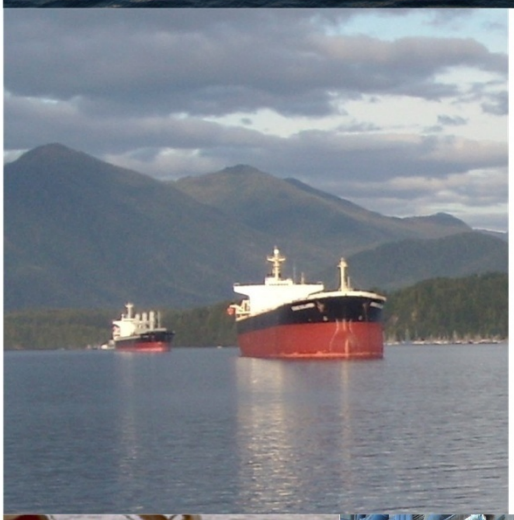

Monitoring the Canadian Grain Handling and Transportation System

Annual Report

2007-2008 Crop Year

1 *Summary Report*

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 2008, and focuses on the various events, issues and trends manifest in the movement of Western Canadian grain during the past year. This is the eighth 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 2007-08 crop year is largely gauged against that of the 2006-07 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 nine crop years. This data constitutes the backbone of the GMP, and is used widely to identify significant trends and changes in GHTS performance over the course of this interval. Readers interested in a fuller examination of the time series data collected are encouraged to consult the detailed data tables found in Appendix 4 as required.

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

QUORUM CORPORATION

Edmonton, Alberta
December 2008

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Executive Summary

The federal government's Grain Monitoring Program (GMP) was initiated in 2001 in order to facilitate a continuous gathering of data, the preparation of detailed measures and an assessment of the performance of Canada's Grain Handling and Transportation System. This report is the eighth under the GMP and covers nine years worth of collected data, starting with the 1999-2000 crop year, and culminating with the 2007-2008 crop year.

Under its mandate, Quorum Corporation provides the government with a series of quarterly and annual reports that track and analyze the impact of overall changes in the structure of the grain handling and transportation system, the effectiveness of the Canadian Wheat Board's tendering process, commercial relations, the efficiency and reliability of the system, short-term operational performance and producer impacts starting with the 1999-2000 crop year, and culminating with the 2007-2008 crop year.

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

Production and Volumes

Grain produced in Western Canada during the 2007-08 crop year fell to 48.5 million tonnes, down 1.5% from a year earlier and the lowest production volume in four years. The composition of the reduced volumes saw a decrease in CWB grains of 2.6 million tonnes offset by an increase of 1.9 million tonnes of non-CWB grains (predominantly canola). Despite the lower overall volume, the crop that came off the field in the fall of 2007 still proved to be above average in terms of quality.

When carry-forward stocks are combined with production, the overall grain supply for the 2007-08 crop year totalled 56.0 million tonnes, a decrease of 9.3% over the previous crop year. Regulated grain moved by rail to western Canadian ports decreased by 6.4% falling to 22.8 million tonnes. The port of Vancouver remained the principal export destination, although its volume fell by 2.7% to 12.5 million tonnes. While Thunder Bay still ranked as the second largest export destination within the grain handling and transportation system (GHTS), its railway volume decreased by 13.9% to 5.1 million tonnes. Running counter to this was the port of Churchill, where the shipment of 0.6 million tonnes of grain produced a 19.6% increase in volume.

Infrastructure

The decline in the number of licensed country elevators in western Canada remains the most visible aspect of the GHTS's continuing evolution. In 1999, the first year of the Grain Monitoring Program (GMP), there were 1,004 licensed primary and process elevators on the prairies. By the close of the 2006-07 crop year this number had been reduced to just 371. The 2007-08 crop year actually saw seven facilities added to this system. Although this represented an increase of just 0.6%, the total number of licensed elevators in western Canada was raised to 378. Notwithstanding this modest variation, the limited scope of the changes recorded in the last five crop years continues to suggest that the grain companies have effectively concluded their elevator rationalization programs.

While the overall number of elevators fell by 62.4%, the GHTS's storage capacity decreased by a comparatively modest 15.3% in this same period, reflecting a strategy by grain companies to close less-efficient smaller elevators while expanding and opening larger ones.

There were 517.3 route-miles of rail line removed in the 2007-08 crop year, the largest single-year reduction recorded since the beginning of the GMP. CN accounted for the majority of this, abandoning a total of 324.1 route-miles of infrastructure, while CP shed another 193.2 route-miles. The majority of the reduction was made by CN to their Saskatchewan lines. While this was a significant one-year reduction, the larger context sees the total reduction to western Canadian railway infrastructure since the beginning of the GMP to

1,490.2 route-miles, or 7.7%.

At the close of the 2007-08 crop year, the licensed terminal elevator network in western Canada comprised a total of 15 facilities, a reduction of one from the previous year. In January 2008 Viterra closed its Thunder Bay "S" terminal, one of two facilities in Thunder Bay that it acquired in the takeover of Agricore United.

CWB Tendering and Advanced Awards

The 2007-08 crop year denoted the eighth for the Canadian Wheat Board's (CWB) tendering program. More significantly, it was the fifth year in which the CWB targeted to move a fixed 40% of its overall grain movements to the four ports in western Canada using a combination of tendering and advance car awards. Under the terms of this arrangement, about half of this volume – representing a maximum of 20% of its overall grain movements – was to be tendered.

The CWB issued a total of 190 tenders calling for the shipment of approximately 1.9 million tonnes of grain, about half of the 3.8 million tonnes that had been sought a year earlier. These calls were met by 629 bids offering to move 4.4 million tonnes of grain. A total of 267 contracts were subsequently signed for the movement of almost 1.9 million tonnes, almost all of the amount called. This represented 14.3% of the tonnage shipped by the CWB to western Canadian ports during the 2007-08 crop year, and fell well short of its 20% target.

Of the tonnage moved, 38.8% was shipped to Prince Rupert, 35.0% to Vancouver, and 26.2% to Thunder Bay. For the third consecutive year, no calls were issued in favour of Churchill.

A total of 1.8 million tonnes of grain moved under the CWB's advance car awards program during the 2007-08 crop year. This represented 13.7% of the CWB's total shipments to western Canadian ports, down 2.1% from the 15.8% share garnered a year earlier and considerably short of the 20% that had been targeted,

Largely as a consequence of decreases in the discounts offered by the grain companies in their tender bids, the transportation savings accruing to the CWB – and ultimately passed back to producers through its pool accounts – fell appreciably in the 2007-08 crop year. The CWB estimates that the savings generated from these and other sources decreased by 12.8%, falling to $30.6 million from $35.1 million a year earlier.

Commercial Relations

Among other important commercial events recorded during the 2007-08 were:

- Dissatisfaction over CN service led a number of grain shippers to bring level-of-service complaints against the carrier before the Canadian Transportation Agency. Moreover, long-standing complaints on the part of rail shippers in general led to the federal government's decision to undertake a review of railway service. The two-stage review is expected to take as much as a year-and-a-half to complete.

- The federal government concluded new operating agreements with both CN and CP for the continued use of its covered hopper car fleet. Key provisions in these agreements required the railways to refurbish the cars as well as provide for their longer-term replacement. This came at the same time as the federal government moved to reduce the allowances that the carriers had been receiving for the maintenance of these cars under the revenue cap.

- Since the 2002-03 crop year ocean freight rates have fluctuated dramatically, with the Baltic Dry Index rising from a low of about 1800 points to almost 12,000 points by the close of the 2007-08 crop year. China's economic expansion continued to be viewed as the main driver in both the rise and unprecedented volatility of ocean freight rates. With iron ore and coal needing about half of the shipping industry's dry bulk capacity, the increase in rates was being fuelled by a seemingly insatiable Chinese demand for these commodities. None of this helped improve Canada's competitive standing in the international grain market. Western Canadian grain usually trades at a freight disadvantage in many parts of the world owing to the greater distances involved in shipping it to market. As ocean

freight rates rise, so too did the cost disadvantage for buyers located around the world. Fortunately, the demand for Canada's grain proved strong enough to overcome this financial difficulty.

- The debate over hopper car maintenance costs was an ongoing issue throughout the crop year with the CTA having made a one-time adjustment to the revenue cap. Since the calculation of this adjustment was expected to take several months to complete and be applicable to the revenues that CN and CP would earn over the course of the entire 2007-08 crop year, the Agency issued an interim decision wherein it advised the railways that the Volume Related Composite Price Index (VRCPI) was being rolled back from its previously determined value of 1.1611 to 1.0884. Although the railways challenged this decision before the Federal Court of Appeal, the court ultimately ruled against the railways. This allowed the one-time adjustment of $72.2 million to be factored into the Agency's calculation of allowable carrier revenues for the 2007-08 crop year.

- Building on earlier policy statements, the federal government moved forward with its plans to give western Canadian farmers greater choice in the marketing of their grain by introducing amendments to the *Canadian Wheat Board Act*. However, this bill, along with another to amend the Canada *Grain Act*, both died on the House of Commons order paper when Parliament was prorogued in September 2008.

System Efficiency and Reliability

The GMP uses the supply chain model to provide a framework by which to examine the speed with which grain moves through the GHTS. In the 2007-08 crop year, the overall amount of time to move grain through the supply chain increased by 2.0 days, to an average of 60.1 days. This result was shaped largely by increases in two of the primary supply chain elements: country elevator storage time, which rose by 0.4 days; and terminal elevator storage time, which rose by 1.8 days. These stood in contrast against a 0.2-day reduction in the railways' loaded transit time.

In addition to the preceding, there are a few other comments that should be made concerning the performance of the GHTS in the 2007-08 crop year:

- Firstly, despite a 9.3% reduction in the grain supply, which totalled 56.0 million tonnes, a GMP record of 7.1 million tonnes ultimately passed through western Canadian ports during the first three months of the 2007-08 crop year. The same was true for the first half, where a record 12.8 million tonnes was also handled by the GHTS. However, the third and fourth quarters saw a sharp reduction in volume which significantly detracted from this record-setting pace. Even so, the pressures brought to bear on the GHTS during the first half proved to have been the most demanding under the GMP.

- Secondly, the heightened demand for Canadian export grain in the face of tight global supplies accentuated the pressures exerted on the GHTS during this period. Many of the problems encountered during this period focused on car supply and the need for more responsive railway service.

- Finally, there is evidence to suggest that, despite the problems encountered during this period, grain continued to move through the supply chain at a consistently faster pace than in the first few years of the GMP. To be sure, much of the overall improvement came from a reduction in the amount of time spent by grain as inventory in the country elevator network, which has clearly been driven by the rationalization of these same facilities. Complementing this, however, has been the benefit of recent improvements in the railways' average loaded transit time. Although the impact of winter operations was again evident in the second and third quarters' higher averages, it is still worth noting that the 7.3-day average posted in the first quarter proved to be the best yet recorded under the GMP.

As a means of gauging the reliability of the GHTS, the GMP measures the terminal stock levels against both the stated requirements and actual shipments of vessels loading at western Canadian ports. These stock-to-vessel-requirement and stock-to-shipment ratios indicated that, with only minor seasonal exception, terminal stocks were in sufficient enough supply to meet the needs of these vessels and maintain a high degree of reliability. This strongly suggests that the grain industry, and more particularly those concerned with the operation of the terminal elevators, have focused their efforts on protecting the GHTS's overall reliability in delivering grain to port. While in itself positive, it must be noted that this is generally done at the expense of

system efficiency since inventories are often maintained at levels well in excess of those required to meet prevailing demand.

Producer Impact

An examination of the per-tonne financial returns to producers of wheat, durum, canola, and large yellow peas, indicates that all have improved significantly since the 1999-2000 crop year. These gains ranged from a low of 73.4% in the case of large yellow peas, to as much as 185.4% for 1CWA durum. In all instances, these improvements came primarily as a result of increases in the market price of the commodity itself. Moreover, much of these gains came from the sharp across-the-board price increases witnessed in the 2007-08 crop year.

The export basis is the GMP's measurement of the producer's total logistics cost, and typically amounts to about one-quarter of the proceeds derived from a grain sale. With respect to the CWB grains, these costs increased by 23.9% (or $13.07 per tonne) in the case of wheat, and 24.9% (or $16.81 per tonne) for durum. As for the non-CWB commodities, the changes proved to be more differentiated: an increase of 1.8% (or $0.96 per tonne) in the case of canola; and an increase of 56.2% (or $30.75 per tonne) for large yellow peas.

Increases to the export basis for the CWB grains was contained by an improvement in the financial benefits accruing to producers, primarily in the form of trucking premiums or CWB transportation savings. These benefits, which amounted to $7.31 per tonne and $8.00 per tonne for wheat and durum respectively, acted as partial counterweights to increases in the direct cost of railway freight, elevation, cleaning, and storage.

In comparison, both canola and large yellow peas receive significantly less in the way of off-setting financial benefits than the CWB grains do. In fact, the trucking premiums paid for both commodities have declined significantly over the course of the past nine 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 $0.49 in the 2007-08 crop year. This 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.

