Monitoring the Canadian Grain Handling and Transportation System

1 Summary Report

Annual Report 2004-2005 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 2005, and focuses on the various events, issues and trends manifest in the movement of Western Canadian grain during the past year. This is the fifth 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 2004-05 crop year is largely gauged against that of the 2003-04 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 six crop years. This data constitutes the backbone of the GMP, and is used widely by a broad cross section of the stakeholder community (industry, railways, banking community, trade and academia amongst others)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.

QUORUM CORPORATION

Edmonton, Alberta
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EXECUTIVE SUMMARY

This constitutes the fifth in a series of annual reports prescribed under the Government of Canada's Grain Monitoring Program (GMP), and submitted by Quorum Corporation in its capacity as the Monitor of Canada's Grain Handling and Transportation System (GHTS).

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.

This report marks the fifth year of the Grain Monitoring program (GMP) and the completion of six years of detailed measures on the performance of the Grain Handling and Transportation System (GHTS) in Western Canada. The six crop years covered by the GMP have each provided unique depictions of grain handling in western Canada. In its first two years, railway shipments exceeded 25 million tonnes annually. This was followed by two years of drought that resulted in the volume falling by as much as a half in the 2002-03 crop year. Even with improved growing conditions in the 2003-04 and this most current crop year, the volume handled could only be considered "near-normal", and the quality of a questionable nature.

Throughout these six years the Western Canadian grain industry has had to cope with all manner of difficult situations while facing an ever changing landscape. Throughout this timeframe the elevator network continued to decline in both number and storage capacity; labour strife brought about the closure of the port of Vancouver for four months; severe winter operating conditions played periodic havoc with west coast grain shipments; and escalating ocean freight rates led to altered traditional traffic flows within North America itself.

The 2004-05 crop year Annual Report will once again examine the movements of grain through the GHTS.

Production and Volumes

The 2004-05 crop year proved to be disappointing for many of the stakeholders in Canada's Grain Handling and Transportation System. The combined effects of a cool growing season and an early frost resulted in a late harvest, and a significantly reduced supply of higher-quality grains. Still, total grain production in western Canada increased 12% over 2003's 47.7 million tonnes to over 53 million tonnes in 2004.

Although comparatively better growing conditions in 2004 resulted in elevated grain production levels, there were notable differences between provinces. Saskatchewan and Alberta, which were more adversely affected by the recent drought, each reported a second consecutive increase in annual output – some 20% and 17% respectively. Poorer growing conditions in Manitoba resulted in a 13% decline in production and British Columbia, where even poorer conditions existed experienced a 27% decline. Production increases were recorded for all major grains except flax.

With an additional 7 million tonnes in carry-forward stocks, the overall grain supply rose by 13% to 60.0 million tonnes. Still, the amount of regulated grain moved by rail to western Canadian ports increased only marginally, just 0.8% over the previous year reflecting a weakened export sales program for both CWB and non-CWB grains, caused predominantly by the overall decline in grain quality.

The ports of Vancouver and Thunder Bay remain the principal destinations for the movement of this grain, with traffic to Vancouver increasing by 7% and the three other Western Canadian ports decreasing by up to 12% (Churchill) over the previous year.

Infrastructure

The decreasing number of licensed country elevators in western Canada continues to be one of the most significant changes in the Western Canadian GHTS. By the end of the 2004-05 crop year their number had fallen to 385, some 61.9% fewer than in 1999, the beginning of the GMP. The system's overall storage capacity, however, has fallen a comparatively modest 17% during the same time frame. This reflects a clear strategy over the period by grain companies closing less-efficient smaller elevators while concurrently expanding and opening larger facilities. High-throughput facilities now account for 45% of all elevators, and 77% of overall storage capacity. These values differ substantially from the 12% and 39% shares they respectively held at the beginning of the GMP.

Canada's two largest grain companies, Agricore United (AU) and Saskatchewan Wheat Pool (SWP), have been the main practitioners of elevator rationalization, reducing their networks by 87% and 78% respectively. Further, the actions taken by these two companies represent 91% of all reductions in GHTS elevators. These companies now account for about one-third of the GHTS's total elevators and storage capacity, and remain the dominant handlers of grain in western Canada.

The railway network in western Canada has changed comparatively little since the beginning of the GMP. Only 59 route-miles of track were removed from the system during the 2004-05 crop year (by CP on three sections located in Alberta). This now brings the total of abandoned lines to almost 4% of what was in place at the beginning of the GMP, leaving a network comprised of 18,763.7 route-miles of track. The most significant change in railway infrastructure of the 2004-05 crop year came as a result of the failure of the Saskatchewan-based shortline, The Prairie Alliance for the Future (PAFF), in the fourth quarter. This resulted in the total amount of railway infrastructure operated by Class 2 and 3 carriers falling to about three-quarters of what it had been at the beginning of the GMP.

The Monitor has also noted a distinct trend for grain companies to invest far more in the facilities served by the Class 1 carriers by placing virtually all of their high-throughput elevators along their primary routes. The impact of these actions is becoming more apparent in the GMP's traffic statistics. For instance, the tonnage originated on the non-grain-dependent network increased by almost 6% over that forwarded a year earlier, while the volume coming from points on the grain-dependent network actually fell by 7%. At the same time, the originated tonnage of shortline carriers is faltering in comparison with that of the major carriers. Whereas the tonnage originated by the major carriers increased by 4% in the 2004-05 crop year, the volume originated by the smaller carriers actually decreased by over 16%. This constituted the first instance under the GMP where year-over-year changes in the volume of both groups did not at least move in a uniform direction.

At the close of the 2004-05 crop year, the licensed terminal elevator network in western Canada encompassed 16 facilities, with an aggregate 2.6 million tonnes of storage capacity. Although no physical alterations to the network were made during the 2004-05 crop year, two proposals involving potential operational changes were brought forward and remain under regulatory review (Competition Bureau) at the time of this writing. The first of these relates to an initiative by Saskatchewan Wheat Pool and James Richardson International Limited to jointly operate their adjacent terminal facilities on the north shore of Vancouver's Burrard Inlet. The second concerned a possible divestiture by Agricore United of the former United Grain Growers elevator to a consortium of independent inland terminal operators known as Terminal One Vancouver Ltd.

CWB Tendering and Advance Car Awards

The 2004-05 crop year denoted the fifth for the Canadian Wheat Board's (CWB) tendering program, but only the second wherein the CWB targeted to move a fixed 40% of the grain it ships to the four ports in western Canada using a combination of tendering and advance car awards. Under this arrangement, the CWB had the option of tendering up to a maximum of 20% of its overall volume.

This past crop year saw a fundamental shift in the balance between supply and demand owing to the combined effects of a cooler growing season and an early frost in August of 2004. As a consequence, the quality of the grain produced for movement in the 2004-05 crop year was significantly reduced. As the scope of the reduction became apparent, the CWB had to adapt, and in fact, the behaviour of the industry at large changed as a result.

During the 2004-05 crop year, the CWB issued a total of 343 tenders calling for the shipment of approximately 6.2 million tonnes of grain, slightly more than double the 3 million tonnes sought a year earlier and the single largest amount of grain put out for tender since the program was introduced in the 2000-01 crop year. To a large extent, the expanded scope of these efforts could reflect the quantities and attributes of the grain that was actually available.

The CWB's tender calls were met by 1,048 bids offering to move 5.7 million tonnes of grain, 8% less than the amount sought. A total of 445 contracts were signed for the movement of just under 2.4 million tonnes of grain, only 38% of the amount called. This represented 18% of the tonnage shipped by the CWB to western Canadian ports during the 2004-05 crop year, and fell only marginally short of its 20% target. The difficulty in securing supplies of higher-quality grain was clearly reflected in the 3.7 million tonnes of grain for which calls were issued, but went either partially, or completely, unfilled.

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. The first quarter's bidding initially resembled that observed a year earlier but then began to tumble as the scope of the problems with grain quality became apparent. The discounts offered by grain companies fell from $14.12 per tonne in the second quarter to $3.06 per tonne in the fourth. What distinguished the 2004-05 crop year from those that preceded it was the fact that the bids advanced by the grain companies began to require that the CWB pay a premium for the movement of some of the higher quality tendered grain. In the first quarter, the bidders effectively asked the CWB to pay as much as $5.00 per tonne over the initial price to ensure that this grain was moved into position for export. By the second quarter, the premium demanded had doubled and ultimately reached $10.75 per tonne in the fourth quarter. This served to significantly reduce the transportation savings that could ultimately be passed back to producers through its pool accounts. The CWB estimates the savings generated from these activities for the 2004-05 crop year to have decreased by 48.9%, to $26.1 million from $51.1 million a year earlier.

A total of 2.1 million tonnes of grain moved under the CWB's advance car awards program during the 2004-05 crop year representing almost 16% of the CWB's total shipments to western Canadian ports. In conjunction with the volume that moved under its tendering program, 34% of the CWB's total shipments moved under these two programs, falling short of the 40% that the CWB had targeted, but was marginally greater than the 32% it had represented in the 2003-04 crop year.

Commercial Relations

There were of course, other commercial and related developments impacting the GHTS during the 2004-05 crop year, including:

- The Federal government entered into a new phase of discussions with the industry in the plan to divest itself of the government owned hopper car fleet, announcing in March 2005 that it had elected to enter into negotiations with the Farmers Railcar Coalition (FRCC) for a potential transfer of the hopper car fleet. Leading up to this decision, stakeholder input had been solicited through Government sponsored technical briefings and through both the Transportation and Agriculture Standing Committees of the House of Commons. Many of the contrasting perspectives that had framed earlier discussions over a potential sale of the cars were revived and several stakeholders expressed scepticism over the FRCC's plan. Nonetheless, the government indicated that it had carefully examined the business case put forward by the FRCC to ensure that it was both financially viable and workable, and that their business case was consistent with the government's stated objectives of building a more commercial and efficient GHTS that met the needs of all stakeholders. As the 2004-05 crop year came to a close, it appeared that a final decision on the transfer, along with all of its attendant terms and conditions, would come at a later date.

- As discussed in previous editions of the Monitor's reports, ocean freight rates have increased significantly, and often erratically, in recent years. While abating somewhat in the 2004-05 crop year, the ocean freight rates in place at the beginning of the crop year proved to be about twice what they had been a year earlier. Reflecting the prevailing, and perceived future, demand for vessels to service China's growing trade in raw materials and finished goods, this price movement has had a significant impact on the export programs for CWB as well as non-CWB grains. Additionally, and perhaps more

importantly, these costs have impacted traditional routing decisions. One example is Canadian grain exports to Mexico, which used to move using ocean-going vessels from west coast ports, have now shifted to direct-rail movement – a change driven wholly by the market economics. These same types of shifts were similarly felt across North American markets, broadly impacting logistics decisions and, subsequently, the balance of equipment supply and available transportation capacity. By the end of the 2004-05 crop year ocean freight rates had reduced to be effectively double what they had been at the beginning of the GMP, with China's relentless economic expansion viewed as the main driver. The comparatively high cost of ocean freight has continued to exert an influence over the export movement of Canadian grain.

- In March 2005, Saskatchewan Wheat Pool (SWP) successfully completed a capital restructuring that formally ended its existence as a farmer-controlled business cooperative. This was followed in April by the company's move to raise an additional $150 million in capital, aimed largely at paying down a sizable portion of its long-term debt, through a rights offering to its new common shareholders. That same month, SWP also announced that it had joined forces with James Richardson International Limited (JRI) to jointly operate their adjacent terminal facilities on the north shore of Vancouver's Burrard Inlet. Although requiring formal regulatory approval from the Competition Bureau, Pacific Gateway Terminal Ltd. began operating on 11 July 2005 with the interim consent of the bureau in order to proceed with certain aspects of the integration while the matter remained under review.

- In May 2005, JRI announced that it had acquired four high-throughput elevators from ConAgra Ltd. These facilities represented but a small part of ConAgra's American parent's international activities. Although comparatively new, having been built in the mid 1990s, ConAgra chose not to expand its Canadian presence through the construction of additional facilities. Having thereby limited its potential domestic role, the company's decision to sell the majority of its Canadian holdings to JRI appears to reflect its strategic determination to withdraw from that portion of the marketplace. At the same time, the acquisition of these four high-throughput facilities appears to complement JRI's own corporate efforts to improve the efficiency of its own grain-gathering network, and to open the door to the possibility of closing some of its smaller facilities at a later date.

- In 2001, as a prerequisite to receiving its approval for the merger of Agricore and United Grain Growers, the Competition Bureau had ordered Agricore United (AU) to sell a portion of its interest in Vancouver's terminal elevators in a bid to prevent what it had deemed to be a potential lessening of competition. AU acquiesced to the sale of the terminal elevator that had been owned and operated by UGG, and although the company had actively searched for a potential buyer, it had ultimately been unable to conclude a final sale of the asset until May 2005 when they announced an agreement for the sale to Terminal One Vancouver Ltd., a consortium representing five farmer-owned inland grain terminals operating in Saskatchewan, for an undisclosed price. However, the consortium's partners were estimated to be capable of amassing only about one-third of the 1.6 million tonnes deemed as volume threshold needed to make the venture viable. The consortium was reported to have worked hard in the fourth quarter to entice other shippers into joining the partnership, or into signing grain handling agreements with them. This proved difficult, however, since these shippers already had pre-existing contracts with other terminal elevator operators for the handling of their grain. These difficulties effectively precluded a final transfer of ownership before the 2004-05 crop year ended with the possibility of completing the deal at a later date appearing unlikely. The matter is presently before a tribunal of the Competition Bureau.

- In November 2004, Saskatchewan-based Mainline Terminal Ltd. (MTL) indicated that it was soliciting expressions of interest in a potential sale of its operations. Since MTL opened its Moosomin facility in 1997, the company had struggled to compete, and had accumulated large losses in the process. Even its majority shareholder, Cargill Limited, appeared uninterested in increasing its stake in the operation. Ultimately, Parrish and Heimbecker Limited (P&H) expressed an interest in acquiring MTL's assets and successfully put forward a bid to takeover the company in March 2005. This transaction, which was finalized in the closing days of the third quarter, marked the first increase to P&H's elevator holdings in almost four years.

- On 25 June 2005, following a month-long series of failed negotiations between the Vancouver Container Truckers' Association (VCTA) and 46 west coast trucking companies, over 1,000 members of the VCTA went on strike in a protest over low hourly rates and rising fuel costs. With over 40% of the ports container traffic dependant on truck movements, considerable pressure from the business community was exerted. The provincial and federal governments answered by announcing they would appoint a mediator who would attempt to resolve the dispute while the strike continued. In late July 2005, and after long negotiations, the mediator proposed a two-year deal that called for an immediate increase in the haulage rates and fuel surcharges applicable on container movements in the Vancouver area. The deal received approval from more than 90% of the VCTA's membership on 31 July 2005, but was unanimously rejected that same day by the trucking companies that engage their services. The Vancouver Port Authority reacted quickly and announced on 1 August 2005 that trucking companies trying to service the port's container terminals would have to obtain a license under an interim system to be put in place for a period of 90 days, which was supported by a federal Order in Council issued in accordance with section 47 of the Canada Transportation Act that allowed such extraordinary steps to be taken in the interest of stabilizing the national transportation system. Concurrent with this, it was announced that a joint task force created by the provincial and federal governments would be formed to examine the various issues surrounding the movement of containers in the Lower Mainland. In the end the strike lasted over 37 days and has been estimated to cost industry over $30 million per day.

- In September and October 2004, Canadian Grain Commission (CGC) employees represented by the Public Service Alliance of Canada (PSAC) staged a series of rotating strikes at terminal elevator locations across Canada. The first of these began on 20 September 2004 with an illegal one-day walkout by grain inspectors in Vancouver. In the weeks that followed, CGC grain weighers and administrative staff joined in with a series of legal, as well as illegal, one-day walkouts of their own. In addition to Vancouver's licensed terminal elevators, those in Prince Rupert and Thunder Bay were affected. Although these walkouts reportedly prevented vessels from being loaded in the initial stages, their impact resulted in a limited slowdown in terminal operations only. In fact the CWB indicated that the rotating strikes had no effect on its ability to meet its export sales commitments. The sole exception came when unionized grain elevator workers and stevedores refused to cross picket lines established at five of Vancouver's six terminal elevators on 24 September 2004. The walkouts came to an end late in October 2004 when striking PSAC employees reached a tentative agreement with the federal government and the CGC.

System Efficiency & Reliability

The Monitoring program views the GHTS through a supply chain and process management model and examines the speed with which grain moves through the system. In this regard, the Monitor's annual report for the 2003-04 crop year concluded that the amount of time taken by grain as it moved through the supply chain had fallen to its lowest recorded value under the GMP, 62.3 days. As we began this crop year, the system realized an average of 48.3 days in the first quarter a pace substantially faster than any seen before.

This result, however, was heavily influenced by the late harvest that resulted in a rapid draw down of existing carry-forward stocks, dramatically reducing the amount of time spent by grain in storage in the primary and terminal elevator systems. As a result, by the end of the fourth quarter, the time increased to a point where grain took an average of 58 days to move through the supply chain during the 2004-05 crop year. This marked another record performance at 4.3 days (or 7%) below the 2003-04 crop year's 62.3-day average. The fact that it was worse than the first quarter's average is merely a reflection of the impact of the challenges faced by the system and the industry over the whole of the crop year.

Although the volume of grain moved through the GHTS was comparable to that in the last crop year, the 2004-05 crop year movement was, as noted above, heavily influenced by factors not experienced during the 2003-04 crop year, most predominantly the quality of grain available. The quantity of higher-quality grains that traditionally constitute the bulk of Canada's exports, such as 1 CWRS wheat and 1 CWA durum, were in very tight supply. Consequently, the GHTS experienced periodic shortages, and handled an unusually larger proportion of lower-quality grains than normal.

Although direct-rail shipments to Mexico were somewhat below the pace set last year, they continue to point towards significantly greater volumes than were seen in the earliest years of the GMP. Even though the demand for carrying capacity to service both domestic and international markets has prompted the railways to try and lease more equipment, a shortage of car supply continued to be a problem for many shippers.

All this not withstanding, an examination of the stock-to-vessel requirement and stock-to-shipment ratios reveal that sufficient grain was available at the terminals to meet prevailing demand. 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, it would appear that the GHTS was fairly reliable, but not completely dependable. On the basis of the measures produced the Monitor can only say that the GHTS continues to operate with about the same degree of reliability as was first observed at the beginning of the GMP.

Producer Impact

An examination of the financial returns to producers of wheat, durum, canola, and large yellow peas, indicates that most have improved since the 1999-2000 crop year. With the exception of large yellow peas, where the producers' netback declined by 18.7%, these gains ranged from a low of 6.3% for 1CWRS wheat to a high of 13.0% for 1 Canada canola. In almost all instances, the improvement came primarily as a result of an increase in the price of the commodity itself.

Within the framework of a wider time series (1999 – 2005), the producer's netback can be seen to have actually fallen by as much as 50.3% from highpoints recorded two years earlier. This clearly underscores the producer's exposure to changes in commodity prices. In fact, the single greatest changes to the producer netback over the past six crop years have been derived from upward or downward movements in price.

To a large extent, the minimal nature of the change in the export basis of both wheat and durum come from the financial benefits received by producers in the form of trucking premiums and CWB transportation savings. These savings amounted to $5.17 per tonne and $5.73 per tonne for wheat and durum respectively and acted as counterweights to the escalation in such direct costs as total transportation, elevation, cleaning, and storage.

The increase in producer benefits also reflects the degree to which the competition between grain companies has been heightened. While 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. For the 2004-05 crop year in particular, the sharp reduction in grain quality was largely responsible for a considerable rollback in the trucking premiums paid to producers by the grain companies, as well as a steep decline in the transportation savings realized by the CWB and ultimately passed on to producers through the pool accounts.

This 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 six 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 $0.34 in the 2004-05 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.

The Historical Perspective

While the Grain Monitoring Program (GMP) originated as part of the changes stemming from the Estey and Kroeger processes of the late 1990's, the genesis of what is the present day GHTS in Western Canada began with the introduction of Western Grain Transportation Act (WGTA) in the early 1980's and the creation of the Grain Transportation Agency. This was followed by a gradual transfer of certain responsibilities to the industry, to the railways in particular and the eventual elimination of that portion of the regulatory framework. Having amassed six years of data on the movement of grain, we thought it valuable to take a brief reflective view for this Executive Summary of where the industry has come from over a longer time frame.

Already, by 1990 the landscape of the industry had started to change. From a peak of over 5,000 elevators in the early 1960's, the Western Canadian GHTS has shrunk to just over 1,600 (see table below) and by the end

of the GMP's first year of measures (August 2000), this again had almost been cut in half. The number of primary elevators in place today is less than a quarter of what existed only 15 years ago.

	1990	1995	2000	2005
Elevators	1,578	1,340	888	356
Production (tonnes)	55,490	50,351	54,073	56,003
CWB Grains	82%	71%	70%	72%
Canola	6%	13%	13%	15%
All Other Grains	12%	17%	17%	13%
Rail Infrastructure (Miles)	23,500	21,736	19,055	18,779

Historical Perspective of key GHTS indictors [1]

It is also apparent that the change of the late 1980's led to changes in the types of crops that form the base of the GHTS. While CWB grains (wheat, durum and barley) remain the dominant grain of choice, Canola and other specialty type crops have gained greater prominence in the producer choice. This has contributed to some of the changes of the GHTS demographic.

Considerations

While consistent and stable market conditions is a luxury rarely enjoyed by any industry in this day and age, there are likely few, if any, that suffer the extreme vagaries of climatic and market swings that the grain industry in Western Canada does. The period of six years that have been studied under the GMP, when viewed in context of a longer time frame give the impression of being as inconsistent as it could get, with swings in production volumes that range up to 27%, reductions in the country elevator network of over 65% and significant shifts in production patterns.

Yet, as we enter into a seventh year of study we begin to see trends that show positive change and indications that more may be on the horizon. Indicators such as the time in the supply chain reducing over the past two years, improvements in country and terminal elevator turnover ratios, reductions in car cycles and stabilizing stock levels at port all point to progress that is encouraging.

As we continue to monitor the industry, it is apparent that much of it is finding its footing on the new landscape, despite the changing environment and the challenges the stakeholders constantly face.

[1] Data is from Canadian Grain Commission (CGC) "Grain Elevators in Canada" publications, CGC and Canada Grains Council annual statistical reports and from Quorum Corporation and the GMP historical data records.

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 – 2004-05 Crop Year

Grain Production and Supply

- *Grain production increased by 12.1% over the previous year to 53.4 million tonne.*
  - *Cool, wet weather produced lower-quality crop and a late harvest*
    - *Higher-quality grades in tight supply.*
  - *Production in Saskatchewan climbed by 20.2%; 16.9% in Alberta.*
    - *Manitoba and British Columbia production declined by 12.9% and 26.7% respectively due to comparatively poorer growing conditions.*
  - *Increased production for most commodities.*
    - *Gains in the order of 10-20% were typical*
    - *Wheat production increased by 13.1% to 19.0 million tonnes.*
- *Carry forward stock increased by 21.1% to 6.6 million tonnes.*
  - *Provincial stock levels increased by 15%-30%.*
  - *Gains noted for all commodities save canola, peas and flaxseed.*
- *Total grain supply increased by 13.0% to 60.0 million tonnes.*
  - *Largest grain supply since the 2000-01 crop year.*

Railway Traffic

- *Railway grain volume increased just 0.8% to 20.8 million tonnes.*
  - *Negatively impacted by the late harvest and grain supply problems.*
- *Changes in traffic mix benefit west coast ports..*
  - *Vancouver volume increased 7.0% to 11.7 million tonnes.*
    - *Share of traffic increased to 56.1% from 52.9% a year earlier.*
  - *Thunder Bay volume decreased 5.1% to 6.0 million tonnes.*
  - *Prince Rupert volume decreased 6.5% to 2.7 million tonnes.*
  - *Churchill volume decreased 15.3% to 0.4 million tonnes.*

Country Elevator Infrastructure

- *Third consecutive year of limited changes to elevator network.*
  - *Grain delivery points reduced by 2.1% to 282.*
  - *Number of elevators fell by 4.7% to 385.*
- *Elevator storage capacity increased by 2.8% to 5.8 million tonnes.*
  - *First net gain since the 1999-2000 crop year.*
- *Elevators capable of loading in blocks of 25 or more cars fell 2.7% to 256; share of total GHTS elevators climbs to 66.5% from 65.1%.*
  - *Share of GHTS storage capacity rose to 88.5% from 87.4%.*

Railway Infrastructure

- *Western Canadian railway network reduced by 0.3% to 18,764 route-miles.*
- *CP abandoned 59.0 route-miles of grain-dependent branch lines.*
  - *45.3 route-miles in Saskatchewan and 13.7 route-miles in Alberta.*
- *Prairie Alliance for the Future fails in May 2005.*
  - *211.5 route-miles of grain-dependent branch lines revert back to CN.*
    - *Shortline network reduced by 5.7% to 3,513 route-miles.*
    - *Class 1 network increased by 1.0% to 15,251 route-miles.*
- *Sale of the Great Western Railway to a Saskatchewan-based consortium completed in November 2004.*
- *Alberta RailNet sold to Savage Companies in May 2005.*
  - *Renamed Savage Alberta Railway.*

Terminal Elevator Infrastructure

- *Number of licensed GHTS terminal elevators remained unchanged at 16*
  - *Storage capacity held at 2.6 million tonnes.*
- *Terminal elevator unloads fell by 0.4% to 217,666 railcars.*
  - *CP's share increased to 51.5% from 48.2% a year earlier.*

Indicator Series 1 – Industry Overview

Table	Indicator Description	Notes	BASE 1999-00	CURRRENT REPORTING PERIOD (1) 2003-04	2004-05	% VAR	
	Production and Supply [Subseries 1A]						
1A-1	Crop Production (000 tonnes)	(2)	55,141.7	47,655.3	53,401.3	12.1%	▲
1A-2	Carry Forward Stock (000 tonnes)	(2)	7,418.2	5,488.9	6,647.5	21.1%	▲
	Grain Supply (000 tonnes)	(2)	62,559.9	53,144.2	60,048.8	13.0%	▲
	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	20,658.9	20,832.5	0.8%	–
1B-3	Railway Grain Volumes (000 tonnes) – Detailed Breakdown						
	Country Elevator Infrastructure [Subseries 1C]						
1C-1	Grain Delivery Points (number)		626	288	282	-2.1%	▼
1C-1	Grain Elevator Storage Capacity (000 tonnes)		7,443.9	5,688.6	5,845.6	2.8%	▲
1C-1	Grain Elevators (number) – Province						
1C-2	Grain Elevators (number) – Railway Class		917	404	385	-4.7%	▼
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	263	256	-2.7%	▼
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	9	18	100.0%	▲
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	37	76.2%	▲
1C-12	Grain Elevator Closures (number) – Railway Line Class						
1C-13	Grain Delivery Points (number) – Accounting for 80% of Deliveries		217	95	n/a	n/a	–
	Railway Infrastructure [Subseries 1D]						
1D-1	Railway Infrastructure (route-miles) – Grain-Dependent Network		4,876.6	4,406.1	4,390.3	-0.4%	–
1D-1	Railway Infrastructure (route-miles) – Non-Grain-Dependent Network		14,513.5	14,416.6	14,373.4	-0.3%	–
1D-1	Railway Infrastructure (route-miles) – Total Network		19,390.1	18,822.7	18,763.7	-0.3%	–
1D-2	Railway Grain Volumes (000 tonnes) – Grain-Dependent Network		8,683.6	6,359.3	5,936.3	-6.7%	▼
1D-2	Railway Grain Volumes (000 tonnes) – Non-Grain-Dependent Network		16,976.0	13,564.2	14,323.1	5.6%	▲
1D-2	Railway Grain Volumes (000 tonnes) – Total Network		25,659.6	19,923.5	20,259.5	1.7%	▲
1D-3	Shortline Railway Infrastructure (route-miles)		3,043.0	3,299.7	3,088.2	-6.4%	▼
1D-3	Shortline Railway Grain Volumes (000 tonnes)		2,090.5	2,001.4	1,676.3	-16.2%	▼
1D-5	Railway Grain Volumes (000 tonnes) – Class 1 Carriers		23,569.1	17,922.1	18,583.2	3.7%	▲
1D-5	Railway Grain Volumes (000 tonnes) – Class 2 and 3 Carriers		2,090.5	2,001.4	1,676.3	-16.2%	▼
1D-6	Grain Elevators (number) – Grain-Dependent Network		371	135	132	-2.2%	▼
1D-6	Grain Elevators (number) – Non-Grain-Dependent Network		513	255	239	-6.3%	▼
1D-6	Grain Elevator Storage Capacity (000 tonnes) – Grain-Dependent Network		2,475.4	1,543.1	1,659.2	7.5%	▲
1D-6	Grain Elevator Storage Capacity (000 tonnes) – Non-Grain-Dependent Network		4,847.6	4,093.4	4,133.4	1.0%	▲
	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	218,447	217,666	-0.4%	–

(1) – In order to provide for more direct comparisons, the values for the 1999-2000 through 2004-05 crop years are "as at" or cumulative to 31 July unless otherwise indicated.

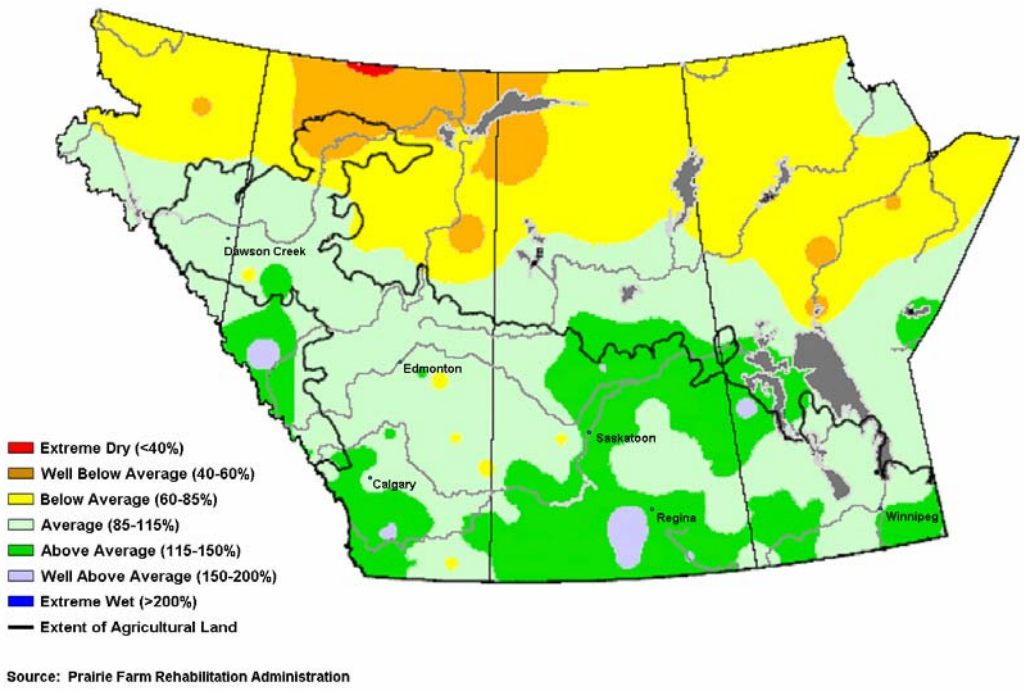
(2) – Values quoted represent the supply available for movement during the crop year.

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

Considering the promise with which it began, the 2004-05 crop year proved to be another disappointing one for many of the stakeholders in Canada's Grain Handling and Transportation System (GHTS). The combined effects of a cool growing season and an early frost resulted in a late harvest, and significantly reduced supplies of high-quality grain. The proportion of the two top grades of spring wheat and durum proved to be the lowest in over ten years. At the same time, Canadian exports still had to compete with the record-setting outputs of other grain-producing nations, and the further decline in world prices that they occasioned.

As a result, despite an upturn in western Canadian grain production, activity within the GHTS remained largely unchanged from that experienced a year earlier. This was broadly reflected in comparatively modest year-over-year changes to the indicators employed in the Grain Monitoring Program (GMP).

Figure 1: Percentage of Average Precipitation – 1 April to 31 August 2004



Source: Prairie Farm Rehabilitation Administration

For most areas of western Canada, the amount of precipitation received in 2004 proved close to the historical norm.[2] There were, however, a number of areas where precipitation levels exceeded this standard by more than 20%. These included much of southern Saskatchewan, as well as a number of pockets in Manitoba and Alberta. In light of the prolonged drought that had only ended in 2003, this led to a widespread expectation of improved grain production for the region.

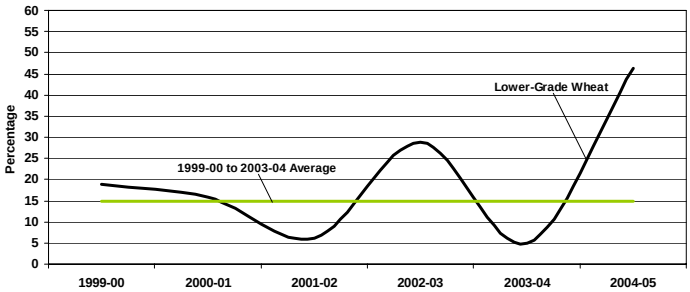
This was in fact the case otal grain production in western Canada having reached 53.4 million tonnes for the 2004-05 crop year. This marked an increase of 12.1% over the 47.7 million tonnes posted in the preceding crop year, and the first time in four years that the crop actually surpassed 50 million tonnes. Moreover, this fell only 2.2% below the 54.6-million-tonne average of the 1999-2000 and 2000-01 crop years, the first two under the GMP. [See Table 1A-1 in Appendix 4.]

[2] 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.

Despite the comparative increase, grain production was adversely affected by an unusually cool growing season, a very early frost, and excessively wet harvesting weather. Although experienced across much of the prairies, the impact on production was most acutely felt in Manitoba and British Columbia. As a result, the quality of the grain produced in the 2004-05 crop year was significantly diminished.

It must be remembered that in comparatively good years lower-graded grains comprise a relatively small proportion of total western Canadian shipments. In the case of wheat, such grades accounted for as little as 5% of the total movement in the 2003-04 crop year. ven though quality fluctuates from year to year, lower-quality wheat shipments in the GMP's first five years represented an average of 14.9%.[3] Data collected from the Canadian Grain Commission suggests that this proportion actually rose to a record 46.3% in the 2004-05 crop year. Moreover, its effects were felt throughout the grain industry, and widely reflected in the various measures used to gauge GHTS performance.

Figure 2: Lower-Quality Wheat Shipments (percentage of total)

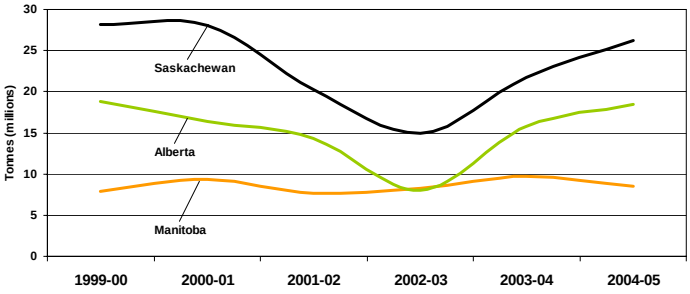


Provincial Grain Production

Although comparatively better growing conditions in 2004 resulted in higher grain production, there were notable differences between provinces. Saskatchewan and Alberta, which were more adversely affected by drought in recent years, each reported a second consecutive increase in annual output. Production in Saskatchewan climbed by 20.2%, increasing to 26.2 million tonnes from 21.8 million tonnes a year earlier. This was only 6.9% below the 28.1-million-tonne high set by the province under the GMP in the 1999-2000 crop year. What is more, Saskatchewan's share of western Canadian production increased for the first time in five years, rising to 49.0% from 45.7% the year before.[4] Alberta followed closely with a year-over-year production increase of 16.9%, to 18.5 million tonnes from 15.8 million tonnes in the previous crop year. This proved to be only 1.8% below the 18.8-million-tonne record set by the province in the GMP's first year.

Poorer growing conditions in Manitoba actually resulted in a 12.9% decline in production for the 2004-05 crop year. Overall grain production totalled 8.5 million tonnes as compared to 9.7 million tonnes a year earlier.[5] Even so, this was only marginally below the 8.6-million-tonne provincial average set in the GMP's first five years. In British Columbia, similarly poor growing conditions were compounded by even harsher circumstances at harvest, where wet fields and heavy snow coverage generally prevented combining from being completed. Due to a 26.7% decline in production, the province's harvest was the lowest recorded under the GMP, amounting

Figure 3: Major Grain Production – Provincial Distribution



[3] In the 2002-03 crop year, almost 30% of the wheat moved was of lower-quality. This constituted the largest proportion observed for any year in this five-year period.

[4] Saskatchewan's grain production had accounted for 51.0% of the overall total in the first year of the GMP.

[5] The 9.7 million tonnes of grain produced by Manitoba in the 2003-04 crop year constituted a provincial record under the GMP.

to slightly more than 0.2 million tonnes.[6]

With the exception of flaxseed, production increases were recorded for all major grains. Although important differences arose as a result of varied provincial growing conditions, gains of between 10% and 20% were typical. Wheat production, which accounted for over one-third of the total harvested tonnage, increased by 13.1%, to 19.0 million tonnes from 16.8 million tonnes a year earlier. This 2.2-million-tonne net increase constituted almost 40% of the 5.7-million-tonne expansion in total grain production. Combined with gains of 0.9 million tonnes for barley and 0.7 million tonnes for durum, almost two-thirds of the overall expansion was attributable to CWB grains.[7]

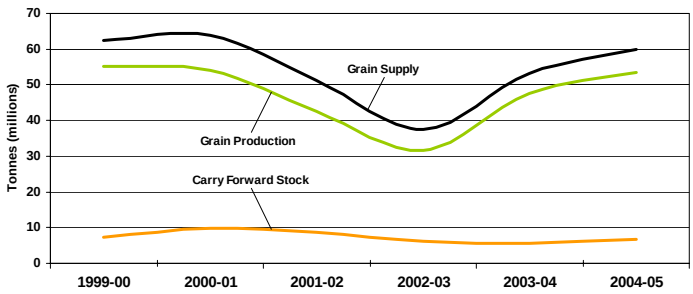
With production of 7.7 million tonnes, canola accounted for 44.7% of the 17.1 million tonnes in non-CWB grains harvested in the 2004-05 crop year. Furthermore, the 1.0-million-tonne increase in canola production comprised half of the 2.0-million-tonne expansion in non-CWB grains. Dry peas and rye, which posted gains of 57.1% and 34.7% respectively, accounted for much of the remainder.

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 14% of the grain supply.[8] 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.

The general deterioration in production witnessed throughout much of the GMP was mirrored in steadily diminishing carry-forward stocks, which fell from 9.8 million tonnes at the end of the 1999-2000 crop year, to 5.5 million tonnes at the close of the 2002-03 crop year.[9] This pattern was reversed when a comparative upturn in the 2003-04 crop year's grain production prompted an increase in year-end stocks, which climbed 21.1% to 6.6 million tonnes. When combined with 53.4 million tonnes of new production, the overall grain supply for the 2004-05 crop year amounted to 60.0 million tonnes, a gain of 13.0% over the previous crop year's 53.1 million tonnes. [See Table 1A-2 in Appendix 4.]

Figure 4: Western Canadian Grain Supply



As with grain production, the change in carry-forward stocks varied widely with respect to individual provinces and grains. On a provincial basis, year-over-year increases ranged from a low of 14.6% in Manitoba, to a high of 33.0% in British Columbia. Even so, Saskatchewan and Alberta accounted for almost 90% of the 1.1-million-tonne net increase in carry-forward stocks, with gains of about 0.5 million tonnes each. Changes in the carry-

[6] With an annual average of about 0.3 million tonnes, British Columbia is the smallest grain-producing province in western Canada. At 240,200 tonnes, production for the 2004-05 crop year proved 700 tonnes less than the province's previous low of 240,900 tonnes, which was set in the 2002-03 crop year.

[7] 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.

[8] 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 herein are derived from data provided by Statistics Canada and the Canadian Grain Commission.

[9] 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.

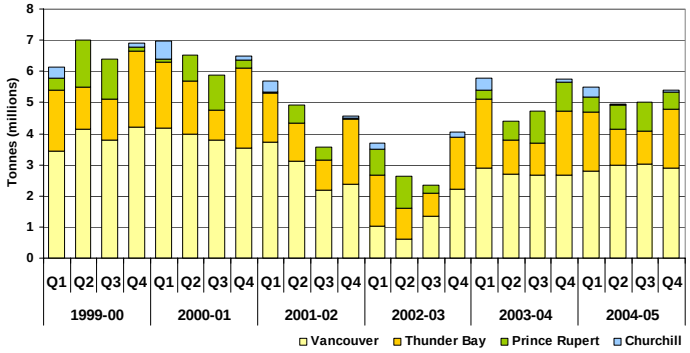
forward stocks of individual grains, however, proved more mixed. The broad increases posted by wheat, durum, barley, oats and rye accounted for an additional 1.4 million tonnes in carry-forward stocks, but was tempered by a combined 0.3-million-tonne reduction in total canola, flaxseed and pea stocks.

