns observed for wheat and durum, the direct costs tied to 1 Canada canola fell by 15.8% between the 1999-2000 and 2006-07 crop years, from an average of $54.99 per tonne to $46.30 per tonne. Much of this reduction stemmed from a 22.2% narrowing of the price differential.[174] By the end of the 2006-07 crop year, the price differential had fallen from an average of $48.55 per tonne to $37.79 per tonne, with its share of direct costs having declined from 88.3% to 81.6%. This narrowing of the price differential effectively signalled that the product was in demand, and that buyers were willing to surrender a greater proportion of the Vancouver price to the producer in order to acquire sufficient supplies.

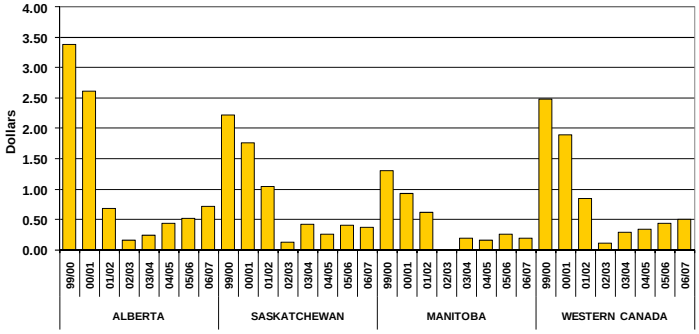
Figure 78: 1 Canada Canola – Price Differential (dollars per tonne)



The second largest component in canola's direct costs is that associated with trucking the commodity from the farm gate to an elevator or processor. As in the determination of the producers' netback for CWB grains, these costs are estimated to have climbed by 7.2% in the 2006-07 crop year, amounting to an average of $7.76 per tonne as compared to $5.94 per tonne at the beginning of the GMP. Owing to the narrowing of the price differential over the past several years, trucking costs in the 2006-07 crop year accounted for a significantly greater proportion of the total direct costs, 16.8% versus 10.8% in the 1999-2000 crop year. The remaining direct costs, which accounted for just 1.6% of the overall total, were derived from a provincial check-off that is applied as a means of funding the Canola Growers' Association.

Unlike CWB grains, trucking premiums are not as aggressively used to attract deliveries of non-CWB commodities. In fact, trucking premiums have been all but eliminated. The premiums paid by grain companies for 1 Canada canola deliveries in each of the nine sampling areas fell by 79.8% between the 1999-2000 and 2006-07 crop years, decreasing from an average of $2.48 per tonne to only $0.50 per tonne. Similarly, their real value in offsetting direct costs has also fallen, declining from 4.5% of direct costs in the first year of the GMP, to just 1.1% in the 2006-07 crop year.

Figure 79: 1 Canada Canola – Producer Benefits (dollars per tonne)



It is also worth noting that the reduction in trucking premiums has coincided with the narrowing of the price differential. This is consistent with comments received from grain companies to the effect that they prefer to use the spread between the spot price and the futures price as the primary signalling mechanism to attract deliveries. As such, it appears likely that trucking premiums will continue to assume a very limited role in determining the export basis for canola.

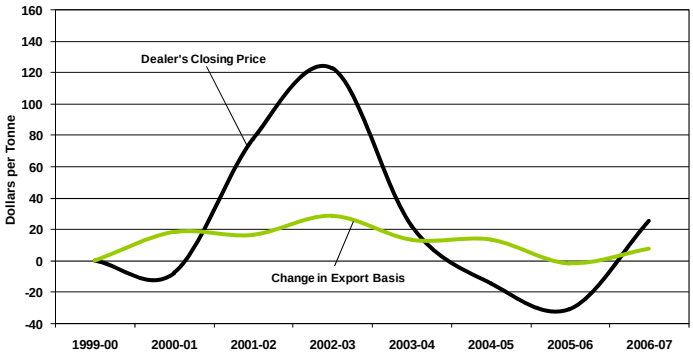
[174] In the case of 1 Canada canola, the price differential represents the spread between the Vancouver cash price and the relevant spot price in each of the nine geographic sampling areas.