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 – 2007-08 Crop Year

Grain Production and Supply

- *Grain production decreased by 1.5% to 48.5 million tonnes.*
  - *Due to somewhat drier-than-normal growing conditions.*
  - *Smallest production volume in four years.*
    - *Alberta – down 3.5% to 16.0 million tonnes.*
    - *Saskatchewan – down 0.8% to 23.6 million tonnes.*
    - *Manitoba – down 0.7% to 8.8 million tonnes.*
  - *Harvested grain was largely of above average quality.*
    - *Higher-quality grades readily available.*
  - *Production decline largely restricted to wheat.*
    - *Wheat – down 23.0% to 14.7 million tonnes.*
    - *Durum – up 10.0% to 3.7 million tonnes.*
    - *Barley – up 16.3% to 10.3 million tonnes.*
    - *Canola – up 11.7% to 9.5 million tonnes.*
    - *Oats – up by 25.1% to 4.3 million tonnes.*
- *Carry forward stocks decreased by 40.0% to 7.5 million tonnes.*
  - *Drawdown prompted by heightened global demand for grain.*
- *Total grain supply decreased by 9.3% to 56.0 million tonnes.*

Railway Traffic

- *Railway grain volume decreased 6.4% to 22.8 million tonnes.*
  - *Vancouver volume decreased 2.7% to 12.5 million tonnes.*
    - *Share of traffic increased to 55.1% from 53.0% a year earlier.*
  - *Prince Rupert volume decreased 9.4% to 4.5 million tonnes.*
    - *Share of traffic fell to 19.6% from 20.3% a year earlier.*
  - *Thunder Bay volume decreased 13.9% to 5.1 million tonnes.*
  - *Churchill volume increased 19.6% to 0.6 million tonnes.*

Country Elevator Infrastructure

- *Sixth consecutive year of limited changes to elevator network.*
  - *Grain delivery points increased by 1.5% to 276.*
  - *Number of elevators increased by 1.9% to 378.*
- *Elevator storage capacity increased by 2.5% to 6.0 million tonnes.*
- *Elevators capable of loading in blocks of 25 or more cars increased 1.3% to 243.*
  - *Share of GHTS elevators fell marginally to 64.3% from 65.1%.*
  - *Share of GHTS storage capacity fell marginally to 88.3% from 88.6%.*

Railway Infrastructure

- *Western Canadian railway network reduced by 2.8% to 17,978.0 route-miles.*
  - *CN and CP abandoned a combined 517.3 route-miles of track.*
- *Two shortline railways created from former CP branch line operations.*
  - *Torch River Rail Inc. – 27.8 route-mile section in Saskatchewan.*
  - *Boundary Trail Railway – 23.2 route-mile section in Manitoba.*
- *Discontinuance plans for over 700 route-miles of CN and CP infrastructure remain.*
- *CN reacquired Athabasca Northern Railway in December 2007 for $25 million.*

Terminal Elevator Infrastructure

- *Terminal elevators reduced to 15 with closure of Viterra's "S" terminal in Thunder Bay.*
  - *Prompted storage capacity reduction of 6.3% to 2.5 million tonnes.*
- *Terminal elevator unloads decreased by 6.1% to 245,213 railcars.*
  - *CN's share increased marginally to 50.2% from 49.8% a year earlier.*
    - *Gain largely due to efforts at promoting Prince Rupert gateway.*

Indicator Series 1 – Industry Overview

Table	Indicator Description	Notes	BASE 1999-00	CURRRENT REPORTING PERIOD (1) 2006-07	2007-08	% VAR	
	Production and Supply [Subseries 1A]						
1A-1	Crop Production (000 tonnes)	(2)	55,141.7	49,264.6	48,517.3	-1.5%	▼
1A-2	Carry Forward Stock (000 tonnes)	(2)	7,418.2	12,424.7	7,450.6	-40.0%	▼
	Grain Supply (000 tonnes)	(2)	62,559.9	61,689.3	55,967.9	-9.3%	▼
1A-3	Crop Production (000 tonnes) – Special Crops	(2)	3,930.2	3,938.1	4,404.3	11.8%	▲
	Rail Traffic [Subseries 1B]						
1B-1	Railway Grain Volumes (000 tonnes) – Origin Province						
1B-2	Railway Grain Volumes (000 tonnes) – Primary Commodities		26,440.8	24,311.7	22,766.5	-6.4%	▼
1B-3	Railway Grain Volumes (000 tonnes) – Detailed Breakdown						
1B-4	Railway Grain Volumes (000 tonnes) – Special Crops		2,103.4	2,344.3	2,481.0	5.8%	▲
	Country Elevator Infrastructure [Subseries 1C]						
1C-1	Grain Delivery Points (number)		626	272	276	1.5%	▲
1C-1	Grain Elevator Storage Capacity (000 tonnes)		7,443.9	5,808.2	5,952.5	2.5%	▲
1C-1	Grain Elevators (number) – Province						
1C-2	Grain Elevators (number) – Railway Class		917	371	378	1.9%	▲
1C-3	Grain Elevators (number) – Grain Company						
1C-4	Grain Elevators Capable of Incentive Loading (number) – Province						
1C-5	Grain Elevators Capable of Incentive Loading (number) – Railway Class		317	240	243	1.3%	▲
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	48	10	-79.2%	▼
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	51	3	-94.1%	▼
1C-12	Grain Elevator Closures (number) – Railway Line Class						
1C-13	Grain Delivery Points (number) – Accounting for 80% of Deliveries		217	97	n/a	n/a	–
	Railway Infrastructure [Subseries 1D]						
1D-1	Railway Infrastructure (route-miles) – Grain-Dependent Network		4,876.6	4,137.7	3,658.8	-11.6%	▼
1D-1	Railway Infrastructure (route-miles) – Non-Grain-Dependent Network		14,513.5	14,357.6	14,319.2	-0.3%	–
1D-1	Railway Infrastructure (route-miles) – Total Network		19,390.1	18,495.3	17,978.0	-2.8%	▼
1D-2	Railway Grain Volumes (000 tonnes) – Grain-Dependent Network		8,686.5	6,988.8	6,648.9	-4.9%	▼
1D-2	Railway Grain Volumes (000 tonnes) – Non-Grain-Dependent Network		16,975.8	16,748.1	15,435.1	-7.8%	▼
1D-2	Railway Grain Volumes (000 tonnes) – Total Network		25,662.3	23,736.9	22,084.0	-7.0%	▼
1D-3	Shortline Railway Infrastructure (route-miles)		3,043.0	2,023.2	1,870.7	-7.5%	▼
1D-3	Shortline Railway Grain Volumes (000 tonnes)		2,090.5	1,059.1	578.3	-45.4%	▼
1D-5	Railway Grain Volumes (000 tonnes) – Class 1 Carriers		23,571.8	22,677.8	21,505.7	-5.2%	▼
1D-5	Railway Grain Volumes (000 tonnes) – Class 2 and 3 Carriers		2,090.5	1,059.1	578.3	-45.4%	▼
1D-6	Grain Elevators (number) – Grain-Dependent Network		371	117	117	0.0%	–
1D-6	Grain Elevators (number) – Non-Grain-Dependent Network		513	238	240	0.8%	–
1D-6	Grain Elevator Storage Capacity (000 tonnes) – Grain-Dependent Network		2,475.4	1,575.6	1,593.9	1.2%	▲
1D-6	Grain Elevator Storage Capacity (000 tonnes) – Non-Grain-Dependent Network		4,847.6	4,169.0	4,274.7	2.5%	▲
	Terminal Elevator Infrastructure [Subseries 1E]						
1E-1	Terminal Elevators (number)		15	16	15	-6.3%	▼
1E-1	Terminal Elevator Storage Capacity (000 tonnes)		2,678.6	2,642.6	2,475.6	-6.3%	▼
1E-2	Terminal Elevator Unloads (number) – Covered Hopper Cars		278,255	261,204	245,213	-6.1%	▼

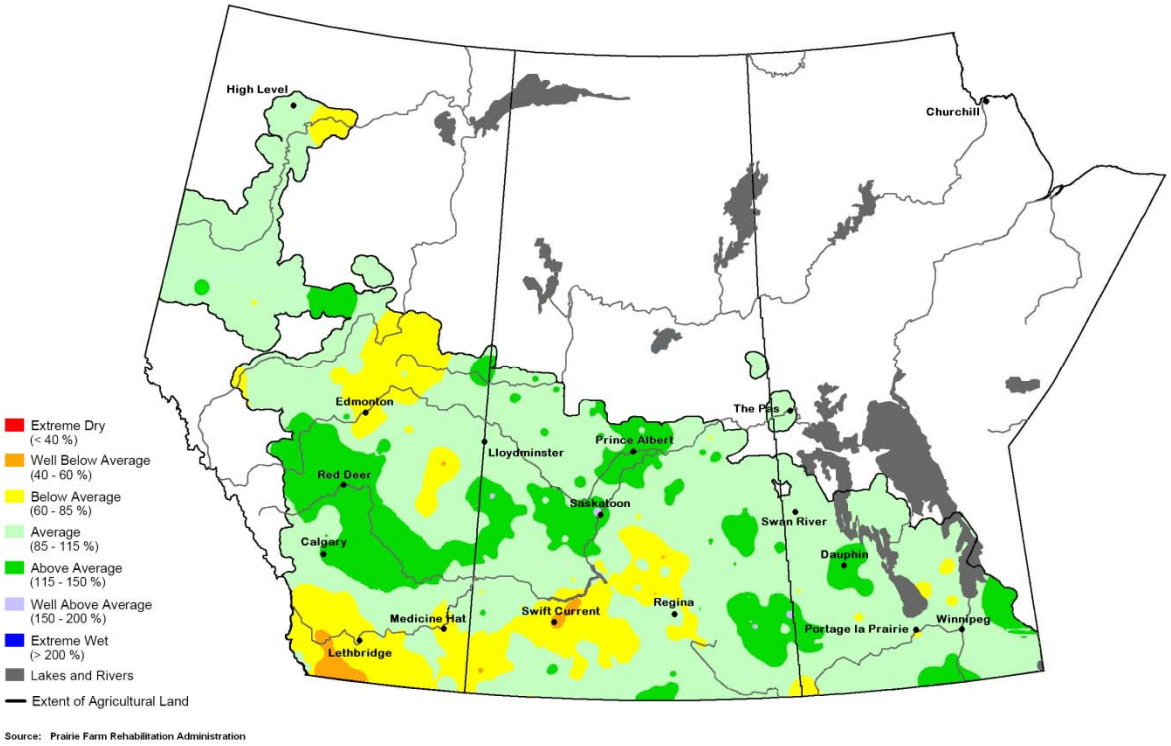
(1) – In order to provide for more direct comparisons, the values for the 1999-2000 through 2007-08 crop years are "as at" or cumulative to 31 July unless otherwise indicated.
(2) – Values quoted represent the supply available for movement during the crop year.

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

With growing conditions having been hotter and drier than normal, most parts of western Canada reported a decline in grain production for the 2007-08 crop year. The prevalence of cool, wet weather throughout much of the fall also slowed harvesting, and contributed to a modest reduction in grain quality. At the same time, world grain prices moved sharply higher in the face of tighter overall grain supplies, which had largely been caused by drought conditions in Australia and the Ukraine. Moreover, these forces helped propel the price of most grains to record highs under the Grain Monitoring Program (GMP).

Although the decline in western Canadian grain production resulted in a downturn in overall GHTS activity, the impact was largely restricted to the latter half of the crop year. In fact, the strong international demand for grain helped raise the volume handled in the first half to a new GMP record. Even so, the effect of a subsequent decline in quarterly activity can readily be seen in a number of the measures that follow.

Figure 1: Percentage of Average Precipitation – 1 April to 31 August 2007



For most areas of western Canada, the amount of precipitation received in the 2007 growing season proved to be consistent with the historical norm.[1] Still, the drier-than-normal conditions that were experienced in parts of Saskatchewan and Alberta had a slightly negative impact on provincial yields. Overall grain production for the 2007-08 crop year fell to 48.5 million tonnes, a decrease of 1.5% from the 49.3 million tonnes recorded a year earlier. This ranked as the smallest production volume in four years, and fell well below the 56.0 million tonnes set as a record under the GMP just two years earlier. Notwithstanding the less-than-ideal harvesting conditions, the crop that came off the field in the fall of 2007 still proved to be above average in terms of quality. [See Table 1A-1 in Appendix 4.]

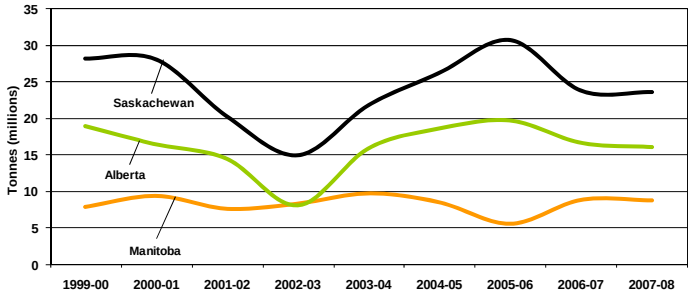
Provincial Grain Production

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

The comparatively modest decrease in overall production was felt by each of the major producing provinces. The largest reduction was registered by Alberta, where output dropped by 3.5% in the face of drier growing conditions, falling to 16.0 million tonnes from 16.5 million tonnes a year earlier.

Saskatchewan, which accounted for almost half of the grain produced in western Canada, followed suit with a decrease of just 0.8%.[2] This saw the province's total output fall to 23.6 million tonnes from 23.8 million tonnes the year before. In almost equal measure, a 0.7% decline in Manitoba's output left total production for that province largely unchanged from the 8.8 million tonnes recorded a year earlier.

Figure 2: Major Grain Production – Provincial Distribution

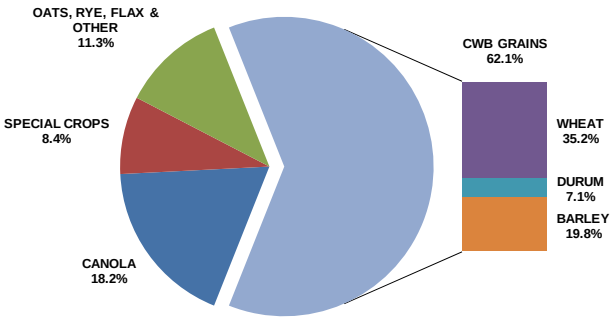


And while British Columbia reported a 57.3% increase in production, its harvest continued to rank as the smallest under the GMP, totalling just over 0.2 million tonnes.[3]

Notwithstanding the broader provincial declines highlighted above, most grains registered significant upturns in production. In fact, there were twice as many grains posting year-over-year increases as there were reporting declines. However, a 2.6-million-tonne net decrease in CWB grain production more than offset the 1.9-million-tonne gain posted by non-CWB grains.

As regards CWB-grain production, the results were heavily influenced by a 23.0% decline in the amount of wheat harvested, which fell to 14.7 million tonnes from 19.1 million tonnes a year earlier. Helping to counteract this loss, however, were the net increases posted by barley, which rose by 1.4 million tonnes to 10.3 million tonnes, and durum, which climbed by 0.3 million tonnes to 3.7 million tonnes.

Figure 3: Crop Production – 2007-08 Crop Year



With 9.5 million tonnes of production, canola accounted for slightly less than half of the 19.8 million tonnes of non-CWB grains harvested in the 2007-08 crop year.[4] Moreover, a 1.0-million-tonne rise in the size of the canola crop accounted for a little more than half of the 1.9-million-tonne increase in non-CWB grain production. This expansion was also supported by substantive increases in the production of oats and dry peas, which grew by 0.9 million tonnes and 0.4 million tonnes respectively. These gains, however, were contained by reductions in the size of the rye and flaxseed crops, which declined by 43.0% and 35.9% respectively.

[2] Under the GMP, Saskatchewan has typically accounted for about half of the grain produced in western Canada. The province's share for the 2007-08 crop year was 48.6%, which represented a modest gain over the previous crop year's 48.2% share.