1.2 Rail Traffic *[Measurement Subseries 1B]*

The amount of regulated grain moved by rail to western Canadian ports increased only marginally in the 2004-05 crop year. Total volume climbed by just 0.8%, to 20.8 million tonnes from 20.7 million tonnes the year before.[10] This increase, however, was well below the previously noted 13.0% gain in the grain supply. [See Tables 1B-1 through 1B-3 in Appendix 4.]

The scope of the differential between the rates of increase for both overall volume and the volume moved by rail emphasizes the adverse impact of reduced grain quality. Owing to a resultant weakening of the sales programs for both CWB and non-CWB grains, the quantity of higher-quality grain that could be directed by rail to export position was constricted. This was further aggravated by decisions on the part of many producers to stockpile much of their lower-quality grain on the farm.[11] Given prevailing market conditions, many farmers believed that it would be financially advantageous to simply blend these stocks with what they hoped would be a better-quality harvest in the fall of 2005.

Figure 5: Railway Grain Volumes



In addition to having carried a significantly lower proportion of the grain supply than they did a year earlier, there was considerably less variation in the quarterly handlings of the railways. Although the pattern of reduced handlings in the second and third quarters remained, its 5.0-million-tonne average represented only an 8.5% reduction from the 5.4-million-tonne average of the first and fourth quarters. This contrasts sharply with the preceding crop year's 21.0% decline. To a large extent, this pattern again reflects the comparative difficulties already mentioned regarding the GHTS's ability to secure sufficient quantities of high-quality grain. At the same time, a reduction in the amount of grain directed to points outside of western Canada may also have helped temper the more extreme seasonal variations exhibited a year earlier.[12]

Origins by Province

Changes in railway shipments for the 2004-05 crop year largely mirrored those noted previously regarding provincial production. The most substantive gain was attributable to Saskatchewan, where rail shipments increased by 4.1% to 10.3 million tonnes. This was followed by Alberta with a 2.4% increase to 8.1 million tonnes. In both instances, these volumes represented the largest shipments made since the 2000-01 crop year. As a result of CN's acquisition of BC Rail just prior to the end of the 2003-04 crop year, shipments from

[10] 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.

[11] The first indications that producers were beginning to stockpile grain came in the third quarter. By the close of the 2004-05 crop year, the total amount of grain being held in the form of both farm and primary elevator stocks had reached 10.8 million tonnes, the largest carry-forward volume observed under the GMP. Furthermore, in representing 20.2% of the 53.4 million tonnes that were produced, this volume also constituted the largest proportion of a crop to be carried forward into the next crop year.

[12] It should be noted that the 2003-04 crop year saw a significant increase in the direct-rail movement of grain to points in eastern Canada, the United States of America, and Mexico. These shipments fell by 27.9% in the 2004-05 crop year, to 2.8 million tonnes from 3.8 million tonnes a year earlier.

origins in British Columbia also increased, amounting to slightly more than 0.1 million tonnes in total.[13] In the case of Manitoba, the decline in grain production prompted a 19.5% reduction in railway shipments, which fell to 2.3 million tonnes from 2.9 million tonnes a year earlier.

Destination Ports

The ports of Vancouver and Thunder Bay remained the principal destinations for the movement of western Canadian grain in the 2004-05 crop year. Traffic to Vancouver increased by 7.0%, to 11.7 million tonnes from 10.9 million tonnes a year earlier. As a result, the port's share of the total volume climbed to 56.1% from 52.9%. This constituted the second consecutive increase in Vancouver's share since a labour dispute disrupted service to the port in the 2002-03 crop year.[14]

In contrast to Vancouver, the volume of traffic directed to the three remaining ports in western Canada all declined from that handled a year earlier. Thunder Bay, which ranked as the second largest destination, saw its railway volume fall by 5.1%, to 6.0 million tonnes from 6.4 million tonnes, and its share to 29.0% from 30.9%. Much the same pattern was in evidence for movements to the GHTS's secondary ports. At Prince Rupert, total volume fell by 6.5% to 2.7 million tonnes, with its overall share falling by a full percentage point to 12.9%. Churchill's 15.3% reduction in volume proved to be the greatest, with the port having handled only 0.4 million tonnes as compared to 0.5 million tonnes a year earlier. As a result, its share also slipped, falling to 2.0% from 2.3% the year before.[15]

Despite the 2004-05 crop year's apparent setbacks, the volumes moved through the ports of Thunder Bay, Prince Rupert and Churchill remained slightly above what they had been at the beginning of the GMP. The modest nature of these gains, however, indicates that their relative shares have effectively remained unchanged from those recorded six years earlier.

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

The decline in the number of licensed country elevators in western Canada has been 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 2004-05 crop year began five years later, that number had fallen by 59.8% to 404.[16] [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, when only 84 elevators were removed from the system in the 2002-03

[13] Under the GMP, 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 came from BC Rail points, the volume handled by federally regulated carriers proved comparatively small – amounting to less than 100,000 tonnes annually. In 2002 the Canadian National Railway entered into a private haulage agreement that saw traffic originating on CN's line in the Dawson Creek area moved to Vancouver by BC Rail. As a result of this change, CN ceased providing the Monitor with information on these movements early in the 2002-03 crop year. With CN's later acquisition of BC Rail in the closing days of the 2003-04 crop year, these volumes were reincorporated into the carrier's overall traffic statistics, but proved to be negligible. With a full accounting of the carrier's handlings from these points in the 2004-05 crop year, total traffic volume effectively climbed to 139,500 tonnes.

[14] 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. Although the dispute was settled in December 2002, the redirection of grain traffic to Prince Rupert effectively distorted traditional shipping patterns on the west coast for some time thereafter. As a result, Vancouver's share of the total railway volume fell to its lowest point in the 2002-03 crop year, 40.6%. Although the port's share has since rebounded, it remains somewhat below the 60.8% share achieved in the 2001-02 crop year.

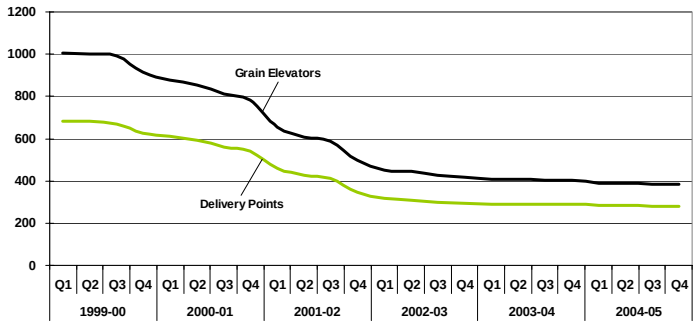
[15] The port of Churchill's overall share of railway grain volumes reached a maximum 2.7% in the 2002-03 crop year.

[16] 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.

crop year, this pace began to exhibit signs of stabilizing. This deceleration was confirmed when just twelve elevators were struck from the network in the 2003-04 crop year.

In the 2004-05 crop year, an additional 19 facilities were removed from the system. Representing a reduction of 4.7%, this lowered the number of licensed elevators in western Canada to 385. Furthermore, this brought the total reduction in elevator facilities recorded since the beginning of the GMP to 619, or 61.7%. The modest scope of the change recorded in this last crop year continues to suggest that the grain companies have effectively concluded their elevator rationalization programs, and that the remaining network is beginning to stabilize.

Figure 6: Licensed Grain Elevators and Delivery Points



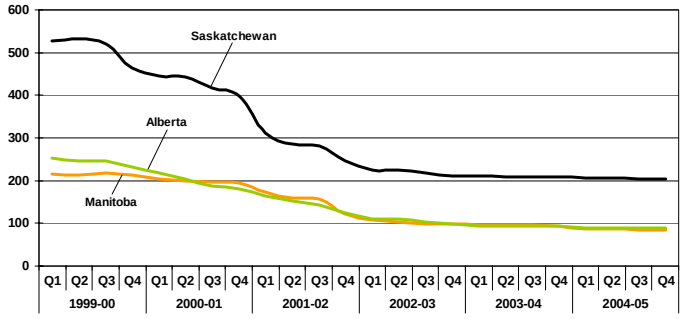
The same is true of the number of grain delivery points, which have been declining in conjunction with the reduction in licensed elevators. In the 2004-05 crop year, the number of active delivery points fell by just 2.1%, to 282 from 288. As a result, 58.8% of the 685 delivery points in place at the beginning of the GMP have now been closed. This indicates that all of the licensed elevators in some 403 communities were closed in the last six crop years.

Since the beginning of the GMP, grain deliveries have been concentrated at a comparatively smaller number of delivery points. In any given crop year, about 30% of the GHTS's active delivery points accounted for 80% of the producers' grain deliveries. This was the case in the 2003-04 crop year – the last for which statistics are available – when just 95 of the GHTS's 288 active grain delivery points (80%) accounted for this share of total grain deliveries. [See Table 1C-13 in Appendix 4.]

Provincial Distribution

At the close of the 2004-05 crop year, 203 of western Canada's licensed elevators were situated in Saskatchewan. This represented 52.7% of the system's active total, and proved to be consistent with the one-half share held by the province since the beginning of the GMP. This was followed in succession by Alberta and Manitoba, whose respective 89 and 84 elevators each accounted for about another quarter. The system's remaining nine facilities were divided between British Columbia and Ontario.[17]

Figure 7: Licensed Grain Elevators – Provincial Distribution



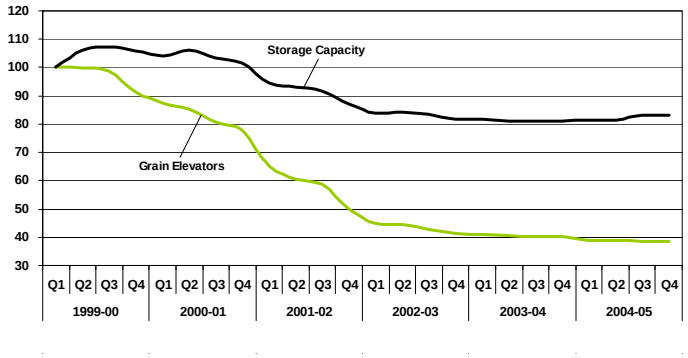
While the greatest numerical reduction in licensed facilities occurred in Saskatchewan, Alberta's closure of 163 elevators produced the largest relative decline since the beginning of the GMP (64.7%). This was followed very closely by a 61.5% reduction of elevators in Saskatchewan, some 324-elevators as well as 61.1% decline, or 132-elevator, in Manitoba. The overall similarity in these decline rates indicates that elevator rationalization has been broad based, and has not unduly targeted the facilities of any single province.

[17] There were nine licensed elevators located outside the provinces of Manitoba, Saskatchewan, and Alberta as at 31 July 2005. Specifically, these included one in Ontario, and eight 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.

Elevator Storage Capacity

Despite a 61.7% decline in the number of elevators, the GHTS's overall storage capacity fell by a comparatively modest 16.8%. As outlined in the Monitor's previous reports, this lower rate of decline in capacity shows that, while grain companies were methodically closing their less-efficient smaller elevators, they were also at the same time expanding and opening larger, higher capacity facilities 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 17: Relative Change in Grain Volumes – Railway Class

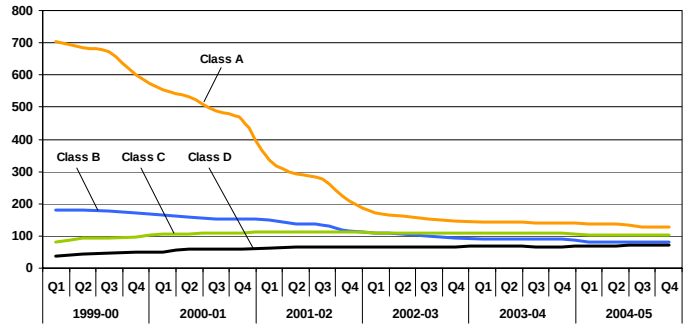


Over the course of the next four crop years, however, the system's storage capacity largely fell in step with the general decline in elevators, losing about 3,500 tonnes per facility closed. By the end of the 2003-04 crop year, total GHTS storage capacity had fallen by 19.0%, to 5.7 million tonnes from 7.0 million tonnes.

In opposition to this trend, the 2004-05 crop year saw total storage capacity increase by 2.8%, or 157,000 tonnes. As was the case in the first year of the GMP, this happened because an expansion in high-throughput storage capacity more than offset the reduction that came from the closure of smaller facilities. This served to increase the GHTS's overall storage capacity to a total of 5.8 million tonnes by the end of the period.

Facility Class

Figure 9: Licensed Grain Elevators – 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.[18] In addition, the GMP deems Class C and D facilities to be high-throughput elevators given their ability to load railcars in larger numbers.

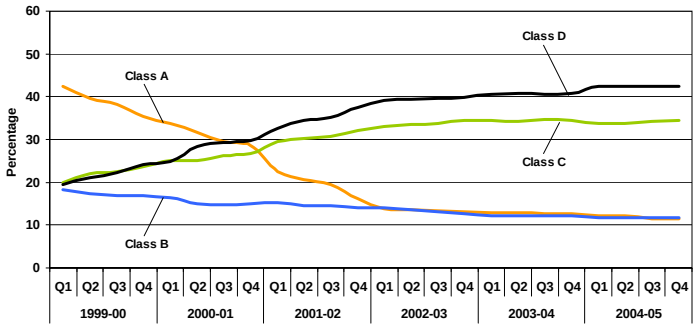
Within this framework, the composition of the elevator network can be seen to have changed significantly over the past six crop years. The most striking aspect of this change has been the 81.7% decline in the number of Class A facilities, which dropped to 129 from 705, and the 55.0% reduction in Class B facilities, which fell to 81 from 180. At the same time, the trade's growing use of high-throughput elevators proved equally pronounced: Class C facilities increased by 28.4%, to 104 from 81; and Class D facilities increased by 86.8%, to 71 from 38.

[18] 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.

Clearly, these statistics illustrate that the primary target in elevator rationalization has been the conventional wood-crib facility. Of the 772 recorded elevator closures since the beginning of the GMP, 631 related to the shutdown of Class A facilities.[19] To a large extent, this was because the economic efficiency of the high-throughput elevator had rendered these facilities obsolete. But they had also been undermined by the railways' system of financial incentives that encouraged grain to move in blocks of 25 or more railcars at a time.

These same forces also disfavoured the Class B facilities, albeit not to the same degree. More particularly, even though grain movements from these facilities were eligible to receive discounts under the railways' incentive programs, these discounts were not as generous as those accorded shipments from high-throughput elevators. More recently, the difference between these discounts was widened even further.[20] As a result, over the course of the past six crop years, a total of 113 Class B facilities also closed. Together, Class A and B facilities account for 96.4% of all recorded elevator closures. [See Tables 1C-10 through 1C-12 in Appendix 4.]

Figure 10: Share of Storage Capacity – Facility Class



In contrast to their share of elevator closures, only 55.6% of the 153 elevators opened during this period were Class A and B facilities.[21] This differential calls attention to the fact that high-throughput facilities accounted for a much greater proportion of elevator openings than closures, 44.4% versus 3.6% respectively. In fact, 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 2004-05 crop year, high-throughput facilities accounted for 45.5% of all elevators, and 76.8% of overall storage capacity. These differ substantially 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, those elevators entitled to receive incentive discounts can be seen to have fallen by 14.4% over the course of the past six years, to 256 from 299, while the associated storage capacity actually increased by 27.7%, to 5.2 million tonnes from 4.1 million tonnes.[22] More importantly, by the end of the 2004-05 crop year, these facilities accounted for 66.5% of the system's elevators, and 88.5% 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

As a strategy, elevator rationalization is aimed at improving the utility and economic efficiency of the grain-gathering network. With the cornerstone of this strategy being the replacement of smaller elevators by larger

[19] 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.

[20] 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 way of comparison, the minimum discount for movements from high-throughput elevators has gone from $3.00 per tonne to $4.00 per tonne over the course of the past six crop years.

[21] Many of the 85 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.

[22] The inclusion of Class B facilities, which declined from 180 to 81 during this period, effectively counters the comparatively smaller numerical increases made by the Class C and D elevators to produce a net reduction in the total number of facilities eligible to receive incentive discounts.

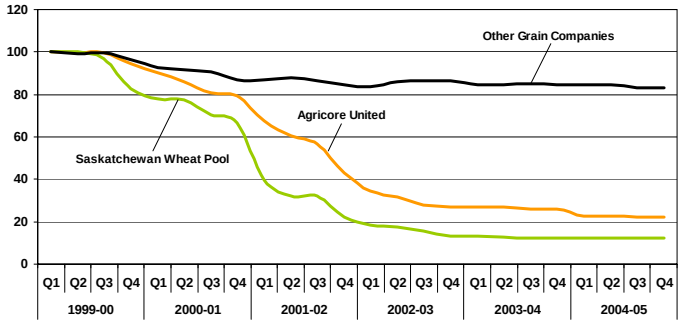
high-throughput facilities, it follows that those companies that can take greatest advantage of this replacement are those having the largest physical networks. In fact, the two largest grain companies at the beginning of the GMP, Agricore United (AU) and Saskatchewan Wheat Pool (SWP), have been the main practitioners of elevator rationalization. When taken together, 91.4% of the net reduction in GHTS elevators comes from actions taken by these two companies.

Comparatively, SWP has proven to be the more aggressive of the two companies. Through to the end of the 2004-05 crop year, SWP reduced the number of its licensed elevators by 87.5%, to 38 from 305.[23] Over half of this 267-facility reduction occurred in a single crop year, specifically that of 2001-02, when the company culled 135 elevators from its network. With only minor changes over the course of the past two crop years, the evidence strongly suggests that the company has largely concluded its rationalization program.

In comparison, by the end of the 2004-05 crop year AU had reduced its elevator network by a somewhat lesser 77.9%, to 85 from 384. As with SWP, almost half of the company's reductions were made in the 2001-02 crop year, and may well have been fuelled by the rationalization opportunities afforded through the merger of its two predecessor companies.[24] Although the pace of the decline in AU elevators has abated significantly since then, the 15-facility reduction posted by the company in the 2004-05 crop year suggests that its rationalization program has not yet ended.

Among the other large grain companies, Cargill and Pioneer Grain posted the next deepest cuts in their elevator networks. However, with reductions of 42.4% and 37.1% respectively, their rationalization efforts were seen to have advanced at roughly half the pace set by SWP and AU. The 11.5% and 14.0% reductions respectively posted by Paterson Grain and Parrish and Heimbecker proved even less pronounced.[25]

Figure 11: Licensed Grain Elevators – Grain Company



Not all of these reductions marked a permanent facility closure. In some instances, elevators closed by the larger grain companies were sold, later to re-emerge as facilities operated by smaller, independent grain companies such as Delmar Commodities, FGDI, Providence Grain Group, and Westlock Terminals.[26] As a result, the number of elevators operated by these smaller grain companies has actually increased by 45.1% in the last six crop years, to 74 from 51.[27]

Considering the above, it can be seen that the collective number of elevators operated by companies other than SWP and AU has fallen by only 16.8%, to 262 from 315. 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 its

[23] The facilities attributed to SWP do not include those operated under the commercial name of AgPro Grain. This latter operation – encompassing some 11 facilities as at 31 July 2005 – is treated as a separate business entity under the GMP. Were they to be included here, the total number of elevators would have fallen from 316 to 49, and the relative decline would have been a marginally lower at 84.5%.

[24] On 1 November 2001, Agricore Cooperative Ltd. formally merged with United Grain Growers Limited to form Agricore United. Although the relative reduction in the company's elevators falls somewhat short of SWP's, the physical count is greater – 299 versus 267 for SWP.

[25] Effective 1 January 2005, N.M. Paterson and Sons Limited changed its corporate name. The company's elevator assets are now licensed to Paterson Grain, a division of Paterson GlobalFoods Inc.

[26] 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 these elevators are now operated by smaller grain companies.

[27] 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 73 elevators cited here include four facilities operated by ADM Agri-Industries Ltd., a subsidiary of the larger US-based Archer Daniels Midland.

associated storage capacity.[28] Despite what amounts to a reversal of position, SWP and AU still remain 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 current networks, it is equally clear that their smaller rivals have also been adapting to this change in the competitive environment. [See Table 1C-3 in Appendix 4]

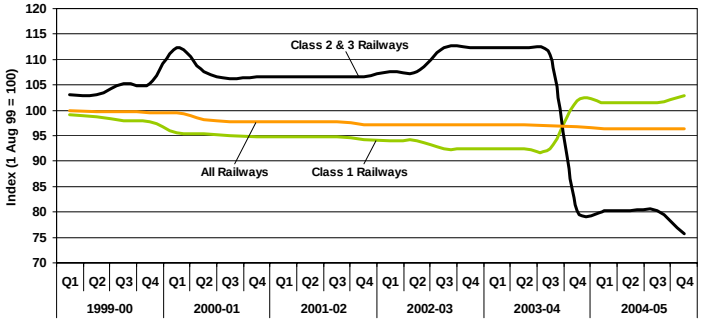
1.4 Railway Infrastructure *[Measurement Subseries 1D]*

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.[29] As outlined in the Monitor's previous reports, that network changed little during the first five years of the GMP. By the end of the 2003-04 crop year, total network mileage had fallen by a mere 3.3%, or 645.5 route-miles, to 18,822.7 route-miles overall. The largest share of this reduction, 85.0%, came from the abandonment of 548.6 route-miles of light-density, grain-dependent branch lines.

However, the railway network has changed in other ways. During this same period, Canadian National Railways (CN) and Canadian Pacific Railways (CP) transferred a number of their prairie branch lines to a variety of new shortline railways. This practice, which began in the mid 1990s, was the cornerstone in an industry restructuring that ultimately gave Class 2 and 3 carriers control over almost one-third of the railway network in western Canada by the end of the 2002-03 crop year.

A major turnabout in this practice came in the closing days of the 2003-04 crop year when CN acquired BC Rail, a regional carrier with operations extending over a 1,419.8-route-mile network in British Columbia. In doing so, CN assumed responsibility for more than one quarter of the infrastructure then operated by the industry's smaller carriers. What is more, this transaction resulted in the Class 1 carriers having recouped slightly more infrastructure than they had actually shed through divestiture since the beginning of the GMP. By the end of the 2003-04 crop year, they collectively managed a total of 15,098.7 route-miles of track as compared to 14,827.9 route-miles five years earlier. In contrast, the network operated by western Canada's Class 2 and 3 carriers declined by 19.7%, to 3,724.0 route-miles from 4,640.3 route-miles.

Figure 12: Relative Change in Route-Miles – Railway Infrastructure



Given the relatively small amount of grain shipped from the British Columbia interior, the integration of CN and BC Rail operations had little real impact on the workings of the GHTS. In fact, with just over 1,500 carloads of grain having moved from Fort St. John and Dawson Creek in the 2004-05 crop year, these movements accounted for less than one percent of the total volume moved by rail. In equal measure, although these movements were now being taken into consideration when the Canadian Transportation Agency calculated CN's revenue cap, its impact was comparatively small.[30]

[28] By the end of the 2004-05 crop year, grain companies other than SWP and AU accounted for 68.1% of the elevators, and 67.0% of the associated storage capacity. This marks a significant increase over the 31.4% and 46.9% shares respectively held at the outset of the GMP. The shares attributable to SWP and AU have fallen correspondingly in this same period to 31.9% of the elevators, and 33.0% of the associated storage capacity.

[29] 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.

[30] As a consequence of the CN acquisition, the operations of the former BC Rail – which had been provincially regulated – now come under the jurisdiction of the Canadian Transportation Agency and the *Canada Transportation Act.* As such, the revenue cap now applies to the movement of grain from former BC Rail points to the four ports in western Canada.

Similarly, no real change arose from the completion of WestCan Rail Ltd.'s sale of the Great Western Railway, a shortline operation extending over a 329.1-route-mile network of grain-dependent branch lines in southwestern Saskatchewan, early in the second quarter to a group of concerned local farmers, organizations and governments.[31] This acquisition marked the first instance in western Canada where the railway's principal users also became its owners.[32] This vertical integration of shipper and carrier interests denoted a significant departure from the stand-alone models typically adopted in forming a new shortline railway.

This was followed in May 2005, when an Alberta-based shortline operation was sold to Savage Companies of Salt Lake City, Utah, for an undisclosed price. Alberta RailNet, Inc. had been formed in June 1999 when its parent, North American RailNet, Inc., acquired much of the non-grain-dependent branch line network that was used by CN to reach Grand Prairie and the southern Peace River area.[33] Although largely focused on serving the resource sector, principally the coal and forestry industries, grain shipments accounted for almost one-fifth of the 44,000 carloads the carrier reportedly moved each year. In addition to several producer-car loading sites, the renamed Savage Alberta Railway's (SAR) 343.8-route-mile network provides direct-rail service to seven licensed elevators, including the three high-throughput facilities located at Rycroft, Alberta. As was the case in the sale of the Great Western Railway, a change in carrier ownership has no direct impact on GHTS performance. However, a pledge by CN to reopen its connecting line with the SAR between Dawson Creek and Hythe, Alberta, presents local grain companies with the promise of a potential service improvement on traffic destined to the port of Prince Rupert.[34]

The most significant change in railway infrastructure during the course of the 2004-05 crop year came as a result of the failure of another Saskatchewan-based shortline operation early in the fourth quarter. The Prairie Alliance for the Future (PAFF) had leased a 211.5-route-mile network of light-density, grain-dependent branch lines in northwestern Saskatchewan from CN in mid-January 2003.[35] Under the terms of the lease, PAFF was to have assumed responsibility for track maintenance and traffic solicitation, which had been expected to consist almost entirely of producer-loaded grain. At the same time, CN became the sole provider of contracted railway services to the new venture under an arrangement that would use CN personnel and equipment in off-peak periods. Unfortunately, PAFF could hardly have selected a less opportune timeframe in which to commence operations, coming as it did on the heels of 2002's drought. Despite its efforts to build a solid traffic base in the 2003-04 crop year, PAFF's originated tonnage proved well below the level needed to make it financially viable. The grain quality problems that reduced producer-car loading in the 2004-05 crop year only compounded these difficulties.

In May 2005, when PAFF found itself unable to provide for adequate liability insurance, the Canadian Transportation Agency cancelled its certificate of fitness.[36] As a result, the railway lines that had been leased by PAFF reverted back to the control of CN. This brought about a further shift between the infrastructures managed by the Class 1 and non-Class 1 carriers. With the close of the 2004-05 crop year, the total amount of

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[31] Faced with mounting financial losses, WestCan Rail Ltd. of Abbotsford, British Columbia, announced late in 2003 that it intended to either sell the Great Western Railway or abandon it entirely. Over the course of the next several months, a group of concerned area farmers mounted a successful campaign to raise the funds necessary to purchase the operation.

[32] Local producers, organizations and municipalities have taken the lead in establishing shortline railway operations on branch lines slated for abandonment before. The creation of Red Coat Road and Rail in 1999, the Wheatland Railway in 2002, and the Prairie Alliance for the Future in 2003, all represent such instances. The distinction to be made in the case of the Great Western Railway is that the purchaser acquired the physical assets and operations of an existing shortline railway outright.

[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 to several shortline railways until May 2005, when its American operations were folded in with those of Denver-based OmniTrax, Inc., and Alberta RailNet was sold to Savage Companies.

[34] As one of the conditions tied to its acquisition of BC Rail, CN agreed to refurbish the branch line that connected Dawson Creek, British Columbia, with Hythe, Alberta. When reopened, this connection would provide a shorter route to Prince Rupert with the potential for improved transit times on grain originating at points served by Savage Alberta Railway. Work on this project was reportedly completed late in the summer of 2005.

[35] The PAFF lease encompassed all of CN's Robinhood and Turtleford subdivisions, as well as the southern portion of its Blaine Lake subdivision.

[36] See Canadian Transportation Agency Decision Number 2005-R-278 dated 20 May 2005.

railway infrastructure operated by the smaller Class 2 and 3 carriers had fallen another 5.7% to 3,512.5 route-miles, about three-quarters of what it had been six years earlier. [See Table 1D-1 in Appendix 4.]

Branch Line Discontinuances

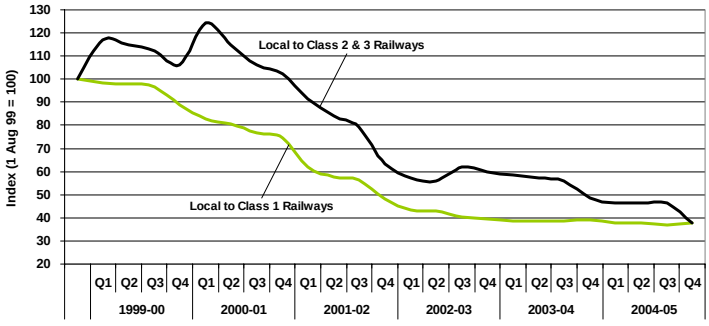
A total of 59.0 route-miles were removed from the western Canadian railway network in the 2004-05 crop year. Much of this was achieved when CP abandoned a 43.2-route-mile section of its Burstall subdivision in southwest Saskatchewan in August 2004.[37] An additional 15.8 route-miles was withdrawn in the fourth quarter when the company abandoned two small sections of its Rocanville and Sterling subdivisions. In total, this constituted a mere 0.3% reduction from the network that existed at the beginning of the crop year. With a remaining network comprised of 18,763.7 route-miles, this enlarged the scope of the reductions made since the beginning of the GMP to 3.6%, or 704.5 route-miles. The modest nature of this change continues to contrast sharply against that of licensed elevators, which as already discussed, fell by 61.7% in the same period.

During the course of the 2004-05 crop year, CP added a number of new abandonment candidates to its Three-Year Network Plan. In August 2004, CP indicated that it would seek to convey or abandon a total of 34.2 route-miles drawn from its Arborg and White Fox subdivisions. This was followed in the closing days of July 2005 by the carrier's decision to add a more substantive 412.2 route-miles of its prairie infrastructure to the list. Well over half of this latter grouping, 242.7 route-miles, related to the planned closure of its Bulyea, Kerrobert, Outlook and Radville subdivisions in Saskatchewan. In Alberta, the abandonment of its Cardston, Irricana and Stirling subdivisions would add another 89.8 route-miles. Sections of Manitoba's La Riviere and Napinka subdivisions accounted for the remaining 79.7 route-miles. In all cases, CP had concluded that these grain-dependent branch lines were no longer commercially viable due to the closure of local grain elevators, and the resultant decline in traffic volume.

Local Elevators

As discussed earlier, while the railway network has changed little over the course of the past six crop years, the elevators it serves have declined significantly. In broad terms, these facilities have decreased by 62.1% in number, to 371 from 979, and by 16.4% in terms of its associated storage capacity, to 5.8 million tonnes from 6.9 million tonnes.[38]

Ostensibly, the rate of decline in the number of elevators tied to the Class 1 railways appear virtually indistinguishable from that of elevators affiliated with the smaller non-Class 1 railways. Those local to Class 1 carriers fell by 62.1%, to 340 from 897, while those associated with the non-Class 1 carriers declined by 62.2%, to 31 from 82. There was, however, a significant differential between these two groups in terms of the rate at which the associated storage capacity has declined: 14.6% in the case of elevators local to Class 1 carriers versus 41.1% for those tied to non-Class 1 carriers. This differential underscores the fact that grain companies



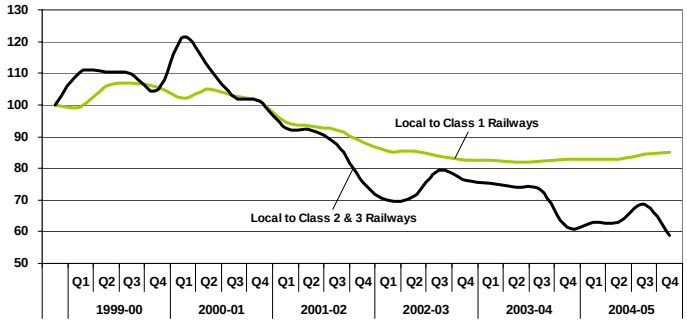
[37] The portion of the Burstall subdivision abandoned by CP in August 2004 had been identified as an abandonment candidate by the carrier, and added to its Three-Year Network Plan in 2001. As the name implies, the Three-Year Network Plan is a legally prescribed listing of all railway lines that a federally-regulated carrier plans to either operate, convey or abandon over the next three years.

[38] The reductions cited here relate only to those facilities directly served by rail. These reductions differ somewhat from those reported in Section 1.3, which related to the net decline in the number and capacity of the entire elevator network, including off-track facilities.

have been investing far more in facilities served by CN and CP. This is reflected in the industry's decision to situate virtually all of its high-throughput elevators along their primary routes.[39] [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, including the Southern Manitoba Railway, Red Coat Road and Rail, and the Great Western Railway. When other shortline operations were established in the 2002-03 crop year, similar gains were also made.

Figure 14: Relative Change in Storage Capacity – Railway Class

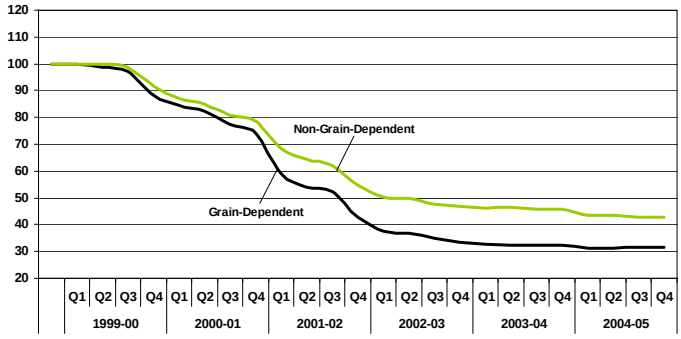


The occasional transfer of these branch line operations does not, however, detract from the fact that the elevators they served were steadily being closed. When the time series is adjusted to exclude such structural changes, it shows the decline in both the number and storage capacity of elevators local to shortline carriers in operation at the beginning of the GMP to have been more pronounced.

Grain-Dependent Network

Differing rates of decline are also evident between facilities local to the grain-dependent, and non-grain-dependent, railway networks.[40] Elevators situated along the grain-dependent network fell by 68.6% over the course of the past six crop years, to 132 from 420. In the case of those situated along the non-grain-dependent network, the decline was a lesser 57.2%, having fallen to 239 from 559. On the whole, 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 reached a record 281.

Figure 15: Relative Change in Local Elevators – Railway Line Class



The rate of decline for both networks has, however, substantially abated over the latter half of the GMP. In fact, net declines in the 2004-05 crop year proved to be the smallest recorded so far, amounting to 2.2% and 6.3% for the grain-dependent and non-grain-dependent networks respectively. These modest declines simply reflect the general slowdown in elevator closures already discussed.

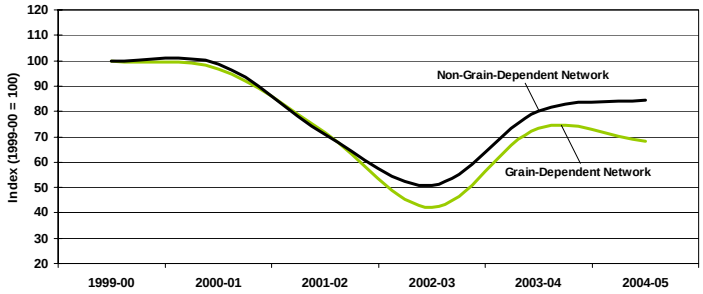
Traffic Volumes

[39] Class 1 carriers serviced 167 of the GHTS's 175 high-throughput elevators (or 95.4%) at the end of the 2004-05 crop year.

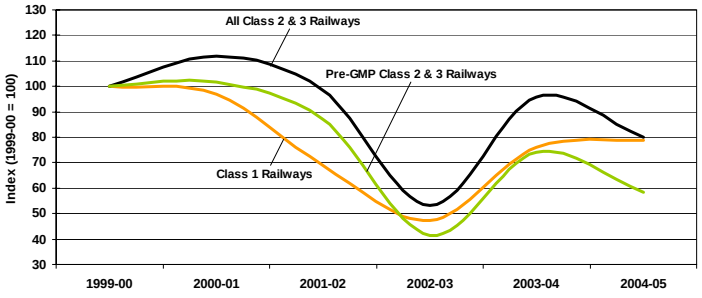
[40] The term "grain-dependent branch line", while largely self-explanatory, denotes a legal designation under the Canada Transportation Act. Since the Act has application to federally regulated railways only, grain-dependent branch lines transferred to provincially regulated carriers lose their federal designation. As a result, the legally defined grain-dependent branch line network is a list that is continuously declining. 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.

Overall grain volumes have now begun to reflect the effects of these changes in the elevator and railway networks. In the 2004-05 crop year, the tonnage originated on the remaining non-grain-dependent network increased by 5.6%, to 14.3 million tonnes from 13.6 million tonnes a year earlier. At the same time, traffic originating at points on the remaining grain-dependent network actually fell by 6.7%, to 5.9 million tonnes from 6.4 million tonnes. These counter movements helped widen the gap that had opened between the amounts of grain originated by these two networks two years before. With the close of the 2004-05 crop year, the tonnage forwarded from points along the non-grain-dependent network had fallen by 15.6% from what it had been in the GMP's base year. In comparison, the volume originated by the grain-dependent network had declined by nearly twice as much, 31.6%. As a consequence, the non-grain-dependent network's share of the total grain volume has risen by 4.5 percentage points to a record 70.7%.[41] [See Table 1D-2 in Appendix 4.]

Figure 16: Relative Change in Grain Volumes – Railway Line Class



These same structural influences are also apparent in the relative volumes of grain originated by large and small carriers. This became particularly evident in the 2004-05 crop year. Whereas the tonnage originated by the major carriers increased by 3.7%, the volume originated by the smaller carriers actually decreased by 16.2%. As with the grain-dependent and non-grain-dependent networks, this constituted the first instance where the year-over-year change in volume for both groups did not at least move in the same direction. In general terms, it suggests that the tonnage originated by the shortline carriers has begun to falter in comparison to that of the Class 1 carriers. However, the net-volume declines registered by both groups over the last six crop years, 19.8 versus 21.2% respectively, conceals this recent shift. In large part, this is a distortion arising from the establishment of several new shortline operations over the course of the GMP. In fact, were the volumes tied to these newer carriers to be excluded, the volume forwarded by shortline railways operating since the beginning of the GMP can be seen to have declined by 41.8%.[42] [See Tables 1D-3 and 1D-5 in Appendix 4.]



Notwithstanding the preceding, the volume of traffic originated by shortline railways has not fallen as sharply as the licensed elevators served by them. In fact, the data indicates that producer-car loading has

[41] 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. Owing in large part to the effects of the drought, this proportion actually climbed to 70.1% in the 2002-03 crop year before falling back to 68.1% in the 2003-04 crop year.

[42] The distortions cited here apply equally to the statistics generated for Class 1 carriers, but given its significantly larger traffic base, the impact is less significant. Had the volume represented by the shortline railways created in this six year period been retained by the Class 1 carriers, their originated tonnage for the 2004-05 crop year would have declined by 17.5% from what it had been in the first year of the GMP. This would only have been 3.7 percentage points less than the 21.2% actually observed.

replaced a significant portion of the grain volume that would otherwise have been lost following the closure of these licensed facilities.[43] This is evidenced by the fact that producer-car loadings accounted for an estimated 43.3% of the overall volume originated by shortline carriers in the 2004-05 crop year.[44] This proportion represents an effective tripling 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 climbed by 14.3%, to 16 from 14, with its associated storage capacity having increased 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.[45] And while no physical alterations to the network were made during the 2004-05 crop year, two proposals involving potentially significant operational changes at the port of Vancouver were brought forward.

The first of these related to an initiative by Saskatchewan Wheat Pool (SWP) and James Richardson International Limited (JRI) to jointly operate their adjacent terminal facilities on the north shore of Burrard Inlet.[46] On a combined basis, these two facilities account for just over one-third of Vancouver's total licensed storage capacity, some 0.3 million tonnes. Although regulatory approval from the Competition Bureau had still not been received by the close of the crop year, the two companies had already moved to integrate some of their operations under an interim consent agreement.[47]

The second related to a long-anticipated divestiture by Agricore United (AU) of the terminal elevator that had previously belonged to one of its predecessor companies, United Grain Growers (UGG).[48] In May 2005, AU announced that it had signed an agreement to sell its former UGG facility to Terminal One Vancouver Ltd., a consortium representing five farmer-owned inland grain terminals operating in Saskatchewan, for an undisclosed price. This transaction, equally subject to the receipt of regulatory approval from the Competition Bureau, also had not been finalized by the close of the 2004-05 crop year.