5.32 Large Yellow Peas

The visible netback due to producers from the delivery of large yellow peas increased by 39.2% in the 2006-07 crop year, to $165.26 per tonne from $118.75 per tonne a year earlier. This denoted the highest value achieved since the 2002-03 crop year.

As was the case with canola, much of this increase was attributable to a sharp rise in the price of large yellow peas over the course of the past twelve months. Tightening inventories and increasing demand, primarily from India – which is the world's largest consumer of pulses – were the main contributors to this price increase. An increase of $9.33 per tonne in the export basis tempered this rise in price.

Figure 80: Change in Netback Components – Large Yellow Peas



The changes giving rise to these results are summarized in the following table.

Contributory Changes to Producer Netback – Large Yellow Peas (dollars per tonne)

							2006-07 / 1999-2000		
	1999-00	2002-03	2003-04	2004-05	2005-06	2006-07	$ VAR	% VAR	
Dealer's Closing Price	$202.54	$325.14	$224.77	$188.17	$171.69	$227.43	$24.89	12.3%	▲
Direct Costs	54.94	83.33	67.86	68.12	53.07	62.41	7.47	13.6%	▲
Less: Trucking Premiums	-0.18	-0.14	-0.11	-0.14	-0.13	-0.24	-0.06	33.3%	▲
Export Basis	54.76	83.19	67.75	67.98	52.94	62.17	7.41	13.5%	▲
Producer Netback	$147.78	$241.95	$157.02	$120.19	$118.75	$165.26	$17.48	11.8%	▲

Dealer's Closing Price

In keeping with the patterns observed for other commodity prices, the 2006-07 crop year saw the first reversal in the price of large yellow peas after a three-year downturn. Price has proven to be the key determinant in the netback for this commodity over the past eight years. And although the price of large yellow peas is sensitive to the wider influences of the international marketplace, Canadian supplies continue to exercise significant sway in the marketplace.[175]

Notwithstanding a modest decline in the 2000-01 crop year, the average annual price of large yellow peas increased by 60.5% between the 1999-2000 and the 2002-03 crop years, rising from $202.54 per tonne to $325.14 per tonne. This largely reflected the effects of a reduction in the international supply. For the 2003-04 crop year, however, western Canadian dry pea production rose to 2.1 million tonnes from 1.4 million tonnes a year earlier. This increase in supply effectively reversed the upward pressure that had been exerted on price. As a result, the average price of large yellow peas declined to $224.77 per tonne. Much the same occurred in

[175] Prior to 2002, Canada accounted for over 25% of the world's dry pea production, and 55% of world export volume. See Agriculture and Agri-Food Canada, *Bi-weekly Bulletin, September 28, 2001*. This leadership role, however, has been surrendered periodically as a result of changes in annual production.

the 2004-05 crop year when production climbed to a record 3.3 million tonnes and the price fell to $188.17 per tonne. Although production fell to 3.1 million tonnes in the 2005-06 crop year, prices continued to fall, slipping to a record low of $171.69 per tonne. Production continued to decline, falling to 2.8 million tonnes in the 2006-07 crop year. However, strong international demand in the face of tighter supplies resulted in prices rebounding sharply, increasing by 32.5% to $227.43 per tonne.

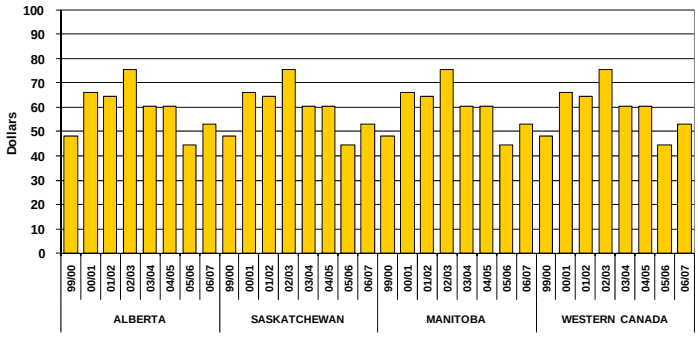
Export Basis

The export basis for large yellow peas has varied significantly over the course of the GMP. In its first four years the export basis actually climbed by 51.9%, reaching a height of $83.19 per tonne in the 2002-03 crop year. This was followed by a fairly steady decline that resulted in the export basis falling to a record low of $52.94 per tonne by the end of the 2005-06 crop year. The 2006-07 crop year, however, saw a reversal of this trend, with the export basis climbing by 17.4% to $62.17 per tonne.