[3] With an annual average of about 0.3 million tonnes, British Columbia is the smallest grain-producing province in western Canada. At 208,600 tonnes, production for the 2007-08 crop year proved to be about 40% less than the GMP's record high of 327,600 tonnes, which was set in the 2003-04 crop year.

[4] 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.

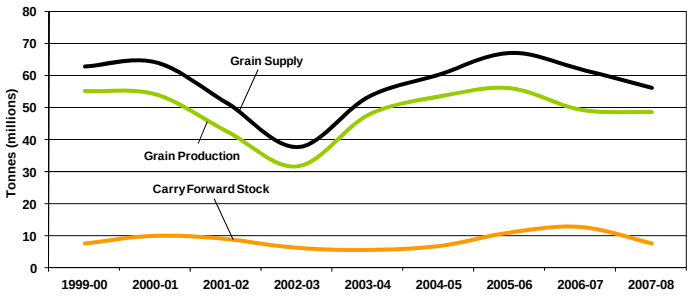
As was the case with most non-CWB grains, special-crop production showed a marked increase in the 2007-08 crop year, climbing by 11.8% to 4.4 million tonnes.[5] Much of this 0.5-million-tonne gain was derived from a 16.5% increase in dry pea production, which accounted for about two-thirds of the overall tonnage. The contributions from other commodities was more mixed, and ranged from a reduction of 68.9% on buckwheat to an increase of 37.7% on chickpeas. [See Table 1A-3 in Appendix 4.]

Carry-Forward Stock and Western Canadian Grain Supply

Although grain production has the most direct impact on the overall grain supply, the volume held over in inventory from the previous crop year also has a bearing. In fact, these carry-forward stocks typically account for about one-sixth of the grain supply.[6] 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 the first few years 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 a low of 5.5 million tonnes at the close of the 2002-03 crop year.[7] In much the same way, these stocks increased as grain production itself climbed over the next three crop years.

Figure 4: Western Canadian Grain Supply



With grain production under the GMP having fallen by 12.0% in the 2006-07 crop year, the stocks held over for the 2007-08 crop year also declined sharply. Totalling some 7.5 million tonnes, these stocks proved to be 40.0% less than those carried forward a year earlier.[8] When combined with 48.5 million tonnes of new production, the overall grain supply for the 2007-08 crop year totalled 56.0 million tonnes, which constituted a decrease of 9.3% from the previous crop year's 61.7 million tonnes. [See Table 1A-2 in Appendix 4.]

Although decreases in carry-forward stocks were the norm, the changes recorded for individual provinces and grains varied widely. On a provincial basis, these reductions ranged from a somewhat moderate 6.9% in Manitoba, to a much deeper 47.7% in Saskatchewan. Notwithstanding the effect of a 0.1-million-tonne reduction in Manitoba's carry-forward stocks, the reductions posted by Saskatchewan and Alberta had the largest overall impact, falling by 3.2 million tonnes and 1.6 million tonnes respectively. Declines in the quantity of CWB grain stocks had the greatest overall impact, with the barley carry-over falling by 1.8 million tonnes, durum by 1.5 million tonnes, and wheat by 0.8 million tonnes. On a combined basis, these three grains accounted for four-fifths of the total reduction in carry-forward stocks. Among the non-CWB grains, canola and

[5] For the purposes of the GMP, special crops are defined as including the following: dry peas; lentils; mustard seed; canary seed; chickpeas; dry beans; sunflower seed; safflower seed; buckwheat; and fababeans. An often referenced subset of special crops, known as pulse crops, encompasses dry peas, lentils, chickpeas, dry beans and fababeans.

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

[7] This pattern can best be seen when gauging the decline in grain production against that of carry-forward stocks in the first four years of the GMP.

[8] Carry-forward stocks for the 2006-07 crop year reached a GMP record of 12.4 million tonnes. Rising prices played a key role in this build-up as many farmers chose to stockpile a larger proportion of their lower-quality grain in the hopes of being able to sell it at a better price in the fall of 2006.

oat stocks accounted for the largest reductions, falling by about 0.4 million tonnes and 0.3 million tonnes respectively.

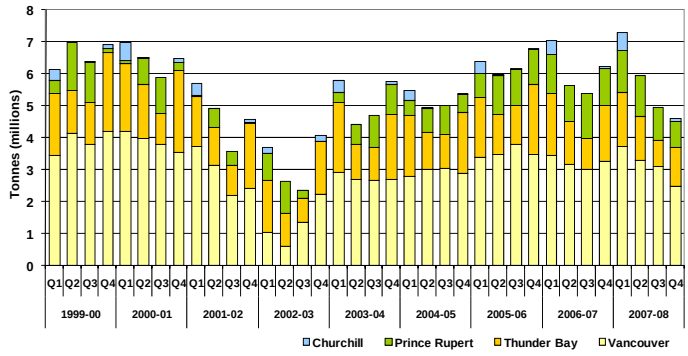
1.2 Rail Traffic *[Measurement Subseries 1B]*

The amount of regulated grain moved by rail to western Canadian ports decreased by 6.4% in the 2007-08 crop year, with the total volume having fallen to 22.8 million tonnes from 24.3 million tonnes the year before.[9] This decrease, however, was well below the previously noted 9.3% reduction in the grain supply. [See Tables 1B-1 through 1B-4 in Appendix 4.]

Origins by Province

The general decline in provincial grain supplies was reflected in the amount of grain each originated as railway shipments. The most substantive impact arose from a reduction in the volume of grain shipped from Saskatchewan, which fell by 14.1% to 10.6 million tonnes. Shipments from Manitoba also fell, albeit just by 0.2%, to 2.5 million tonnes. In comparison, movements from Alberta posted a modest increase for the crop year, rising by 1.4% to 9.4 million tonnes. Although rail shipments from origins in British Columbia amounted to just under 0.3 million tonnes, these increased by a more substantive 35.7%.[10]

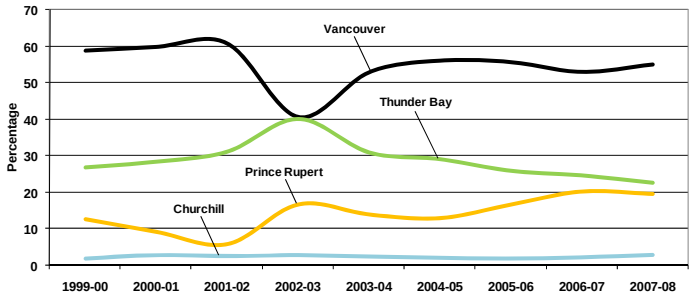
Figure 5: Railway Grain Volumes



Destination Ports

The port of Vancouver remained the principal export destination for western Canadian grain in the 2007-08 crop year. Traffic to Vancouver totalled 12.5 million tonnes, a reduction of 2.7% from the 12.9 million tonnes that were directed there a year earlier. Notwithstanding this decline, the port's share of total rail shipments actually increased, rising to 55.1% from 53.0% the year previous.[11] This was due in large measure to the first downturn in shipments to Prince Rupert in three years. Total shipments to this northern port amounted to 4.5 million tonnes, which

Figure 6: Railway Grain Volumes – Destination Port



[9] 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.

[10] Under the GMP, statistics relating to the railway movement of grain in western Canada centre on the volume handled by federally regulated carriers. With CN's acquisition of BC Rail in the closing days of the 2003-04 crop year, the volumes that would have moved under provincial jurisdiction previously became subject to federal regulation, and were incorporated into CN's overall traffic statistics.

[11] Vancouver's share of the total railway volume fell to its lowest level under the GMP, 40.6%, in the 2002-03 crop year. This was largely due to a labour disruption that effectively prevented grain from moving through the port of Vancouver for much of that crop year. Although the port's share has since rebounded, it still remains below the high watermark set in the 2001-02 crop year, when the port received 60.8% of railway grain shipments.

constituted a reduction of 9.4% from the previous crop year's GMP record of 4.9 million tonnes. At the same time its overall share also fell, to 19.6% from the GMP record of 20.3% it secured a year earlier.

Like Prince Rupert, the volume and share of traffic directed to Thunder Bay declined in the face of the advances made by Vancouver. Although Thunder Bay still ranked as the second largest export destination within the GHTS, its railway volume decreased by 13.9%, to 5.1 million tonnes from 6.0 million tonnes a year earlier, while its overall share fell to 22.6% from 24.6%. Running counter to this trend was the port of Churchill, where the shipment of 0.6 million tonnes of grain produced a 19.6% increase in volume, and a 0.6-percentage-point gain in share, which tied its previous GMP record of 2.7%.[12]

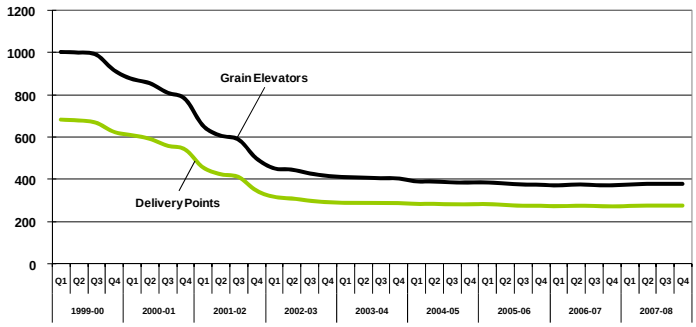
Notwithstanding these recent year-over-year changes, it is worth noting that the roles accorded to each of the ports has begun to change in the face of the gains made by Prince Rupert over the course of the last three crop years. There can be little doubt that the upturn in the share of traffic destined to Prince Rupert is the product of more competitive railway freight rates and a better car supply within this corridor. Moreover, these forces are having a measurable impact on the ports of Vancouver and Thunder Bay.

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

The decline in the number of licensed country elevators in western Canada remains one of the most visible facets of the GHTS's continuing evolution. At the outset of the 1999-2000 crop year, there were 1,004 licensed primary and process elevators on the prairies. By the time the 2007-08 crop year began eight years later, that number had already fallen by 63.0% to 371.[13] [See Tables 1C-1, and 1C-2 in Appendix 4.]

In fact, during the first three years of the GMP, the rate at which these facilities were declining was rapidly accelerating. A total of 87 facilities were removed from the network in its first year, followed by 136 in the second, and 281 in the third. However, this pace clearly showed signs of relaxing when only 84 elevators were removed from the system in the 2002-03 crop year. This deceleration was affirmed with very modest elevator reductions in each of the following four crop years: twelve in the 2003-04 crop year; 19 in the 2004-05 crop year; eleven in the 2005-06 crop year; and three in the 2006-07 crop year.

Figure 7: Licensed Grain Elevators and Delivery Points



The 2007-08 crop year actually ran counter to this trend, with seven facilities being added to the system. Although this represented an increase of just 0.6%, the total number of licensed elevators in western Canada was raised to 378. This cut the total reduction in elevator facilities recorded since the beginning of the GMP to 626, or 62.4%. Notwithstanding this modest variation, the limited scope of the changes recorded in the last five crop years continues to suggest that the grain companies have effectively concluded their elevator rationalization programs.

The same is true of grain delivery points, which have been declining in conjunction with the reduction in licensed elevators. By the close of the 2006-07 crop year the scope of this network had been reduced by 60.3%, to 272 delivery points from the 685 that had been in place at the beginning of the GMP. The 2007-08

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

[13] 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.

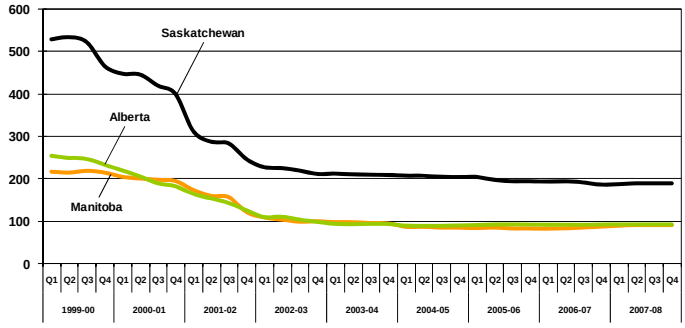
crop year, however, saw four delivery points added back to the system, thereby increasing the overall number by 1.5%, to 276.[14] This served to trim the reduction in delivery points over the course of the last nine crop years to 59.7%. This means that all of the licensed elevators in some 409 communities have now been closed.

Since the beginning of the GMP, grain deliveries have been concentrated at a comparatively small number of delivery points. In any given crop year, about one-third of the GHTS's active delivery points accounted for 80% of the producers' grain deliveries. In the 2006-07 crop year – the last for which statistics are available – this amounted to 97, or 40.1%, of the GHTS's 242 active grain delivery points. Proportionally, although this share proved somewhat greater than the 33.5% recorded in the GMP's base year, it remains consistent with the more elevated values observed since the 2003-04 crop year. To a large extent, this wider distribution is correlated with the general reduction in the size of the elevator network itself, which resulted in more grain being delivered to secondary locations. [See Table 1C-13 in Appendix 4.]

Provincial Distribution

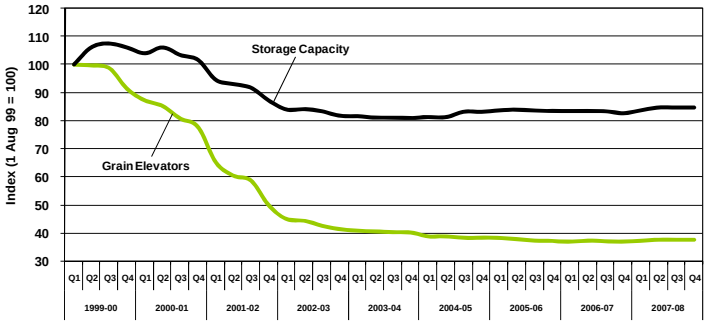
With the close of the 2007-08 crop year, 188 of western Canada's licensed elevators were situated in Saskatchewan. This constituted 49.7% of the system's active total, and proved to be consistent with the proportion held by the province since the beginning of the GMP. This was followed in succession by Alberta and Manitoba, whose respective 92 and 90 elevators each accounted for about another one-quarter. The GHTS's remaining eight facilities were divided between British Columbia and Ontario.[15]

Figure 8: Licensed Grain Elevators – Provincial Distribution



In addition to posting the greatest numerical reduction in licensed facilities, Saskatchewan's closure of 339 elevators also produced the largest relative decline since the beginning of the GMP, 64.3%. However, this proved little different from both the 63.5%, or 160-elevator, reduction registered in Alberta and the 58.3%, or 126-elevator, decline posted in Manitoba. These similarities highlight the fact that elevator rationalization activities have been broad based, and that they have not unduly targeted the facilities of any one province.