Terminal Elevator Unloads

The number of covered hopper cars unloaded at terminal elevators during the 2004-05 crop year remained largely unchanged from the year before, falling by just 0.4%, to 217,666 carloads from 218,447 carloads.[49] Of the two major carriers operating in western Canada, CP posted the greatest overall increase in the number of

[43] 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.

[44] Based on data from the Canadian Grain Commission.

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

[46] This venture is discussed more fully in section 2.33.

[47] Among other things, this included the construction of additional railway infrastructure to facilitate the exchange of railcars between the two facilities.

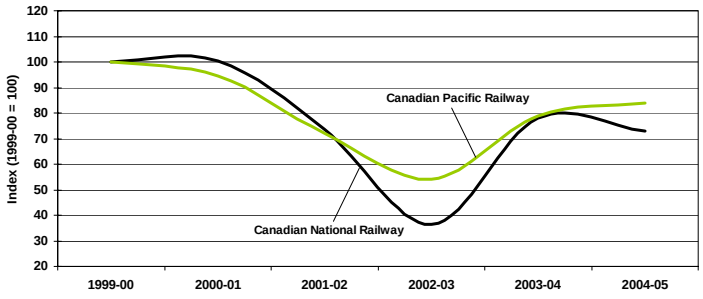
[48] As a prerequisite to receiving the approval of the Competition Bureau for the merger of Agricore Cooperative Ltd. and United Grain Growers Limited (UGG) in 2001, the newly formed Agricore United (AU) agreed to sell the Vancouver terminal elevator that had been owned and operated by UGG. Although AU had been actively searching for a potential buyer, it had been unable to conclude a final sale.

[49] 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.

carloads originated. The company's handlings rose 6.6%, to 112,189 carloads from 105,229 carloads the year before. Much of this gain came as a result of the volumes it moved to Vancouver and Prince Rupert, which increased by 6,700 cars (11.9%) and 1,200 cars respectively.[50] The concentration of higher-quality grains in CP's service area, as well as the better availability of grains with specific sales attributes, was largely responsible for these gains. In contrast, CP's handlings into Thunder Bay remained unchanged from the year before, while those into Churchill fell by 32.7%.[51]

By way of comparison, CN's handlings were off by 6.8%, falling to 105,477 carloads from 113,218 carloads a year earlier. The carrier's handlings into Vancouver proved more insulated than those directed to other ports, falling by just 1.1% to 50,535 carloads. And although the carrier's shipments into Prince Rupert remained second only to Vancouver, the 29,506 cars unloaded there were 11.6% below that handled the year before. For Thunder Bay and Churchill, the carrier posted similar year-over-year reductions of 11.1% and 15.3% respectively.[52]

Figure 18: Relative Change in Terminal Unloads – CN and CP Origins



These results reveal CP, with 51.5% of the overall grain movement in the 2004-05 crop year, to have been the largest handler of grain in western Canada, a position it had lost to CN a year before. With respect to movements into Vancouver, the GHTS's principal export gateway, CP accounted for 55.4% of all grain shipments, up marginally from 52.3% a year earlier. CP was also the dominant carrier in the Thunder Bay corridor, where it originated 67.1% of the 69,038 cars unloaded. This too denoted a modest gain over the 64.5% share earned the year before. [See Table 1E-2 in Appendix 3.]

Although the record is somewhat mixed, CP has often outpaced CN's quarterly and annual handlings since the 2002-03 crop year. To a degree, this can be explained by a distribution in crop production that has tended to benefit CP rather than CN in recent years. The better availability of higher-quality grains in CP's service area was a central factor in its having secured the larger share of the 2004-05 crop year's total movement. Even so, the greater mobility given to grain through extended trucking options has helped to blur the traditional definition of these boundaries. As a result, factors such as the carrier's pricing and service levels have also become key determinants of market share.

1.6 Summary Observations

The 2004-05 crop year proved to be disappointing for many of the stakeholders in Canada's Grain Handling and Transportation System. The combined effects of a cool growing season and an early frost resulted in a late harvest, and a significantly reduced supply of higher-quality grains. Still, total grain production in western Canada actually surpassed 50 million tonnes for the first time in four years, increasing by 12.1% to 53.4 million tonnes from 47.7 million tonnes a year earlier.

Although comparatively better growing conditions in 2004 resulted in elevated grain production levels, there were notable differences between provinces. Saskatchewan and Alberta, which were more adversely affected

[50] Prince Rupert effectively did not receive grain from CP-served origins in the 2003-04 crop year. The 1,200 cars originated by CP in the 2004-05 crop year marks the first such handlings since the 2002-03 crop year when a labour disruption in Vancouver resulted in a substantial amount of western Canadian grain having been directed to Prince Rupert.

[51] CP does not provide direct rail service to either Prince Rupert or Churchill. Traffic destined to these ports is interchanged to CN as part of an interline movement.

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

by the recent drought, each reported a second consecutive increase in annual output. Production in Saskatchewan climbed by 20.2%, increasing to 26.2 million tonnes from 21.8 million tonnes a year earlier. Alberta followed closely behind with a year-over-year increase of 16.9%, to 18.5 million tonnes from 15.8 million tonnes a year earlier. Poorer growing conditions in Manitoba actually resulted in a 12.9% decline in production, which totalled 8.5 million tonnes as compared to 9.7 million tonnes a year earlier. Much the same was true for British Columbia, where even poorer conditions resulted in a 26.7% decline.

With the exception of flaxseed, production increases were recorded for all major grains, with gains of between 10% and 20% being typical. Wheat production, which accounted for over one-third of the total harvested tonnage, increased by 13.1%, to 19.0 million tonnes from 16.8 million tonnes a year earlier. When combined with durum and barley, CWB grains accounted for almost two-thirds of the overall expansion in total production. With production of 7.7 million tonnes, canola proved to be the leading non-CWB grain, representing 44.7% of the 17.1 million tonnes in non-CWB grains harvested.

With an additional 6.6 million tonnes in carry-forward stocks, the overall grain supply rose by 13.0% to 60.0 million tonnes. Still, the amount of regulated grain moved by rail to western Canadian ports increased only marginally in the 2004-05 crop year, climbing by just 0.8%, to 20.8 million tonnes from 20.7 million tonnes the year before. To an extent, this limited gain reflects the weakened export sales programs for both CWB and non-CWB grains as a result of the overall decline in grain quality.

The ports of Vancouver and Thunder Bay remained the principal destinations for the movement of this grain. Traffic to Vancouver increased by 7.0%, to 11.7 million tonnes from 10.9 million tonnes a year earlier. The port's share of the total volume also climbed to 56.1% from 52.9%, its second consecutive increase in share since a labour dispute disrupted service to the port in the 2002-03 crop year.

Unlike Vancouver, the traffic volume directed to western Canada's three remaining ports all declined from that handled a year earlier. Thunder Bay, which ranked as the second largest destination, saw its railway volume fall by 5.1%, to 6.0 million tonnes from 6.4 million tonnes, and its share to 29.0% from 30.9%. At Prince Rupert, total volume fell by 6.5% to 2.7 million tonnes, with its overall share falling by a full percentage point to 12.9%. For Churchill, total volume fell by 15.3% to 0.4 million tonnes, with its share falling to 2.0% from 2.3% the year before. Despite the 2004-05 crop year's apparent setbacks, the volumes moved through the ports of Thunder Bay, Prince Rupert and Churchill remain slightly above what they were at the beginning of the GMP.

The decline in the number of licensed country elevators in western Canada continues to be one of the most visible facets of the changing GHTS. By the end of the 2004-05 crop year their number had fallen by 61.9% to 385. The system's overall storage capacity, however, fell by a comparatively modest 16.8% during the GMP's six-year history, to 5.8 million tonnes from 7.0 million tonnes. This lower rate of decline simply reflects the fact that grain companies were methodically closing their less-efficient smaller elevators while concurrently expanding and opening larger facilities. By the end of the 2004-05 crop year, high-throughput facilities accounted for 45.5% of all elevators, and 76.8% of overall storage capacity. These values differ substantially from the 11.9% and 39.4% shares they respectively held at the beginning of the GMP.

Canada's two largest grain companies, Agricore United (AU) and Saskatchewan Wheat Pool (SWP), have been the main practitioners of elevator rationalization, having reduced their networks by 87.5% and 77.9% respectively. On a combined basis, 91.4% of the overall reduction in GHTS elevators was derived from the actions taken by these two companies. In comparison, the number of elevators operated by companies other than SWP and AU has fallen by only 16.8%. In the face of the steeper cuts made by SWP and AU, these companies now account for about one-third of the GHTS's total elevators and storage capacity, although SWP and AU still remain the dominant handlers of grain in western Canada.

The railway network in western Canada has changed comparatively little since the beginning of the GMP. Only 59.0 route-miles of additional track were removed from the system during the 2004-05 crop year when CP abandoned sections of its Burstall, Rocanville and Sterling subdivisions. This enlarged the scope of the reductions made since the beginning of the GMP to just 3.6%, resulting in a remaining network comprised of 18,763.7 route-miles.

The most significant change in railway infrastructure during the course of the 2004-05 crop year came as a result of the failure of a Saskatchewan-based shortline, The Prairie Alliance for the Future (PAFF), early in the fourth quarter. Established in January 2003, the company operated over a 211.5-route-mile network of light-

density, grain-dependent branch lines that it had leased from CN, but ultimately proved incapable of building the solid traffic base it needed to become financially viable. When the Canadian Transportation Agency cancelled its certificate of fitness in May 2005, the railway lines that PAFF had leased reverted back to the control of CN. This resulted in the total amount of railway infrastructure operated by the smaller Class 2 and 3 carriers having fallen to 3,512.5 route-miles, about three-quarters of what it had been at the beginning of the GMP.

On the surface, the rate of decline in the number of elevators tied to the Class 1 railways appears virtually indistinguishable from that of elevators affiliated with the smaller non-Class 1 railways, 62.1% versus 62.2% respectively. There has been, however, a significant difference in the rate at which the associated storage capacities of both have been declining: 14.6% in the case of elevators local to Class 1 carriers versus 41.1% for those tied to non-Class 1 carriers. The data also clearly indicates that the decline in facilities local to the grain-dependent network has been markedly faster rate than that of the non-grain-dependent network, 68.6% versus 57.2% respectively.

These differentials underscore the fact that grain companies have been investing far more in the facilities served by the Class 1 carriers, and in the industry's decision to situate virtually all of its high-throughput elevators along their primary routes. The impact of these changes is becoming more apparent in the GMP's traffic statistics. The tonnage originated on the non-grain-dependent network increased by 5.6% over that forwarded a year earlier, while the volume coming from points on the grain-dependent network actually fell by 6.7%. This further widened the gap between the relative volumes originated by the two networks. At the same time, the originated tonnage of shortline carriers is faltering in comparison with that of the major carriers. Whereas the tonnage originated by the major carriers increased by 3.7% in the 2004-05 crop year, the volume originated by the smaller carriers actually decreased by 16.2%. This constituted the first instance under the GMP where year-over-year changes in the volume of both groups did not at least move in a uniform direction.

At the close of the 2004-05 crop year, the licensed terminal elevator network in western Canada encompassed 16 facilities, with an aggregate 2.6 million tonnes of storage capacity. Over the course of the past six years this represented a gain of 14.3% in terms of the system's total number of facilities, and 3.3% in terms of its storage capacity. Although no physical alterations to the network were made during the 2004-05 crop year, two proposals involving potential operational changes were brought forward. The first of these relates to an initiative by Saskatchewan Wheat Pool and James Richardson International Limited to jointly operate their adjacent terminal facilities on the north shore of Vancouver's Burrard Inlet. The second concerned a possible divestiture by Agricore United of the former United Grain Growers elevator to a consortium of independent inland terminal operators known as Terminal One Vancouver Ltd.

The number of covered hopper cars unloaded at these terminal elevators was largely unchanged from that handled a year earlier, falling by just 0.4%, to 217,666 carloads from 218,447 carloads. Of the two major carriers operating in western Canada, only CP posted a net increase in the number of carloads it originated. The company's handlings rose 6.6%, to 112,189 carloads from 105,229 carloads the year before. CN's handlings on the other hand, fell by 6.8%, to 105,477 carloads from 113,218 carloads a year earlier. The concentration of higher-quality grains in CP's service area was largely responsible for its having taken a 51.5% share of the total volume as compared to CN's marginally lower 48.5% share.

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 2004-05 crop year, the CWB has 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 – 2004-05 Crop Year

Tendering

- *CWB's tendering commitment held to a maximum of 20% for second consecutive year.*
- *343 tender calls were issued by the CWB during 2004-05.*
  - *Called for the movement of 6.2 million tonnes to export positions.*
    - *More than double the 3.0 million tonnes sought a year earlier.*
- *1,048 bids received; offered an aggregate 5.7 million tonnes.*
  - *Significantly reduced bidding reflected tight supply of high-quality grains.*
    - *Difficult to meet the specifications of the tender.*
- *445 contracts concluded for the movement of 2.4 million tonnes.*
  - *Falls by 3.3% from the 2003-04 crop year's 2.5 million tonnes.*
  - *CWB concentrates tendered grain movements at Vancouver.*
    - *Vancouver accounts for 70.3% of all deliveries.*
    - *Thunder Bay, 20.9%; Prince Rupert, 8.1%; and Churchill, 0.7%.*
  - *Three contracts for the movement of 43,200 tonnes of malting barley.*
  - *Represented 18.0% of CWB volume moved to ports in western Canada.*
    - *Marginally below established 20% maximum commitment.*
- *Tenders for 58.7% of the tonnage called either partially, or not at all, filled.*
  - *Almost four times greater than 2003-04's 15.7% proportion.*
- *Proportion moving in multiple car blocks decreased marginally to 88.2%.*
  - *Proportion in blocks of 50 or more cars decreased to 63.3% from 70.7%.*
    - *6.1-percentage-point increase in non-incentive movements.*
- *CWB estimated 2004-05 savings from grain company tendering, freight and terminal rebates, and financial penalties for non-performance, at $26.1 million.*
  - *Decreased by 48.9% from 2003-04's $51.1 million savings.*

Advance Car Awards

- *2.1 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.*
    - *Falls short of the 20% targeted by the CWB.*
  - *Reduced volume reflects widespread grain supply problems.*
- *33.8% of all CWB movements in western Canada moved under its tendered and advance-car-awards programs.*
  - *Falls 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.*
  - *83.4% sourced from high-throughput elevators.*
- *Less use of larger multiple-car blocks.*
  - *Stems from railcar allocation process and the larger use of shipments in blocks of less than 50 railcars by the non-major grain companies.*

Other

- *Government of Canada opens negotiations with the Farmer Rail Car Coalition for potential transfer of the federally owned covered hopper car fleet.*
  - *Minister of Transport consults with stakeholders at Meeting in Winnipeg.*
  - *Deems FRCC business case to be consistent with stated policy objectives.*
- *Ocean freight rates move sharply lower.*
  - *Increase of 50% before falling sharply in the latter half.*
    - *Net reduction of about 10% since beginning of crop year.*
  - *Impact on North American grain movement moderates.*
- *Further restructuring in the grain industry.*
  - *SWP successfully completes capital restructuring.*
    - *Ceases to be farmer-controlled cooperative; raises $150 million in additional equity financing. .*
  - *SWP and JRI announce plan to jointly operate their Vancouver facilities.*
  - *AU agrees to sell former UGG terminal elevator ordered sold by Competition Bureau in 2001 to Terminal One Vancouver Ltd.*
  - *P&H announces takeover Mainline Terminal Ltd.*
  - *JRI announces acquisition of ConAgra's four high-throughput elevators.*
    - *ConAgra chooses to significantly reduce its Canadian presence.*

Indicator Series 2 – Commercial Relations

Table	Indicator Description	Notes	BASE 1999-00	CURRRENT REPORTING PERIOD (1) 2003-04	2004-05	% VAR	
	Tendering Program [Subseries 2A]						
2A-1	Tenders Called (000 tonnes) – Grain		n/a	2,971.3	6,218.5	109.3%	▲
2A-2	Tenders Called (000 tonnes) – Grade						
2A-3	Tender Bids (000 tonnes) – Grain		n/a	10,288.5	5,722.9	-44.4%	▼
2A-4	Tender Bids (000 tonnes) – Grade						
2A-5	Total CWB Movements (000 tonnes)	(2)	n/a	13,617.3	13,281.2	18.0%	▲
2A-5	Tendered Movements (%) – Proportion of Total CWB Movements	(2)	n/a	18.1%	18.0%	-0.6%	–
2A-5	Tendered Movements (000 tonnes) – Grain	(2)	n/a	2,469.9	2,387.7	-3.3%	▼
2A-6	Tendered Movements (000 tonnes) – Grade	(2)					
2A-7	Unfilled Tender Volumes (000 tonnes)		n/a	467.4	3,651.2	681.2%	▲
2A-8	Tendered Movements (000 tonnes) – Not Awarded to Lowest Bidder		n/a	72.2	65.9	-8.8%	▼
2A-9	Tendered Movements (000 tonnes) – FOB		n/a	0.0	43.2	n/a	▲
2A-9	Tendered Movements (000 tonnes) – In-Store		n/a	2,470.0	2,344.5	-5.1%	▼
2A-10	Distribution of Tendered Movements – Port	(3)					
2A-11	Distribution of Tendered Movements – Railway	(3)					
2A-12	Distribution of Tendered Movements – Multiple-Car Blocks	(3)					
2A-13	Distribution of Tendered Movements – Penalties	(3)					
2A-14	Distribution of Tendered Movements – Province / Elevator Class	(3)					
2A-15	Distribution of Tendered Movements – Month	(3)					
2A-16	Distribution of Tender Delivery Points (number) – Contracted Cars	(3)					
2A-17	Average Tendered Multiple-Car Block Size (carloads) – Port		n/a	58.7	55.5	-5.5%	▼
2A-18	Railway Car Cycle (days) – Tendered Grain		n/a	14.7	16.0	6.0%	▲
2A-18	Railway Car Cycle (days) – Non-Tendered Grain		n/a	16.1	17.6	8.0%	▲
2A-19	Maximum Accepted Tender Bid ($ per tonne) – Wheat		n/a	-$23.04	-$21.86	-5.1%	▼
2A-19	Maximum Accepted Tender Bid ($ per tonne) – Durum		n/a	-$24.07	-$19.03	-20.9%	▼
2A-20	Market Share (%) – CWB Grains – Major Grain Companies		n/a	73.1%	77.2%	5.6%	▲
2A-20	Market Share (%) – CWB Grains – Non-Major Grain Companies		n/a	26.9%	22.8%	-15.2%	▼
	Advance Car Awards Program [Subseries 2B]						
2B-1	Advance Award Movements (%) – Proportion of Total CWB Movements		n/a	13.9%	15.8%	13.7%	▲
2B-1	Advance Award Movements (000 tonnes) – Grain		n/a	1,888.0	2,100.7	11.3%	▲
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	15.0	17.2	14.7%	▲
2B-7	Distribution of Advance Award Movements – Multiple-Car Blocks	(4)					
2B-8	Average Advance Award Multiple-Car Block Size (carloads) – Port		n/a	49.9	47.3	-5.2%	▼

(1) – In order to provide for more direct comparisons, the values for the 1999-2000 through 2004-05 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]*

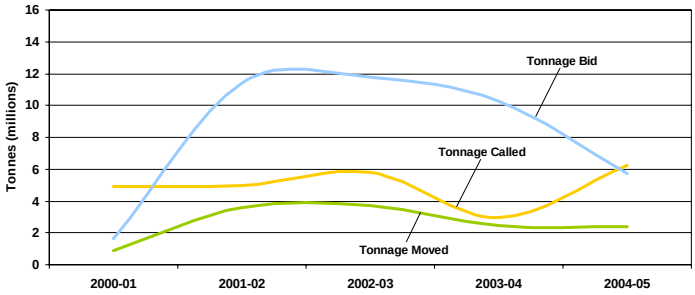
The 2004-05 crop year was the fifth for the Canadian Wheat Board's (CWB) tendering program[53]. More significantly, it was the second year in which the CWB would target to have 40% of the grain it ships to the four ports in western Canada moved to export position using a combination of tendering and advance car awards.[54] Under this arrangement, the CWB had the option of tendering up to a maximum of 20% of its overall volume.

As discussed previously, owing to the combined effects of a cooler growing season and an early frost, the quality of the grain produced for movement in the 2004-05 crop year was significantly reduced. As the extent of this decline in quality became apparent, the CWB had to adapt to this fundamental shift in the traditional balance between supply and demand. In fact, data gathered respecting tendered grain movements suggests that this new market dynamic considerably altered the behavioural patterns of the industry at large. These are highlighted where appropriate in the discussion that follows.

Tender Calls

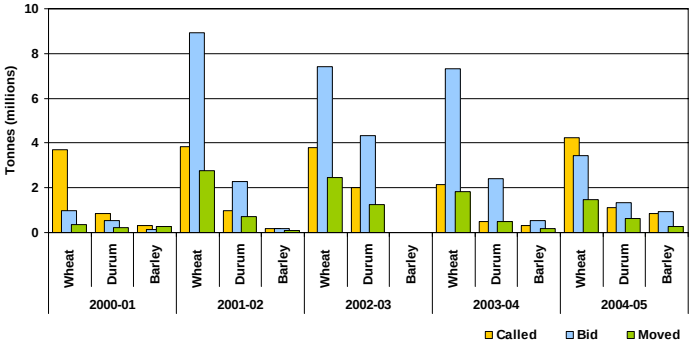
During the 2004-05 crop year, the CWB issued a total of 343 tenders calling for the shipment of approximately 6.2 million tonnes of grain, slightly more than double the 3.0 million tonnes sought a year earlier. More importantly, this constituted the single largest amount of grain put out for tender since the program was first introduced in the 2000-01 crop year. To a large extent, the expanded scope of these calls reflects the very real efforts of the CWB to determine the exact quantities and attributes of the grain that was actually available in the country. In a sense, the CWB began to cast a wider net in order to draw in the stocks it needed to fill the demand for higher-quality grain. As opposed to previous years, this meant that a greater degree of specificity was incorporated into the tender calls. As a result, the tender calls began to emphasize the protein content and falling number of the grain over its grade.

Figure 19: Total Tonnage Called, Bid and Moved Through Tendering



Not withstanding these overarching factors the patterns inherent in the tenders themselves did not differ significantly from those of past crop years. The vast majority of the grain put up for tender, 68.4%, called for the movement of some 4.3 million tonnes of wheat. Another 18.1%, or 1.1 million tonnes, involved durum, while the remaining 13.5%, or 0.8 million tonnes, dealt with barley. These values were consistent with the mix exhibited a year earlier.

Figure 20: Tonnage Called, Bid and Moved Through Tendering – Grain



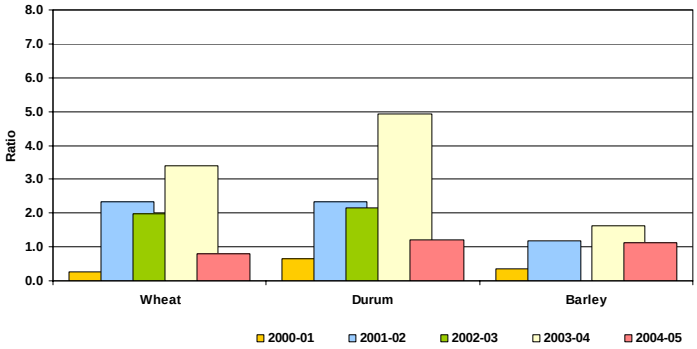
[53] The CWB Tendering program was initiated as part of the Federal Governments August 2000 GHTS policy reforms in an attempt to enhance commercial mechanisms in the system. Originally a three year program and based on a memorandum of understanding between the Minister responsible for the CWB and the CWB the program saw three increments of tendering moving from 25% of port export volumes to 50% in its final year. At the conclusion of the MOU in July of 2003, the CWB agreed to continue tendering to maximum of 20% and at the same time initiated the advance car awards program.

[54] 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.

There was, however, a significant shift in the relative amounts that these tenders sought to direct to the four ports in western Canada. Over 80% of the volume called was intended for export through the west coast ports of Vancouver and Prince Rupert. This was much greater than the 65.8% share these ports held just a year earlier, and was primarily driven by the CWB's decision to concentrate its higher-grade grains in Vancouver so as to better service key international customers such as Japan. The tendering program provided a practical means through which to accomplish this, and as a result, Vancouver's share climbed to 70.9% from 41.7% a year earlier, while those for all others declined: Thunder Bay, to 16.9% from 30.7%; Prince Rupert, to 10.9% from 24.1%; and Churchill, to 1.3% from 3.5%. [See Tables 2A-1 and 2A-2 in Appendix 4]

Another noteworthy change adopted by the CWB for the 2004-05 crop year involved the issuance of more tenders that would better allow for shipments to move in blocks of 56 and 112 railcars. This was instituted in order to address a structural inconsistency that had existed between the CWB's tendering program and CP's multiple-car block incentive program. In improving the alignment between these two programs, shippers served by CP were better positioned to maximize the incentive discounts they could earn from handling tendered grain.

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

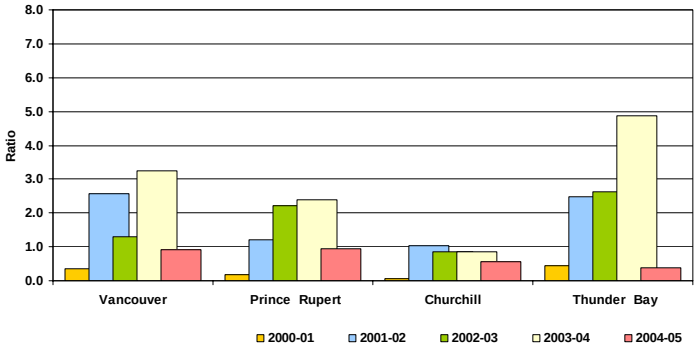


Tender Bids

The CWB's tender calls were met by 1,048 bids offering to move 5.7 million tonnes of grain, a marginal 8.0% less than the amount sought. These bids largely mirrored the tonnage called for, with the majority of those advanced, 59.8%, responding to calls for wheat, 23.5% for durum, and 16.7% for barley. When examined with respect to the port specified in the tender call, 73.3% of the bids were to Vancouver movements, 19.5% to Thunder Bay, 6.7% to Prince Rupert, and 0.5% to Churchill. In this regard, the bidding again proved reflective of the tonnage called. [See Tables 2A-3 and 2A-4 in Appendix 4.]

The bidding, however, proved more subdued than at any other point since the 2000-01 crop year. Although partially reflecting the more numerous calls issued by the CWB, this more muted bidding activity simply underscored the fact that high-quality grains were in tight supply, and that the grain companies could not always secure the volumes needed to meet the specifications set out in the tender call. In many instances, they simply chose not to bid.

Figure 22: Ratio of Tonnage Bid to Tonnage Called – Port

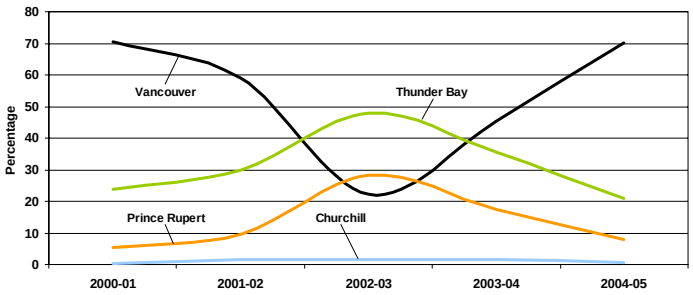


The reduction in the intensity of the bidding can best be gauged through an examination of the tonnage-bid-to-tonnage-called ratio, where higher values denote a much stronger response to a tender call than lower ones. In all cases, with respect to either a particular grain or port, the ratios for the 2004-05 crop year showed sharply lower values than those posted in any of the three previous crop years. Moreover, they fail to show the discernable preferences that bidders had previously given to some grains and ports. Although the bids put forward with respect to wheat, as well as those pertaining to Thunder Bay and Churchill, received comparatively weaker responses than did others, the overall pattern presented for the 2004-05 crop year proved largely non-discriminatory.

Contracts Awarded

A total of 445 contracts were subsequently signed for the movement of just under 2.4 million tonnes of grain, only 38.4% of the amount called. This represented 18.0% of the tonnage shipped by the CWB to western Canadian ports during the 2004-05 crop year, and fell only marginally short of its 20% target.[55] [See Tables 2A-5 and 2A-6 in Appendix 4.]

Figure 23: Tendered Grain – Destination Port



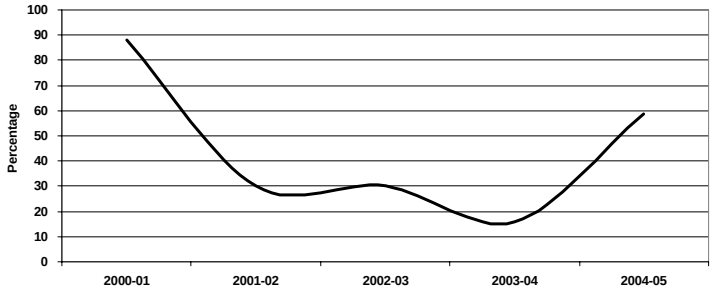
Of the 2.4 million tonnes moved, 70.3% was shipped to Vancouver, 20.9% to Thunder Bay, 8.1% to Prince Rupert, and 0.7% to Churchill. Although these rankings are consistent with those of the 2003-04 crop year, the volumes reflect the much greater preference that was given to using Vancouver as the principal export gateway for tendered grain shipments in the 2004-05 crop year.[56]

While it is true that the share of the tendered grain movement through the Port of Vancouver suggests a resurgence of its use for this type of movement, whether it will continue to be used to this degree in the future is unclear. Moreover, there is the suggestion that the challenges that confronted the industry in the 2004-05 crop year as a result of reduced grain quality were somewhat extreme, and that the resultant impact on tendered grain movements may turn out to have only been temporary.

Tendered Volumes Not Filled

The difficulty in securing adequate supplies of higher-quality grain was clearly reflected in the greater proportion of tender calls that went unfilled in the 2004-05 crop year. A total of 3.7 million tonnes went either partially, or completely, unfilled. This constituted 58.7% of the overall volume called, and marked a virtual quadrupling of the 15.7% recorded a year earlier. Furthermore, it proved to be the second highest value observed for tonnage not moved since the CWB's tendering program was introduced in the 2000-01 crop year.[57]

Figure 24: Proportion of Total Tonnage Called Not Moved



Equally telling were the specific failings that contributed to this outcome. No award was made in the case of 1.5 million tonnes (41.0%) because an insufficient quantity was bid. Another 1.1 million tonnes (30.7%) went unfilled as a result of no bids having been submitted. For a further 0.9 million tonnes (23.9%), the bid price was unacceptable. A final 0.2 million

[55] 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.

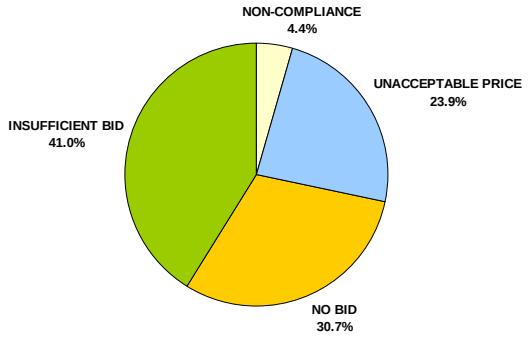
[56] With settlement of the labour dispute that impeded the movement of grain through Vancouver in the 2002-03 crop year, the port reclaimed its earlier position as the GHTS's largest handler of tendered grain a year later.

[57] Owing to the initial lack of industry participation, 88.2% of the tenders called in the first year of CWB's tender program went unfilled. To date, this remains the highest value yet recorded.

tonnes (4.4%) received no award due to the bidders' failure to comply with the specifications set out in the tender itself. [See Table 2A-7 in Appendix 4.]

Of the 343 tender calls issued, 13 resulted in contracts being awarded to companies that did not put forward the lowest-priced bid. This involved an aggregate volume of 65,900 tonnes, 8.8% less than that awarded the year before, and the lowest amount recorded in the program's five-year history. In these cases, the lowest-priced bid often failed to secure an award because it included conditions that could not be accommodated. [58] [See Table 2A-8 in Appendix 4.]

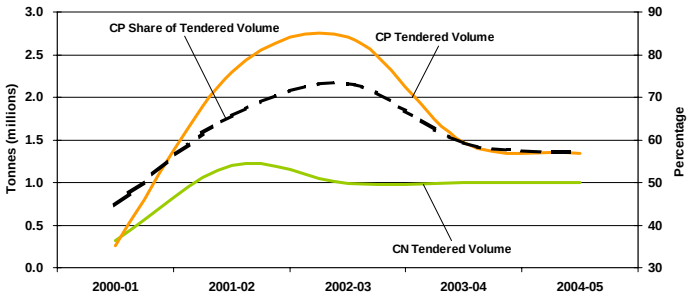
Figure 25: Composition of Tendered Volumes Not Filled



Malting Barley

During the 2004-05 crop year, five tender calls were issued by the CWB for the movement of malting barley. In response, a total of 24 bids were received. This resulted in the awarding of three contracts for the subsequent shipment of 43,200 tonnes to Vancouver, the first since 71,300 tonnes were forwarded in the 2001-02 crop year. As was the case three years earlier, 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 2004-05 crop year represented a mere 2.6% of the overall tonnage moved under tender to the port of Vancouver, and just 1.8% of that directed to the four ports in western Canada. [See Table 2A-9 in Appendix 4.]

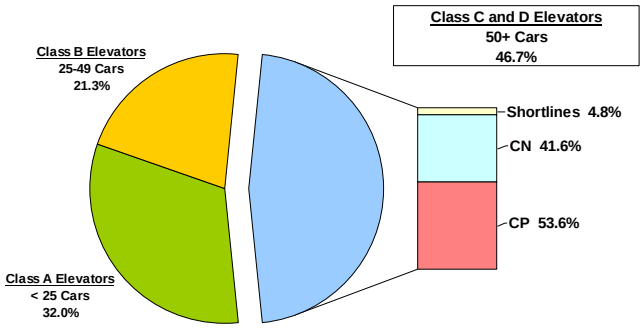
Figure 26: Tendered Movements – Originating Carrier



Originating Carrier

Over half, 57.1%, of the volume moved under tender during the 2004-05 crop year originated at points local to the Canadian Pacific Railway (CP). This was only marginally lower than the 59.3% the carrier secured a year earlier. In fact, CP has carried the majority of the CWB's tendered grain in each of the last four crop years, reaching a record 73.3% in the 2002-03 crop year. Only in the first year of the program did CP move a smaller share than Canadian National Railway (CN), 44.6%. [See Table 2A-11 in Appendix 4.]

Figure 27: Primary High-Throughput Elevators – Serving Carrier

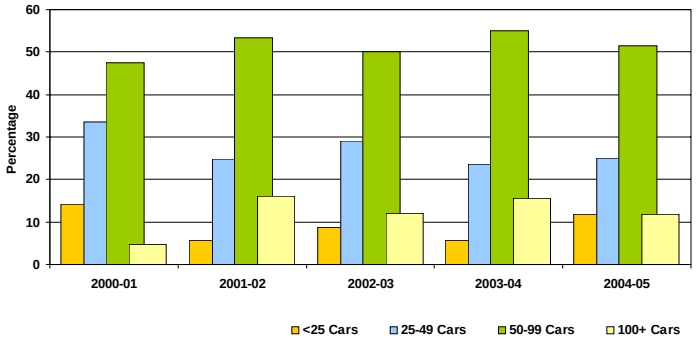


[58] Mention should be of the fact that if these bids were made in accordance with the bidder's agreement with the CWB, they were not automatically rejected. The CWB, the Western Grain Elevator Association, and the Inland Terminal Association of Canada entered into a tri-party agreement that laid out 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.

To an extent, the gain in CP's market share should not be taken as an indication of an overall decline in CN's competitiveness. Rather, the data suggests that CP's larger share simply reflected the better availability of grain, in the grades demanded, within its own service area. This is supported to a large degree by the fact that CP has also managed to increase its share of the overall grain movement during this same period.

The predominant use of high-throughput elevators in handling tendered grain, coupled with higher applicable incentive discounts from CP-served facilities, also provides a reasonable explanation for the observed increase in the carrier's market share over the course of the past five years. Another factor relates more specifically to the actual number of high-throughput elevators served by each of the railways in western Canada. Of the 356 primary elevators situated across western Canada, 166 are designated as Class C and D facilities. CP directly serves 89 of these elevators, representing 53.6% of the total. In comparison, CN serves a noticeably lesser 69, or 41.6%, of these facilities, while shortline railways provide service to the remaining eight, or 4.8%. 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.

Figure 28: Tendered Movements – Multiple-Car Blocks



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 2004-05 crop year proved slightly higher at 88.2%, it was the second lowest value observed in the past five crop years.

In addition to having lost some ground against the preceding crop year's 94.3%, there were also some modest losses among the shipments made in the larger car blocks. There was a 3.6-percentage-point decline in tendered shipments using blocks of 50-99 cars, which fell to 51.5% from 55.1%, as well as a 3.8-percentage-point drop in those using blocks of 100 or more cars, which decreased to 11.8% from 15.6%. Much of the loss cited here migrated to shipments made in blocks of less than 25 cars, which increased to 11.8% of the total from 5.7% a year earlier. Similarly, movements in blocks of 25-49 cars rose by 1.4 percentage points, to 25.0% from 23.6% a year earlier. [See Table 2A-12 in Appendix 4.]

Notwithstanding the comparatively small variations that have been observed from year to year, these measurements mean 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. Given the greater latitude in planning for these shipments, the proportion of the tendered grain movement earning these discounts has far outpaced that of non-tendered grain. With an estimated 72.0% of non-tendered movements having qualified for the same discounts offered by the railway in the 2004-05 crop year, tendered grain shipments held a 16.2-percentage-point advantage.[59]

Tendered Origins

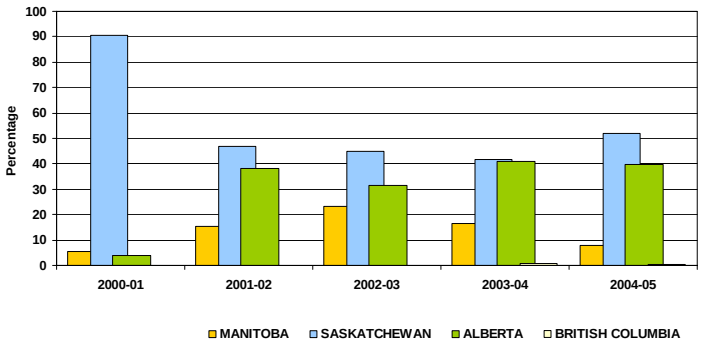
As was the case in each of the four previous crop years, the largest amount of grain shipped under the CWB's tendering program was drawn from Saskatchewan. Totalling slightly more than 1.2 million tonnes, these shipments accounted for just over half, 52.2%, of all tendered grain movements. Even so, this was the first

[59] The 72.0% cited here as the overall proportion of non-tendered shipments moving in blocks of 25 or more railcars at a time is an estimate drawn from data presented in Table 3C-5.

instance where the province's share actually rose above the 46.8% it had represented in the 2001-02 crop year.[60] This 6.4-percentage-point gain translated into relative losses for each of the other three provinces.

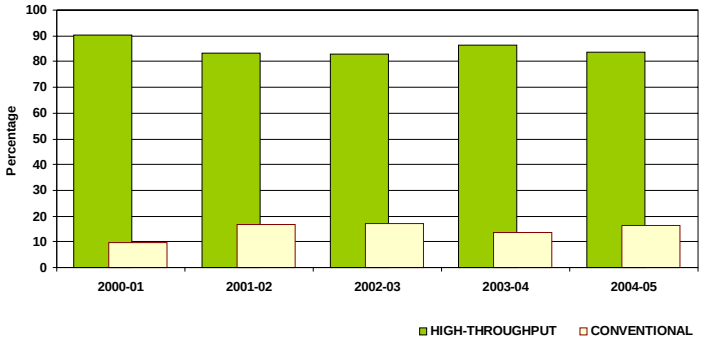
Although tendered grain shipments from Alberta fell by 7.4% to 0.9 million tonnes, its share of the overall volume decreased only marginally, to 39.9% from 40.9% a year earlier. The most substantive decline was recorded on movements out of Manitoba, where a 56.2% reduction in originated volume reduced the province's share to 7.7% from 16.7%. Although a deep reduction in grain production contributed to this weakening, it was the province's more limited supply of higher-quality grains that proved to be the real driver. Similarly, the 2004-05 crop year also saw the amount of tendered grain drawn from British Columbia reduced by 64.6%, to 5,900 tonnes from 16,800 tonnes a year earlier. However, this represented just 0.3% of the overall total.