As with canola, because of the relative size of the direct cost component in the export basis, changes in the former are virtually indistinguishable from those of the export basis itself. Likewise, over 80% of these direct costs cannot be examined directly. Instead, a price differential between the dealer's closing price and the grower's bid closing price is calculated as an approximation for the cost of freight as well as other handling, cleaning, and storage activities.

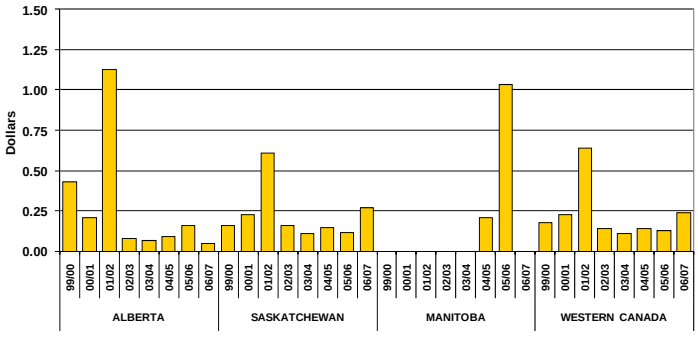
Over the first four years of the GMP, the price differential increased by 56.6%, climbing to $75.52 per tonne from $48.23 per tonne in the 1999-2000 crop year. This was followed by a 41.0% reduction in the 2003-04 through 2005-06 crop years, where it fell to a low of $44.56 per tonne. For the 2006-07 crop year, however, the differential increased by 18.7% to stand at $52.90 per tonne. This resulted in the price differential accounting for 84.8% of total direct costs, the second lowest share accorded to the component under the GMP.[176]

Figure 81: Large Yellow Peas – Price Differential (dollars per tonne)



The second largest component in the direct costs of large yellow peas is trucking. As elsewhere, these costs are estimated using an average haul distance of 40 miles, and are deemed to have risen by 7.2% to about $7.76 per tonne in the 2006-07 crop year. On a comparative basis, this element accounted for 12.4% of total direct costs versus 10.8% at the outset of the GMP. The remaining 2.8% was derived from a levy assessed by the provincial Pulse Growers Association at the time of delivery.

Figure 82: Large Yellow Peas – Producer Benefits (dollars per tonne)



Trucking premiums are even less commonly used to encourage the delivery of large yellow peas than they are for canola, and have generally been on the decline. From an average of $0.18 per tonne for the 1999-2000 crop year, these premiums fell to just $0.13 per tonne by the end of the 2005-06 crop year. However, they rose sharply in the 2006-07 crop year, climbing to an average of $0.24 per tonne. In total,

[176] The previous record low was set in the 2005-06 crop year when the price differential amounted to 84.0% of total direct costs.

these premiums represented an offset to direct costs of just over 0.4% in the last crop year. Here too the value of this producer benefit as an offset to total direct costs has little changed from the 0.3% it constituted eight years earlier.

5.4 Cash Ticket Analysis

In order to validate the preceding analysis, a number of grain companies provided the Monitor with a sample of the cash tickets issued by the elevators at each of the 43 stations defined in the sampling methodology. It was intended that these tickets would represent a minimum of three percent of the receipts issued with respect to the grains under examination. In some instances, the grain companies provided larger samples.

Figure 83 illustrates the variance observed in a comparison of the individual deductions and premiums identified on the cash tickets, and averages developed in the calculation of the export basis for wheat. For the 2006-07 crop year, the variances observed with respect to freight, elevation, cleaning, and competitive premiums were minimal. The variability in the data relating to competitive premiums has decreased marginally from that recorded a year earlier, and remains significantly less than that observed at the beginning of the GMP, falling well within acceptable limits.