Figure 9: Relative Change in Grain Elevators and Storage Capacity



Elevator Storage Capacity

Despite a 62.4% decline in the overall number of elevators, the GHTS's storage capacity fell by a comparatively modest 15.3% in this same period. As outlined in the Monitor's previous reports, this lower rate of decline simply reflects the fact that while grain companies were methodically closing their less-efficient smaller elevators, they were also expanding and

[14] The addition of delivery points referenced here stems from the reactivation of previously closed elevators. Many of the elevators that have reopened since the beginning of the GMP are stand-alone entities, frequently dealing in specialized commodities such as pulses or malting barley. The resumption of grain delivery to these elevators should not be construed as meaning that grain had never before been delivered to these railway points.

[15] There were eight licensed elevators located outside the provinces of Manitoba, Saskatchewan, and Alberta as at 31 July 2008. Specifically, these included one in Ontario, and seven in British Columbia. Changes in the elevator infrastructure of these provinces are generally not highlighted given their limited influence, but are included in the wider statistics pertaining to the GHTS as a whole.

opening larger ones. In fact, during the first year of the GMP, the capacity added through investment in larger facilities actually outpaced that removed by the closure of smaller elevators. This initially produced a 7.4% increase in storage capacity, which climbed from the benchmark level of 7.0 million tonnes at the beginning of the GMP to a peak of 7.5 million tonnes in the third quarter of the 1999-2000 crop year.

Over the course of the next four crop years, however, the system's storage capacity fell largely in concert with the general decline in elevators, dropping at a rate of about 3,500 tonnes per facility closed. By the end of the 2003-04 crop year, total GHTS storage capacity had fallen by 19.0% to 5.7 million tonnes. This trend was temporarily reversed in the 2004-05 and 2005-06 crop years when total storage capacity increased by 157,000 tonnes and 25,200 tonnes respectively.[16] Following another reduction of 112,400 tonnes in the 2006-07 crop year, the GHTS's overall storage capacity was left standing at 5.8 million tonnes.

The opening of several previously closed elevators in the 2007-08 crop year, along with an expansion in the storage capacity of others, resulted in another 144,300 tonnes of storage capacity being added to the system. Although this gain amounted to just 2.5%, it effectively raised the system's total storage capacity to its highest level in six years, almost 6.0 million tonnes.

Facility Class

For comparative purposes, the GMP groups elevators into four classes. These classes are based on the loading capability of each facility, which is in turn defined by the number of car spots each possesses. Those with less than 25 car spots are deemed to be Class A facilities; those with 25-49, Class B; those with 50-99, Class C; and those with 100 or more, Class D.[17] 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 nine crop years. The most striking aspect of this change has been the 80.9% decline in the number of Class A facilities, which dropped to 135 from 705, and the 62.8% reduction in Class B facilities, which fell to 67 from 180. At the same time, the trade's growing use of high-throughput elevators proved equally pronounced: Class C facilities increased by 14.8%, to 93 from 81; and Class D facilities increased by 118.4%, to 83 from 38.

Clearly, these statistics illustrate that the primary target in elevator rationalization has been the conventional wood-crib

Figure 10: Licensed Grain Elevators – Facility Class

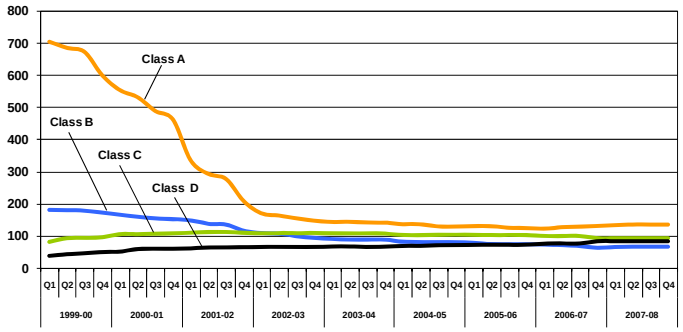
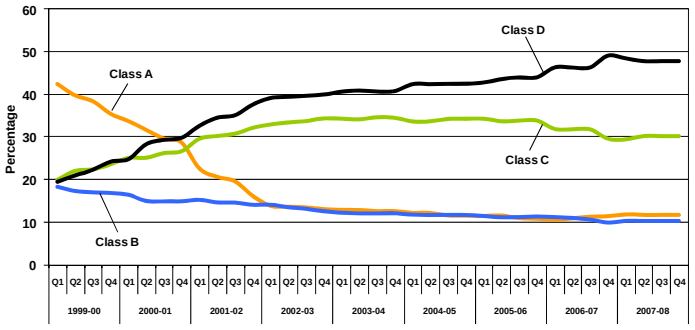


Figure 11: Share of Storage Capacity – Facility Class



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

[17] 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.

facility. Of the 847 elevator closures recorded since the beginning of the GMP, 658 related to the shutdown of Class A facilities.[18] 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, they were not as generous as those accorded shipments from high-throughput elevators. Moreover, these discounts were later progressively reduced and eliminated.[19] As a result, over the course of the past nine crop years, a total of 128 Class B facilities also closed. Together, Class A and B facilities account for 92.8% of all recorded elevator closures. [See Tables 1C-10 through 1C-12 in Appendix 4.]

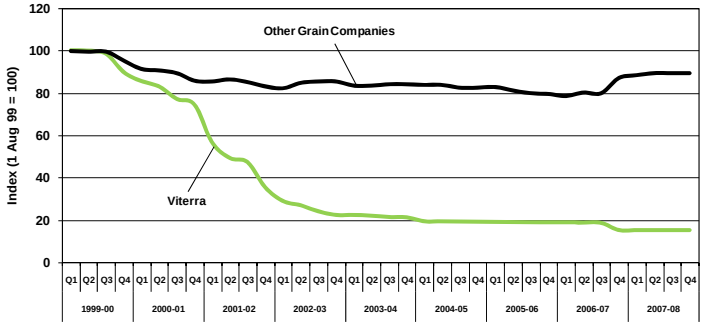
In contrast to their share of elevator closures, only 55.2% of the 221 elevators opened during this period were Class A and B facilities.[20] This differential calls attention to the fact that high-throughput facilities accounted for a much greater proportion of elevator openings than closures, 44.8% versus 7.2% 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 2007-08 crop year, high-throughput facilities accounted for 46.6% of all elevators, and 78.0% of the system's overall storage capacity. These values differ considerably from the 11.9% and 39.4% shares they respectively held at the beginning of the GMP. [See Tables 1C-7 through 1C-9 in Appendix 4.]

When taking into account all facility classes, the number of elevators having the ability to load cars in blocks of 25 or more can be seen to have fallen by 18.7% over the course of the past nine years, to 243 from 299, while its associated storage capacity has actually increased by 29.8%, to 5.3 million tonnes from 4.1 million tonnes.[21] More importantly, by the end of the 2007-08 crop year, these facilities accounted for 64.3% of the system's elevators, and 88.3% of its storage capacity. As was the case with high-throughput elevators, these stakes are significantly greater than the 29.8% and 57.7% shares respectively held at the beginning of the GMP. [See Tables 1C-4 through 1C-6 in Appendix 4.]

Grain Companies

For a number of grain companies, the key to improving the economic efficiency of their grain-gathering networks has been to rationalize their elevator assets. With the cornerstone of this strategy being the replacement of smaller elevators by larger high-throughput facilities, it follows that this would better lend itself to those grain companies having the largest physical networks. To be sure, the largest grain companies in existence at the beginning of the GMP proved to be the primary practitioners of elevator rationalization. In fact, the 594 elevator closures posted by Viterra Inc. accounts for 94.9% of the 626-

Figure 12: Licensed Grain Elevators – Grain Company



[18] 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, later reopened by another.

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

[20] Many of the 122 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.

[21] The inclusion of Class B facilities, which declined from 180 to 67 during this period, effectively counters the smaller numerical increase in Class C and D elevators.

elevator decline in GHTS elevators recorded over the last nine crop years.[22]

Although the first two years of the GMP witnessed the closure of one quarter of the company's 700 heritage elevators, the largest reduction came a year later when Viterra's predecessor companies culled 273 facilities from its remaining network of 520 elevators. And while a further 113-elevator decline was noted over the course of the 2002-03 through 2004-05 crop years, the consecutively smaller scope of the annual reductions strongly suggested that the rationalization process was clearly coming to an end.[23] Moreover, were it not for the agreements Saskatchewan Wheat Pool struck with James Richardson International Limited and Cargill Limited in order to gain their support for its acquisition of Agricore United, it seems unlikely that Viterra's facility count would have fallen much below 130.[24] Nevertheless, the resulting transfer of 24 Viterra elevators to these firms reduced the company's network to 106 by the end of the 2006-07 crop year. With no changes having been recorded in the 2007-08 crop year, the scope of the reductions posted by Viterra was held to 84.9%.

Amongst the other large grain companies, Pioneer Grain and Cargill posted the next deepest cuts in the elevator network. However, with reductions of 40.0% and 25.4% respectively, their rationalization efforts were notably less than that presented by Viterra. Moreover, these values were tempered as a result of the elevator acquisitions made by these two companies in the wake of Saskatchewan Wheat Pool's purchase of Agricore United.[25] Paterson Grain and Parrish and Heimbecker followed suit with reductions of 24.0% and 19.2% respectively.

Not all of these reductions marked a permanent facility closure. In a number of instances, the elevators closed by the larger grain companies were sold, sometimes re-emerging 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 actually increased by 71.4% in the last nine crop years, climbing to 96 from 56.[27]

When taken together for comparative purposes, it can be seen that the collective number of elevators operated by companies other than Viterra has fallen by only 10.5%, to 272 from 304, over the course of the GMP. What is more, in the face of the deeper cuts made by Viterra, these companies now account for over two-thirds of the GHTS's total elevators and associated storage capacity.[28] Despite this reversal of position, Viterra remains the dominant handler of grain in western Canada. And while the company has built up the efficiency of its remaining elevator network, it has been equally clear that its smaller rivals have also been adept at adjusting to these changes in the competitive environment. [See Table 1C-3 in Appendix 4]

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[22] Viterra Inc. was formed in 2007 following Saskatchewan Wheat Pool's purchase of Agricore United, which was itself a product of a merger between Agricore Cooperative Ltd. and United Grain Growers Limited in 2001. Given this heritage, Viterra Inc. is the corporate successor to the three largest grain companies in existence at the beginning of the GMP. The 594 closures cited here represent the consolidated net reduction in the number of elevators operated by Viterra Inc. as well as its predecessor companies, which had a combined network of 700 elevators at the outset of the GMP.

[23] The elevator reductions posted by Viterra's predecessor companies in the 2002-03, 2003-04 and 2004-5 crop years amounted to 91, eight and four respectively.

[24] Prior to the formation of Viterra Inc., Saskatchewan Wheat Pool and Agricore United had a combined total of 130 licensed country elevators. The agreement to sell 24 of these to James Richardson International Ltd. and Cargill Limited effectively resulted in a remaining network comprised of 106 facilities.

[25] Pioneer Grain acquired 15 of the 24 elevators sold by SWP while Cargill purchased the other nine.

[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 the independent grain companies cited here now operate these elevators.

[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, seven of the 96 elevators cited here are operated through subsidiaries of US-based Archer Daniels Midland, one of the largest agricultural processors in the world.

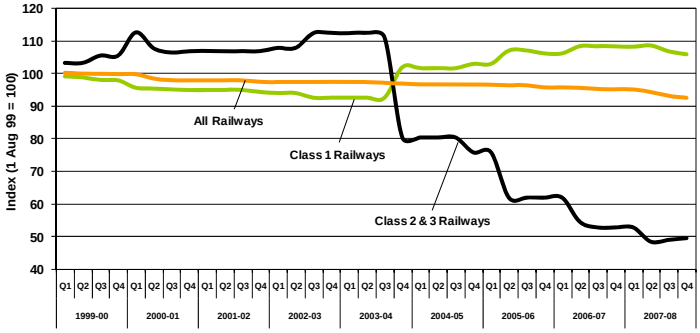
[28] By the end of the 2006-07 crop year, grain companies other than Viterra accounted for 72.0% of the elevators, and 68.1% of the associated storage capacity. This marks a significant increase over the 30.3% and 41.7% shares respectively held at the outset of the GMP. The shares attributable to Viterra have fallen correspondingly in this same period to 28.0% of the elevators, and 31.9% of the associated storage capacity.

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] The dramatic change to the makeup of the GHTS's elevator system contrasts sharply with the more modest one posted by the railway network. By the end of the 2006-07 crop year, the net reduction in western Canadian railway infrastructure amounted to just 5.0%, with the network's total mileage reduced to 18,495.3 route-miles overall. The largest share of this 972.9-route-mile reduction came from the abandonment of 817.0 route-miles of light-density, grain-dependent branch lines.

At the same time, the remaining network showed significant compositional changes. Much of this stemmed from the transfer by CN and CP of various branch line operations to a host of new shortline railways. This practice, which began in the mid 1990s, was one of the cornerstones in an industry restructuring that resulted in slightly more than one-quarter of the railway network in western Canada being operated by smaller regional and shortline carriers.

Figure 13: Relative Change in Route-Miles – Railway Infrastructure



However, the subsequent decline in the financial health of many of these shortlines prompted several of them into either selling or rationalizing their own operations. In most instances, this has resulted in their reverting back to the control of the Class 1 carrier that had spun them off in the first place. Perhaps the most vivid example of this came in January 2006 when RailAmerica Inc. sold most of its western Canadian holdings back to CN.[30] This was followed by the reversion of the Savage Alberta Railway to CN control later that same year. Not surprisingly, these sales significantly realigned the holdings of the Class 1 and non-Class 1 railways over the course of the last four years. By the end of the 2006-07 crop year, the networks directly managed by CN and CP had increased to 16,047.8 route-miles; a gain of 8.2% over the 14,827.9 route-miles they held at the beginning of the GMP. In comparison, the network operated by western Canada's Class 2 and 3 carriers declined by 47.3%, from 4,640.3 route-miles to 2,447.5 route-miles.

The second quarter of the 2007-08 crop year produced yet another such reacquisition when CN purchased the Athabasca Northern Railway (ANY) from its Manitoba-based parent, Cando Contracting Ltd., in December 2007 for $25 million.[31] As was the case with the line's previous operator, RailAmerica Inc., which had leased the 203.5-route-mile line from CN before withdrawing service in 2000, the ANY had struggled to make the operation financially viable.[32] Although the railway's traffic volume had increased five-fold as a result of its

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[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] The sale, valued at $26 million, encompassed 702.8 route-miles of railway infrastructure grouped under three separate operations: the Central Western Railway; the Lakeland and Waterways Railway; and the Mackenzie Northern Railway.