Figure 29: Tendered Grain – Provincial Origin



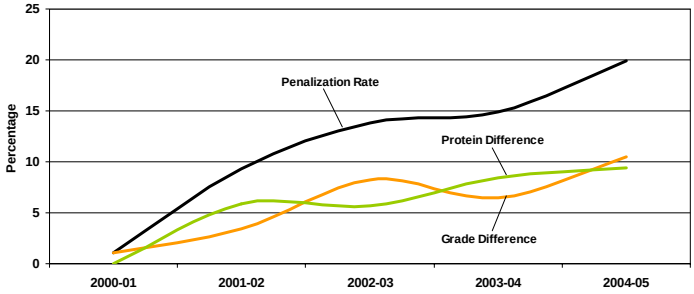
As mentioned previously, high-throughput elevators have proven to be the principal facilities employed in moving tendered grain. In fact, in the initial year of the tendering program, these facilities originated 90.3% of the volume. Even in the face of two consecutive years of drought, this proportion changed comparatively little, declining to a low of only 83.0% in the 2002-03 crop year. The result was little different for the 2004-05 crop year, when the proportion increased to a marginally higher 83.8%.

Figure 30: Tendered Grain – Elevator Class



Still, this represented a modest decline from the 86.2% reported as having originated at high-throughput elevators a year earlier. This overall weakening merely reflected those registered provincially. For Manitoba, whose limited supply of higher-quality grains proved problematic for tendered shipments, saw its originations at these elevators fall substantially, to 75.2% from 89.2% a year earlier. In the case of Saskatchewan, the proportion originating at high-throughput facilities fell only slightly, to 85.5% from 89.7%. Only Alberta was able to post an increase, climbing to 83.8% from 82.8% the year before. As in previous years, tendered grain shipments from British Columbia came exclusively from conventional elevators. [See Table 2A-14 in Appendix 4.]

Figure 31: Tendered Grain – Penalized Shipments



Applied Penalties

For the 2004-05 crop year, a total of 5,412

[60] The 83.5% share garnered by Saskatchewan in the 2000-01 crop year is not deemed comparative since the results were heavily skewed in favour of the province during the first year of the CWB's tendering program.

carloads were assessed with financial penalties following their arrival at the four designated ports in western Canada. 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. This marked a 29.6% increase from the 4,175 carloads penalized a year earlier. In addition, the penalization rate also climbed, to 19.9% from 14.9%.

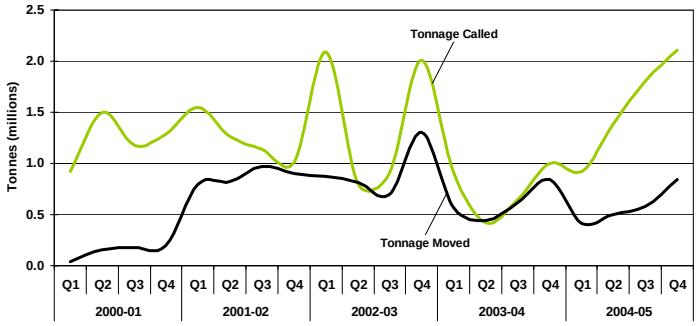
More importantly, this marked the fourth consecutive increase in the penalization rate since the tendering program was instituted in the 2000-01 crop year. At that time, only 1.1% of the cars unloaded were penalized for having failed to meet the grade or protein level specified in the tender.[61] Even when benchmarked against the 9.3% of shipments that were penalized in the 2001-02 crop year, the 2004-05 crop year's penalization rate can be seen to have more than doubled. And while this proportion has risen steadily over the course of the past five years, it must be remembered that it is not inconsistent with the mis-shipment rate of 18% tied to grain movements at large.[62]

Shipments that failed to comply with the tender's specified grade marginally exceeded those that failed to meet the required protein content, 10.5% versus 9.4% respectively. As with the penalization rate, both values have moved steadily higher in recent years. 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 2004-05 crop year, the CWB issued tenders at an average rate of 518,200 tonnes per month. However, the actual amounts varied from a low of 249,700 tonnes in September 2004, to a high of 835,500 tonnes in June 2005. Moreover, the quarterly distribution of these values shows a steadily increasing pattern, ranging from a low of 0.9 million tonnes in the first quarter to a high of 2.1 million tonnes in the fourth. In fact, this progressive rise pushed almost two-thirds of the total tonnage called into the latter half of the crop year.

Figure 32: Quarterly Distribution of Tendered Grain



The monthly volume of grain actually shipped under the tendering program showed a similar, albeit dampened, distribution pattern. Averaging 195,400 tonnes per month, these shipments varied from a low of 66,700 tonnes to a high of 371,000 tonnes. Although the quarterly distribution was correlated with the tonnage called, the relationship proved weaker 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 diminished strength in the correlation appears related to the latter, where the proportion of tender calls that went unfilled increased to 58.7% in the 2004-05 crop year from 15.7% a year earlier. [See Table 2A-15 in Appendix 4.]

Delivery Points per Tender Contract

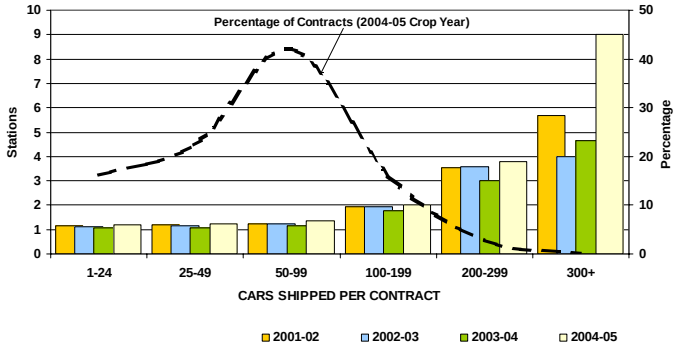
Tendered grain shipments can originate at one or more delivery points. Of the 445 contracts signed for the movement of tendered grain in the 2004-05 crop year, 67.6% involved grain drawn from a single delivery point. This was somewhat lower than the 76.6% observed a year earlier. The average number of delivery points

[61] 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.

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

observed for shipments made in blocks of less than 25 cars, 25-49 cars, and 50-99 cars, showed only minor variation, averaging about 1.2 stations per contract in all three cases. Moreover, the average for these groupings has remained relatively constant since the 2001-02 crop year. [See Table 2A-16 in Appendix 4.]

Figure 33: Tendered Grain – Delivery Points per Contract



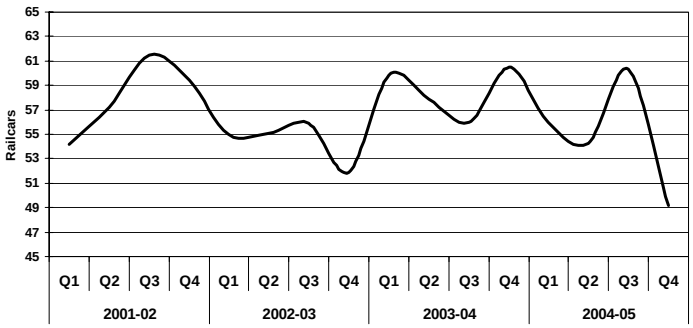
Contracts calling for the shipment of 100 or more cars typically drew grain from a greater number of delivery points. This relates simply to the larger amount of grain involved, and the fact that it often had to be drawn from a larger geographic area. In the case of shipments comprised of 100 to 199 cars, grain was drawn from an average of 2.0 delivery points; 3.8 stations for shipments of between 200 and 299 cars; and 9.0 stations for shipments involving 300 or more cars. With the exception of this last grouping, these averages have also changed little from those first observed in the 2001-02 crop year.[63]

Of all contracts signed in the 2004-05 crop year, 80.4% involved movements of less than 100 carloads of grain. Although this was somewhat higher than the 75.3% observed a year earlier, the result was consistent with the difficulties reportedly incurred in securing sufficient quantities of higher-quality grain. Still, the greater part of this, 42.2%, moved in lots of 50-99 cars. This was virtually unchanged from the 42.1% recorded a year earlier, and only marginally higher than the 38.4% realized in the 2001-02 crop year. These observations reinforce earlier ones, namely, the sourcing difficulties of the past crop year notably diminished grain companies' ability to ship grain in larger car blocks.

Multiple-Car Block Size

As mentioned previously, 88.2% of the tendered grain shipped in the 2004-05 crop year moved under the incentive discount programs offered by CN and CP. On average, these shipments amounted to only 55.5 cars, a value just above the 50-car threshold used to define movements from high-throughput elevators. What is more, this denoted a 5.5% decrease from the record-setting 58.7-car average of the previous crop year. With the exception of tendered grain moving to Churchill, a decline in the size of the average car block used in each of the primary export corridors was noted. [See Table 2A-17 in Appendix 4.]

Figure 34: Tendered Grain – Weighted Average Car Block



In addition to having posted the only year-over-year increase in an average car block size, tendered grain movements to Churchill posted the single largest increase in any corridor over the course of the past four crop years, 79.0%. Furthermore, beyond having almost doubled its previous record average of 49.9 cars, its 89.3-car average for the 2004-05 crop year proved to be the highest achieved in any corridor. It is important to note, however, that the awarding of larger Churchill contracts was the chief factor in the production of these results.

[63] The four-station increase recorded in the 2004-05 crop year for shipments involving 300 or more cars reflected the fact that there was only one such movement in this period. The limited frequency of such movements renders the average highly sensitive to significant year-over-year changes.

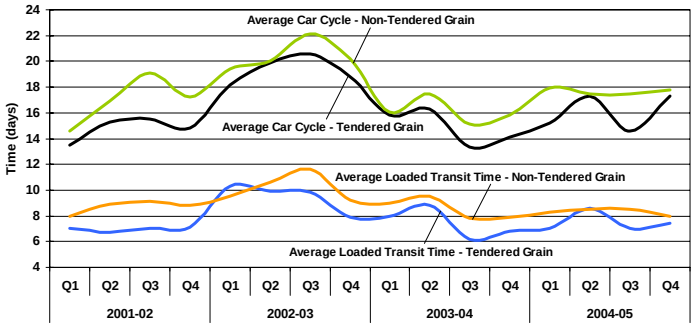
Among decliners, the most significant reduction came in the Vancouver corridor, where the average block size fell by 11.4%, to 55.4 cars from a record-setting 62.5 cars a year earlier.[64] Although the annualized averages for Prince Rupert and Thunder Bay also declined, they fell by much lesser amounts. In the case of Prince Rupert, the 2004-05 crop year's average fell by 3.2% to 56.6 cars, well short of the 60.8-car record set four years earlier. As for Thunder Bay, the reduction proved even smaller, just 0.2%, with the average falling to 54.4 cars from 54.5 cars. It is interesting to note that the annualized average exhibited in the Thunder Bay corridor has proven to be the most stable, ranging from this crop year's record-setting low to a high of just 55.5 cars in the 2002-03 crop year.

On the whole, the quarterly averages showed a greater degree of variability. To a large extent, these values show a steadily diminishing average throughout the 2004-05 crop year, with a strong third quarter having only eased this downward momentum temporarily. Again, this pattern appears to reflect the wider problems incurred in securing adequate supplies of higher-quality grain as the crop year progressed.

Car Cycles

The average car cycle for tendered grain shipments amounted to 16.3 days in the 2004-05 crop year. This represented a 10.9% increase over the 14.7-day average recorded a year earlier. Much of this overall deterioration was driven by the comparatively weak performance of the second quarter, where the difficulties tied to securing higher-quality grain in the aftermath of a poor harvest became particularly acute. Differing railway operating practices also had a bearing on these results.[65] [See Table 2A-18 in Appendix 4.]

Figure 35: Car Cycles – Tendered and Non-Tendered Grain



With 83.8% 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 6.9% less than that of non-tendered grain in the 2004-05 crop year, 16.3 days versus 17.5 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 a multiple of smaller, conventional elevators.[66] Over the course of the past four crop years, the time advantage enjoyed by tendered grain shipments has proven fairly consistent, amounting to an average of 1.3 days, or 7.6%, less than that of the car cycle for non-tendered movements. Much of this advantage was derived from faster loaded transit times.

In the 2004-05 crop year, tendered grain's average loaded transit time amounted to 7.6 days. This represented a 4.1% increase over the previous crop year's 7.3-day average. When the four-year record is examined against that of non-tendered grain shipments, the loaded transit time advantage can be seen to have amounted to one whole day on average, or 11.4%. The benefit derived from the difference between the average empty transit times for tendered and non-tendered grain proved substantially less, and amounted to a margin of about 0.3 days, or 3.4%.

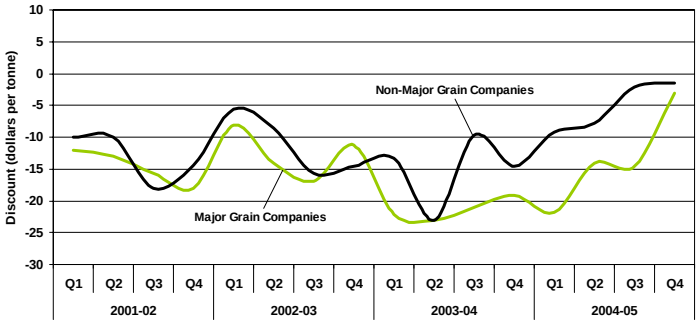
[64] The values cited here are based on annualized averages, and not the individual quarterly records that may have been attained in either the 2004-05 crop year, or earlier crop years.

[65] These differences are discussed more fully in section 3.3.

[66] 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.

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 55.5 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 can not 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.

Figure 36: Maximum Discount from Initial Price - Wheat



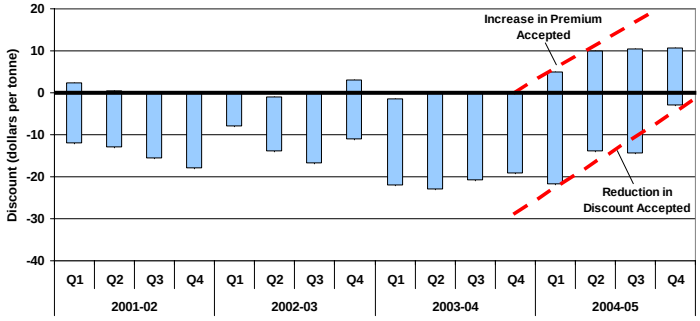
Accepted Bids

With the CWB's tendering program having been 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.[67]

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.[68] As a result, the maximum discount offered by grain companies, and generally accepted by the CWB, provides a reasonable basis by which to compare differences in the bidding behaviours of both the major, and non-major, grain companies.

The maximum discounts put forward by both groups shows a significant degree of variation over the course of the past four 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 increased to a record $23.04 per tonne. [See Table 2A-19 in Appendix 4.]

Figure 37: Range of Tender Bids Accepted – Wheat



[67] 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.

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

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. The first quarter's bidding initially resembled that discussed previously, and produced a maximum discount bid of $21.86 per tonne from one major grain company before then beginning to tumble as the problem with grain-quality became more apparent. In the second quarter, the maximum discount bid by the major grain companies had fallen by a factor of one-third, to $14.12 per tonne. By the fourth quarter, it had fallen to just $3.06 per tonne. Although the discounts accepted from the non-majors proved to be less than those of their larger rivals, they also declined sharply: from a maximum of $9.20 per tonne in the first quarter to just to $1.50 per tonne by year's end.

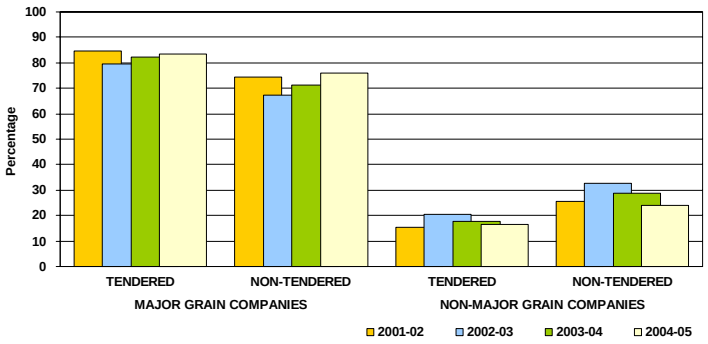
Notwithstanding this reduction in the discounts offered, what distinguished the 2004-05 crop year from those that preceded it was the fact that the bids advanced by the grain companies quickly began to require that the CWB pay a premium to move tendered grain. Whereas the CWB had effectively been able to dismiss such "positive bids" before, they were compelled to accept a significantly larger number of these as a result of the dramatic change in market conditions. Once again the major grain companies generally proved to be more aggressive, taking the lead in asking that the CWB pay a premium of as much as $5.00 per tonne over the initial price to ensure that grain was moved into position for export in the first quarter. By the second quarter, the premium demanded had doubled to $10.00 per tonne. This was elevated to $10.50 per tonne in the third quarter, and to $10.75 in the fourth. And while the premiums demanded by the non-majors at first proved to be less than those sought by the larger grain companies, by the beginning of the second half they had effectively become indistinguishable.

Even with the differences occasioned by the scarcity of higher-quality grain, 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

Unquestionably 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 four crop years, has not materially changed. In the 2001-02 crop year, the major grain companies controlled 84.6% of the tendered volume. Three years later, that share had dropped only marginally to 83.4%. The same was true of non-tendered CWB grains, with the major grain companies' share having increased by only a small amount, to 75.9% from 74.4%. [See Table 2A-20 in Appendix 4.]

Figure 38: Market Share – CWB Grains

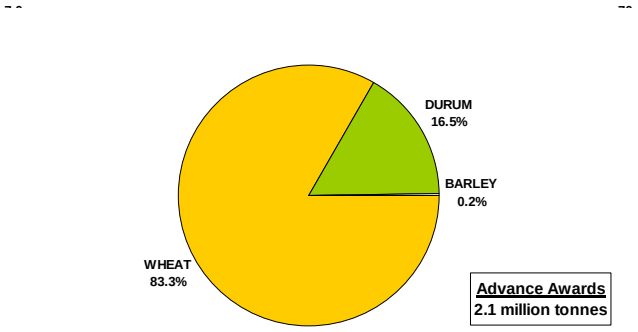


The same is true for the market shares held by the non-major grain companies. Over the course of the past four crop years they have added only 1.2 percentage points to their share of the tendered grain movement while forgoing 1.5 percentage points in its share of non-tendered grain movements. To be sure, these differentials are very small, and far too limited in scale to be indicative of any emerging trend. 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.[69]

[69] 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

To an extent, 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.

Figure 41: Advance Car Awards – Grain Composition



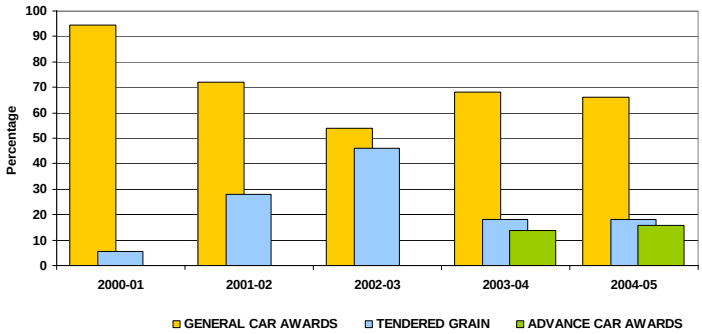
Financial Savings

A sharp reduction in the discounts offered by the grain companies in their tender bids, along with a steady build-up in the requirement that premiums be paid instead, significantly reduced the financial savings that the CWB could ultimately pass back to producers through its pool accounts. 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 savings generated from these activities for the 2004-05 crop year to have decreased by 48.9%, to $26.1 million from $51.1 million a year earlier.

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

A total of 2.1 million tonnes of grain moved under the CWB's advance car awards program during the 2004-05 crop year. This represented 15.8% of the CWB's total shipments to western Canadian ports, which constituted a gain of 1.9 percentage points over the 13.9% share seen a year earlier. In conjunction with the volume that moved under its tendering program, a combined 33.8% of the CWB's total shipments moved under these two programs. This fell somewhat short of the 40% which it had targeted, but marginally greater that the 32.0% they represented in the 2003-04 crop year.[70]

Figure 40: CWB Grain Movements – Western Canada



In large part, these gains were attributable to an additional 0.2 million tonnes having been handled under the advance car awards program in the 2004-05 crop year. Delays in the program's implementation, which did not come into effect until late in the first quarter

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.

[70] 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.

of the 2003-04 crop year, severely limited handlings during this period. As such, the volume handled during the first quarter of the 2004-05 crop year proved to be almost six times what it had been a year earlier, 0.6 million tonnes versus 0.1 million tonnes respectively. In fact, during the first quarter, movements under the advance car awards program accounted for 17.7% of the CWB's total shipments to western Canadian ports.

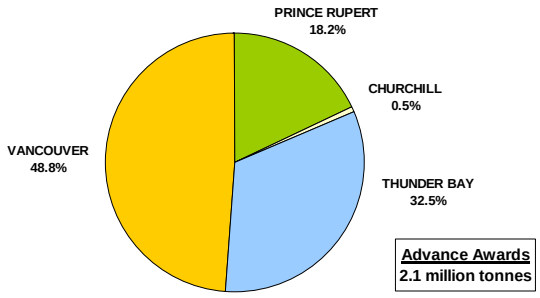
This, however, was drawn down by comparatively poorer performances in the remaining three quarters, which simply reflected the effects of the wide-spread grain supply problems cited earlier. When combined with tendered grain movements, the highly erratic nature of the volumes shipped under both programs becomes even clearer: from 38.3% of the total in the first quarter, the proportion fell to 26.5% in the second, then climbed to 41.2% in the third, and finally slipped back to 30.1% 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 2.1 million tonnes shipped under the program consisted of wheat, some 1.7 million tonnes, or 83.3%. This was in turn followed by another 0.3 million tonnes, or 16.5%, of durum, and a residual barley component of 3,200 tonnes, or 0.2%. As compared to tendered grain movements, however, wheat secured an additional 21.5 percentage points in share, while durum and barley lost 10.1 and 11.4 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 1.0 million tonnes, or 48.8%. This, however, significantly trailed the 70.3% share the port secured in the movement of tendered grain. Although the shares were notably lower, the remaining ports were ranked similarly: Vancouver was followed in turn by Thunder Bay with 0.7 million tonnes and a 32.5% share; Prince Rupert with 0.4 million tonnes and an 18.2% share; and Churchill with 10,100 tonnes and a 0.5% share. [See Table 2B-2 in Appendix 4.]

Figure 42: Advance Car Awards – Destination Port



As with tendered grain, the advance car awards program also saw a significant increase in the proportion dedicated to shipments to Vancouver, 48.8% versus 39.8% a year earlier. This nine-point gain came at the expense of the port of Prince Rupert, which saw its share of total handlings under the program decline to 18.2% from 28.5%. An additional 1.3 percentage points in share, along with another 0.3 percentage points from Churchill, were surrendered to Thunder Bay.

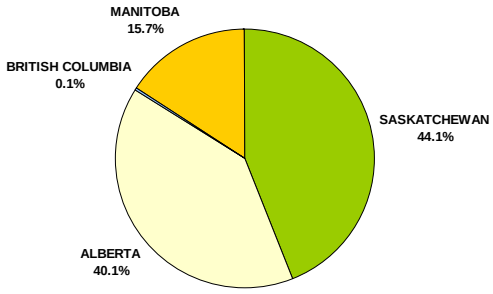
This increased preference for Vancouver is manifest in other measures under the GMP regarding tendered as well as non-tendered grain movements. In underscoring earlier observations, it adds further support to the view that the CWB chose to move a greater proportion of its overall volume through the port of Vancouver in the 2004-05 crop year. Clearly, this signals at least a temporary reversal of the gains that had been made by Prince Rupert against Vancouver in recent years.

Originating Carrier

Over half, 53.5%, of the volume moved under the advance car awards program during the 2004-05 crop year originated at points local to CP. This proved marginally greater than the 52.3% the carrier had secured a year earlier, but somewhat lower than the 57.1% obtained as its share of the tendered grain movement. [See Table 2B-3 in Appendix 4.]

In both cases, however, these values are greater than the 51.5% share the carrier amassed with respect to the overall movement of grain in western Canada. And as outlined previously, the physical distribution of crop production, the predominant use of high-throughput elevators, as well as the higher applicable incentive discounts available from CP-served facilities, all provide a reasonable explanation for this.

Figure 43: Advance Car Awards – Provincial Origin



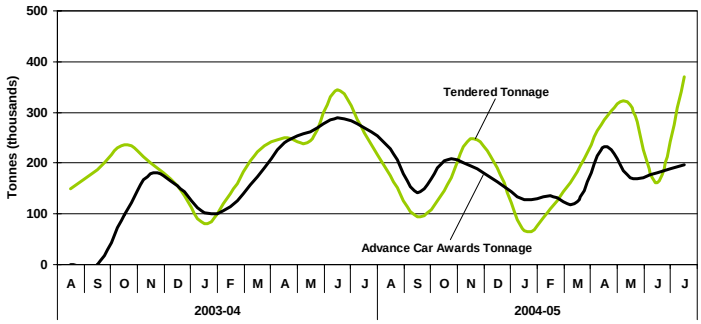
Traffic Origination

Like tendered grain, the largest volume moved under the CWB's advance car awards program came from Saskatchewan, 0.9 million tonnes. This volume, however, accounted for a much lesser share of the total tonnage, 44.1% versus 52.2% for tendered grain. And like tendered grain, shipments from the provinces of Alberta and Manitoba were positioned behind it, originating 0.8 million tonnes and 0.3 million tonnes respectively. An exceptionally small volume, totalling just 3,000 tonnes, was also shipped from British Columbia. [See Table 2B-4 in Appendix 4.]

As a result of Saskatchewan's relatively lower volumes, the other provinces obtained a greater share of the tonnage shipped under the advance car awards program than through tendering.[71] In the case of Alberta, the gain proved insignificant, 40.1% versus 39.9% respectively. The increased share accorded to Manitoba, however, virtually equalled that lost by Saskatchewan. The province's 15.7% share of the advance car awards movement proved to be slightly more than twice the 7.7% it secured for tendered grain.

As was the case with tendered grain, 83.4% of the grain shipped under the advance car awards program came from high-throughput elevators. This was only marginally higher than the 81.6% originated from these facilities a year earlier. Moreover, its share was entirely consistent with the 83.8% reported earlier for tendered grain movements.

Figure 44: Advance Car Awards – Monthly Distribution



When the division between conventional and high-throughput elevators is examined against province of origin, little material difference is noted. With 86.5% of its traffic originating at high-throughput elevators, Alberta utilized these facilities the most. Saskatchewan and Manitoba followed with high-throughput shares of 83.3% and 76.8% respectively. On the whole, these provincial values were consistent with those observed for tendered grain shipments.

Monthly Distribution

[71] The exception is British Columbia, which in addition to Saskatchewan, also secured a lesser share of the advance car awards movement than it did of the tendered grain movement, 0.1% versus 0.3% respectively.

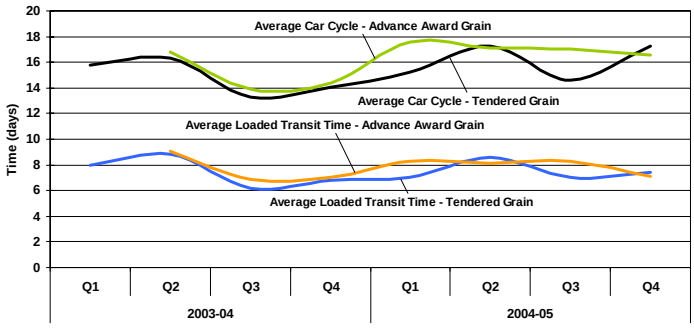
The volume of grain moved under the CWB's advance car awards program averaged 175,100 tonnes per month, and varied from a low of 123,700 tonnes in March 2005, to a high of 233,000 tonnes in April 2005. Moreover, the distribution of these movements presented a pattern that generally followed that of tendered grain.

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 17.2 days in the 2004-05 crop year. However, this value proved to be 14.7% greater than the 15.0-day average of the 2003-04 crop year. In addition, it was also 5.5% greater than the 16.3-day average observed for tendered grain shipments. As with tendered grain, much of this deterioration stemmed from the difficulties tied to securing higher-quality grain in the aftermath of a poor harvest, as well as the overarching influences of differing railway operating practices. Even so, the data collected showed that the quarterly car-cycle values tracked those observed under the tendering program, albeit less closely than in the previous crop year. [See Table 2B-6 in Appendix 4.]

Figure 45: Advance Car Awards – Car Cycle



Similarly, the 8.0-day average loaded transit time for grain moved under the advance car awards program was only marginally higher than the 7.6 days given over to tendered grain shipments. Another half-day differential came from a longer average empty transit time, 9.2 days versus 8.7 days respectively.

Although the comparative averages for advance car awards movements proved to be higher than those of tendered grain, they were marginally lower than those posted for non-tendered movements in general. With the overall car cycle of non-tendered movements averaging 17.5 days, however, this difference amounted to just 1.7%. Although these similarities still lend credence to the observation that grain shipped under the CWB's tendering and advance car awards programs moved largely in concert, the data suggests that there were a greater number of instances where this was not the case.

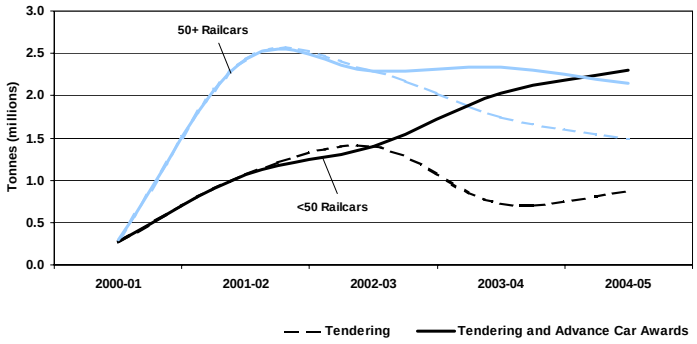
Multiple-Car Blocks

As mentioned previously, the proportion of grain moving in multiple-car blocks has been steadily increasing under the GMP. Moreover, with 88.2% of tendered grain shipments moving in blocks of 25 or more cars, the usage rate easily outpaced that of non-tendered grain. This was also the case for movements in blocks of 50 or more cars, which represented almost two-thirds of the overall tendered volume in the 2004-05 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.[72]

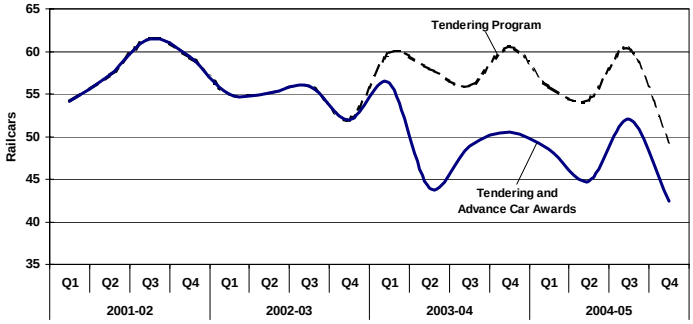
Figure 46: Grain Volumes Moved in Multiple Car Blocks



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. In fact, 68.7% of the shipments made under the advance car awards program in the 2004-05 crop year were in blocks of less than 50 cars. This proved to be almost double the 36.8% proportion reported for tendered grain movements alone. 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 36.8% of tendered grain movements were in blocks of less than 50 cars, the proportion climbed to 51.9% when pooled with those made using advance car awards. Conversely, the proportion moving in blocks of 50 or more cars decreased from 63.3% in the case of tendered grain shipments alone, to 48.1% when combined with those moved under the advance car awards program.

The sourcing problems encountered throughout much of the 2004-05 crop year made it more difficult to assemble shipments in trainload lots. As a result, the share of movements in blocks of 50 or more cars fell to 48.1% from 53.6% a year earlier. Correspondingly, the share accorded to shipments of less than 50 cars increased, to 51.9% from 46.4%. [See Table 2B-7 in Appendix 4.]

Figure 47: Average Car Block – Tendering and Advance Awards



Multiple-Car Block Size

In a parallel expression of these same forces, the average car-block size also fell. As seen earlier, car blocks averaged 55.5 cars under the CWB's tendering program in the 2004-05 crop year. When combined with movements under the advance car awards program, this average was reduced by 14.8% to 47.3 cars. The effects of this dilution can be seen in a comparison of the quarterly averages. [See Table 2B-8 in Appendix 4.]

Despite only two 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 eight cars. Moreover, these averages display similar patterns of movement that draw attention yet again to complementary nature of these movements.

[72] 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 Potential Sale of Government-Owned Hopper Cars

Between 1972 and 1994, the federal government spent approximately $570M to purchase some 13,000 covered hopper cars for use in the movement of western Canadian grain. These, and another 6,000 publicly supplied covered hopper cars, are provided to CN and CP under operating agreements that allow for their use as part of the carriers' general grain fleet.[73]

While both railway companies supplement these cars with their own equipment in order to meet prevailing market demands, the public fleet remains the principal asset employed in moving grain through the GHTS. As a result, the deployment of these cars has always been an important matter to stakeholders. The general availability of these cars, as well as the mechanisms used to secure their use at any particular moment in time, has always figured prominently in discussions focusing on potential changes to the GHTS.

When the railways' right of first refusal in any potential sale of these cars expired on 30 June 2002, other groups expressed interest in acquiring them.[74] One in particular, a producer-backed organization called the Farmer Rail Car Coalition (FRCC), championed a plan that called for ownership to be transferred to a non-profit, farmer-led company for a nominal sum. Although in the months that followed, the government indicated it had made no decision with respect to how it would dispose of the fleet, it acknowledged that the FRCC's plan represented one possible alternative. Other options, which ranged from the maintenance of the status quo to a public auctioning of the cars, were also being given consideration. Still, by the spring of 2004 the federal government was widely reported to be wrestling with a choice between selling the cars to the highest bidder or turning them over to the FRCC.

Against this backdrop, many of the contrasting perspectives that had framed earlier discussions over a potential sale of the cars were revived. Many stakeholders expressed scepticism over the FRCC's plan given the limited detail they say was provided by the organization during its efforts to promote it. Some maintained that auctioning the cars to the highest bidder remained the only fair means of dealing with the issue, while others proved equally wary of this approach as well. At the same time, some stakeholders urged the government to either maintain the status quo or, at the very least, make the process more transparent. In the case of the railways, CN offered to purchase its share of the cars at fair market value, while CP advocated that the government maintain ownership but lease the cars back to the railways under a new operating agreement.

As this unfolded, the government moved forward with its preparations for a possible transfer of ownership and commissioned a detailed mechanical inspection of the cars.[75] At the same time, the federal Minister of Transport also got to hear the industry's concerns firsthand when he met with interested stakeholders to discuss the various issues that had been raised in advance of taking a recommendation to the federal cabinet.[76] In addition, the House of Commons Standing Committee for Agriculture and Agri-Food, followed

[73] Over time, attrition has diminished the number of covered hopper cars still in the federal government's fleet. By the end of the 2003-04 crop year an estimated 12,400 cars remained. In addition, this fleet had at one time also been supplemented by another 2,000 cars owned by the CWB; 2,000 cars administered by the CWB on leases paid by the federal government; 1,000 cars owned by the government of Alberta, and 1,000 cars owned by the Saskatchewan Grain Car Corporation. Although these cars have also been reduced through attrition, a combined publicly-owned fleet of about 19,000 covered hopper cars had at one time been directed towards the movement of western Canadian grain.

[74] In 1996, the federal government announced that it intended to sell its fleet of 13,000 covered hopper cars. However, under the operating agreement then governing the use of these cars, the railways held a right of first refusal (ROFR) in any potential sale. Deeming that any sale should be open to a broader number of potential purchasers, the federal Minister of Transport issued a five-year notice to the railways that he was exercising his right to terminate the operating agreement as of 31 December 2001. The railways' ROFR automatically expired six months later.

[75] The inspection was undertaken as a means of assessing the general condition of the government's covered hopper fleet, as well as identifying any repairs that might be necessary. The inspection was performed on a representative sample amounting to about eight percent of the cars still in service.

[76] The consultative session referred to was held in Winnipeg, Manitoba, on 1 November 2004.

later by the Standing Committee on Transport, opened hearings into the various disposal options available to the government.[77]

In December 2004 a number of farm organizations and grain companies put forward an alternative to the FRCC's plan, which came to be known as the Farmer Industry Partnership Proposal.[78] Under the proposal, a stand-alone company would be established to purchase the cars from the federal government on a lease-to-own basis, with annual payments of $5 million to be paid over a period of 20 years. The new company was also to be charged with developing a plan for the orderly, long-term replacement of these cars. According to the proposal the cars would continue to be shared between the railways, but apportioned in keeping with commercial principles.

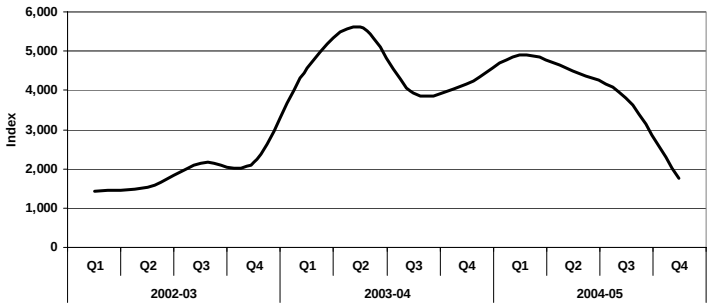
One of the more contentious issues that arose during this period related to the actual costs incurred in maintaining the government's hopper car fleet. The FRCC's proposal was founded on the principle that these costs could effectively be reduced to an estimated annual average of $1,500 per car from the $4,329 per car that the railways were allowed under the revenue cap.[79] Although the savings implicit in such a reduction could lower the cost of transportation for producers generally, it remained largely theoretical in the absence of actual maintenance data. Moreover, the railways declined to reveal what they had been spending on maintenance given its commercial sensitivity.[80]

The Government of Canada announced in March 2005 that it had elected to enter into negotiations with the FRCC for a potential transfer of the hopper car fleet. In deciding to do so, the government indicated that it had carefully examined the business case put forward by the FRCC to ensure that it was both financially viable and workable, and that their business case was consistent with the government's stated objectives of building a more commercial and efficient GHTS that met the needs of all stakeholders. As the 2004-05 crop year came to a close, it appeared that a final decision on the transfer, along with all of its attendant terms and conditions, would come at a later date.

2.32 Ocean Freight Rates

As discussed in previous editions of the Monitor's reports, ocean freight rates have increased significantly, and often erratically, in recent years. Half way through the 2003-04 crop year, they had climbed to a level that was five-and-a-half times what they had been just 18 months earlier. Ultimately, this marked a plateau from which they began to tumble in the second half. Even so, the ocean freight rates in place at the beginning of the 2004-05 crop year proved to be about twice what they had been a year earlier.

Figure 48: Baltic Dry Index of Ocean Freight Rates



Much of this price movement reflected the prevailing, and perceived future, demand

[77] The House of Commons Standing Committee for Agriculture and Agri-Food concluded its hearings on the matter in December 2004. The Standing Committee on Transport subsequently scheduled its own hearings on the issue, which were held two months later in February 2005.

[78] In addition to a number of grower associations, members of the Western Grain Elevators Association and the Inland Terminal Association of Canada also lent their support to the Farmer Industry Partnership Proposal.

[79] The annual average of $4,329 per car cited here was developed by the Canadian Transportation Agency at the request of Transport Canada using a 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.

[80] The Canadian Transportation Agency has indicated that neither CN nor CP maintain separate accounts for the costs incurred in maintaining the government's hopper car fleet. As such, it is comparatively difficult to isolate the direct costs or to allocate the indirect cost tied to such elements as overhead and administration.

for vessels to service China's growing trade in raw materials and finished goods.[81] This had a significant impact on the export programs for CWB as well as non-CWB grains. In some cases, grain importers consciously deferred buying Canadian grain in the hope that ocean freight rates would moderate. In others, they simply turned to less-distant grain-exporting nations in an effort to contain these costs.

Even in North America, the rise in these costs changed traditional routing decisions. Canadian grain exports to Mexico, which had long used ocean-going vessels in movements from west coast ports, were being displaced by direct-rail shipments.[82] Similarly, an increase in the spread between the benchmark ocean freight rates from the US to Japan temporarily favoured the railway delivery of grain to the Pacific Northwest rather than the Gulf of Mexico. Likewise, freight differentials appeared to have influenced the timing of the railway movement of western Canadian grain to the country's east coast ports.