Figure 83: Cash Ticket Variances

The GMP utilizes posted tariff rates to reflect freight, elevation and cleaning charges. The freight deductions seen in the sample of cash tickets for the 2006-07 crop year were essentially the same as those of the weighted averages used for applicable freight in the analysis.[177]

For the 2006-07 crop year, the charges for elevation on cash tickets were little different from the averages drawn from the applicable tariffs. Similarly, those for cleaning were very close to the averages drawn from the applicable tariffs. Tariff rates effectively represent the maximum that grain companies may charge for these services. Although the evidence would suggest that most charges are at tariff rates, some companies indicated that their deductions were either above or below the average tariff level. In addition, the weighted average value of the sample data may produce results that differ from the nominal tariff average. In any case, the variance is within the bounds of statistical error.

Greater variability was observed with respect to the premiums reported as having been paid on these cash tickets. This was particularly true of the 1999-2000 and 2000-01 crop years, when the cash tickets revealed trucking premiums to have varied by factors of 22% above, and 18% below, those reported on an aggregated basis by the grain companies.[178] The variances observed in both the 2001-02 and 2002-03 crop years proved significantly better, differing only by a factor of about one percent. In the years that followed, the variance steadily widened: to 3.5% in the 2003-04 crop year; to 5.2% in the 2004-05 crop year; and to 6.0% in the 2005-06 crop year. Even so, the variance was within the bounds of acceptable statistical error. For the 2006-07 crop year, however, the variance was essentially nil.

[177] The sample of cash tickets used is based on three percent of the number of tickets actually issued, and does not necessarily correspond to three percent of volume delivered. The average freight charges presented in the data tables are, however, weighted by volume.

[178] The variances pertaining to the trucking premiums paid during the first two crop years must be viewed in the context of the challenge involved in obtaining the necessary information to conduct the analysis. Owing to the fact that the information systems used by the grain companies were not designed to extract the data required for this analysis, there were significant data integrity problems to be overcome. The variances reported for the 1999-2000 and 2000-01 crop years largely reflect these initial difficulties.

In light of these results, the Monitor is satisfied that the methodology used to determine both the export basis and the producer's netback, along with the aggregated data received from the grain companies, provides for a fair representation of the financial returns experienced by western Canadian producers since the beginning of the GMP.

5.5 The Netback Calculator

As was reported in the Monitor's annual report for the 2002-03 crop year, an initiative was undertaken to improve the quality of the information used in estimating the export basis and to give producers internet access to portions of the database used for the producer netback analysis. The result of this initiative, the Producer Netback Calculator (PNC), was implemented in March 2004, and can be found at www.netback.ca.

The concept for the PNC originates with some of western Canada's producer groups who suggested methods for employing the Monitoring program's producer netback statistics as a management tool in making better grain-delivery decisions. They advanced the idea that the Monitor create a mechanism through which producers could gain access to local, and current, tariff and cost data in order to allow them to identify the most effective delivery alternatives for their products. At the same time, the Monitor was searching for a more effective means with which to understand the decisions and behaviour of producers in the delivery of grain. The concept of the PNC came out of those discussions and, after thoroughly reviewing the concept, the federal government agreed to support and fund an internet-based system.

After considerable input from a broad spectrum of the industry, the detailed design and development of the system began in August of 2003. Completed in early 2004, the system was officially released in mid March, and has been actively promoted to producers since April of that year. The PNC is an easy-to-use system that provides producers with immediate access to the information that they need to make better delivery decisions.[179] Although the reaction from producers who subscribe and have become regular users of the system has been very positive, for the purposes of the GMP, not all of the PNC's goals have yet been met.

Given the need for statistical validity, the PNC requires a greater number of consistent users. In addition, these users need to be distributed fairly evenly across all nine of the sampling areas used by the GMP. Should these criteria be met, the Monitor fully expects that its future annual reports will incorporate the data collected through the PNC. With this objective in mind, the monitoring team will continue to promote usage of the PNC throughout the coming months at various industry conventions and trade shows, as well as through its regular meetings with the stakeholder community.

5.6 Producer Loading Sites and Shipments *[Measurement Subseries 5B]*

The aggregate number of producer loading sites has declined 33.1% since the beginning of the 1999-2000 crop year, falling from an estimated 709 to 474 by the end of the 2006-07 crop year. Much of this overall decline stems from the reduction in the number of sites served by the larger Class 1 carriers, which fell by 42.9% during the same period, from 644 to 368. Conversely, the number of sites local to the smaller Class 2 and 3 carriers increased from 65 to 106. [See Table 5B-1 in Appendix 4.]