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

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

efforts to market its services to the oil-sands industry based in Fort McMurray, the physical condition of the infrastructure had deteriorated significantly.[33] Moreover, the carrier reported that it could not afford the $125-million investment in plant improvements that were needed to keep the line in service. As a result, in June 2007 the railway's owner filed for abandonment with an eye towards withdrawing service by year's end. CN's decision to purchase the ANY proved to have been an eleventh-hour one, which came only in response to a long-term traffic guarantee negotiated with concerned shippers.[34]

And while the sale of the ANY meant that no other freight-based shortline was left operating in Alberta, two new shortline entities emerged in neighbouring Saskatchewan and Manitoba. In mid April 2008 Torch River Rail Inc. (TRR) formally assumed ownership of a 27.8 route-mile section of CP's White Fox subdivision. The formation of the TRR marked the final act in a drama that began when area farmers raised objection to the closure of producer-car loading sites situated along the grain-dependent branch line early in the 2003-04 crop year.[35] As was the case in the formation of other shortline operations within the province, the transfer was the product of a cooperative effort between a number of concerned local farmers, organizations and governments. The purchase was financed in large part by funds raised from the Rural Municipality of Torch River, the towns of Nipawin, Choiceland and White Fox, as well as over forty other shareholders. The TRR was reportedly working towards reintroducing railway service along the line by the beginning of the 2008-09 crop year.

The closing weeks of the 2007-08 crop year also brought forward an effort to save another 80-route-mile section of CP track stretching from Killarney to Morden in southern Manitoba. However, this effort on the part of still more concerned residents and local governments proved to have come far too late in the discontinuance process. To be sure, CP had formally abandoned the line on 1 May 2008, and was actively engaged in salvaging the track materials. In fact, the reclamation of these materials had already created an 18-mile gap at the very centre of the branch line this group wanted to buy. Nevertheless, the proponents of the Boundary Trail Railway (BTR) persisted in their drive to raise the funds needed to purchase what remained. In the end, however, they were only partially successful, and settled for acquiring what had effectively become the easternmost remnant of this abandoned branch line.[36] The BTR has indicated that it plans to reinstate service over this 23.2-route-mile section, which extended from Manitou to Morden, sometime in the 2008-09 crop year.

These transfers, combined with the abandonment of another 517.3 route-miles of infrastructure, had the effect of further tilting the balance between the Class 1 and non-Class-1 carriers. Although railway infrastructure under CN and CP management fell to 15,683.0 route-miles by the end of the 2007-08 crop year, their overall share of the western Canadian total rose to 87.2%. This proved to be significantly greater than the 76.2% share they had held at the beginning of the GMP. In comparison, the network operated by the remaining Class 2 and 3 carriers shrank by another 6.2%, falling to 2,295.0 route-miles in the same period.[37] Moreover, their share of the infrastructure had been reduced by half, declining to 12.8% as compared to 23.8% nine years earlier. [See Table 1D-1 in Appendix 4.]

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company's newly created Athabasca Northern Railway (ANY) reinstituted service over the line shortly afterwards. The ANY continued to interchange traffic with what remained of the LWR until RailAmerica Inc. sold its railway holdings in Alberta back to CN in January 2006.

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

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

[35] A reduction in CP rail service on the White Fox subdivision had been criticized by area farmers who launched a formal level-of-service complaint with the Canadian Transportation Agency (CTA) early in the 2003-04 crop year. The complaint centred on an alleged failure by the carrier to supply cars for producer loading at three specific locations along the White Fox subdivision. CP had de-listed these sites at the end of the 2002-03 crop year due to declining volumes, suggesting instead that producer-car loading could easily be accommodated at Nipawin. Following mediation efforts by the CTA, CP reportedly committed itself to servicing two of the sites through to the end of the 2003-04 crop year as long as producers respected a 25-car minimum loading requirement. CP identified the branch line as a discontinuance candidate in August 2004.

[36] The section of track cited here was formerly a part of CP's La Riviere subdivision, and extended from mileage point 80.3 to mileage point 103.5.

[37] The total number of route-miles operated by non-Class-1 carriers reached a GMP low of 2,244.0 at the end of the second quarter. However, the subsequent establishment of two new shortlines, Torch River Rail Inc. and the Boundary Trail Railway, resulted in a modest increase in the overall size of this network by the end of the 2007-08 crop year.

Notwithstanding the recent creation of the TRR and the BTR, these broader declines do not augur well for the future of the shortline industry in western Canada. Although gains in producer-car loading has helped mitigate the adverse impact of local elevator closures, the tonnage originated by shortline carriers has clearly been faltering in comparison to that of the Class 1 carriers. Moreover, most of these carriers have been unable to build the volumes needed to sustain them financially. Those with a significant interest in moving grain have also proved equally incapable of reshaping the economics that gave rise to the elevator rationalization strategies of the grain companies in the first place. It remains to be seen whether or not these smaller carriers can continue to survive, or if further retrenchment will ensue.

Branch Line Discontinuances

A total of 517.3 route miles of infrastructure were removed from the railway system in the 2007-08 crop year. This proved to be the largest single-year reduction recorded since the beginning of the GMP, and was derived predominantly from the abandonment of 403.1 route-miles of track in Saskatchewan. In fact, 6.7% of the province's total route-miles were shed during this period. A full four-fifths of these abandonments were registered by CN, which closed a combined 145.2 route-miles of its Lewvan and Northgate subdivisions early in the second quarter, and another 178.9 route-miles of its Amiens, Robinhood and Turtleford subdivisions in the third.[38] The remaining 79.0 route-miles of the track abandoned in that province came from CP's partial closure of its Bulyea and Outllook subdivisions.[39]

Figure 14: Relative Change in Local Elevators – Railway Class

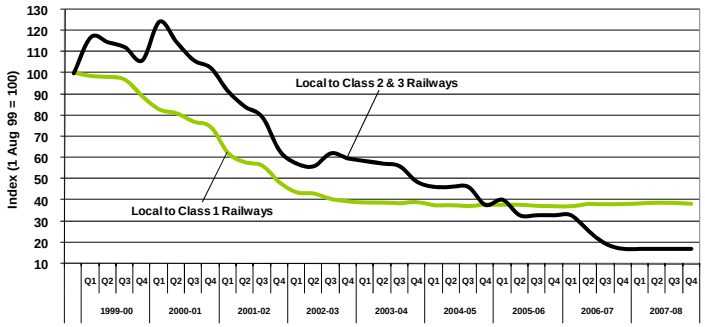
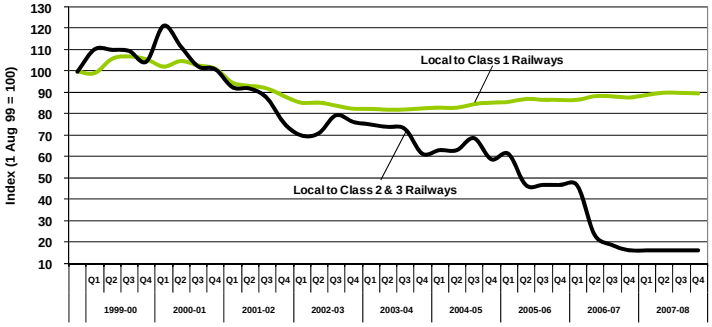


Figure 15: Relative Change in Storage Capacity – Railway Class



A further 114.2 route-miles of railway infrastructure in Manitoba was lost when CP abandoned sections of its Arborg, La Riviere and Napinka subdivisions in the fourth quarter.[40] These actions enlarged the overall reduction in western Canadian railway infrastructure since the beginning of the GMP to 1,490.2 route-miles, or 7.7%. And while the abandonments made in the last crop year accounted for about one-third of this total, the network plans of CN and CP continue to show over 700 route-miles of railway infrastructure still being targeted for discontinuance in the next three years.[41] Even if acted upon, the full scope of the potential network reduction will fall well short of the 62.4% decline already recorded in licensed elevators.

[38] The abandonments noted here for the second quarter encompassed 106.8 route-miles of CN's Lewvan subdivision and 38.4 route-miles of its Northgate subdivision. Although both sections had effectively been "retired in place" for more than a decade, they were formally added to the company's Three Year Network Plan as discontinuation candidates in October 2005. The abandonments posted in the third quarter comprised 25.9 route-miles of the company's Amiens subdivision; 69.6 route-miles of its Robinhood subdivision; and 83.4 route-miles of its Turtleford subdivision. These latter branch lines were also earmarked for discontinuance in October 2005 following the financial collapse of the Prairie Alliance for the Future, which had briefly leased them from CN.

[39] CP abandoned 24.5 route-miles of its Outllook subdivision in the first quarter, followed by another 54.5 route-miles of its Bulyea subdivision early in the third.

[40] The fourth-quarter abandonments made by CP encompassed 57.7 route-miles of the company's Arborg subdivision; 7.5 route-miles of its La Riviere subdivision; and 49.0 route-miles of its Napinka subdivision.

[41] About 70% of the route-miles targeted for discontinuance at the end of July 2008 were attributable to CP, with the remaining 30% having been earmarked by CN.

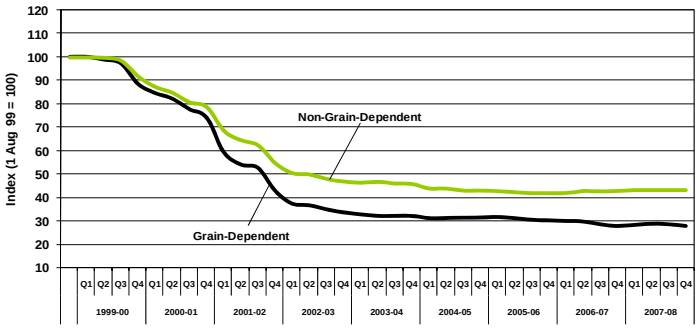
Local Elevators

As discussed earlier, while the railway network has changed comparatively little over the course of the past nine crop years, the elevators it serves have declined significantly. In broad terms, these facilities have decreased by 63.5% in number, to 357 from 979, and by 15.4% in associated storage capacity, to 5.9 million tonnes from 6.9 million tonnes.[42]

Moreover, the collapse of several shortline railways has widened the differential between the decline in elevators tied to the Class 1 railways and those affiliated with the smaller non-Class 1 railways. Those local to Class 1 carriers fell by 61.8%, to 343 from 897, while those associated with the non-Class 1 carriers declined by 82.9%, to 14 from 82. This differential proved even more significant when gauging the decline in associated storage capacity: 10.3% in the case of elevators local to Class 1 carriers versus 83.9% for those tied to non-Class 1 carriers. Even without these recent shifts, it has been clear for some time that the grain companies have been investing in the facilities served by CN and CP rather than those served by the shortlines. To a large extent, this is reflected in the industry's decision to situate virtually all of its high-throughput elevators along the primary routes of both major railways.[43] [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, such as the Southern Manitoba Railway, Red Coat Road and Rail, and the Great Western Railway. The elevator network that these carriers served has, however, shrunk considerably.

Figure 16: Relative Change in Local Elevators – Railway Line Class



Grain-Dependent Network

Differing rates of decline are also evident between facilities local to the grain-dependent, and non-grain-dependent, railway networks.[44] Elevators situated along the grain-dependent network fell by 72.1% over the course of the past nine crop years, to 117 from 420. In the case of those situated along the non-grain-dependent network, the decline was a lesser 57.1%, having fallen to 240 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 for the period reached a record 266.

The rate of decline for both networks has, however, substantially abated over the course of the last five crop years, largely in a reflection of the broader slowdown discussed previously. In fact, the number of elevators tied to the non-grain-dependent network actually increased in each of the last two crop years, albeit by just seven in total, or 3.0%. By comparison, the facilities served by the grain-dependent network continued to decline, dropping by a further ten in number, or 7.9%.

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

[43] As at 31 July 2008 a total of 172, or 97.7%, of the GHTS's 176 high-throughput elevators were served directly by CN and CP.

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

Traffic Volumes

The composition of the traffic moved by the GHTS continues to reflect the changes that have been made in both the elevator and railway networks. In the 2007-08 crop year, the tonnage originated on the remaining non-grain-dependent network decreased by 7.8%, to 15.4 million tonnes from 16.7 million tonnes a year earlier. At the same time, traffic originating at points on the remaining grain-dependent network decreased by 4.9%, to 6.6 million tonnes from 7.0 million tonnes.

Moreover, the gap in real originations that had opened between the two networks five years earlier has widened. With the close of the 2007-08 crop year, the tonnage forwarded from points along the non-grain-dependent network had fallen by 9.1% from what had been moved in the GMP's base year. In comparison, the volume originated by the grain-dependent network had declined by 23.5%. As a consequence, the non-grain-dependent network's share of the total grain volume has climbed to 69.9 from the GMP's base year value of 66.2%.[45] [See Table 1D-2 in Appendix 4.]

Figure 17: Relative Change in Grain Volumes – Railway Line Class

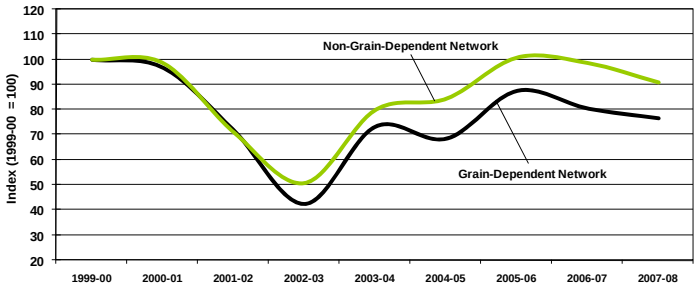
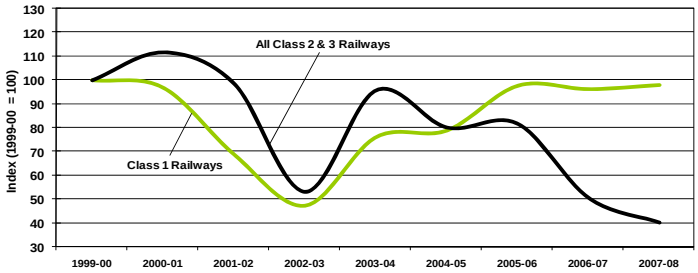


Figure 18: Relative Change in Grain Volumes – Railway Class



These same structural influences are also apparent in the relative volumes of grain originated by large and small carriers, which has become particularly pronounced as a result of CN's reacquisition of several shortline railways. Whereas the tonnage originated by the major carriers decreased by 5.2% in the 2007-08 crop year, the volume originated by the smaller carriers decreased by a much greater 45.4%. Although the creation and elimination of several shortline operations in recent years has obscured the real change in volume, the overall trend clearly shows the tonnage originated by shortline carriers to have declined far more precipitously than that of the Class 1 carriers since the beginning of the GMP, by 72.3% and 8.8% respectively. [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 number of licensed elevators served by them, which were reduced by 82.9% in the same period. In fact, the data indicates that increased producer-car loading has helped replace a significant portion of the grain volume that would otherwise have been lost following the closure of these licensed facilities.[46] This is evidenced by the fact that producer-car loadings accounted for an estimated 41.3% of the overall volume originated by shortline carriers in the 2007-08 crop year.[47] 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.