The volatility of ocean freight rates has been particularly evident since the beginning of the 2004-05 crop year. Towards the end of the first quarter they began to rise, and spiked by almost 50% in November 2004, before falling back sharply in December. In January 2005, they began to stabilize, and remained largely unchanged throughout much of the third quarter. In mid April 2005, they began to slide once again, and continued to do so steadily throughout the fourth quarter. By the end of July 2005, the Baltic Dry Index had fallen by about 60% from what it had been at the beginning of the 2004-05 crop year.[83]

Despite the scope of these recent reductions, ocean freight rates at the end of the 2004-05 crop year were still effectively double what they had been at the beginning of the GMP. China's relentless economic expansion continues to be viewed as the main driver. With the demand for all kinds of dry bulk commodities expected to remain high over the course of the next few years, most industry analysts suspect that the respite will prove only temporary. In fact, some suggested that 2005 was likely to see a repeat of the cyclical pattern observed a year earlier when, after climbing in winter, ocean freight rates dropped off significantly in the summer months before then rising again. In any event, the comparatively high cost of ocean freight has continued to exert an influence over the export movement of Canadian grain.

2.33 Restructuring in the Grain Industry

Having struggled in recent years with the financial realities of drought-induced reductions in grain volume and revenue, the early indications of a potential bumper crop in the 2004-05 crop year held the promise of improved earnings for most grain handlers. But the frost that affected a large section of Saskatchewan and Manitoba in late August 2004 resulted in lower yields, which in turn adversely impacted industry earnings.

The impact was most evident in the financial results posted by the two largest publicly-owned grain handlers in western Canada, Agricore United (AU) and Saskatchewan Wheat Pool (SWP).[84] Although their losses for the 2002-03 crop year amounted to $32.9 million and $50.3 million respectively, the two companies had been working hard to reduce costs, improve profitability and pare down their long-term debts in the face of sharply

[81] A tempering of the outlook for Chinese economic growth was widely considered to have been responsible for the reduction in ocean freight rates during the second half of the 2004-05 crop year.

[82] By the end of the 2003-04 crop year, the direct-rail movement of Canadian grain to Mexico had climbed to almost three times what it had been a year earlier, and accounted for just over half of the total volume exported to that country.

[83] The Baltic Dry Index is produced by The Baltic Exchange Limited, a London-based organization that provides independently gathered real-time freight market information such as daily fixtures, indices for the cost of shipping wet and dry cargos, route rates, as well as a market for the trading of freight futures. The Baltic Dry Index is a price index of ocean freight rates based on a composite of daily rate quotes for 24 shipping routes. The information presented in the [Figure 48] is drawn from publicly available secondary sources.

[84] Most grain companies operating in western Canada are privately owned. As a result, the financial statements of companies such as Paterson Global Foods Limited, Parrish and Heimbecker Limited and Pioneer Grain Company Limited are not publicly available. Even the financial statements of the foreign parents to Canadian operations such as Cargill Limited and Louis Dreyfus Ltd. are unavailable since they too are privately held. This, however, is not the case with Canada's two largest grain companies, namely Agricore United and Saskatchewan Wheat Pool, which are both publicly owned and handle over half the grain volume in western Canada. Although not necessarily indicative of other firms within the industry, the financial performance of these two companies is often considered as a barometer of the financial health of the industry at large.

diminished volumes.[85] With the 2003-04 crop year's substantial increase in grain handlings, both companies had been able to post a modest net income: $4.1 million in the case of AU, and $5.0 million for SWP.
It must be noted, however, that the profitability of the grain companies is not solely dependent on grain handling. The sale of seed, fertilizer and other crop inputs are generally integral elements in a wider range of business interests. The more diversified of these firms are also engaged in a variety of other commercial activities that include financial services as well as livestock operations. While this necessarily entails the acceptance of other commercial risks, the broader strategy is aimed at spreading a company's overall business risk, and minimizing the financial consequences that can come from a downturn in grain-handling volume.

Given what had been early indications of a plentiful harvest, both companies anticipated significantly improved earnings for the 2004-05 crop year. Cooler temperatures and an early frost severely undermined grain quality and kept producers from binning much of the crop until late in the fall of 2004. This delayed grain deliveries and adversely impacted revenues from grain storage and fertilizer sales. As a result, AU and SWP accumulated deeper-than-expected losses of $49.1 million and $17.4 million in the crop year's first three quarters.[86] However, the fourth quarter's sales of seed and fertilizer proved much stronger owing to the arrival of early spring rains, and generally good moisture conditions for planting. This upturn in business proved enough to more than double SWP's net income for the year, which climbed to $12.1 million from $5.0 million a year earlier. This was not the case for AU however. Although its fourth quarter earnings increased by 13.0% over that of the same period a year earlier, it was not enough to offset the losses they had already suffered. As a result, AU finished the 2004-05 crop year with a modest net loss of $1.9 million.

The financial problems experienced by the grain industry at large are not, however, solely tied to the volume of grain handled. Many stakeholders continue to point to an overcapacity in the country elevator system as a critical issue.[87] Others counter that the GHTS's existing storage capacity provides an excellent buffer with which to hedge against the logistics challenges that loom on the horizon. For example, although bulk shipments classified as "Identity Preserved" represent only a small fraction of today's total grain movements, its probable future expansion could significantly stress the system's current infrastructure and operating practices.

These perspectives underscore the division that exists between stakeholders with respect to how the industry can best optimize the future deployment of its assets and resources. Despite these differences, the industry's longer-term record of corporate mergers, capital investment, and even business divestitures, provides evidence of its ability to adapt to changes in the competitive environment. And while the financial losses sustained by some continue to raise questions about the ultimate sustainability of the existing system in light of its sensitivity to fluctuations in grain volume and quality, the 2004-05 crop year has again called attention to the fact that the GHTS and its stakeholders are continuing to evolve.[88]

In this regard, SWP proved to be one of the more actively engaged stakeholders. In March 2005, the company successfully completed a capital restructuring that formally ended its existence as a farmer-controlled business cooperative.[89] This was followed in April by the company's move to raise an additional $150 million in capital,

[85] Agricore United declared a net loss of $5.5 million for its 2002-03 fiscal year. However, since the company's fiscal year extends from November through October, the result was not directly relatable to activity in the 2002-03 crop year. In order to provide for a fairer comparison, an estimated net loss of $32.9 million for the 2002-03 crop year was developed using the company's un-audited quarterly financial reports. Similarly, this approach also produced an estimated net income of $4.1 million for the 2003-04 crop year, while the company reported a net loss of $13.7 million for its fiscal year.

[86] It should be noted that grain company sales and earnings are highly cyclical, typically reaching its height in the fourth quarter of the crop year. Losses in the first three quarters of the crop year are equally characteristic, and are not of themselves unusual.

[87] Some stakeholders contend that the 2003-04 crop year's capacity turnover ratio of 5.6, which was the highest recorded under the GMP, provides the best evidence of this overcapacity when many grain companies typically aim to turn over their storage capacities by anywhere from 7 to 12 times a year. To a large extent, the capacity turnover ratio's improvement since the beginning of the GMP has been fuelled by a 1.3-million-tonne reduction in the storage capacity of the primary elevator system itself.

[88] Some grain companies contend that a significant reduction in grain quality can also have an adverse impact on profitability because, as in the case of feed wheat, it will often bypass the primary elevator system in favour of direct delivery to the consumer, thereby taking away from its total handlings. Others maintain that the impact is negligible since reduced grain quality simply enhances the need for blending.

[89] The plan, which SWP saw as essential to its future viability, was aimed at significantly reducing the company's outstanding debt while improving its access to the equity market. Under this initiative, SWP would be incorporated under the Canada Business

aimed largely at paying down a sizable portion of its long-term debt, through a rights offering to its new common shareholders. That same month, SWP also announced that it had joined forces with James Richardson International Limited (JRI) to jointly operate their adjacent terminal facilities on the north shore of Vancouver's Burrard Inlet.[90]

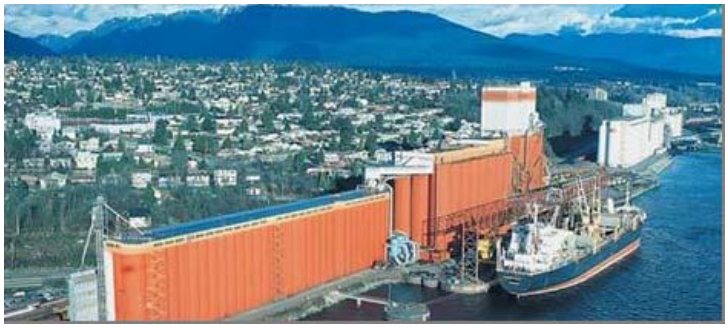


Figure 49: An aerial view of the terminal elevator facilities belonging to James Richardson International Limited (left) and Saskatchewan Wheat Pool, Inc. (right) in North Vancouver, British Columbia.

Ultimately, this collaboration is aimed at improving the operational efficiency of both facilities by permitting each house to specialize in the handling of specific commodities, as opposed to all grains. In addition to the physical integration of storage capacity, vessel loading activities and supporting railway infrastructure, it was also anticipated that the new arrangement would make it easier to deal with the industry's emerging needs respecting identity preservation, product tracing, food safety and special handling.[91] To this end, Pacific Gateway Terminal Ltd. (PGTL), in which SWP and JRI held an equal ownership, was established as an arm's-length entity to oversee the management of these two terminal elevators on their behalf. Although requiring formal regulatory approval from the Competition Bureau, PGTL began operating on 11 July 2005 with the interim consent of the bureau in order to proceed with certain aspects of the integration while the matter remained under review.[92]

Four years earlier, in a bid to prevent what it had deemed to be a potential lessening of competition, the Competition Bureau had ordered Agricore United (AU) to sell a portion of its interest in Vancouver's terminal elevators. As a prerequisite to receiving its approval for a merger between Agricore Cooperative Ltd. and United Grain Growers Limited (UGG) in 2001, the emerging AU finally acquiesced to the sale of the terminal elevator that had been owned and operated by UGG. Although the company had actively searched for a potential buyer, it had ultimately been unable to conclude a final sale of the asset.

In May 2005, however, AU announced that it had reached an agreement for the sale of the former UGG facility to Terminal One Vancouver Ltd., a consortium representing five farmer-owned inland grain terminals operating in Saskatchewan, for an undisclosed price. Even so, the consortium's partners were estimated to be capable of amassing only about one-third of the 1.6 million tonnes deemed as volume threshold needed to make the venture viable. As a result, the consortium was reported to have worked hard in the fourth quarter to entice other shippers into joining the partnership, or into signing grain handling agreements with them. This proved difficult, however, since these shippers already had pre-existing contracts with other terminal elevator operators for the handling of their grain. These difficulties effectively precluded a final transfer of ownership before the 2004-05 crop year ended. Even so, the possibility of completing the deal at a later date appeared unlikely.[93]

Corporations Act, and its existing Class A and B shares consolidated into a single class of common voting shares having no special rights or privileges for farmers.

[90] The SWP terminal elevator has a licensed storage capacity of 237,240 tonnes as compared to that of 108,000 tonnes for the JRI facility. The combined capacity of the two facilities would total 345,240 tonnes and account for just over one-third of Vancouver's total licensed storage capacity.

[91] SWP and JRI physically connected their existing railway infrastructures in order to facilitate the exchange of railcars between, and integrate the operations of, what were designed as two stand-alone facilities.

[92] The agreement given by the Competition Bureau, and provided for under a 60-day detailed consent order, was independent of any decision that it might ultimately make respecting the joint venture proposed by SWP and JRI. With no specified timeline for the bureau to complete its review of the transaction, a formal decision had still not been rendered as the 2004-05 crop year came to a close.

[93] The possible sale of the former UGG facility to Terminal One Vancouver Ltd. was effectively extinguished in the first few weeks of August 2005. On 29 July 2005 AU reported to the Commissioner of the Competition Bureau that a sale of the UGG facility to Terminal One was not expected to close by 1 August 2005, and accordingly requested that the Commissioner extend the timeframe within which both parties could conclude the transaction. The Commissioner's subsequent denial of this request effectively put an end to the sales deal that AU and Terminal One had been working towards. Dissatisfied with this, AU filed an application with the

It is important to recognize, however, that such restructuring initiatives have not been entirely limited to the GHTS's largest grain companies. In November 2004, Saskatchewan-based Mainline Terminal Ltd. (MTL) indicated that it was soliciting expressions of interest in a potential sale of its operations.[94] Since MTL opened its Moosomin facility in 1997, the company had struggled to compete, and had accumulated large losses in the process.[95] Even its majority shareholder, Cargill Limited, appeared uninterested in increasing its stake in the operation.[96] Ultimately, Parrish and Heimbecker Limited (P&H) expressed an interest in acquiring MTL's assets and successfully put forward a bid to takeover the company in March 2005. This transaction, which was finalized in the closing days of the third quarter, marked the first increase to P&H's elevator holdings in almost four years.[97]

Figure 50: An aerial view of Vancouver's Centerm container terminal, one of several facilities affected by the strike of the Vancouver Container Truckers' Association in the summer of 2005.

Similarly, in May 2005, JRI announced that it had acquired four high-throughput elevators from ConAgra Ltd. Unlike MTL's operations, these facilities, along with an oat-milling facility in Alberta, represented but a small part of its American parent's international activities.[98] Although comparatively new, having been built in the mid 1990s, ConAgra chose not to expand its Canadian presence through the construction of additional facilities. Having thereby limited its potential domestic role, the company's decision to sell the majority of its Canadian holdings to JRI appears to reflect its strategic determination to withdraw from the marketplace.[99] At the same time, the acquisition of these four high-throughput facilities appears to complement JRI's own corporate efforts to improve the efficiency of its own grain-gathering network, and to open the door to the possibility of closing some of its smaller facilities at a later date.

2.34 Trucker Strike Paralyses Container Movements at the Port of Vancouver

On 25 June 2005, following a month-long series of failed negotiations between the Vancouver Container Truckers' Association (VCTA) and 46 west coast trucking companies, over 1,000 members of the VCTA went on strike in a protest over low hourly rates and rising fuel costs. With trucks transporting more than 40% of the container volume handled by the port of Vancouver, movements into and out of the container terminals located there were brought to a virtual standstill.

Competition Tribunal seeking, among other things, an order pursuant to the Competition Act rescinding the original consent agreement made between the Commissioner and AU in 2001 for the sale of this facility.

[94] Mainline Terminal Limited (MTL) was a regional grain company with two facilities located in southeastern Saskatchewan: an inland grain terminal with producer-owned condo storage at Moosomin; and a smaller grain elevator in Langbank. MTL was jointly owned by Cargill Limited, which held a majority interest, and some 350 local shareholders.

[95] MTL had accumulated a net loss of $5.9 million as at 30 November 2004, with outstanding liabilities of $7.1 million.

[96] In addition to its equity interest, Cargill Limited was also an MTL creditor owed in excess of $2.1 million at the beginning of December 2004.

[97] P&H took formal possession of the Moosomin and Langbank facilities from MTL on 1 May 2005.

[98] ConAgra Ltd. is a wholly owned subsidiary of Omaha-based ConAgra Foods Inc.

[99] ConAgra has said that it does not intend to completely vacate the Canadian market. The company continues to operate its oat-milling facility in Alberta, and also maintains a grain merchandising office.

The action also disrupted the normal flow of traffic through the port, and also had a negative affect at other facilities in British Columbia's Lower Mainland. In addition to the severe impact this action would have on the movement of freight destined for local delivery, the port authority was concerned with the congestion problems that would inevitably arise from terminal operators having to store these containers temporarily.

The financial impact of the strike was sizeable, with estimates of the cost to the provincial economy being as high as $30 million a day. In the days immediately following, business leaders began to demand that the federal government legislate the VCTA membership back to work, but these calls were dismissed as too simplistic. Instead, the provincial and federal governments announced that they would appoint a mediator who would attempt to resolve the dispute while the strike continued.

By mid July 2005, the strike's impact was beginning to be felt over a wider geographic area. Shipping lines were reportedly holding back goods destined for Vancouver in Asia as well as Europe. With goods piling up elsewhere in Canada, many within the industry claimed that the nation's transportation system was being compromised. Some appeared concerned with Vancouver's international reputation, claiming that the port's major customers had already concluded that its labour force was unreliable and had begun to reassess their options on how to best reach the Canadian market. Many feared that this would ultimately mean the permanent diversion of cargo through other ports in order to ensure that the movement of the customers' goods were not again impeded.

From the vantage point of the GHTS, the strike's impact was limited since the overwhelming majority of the grain that moves through the port is actually transported in covered hopper cars and handled at destination by the terminal elevator system. Nevertheless, a portion of the grain that flows through the port of Vancouver is shipped overseas in containers. Some of this grain is loaded directly into containers on the prairies, while a more substantial amount first moves by rail to the port and is then transhipped into containers. Much of this traffic is comprised of special crops, which includes such products as peas, beans and lentils.

Although direct container movements from the prairies were largely unaffected by the strike, the companies hired to tranship these products from covered hopper cars were effectively prevented from moving containers into and out of their facilities. This impinged on the flow of these commodities through the port, and produced a backlog in the logistics chain.

In late July 2005 the mediator proposed a two-year deal that called for an immediate increase in the haulage rates and fuel surcharges applicable on container movements in the Vancouver area. The VCTA's negotiating body recommended that the striking truckers accept the offer, which received approval from more than 90% of its membership on 31 July 2005. However, the trucking companies that engage their services unanimously rejected the deal that same day.

In an effort to bridge the impasse while the search for a long-term solution continued, the Vancouver Port Authority announced on 1 August 2005 that trucking companies trying to service the port's container terminals would have to obtain a license under an interim system to be put in place for a period of 90 days. In doing so, these companies would be required to pay truckers a minimum of $200 for each container they delivered, a rate that had been set out in the mediator's recent proposal. This was supported by a federal Order in Council issued in accordance with section 47 of the Canada Transportation Act that allowed such extraordinary steps to be taken in the interest of stabilizing the national transportation system.

Concurrent with this, a joint task force created by the provincial and federal governments would be formed to examine the various issues surrounding the movement of containers in the Lower Mainland. Its ultimate purpose would be to recommend a long-term strategy that would be aimed at improving industry relations, preventing future disruptions to the movement of containers, and maintaining the efficiency and effectiveness of the transportation system as a whole. Although these actions brought about an immediate restoration of service, clearing the backlog of traffic required more than a month of active effort on the part of all stakeholders.

2.35 Canadian Grain Commission Employees Walkout Over Stalled Contract Negotiations

Dissatisfied with the progress of contract negotiations with the federal government, Canadian Grain Commission (CGC) employees represented by the Public Service Alliance of Canada (PSAC) staged a series of rotating strikes at terminal elevator locations across Canada. The first of these began on 20 September

2004 with an illegal one-day walkout by grain inspectors in Vancouver. In the weeks that followed, CGC grain weighers and administrative staff joined in with a series of legal, as well as illegal, one-day walkouts of their own.[100]

In addition to Vancouver's licensed terminal elevators, those in Prince Rupert and Thunder Bay each found themselves picketed by striking PSAC employees. Among all of the facilities in western Canada, only the terminal elevator at Churchill found itself bypassed. The terminal and transfer facilities of eastern Canada were also affected.

Although these walkouts reportedly prevented vessels from being loaded in the initial stages, their impact resulted in a limited slowdown in terminal operations only. In fact the CWB indicated that the rotating strikes had no effect on its ability to meet its export sales commitments. The sole exception came when unionized grain elevator workers and stevedores refused to cross picket lines established at five of Vancouver's six terminal elevators on 24 September 2004.

In light of these actions, some questioned whether the quality control processes used in loading vessels with grain were being compromised. The CGC, however, had quickly moved to replace its striking grain inspectors and weighers with qualified non-striking personnel drawn largely from its managerial ranks in order to protect these same processes. Normally, the CGC would inspect and monitor the weighing of grain twice: once when a terminal elevator received it; and again when it was loaded onto vessels. Given practical limitations, the CGC's fill-in personnel dedicated their effort to the assurance of quality at the moment grain was loaded onto ships for export. As a means of avoiding delays and ensuring that the terminal elevators had enough grain on hand to meet demand, the terminal elevator operators were permitted to receive grain without having the CGC either inspect or weigh the cars received for unloading, provided that written permission had been received from the shipper.[101]

The walkouts came to an end late in October 2004 when striking PSAC employees reached a tentative agreement with the federal government and the CGC.

2.4 Summary Observations

The 2004-05 crop year was the fifth for the Canadian Wheat Board's (CWB) tendering program, but only the second wherein the CWB targeted to move a fixed 40% of the grain it ships to the four ports in western Canada using a combination of tendering and advance car awards. Under this arrangement, the CWB had the option of tendering up to a maximum of 20% of its overall volume.

On account of the combined effects of a cooler growing season and an early frost, the quality of the grain produced for movement in the 2004-05 crop year was significantly reduced. As the scope of the reduction became apparent, the CWB had to adapt to a fundamental shift in the balance between supply and demand. In fact, the behaviour of the industry at large changed as a result.

During the 2004-05 crop year, the CWB issued a total of 343 tenders calling for the shipment of approximately 6.2 million tonnes of grain, slightly more than double the 3.0 million tonnes sought a year earlier. This also constituted the single largest amount of grain put out for tender since the program was introduced in the 2000-01 crop year. To a large extent, the expanded scope of these calls reflects the very real efforts of the CWB to better determine the quantities and attributes of the grain that was actually available. Unlike previous years, a greater degree of specificity was incorporated into the tender calls.

The vast majority of the tender calls, 68.4%, involved the movement of wheat. Another 18.1% involved durum, while the remaining 13.5% dealt with the movement of barley. These shares were generally consistent with those exhibited a year earlier. There was, however, a significant shift in the relative amounts that these tenders

[100] Three separate bargaining groups represented the Canadian Grain Commission's unionized employees, with each earning the legal right to strike at various moments during the months of September and October 2004.

[101] In reality the impact on terminal operations as a result of this waiver was minimal given that a terminal elevator independently inspects and weighs the grain it receives. To a large extent, the CGC's inspection and weighing activity served as a failsafe mechanism, and merely confirmed the terminal elevator operator's own findings.

sought to direct to the four ports in western Canada. Over 80% of the volume called was intended for export through the west coast ports. This was primarily driven by the CWB's decision to concentrate its higher-grade grains in Vancouver in order to better service key international customers such as Japan. As a result, Vancouver's share climbed to 70.9% from 41.7% a year earlier, while those for all others declined.

The CWB's tender calls were met by 1,048 bids offering to move 5.7 million tonnes of grain, some 8.0% less than the amount sought. The majority of the bids advanced, 59.8%, responded to calls for wheat. Similarly, 73.3% of the bids were assigned to Vancouver movements. In this regard, the bidding largely reflected the call for tonnage . Nevertheless, the bidding proved more subdued than at any other point since the 2000-01 crop year. Although partially reflecting the more numerous calls issued by the CWB, this more muted bidding activity simply underscored the fact that high-quality grains were in tight supply, and that the grain companies could not always secure the volumes needed to meet the specifications set out in the tender call.

Ultimately, a total of 445 contracts were signed for the movement of just under 2.4 million tonnes of grain, only 38.4% of the amount called. This represented 18.0% of the tonnage shipped by the CWB to western Canadian ports during the 2004-05 crop year, and fell only marginally short of its 20% target. The difficulty in securing supplies of higher-quality grain was clearly reflected in the 3.7 million tonnes of grain for which calls were issued, but went either partially, or completely, unfilled. This constituted 58.7% of the overall volume called, and marked a virtual quadrupling of the previous crop year's 15.7% proportion.

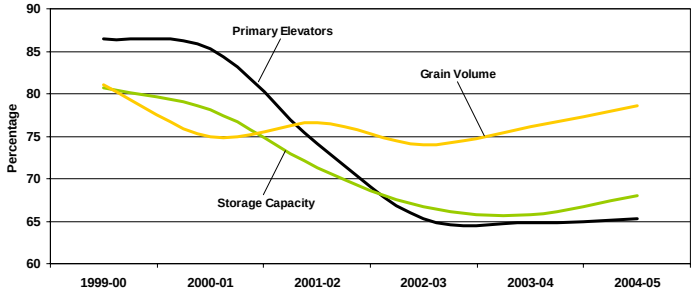
With tight supplies of high-quality grain, the nature of the bidding in the 2004-05 crop year was dramatically altered. The discounts that the CWB had been able to extract from the grain companies began to decline. The first quarter's bidding initially resembled that observed a year earlier, and produced a maximum discount of $21.86 per tonne for wheat, which then began to tumble as the scope of the problems with grain quality became apparent. The maximum discounts offered by the majors were reduced to $14.12 per tonne in the second quarter, $14.57 per tonne in the third, and $3.06 per tonne in the fourth. Those advanced by the non-majors came in well below these values.

What distinguishes the 2004-05 crop year from those that preceded it, however, was the fact that the bids advanced by the grain companies soon required the CWB to pay a premium for the movement of tendered grain. In the first quarter, the bidders effectively asked the CWB to pay as much as $5.00 per tonne over the initial price to ensure that this grain was moved into position for export. By the second quarter, the premium demanded had doubled to $10.00 per tonne, and ultimately reached $10.75 per tonne in the fourth. According to the CWB, this served to significantly reduce the transportation savings that could ultimately be passed back to producers through its pool accounts. The CWB estimates the savings generated from these activities for the 2004-05 crop year to have decreased by 48.9%, to $26.1 million from $51.1 million a year earlier.

A total of 2.1 million tonnes of grain moved under the CWB's advance car awards program during the 2004-05 crop year. This represented 15.8% of the CWB's total shipments to western Canadian ports, and constituted a gain of 1.9% over the year before. In conjunction with the volume that moved under its tendering program, 33.8% of the CWB's total shipments moved under these two programs. This fell somewhat short of the 40% that the CWB had targeted, but was marginally greater than the 32.0% it had represented in the 2003-04 crop year.

In a number of respects, the grain shipped under the advance car awards program had a make-up that largely paralleled that moved under the tendering program. These similarities effectively show 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.

Figure 51: Relative Shares of the Four Largest Grain Companies



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 actually fallen slightly in the past six crop years, to 78.6% from 81.1%. At the same time the major grain companies' dominance over the primary elevator network, be it in terms of number or storage capacity, also diminished. As of 31 July 2005, the major grain companies held sway over 65.4% of the elevators, and 68.0% of the storage capacity. This marked a significant reduction 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, and subsequent increase in number, of a variety of 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.

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. A 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 – 2004-05 Crop Year

Trucking

- *The Composite Freight Rate Index for short-haul trucking climbs by 11.3%.*
  - *First significant rise in trucking costs in three years.*
    - *Composite Freight Rate Index climbs to 111.3 by year-end.*
  - *Driven by significant increase in fuel prices.*

Country Elevators

- *Throughput for 2004-05 increases by 0.2% to 28.6 million tonnes.*
- *The average elevator capacity-turnover ratio remained unchanged at 5.6 turns.*
  - *Performance was bolstered by a 1.2-million-tonne reduction in elevator storage capacity over the past six crop years.*
- *Average weekly stock levels decreased 14.0% to 2.3 million tonnes.*
  - *Lowest average since the beginning of the GMP.*
    - *Partially reflects sensitivity to declining storage capacity.*
- *Average number of days-in-store fell by 14.3% to 29.5 days.*
  - *Lowest average since the beginning of the GMP.*
    - *Directly reflects the effects of a late harvest and the reduced availability of grain in the first quarter.*
- *Average weekly stock-to-shipment ratio fell by 18.0% to 4.1.*
  - *Reflects reduction in average stock levels.*
  - *Lowest average since the beginning of the GMP.*
- *Posted tariff rates for elevator handling activities increased modestly:*
  - *Receiving, elevation and loading – increased by 0.9%.*
  - *Cleaning – increased by 3.2%.*
  - *Storage – increased by 0.6%.*

Rail Operations

- *Average car cycle increased by 7.7% to 18.0 days.*
  - *Empty transit up 19.9% to 9.4 days; loaded transit down 2.9% to 8.6 days.*
  - *Averages disguise differences in CN and CP car cycles.*
    - *CP decreases by 2.7% while CN's climbs 19.9%.*
- *Proportion of grain traffic moving in multiple-car blocks decreased marginally to 73.9%.*
  - *Proportion in blocks of 50 or more railcars fell marginally to 67.9%.*
  - *Reflects modest decline in the use of larger car blocks and a restructuring of incentive discounts.*
    - *CP reduced discounts for movements in blocks of 100-111 cars.*
    - *Significant changes to shuttle train services.*
  - *Railway incentive payments estimated at $67.7 million – down 0.4%.*
    - *Average discount decreases 0.4% to $4.52 per tonne.*
- *Posted freight rates adjusted in multiple phases.*
  - *CN reduces rates by about 1.0% in August 2004; CP largely matches.*
  - *CN and CP reduce rates in third quarter by 1.0% and 3.0% respectively.*
    - *Follow with an additional 3.0% reduction in the fourth quarter.*
- *Canadian Transportation Agency established Revenue Cap of $629.3 million.*
  - *Determined statutory grain revenues for CN and CP totalled $628.9 million.*
    - *Total grain revenues $0.4 million less than allowed.*
    - *CN pays penalty on $0.1 million in excess revenues.*
  - *Average revenue increased 0.6% to $25.87 per tonne.*

Terminal Elevators and Port Performance

- *Terminal throughput decreased by 0.1% to 18.9 million tonnes.*
- *The average elevator capacity-turnover ratio increased by 7.1% to 7.5 turns.*
- *Average weekly stock level increased 5.5% to 1.1 million tonnes.*
- *Average time in port increases 22.5% to 4.9 days.*
  - *Reflects loading delays in Vancouver in the second and third quarters.*
- *Posted tariff rates for terminal elevator handling activities increased.*
  - *Receiving, elevation and loading – increased by 2.3%.*
  - *Storage charges – increased by 5.4%.*

Indicator Series 3 – System Efficiency

Table	Indicator Description	Notes	BASE 1999-00	CURRENT REPORTING PERIOD (1) 2003-04	2004-05	% VAR	
	Trucking [Subseries 3A]						
3A-1	Composite Freight Rate Index – Short-haul Trucking		100.0	100.0	111.3	11.3%	▲
	Primary Country Elevators [Subseries 3B]						
3B-1	Grain Volume Throughput (000 tonnes)		32,493.9	28,526.9	28,593.5	0.2%	–
3B-2	Average Elevator Capacity Turnover Ratio		4.8	5.6	5.6	0.0%	–
3B-3	Average Weekly Elevator Stock Level (000 tonnes)		3,699.3	2,691.9	2,314.3	-14.0%	▼
3B-4	Average Days-in-Store (days)		41.7	34.4	29.5	-14.3%	▼
3B-5	Average Weekly Stock-to-Shipment Ratio – Grain		6.2	5.0	4.1	-18.0%	▼
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		25,659.6	19,923.5	20,259.5	1.7%	▲
3C-3	Hopper Car Grain Volumes (000 tonnes) – Detailed Breakdown						
3C-4	Railway Car Cycle (days) – Empty Transit Time		10.7	7.8	9.4	19.9%	▲
3C-4	Railway Car Cycle (days) – Loaded Transit Time		9.2	8.9	8.6	-2.9%	▼
3C-4	Railway Car Cycle (days) – Total Transit Time		19.9	16.7	18.0	7.7%	▲
3C-5	Hopper Car Grain Volumes (000 tonnes) – Non-Incentive		12,735.5	4,957.3	5,294.1	6.8%	▲
3C-5	Hopper Car Grain Volumes (000 tonnes) – Incentive		12,924.2	14,966.3	14,965.3	0.0%	–
3C-6	Hopper Car Grain Volumes ($millions) – Incentive Discount Value		$31.1	$67.9	$67.7	-0.4%	–
3C-7	Traffic Density (tonnes per route-mile) – Grain-Dependent Network		442.3	356.7	337.1	-5.5%	▼
3C-7	Traffic Density (tonnes per route-mile) – Non-Grain-Dependent Network		292.4	235.1	249.1	6.0%	▲
3C-7	Railway Traffic Density (tonnes per route-mile) – Total Network		330.3	263.8	269.8	2.3%	▲
3C-8	Composite Freight Rates – Rail	(2)					
3C-9	Multiple-Car Shipment Incentives – Rail	(2)					
3C-10	Effective Freight Rates – CTA Statutory Revenue ($ per tonne)		n/a	$25.72	$25.87	0.6%	–
	Terminal Elevator and Port Performance [Subseries 3D]						
3D-1	Annual Port Throughput (000 tonnes) – Grain		23,555.5	18,962.0	18,943.5	-0.1%	–
3D-2	Average Terminal Elevator Capacity Turnover Ratio		9.1	7.0	7.5	7.1%	▲
3D-3	Average Weekly Terminal Elevator Stock Level (000 tonnes)		1,216.2	1,069.2	1,127.5	5.5%	▲
3D-4	Average Days-in-Store – Operating Season (days)		18.6	19.0	19.9	4.7%	▲
3D-5	Average Weekly Stock-to-Shipment Ratio – Grain	(2)					
3D-6	Average Weekly Stock-to-Shipment Ratio – Grade	(2)					
3D-7	Average Vessel Time in Port (days)		4.3	4.0	4.9	22.5%	▲
3D-8	Distribution of Vessel Time in Port	(2)					
3D-9	Distribution of Berths per Vessel	(2)					
3D-10	Annual Demurrage Costs ($millions)		$7.6	$4.7	$16.0	236.7%	▲
3D-10	Annual Dispatch Earnings ($millions)		$14.5	$20.0	$17.5	-12.5%	▼
3D-11	Average Handling Charges – Terminal Elevators	(2)					

(1) – In order to provide for more direct comparisons, the values for the 1999-2000 through 2004-05 crop years are "as at" or cumulative to 31 July unless otherwise indicated.

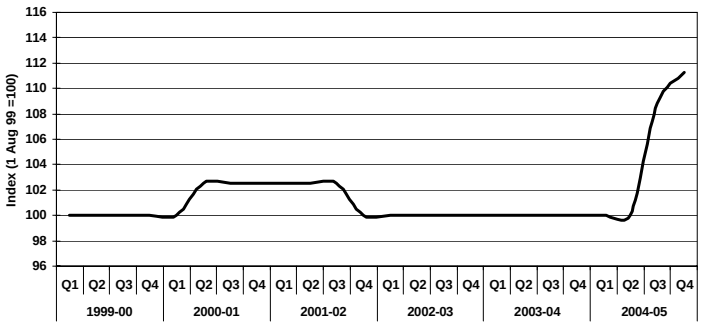
(2) – Changes in the data cited cannot be depicted within the summary framework presented here. The reader is encouraged to consult the detailed data tables found in Appendix 4 as required.

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.

Figure 52: Composite Freight Rate Index – Short-Haul Trucking



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.

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.[102] By the beginning of the 2004-05 crop year, carriers were widely reported to have already absorbed increases of 10% in their direct costs.

These pressures did not ease. By the end of the half of the 2004-05 crop year, the price of West Texas Intermediate crude oil was quickly approaching $50 US a barrel, having risen another 20%. With fuel prices climbing as a result, an escalation in the rates for hauling grain became unavoidable. By the end of the third quarter, the larger grain companies had all brought forward rate increases, which raised the GMP's price index for short-haul trucking by 8.8%. Additional increases in the forth quarter pushed the index up by another 2.5 points, to a value of 111.3, thereby closing out the 2004-05 crop year 11.3% higher than when it began. This marked one of the most significant single-year increases in the logistics costs borne by producers since the beginning of the GMP. [See Table 3A-1 in Appendix 4.]

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

The 2004-05 crop year provided the GMP with its second consecutive opportunity to gauge the impact of recent changes in the GHTS on the operational efficiency of the primary country elevator system under near-normal volumes. This stemmed largely from the fact that the system's throughput remained effectively unchanged from the previous crop year's 26.5 million tonnes, increasing by just 0.2% to 28.6 million tonnes.[103]

[102] The price of West Texas Intermediate crude oil climbed by 43.5% in the 2003-04 crop year, to US$ 43.80 per barrel from US$ 30.53.

[103] 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.

This volume, however, fell 14.3% short of the 33.3-million-tonne record set under the GMP in the 2000-01 crop year.

Year-over-year increases in primary elevator shipments were recorded by only two of the producing provinces. With an 8.4% increase in throughput, Alberta posted the largest comparative gain. Moreover, its shipment of 9.3 million tonnes proved second only to the 10.3 million tonnes that it originated in the GMP's base year. This was followed by Saskatchewan, which, despite posting an increase of 4.4% to 13.6 million tonnes, still fell well below its GMP high of 17.8 million tonnes. In a reflection of Manitoba's comparatively poorer growing conditions, shipments from the province fell by 16.0%, to 5.5 million tonnes from 6.6 million tonnes a year earlier. Even so, this was only marginally below the 5.6 million tonnes averaged in its first five years under the GMP.

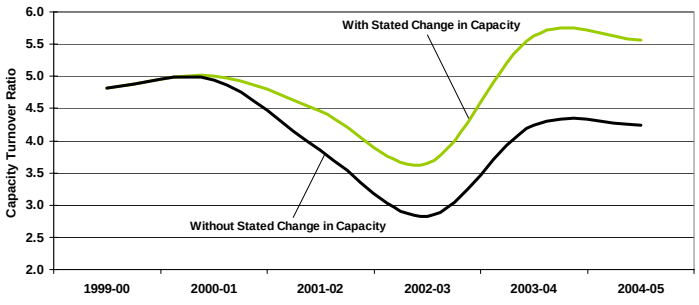
With a reduction of 50.9%, British Columbia posted the sharpest year-over-year decline in primary elevator throughput. Its 0.2 million tonnes constituted the second smallest volume recorded for the province under the GMP.[104] This reduction was not only attributable to the province's comparatively poorer growing conditions, but the harsher weather that confronted it at harvest as well. [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. Even though throughput for the 2004-05 crop year increased by 66,600 tonnes from that shipped a year earlier, the ratio remained unchanged at 5.6 turns, the highest value recorded under the GMP.[105] This was due in large part to the offsetting influence of a 66,800-tonne net increase in the system's storage capacity.

Even so, significant changes were noted among the ratios of the various provinces. The ratio for Alberta continued its move into higher territory, increasing another 4.4% to 7.1 turns from the previous crop year's record setting 6.8 turns. A gain was also posted by Saskatchewan, which reported 4.8 turns as compared to 4.7 turns a year earlier. These improvements were chiefly driven by the increases in provincial throughput already mentioned. This sensitivity was equally evident in the lower ratio values scored by Manitoba and British Columbia, which fell by 14.5% to 5.9 turns in the case of the former, and by 52.7% to 2.6 turns for the latter, as a result of reduced volumes. [See Table 3B-2 in Appendix 4.]

Figure 53: Change in Capacity – Impact on Capacity Turnover Ratio



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 18.8%, or 1.2-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 2004-05 crop year's ratio would have been 4.2 instead of 5.6. This 1.4-turn differential draws attention to the fact that the primary elevator system has improved its handling efficiency by an estimated 31.4% over the course of the last six crop years.

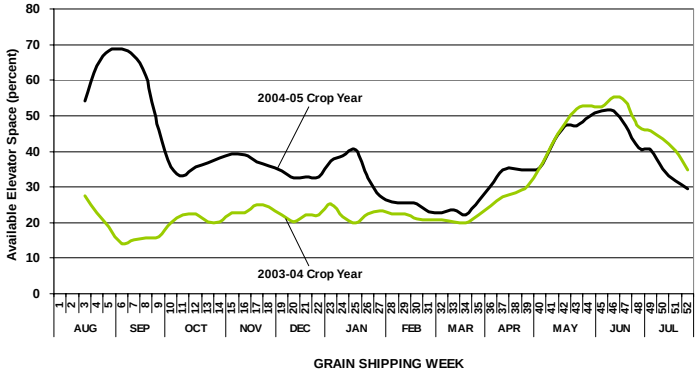
[104] The smallest amount of grain to be shipped from the primary elevators in British Columbia was recorded in the first year of the GMP, and amounted to 169,700 tonnes. At 173,200 tonnes, shipments from these facilities for the 2004-05 crop year proved only 2.1% greater.

[105] As a rule, the significant figures in any measurement made under the GMP are taken to one decimal place. In this instance, rounding actually ignores a very small reduction in the capacity turnover ratio for the 2004-05 crop year.

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.

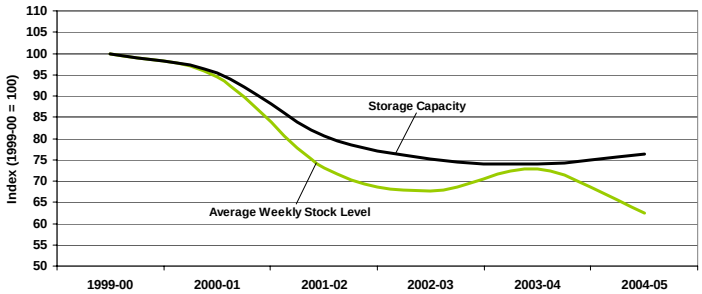
Figure 54: Available Country Elevator Space



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 a low of 2.5 million tonnes. And even though the 2003-04 crop year's average climbed to 2.7 million tonnes, it had still fallen by more than one quarter from the GMP's first year benchmark of 3.7 million tonnes. [See Table 3B-3 in Appendix 4.]