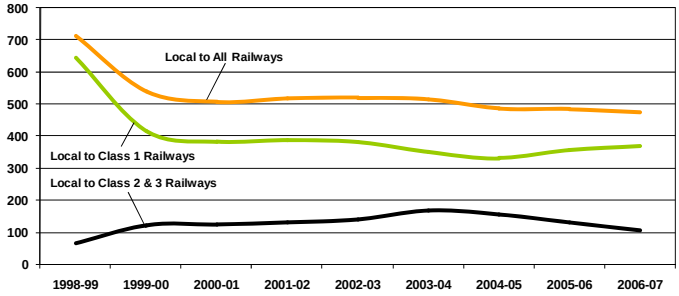
Regionally, Manitoba and Alberta posted the largest attrition rates, with the number of producer loading sites declining by an overall 60.4% and 43.7% respectively. The rate of decline in Saskatchewan was substantially less; the number of sites having fallen by only 9.4% during the same eight-year period. Hidden by these statistics is the fact that while the overall number of producer loading sites has declined sharply, the reduction rate has abated substantially. Since falling to 505 in the 2000-01 crop year, the number of producer loading sites has decreased by only 6.1%, with much of this having occurred in the last three crop years.

[179] For a more comprehensive review of the Producer Netback Calculator, see Appendix 2.

Producer Car Shipments

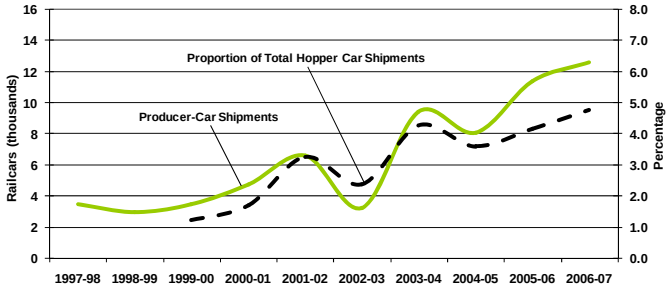
Even though he overall number of producer loading sites has decreased, producer-car shipments have been on the rise. In the first five years of the GMP, these shipments virtually tripled, increasing from 3,441 carloads to 9,399 carloads by the end of the 2003-04 crop year. Notwithstanding the decline in grain quality that prompted a reduction in such shipments during the 2004-05 crop year, producer-car loading have continued to increase. Total shipments in the 2006-07 crop year increased another 10.4%, climbing to a record 12,529 carloads under the GMP.

Figure 84: Producer-Car Loading Sites



This marks the first instance in the history of the GMP where producer-car shipments reached levels comparable to those witnessed in the early 1990s. Moreover, they continue to trend upwards. At the same time, their share of all covered hopper car movements has also been increasing. From an estimated 1.2% in the 1999-2000 crop year, producer-car shipments climbed to a record 4.2% in the 2003-04 crop year. Although reduced shipments in the 2004-05 crop year were largely responsible for this share having fallen back to 3.6%, more recent volume increases have resulted in this share rebounding to a new record of 4.8%, or 7.4% of CWB grains alone. [See Table 5B-2 in Appendix 4.]

Figure 85: Producer-Car Shipments



This increase in producer-car shipments has come as a result of many factors, not the least of which includes the closure of local elevators, better collaboration between producer groups and the CWB, as well as the advent of license-exempt facilities. With the close of the 2006-07 crop year, a total of 41 such facilities had received exemptions. This constituted a gain of just 2.5% over the 40 that were in place at the end of the previous crop year, with 30 being located in Saskatchewan, eight in Alberta, and three in Manitoba.

5.7 Summary Observations

An examination of the per-tonne financial returns to producers of wheat, durum, canola, and large yellow peas, indicates that all have improved since the 1999-2000 crop year. These gains ranged from a low of 10.5% in the case of 1CWRS wheat, to as much as 39.2% for large yellow peas. In all instances, these improvements came primarily as a result of increases in the market price of the commodity itself.