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

[46] 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.

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

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

At the close of the 2006-07 crop year, the licensed terminal elevator network in western Canada comprised a total of 16 facilities with an associated storage capacity of 2.6 million tonnes. These values proved only marginally greater than those of the GMP's base year, which were benchmarked at 14 elevators and 2.6 million tonnes of storage capacity.[48] 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.]

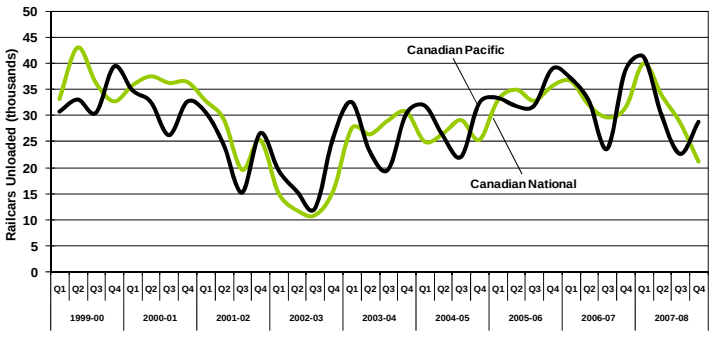
And while the scope of this network had not changed in several years, there had still been a number of significant changes in terminal ownership brought about by the various corporate mergers and acquisitions witnessed under the GMP.[49] The first significant alteration to the makeup of this network came in January 2008 when Viterra decided to close its 167,000-tonne "S" terminal in Thunder Bay.

The "S" terminal represented one of the two facilities still operated by Agricore United in Thunder Bay before the company was acquired by Saskatchewan Wheat Pool in 2007. As a result of the purchase, the emergent Viterra was endowed with a total of three terminal elevators at the port. In the corporate restructuring that followed, the company deemed the "S" terminal as surplus to its immediate commercial needs. The de-licensing of this terminal elevator served to reduce both the number of operating facilities in Thunder Bay, along with its associated storage capacity, by a factor of 12.5%.

The overall impact on the terminal elevator network was a 6.3% reduction in both the number of facilities and its storage capacity, which fell to 15 and 2.5 million tonnes respectively. It is worth noting that this also marked the first instance where the network's total storage capacity actually fell below the 2.6-million-tonne benchmark recorded at the beginning of the GMP.

Terminal Elevator Unloads

Figure 19: Relative Change in Terminal Unloads – CN and CP Origins



The number of covered hopper cars unloaded at terminal elevators during the 2007-08 crop year decreased by 6.1%, falling to 245,213 carloads from 261,204 carloads the year before.[50] Both CN and CP witnessed reductions in their respective handlings, although CN posted the smallest overall decrease. Whereas CP's handlings dropped by 7.5%, CN's handlings fell by a noticeably lesser 4.8%. This allowed CN to displace CP as the GHTS's largest grain carrier in the 2007-08 crop year, with overall shares of 50.2% versus 49.8% respectively.

These values, however, disguise some extraordinary changes in underlying traffic patterns. Of particular interest is the shift between movements to Vancouver and Prince Rupert. While movements to these two west coast ports were down by 3.9% in total, falling to 175,269 carloads as compared to 182,334 a year earlier,

[48] The expansion noted here in the licensed terminal elevator network is somewhat illusionary since the changes were not truly physical but, rather, the product of having licensed three pre-existing facilities and de-licensed another. The last actual physical addition to the network came in 1985 with the opening of Prince Rupert Grain Ltd.

[49] Those with the most direct bearing on terminal ownership involved the merger of Agricore Cooperative Ltd. and United Grain Growers Limited, which combined to form Agricore United in 2001, and the subsequent purchase of Agricore United by Saskatchewan Wheat Pool to form Viterra Inc. in 2007. More information on the specific changes in terminal elevator ownership can be found in section 1.5 of the Monitor's Annual Report for the 2006-07 crop year.

[50] 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.

Prince Rupert still reported near-record handlings of 51,427 carloads.[51] More importantly, while Prince Rupert's handlings fell by 5.9%, it was not inconsistent with the 3.0% decline posted by Vancouver. Much of the shift away from Vancouver can be attributed to the changes made by CN in its rate structure, which has increasingly favoured Prince Rupert with comparatively lower rates. In fact, the carrier's handlings into Prince Rupert exceeded those into Vancouver for a second consecutive year.[52]

CN's handlings into Vancouver for the 2007-08 crop year fell by 3.4%, to 47,959 carloads from 49,634 a year earlier. This reduction also served to marginally reduce CN's share of the total rail movements into Vancouver, which stood at 38.7% in comparison to 61.3% for CP. CN also posted a decline of 6.8% on its handlings into Thunder Bay, which fell to 18,934 carloads. Running counter to this were CN's unloads at Churchill, which rose by 1.5% to 4,801 carloads.[53]

In comparison, the reduction in CP's handlings, which fell by 7.5% to 122,092 carloads from 131,923 carloads a year earlier, proved more substantial. Interestingly, the carrier's handlings into Vancouver fell by just 2.8%, declining to 75,883 carloads. The greater reduction was posted by CP's shipments into Thunder Bay, which with 44,639 cars unloaded, were 15.3% below that handled the year before. Even so, CP remained the dominant carrier in this corridor, originating 70.2% of the 63,573 cars unloaded. This, however, denoted a modest reduction from the 72.2% 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. This could largely be explained by a distribution in crop production that tended to benefit CP rather than CN. Still, CN's more recent efforts to promote its Prince Rupert gateway appear to have done much to counter this. Through reduced freight rates and a better allocation of cars to the corridor, CN appears to be gaining market share – even if that gain has come at the expense of reduced handlings into Vancouver.

1.6 Summary Observations

Overall grain production for the 2007-08 crop year fell to 48.5 million tonnes, a decrease of 1.5% from the 49.3 million tonnes recorded a year earlier. This ranked as the smallest production volume in four years, and fell well below the 56.0 million tonnes set as a record under the GMP just two years earlier. Notwithstanding the less-than-ideal harvesting conditions, the crop that came off the field in the fall of 2007 still proved to be above average in terms of quality. The comparatively modest decrease in overall production was reflective of those posted by each of the major producing provinces. Notwithstanding these broader provincial declines, most grains registered significant upturns in production. Although there were twice as many grains posting increases as opposed to declines, a 2.6-million-tonne net decrease in CWB grain production more than offset the 1.9-million-tonne gain posted by non-CWB grains.

CWB-grain production felt the effects of a 4.4-million-tonne decline in the amount of wheat harvested, which fell to 14.7 million tonnes from 19.1 million tonnes a year earlier. Helping to counteract this loss, however, were the net increases posted by barley, which rose by 1.4 million tonnes to 10.3 million tonnes, and durum, which climbed by 0.3 million tonnes to 3.7 million tonnes. With 9.5 million tonnes of production, canola accounted for slightly less than half of the 19.8 million tonnes of non-CWB grains that were harvested. Moreover, a 1.0-million-tonne rise in the size of the canola crop accounted for a little more than half of the 1.9-million-tonne increase in non-CWB grain production. As was the case with most non-CWB grains, special-crop production showed a marked increase, climbing by 11.8% to 4.4 million tonnes. Much of this 0.5-million-tonne gain was derived from an increase in dry pea production, which accounted for about two-thirds of the overall tonnage.

When combined with 48.5 million tonnes of new production, the overall grain supply for the 2007-08 crop year totalled 56.0 million tonnes, which constituted a decrease of 9.3% from the previous crop year's 61.7 million

[51] A record 54,651 carloads were unloaded at Prince Rupert in the 2006-07 crop year.

[52] As a CN-served destination, movements to Prince Rupert from CP-served origins have been comparatively limited. With the exception of the 2002-03 crop year, where a labour disruption in Vancouver resulted in a substantial amount of western Canadian grain being directed to Prince Rupert, CP's handlings into Prince Rupert have effectively been eliminated. No CP-originated traffic was reported to have been unloaded at Prince Rupert during the course of the 2007-08 crop year.

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

tonnes. The amount of regulated grain moved by rail to western Canadian ports decreased by 6.4% in the 2007-08 crop year, with the total volume having fallen to 22.8 million tonnes from 24.3 million tonnes the year before. The port of Vancouver remained the principal export destination, although its volume fell by 2.7% to 12.5 million tonnes. Notwithstanding this decline, the port's share of total rail shipments actually increased, rising to 55.1% from 53.0% the year previous. This was due in large measure to the first downturn in shipments to Prince Rupert in three years, which fell by 9.4% to 4.5 million tonnes. Although Thunder Bay still ranked as the second largest export destination within the GHTS, its railway volume decreased by 13.9% to 5.1 million tonnes. Running counter to this was the port of Churchill, where the shipment of 0.6 million tonnes of grain produced a 19.6% increase in volume.

The decline in the number of licensed country elevators in western Canada remains one of the most visible facets of the GHTS's continuing evolution. At the outset of the 1999-2000 crop year, there were 1,004 licensed primary and process elevators on the prairies. By the close of the 2006-07 crop year this number had been reduced to just 371. The 2007-08 crop year actually saw seven facilities added to this system. Although this represented an increase of just 0.6%, the total number of licensed elevators in western Canada was raised to 378. Notwithstanding this modest variation, the limited scope of the changes recorded in the last five crop years continues to suggest that the grain companies have effectively concluded their elevator rationalization programs.

Despite a 62.4% decline in the overall number of elevators, the GHTS's storage capacity fell by a comparatively modest 15.3% in this same period. This lower rate of decline simply reflects the fact that while grain companies were methodically closing their less-efficient smaller elevators, they were also expanding and opening larger ones. By the end of the 2007-08 crop year, high-throughput facilities accounted for 46.6% of all elevators, and 78.0% of overall storage capacity. These values differ considerably from the 11.9% and 39.4% shares they respectively held at the beginning of the GMP. Much of this transformation came as a result of the initiatives taken by the forerunners of today's Viterra Inc., whose actions accounted for 94.9% of the net reduction in licensed elevators.

The dramatic changes to the makeup of the elevator system contrasts sharply with the more modest one posted by the railway network. During the first eight years of the GMP, the net reduction in western Canadian railway infrastructure amounted to just 5.0%, with the network's total mileage reduced to 18,495.3 route-miles overall. The largest share of this 972.9-route-mile reduction came from the abandonment of 817.0 route-miles of light-density, grain-dependent branch lines. Another 517.3 route-miles were removed in the 2007-08 crop year. This proved to be the largest single-year reduction recorded since the beginning of the GMP, with much of it derived from the abandonment of track in Saskatchewan. CN accounted for the majority of this, abandoning a total of 324.1 route-miles of infrastructure, while CP shed another 193.2 route-miles. These actions enlarged the overall reduction in western Canadian railway infrastructure since the beginning of the GMP to 1,490.2 route-miles, or 7.7%.

The composition of the traffic moved by the GHTS continued to reflect the changes that have been made in both the elevator and railway networks. Although the tonnage forwarded from points along the non-grain-dependent network had fallen by 9.1% from what had been moved nine years earlier, the volume originated by the grain-dependent network has declined by 23.5%. These same influences are also apparent in the relative volumes of grain originated by large and small carriers, which has become particularly pronounced as a result of CN's reacquisition of several shortline railways. The overall trend clearly shows the tonnage originated by shortline carriers to have declined far more precipitously than that of the Class 1 carriers since the beginning of the GMP, by 45.4% and 5.2% respectively.

At the close of the 2006-07 crop year, the licensed terminal elevator network in western Canada comprised a total of 16 facilities with an associated storage capacity of 2.6 million tonnes. And while the scope of this network has not changed in several years, there have still been a number of significant changes in terminal ownership as a result of various corporate mergers and acquisitions. The first significant alteration to the makeup of this network came in January 2008 when Viterra decided to close its 167,000-tonne "S" terminal, one of two facilities in Thunder Bay that it acquired in the takeover of Agricore United. The overall impact on the terminal elevator network was a 6.3% reduction in both the number of facilities and its storage capacity, which fell to 15 and 2.5 million tonnes respectively. It is worth noting that this also marked the first instance where the network's total storage capacity actually fell below the 2.6-million-tonne benchmark recorded at the beginning of the GMP.