This downward trend was accentuated even further in the 2004-05 crop year, with the average having fallen by another 14.0% to a record-setting low of 2.3 million tonnes. This was fuelled in large part by a sharp decline in the amount of grain held in storage during the first quarter, which fell to a closing weekly average of 1.8 million tonnes, the lowest quarterly value recorded under the GMP. For the most part, these record-setting values reflected the heightened demand for high-quality grain in a commercial environment where the late harvest had severely limited the overall supply.

The late harvest prompted an initial drawdown in carry-forward stocks in order to satisfy export sales commitments. When the new crop began to come off the field, whatever quantities of high-quality grain were available quickly found their way into, and through, the country elevator system. These dual forces worked to rapidly reduce inventories. This was clearly reflected in a significant rise in the amount of space available in the country elevator system, which reached almost 70% in early September 2004 as compared to a more normative 20%.

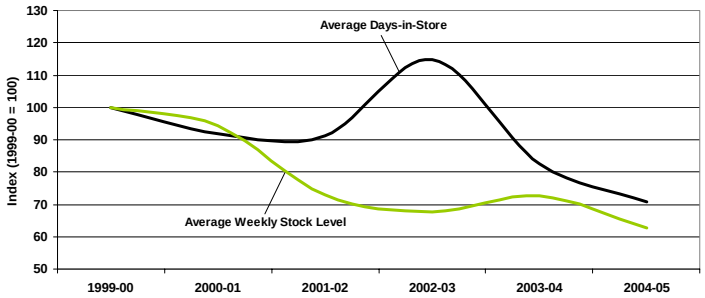


With an improvement in grain availability in the second quarter, these demand pressures began to ease. As such, the closing weekly stock level began to rise. By the end of the third quarter it had rebounded to an average of 2.8 million tonnes, before then settling back to 2.3 million tonnes in the fourth. Although this general rise effectively tempered the exceptionally low average of the first quarter, its influence still proved sufficient to set a new performance standard under the GMP.

It is worth noting that the 37.4% net decline in primary elevator inventories over the course of the last six crop years exceeds a corresponding 23.7% reduction in storage capacity. This becomes evident when the average inventories of the past six crop years are compared with the system's storage capacity, and inventories can be seen to have fallen from an average of 54.3% of total capacity to 44.6%. This suggests that average inventories have fallen in real terms, and that less grain is being maintained in inventory per unit of storage capacity than at the beginning of the GMP.

Just as the average stock level has moved generally lower, so has the average amount of time spent by grain in inventory. From a benchmark 41.7 days in the GMP's base year, to 34.4 days in the 2003-04 crop year, the average number of days-in-store fell by 17.5%.[106] Here too, the 2004-05 crop year set a new record for the lowest average number of days grain spent in inventory, 29.5 days. And as was the case with inventories, this reduction in storage time related directly to the rapidity with which grain was initially being drawn into, and through, the primary elevator system. The first quarter's 22.7-day average for the number of days-in-store was a full 34.0% below the previous crop year's 34.4-day average. Moreover, it was rivalled only by the 2003-04 crop year's fourth quarter average as the lowest attained under the GMP.[107] [See Table 3B-4 in Appendix 4.]

Figure 56: Relative Change in Average Weekly Stock Levels and Average Days-in-Store



The average number of days-in-store for the provinces of Saskatchewan and Alberta posted the most substantial year-over-year decreases in the 2004-05 crop year, 19.4% and 12.7% respectively. These results generally mirrored the fact that production had concentrated a comparatively greater proportion of the higher-quality grains that were available in these areas. The averages for individual grains proved to be more mixed, with the non-CWB grains having posted the broader declines. The principal changes in these values are summarized as follows:

Province	Days-in-Store	Change
Saskatchewan	32.8 days	Down 19.4%
Alberta	25.4 days	Down 12.7%
Manitoba	28.1 days	Down 3.8%
British Columbia	41.9 days	Up 34.9%

Grain	Days-in-Store	Change
CWB Grains		
Wheat	31.2 days	Down 23.7%
Durum	43.1 days	Down 17.2%
Barley	27.6 days	Up 12.1%
Non-CWB Grains		
Canola	19.3 days	Down 14.2%
Peas	18.4 days	Up 0.5%
Flaxseed	22.6 days	Up 16.1%
Oats	33.6 days	Up 44.4%

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.[108]

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

[106] 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.

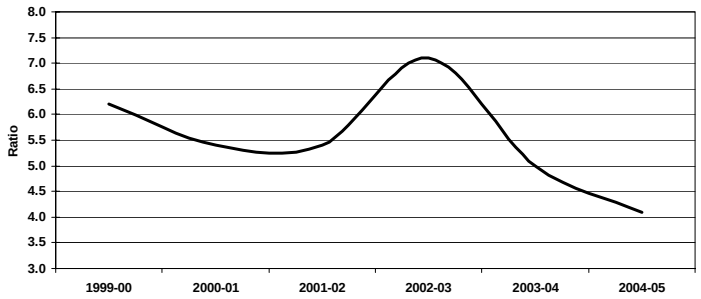
[107] A 22.7-day average for the number of days-in-store was also achieved in the fourth quarter of the 2003-04 crop year. Many of the same forces that had influenced this result were extended into the first quarter of the 2004-05 crop year.

[108] he value of 1.0 constitutes a lower limit for the stock-to-shipment ratio as calculated under the GMP. This occurs because primary elevator shipments are effectively constrained by the actual level of grain held in inventory.

that greatly inflated the ratio, by the 2003-04 crop year the annual average had declined by 19.4%, to 5.0 from 6.2.[109]

The same forces that led to reduced stock levels in the 2004-05 crop year also contributed to a further tightening of these ratios. For the first quarter, the average weekly stock-to-shipment ratio fell to a record low of 2.8. And although the ratio's value subsequently increased in concert with the build-up in quarterly inventories, the exceptionally strong influence of the first quarter helped draw down the annual average by 18.0%, to a record-setting 4.1 from 5.0 a year earlier. [See Table 3B-5 in Appendix 4.]

Figure 57: Primary Elevators – Stock-to-Shipment Ratio

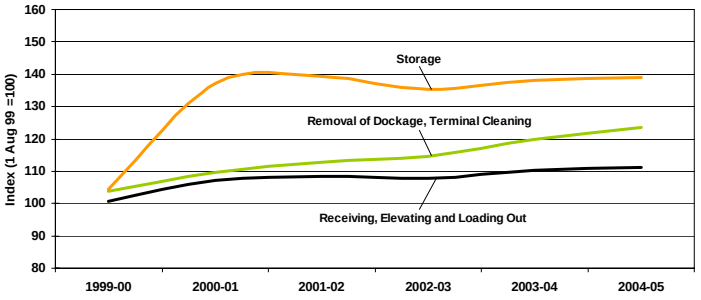


Average Handling Charges

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.[110]

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.

Figure 58: Relative Change in Elevator Handling Charges



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 2003-04 crop year, these rates had risen by a total of 10.3%. During the course of the 2004-05 crop year they increased a further 0.9%, bringing the cumulative increase for the last six years to 11.3%.[111]

The rates in place for the removal of dockage are the only ones to have posted increases in each of the last six crop years.[112] For the 2004-05 crop year, these rates were raised by about 3.2%. This resulted in the composite price index having climbed 23.7% under the GMP.

[109] 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.

[110] 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.

[111] By way of comparison, the Price Index increased by % during this period.

[112] 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.

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, minor annual increases have been applied in each of the past two crop years. An increase of 0.6% in the 2004-05 crop year resulted in storage charges that were effectively 39.0% 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 2004-05 crop year posted a modest year-over-year increase of 1.7%, rising to 20.3 million tonnes from 19.9 million tonnes the year before.[113] All ports, save that of Vancouver, experienced a decrease in the amount of grain handled. Movements to Vancouver climbed by 9.2%, to 11.1 million tonnes from 10.2 million tonnes a year earlier, giving it a 55.0% share of the total railway volume. Thunder Bay saw its volume decline by 5.1%, to 6.0 million tonnes from 6.4 million tonnes the year before. Similarly, traffic to Prince Rupert fell by 6.8% to 2.7 million tonnes, while shipments to Churchill decreased by 16.2% to 0.4 million tonnes.

Railway shipments from every province in western Canada save that of Manitoba posted an increase. The most significant net gain was registered by Saskatchewan, where rail shipments increased by 5.7%, or 0.5 million tonnes, to 10.0 million tonnes. This was in turn followed by increases of 3.1%, or 0.2 million tonnes, for shipments from Alberta, and 0.1 million tonnes for those from British Columbia.[114] A 0.6-million-tonne reduction in the volume shipped from Manitoba, however, largely offset these gains. [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. In the 2004-05 crop year, the overall car cycle increased by 7.7%, to an average of 18.0 days from 16.7 days a year earlier.[115] Although greater than those of the 2003-04 crop year, these values are generally consistent with those exhibited during the GMP's more active initial years.[116] [See Table 3C-4 in Appendix 4.]

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[113] The overall volume of grain cited here as having moved by rail to Western Canadian export positions in the 2004-05 crop year contrasts with the 20.8 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.

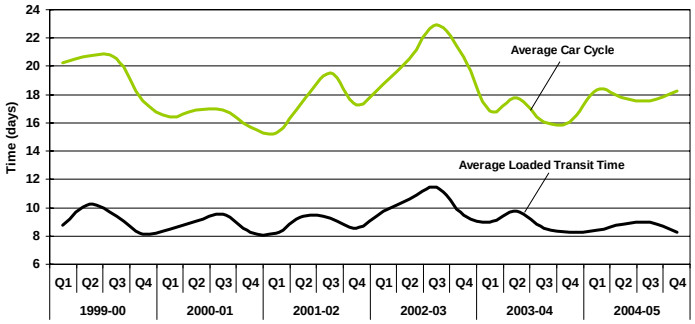
[114] Statistics relating to the railway movement of grain in western Canada centre on the volume handled by federally regulated carriers. Given that much of the grain originating in British Columbia was handled by BC Rail, the volume handled by federally regulated carriers prior to CN's acquisition 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 2004-05 crop year reflects the first full year of comprehensive statistics relating to railway grain movements from British Columbia.

[115] Western Canada's average car cycle of 18.0 days is derived from 113,520 movements: 54,330 in the Vancouver corridor; 41,397 in the Thunder Bay corridor; and 17,793 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.

[116] Drought-induced reductions in the productivity of the hopper car fleet were largely responsible for the elongation in car cycles observed 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 noted in all corridors.

Even so, there were some significant performance differences in the primary operating corridors. The average for the Vancouver corridor increased by 3.4% to 18.4 days. For movements to Thunder Bay, the average car cycle increased by 5.2% to 17.9 days. The car cycle to Prince Rupert posted the most substantive increase, having risen by 25.4% to an average of 17.5 days.

Figure 59: Average Railway Car Cycle



A rise in the empty transit time proved to be the underlying the elongation of the overall car cycle. In specific terms, the average empty transit time climbed by 19.9%, to 9.4 days from 7.8 days a year earlier. Conversely, the loaded transit time – which bears directly on the speed with which grain moves through the GHTS – actually fell by 2.9%, to an average of 8.6 days from 8.9 days. Although the values varied, this general pattern was exhibited in changes to the individual averages for movements in the Vancouver and Thunder Bay corridors. The exception proved to be the Prince Rupert corridor where both elements increased markedly, by 31.1% in the case of the empty transit time, and by 19.9% in the case of the loaded transit time.

These overall averages, however, also mask the fact that the individual carrier averages moved in generally opposing directions. To be specific, CP's average car cycle fell by 2.7%, while CN's climbed by 19.9%. Much of CP's overall improvement came from a 14.8% reduction in its average loaded transit time, while the CN average increased by 12.4%. CN's performance was also undermined by a 28.9% increase in its average empty transit time, whereas the CP average increased by a much lower 10.2%.

To a large extent, these results hint at more significant differences between the carriers. In part, they undoubtedly reflect workload differences. During the first quarter, CP handled a significantly greater proportion of the grain volume than did CN, and was comparatively more active during this period.[117] Evidence of this could be found in the sharp reduction in grain volumes that moved to Prince Rupert in September and October 2004, which negatively impacted the CN car cycle in this corridor.[118] Likewise, an increase in handlings during the second and third quarters undoubtedly helped to improve the carrier's performance during this period, while a drop in the fourth quarter's volume contributed to its later weakening.

Still, CN's overall record of increasing loaded and empty transit times in the 2004-05 crop year suggests that another structural difference between the operations of the two carriers exists. One potential explanation stems from CN's reported return to the practice of using grain to fill-out its other manifest trains. While there may be economic merit for a carrier to move grain in this way – or even to break up existing unit trains for this purpose – it generally results in longer loaded and empty transit times. CP on the other hand, has shown little inclination to follow CN's lead, and has continued to focus on moving grain in unit trains. Although it is self-evident that such operational changes can have a measurable impact on the overall car cycle, it ultimately remains to be seen whether CN will continue with the practice of filling-out its manifest trains with grain.

Multiple-Car Blocks

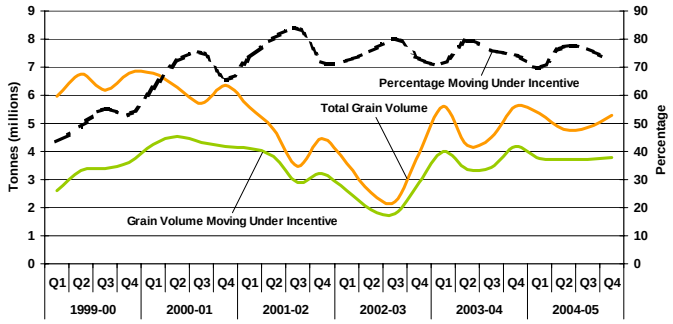
During the course of the 2004-05 crop year, the railways handled a total of 15.0 million tonnes of grain under the incentive programs they offer to encourage shipments in larger multiple-car blocks. This was unchanged from the volume handled a year earlier, but notably behind the 17.3 million tonnes moved under these programs in the 2000-01 crop year.

[117] Inactivity is known to manifest itself in generally longer empty transit times since railcars are compelled to wait longer periods for the next loading opportunity.

[118] The falloff in grain traffic to Prince Rupert was the result of scheduled facility maintenance at Prince Rupert Grain Ltd., and a reduction in the volume that moved to the port while the CWB re-evaluated the quality of the crop then being harvested.

Although the droughts of the 2001-02 and 2002-03 crop years had a bearing on the decline in volumes handled under these programs, the structural changes made to the programs themselves have also had an impact. 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. Even so, the overall proportion of grain that earned incentive discounts decreased only marginally, to an estimated 73.9% in the 2004-05 crop year from 75.9% two years earlier. Moreover, since the beginning of the GMP this proportion has risen steadily from 50.4%.[119] Despite this longer-term trend, variations in the quarterly values have seldom exceeded 80%, suggesting that a ceiling in this area has now formed.[120] [See Table 3C-5 in Appendix 4.]

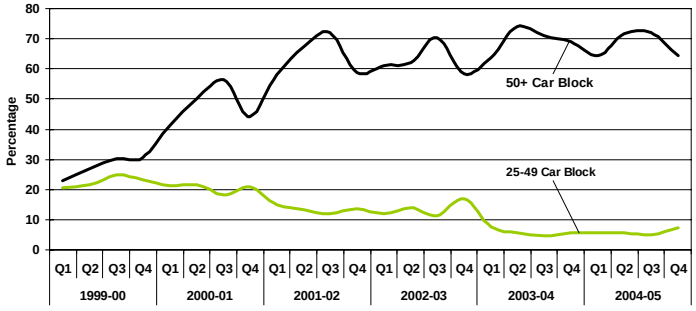
Figure 60: Railway Volume Moving Under Incentive



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 2004-05 crop year showed that movements in blocks of 50-99 cars proved to be the most utilized, going from a 20.2% share in the 1999-2000 crop year to an estimated 45.1% by the end of the 2004-05 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.[121] 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.

Figure 61: Composition of Multiple-Car Block Incentive Movements



Over the course of the past six crop years, the share of the total volume moving in blocks of 50 or more cars has climbed from 27.8% to 67.9%.[122] Although increases in the incentive discounts offered by the railways largely fuelled this migration, there can be little doubt that a rollback in the discounts applicable on shipments in blocks of 25-49 railcars also contributed. During this period, shipments earning these lesser discounts fell from a 22.6% share to just 5.9%.

The annual value of the discounts earned by grain shippers – estimated as a gross savings in railway freight charges – has more than doubled in the last six years, to $67.7 million from $31.1 million. Yet only $4.9 million,

[119] 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 a height of 83.9% in the third quarter of the 2001-02 crop year.

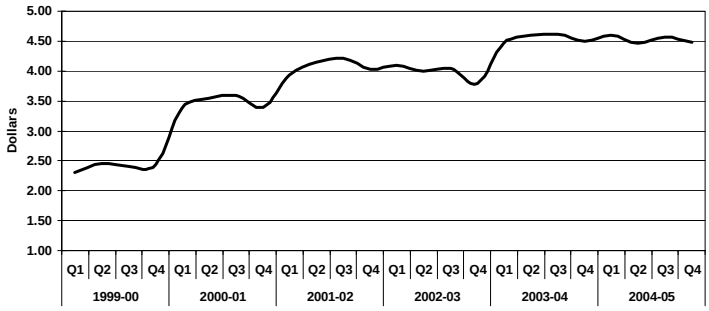
[120] As a corollary to this, non-incentive based movements have accounted for about one-quarter of all grain shipments in the last three crop years.

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

[122] The proportion moving in blocks of 50 or more cars actually reached a record 69.1% in the 2003-04 crop year. The 67.9% value attained in the 2004-05 crop year proved only marginally lower.

or 13.3%, of this $36.6 million increase was derived from the additional volume of grain that was actually shipped under these programs. The majority, $31.7 million, came from the expanded use by shippers of the larger car blocks, which carried the higher per-tonne discounts offered by the railways.

Figure 62: Average Incentive Discount Earned (dollars per tonne)



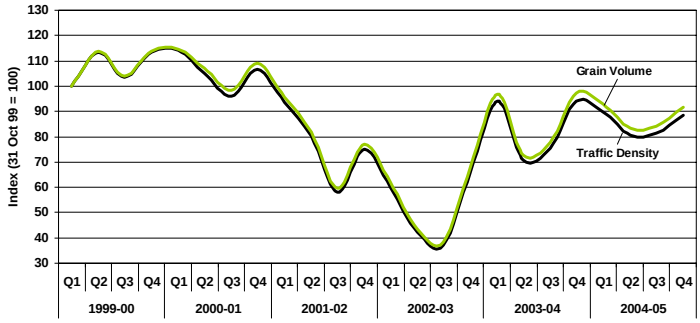
The average discount earned underscores the incremental gains realized by the grain companies. Between the 1999-2000 and 2003-04 crop years, the average discount earned under these programs climbed to an estimated annualized average of $4.54 per tonne from $2.40 per tonne.[123] The 2004-05 crop year saw this average fall by a marginal 0.4%, to $4.52 per tonne. The reduction was chiefly a reflection of the modest decline in the proportion of movements that went in blocks of 50 or more cars. [See Table 3C-6 in Appendix 4.]

Traffic Density

A broad indicator of railway efficiency is traffic density. With a quarterly average of 269.8 originated tonnes per route-mile, overall density in the 2004-05 crop year was 2.3% greater than the 263.8 tonnes per route-mile observed a year earlier. This, however, was still 18.3% below the 330.3 tonnes per route-mile recorded in the first year of the GMP.[124]

The limited transformation of the railway network over the past six years has largely sensitized this indicator to changes in traffic volume alone.[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 the same volume-related changes outlined in Section 1.4.

Figure 63: Relative Change in Traffic Density and Grain Volume



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. This chiefly reflects the changes that have been made with respect to the underlying infrastructure itself, be it through sale or abandonment. A significant improvement in the traffic density of the smaller railways came at the end of the 2003-04 crop year when CN acquired BC Rail, a railway originating very little in the way of grain volumes. Conversely, this same transaction had the precise opposite effect on the density of Class 1 operations. A reversion back to CN of the infrastructure operated by the Prairie Alliance for the Future in the

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

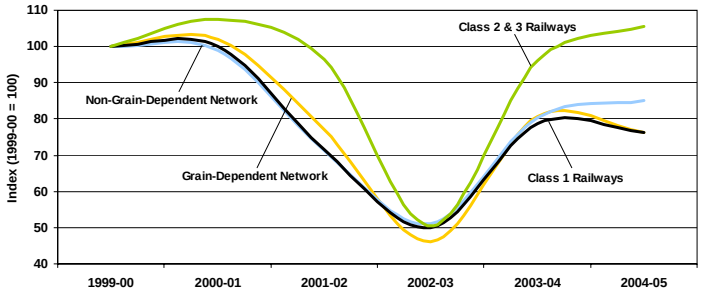
[124] Traffic density is determined by relating grain volumes for a specific period of time to the number of route-miles comprised within the western Canadian railway network at the end of that same period. Although year-over-year measurements are comparable, they cannot be directly gauged against quarterly 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 3.4% improvement in traffic density.

fourth quarter of the 2004-05 crop year had a similar impact, propping up the traffic density of the remaining shortlines while reducing that of the Class 1 carriers.

These changes can largely be avoided if the base network being examined is less prone to this kind of redefinition. Such 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 occurred, 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 64: Relative Change in Railway Traffic Density



This was not the case in the 2004-05 crop year. With a 5.6% gain in volume for the non-grain-dependent network, and a 6.7% decline in that for the grain-dependent network, their traffic densities began to move in opposing directions. In the case of the former, traffic density increased by 6.0% to an average of 249.1 tonnes per route-mile, while the grain-dependent network's average fell 5.5% to 337.1 tonnes per route-mile. On the whole, these measurements serve to affirm what appears to be the increasing erosion of the grain-dependent branch line network's existing traffic base. [See Table 3C-7 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. Although the revenue cap accorded both CN and CP greater freedom in setting freight rates, their pricing actions remained largely similar. With the close of the 2002-03 crop year, railway pricing decisions had pushed nominal freight rates up 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]

As outlined in the Monitor's previous annual report, CN and CP took noticeably different pricing actions in the 2003-04 crop year, thereby breaking with the practice of making largely parallel changes to their freight rates. With minor exception, CN chose to maintain its existing rates, while CP effectively rolled back its rates by about 1.0%. These actions were also supported by the first substantive structural changes to the railways' incentive

[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 represents a composite average based on published tariff rates for both CN and CP.

[128] Since 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.

programs since the beginning of the 2000-01 crop year.[129] In addition, midway through the third quarter, both carriers brought forward a second set of pricing adjustments: increases of about 1.5% in the case of CN; and 2.0% in the case of CP.

Railway pricing actions in the 2004-05 crop year appeared to follow a very similar pattern. At the outset, CN reduced its rates on single-car movements to the four ports in western Canada by about 1.0%. Although CP matched this reduction in the Thunder Bay corridor, it chose to maintain those already in place for movements to Vancouver. For the most part, these adjustments appear to have simply reflected the Canadian Transportation Agency's determination that the Volume-Related Composite Price Index for the period was going to decline by 0.9%.[130] As a result, composite net increases in the Thunder Bay and Vancouver corridors since the beginning of the GMP amounted to about 3.6% and 4.2% respectively.[131] [See Tables 3C-8 and 3C-9 in Appendix 4.]

In addition, some substantive changes were made to the incentive programs offered by the railways. Although CN did not alter the discounts it offered for movements in blocks of 50-99 cars ($4.00 per tonne) and 100 or more cars ($6.00 per tonne), it dispensed with the $1.00 per-tonne premium that it had been paying on shuttle train movements.[132] This effectively eliminated the financial benefit that had been given to shippers when they committed to move a specific number of trains over an extended period of time.

In the case of CP, the carrier reduced the discount it offered for movements in blocks of 100-111 cars from $7.00 per tonne to $4.00 per tonne; the same discount given to shipments in blocks of 50-99 cars.[133] The carrier, however, maintained its maximum discount on shipments in blocks of 112 cars at $7.50 per tonne.[134] Together, these actions underscored CP's efforts to further promote grain shipments in the largest trainload lots possible. Even so, CP also chose to eliminate its shuttle train programs, along with the supplementary premiums that they offered under them.[135]

Notwithstanding these changes, both carriers appeared to be adding emphasis to their advance booking options. On the whole, these options held out the promise of improved car supply if the shipper committed to ordering cars even further ahead of time, over a larger number of consecutive shipping weeks, and in specific minimum quantities. All of these options involved a diverse series of supporting financial rewards and

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129 In summary, CN eliminated its incentives for grain moving in blocks of 25-49 railcars, while CP cut its corresponding incentive from $1.00 per tonne to $0.50. Neither carrier chose to alter their existing $4.00-per-tonne discount for movements in blocks of 50-99 railcars. But whereas CN also elected to maintain the discount it offered for movements in blocks of 100 or more cars at $6.00 per tonne, CP increased its discount to $7.00 per tonne. For more detailed information on the scope of these changes, please see the Monitor's annual report for the 2003-04 crop year.

130 The revenue cap is adjusted annually for inflation by the Canadian Transportation Agency. For the 2004-05 crop year, the Agency determined that Volume-Related Composite Price Index used to accomplish this was to be reduced by 0.9%. See Canadian Transportation Agency Decision Number 203-R-2004 dated 22 April 2004.

131 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 show increases of about 3.7% for Churchill, and reductions of about 2.0% for Prince Rupert, over the same period of time.

132 CN's shuttle premium of $8,700 per train effectively increased the discount that could be earned on the movement of a 100-car train from $6.00 per tonne to almost $7.00 per tonne.

133 It should be noted that although CP reduced the discount that applied on movements of 100-111 cars from $7.00 per tonne to $4.00 per tonne, a number of grain shippers indicated that the higher discount was "grandfathered" to those who had been earning it before the change was instituted.

134 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.

135 The premiums paid by CP varied according to both the number of shuttle trains to which a shipper committed itself (i.e., four, eight or twelve), as well as their relative size (i.e., 100-car trains versus 112-car trains). As such, the maximum net discount a qualifying shipper could receive amounted to about $9.00 per tonne. These programs were formally withdrawn at the beginning of the 2004-05 crop year.

penalties. One change in the rationalization mechanism brought forward by CP under its "Advance Max" program actually required shippers to pay a premium if the penalty they bid exceeded $3,000 per car.[136]

The third quarter saw both carriers bring forward a second round of pricing adjustments. In the case of CN, this amounted to a general reduction of 1.0%, while CP reduced its rates by about 3.0%. On the heel of these rate reductions, however, both carriers came forward with fourth-quarter cuts amounting to another 3.0%. As a result, the rates in place at the end of the crop year proved substantially lower than those in place at the beginning of the period. In the case of the Thunder Bay and Vancouver corridors, CN posted net reductions of 5.3% and 4.9% respectively, while CP's fell by a somewhat steeper 6.7% and 5.7% respectively.[137]

As was the case in the latter half of the 2003-04 crop year, these rate reductions were undoubtedly aimed at ensuring the carriers did not exceed the revenue limits that would be imposed on them by the revenue cap. In fact, there is much to suggest that these later adjustments constitute the primary mechanism through which CN and CP now optimize the generation of their statutory revenues: increasing rates in order to make-up an expected shortfall with their allowed limits; and reducing them so as to surrender any apparent excess. Given the comparative depth, and rapid succession with which both carriers instituted these rate reductions in the latter half of the crop year, it seems highly probable that both would have exceeded their revenue caps for the 2004-05 crop year by a significant margin had they not done so.

Just the same, these actions directly benefited individual producers by reducing their immediate freight charges in the second half of the 2004-05 crop year. This was particularly true for producers who made shipments following the last of these rate reductions, and who realized the largest financial savings possible.

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.[138]

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.[139] For the 2004-05 crop year, these adjustments resulted in CN and CP being accorded individual revenue caps of $305.7 million and $323.6 million respectively, or $629.3 million on a combined basis.[140] [See Table 3C-10 in Appendix 4.]

[136] The rationalization mechanism referred to required potential shippers to bid on the cars that CP was willing to provide for loading in a specified period. In effect, these bids constituted a penalty that the shipper would pay to the railway if it failed to load the car in accordance with the parameters of the program. In the event that a winning bid actually exceeded $3,000 per car, the new rules required the shipper to advance any amount above this threshold to CP immediately, the residual to be paid to the carrier as a penalty if applicable.

[137] 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 show decreases of 10.6% and 5.4% for Prince Rupert and Churchill respectively.

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

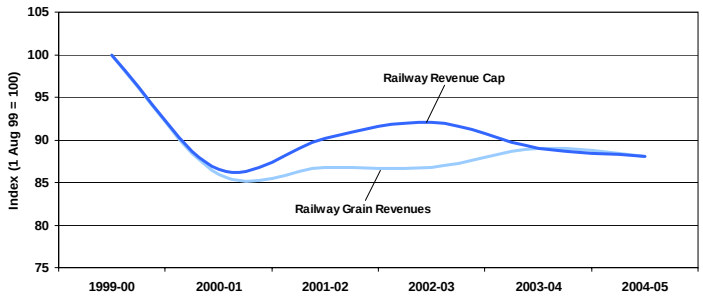
[139] A volume-related composite price index, which is used to adjust for inflation under the revenue cap regime, is determined annually by the Canadian Transportation Agency in advance of the crop year. For the 2004-05 crop year, the Agency determined the value of the volume-related composite price index to be 1.0108, which represented a year-over-year reduction of 0.9%. See Canadian Transportation Agency Decision Number 203-R-2004 dated 22 April 2004.

[140] See Canadian Transportation Agency Decision Number 755-R-2005 dated December 2005.

At the same time, the Agency determined that the statutory grain revenues for CN and CP amounted to $305.8 million and $323.1 million respectively. Although on a combined basis, this meant that the industry's grain revenues came $0.4 million below the $629.3 million allowed, the individual carrier results were mixed. Specifically, while CP's revenue fell $0.5 million below its revenue cap, CN's revenue was $0.1 million more than allowed.[141] Moreover, this marked a reversal of the previous year's results, and only the second instance where the revenues of a prescribed carrier actually exceeded the limit imposed by the revenue cap.[142] As a result, the Agency ordered CN to pay $124,650, comprised of its excess revenue along with a 5% penalty, to the Western Grains Research Foundation.

For a second 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 fell short of the allowable limit narrowed to just 0.06% from 0.14% a year earlier, the smallest yet recorded. More importantly, these values denote a clear departure from the pattern that saw the margin increase 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.

Figure 65: Railway Revenue Cap - Compliance



To an extent, the initial widening of this margin was attributable to the expanded use by grain companies of the incentive discounts applicable on grain shipped in blocks of 25 or more railcars during this period. By the 2002-03 crop year, an estimated 74.8% of all shipments in covered hopper cars earned such discounts as compared to 68.6% two years earlier. 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.[143] The 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.[144]

Even though an increase in grain volumes has done much to reduce the gap between allowable, and actual, railway revenues, the narrowness of the margins in the 2003-04 and 2004-05 crop years suggests that both carriers have become more adept at managing their revenues since the inception of the revenue cap regime. Of the two, CP has generally posted the narrowest absolute variances over the past five years: 0.7% in the first year; 3.0% in the second; 2.8% in the third; 0.1% in the fourth, and 0.2% in the fifth. Despite having usually greater variances, CN's margins have followed a similar pattern, widening to a maximum of 9.0% in the 2002-03 crop year before then falling sharply to 0.4% a year later, and a record-setting 0.04% in the crop year just ended. A great deal of this improved proficiency stems directly from the more frequent adjustment of single-car freight rates.

[141] The margin by which CN exceeded its revenue cap was statistically insignificant, just 0.04%.

[142] The first instance of a carrier exceeding its revenue cap came in the 2003-04 crop year when CP's revenues proved to have been 0.1%, or $0.3 million, above that allowed.

[143] 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.

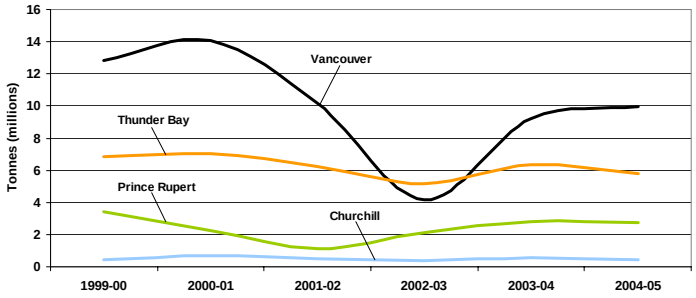
[144] The Canadian Transportation Agency does not make public any information pertaining to the specific makeup of the reductions applied when calculating the statutory grain revenues of either CN or CP. Nevertheless, a fixed annual reduction, such as might be embodied in the annualized contributions 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.

When the revenue cap was instituted with the 2000-01 crop year, CN and CP initially chose to follow the convention of instituting any change to its single-car freight rates at the beginning of the crop year. Through the first three years of the new regime, the pricing adjustments made by both carriers through this process were similar, if not identical. This changed in the 2003-04 crop year when both carriers adopted a decidedly non-traditional approach to pricing. The most prominent feature in this new approach was to make a series of subsequent rate adjustments in the third quarter. As discussed previously, the 2004-05 crop year largely mirrored this, although the third quarter's rate reductions were also followed by another round of cuts in the fourth. The rapidity with which these latter reductions were instituted leaves little doubt that they were but short-term corrective measures taken by the carriers to ensure the maximization of their revenues, while still respecting the limits imposed by their revenue caps.

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 18.9 million tonnes in the 2004-05 crop year.[145] This was virtually unchanged from the previous year, having fallen by only 0.1% from 19.0 million tonnes. [See Table 3D-1 in Appendix 4.]

Figure 66: Western Canadian Ports – Grain Throughput



Vancouver was the only port to have witnessed an increase in its throughput for the 2004-05 crop year. Total marine shipments from the port rose by 8.0%, to 10.0 million tonnes from 9.2 million tonnes a year earlier. Moreover, these accounted for just over half, 52.6%, of the GHTS's total throughput volume. Although shipments through Prince Rupert declined for the first time in three years, it only fell by 2.5%, to 2.7 million tonnes from 2.8 million tonnes the year before. When combined, the volume passing through these two west coast ports accounted for 67.1% of the overall total, which represented a modest gain over the 63.5% realized a year earlier, and the 53.3% share they earned in the 2002-03 crop year.

Clearly the comparative increase in the share of grain that moved through west coast ports came at the expense of the system's other two. On a combined basis, the share accorded the ports of Thunder Bay and Churchill fell to 32.9% from 36.5% the year before. At Thunder Bay, the dominant eastern gateway, throughput decreased by 9.0%, to 5.8 million tonnes from 6.4 million tonnes a year earlier. Churchill, the port with traditionally the lowest volume, saw its throughput decrease by 20.1%, to 0.4 million tonnes from 0.5 million tonnes.

Capacity Turnover

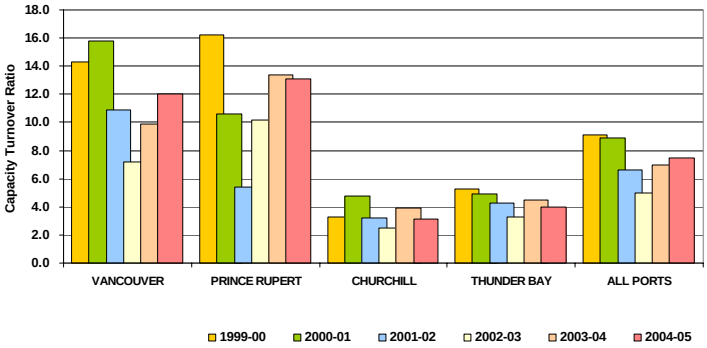
The increased share accorded Vancouver in the 2004-05 crop year was the underlying force behind a 7.1% gain in the GHTS's capacity-turnover ratio, which climbed to an average of 7.5 turns from 7.0 turns a year earlier.[146] The ratio for the port of Vancouver itself increased by 21.2%, climbing to 12.0 turns from 9.9 turns a year earlier. Declines in keeping with the reduction in throughput volume were noted for each of the remaining three ports. Churchill, with a decline of 20.5%, posted the sharpest comparative reduction, 3.1 turns versus 3.9

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

[146] 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.

turns a year earlier. This was followed by Thunder Bay, down by 11.1% to 4.0 turns; and Prince Rupert, down by 2.2% to 13.1 turns. [See Table 3D-2 in Appendix 4.]

Figure 67: Average Terminal Capacity Turnover Ratio



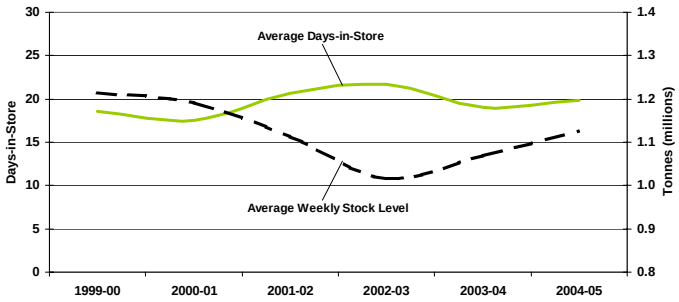
Owing to the limited transformation of the terminal elevator network over the past six years, the capacity turnover ratio has shown itself to be highly sensitive to changes in terminal throughput. As such, a comparison of the changes in these measures reveals patterns that are virtually indistinguishable. 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.[147]

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 about 6% of the total throughput. With little change in throughput for the 2004-05 crop year, the average weekly stock level rose by only 5.5% to slightly more than 1.1 million tonnes.[148] With the increases at Vancouver, Prince Rupert and Thunder Bay being notably less, the impetus for the system's larger gain came from a 67.8% build-up in the stocks, primarily durum, held at Churchill through the latter half of the crop year.

Wheat stocks traditionally account for about half of the system's overall inventories. In the last crop year wheat stocks grew by 14.5% to just over 0.5 million tonnes, or 47.3% of the overall total. Durum stocks, which were allocated the second largest amount of storage space, climbed by 36.5% to an average of 0.2 million tonnes. The largest relative stock increases were made by oats and peas, which rose by 70.6% and 52.1% respectively, even though they accounting for just under 0.1 million tonnes collectively. The remaining 0.3 million tonnes of inventory, composed chiefly of canola, but including barley and flaxseed as well, fell by 0.1 million tonnes in total. [See Table 3D-3 in Appendix 4.]

Figure 68: Terminal Elevators – Weekly Stock Level and Days-in-Store



To a large extent, the increase in terminal stocks was also accompanied by an increase in the amount of time grain spent in inventory. The overall average number of days-in-store for the 2004-05 crop year shows a modest year-over-year increase of 4.7%, climbing to 19.9 days from 19.0 days the year before. Even so, this increase did not reflect an across-the-board escalation in storage times. Mention must be made of the fact that while the time spent by grain in inventory increased for most ports and commodities, it actually declined by 6.8% in Vancouver, falling to an average of 16.4 days from 17.6 days the year before. To a large extent, Vancouver's improved performance helped allay the upward pressure that came as a result of increases that ranged from 14% to 60% at the other three ports. [See Table 3D-4 in Appendix 4.]

[147] The de-licensing of Agricore United's "M" terminal resulted in a 3.3% improvement to the network's handling efficiency.

[148] Owing to rounding, there is no difference between this value and the 1.1-million-tonne average of the 2003-04 crop year.