Within the wider framework of a time series, however, the producer's netback can be seen to have actually climbed steadily, to even greater comparative heights in the 2002-03 crop year, before then surrendering virtually all of these gains over the next three crop years. Such reversals clearly underscored the sensitivity of the producer netback to changes in specific variables, most notably commodity prices. In fact, most of the observed variations in the producer netback over the past eight crop years have been derived from upward or downward movements in price.

The influence of changes in the export basis has proven to be substantially less. In large part, this lesser sway stems from a sizable difference in the scale of the components themselves. With the export basis typically amounting to about one-quarter of the proceeds derived from a grain sale, its leverage in effecting a change in the netback is simply far less. By way of example, the export basis would have to fall by about 4% to have the same beneficial impact on the netback as that of a 1% increase in price.

Still, the export basis for all commodities has changed over the course of the GMP, albeit with demonstrably less volatility than exhibited by price. With respect to the CWB grains, the scope of that net change was an increase of 15.8% (or $8.62 per tonne) in the case of wheat, and 12.6% (or $8.55 per tonne) for durum. As for the non-CWB commodities, the changes proved somewhat more beneficial: a decrease of 12.8% (or $6.71 per tonne) in the case of canola; and an increase of 13.5% (or $7.41 per tonne) for large yellow peas.

To a large extent, the export basis of both wheat and durum has profited from the financial benefits received by producers, whether in the form of trucking premiums or CWB transportation savings. These increased benefits, which amounted to $4.62 per tonne and $4.07 per tonne for wheat and durum respectively, acted as counterweights to the escalation in such direct costs as transportation, elevation, cleaning, and storage.

The increase in producer benefits reflects the degree to which the competition between grain companies has been heightened. The desire of the larger grain companies to draw increasingly greater volumes of grain into their high-throughput facilities appears to be the foundation for this. Although producers have become more adept at exploiting that rivalry to their own advantage, often playing each against the other in order to secure the best possible trucking premium when delivering grain, overarching market forces also play a role.

This, however, is not the case for non-CWB commodities. Both canola and large yellow peas receive significantly less in terms of these per-tonne premiums than CWB grains do. More importantly, the trucking premiums paid for both commodities have declined significantly over the course of the past eight crop years. In the case of canola, trucking premiums have all but been eliminated, having fallen from $2.48 per tonne in the 1999-2000 crop year to just $0.50 in the 2006-07 crop year. This decline is consistent with the grain companies' stated preference to use a single pricing tool, namely the basis, as the competitive mechanism by which they attract these commodities into their facilities.

Also worth noting is the degree to which the export basis can vary between the nine geographic areas used to assess producer impact under the GMP, both in absolute as well as relative terms. These variations encompass a myriad of individual differences in the applicable cost of freight, the FAF, elevation, and producer benefits. As a result, the export basis within any one area can vary significantly from the western Canadian average.

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Chairman of the Advisory Board
President, Quorum Corporation
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J. Marcel Beaulieu
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Sherwood Park, Alberta

Richard B. Boyd
Senior Vice President, Canadian National Railway Company (retired)
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Additional copies of this report are available for downloading directly from the company's website.

Appendix 1: Program Background

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

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

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

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

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

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

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

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

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

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

Appendix 2: Producer Netback Calculator

A prime issue with many stakeholders is the impact that the shrinking GHTS network has had on the length of truck haul from farm gate to elevator. While all evidence suggests that truck hauls are increasing because of the reduced number of delivery points, the exact – or even approximate – amount of this increase is unknown. Following discussions with stakeholders and the government, a methodology that would allow the Monitor to gather the data necessary to enhance the quality and reliability of this component of the export basis has been developed.[180] The Producer Netback Calculator (PNC) was designed to provide a cost-effective and non-intrusive means of gathering this data.