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 2007-08 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 – 2007-08 Crop Year

Tendering

- *CWB's tendering commitment held to a maximum of 20% for fifth consecutive year.*
- *190 tender calls were issued by the CWB during the 2007-08 crop year.*
  - *Called for the movement of 1.9 million tonnes to export positions.*
    - *Reduction of 49.8% from the 3.8 million tonnes sought a year earlier.*
- *629 bids received; offered an aggregate 4.4 million tonnes.*
  - *Modest increase in bidding activity.*
    - *Reflects reduction in the number of tender calls issued .*
- *267 contracts concluded for the movement of 1.9 million tonnes.*
  - *Decrease of 28.3% from the 2006-07 crop year.*
  - *CWB directed more west coast grain to Prince Rupert.*
    - *Prince Rupert's share increased to 38.8% from 33.1%.*
    - *Vancouver's share decreased to 35.0% from 46.4%.*
    - *Thunder Bay's share increased to 26.2% from 20.5%.*
    - *Churchill received no tendered grain for a third consecutive year.*
  - *Two contracts for the movement of 65,100 tonnes of malting barley.*
  - *Represented 14.3% of CWB volume moved to ports in western Canada.*
    - *Well below established 20% maximum commitment.*
- *Tenders for 11.0% of the tonnage called either partially, or not at all, filled.*
  - *Significant reduction from previous year's 33.9%.*
- *Proportion moving in multiple car blocks decreased marginally to 88.8%.*
  - *Proportion in blocks of 50 or more cars decreased to 66.7% from 77.7%.*
- *Estimated $30.6 million in savings from grain company tendering, freight and terminal rebates, and financial penalties for non-performance.*
  - *Decreased 12.8% from $35.1 million a year earlier.*

Advance Car Awards

- *1.8 million tonnes of grain moved under the CWB's advance car awards program.*
  - *Represented 13.7% of CWB volume moved to ports in western Canada.*
    - *Fell well short of the 20% targeted by the CWB.*
- *28.0% of all CWB movements in western Canada moved under its tendered and advance-car-awards programs.*
  - *Fell well 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.*
  - *89.9% sourced from high-throughput elevators.*
- *Usage of smaller car blocks more prevalent under advance car awards program.*
  - *Stems from railcar allocation process and number of less-than-50-railcar shipments made by the non-major grain companies.*
  - *Supplements larger tendered grain movements.*

Other

- *CWB and five other grain shippers filed level-of-service complaints against CN.*
  - *Alleges that car allocation practices are discriminatory.*
- *Federal government signed new operating agreements with CN and CP for the use of government-owned hopper car fleet.*
  - *Provides for rehabilitation and long-term replacement of aging railcars.*
- *Canadian Transportation Agency makes one-time adjustment to the revenue cap.*
  - *Reduces maintenance allowances to the railways by $72.2 million.*
- *Port of Churchill experienced a sharp increase in traffic volume.*
  - *Received commitment for $48 million in federal and provincial government assistance.*
- *Federal government moved to amend the Canada Grain Act and the Canadian Wheat Board Act.*
- *Ocean freight rates reached their highest level under the GMP in the fourth quarter.*
- *Vancouver sees increase in container transloading capacity.*

Indicator Series 2 – Commercial Relations

Table	Indicator Description	Notes	BASE 1999-00	CURRRENT REPORTING PERIOD (1) 2006-07	2007-08	% VAR	
	Tendering Program [Subseries 2A]						
2A-1	Tenders Called (000 tonnes) – Grain		n/a	3,765.1	1,891.2	-49.8%	▼
2A-2	Tenders Called (000 tonnes) – Grade						
2A-3	Tender Bids (000 tonnes) – Grain		n/a	6,753.6	4,396.7	-34.9%	▼
2A-4	Tender Bids (000 tonnes) – Grade						
2A-5	Total CWB Movements (000 tonnes)	(2)	n/a	14,932.2	13,332.3	-10.7%	▼
2A-5	Tendered Movements (%) – Proportion of Total CWB Movements	(2)	n/a	17.8%	14.3%	-19.7%	▼
2A-5	Tendered Movements (000 tonnes) – Grain	(2)	n/a	2,651.6	1,900.0	-28.3%	▼
2A-6	Tendered Movements (000 tonnes) – Grade	(2)					
2A-7	Unfilled Tender Volumes (000 tonnes)		n/a	1,276.6	207.9	-83.7%	▼
2A-8	Tendered Movements (000 tonnes) – Not Awarded to Lowest Bidder		n/a	46.3	18.7	-59.7%	▼
2A-9	Tendered Movements (000 tonnes) – FOB		n/a	152.8	65.1	-57.4%	▼
2A-9	Tendered Movements (000 tonnes) – In-Store		n/a	2,498.8	1,835.0	-26.6%	▼
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	64.7	57.5	-11.1%	▼
2A-18	Railway Car Cycle (days) – Tendered Grain		n/a	14.7	13.9	-5.4%	▼
2A-18	Railway Car Cycle (days) – Non-Tendered Grain		n/a	16.4	15.2	-7.3%	▼
2A-19	Maximum Accepted Tender Bid ($ per tonne) – Wheat		n/a	-$24.51	-$23.78	-3.0%	▼
2A-19	Maximum Accepted Tender Bid ($ per tonne) – Durum		n/a	-$21.56	-$10.52	-51.2%	▼
2A-20	Market Share (%) – CWB Grains – Major Grain Companies		n/a	75.6%	74.3%	-1.7%	▼
2A-20	Market Share (%) – CWB Grains – Non-Major Grain Companies		n/a	24.4%	25.7%	5.3%	▲
	Advance Car Awards Program [Subseries 2B]						
2B-1	Advance Award Movements (%) – Proportion of Total CWB Movements		n/a	15.8%	13.7%	-13.3%	▼
2B-1	Advance Award Movements (000 tonnes) – Grain		n/a	2,362.9	1,831.0	-22.5%	▼
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	15.1	14.4	-4.6%	▼
2B-7	Distribution of Advance Award Movements – Multiple-Car Blocks	(4)					
2B-8	Average Advance Award Multiple-Car Block Size (carloads) – Port		n/a	53.9	52.0	-3.5%	▼

(1) – In order to provide for more direct comparisons, the values for the 1999-2000 through 2007-08 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]*

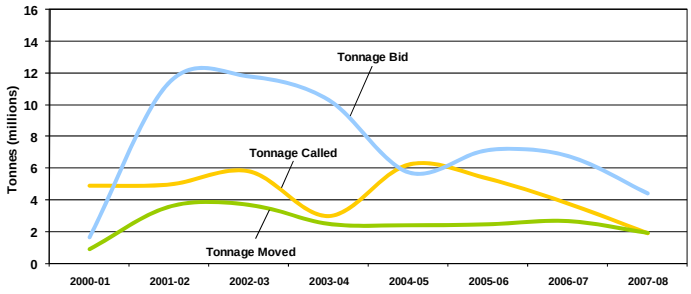
The 2007-08 crop year denoted the eighth for the Canadian Wheat Board's (CWB) tendering program. More significantly, it was the fifth year in which the CWB targeted to move a fixed 40% of its overall grain movements to the four ports in western Canada using a combination of tendering and advance car awards.[54] Under the terms of this arrangement, about half of this volume – representing a maximum of 20% of its overall grain movements – was to be tendered.

Attention should be drawn to the fact that the quality of the grain produced for movement in the 2007-08 crop year again proved superior to that of the 2004-05 and 2005-06 crop years. As such, the market forces that enabled the grain companies to assess significant premiums against the movement of high-quality tendered grain during a period of unusually tight supplies were again absent. The tendering patterns observed in the 2007-08 crop year were, therefore, largely consistent with the crop year that preceded it.

Tender Calls

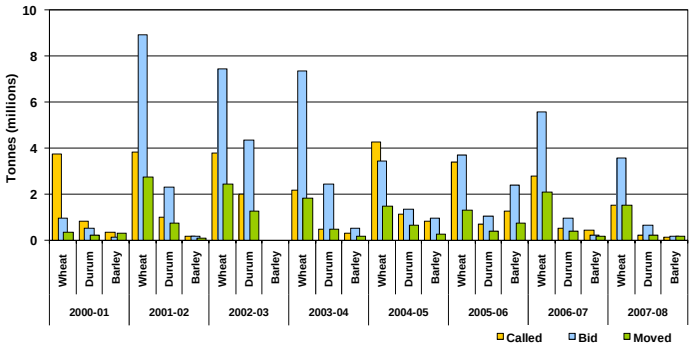
During the 2007-08 crop year, the CWB issued a total of 190 tenders calling for the shipment of approximately 1.9 million tonnes of grain. This represented about half of the 3.8 million tonnes that had been sought a year earlier. Although this partially reflected a 10.7% reduction in total CWB shipments, it also suggested that tendering had been given a less prominent role in accomplishing it.

Figure 20: Total Tonnage Called, Bid and Moved Through Tendering



As in past years, the vast majority of the grain put out to tender, 81.3%, called for the movement of wheat. For the 2007-08 crop year this entailed a potential movement of 1.5 million tonnes, which stood 44.7% less than the previous crop year's 2.8 million tonnes. Durum tenders ranked second in terms of overall size, with calls for over 0.2 million tonnes having been issued. This denoted 12.2% of the overall total as compared to 14.4% the year before. Barley calls, which fell to a 6.5% share from an 11.8% share a year earlier, accounted for the remaining 0.1 million tonnes.

Figure 21: Tonnage Called, Bid and Moved Through Tendering – Grain



There was also a noticeable shift in the comparative amounts these tenders sought to direct to the four ports in western Canada. Of the total volume called, 73.3% was intended for export through the west coast ports of Vancouver and Prince Rupert. Although this was somewhat below the levels observed in the two preceding crop years, it remained well above the 64.9% average presented in the first four years of the CWB's tendering program.[55] Nevertheless, there was a further shift in the allocation between these two ports. Prince Rupert's share dipped only slightly to 41.3% from the previous crop year's 41.5% record, while Vancouver's declined to 32.0% from 40.3%. The share accorded to the port of Thunder Bay

[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.

[55] The share accorded west coast ports in the 2005-06 and 2006-07 crop years were 84.6% and 81.8% respectively.

showed a marked increase in the face of Vancouver's decline, climbing to 26.7% from 18.2% a year earlier. For the third consecutive year, no calls were issued in favour of Churchill. [See Tables 2A-1 and 2A-2 in Appendix 4]

Tender Bids

The CWB's tender calls were met by 629 bids offering to move 4.4 million tonnes of grain, almost two-and-a-half times the amount sought. The majority of these bids, 81.3%, responded to calls for the movement of wheat. Another 15.0% responded to those issued for durum, while the remaining 3.7% answered those for barley. Although there was a general increase in overall bidding activity for the 2007-08 crop year, some preference appeared to have been given to durum tenders.

When examined with respect to the port specified in the tender call, 40.9% of the bids were given over to Prince Rupert movements, 30.8% to Thunder Bay, and 28.3% to Vancouver. Although these bids were reflective of the tonnage called, they also showed a comparative weakening in the preference that had traditionally been given to Vancouver. [See Tables 2A-3 and 2A-4 in Appendix 4.]

In general terms, the bidding proved somewhat stronger than in the 2006-07 crop year. The comparative change in the intensity of this bidding can best be gauged through an examination of the tonnage-bid-to-tonnage-called ratio, where higher values denote a much stronger response to a tender call than lower ones. With few exceptions, these ratios moved generally higher in the 2007-08 crop year. Even so, they remained more subdued than in the 2003-04 crop year, when bidding under the CWB's tendering program proved most intense. Although the bids put forward with respect to barley and Vancouver garnered comparatively weaker responses than did others, the overall pattern presented for the 2007-08 crop year again proved largely non-discriminatory.

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

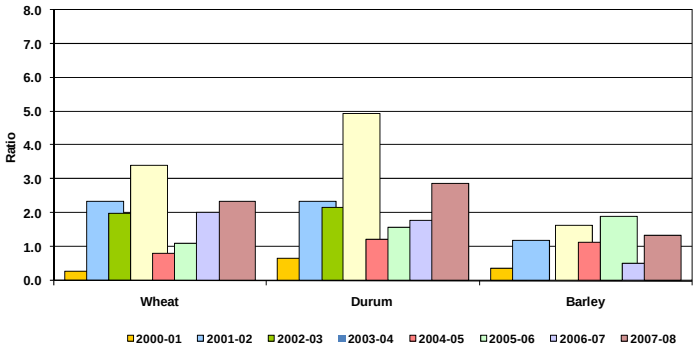
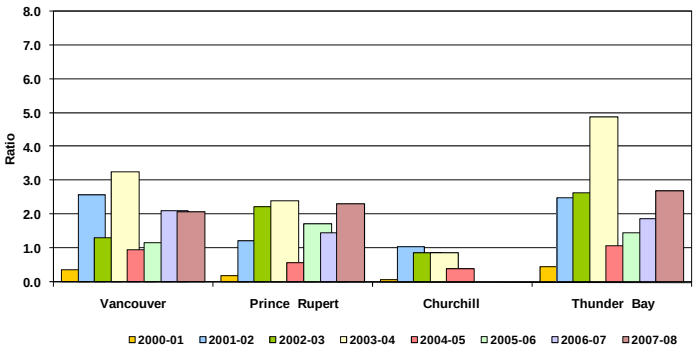


Figure 23: Ratio of Tonnage Bid to Tonnage Called – Port



Contracts Awarded

A total of 267 contracts were subsequently signed for the movement of 1.9 million tonnes of grain, almost all of the amount called. This represented 14.3% of the tonnage shipped by the CWB to western Canadian ports during the 2007-08 crop year, and fell well short of its 20% target.[56] [See Tables 2A-5 and 2A-6 in Appendix 4.]

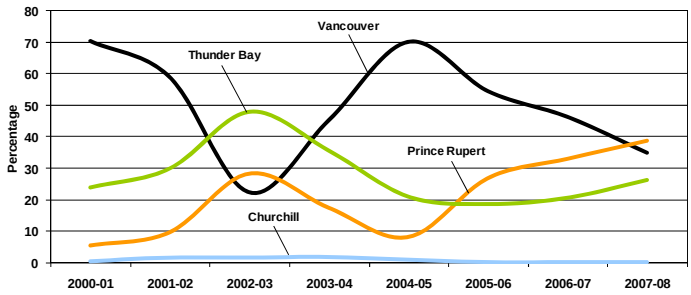
Of the 1.9 million tonnes moved, 38.8% was shipped to Prince Rupert, 35.0% to Vancouver, and 26.2% to Thunder Bay. Owing to the increased proportion directed to Prince Rupert these rankings differ significantly

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

from those observed in the 2004-05 crop year. In addition to showing a diminished role for Vancouver and Churchill in the movement of tendered grain, these results mark the third instance were Thunder Bay failed to place at least second in terms of the largest export gateways for tendered grain in the program's eight-year history.[57]

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

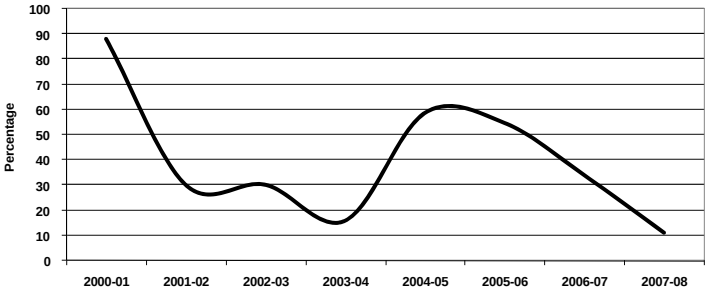
Figure 24: Tendered Grain – Destination Port



Tendered Volumes Not Filled

The ready availability of higher-quality grain was largely responsible for the improved response rate on tender calls issued by the CWB as well as a decrease in the proportion that went unfilled in the 2007-08 crop year. Tenders for a total of 0.2 million tonnes of grain went either partially, or completely, unfilled. This constituted 11.0% of the overall volume called, and marked a sharp reduction from the 33.9% recorded a year earlier. Moreover, this value proved to be the lowest observed since the CWB introduced its tendering program in the 2000-01 crop year.[58]

Figure 25: Composition of Tendered Volumes Not Filled



In large measure, this reduction reflected the broader engagement of the grain companies in the overall tendering process. Of the 1.9 million tonnes put out for tender by the CWB, only 9,900 tonnes failed to secure any bids whatsoever. This constituted just 4.7% of the total tenders issued, and fell well below the 42.8% that went unanswered a year earlier. Likewise, the total tonnage that went unfilled for other reasons also showed a marked reduction, falling to an aggregate 0.2 million tonnes from 0.7 million tonnes over the same time frame.