As was the case with country elevator stocks, the demand for high-quality grain in the face of tight supplies also contributed to a significant reduction in storage times, with the first quarter's 17.2-day average proving to have been among the lowest values yet recorded under the GMP. Some of the more pronounced changes are summarized as follows:

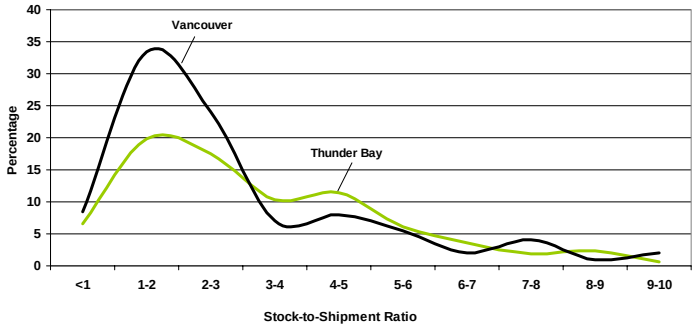
	Days in Store	Change	Remarks
Terminal Ports			
Vancouver	16.4 days	Down 6.8%	The most improved of all western ports
Thunder Bay	26.6 days.	Up 14.7%	
Churchill	20.4 days	Up 20.0%	
Prince Rupert	13.9 days	Up 59.8%	Lowest average number of days-in-store
Notable Grains			
Canola	14.9 days	Down 25.1%	Lowest average number of days-in-store
Barley	38.2 days	Up 4.9%	Highest average number of days-in-store
Wheat	18.5 days	Up 12.8%	
Oats	36.2 days	Up 40.9%	

Whether these stocks were sufficient to meet short-term demand can best be gauged by the average weekly stock-to-shipment ratio. This ratio provides an indication of how terminal stock levels related to the volume of grain loaded onto ships during the course of any particular week.[149] For Vancouver, the average for all stock-to-shipment ratios came in comfortably above a value of 2.0.[150] Four out of seven major grains showed year-over-year increases as a result of a modest build-up in inventories, with the ratio for wheat having climbed the most, by 15.3% to 2.8. The ratio for barley showed the most substantive decline, falling by 32.8% to 2.3. Canola also posted a sharp decline, falling by 19.7% to 2.8. [See Table 3D-5 in Appendix 4.]

As with Vancouver, the average ratios at Thunder Bay were well above a value of 2.0. Here too, larger inventory levels helped increase the ratios for wheat, barley, oats and flaxseed. The most sizeable increase was posted by wheat, which climbed 20.9% to 6.1. Among the decliners, canola stocks showed the largest relative decrease, falling 31.6% to 2.2. At Prince Rupert, the average ratio for wheat climbed by 54.0% to 1.9.[151] The ratios posted by Churchill increased by 10.6% to 2.2 in the case of wheat, and fell by 57.1% to 1.9 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 stock shortages were periodically experienced at each of the four ports, these instances were most frequent in the first quarter when the supply of high-quality grain tightened considerably. The stability and consistency of later shipments helped to lessen these occurrences beginning with the second quarter. And while grade-based stock-to-shipment ratios show a greater degree of variability, they too indicate that stock levels were generally

Figure 69: Distribution of Weekly Stock-to-Shipment Ratios



[149] 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.

[150] A high proportion of direct hit shipments distorted the weekly ratios for oats.

[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 five crop years covered by the GMP.

sufficient to meet demand throughout much of the crop year. [See Table 3D-6 in Appendix 4.]

Even so, stock shortages were not entirely avoided. 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 occurrences in the 2004-05 crop year.[152] In the case of Vancouver, this happened in 8.5% of all instances, about one-third more often than the preceding crop year's 6.3% rate would indicate. The increase was even more substantial at Thunder Bay were the incidence of occurrence more than doubled, rising to 6.6% from 2.7% a year earlier.

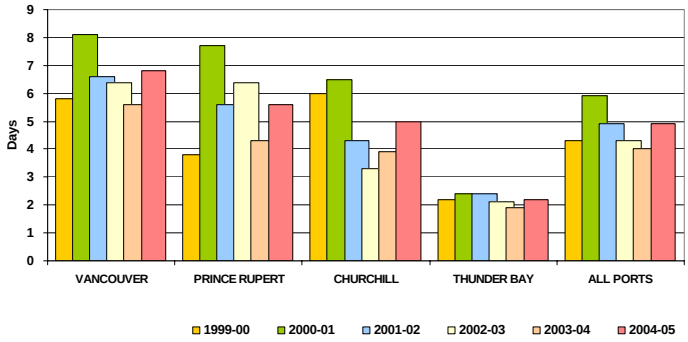
Port Operations

A total of 695 vessels called for grain at western Canadian ports during the 2004-05 crop year. Although this represented a 4.3% reduction from the 726 that arrived for loading a year earlier, it mainly reflected an increase in the use of larger vessels. This was particularly the case in Prince Rupert where much of the feed wheat was concentrated for west coast export, and where 83.9% of the 62 ships that arrived took on loads in excess of 30,000 tonnes.[153]

Despite the variation in volume witnessed over the course of the GMP's first five years, the average amount of time spent by vessels in port has generally fluctuated between 4.0 and 4.5 days.[154] Although the first quarter's 4.2-day average fell well within this range, the second and third quarter averages jumped to levels well above this, to 5.7 days and 6.1 days respectively. Even though the fourth quarter's average fell back to 4.0 days, these higher mid-year values were enough to raise the crop year's overall average by 22.5%, to 4.9 days from 4.0 days a year earlier. On the whole, waiting times increased by an average of 0.5 days (or 29.4%) to 2.2 days, while the amount of time given over to the actual loading of these vessels increased by 0.4 days (or 17.4%) to an average of 2.7 days.[155]

Much of the influence in these overall results can be traced back to activity in Vancouver, where loading delays in the second and third quarters pushed the port's averages up sharply. In fact, the port's annualized 6.8-day average for the 2004-05 crop year was its second highest under the GMP.[156] This stemmed chiefly from problems in locating and sourcing grains that met the shipment's specifications for higher quality, including its falling number, throughout much of November and December 2004. In addition, the handling of larger vessels at Prince Rupert drove the average time spent in port up by 30.2%, to 5.6 days from 4.3 days the year before.

Figure 70: Average Vessel Time in Port



[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 is generally shipped in larger quantities than higher-quality grain. Comparatively, only 49 of the 74 ships (or 66.2%) that loaded at Prince Rupert in the 2003-04 crop year took on loads in excess of 30,000 tonnes. Moreover, vessel loading during this period averaged 37,400 tonnes as compared to the 2004-05 crop year's 42,200-tonne average.

[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.

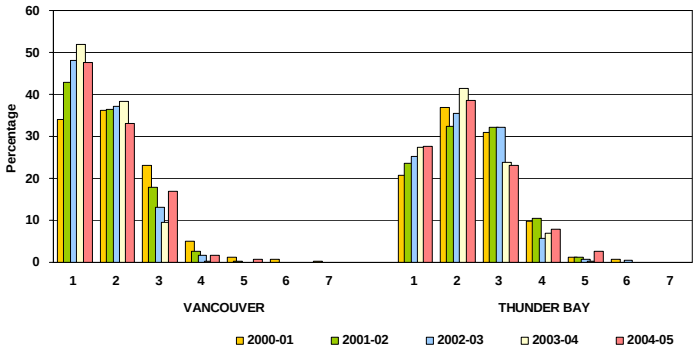
[156] For the 2000-01 crop year, the average amount of time spent by vessels in Vancouver reached a record 8.1 days.

The average for Churchill also increased by 28.2% to 5.0 days as a result of vessel loading delays brought on by the late harvest.[157] Taken together, these performance measures that vessels were largely compelled to wait for grain that was in generally tight supply, all of which resulted in delays and extended turnaround times. [See Table 3D-7 in Appendix 4.]

With a 2.2-day average, the overall amount of time spent by vessels in Thunder Bay came in 15.8% above the previous crop year's record-setting 1.9-day average. Of this, 0.8 days were spent waiting to load, and 1.4 days actually loading. Despite this increase, Thunder Bay continues to post the lowest comparative average among 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.

The distribution of vessel time in port also shows that most ships required more time to clear. At Vancouver, the proportion of vessels requiring more than five days in port rose to 44.9% from 41.4% a year earlier. Similarly, Prince Rupert saw its proportion increase to 32.3% from 24.3% in the same period. At Thunder Bay, where the proportion is traditionally even lower, 4.9% required stays of this duration versus 1.7% a year earlier. Finally, Churchill also saw the proportion of vessels in port for longer than five days increase sharply, to 28.6% from 20.0% the year before. [See Table 3D-8 in Appendix 4.]

Figure 71: Number of Berths per Vessel



To an extent, these results were also the product of an increase in the number of vessels requiring more than one terminal berthing to load its cargo. The proportion of vessels requiring multiple berths to load at Vancouver increased to 52.3% from 48.1% a year earlier. At Thunder Bay, the proportion remained largely unchanged, falling only marginally to 72.3% from 72.5% 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] For the most part, demurrage costs climbed dramatically in the 2004-05 crop year as a result of a number of significant vessel delays, while dispatch earnings fell moderately. Although this still resulted in the generation of $1.5 million in net earnings, this total fell 90.2% below the $15.2 million earned a year earlier. Much of the overall decline was due to a three-fold increase in overall demurrage costs, which rose to $16.0 million from $4.7 million a year earlier. This was driven by a 517.8% increase in the demurrage costs incurred along the Pacific Seaboard, which climbed to $14.0 million from $2.3 million largely in response to loading delays experienced in Vancouver. In contrast with those from the west coast, the charges arising from the delay of vessels at Churchill, Thunder Bay, and along the St. Lawrence Seaway, actually decreased by 20.8% in the 2004-05 crop year, to $2.0 million from $2.5 million the year before.

The problems tied to the sourcing of high-quality grain also had a modest impact on the dispatch earnings generated from faster vessel releases. Total dispatch earnings for the 2004-05 crop year decreased by 12.5%, falling to $17.5 million from $20.0 million a year earlier. As in the case of demurrage, the largest decline was

[157] ny significant delay to a vessel at Churchill has a larger negative impact on the port's average given the small number of vessels handled, which amounted to 14 in the first quarter of the 2004-05 crop year.

[158] he 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] he 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.

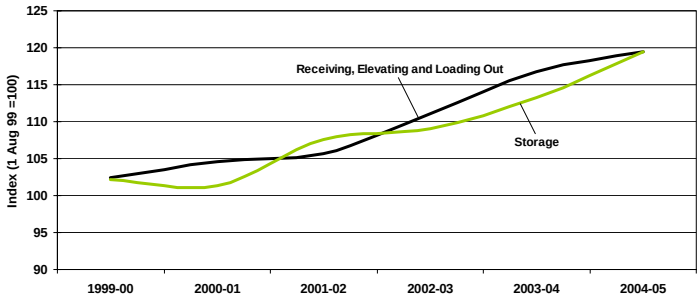
tied to activities along the west coast, where dispatch earnings fell 16.6% to $8.0 million. For Churchill, Thunder Bay, and the St. Lawrence Seaway, the decline proved to be a more moderate 8.7%, falling to $9.4 million from $10.3 million. [See Table 3D-10 in Appendix 4.]

The reporting of both the amount of demurrage paid, and dispatch earned, by vessels is intended to provide an indication of the effectiveness with which grain flows through western Canadian ports. The general increase in the average amount of time vessels spent in port along with the decrease in net dispatch earnings, indicate that vessels were not loading in accordance with the lay days provided within their charters.

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 2004-05 crop year these ranged from a low of about $8.08 per tonne for wheat delivered at Churchill, to a high of $12.87 for canola shipped to Vancouver. The daily charge for storage ranged from $0.06 to $0.11 per tonne.

Figure 72: 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 terminal elevators in the 2004-05 crop year. Increases posted by Vancouver's terminal elevators ranged from 1.9% to 4.1%. At Prince Rupert, this spread went from 3.9% to 5.3%. Thunder Bay put forward increases that ranged from 1.0% to 3.4%. Churchill, where these rates remained unchanged from those in place at the end of the 2003-04, was the exception. The composite price index used by the Monitor shows that the cost of these services effectively rose by a further 2.3% in the last crop year, and that the combined value of all increases made since the beginning of the GMP had reached 19.4%. [See Table 3D-11 in Appendix 4.]

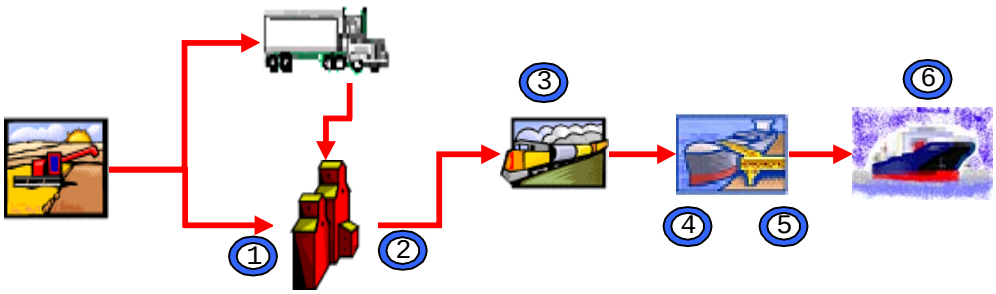
The charges for terminal storage have also risen since the beginning of the GMP. In the 2004-05 crop year, these rates rose by 5.4%, and brought the accumulated price increase over the last six years to 19.4% as well. Vancouver reported the largest year-over-year gain, with an increase of 14.5%. The terminals at Prince Rupert and Thunder Bay followed with increases that averaged 5.0% and 4.8% respectively. The overall increase in the composite price index was tempered by the fact that Churchill also chose to further extend its storage rates from the 2003-04 crop 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 2003-04 crop year concluded that the amount of time taken by grain as it moved through the supply chain had fallen to its lowest recorded value under the GMP, 62.3 days.

[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.

Figure 73: The GHTS Supply Chain



	SUPPLY CHAIN ELEMENT	TABLE	1999-00	2000-01	2001-02	2002-03	2003-04	2004-05	SUPPLY CHAIN EFFECT
	SPEED RELATED								
2	Country Elevator – Average Days-in-Store	3B-4	41.7	38.3	38.0	47.9	34.4	29.5	▼
3	Average Railway Loaded Transit Time (days)	3C-4	9.2	8.8	8.8	10.1	8.9	8.6	▼
5	Terminal Elevator – Average Days-in-Store	3D-4	18.6	17.5	20.6	21.7	19.0	19.9	▲
	Average Total Days in GHTS		69.4	64.6	67.4	79.7	62.3	58.0	▼
	SERVICE / ASSET RELATED								
1	Average Country Elevator Capacity Turnover Ratio	3B-2	4.8	5.0	4.5	3.7	5.6	5.6	–
4	Average Terminal Elevator Capacity Turnover Ratio	3D-2	9.1	8.9	6.6	5.0	7.0	7.5	▲
3	Average Railway Car Cycle (days)	3C-4	19.9	16.4	17.1	20.4	16.7	18.0	▲
6	Average Vessel Time in Port (days)	3D-7	4.3	5.9	4.9	4.3	4.0	4.9	▲

Even so, at an average of 48.3 days, the pace at which grain moved through the GHTS during the first quarter of the 2004-05 crop year proved to be substantially faster. This result, however, was heavily influenced by the late harvest that resulted in a rapid draw down of existing carry-forward stocks, and dramatically reduced the amount of time spent by grain in storage in the primary elevator system, which averaged 22.7 days in the first quarter as compared to the previous crop year's 34.4-day average.

With the significant easing of these pressures, primary elevator inventories and storage times both began to increase, with the latter having rebounded to an average of 29.9 days in the second quarter, 36.5 days in the third, and 29.4 in the fourth. As a result, the cumulative average rose as well, reaching 29.5 days for the 2004-05 crop year as a whole. This, however, still constituted a 4.9-day (or 14.3%) improvement over the previous crop year's 34.4-day average.

A 0.3-day (or 2.6%) reduction in the railways' loaded transit time, which averaged 8.6 days for the crop year, also contributed to an improvement in the speed with which grain moved through the GHTS. Conversely, a 4.7% increase in the amount of time grain spent in inventory at terminal elevators, which averaged 19.9 days as compared to the preceding crop year's 19.0-day average, dragged down these gains by 0.9 days.

As a result, grain took an average of 58.0 days to move through the supply chain during the 2004-05 crop year. Although this was 4.3 days (or 6.9%) below the 2003-04 crop year's 62.3-day average, it marked a 9.7-day worsening over the first quarter's 48.3-day average.

With these results, a few general observations concerning the supply chain's performance during the 2004-05 crop year are warranted:

- Firstly, with a grain supply of 60.0 million tonnes, the 2004-05 crop year's potential grain movement falls just short of the 62.6 million tonnes that was available in the first year of the GMP. And although the first quarter's port throughput was largely comparable to that handled during the same period of the 1999-2000 crop year, the amount of grain handled in the second through fourth quarters fell well short of this benchmark. As such, only 18.9 million tonnes of grain passed through western Canadian ports in the 2004-05 crop year as compared to 23.6 million tonnes during the GMP's base year. With only about 80% of the handlings, the volume-related pressures brought to bear on the GHTS were not as great as those experienced at the beginning of the GMP.

- Secondly, although the volume of grain moved through the GHTS was comparable to what it had been a year earlier, the movement was heavily influenced by other factors. In general terms, grain quality was significantly diminished as a result of the cool, wet conditions that prevailed in August and September 2004. This meant that the quantity of higher-quality grains that traditionally constitute the bulk of Canada's exports, such as 1 CWRS wheat and 1 CWA durum, were in very tight supply. As such, the GHTS experienced periodic shortages, and handled an unusually larger proportion of lower-quality grains than normal. This also had an influence over the mix of both grains and grades that moved through specific ports. By way of example, Vancouver became the principal west coast port for the export of higher-quality CWB grains, while Prince Rupert became the system's lead handler of lower-grade wheat.

- Thirdly, the combined effects of the late harvest along with the limited availability of higher-quality grades placed significant demand pressure on the GHTS. In general terms, carryover stocks were quickly drawn down in order to fill programmed sales, while those coming into the system after harvesting were promptly expedited. This was the key driver behind the reduction in the average stock level, and in the accelerated rate at which grain passed through both the country elevator system and the supply chain in the first quarter. The subsequent easing of these pressures was largely responsible for the deceleration that came about thereafter.

- Finally, although ocean freight rates have fallen from their November 2004 highpoint, they have continued to exert an influence over the direct-rail movement of grain within North America. Direct-rail shipments to Mexico, while now somewhat below the pace set last year, continue to point towards significantly greater volumes than were seen in the earliest years of the GMP. Even though the demand for carrying capacity to service both domestic and international markets has prompted the railways to try and lease more equipment, car supply reportedly continued to be a problem for many shippers.

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 – 2004-05 Crop Year

Port Performance

- *Problems in securing higher-quality grains did not seriously impact the overall reliability of the GHTS and the movement of grain to western Canadian ports.*
  - *Increased share accorded to Vancouver reflected in reductions to the stock-to-vessel-requirement and stock-to-shipment ratios.*
- *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.*
- *Reduced grain inventories reflected in generally lower average weekly stock-to-vessel-requirements ratios, particularly in Vancouver.*
  - *Vancouver*
    - *Wheat – 2.7; down by 20.8% from last crop year.*
    - *Canola – 2.8; down 22.8%.*
  - *Thunder Bay*
    - *Wheat – 6.0; up by 25.5% from last crop year.*
    - *Canola – 2.2; down by 27.1%.*
- *Reduced grain inventories also reflected in marginally lower stock-to-shipment ratios for Vancouver as opposed to Thunder Bay.*
  - *Vancouver*
    - *CWB grains – 3.2; down by 1.1% from last crop year.*
    - *Non-CWB grains – 3.6; down by 2.6%.*
  - *Thunder Bay*
    - *CWB grains – 7.2; up by 21.0% from last crop year.*
    - *Non-CWB grains – 3.6; up by 19.4%.*
- *Terminal handling revenues increased by 11.6% to $219.3 million.*
  - *Vancouver revenues totalled $150.9 million.*
    - *Up by 11.9% from last crop year.*
  - *Thunder Bay revenues totalled $68.4 million.*
    - *Up by 10.8% from last crop year.*
- *CWB carrying costs increased by 17.8% to $110.0 million.*
  - *Pacific Seaboard carrying costs totalled $73.8 million.*
    - *Up by 40.7% from last crop year.*
  - *Thunder Bay carrying costs totalled $36.1 million.*
    - *Down by 11.6% from last crop year.*

Indicator Series 4 – Service Reliability

Table	Indicator Description	Notes	BASE 1999-00	CURRRENT REPORTING PERIOD (1) 2003-04	2004-05	% VAR	
	Port Performance [Subseries 4A]						
4A-1	Avg. Weekly Stock-to-Vessel Requirements Ratio – VCR – Wheat		3.1	3.5	2.7	-20.8%	▼
4A-1	Avg. Weekly Stock-to-Vessel Requirements Ratio – VCR – Canola		2.5	3.6	2.8	-22.8%	▼
4A-1	Avg. Weekly Stock-to-Vessel Requirements Ratio – TBY – Wheat		5.6	4.8	6.0	25.5%	▲
4A-1	Avg. Weekly Stock-to-Vessel Requirements Ratio – TBY – Canola		2.8	3.0	2.2	-27.1%	▼
4A-2	Avg. Weekly Stock-to-Vessel Requirements Ratio – Grade	(2)					
4A-3	Avg. Weekly Stock-to-Shipment Ratio – VCR – CWB Grains		3.5	3.3	3.2	-1.1%	▼
4A-3	Avg. Weekly Stock-to-Shipment Ratio – VCR – Non-CWB Grains		3.6	3.7	3.6	-2.6%	▼
4A-3	Avg. Weekly Stock-to-Shipment Ratio – TBY – CWB Grains		4.6	6.0	7.2	21.0%	▲
4A-3	Avg. Weekly Stock-to-Shipment Ratio – TBY – Non-CWB Grains		3.3	3.1	3.6	19.4%	▲
4A-4	Terminal Handling Revenue ($millions) – Vancouver		$192.7	$134.9	$150.9	11.9%	▲
4A-4	Terminal Handling Revenue ($millions) – Thunder Bay		$82.1	$61.7	$68.4	10.8%	▲
4A-4	CWB Carrying Costs ($millions) – Pacific Seaboard		$63.3	$52.5	$73.8	40.7%	▲
4A-4	CWB Carrying Costs ($millions) – Thunder Bay		$31.3	$40.9	$36.1	-11.6%	▼

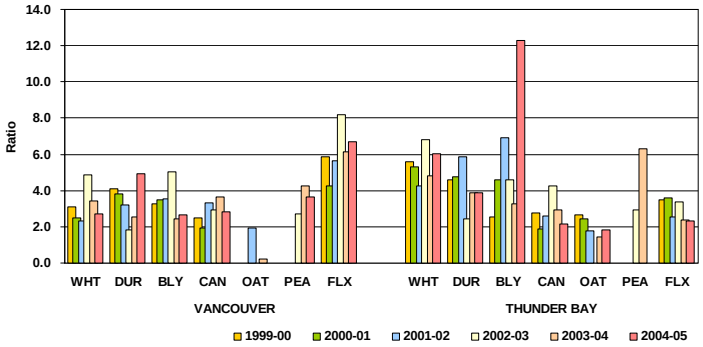
(1) – In order to provide for more direct comparisons, the values for the 1999-2000 through 2004-05 crop years are "as at" or cumulative to 31 July unless otherwise indicated.
(2) – Changes in the data cited cannot be depicted within the summary framework presented here. The reader is encouraged to consult 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 2004-05 crop year produced some sharp year-over-year changes. Among CWB grains, the ratio posted for wheat fell by 20.8%, to 2.7 from 3.5 a year earlier. Durum, on the other hand, posted an increase of 95.7% to 5.0 from 2.5 the year before. This was joined by an 8.4% rise in the average ratio for barley, which increased to 2.6 from 2.4. In the case of non-CWB grains, the results proved equally mixed: decreases in the ratios for canola and peas, while that of flaxseed increased.

Figure 74: Stock-to-Vessel Requirements Ratio



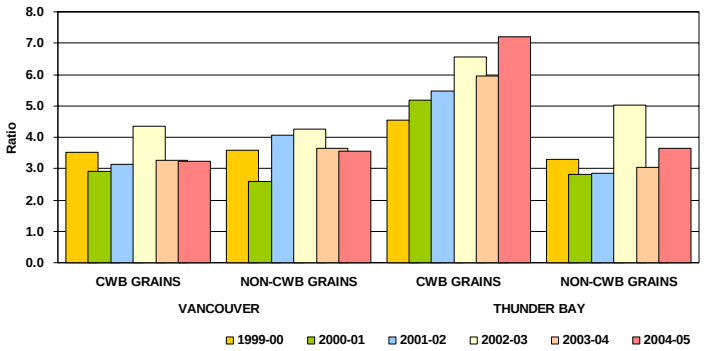
At Thunder Bay, gainers nudged out decliners. In the case of CWB grains, the ratios for wheat and barley showed sharp increases from the previous year, climbing by 25.5% in the case of the former to 6.0, and almost tripling to 12.3 in the case of the latter. The average ratio for durum remained unchanged at 3.9. Among the non-CWB grains, the ratios for canola and flaxseed declined by 27.1% and 4.1% respectively, while that of oats increased by 28.0%. 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, few of the grade-specific averages ever fell below a value of 1.0 at either Vancouver or Thunder Bay. [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 75: 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 a marginal 1.1% during the 2004-05 crop year, to 3.2 from 3.3. The average ratio for non-CWB grains fell by a slightly greater 2.6%, to 3.6 from 3.7. At Thunder Bay, the average ratio for CWB grains climbed by 21.0%, to 7.2 from 6.0, while the average for non-CWB grains increased 19.4%, to 3.6 from 3.0. 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. Differences in accounting practices make direct comparisons between total revenues and CWB costs difficult. The terminal revenue and cost data presented here is un-audited. [See Table 4A-4 in Appendix 4.]

Total reported terminal revenues for the 2004-05 crop year increased by 11.9% at Vancouver, rising from $134.9 million to $150.9 million. At Thunder Bay, total reported terminal revenues rose by a slightly lesser 10.8%, from $61.7 million to $68.4 million.

Total CWB carrying costs along the Pacific Seaboard rose by 40.7% in the 2004-05 crop year, to $70.8 million from $52.5 million the year before. At Thunder Bay carrying costs fell by 11.6%, to $36.1 million from $40.9 million a year earlier.

4.2 Summary Observations

An examination of the stock-to-vessel requirement, and stock-to-shipment, ratios reveal that sufficient grain was available at the terminals to meet prevailing demand. In addition to the varying degree of coverage afforded by the individual stocks, the year-over-year changes in the value of these ratios covered a wide spectrum. 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, it would appear that the GHTS was fairly reliable, but not completely infallible.

Balancing the need for both efficiency and reliability within the GHTS is one that continually challenges all within the stakeholder community. For those concerned with the operation of terminal elevators, these challenges often involve trade-offs between system efficiency and reliability. In a sense, any "just-in-time" approach to inventory management strives to reduce the time and cost associated with any product moving through the logistics chain to an absolute minimum without detracting from the chain's overall reliability. In the context of the GHTS, stock-to-vessel requirement, and stock-to-shipment, ratios with values of about 1.0 might be considered as an optimal target under such an approach.

Yet the values observed for these ratios over the course of the past six crop years have typically been well in excess of 2.0. Such values betray an effort to protect the system's reliability in delivering grain to port. But it does so at the expense of system efficiency since inventories are maintained at levels well in excess of that required to meet prevailing demand. It is difficult, if not impossible, to determine the appropriate ratio value that would see the balance between system efficiency and reliability effectively optimized, particularly given the diversity of grains, grades, protein content, and other stock characteristics. In any event, this is a matter for the facility operators and stakeholders themselves. With this in mind, the Monitor can only say that the GHTS continues to operate with about the same degree of reliability as was first observed at the beginning of the GMP.

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 – 2004-05 Crop Year

Producer Netback and Sampling Methodology

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

Export Basis and Producer Netback – CWB Grains

- *Producer netback:*
  - *Reductions largely price-driven.*
    - *Wheat – decreased 5.0% to $152.34 per tonne.*
    - *Durum – decreased 6.0% to $170.94 per tonne.*
- *Final Realized Price:*
  - *Modest reductions attributable to higher global grain supplies.*
    - *Wheat – decreased 2.9% to $205.10 per tonne.*
    - *Durum – decreased 3.9% to $220.37 per tonne.*
- *Export Basis:*
  - *Wheat – increased 4.1% to $57.77 per tonne.*
  - *Durum – increased 9.3% to $70.73 per tonne.*
- *Average direct costs:*
  - *Weighted applicable freight costs increased 1.3% for wheat, and 2.5% for durum.*
  - *Trucking costs increase by 10.1%.*
  - *Primary elevation costs increase by 1.0% for wheat, and 1.1% for durum.*
  - *Gross CWB costs decreased by 16.6% for wheat, and increased by 11.4% for durum.*
- *Total producer benefits:*
  - *Decreased as a result of significant decline in grain quality.*
  - *Average trucking premiums:*
    - *Wheat – decreased 13.4% to $3.68 per tonne.*
    - *Durum – decreased 9.4% to $4.24 per tonne.*
  - *CWB transportation savings decreased by 52.5% to $1.49 per tonne.*

Export Basis and Producer Netback – Non-CWB Commodities

- *Producer netback:*
  - *Reductions driven largely by price reductions.*
    - *Canola – decreased 21.6% to $270.22 per tonne.*
    - *Yellow Peas – decreased 23.5% to $120.19 per tonne.*
- *Average prices for non-CWB commodities declined as a result of increased supplies:*
  - *Canola –.decreased 19.6% to $311.19 per tonne.*
  - *Yellow Peas – decreased 16.3% to $188.17 per tonne.*
    - *Falls 7.1% below 1999-2000 crop year's $202.54-per-tonne price.*
- *Average western Canadian export basis for non-CWB commodities:*
  - *Reductions due largely to a narrowing of the price differential.*
    - *Canola – decreased by 3.6% to $40.97 per tonne.*
    - *Yellow Peas – increased by 0.3% to $67.98 per tonne.*

Producer Car Loading

- *Number of producer-loading sites decreases 5.3% to 466.*
  - *Decreases tied to Class 1 railways.*
    - *Posts reduction of 7.5% to 333 sites.*
  - *Shortline railways add one site.*
    - *Increase of 0.8% to 133 sites.*
- *Producer-car shipments decreased 14.2% to 8,061 carloads.*
  - *Denotes second largest producer-car volume recorded under the GMP.*
    - *Share of total hopper car movement falls to 3.6%.*
  - *Decrease in volume primarily reflects the widespread problems with grain quality.*

Indicator Series 5 – Producer Impact

Table	Indicator Description	Notes	BASE 1999-00	CURRRENT REPORTING PERIOD (1) 2003-04	2004-05	% VAR	
	Export Basis [Subseries 5A]						
	Manitoba East						
5A-1A	1 CWRS Wheat ($ per tonne)	(2)	$54.20	$53.17	$58.20	9.5%	▲
5A-1B	1 CWA Durum ($ per tonne)	(2)	$60.29	$58.19	$63.34	8.9%	▲
5A-1C	1 Canada Canola ($ per tonne)	(2)	$61.58	$50.45	$44.24	-12.3%	▼
5A-1D	Canadian Large Yellow Peas – No. 2 or Better ($ per tonne)	(2)	$54.93	$67.04	$67.48	0.7%	–
	Manitoba West						
5A-2A	1 CWRS Wheat ($ per tonne)	(2)	$57.80	$57.27	$61.86	8.0%	▲
5A-2B	1 CWA Durum ($ per tonne)	(2)	$65.37	$58.87	$68.64	16.6%	▲
5A-2C	1 Canada Canola ($ per tonne)	(2)	$58.67	$51.64	$46.21	-10.5%	▼
5A-2D	Canadian Large Yellow Peas – No. 2 or Better ($ per tonne)	(2)	$54.93	$67.04	$67.25	0.3%	–
	Saskatchewan Northeast						
5A-3A	1 CWRS Wheat ($ per tonne)	(2)	$58.10	$60.16	$62.68	4.2%	▲
5A-3B	1 CWA Durum ($ per tonne)	(2)	$68.31	$66.34	$73.27	10.4%	▲
5A-3C	1 Canada Canola ($ per tonne)	(2)	$54.38	$48.83	$49.15	0.7%	–
5A-3D	Canadian Large Yellow Peas – No. 2 or Better ($ per tonne)	(2)	$54.93	$67.84	$68.12	0.4%	–
	Saskatchewan Northwest						
5A-4A	1 CWRS Wheat ($ per tonne)	(2)	$56.42	$57.11	$59.89	4.9%	▲
5A-4B	1 CWA Durum ($ per tonne)	(2)	$70.53	$67.58	$74.08	9.6%	▲
5A-4C	1 Canada Canola ($ per tonne)	(2)	$50.88	$47.38	$47.50	0.3%	–
5A-4D	Canadian Large Yellow Peas – No. 2 or Better ($ per tonne)	(2)	$54.84	$67.57	$68.08	0.8%	–
	Saskatchewan Southeast						
5A-5A	1 CWRS Wheat ($ per tonne)	(2)	$59.40	$60.32	$64.51	6.9%	▲
5A-5B	1 CWA Durum ($ per tonne)	(2)	$65.22	$63.43	$69.10	8.9%	▲
5A-5C	1 Canada Canola ($ per tonne)	(2)	$57.47	$48.15	$49.15	2.1%	▲
5A-5D	Canadian Large Yellow Peas – No. 2 or Better ($ per tonne)	(2)	$54.72	$67.83	$68.01	0.3%	–
	Saskatchewan Southwest						
5A-6A	1 CWRS Wheat ($ per tonne)	(2)	$57.22	$56.78	$58.67	3.3%	▲
5A-6B	1 CWA Durum ($ per tonne)	(2)	$68.12	$65.71	$71.09	8.2%	▲
5A-6C	1 Canada Canola ($ per tonne)	(2)	$55.75	$46.34	$46.84	1.1%	▲
5A-6D	Canadian Large Yellow Peas – No. 2 or Better ($ per tonne)	(2)	$54.66	$67.80	$67.93	0.2%	–
	Alberta North						
5A-7A	1 CWRS Wheat ($ per tonne)	(2)	$53.20	$51.50	$51.27	-0.4%	–
5A-7B	1 CWA Durum ($ per tonne)	(2)	$71.67	$70.08	$74.65	6.5%	▲
5A-7C	1 Canada Canola ($ per tonne)	(2)	$50.39	$38.55	$36.95	-4.2%	▼
5A-7D	Canadian Large Yellow Peas – No. 2 or Better ($ per tonne)	(2)	$54.29	$67.86	$68.06	0.3%	–
	Alberta South						
5A-8A	1 CWRS Wheat ($ per tonne)	(2)	$48.81	$47.47	$50.66	6.7%	▲
5A-8B	1 CWA Durum ($ per tonne)	(2)	$66.06	$60.64	$65.70	8.3%	▲
5A-8C	1 Canada Canola ($ per tonne)	(2)	$48.07	$36.68	$35.60	-2.9%	▼
5A-8D	Canadian Large Yellow Peas – No. 2 or Better ($ per tonne)	(2)	$54.93	$67.85	$68.12	0.4%	–
	Peace River						
5A-9A	1 CWRS Wheat ($ per tonne)	(2)	$53.57	$54.20	$55.23	1.9%	▲
5A-9B	1 CWA Durum ($ per tonne)	(2)	$71.00	$70.37	$76.14	8.2%	▲
5A-9C	1 Canada Canola ($ per tonne)	(2)	$52.14	$41.61	$40.48	-2.7%	▼
5A-9D	Canadian Large Yellow Peas – No. 2 or Better ($ per tonne)	(2)	$54.93	$67.55	$67.90	0.5%	–
	Western Canada						
5A-10A	1 CWRS Wheat ($ per tonne)	(2)	$54.58	$55.51	$57.77	4.1%	▲
5A-10B	1 CWA Durum ($ per tonne)	(2)	$67.63	$64.72	$70.73	9.3%	▲
5A-10C	1 Canada Canola ($ per tonne)	(2)	$52.51	$42.51	$40.97	-3.6%	▼
5A-10D	Canadian Large Yellow Peas – No. 2 or Better ($ per tonne)	(2)	$54.76	$67.75	$67.98	0.3%	–
	Producer Loading [Subseries 5B]						
5B-1	Producer Loading Sites (number) – Class 1 Carriers		415	360	333	-7.5%	▼
5B-1	Producer Loading Sites (number) – Class 2 and 3 Carriers		120	132	133	0.8%	–
5B-1	Producer Loading Sites (number) – All Carriers		535	492	466	-5.3%	▼
5B-2	Producer Car Shipments (number) – Covered Hopper Cars		3,441	9,399	8,061	-14.2%	▼

(1) – In order to provide for more direct comparisons, the values for the 1999-2000 through 2004-05 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 hundreds of grain 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 easily 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 76. Within a larger context, these 43 grain stations encompass:

- 30 stations with one or more high-throughput grain elevators;
- 27 stations with one or more conventional grain elevators;
- 19 stations that are local to the branch line railway network; and
- 10 stations that are directly served by regional and shortline railway carriers.

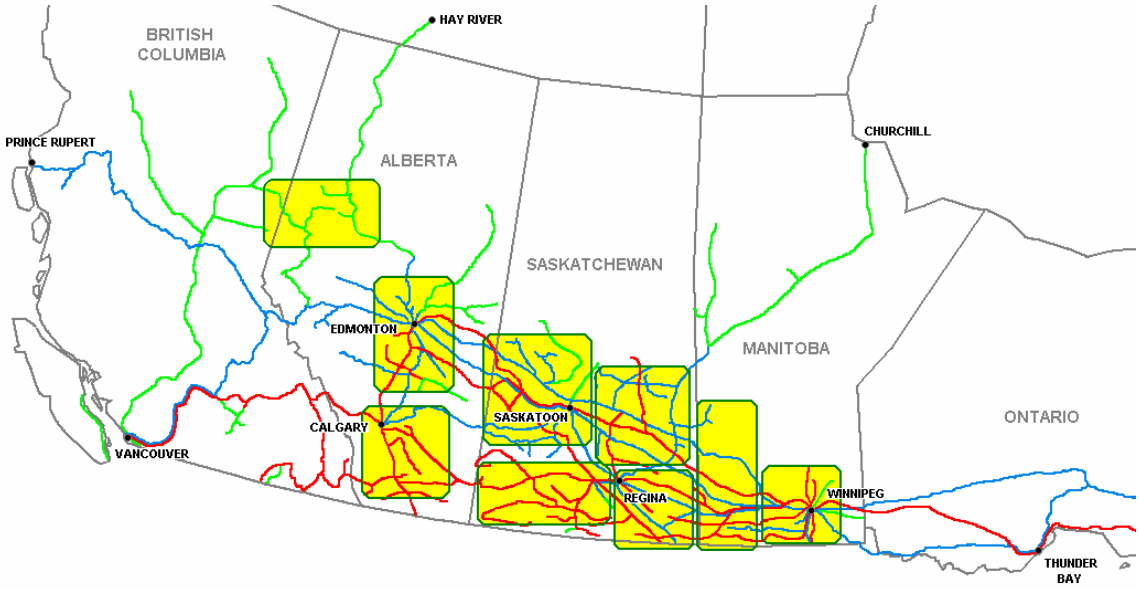
[162] In its basic form, producer netback equates to the residual left after subtracting the logistics cost from a grain's sale price.

[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.

Figure 76: 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.[166]

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.

[166] 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 are subject to a $0.50 per tonne "check-off" for provincial canola association dues. Similarly, a levy of 0.5% is deducted for provincial Pulse Growers Associations on the delivery of yellow peas.[8]
Trucking Premiums	Grain companies report on the trucking premiums they pay to producers at each of the facilities identified in the sampling methodology.[9] 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.
8) – Levies for Manitoba and Alberta producers are refundable. The Saskatchewan levy stood at 0.75% on 1 August 2002, and rose to 1.00% on 1 August 2003.
9) – Various terms are used by grain companies to describe the premiums they offer to producers in an effort to attract deliveries to their facilities – i.e., trucking premiums, marketing premiums, and location premiums. The most common term, however, remains "trucking premium," and it is utilized generically in the calculation of the Export Basis.

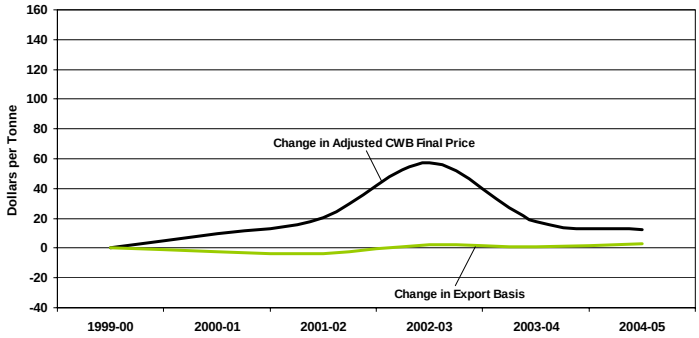
5.2 Export Basis and Producer Netback – CWB Grains (Wheat and Durum)

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 had 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 in the 2004-05 crop year, the price of 1CWRS continued to slide, falling by another 2.6%, or $5.68 per tonne. When coupled along with a $2.26-per-tonne increase in the export basis, the producers' netback was reduced by a further $7.94 per tonne, to $152.34 per tonne.