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

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

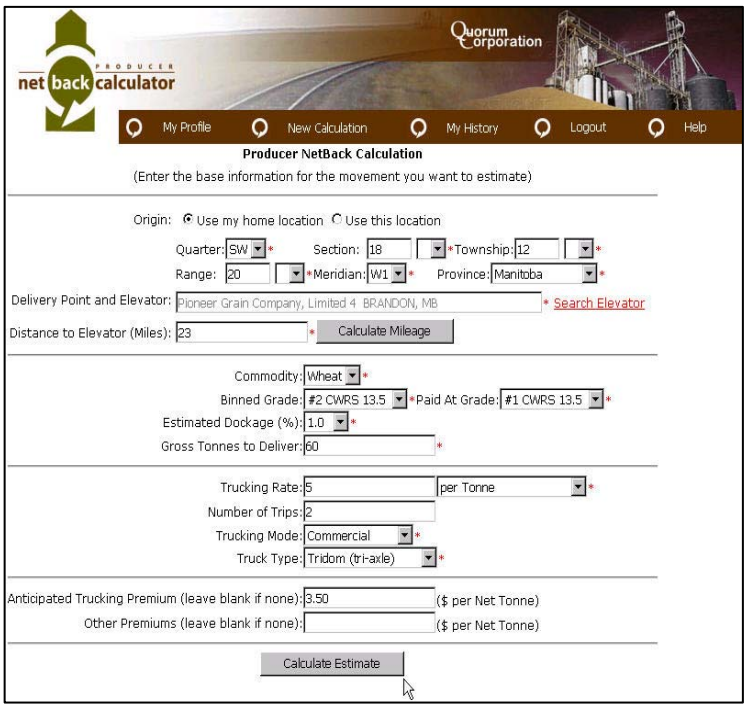

Figure A1: An image of the input screen for Quorum Corporation's Netback Calculator.

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

[180] The GMP currently incorporates trucking costs based on the commercial short-haul trucking rates for an average haul of 40 miles, as presented in Table 3A-1.

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

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

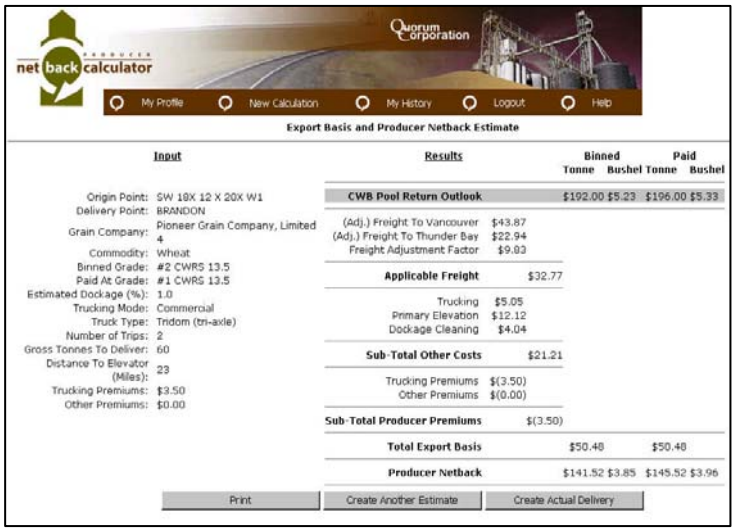

Figure A2: An image of the output screen for Quorum Corporation's Netback Calculator.

Appendix 3: Acknowledgements

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

Agricore United
Agricultural Producers Association of Saskatchewan
Agriculture and Agri-Food Canada
Alberta Agriculture, Food and Rural Development
Alberta Infrastructure and Transportation
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
Fife Lake Railway Ltd.
Gardiner Dam Terminal
Government of British Columbia
Grain Growers of Canada
Great Sandhills Terminal
Great Western Railway Ltd.
Inland Terminal Association of Canada
James Richardson International Ltd. (Pioneer Grain)
Keystone Agricultural Producers
Louis Dreyfus Canada Ltd.
Manitoba Agriculture, Food and Rural Initiatives
Manitoba Infrastructure and Transportation
Mission Terminal Inc.
National Farmers Union
North East Terminal Ltd.
North West Terminal Ltd.
OmniTRAX Canada, Inc.
Parrish & Heimbecker Ltd.
Paterson Grain
Port of Churchill
Port of Prince Rupert
Port of Thunder Bay
Port of Vancouver
Prairie West Terminal
Prince Rupert Grain Ltd.
Red Coat Road and Rail Ltd.
Saskatchewan Agriculture and Food
Saskatchewan Highways and Transportation
Saskatchewan Association of Rural Municipalities
Saskatchewan Wheat Pool
South West Terminal
Statistics Canada
Transport Canada
Vancouver Wharves Ltd.
West Central Road and Rail Ltd.
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