Figure 77: Change in Netback Components – 1 CWRS Wheat



Although this marked a second consecutive reduction in the producer's netback, it had nevertheless remained $9.09 per tonne, or 6.3%, above the $143.25 per tonne it had been six years earlier. Again, it must be said that this improvement was derived chiefly from an increase of $12.28 per tonne in the price of 1CWRS wheat. A $3.19-per-tonne, or 5.8%, increase in the export basis during this period produced a partial offset to 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, these latter items fell back considerably in the 2004-05 crop year, 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 – 1 CWRS Wheat (dollars per tonne)

							2004-05 / 1999-2000		
	1999-00	2000-01	2001-02	2002-03	2003-04	2004-05	$ VAR	% VAR	
CWB Final Price	$192.43	$202.58	$217.02	$250.20	$211.14	$205.10	$12.67	6.6%	▲
Plus: CWB Costs (Net)	5.40	5.14	1.14	5.02	4.65	5.01	-0.39	-7.2%	▼
Adjusted CWB Final Price	197.83	207.72	218.16	255.22	215.79	210.11	12.28	6.2%	▲
Direct Costs	56.90	56.54	56.97	63.81	62.90	62.94	6.04	10.6%	▲
Less: Trucking Premiums	-2.32	-3.01	-3.62	-3.96	-4.25	-3.68	-1.36	58.6%	▲
CWB Savings	0.00	-0.61	-2.47	-2.70	-3.14	-1.49	-1.49	n/a	▲
Export Basis	54.58	52.92	50.88	57.15	55.51	57.77	3.19	5.8%	▲
Producer Netback	$143.25	$154.80	$167.28	$198.07	$160.28	$152.34	$9.09	6.3%	▲

Final Realized Price

As already mentioned, positive price movement has been the chief force underlying the improvement in the visible netback to producers of 1CWRS wheat over the course of the past six crop years. From an initial value

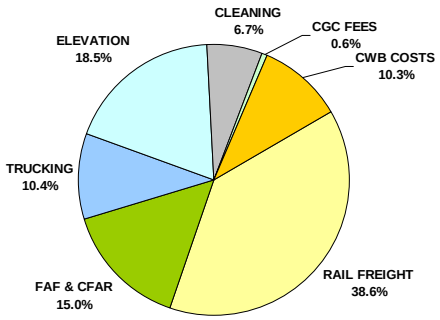
of $192.43 per tonne in the 1999-2000 crop year, shrinking global wheat stocks and the prospect of tighter supplies had proved to be the primary forces underlying the first real increase in world prices since the 1995-96 crop year. Drought conditions in both Canada as well as other producing countries also helped to push prices to a peak of $250.20 in the 2002-03 crop year.

Since then, the Final Realized Price for 1CWRS wheat (13.5% protein) has tumbled by 18.0%, falling first to $211.14 per tonne in the 2003-04 crop year, and then $205.10 per tonne in the 2004-05 crop year. Much of this price erosion stemmed from the combined forces of higher global wheat production, continued export competition, weaker global demand, and a strengthening Canadian dollar.

Export Basis

Although the export basis has increased since the beginning of the GMP, the last three 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 $6.89 per tonne, or 13.5%. At $57.77 per tonne, the 2004-05 crop year's export basis marks the highest value attained under the GMP.

Figure 78: 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.[167] 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 six crop years, the direct cost component of the export basis has climbed by 10.6%, from an average of $56.90 per tonne in the 1999-2000 crop year to $62.94 per tonne in the 2004-05 crop year. The largest single element in these costs is the applicable freight, which incorporates not only the per-car charges for an average railway shipment, but the applicable CWB Freight Adjustment Factor (FAF) 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 $33.74 per tonne by the end of the 2004-05 crop year, its proportion of total direct costs declined marginally to 53.6%.

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

- Trucking Costs: The commercial costs tied to a 40-mile haul are estimated to have increased by 10.1% in the 2004-05 crop year, to $6.54 per tonne from $5.94 per tonne a year earlier. This constituted the first real increase in trucking costs since the beginning of the GMP, although fuel surcharges had been applied temporarily in the 2000-01 and 2001-02 crop years. This increase in trucking costs resulted in its share of total direct costs having climbed from 9.5% to 10.4%, the same proportion they represented in the first year of the GMP.

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

- Primary Elevation Costs: These costs averaged $9.75 per tonne in the 1999-2000 crop year, and comprised 17.1% of the total direct costs for 1CWRS wheat. Increases in the tariff rates over the next five years effectively raised the cost of elevation by 19.4%, to an average of $11.64 per tonne in the 2004-05 crop year, thereby pushing up its share of total direct costs to a marginally higher 18.5%. 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 17.7% over the course of the last six crop years, to an average of $4.19 per tonne in the 2004-05 crop year, their contribution to total direct costs remained essentially unchanged at 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 six crop years. On a proportional basis, they constitute a mere 0.6% of total direct costs.[168]

- 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. In the 2004-05 crop year, these costs had increased to an average of $6.50 per tonne, and represented a somewhat higher 10.3% 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.[169] 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.

In the first five years of the GMP, the trucking premiums paid by grain companies for 1CWRS wheat deliveries in the nine sampling areas rose by 83.2%, from an average of $2.32 per tonne in the 1999-2000 crop year to $4.25 per tonne in the 2003-04 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 6.8% in the 2003-04 crop year. However, trucking premiums actually declined by 13.4% in the 2004-05 crop year. In equal measure, the latest crop year's $3.68-per-tonne average premium also offset a smaller proportion of the producer's direct costs, which fell by a full percentage point to 5.8%. Much of this decline stemmed from reductions made in the premiums paid to producers in Manitoba and Saskatchewan, while those paid to Alberta producers moved higher.

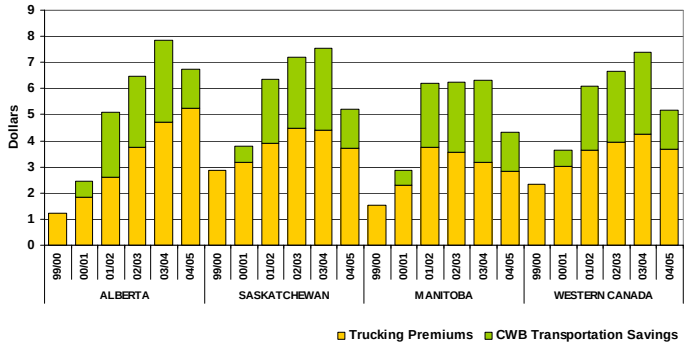
The transportation savings identified by the CWB stem directly from the implementation of its tendering program in the 2000-01 crop year. In that crop year, these savings initially amounted to an average of $0.61 per tonne, which offset the direct costs tied to 1CWRS wheat by a further 1.1%. By the 2003-04 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. Data for the 2004-05 crop year, however, shows that these savings fell by 52.5% to $1.49 per tonne,

[168] 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.

[169] 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.

thereby reducing its direct-cost offset to 2.4%. To a large extent, this decline reflected the unusual market conditions brought on by much tighter supplies of high-quality grain, and the deep reduction in the discounts put forward by grain companies in their bids to move tendered grain.

Figure 79: Wheat Export Basis – Producer Benefits (dollars per tonne)

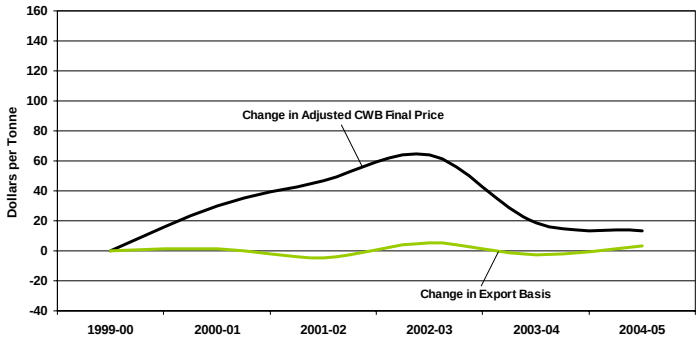


As a result of these forces, the financial benefit to producers in the 2004-05 crop year was rolled back by 30.0%, to an average of $5.17 per tonne from $7.39 per tonne a year earlier. This constituted the first reversal of a trend that had seen the value of these benefits effectively triple in comparison to the 1999-2000 crop year's benchmark average of $2.32 per tonne. What is more, the offset value of these financial benefits was also reduced sharply in the last crop year, to 8.2% of total direct costs from 11.7% 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.

Figure 80: Change in Netback Components – 1 CWA 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 by 17.0% to $181.80 per tonne largely in response to slumping world prices. Much the same was true for the 2004-05 crop year when prices fell another 3.9%, thereby prompting another 6.0% reduction in the producers' netback, which declined to $170.94 per tonne. Even so, over the course of the past six years the return to producers has increased by $10.46 per tonne, or 6.5%. The changes that contributed to this result are summarized below.

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

							2004-05 / 1999-2000		
	1999-00	2000-01	2001-02	2002-03	2003-04	2004-05	$ VAR	% VAR	
CWB Final Price	$206.79	$234.17	$257.12	$266.88	$229.20	$220.37	$13.58	6.6%	▲
Plus: CWB Costs (Net)	21.32	23.97	17.35	25.13	17.32	21.30	-0.02	0.0%	▼
Adjusted CWB Final Price	$228.11	$258.14	$274.47	$292.01	$246.52	$241.67	$13.56	5.9%	▲
Direct Costs	70.77	72.88	69.65	79.48	72.54	76.46	5.69	8.0%	▲
Less: Trucking Premiums	-3.14	-3.56	-4.13	-3.73	-4.68	-4.24	-1.10	35.0%	▲
CWB Savings	0.00	-0.61	-2.47	-2.70	-3.14	-1.49	-1.49	n/a	▲
Export Basis	67.63	68.71	63.05	73.05	64.72	70.73	3.10	4.6%	▼
Producer Netback	$160.48	$189.43	$211.42	$218.96	$181.80	$170.94	$10.46	6.5%	▲

Final Realized Price

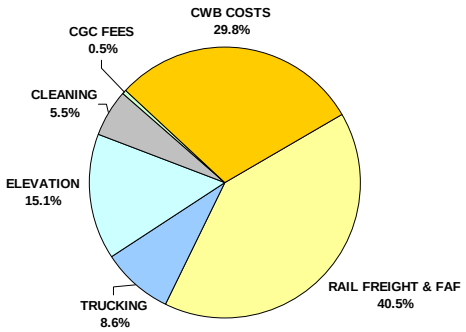
As was the case with 1CWRS wheat, an increase in grain prices proved to be the principal factor underlying the improvement in the netback to producers of 1CWA durum over the first four years of the GMP. During this period, limited supplies of high-grade milling durum in the face of reduced North American 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. With much of the same forces at play in the 2004-05 crop year, the price weakened even further, falling by another 3.9% to $220.37 per tonne for the year.

Export Basis

As was outlined previously with respect to 1CWRS wheat, the export basis for 1CWA durum has also proven fairly stable. Although a greater degree of variation has been observed, the export basis has fluctuated around a six-year average of $67.98 per tonne. In fact, the 2004-05 crop year's export basis of $70.73 per tonne proved to be only 4.0% above this value, and 4.6% above the $67.63-per-tonne value recorded in the first year of the GMP.

Figure 81: Durum Export Basis – Direct Costs



And 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 stabilizing the export basis.

Since having climbed to $79.48 per tonne in the 2002-03 crop year, the direct costs tied to 1CWA durum have declined. For the 2004-05 crop year, these amounted to an average of $76.46 per tonne. And 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 40.5% of the total.[170] For the 2004-05 crop year, the weighted average freight for the movement of 1CWA durum totalled $30.98 per tonne, just 3.0% more than the $30.07 per tonne it had been six years earlier. Moreover, given the comparatively modest nature of the gain itself, its share of total direct costs had actually fallen from the 42.5% it had been in the first year of the GMP.

Gross CWB costs also increased over the course of the past six crop years: from $21.32 per tonne in the first year of the GMP to $22.79 per tonne in the 2004-05 crop year. Notwithstanding year-to-year fluctuations, the share of total direct costs attributable to this element has remained largely unchanged, having fallen from 30.1% to 29.8%.

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

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

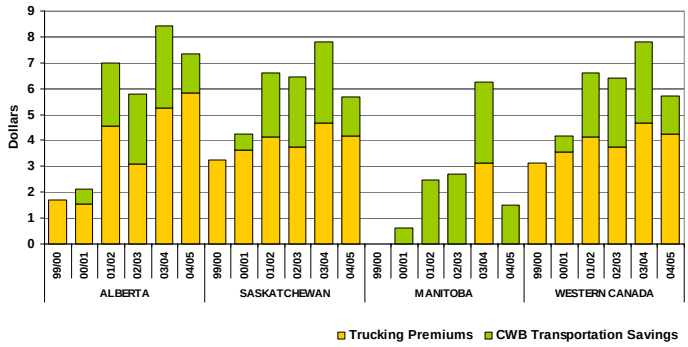
- Trucking Costs: The commercial costs tied to a 40-mile haul increased to $6.54 per tonne in the 2004-05 crop year. These are the same values cited earlier with respect to wheat, and are 10.1% greater than the commercial trucking costs first recorded in the 1999-2000 crop year. On a proportional basis they accounted for 8.6% of total direct costs in the 2004-05 crop year as compared to 8.4% six 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 22.1% to an average of $11.53 per tonne in the 2004-05 crop year. This increase was a key driver in the observed rise in total direct costs over the past five crop years, and resulted in its share having risen to a total of 15.1%.

- 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 17.1% to an average of $4.24 per tonne in the 2004-05 crop year, and its share of total direct costs advanced to 5.5%.

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

Figure 82: Durum Export Basis – Producer Benefits (dollars per tonne)



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 by 49.0% from an average of $3.14 per tonne to $4.68 per tonne. Similarly, they also declined by 9.4%, to an average of $4.24 per tonne, in the 2004-05 crop year as a result of changes in prevailing market conditions. Despite some variation, these premiums typically provided an offset to total direct costs of about 5.3%. At 5.5%, the compensation provided in the 2004-05 crop year proved only marginally greater. It should be noted, that due in large part to the much lower volumes of durum handled in Manitoba, the premiums paid out to producers there have been insignificant.[171]

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 the $1.49-per-tonne savings attained in the 2004-05 crop year marked a 52.5% reduction from this value, it was still more than twice what it had been four years earlier, and accounted for an offset to total direct costs of 1.9%.

When examined on a combined basis, these producer benefits have moved steadily 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 factoring their subsequent decline to $5.73 per tonne in the 2004-05 crop year, these financial benefits have climbed by 82.5% in the past six years. Moreover, as a 7.5% offset to total direct costs, they have helped contain the escalation in the export basis to just 4.6% over this same period.

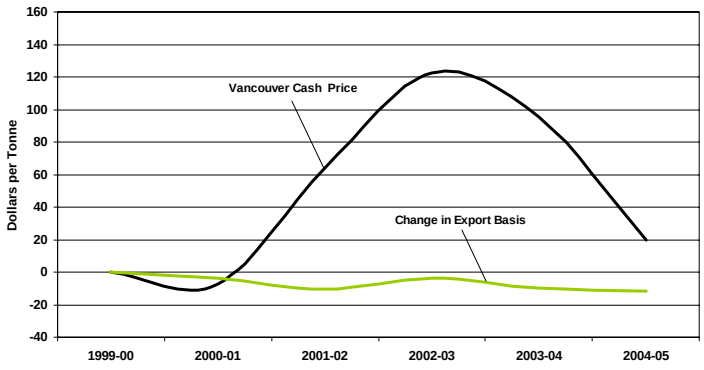
[171] The $3.11-per-tonne average trucking premium reported as having been paid to Manitoba producers in the 2003-04 crop year is derived from deliveries to but one station in southwestern Manitoba. This was the sole instance during the course of the GMP that a sampling station in Manitoba reported having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

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 due 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. In the two years that followed, however, these gains were largely lost. Compounding the 5.7% reduction that was experienced a year earlier, the producer's netback for the 2004-05 crop year fell by another 21.6%, to $270.22 per tonne.

Figure 83: Change in Netback Components – 1 Canada Canola



Even so, over the course of the last six crop years, there has still been a $31.12-per-tonne, or 13.0%, improvement in the netback to producers of 1 Canada canola. This improvement, however, was largely derived from a net increase in the market price of 1 Canada canola. Indeed, almost two-thirds of this improvement, $19.58, was derived from an improvement in the Vancouver cash price. The remaining $11.54, or 37.1%, came from a reduction in the export basis itself. The scope of the changes in these individual components are summarized below.

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

							2004-05 / 1999-2000		
	1999-00	2000-01	2001-02	2002-03	2003-04	2004-05	$ VAR	% VAR	
Vancouver Cash Price	$291.61	$284.46	$355.67	$414.36	$387.11	$311.19	$19.58	6.7%	▲
Direct Costs	54.99	51.00	42.85	49.08	42.79	41.31	-13.68	-24.9%	▼
Less: Trucking Premiums	-2.48	-1.89	-0.84	-0.11	-0.28	-0.34	2.14	-86.3%	▼
Export Basis	52.51	49.11	42.01	48.97	42.51	40.97	-11.54	-22.0%	▼
Producer Netback	$239.10	$235.35	$313.66	$365.39	$344.60	$270.22	$31.12	13.0%	▲

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. Notwithstanding 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 was largely a 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 by 6.6% to $387.11 per tonne. Canadian canola production for the 2003-04 crop year, which increased to 6.6 million tonnes from a ten-year low of just 4.1 million tonnes a year earlier, typified this general improvement in supply. Although these same forces were also at work in the 2004-05 crop year, the downward pressure exerted on prices proved far greater. Record soybean production in South America along with a substantial increase in US output were chiefly responsible for this. Canadian canola production, which increased by 15.8% from the preceding crop year, added another

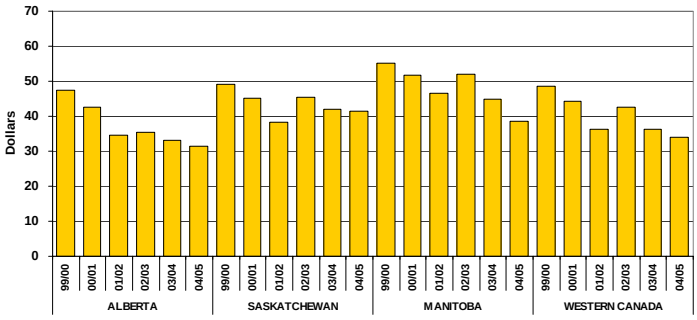
7.7 million tonnes to an already over-supplied global market. As a result, world prices tumbled even further. With the strength of the Canadian dollar also playing a role, the average Vancouver cash price fell by 19.6% to close out the 2004-05 crop year at $311.19 per tonne, just 6.7% higher than that posted six years earlier.

Export Basis

The export basis for 1 Canada canola has decreased by 22.0% over the past six years, falling from an average of $52.51 per tonne in the 1999-2000 crop year to $40.97 in the 2004-05 crop year. Other than in the 2002-03 crop year, when the export basis increased to $48.97 per tonne, this downward tendency has proven to be fairly continual.

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.

Figure 84: 1 Canada Canola – Price Differential (dollars per tonne)



In contrast to the patterns observed for wheat and durum, the direct costs tied to 1 Canada canola fell by 24.9% between the 1999-2000 and 2004-05 crop years, from an average of $54.99 per tonne to $41.31 per tonne.[172] Much of this reduction stemmed from a 29.7% narrowing of the price differential.[173] By the end of the 2004-05 crop year, the price differential had fallen from an average of $48.55 per tonne to $34.11 per tonne, with its share of direct costs having declined from 88.2% to 82.6%. 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.

Although the global over-supply described earlier might have been expected to produce a widening of the price differential, a reduction in primary elevator inventories produced a seemingly contradictory response. With canola's average weekly stock level having declined by 23.4% in the 2004-05 crop year, to an average of 252,700 tonnes from 330,700 tonnes a year earlier, the tightening of domestic supplies actually resulted in a further heightening of demand. As a result, grain companies and crushing plants narrowed the export basis in order to entice producers into delivering canola to their facilities.[174]

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 10.1% in the 2004-05 crop year, amounting to an average of $6.54 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 six years, trucking costs in the 2004-05 crop year accounted for a significantly greater proportion of the total direct costs, 15.8% versus 10.8% in the 1999-2000 crop year. The remaining direct

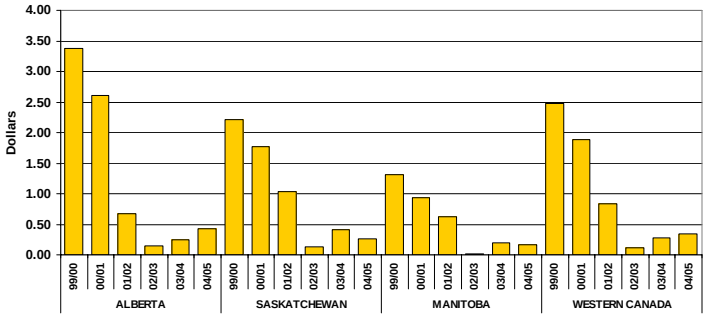
[172] The 2002-03 crop year provided the only exception to this trend when direct costs rose by 14.5%, to an average of $49.08 per tonne from the previous year's $42.85-per-tonne average.

[173] 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.

[174] This process was also at work in the 2002-03 crop year when the price differential for 1 Canada canola widened in response to a 57.1% increase in primary elevator inventories, which climbed to a weekly average of 388,000 tonnes from 247,000 tonnes a year earlier. With ample inventories on hand, the spot price was reduced in order to discourage further producer deliveries.

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.

Figure 85: 1 Canada Canola – Producer Benefits (dollars per tonne)



Unlike CWB grains, trucking premiums are not as aggressively used to attract deliveries of non-CWB commodities. The premiums reported as having been paid by grain companies for 1 Canada canola deliveries in each of the nine sampling areas fell by 86.3% between the 1999-2000 and 2004-05 crop years, decreasing from an average of $2.48 per tonne to only $0.34 per tonne. These premiums represented an offset of 4.5% to the direct costs in the first year of the GMP, but have been declining fairly steadily since then. In the 2004-05 crop year, they served to reduce these costs by just 0.8%.

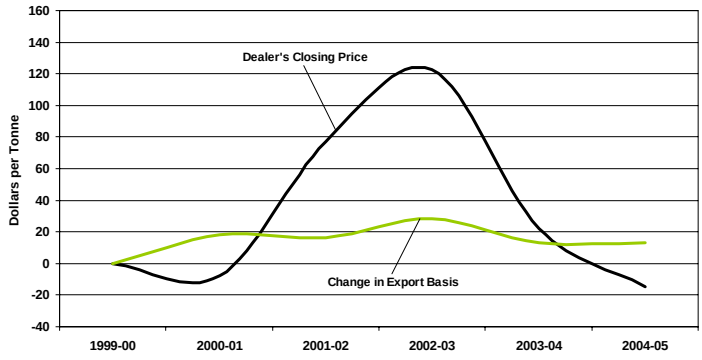
It is also worth noting that the reduction in trucking premiums has coincided with the narrowing of the price differential. This is consistent with comments received from grain companies to the effect that they prefer to use the spread between the spot price and the futures price as the primary signalling 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.

5.32 Large Yellow Peas

The visible netback due to producers from the delivery of large yellow peas decreased by 23.5% in the 2004-05 crop year, to $120.19 per tonne from $157.02 per tonne a year earlier. This entirely negated what few traces remained of the gains that had been made through the first five years of the GMP. Moreover, the most recent producers' netback falls $27.59 below the $147.78 per tonne it had originally been benchmarked at in the 1999-2000 crop year.

As with other commodities, much of this decline is attributable to a sharp reduction in the price of large yellow peas over the course of the past two crop years. In fact, large yellow peas is the only commodity among the four used in gauging the producers' netback to have seen its price actually fall $14.37 per tonne below that benchmarked in the first year of the GMP. An increase of $13.22 per tonne in the export basis effectively doubled the loss derived from this reduction in price. The changes giving rise to these results are summarized in the following table.

Figure 86: Change in Netback Components – Large Yellow Peas



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

	1999-00	2000-01	2001-02	2002-03	2003-04	2004-05	2004-05 / 1999-2000 $ VAR	2004-05 / 1999-2000 % VAR	
Dealer's Closing Price	$202.54	$194.60	$279.85	$325.14	$224.77	$188.17	-$14.37	-7.1%	▼
Direct Costs	54.94	72.95	71.61	83.33	67.86	68.12	13.18	24.0%	▲
Less: Trucking Premiums	-0.18	-0.23	-0.64	-0.14	-0.11	-0.14	0.04	-22.2%	▼
Export Basis	54.76	72.72	70.97	83.19	67.75	67.98	13.22	24.1%	▲
Producer Netback	$147.78	$121.88	$208.88	$241.95	$157.02	$120.19	-$27.59	-18.7%	▼

Dealer's Closing Price

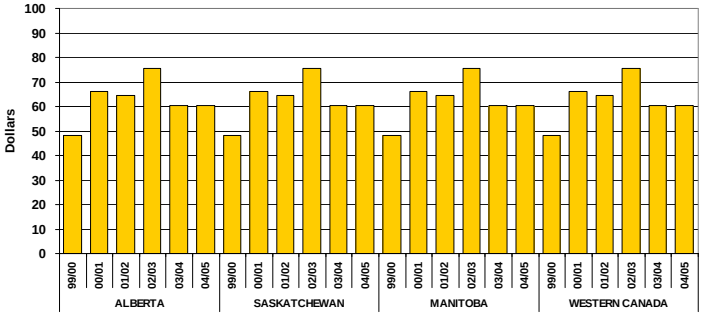
In keeping with the patterns observed for other commodity prices, the 2004-05 crop year saw the second reduction in the price of large yellow peas after a four-year run up. In equal measure, price has proven to be the key determinant in the netback for this commodity over the past six years. And although 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, western Canadian dry pea production rose to 2.1 million tonnes, a gain of 55% from the 1.4 million tonnes of the preceding crop year. 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 by 30.9% to $224.77 per tonne in the 2003-04 crop year. Much the same occurred in the 2004-05 crop year when production climbed to a record 3.3 million tonnes and the price fell another 16.3% to $188.17 per tonne. It is important to note that this is 7.1% below the benchmark price set for large yellow peas, and that this commodity's price is the only one to have fallen through this floor.

Export Basis

Unlike canola, the export basis of large yellow peas posted a net increase over the course of the GMP, although it has been declining in recent years. In fact, the export basis for large yellow peas actually reached a height of $83.19 per tonne in the 2002-03 crop year, an increase of 51.9% over the $54.76 per tonne it had been four years earlier. Since then, the export basis for large yellow peas has fallen by 18.3%, to $67.98 per tonne by the end of the 2004-05 crop year. Even so, its net increase of 24.1% since the beginning of the GMP was the largest of any commodity.

Figure 87: Large Yellow Peas – Price Differential (dollars per tonne)



As was mentioned previously with respect to canola, owing to 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

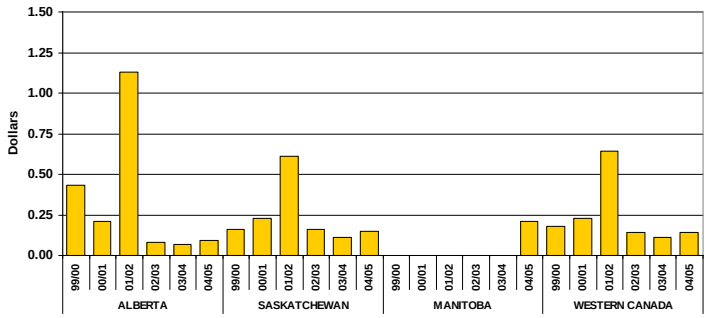
[175] Prior to 2002, Canada accounted for over 25% of the world's dry pea production, and 55% of world export volume. See Agriculture and Agri-Food Canada, *Bi-weekly Bulletin, September 28, 2001*. This leadership role, however, has been surrendered periodically as a result of changes in annual production.

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 20.2% reduction in the 2003-04 crop year, to $60.28 per tonne. For the 2004-05 crop year, the differential remained effectively unchanged, gaining just two cents to stand at $60.30 per tonne. The differential's 88.5% share of total direct costs was equally consistent with the 89.0% it represented a year earlier.[176]

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 10.1% to about $6.54 per tonne in the 2004-05 crop year. On a comparative basis, this element accounted for 9.6% of total direct costs versus 8.8% a year earlier. The remaining 1.9% was derived from a levy assessed by the provincial Pulse Growers Association at the time of delivery.

Figure 88: Large Yellow Peas – Producer Benefits (dollars per tonne)



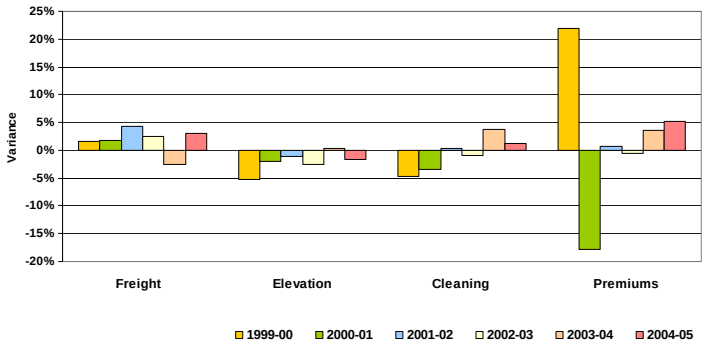
Trucking premiums are even less commonly used to encourage the delivery of large yellow peas than they are for canola, and have also been in general decline under the GMP. From an average of $0.18 per tonne for the 1999-2000 crop year, these premiums amounted to only $0.14 per tonne in the 2004-05 crop year. In total, these premiums represented an offset to direct costs of just over 0.2% in the last crop year, 2004-05 crop year. Here too the value of this producer benefit as an offset to total direct costs is little changed from the 0.3% it constituted six 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 89 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 2004-05 crop year, the variances observed with respect to freight, elevation, cleaning, and competitive premiums were minimal. Moreover, although the variability in the data relating to competitive premiums has increased marginally from that recorded a year earlier, it remains significantly less than that observed at the beginning of the GMP, and still falls within acceptable limits.

Figure 89: Cash Ticket Variances



[176] Despite changes in the per-tonne value throughout the course of the GMP, the price differential has remained fairly consistent as a proportion of total direct costs. In the 1999-2000 crop year this proportion amounted to 87.8%, the lowest value recorded for large yellow peas. At its height a year later, this proportion had climbed by just three percentage points to 90.8%.

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 2004-05 crop year were marginally higher than those reflected by the weighted averages used for applicable freight in the analysis. This variation, however, was still within acceptable limits.[177]

For the 2004-05 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 below 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. A year later this variance widened to 3.5%. This was also the case in the 2004-05 crop year, where the variance widened somewhat to 5.2%. Even so, the variance was within the bounds of acceptable statistical error.

In light of the improvements that have been made, 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

[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.

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.

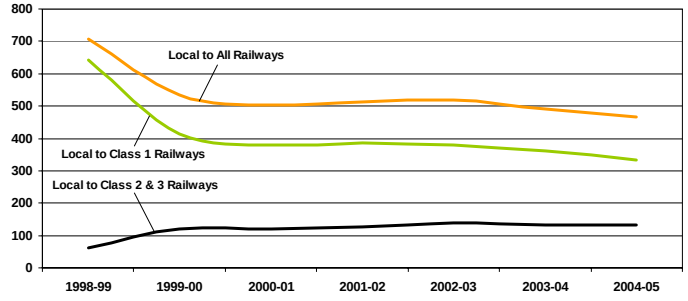
Given the need for statistical validity, the PNC requires a greater number of consistent users. In addition, these users need to be distributed fairly evenly across all nine of the sampling areas used by the GMP. Should these criteria be met, the Monitor fully expects that its annual report for the 2005-06 crop year 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 significantly since the beginning of the 1999-2000 crop year, falling from an estimated 706 to 466 by the end of the 2004-05 crop year (or 34.0%). Much of this overall decline stems from the net reduction in the number of sites local to the larger Class 1 carriers, which fell by 48.2% during the same period, from 643 to 333. Conversely, the number of sites local to the smaller Class 2 and 3 carriers more than doubled, increasing from 63 to 133, or 111.1%. [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 55.3% and 42.2% respectively. The rate of decline in Saskatchewan was substantially less; the number of sites having fallen by 16.1% during the same six-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 503 in the 2000-01 crop year, the number of producer loading sites has decreased by only 7.4%, with much of this having occurred in the past two crop years.

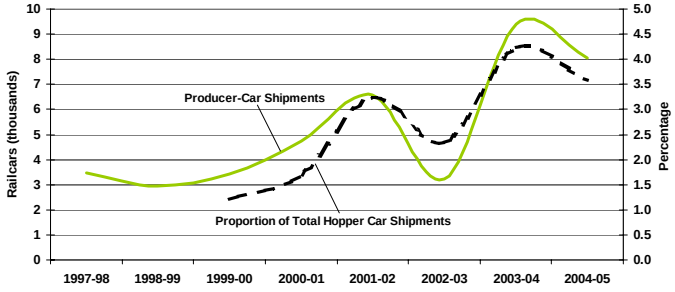
Figure 90: Producer-Car Loading Sites



Producer Car Shipments

Notwithstanding the overall reduction in the number of producer loading sites witnessed, 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. The sharp decline in grain quality for the 2004-05 crop year, however, produced a 14.2% reduction in such shipments, which fell to 8,061 carloads.

Figure 91: Producer-Car Shipments



And while these values are still well below the levels witnessed in the early 1990's, when producer-car shipments averaged about 12,500 annually, the trend has been

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

clearly upwards. More importantly, its 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. Reduced shipments in the 2004-05 crop year were largely responsible for this share having fallen falling back to 3.6%. [See Table 5B-2 in Appendix 4.]

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. As at 31 July 2005, a total of 37 such facilities had received exemptions, with 28 in Saskatchewan, six 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 most have improved since the 1999-2000 crop year. With the exception of large yellow peas, where the producers' netback declined by 18.7%, these gains ranged from a low of 6.3% for 1CWRS wheat to a high of 13.0% for 1 Canada canola. In almost all instances, the improvement came primarily as a result of an increase in the price of the commodity itself.

Within the wider framework of a time series, the producer's netback can be seen to have actually fallen by as much as 50.3% from highpoints recorded two years earlier. Such reversals clearly underscored the measure's sensitivity to changes in specific variables, most notably commodity prices. In fact, most of the observed variations in the producer netback over the past six 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 5.8% (or $3.19 per tonne) in the case of wheat, and 4.6% (or $3.10 per tonne) for durum. As for the non-CWB commodities, the changes proved more substantive: a decrease of 22.0% (or $11.54 per tonne) in the case of canola; and an increase of 24.1% (or $13.22 per tonne) for large yellow peas.

To large extent, the minimal nature of the change in the export basis of both wheat and durum are the by-products of an increase in the financial benefits received by producers, whether in the form of trucking premiums or CWB transportation savings. These increased benefits, which amounted to $5.17 per tonne and $5.73 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. For the 2004-05 crop year in particular, a sharp reduction in grain quality was largely responsible for a considerable rollback in the trucking premiums paid to producers by the grain companies, as well as a steep decline in the transportation savings realized by the CWB and ultimately passed on to producers through the pool accounts.

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 six 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 $0.34 in the 2004-05 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.

Compared to other costs borne by producers the average cost of transportation and logistics has realized a relatively small increase. With CPI increasing at 14.1% and the Farm Input Price Index[180] increasing by 29.4% to the end of 2004, the relative increases of the export basis as shown above (with the exception of yellow peas) is negligible.

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.

[180] The Farm Input Price Index for Crop Production in Western Canada is prepared by Statistics Canada. The index reflects all costs of production and includes crop inputs such as fertilizer, seed and pesticides, the cost of machinery and fuel and the cost of transportation and logistics, amongst others.

Members of the Quorum Corporation Advisory Board (as of 30 November 2005)

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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 is 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.[181] 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 and durum. 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.

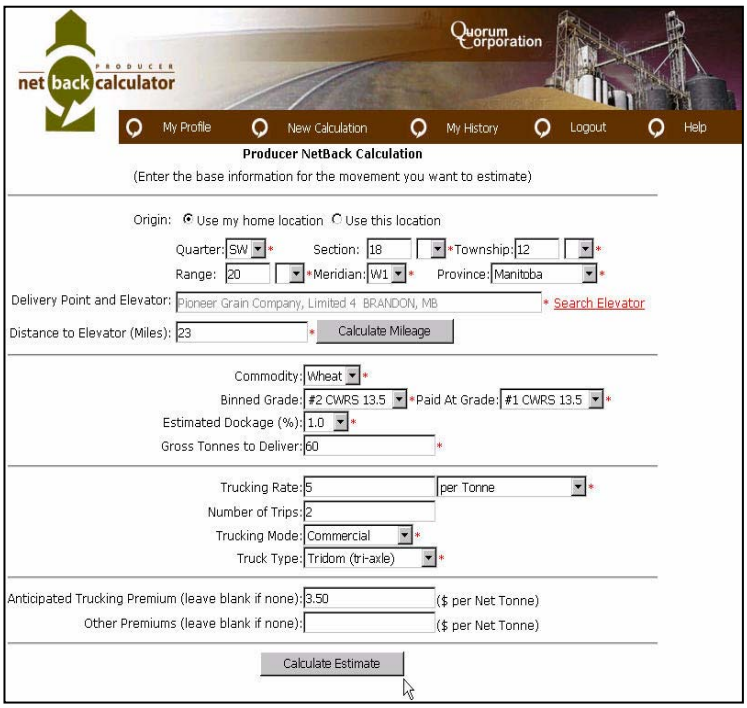

Figure A1: An image of the input screen for Quorum Corporation's Netback Calculator.

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.).

[181] 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.

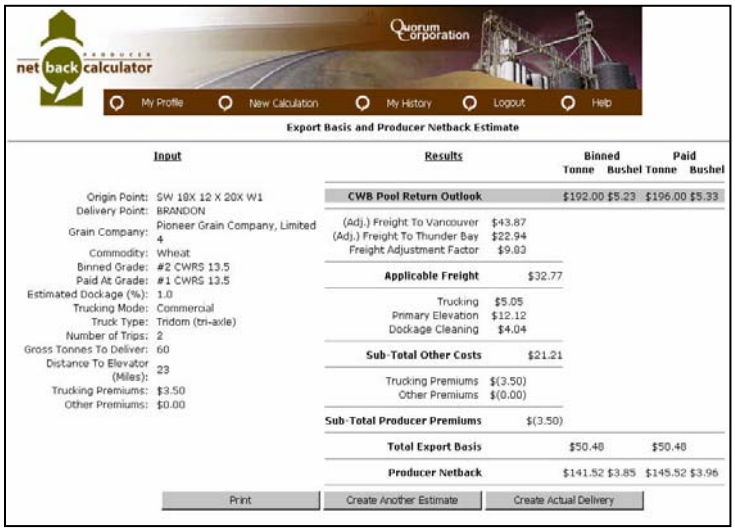

Figure A2: An image of the output screen for Quorum Corporation's Netback Calculator.

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 Transportation
Alberta RailNet
Canadian Canola Growers Association
Canadian Grain Commission
Canadian Maritime Chamber of Commerce
Canadian National Railway
Canadian Pacific Railway
Canadian Ports Clearance Association
Canadian Ship Owners Association
Canadian Special Crops Association
Canadian Transportation Agency
Canadian Wheat Board
Cando Contracting Ltd.
Cargill Limited
CMI Terminal
ConAgra Grain, Canada
Gardiner Dam Terminal
Government of BC
Grain Growers of Canada
Great Sandhills Terminal
Great Western Rail
Inland Terminal Association of Canada
James Richardson International Ltd. (Pioneer Grain)
Keystone Agricultural Producers
Louis Dreyfus Canada Ltd.
Mainline Terminal Ltd.
Manitoba Agriculture
Manitoba Transportation and Government Services
Mid-Sask Terminal Ltd.
Mission Terminal Inc.
National Farmers Union
North East Terminal Ltd.
North West Terminal Ltd.
OmniTRAX Canada, Inc.
Parrish & Heimbecker Ltd.
Paterson Grain
Port of Churchill
Port of Prince Rupert
Port of Thunder Bay
Port of Vancouver
Prairie West Terminal
Prince Rupert Grain Ltd.
Rail America
Red Coat Road and Rail
Saskatchewan Agriculture and Food
Saskatchewan Highways and Transportation
Saskatchewan Association of Rural Municipalities
Saskatchewan Wheat Pool
South West Terminal
Statistics Canada
Terminal 22 Inc
Transport Canada
Vancouver Wharves Ltd. (BCR Marine)
Western Barley Growers Association
Western Canadian Wheat Growers Association
Western Grain By-Products Storage Ltd.
Western Grain Elevator Association
Weyburn Inland Terminal Ltd.
Wild Rose Agricultural Producers
Winnipeg Commodity Exchange