Of the tender calls that ultimately went unfilled, 81,800 tonnes, or 39.3%, were attributable to the bidders' failure to comply with the specifications set out in the tender. For a further 70,000 tonnes, or 33.6%, the bid price was unacceptable. Finally, for another 46,400 tonnes, or 22.3%, an insufficient quantity was bid. [See Table 2A-7 in Appendix 4.]

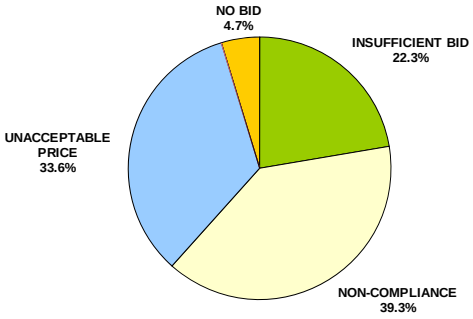
Of the 190 tender calls issued, 2 resulted in contracts being awarded to companies that did not put forward the lowest-priced bid. This involved an aggregate volume of 18,700 tonnes, about 40% of that awarded the year

[57] Notwithstanding the 2002-03 crop year, where Thunder Bay became the GHTS's largest handler of tendered grain as a result of a labour dispute that impeded the movement of grain through Vancouver, tendered grain shipments through the port of Thunder Bay had always ranked second to those of Vancouver until the 2005-06 crop year. The 2007-08 crop year constituted the third consecutive one in which the volume of tendered grain shipped through the port of Thunder Bay ranked behind that of both Vancouver and Prince Rupert.

[58] The previous record was set in the 2003-04 crop year when 15.7% of the tenders called went unfilled.

before.[59] In these cases, the lowest-priced bid often failed to secure an award because it included conditions that could not be accommodated.[60] [See Table 2A-8 in Appendix 4.]

Figure 26: Composition of Tendered Volumes Not Filled



Malting Barley

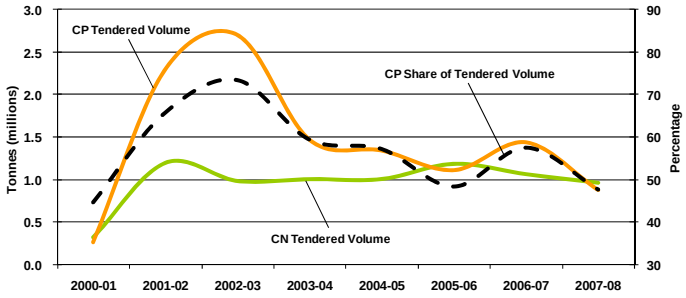
During the 2007-08 crop year, two tender calls were issued by the CWB for the movement of malting barley. In response, a total of six bids were received. This resulted in the awarding of two contracts for the shipment of 65,100 tonnes to Vancouver, an amount that fell some 57.4% below the 152,800 tonnes handled a year earlier. As has been the case throughout the GMP, malting barley constituted the sole grain to have been sold Free on Board (FOB). All other tendered grain shipments were sold on an "in-store" basis. Tendered malting barley shipments in the 2007-08 crop year represented 9.8% of the overall tonnage moved under tender to the port of Vancouver, and just 3.4% of that directed to the four ports in western Canada. [See Table 2A-9 in Appendix 4.]

Originating Carrier

CN secured just over half, 52.4%, of the volume that moved under tender in the 2007-08 crop year. In addition to this share being noticeably greater than the 42.5% it had garnered a year earlier, it also denoted only the third instance where CN carried the majority of the CWB's tendered grain.[61] Much of this gain was attributable to a sharp reduction in the amount of tendered grain moving to Vancouver, and a comparative weakening of CP's positions in this corridor. To an extent, this was consistent with the previously noted gain in CN's overall grain handlings. [See Table 2A-11 in Appendix 4.]

Even so, it should be noted that CP still maintains a strong competitive position in the movement of tendered grain. Much of this relates to crop production, and what has often been the better availability of higher-quality grains in CP's service area.

Figure 27: Tendered Movements – Originated Carrier



At the same time, CP has continued to serve a larger number of high-throughput facilities than its rival. Although CN has increased the number of high-throughput elevators it services to 81 in recent years, these represent just 46.0% of the 176 Class C and D facilities situated across western Canada. Moreover, with 91 such

[59] In the 2006-07 crop year, 46,300 tonnes were awarded to bidders who did not put forward the lowest bids.

[60] Mention should be made of the fact that if these bids were 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 cannot 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.

[61] In addition to capturing a 52.4% share of the 2007-08 crop year's tendered grain movement, CN also handled 55.4% of the tendered grain shipped in the 2000-01 crop year, and 51.7% of that moved in the 2005-06 crop year.

facilities local to its lines, CP still provided service to more than half of them, 51.7%.[62] With this broader high-throughput base, CP can reasonably be expected to win a slightly greater proportion of the volume shipped from these facilities, be it tendered or non-tendered grain. Despite these strengths, it would appear that reduced freight rates in the Prince Rupert corridor have also helped CN to win over some of the traffic that had been moving by CP. It remains to be seen, however, whether this competitive advantage can be sustained over the longer term.

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 has never fallen below 85.9%.[63] This proved once again to be the case in the 2007-08 crop year, when 88.8% of the tendered grain volume moved in such blocks, although this was down from 93.2% a year earlier.

In addition to an increase in the proportion of non-incentive movements, which rose to 11.2% as compared to 6.8% the year before, there were a number of other differences in the makeup of these movements. Chief among these was a 6.6-percentage-point increase in the proportion of tendered shipments using blocks of 25-49 cars, which rose to a 22.1% share of the total from 15.5% a year earlier. The gains registered here were naturally reflected in diminished proportions for larger-block movements. Although shipments in blocks of 50-99 cars fell marginally, to a 56.7% share from 59.1% twelve months before, it was the decline in blocks of 100 or more cars that proved more significant. These latter movements took a 10.0% share of the total tendered volume in comparison to 18.6% a year earlier. [See Table 2A-12 in Appendix 4.]

Notwithstanding the small variations that have been observed from year to year, these measurements underscore the fact that successful bidders generally attempt to ship tendered grain in the largest car blocks possible in order to realize the financial benefits available from doing so. Even with the greater latitude given to the planning for these shipments, the proportion moving in blocks of 50 or more railcars has generally not outpaced that of non-tendered grain. This, however, was not the case in the 2007-08 crop year when, owing to a greater number of smaller shipments, the proportion for tendered grain trailed that of non-tendered grain by 8.9 percentage points, 66.7% as opposed to 75.6% respectively.

Figure 28: Tendered Movements – Multiple Car Blocks

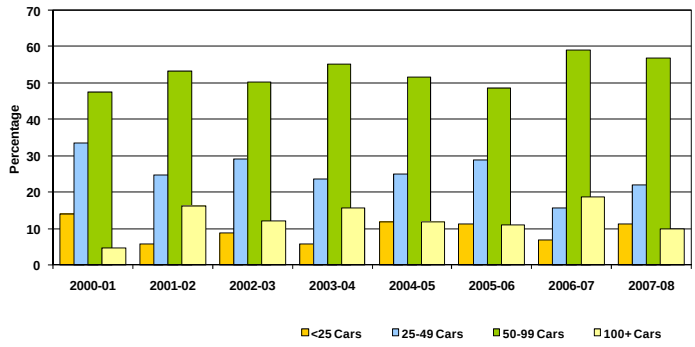
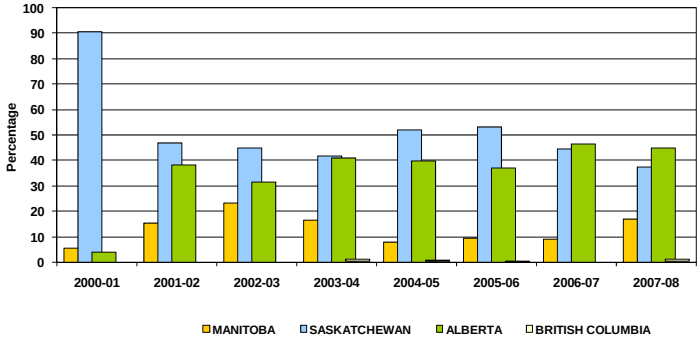


Figure 29: Tendered Grain – Provincial Origin



Tendered Origins

As was the case a year earlier, the largest amount of grain shipped under the CWB's tendering program was drawn from Alberta. Totalling in excess of 0.8 million tonnes, these shipments accounted for slightly less than half, 44.7%, of all tendered grain movements in the 2007-08 crop year. Although this represented a modest decrease from the 46.3% share

[62] Shortline railways provide service to the remaining four high-throughput facilities.

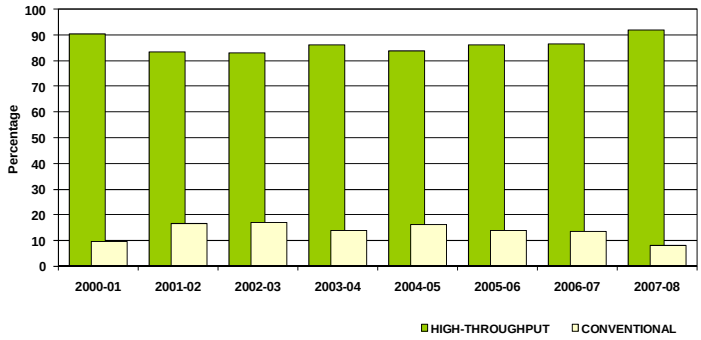
[63] This proportion was actually recorded in the 2000-01 crop year, the first for the CWB's tendering program.

the province garnered a year earlier, it marked the second consecutive instance where Saskatchewan was displaced as the leading originator of tendered grain.

With 0.7 million tonnes of tendered grain having originated in Saskatchewan, the province's share fell to 37.5% from 44.7% a year earlier. An upturn in shipments from Manitoba, which totalled 0.3 million tonnes, lifted that province's share to 16.9% from 9.0%. The 2007-08 crop year also saw the amount of tendered grain shipped from British Columbia rebound to 16,200 tonnes from nothing the previous year.

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 results for the 2007-08 crop year proved no different in this regard, with a record 91.8% of the tendered volume having originated at such facilities.

Figure 30: Tendered Grain – Elevator Class

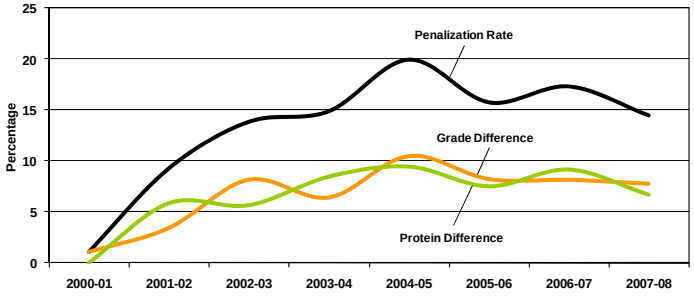


Still, this represented a sharp gain over the 86.3% reported as having originated at high-throughput elevators a year earlier. A comparison of the provincial values reveals similar gains. For Manitoba, such originations rose to 90.8% from 85.4% a year earlier. In the case of Saskatchewan, the proportion originating at high-throughput facilities increased to 92.0% from 87.2%. Alberta also posted an increase in its share of the volume originated by these facilities, claiming 93.9% as compared to 85.7% the year before. Only British Columbia, which saw all of its tendered grain shipped from conventional elevators, presented a clear contrast. [See Table 2A-14 in Appendix 4.]

Applied Penalties

For the 2007-08 crop year, a total of 3,126 carloads were assessed with financial penalties following their arrival at the four designated ports in western Canada.[64] This marked a 40.1% decrease from the 5,218 carloads penalized a year earlier. In addition, the penalization rate also decreased, to 14.5% from 17.3%.

Figure 31: Tendered Grain – Penalized Shipments



Despite this immediate improvement, the penalization rate can be seen to have risen substantially since the tendering program was instituted in the 2000-01 crop year. At that time, only 1.1% of the cars unloaded were penalized for having failed to meet the grade or protein level specified in the tender.[65] Even when benchmarked against the 9.3% of shipments that were penalized in the 2001-02 crop year, the penalization rate can still be seen to have risen substantially. Even so, it must be noted that since it peaked at 19.9% in the 2004-05 crop year, the

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

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

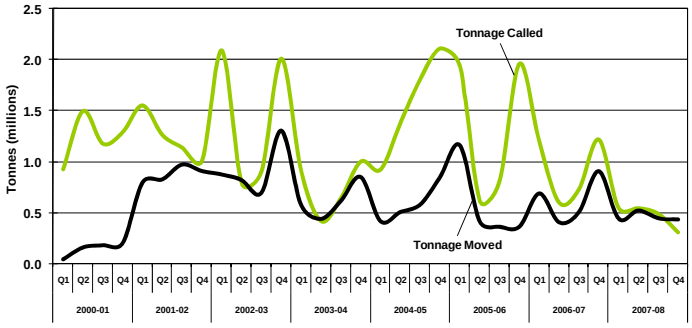
penalization rate has moved generally lower. Moreover, the values posted over the course of the past six crop years have not differed significantly from the mis-shipment rate for grain movements at large.[66]

Shipments that failed to meet the specified grade marginally exceeded those that did not comply with the tender's required protein content. Much of the overall decrease in the penalization rate can be traced to a 2.5-percentage-point decline in the proportion of shipments failing to meet the specified protein content, which fell to 7.8% from 9.1% the year before. In comparison, there was a more moderate 0.4-percentage-point reduction on the penalization rate for shipments that failed to meet the specified grade, which declined to 7.8% from 8.2% a year earlier. Notwithstanding these improvements, these failure rates have continued to move largely in tandem, with no one element having proved to be the 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 2007-08 crop year, the CWB issued tenders at an average rate of 157,600 tonnes per month. However, the actual amounts varied from a low of 62,600 tonnes to a high of 238,700 tonnes. The quarterly distribution of these values showed a progressive decline in the amount of grain put out to tender, which contrasted rather sharply with the variability observed in earlier crop years.

Figure 32: Quarterly Distribution of Tendered Grain

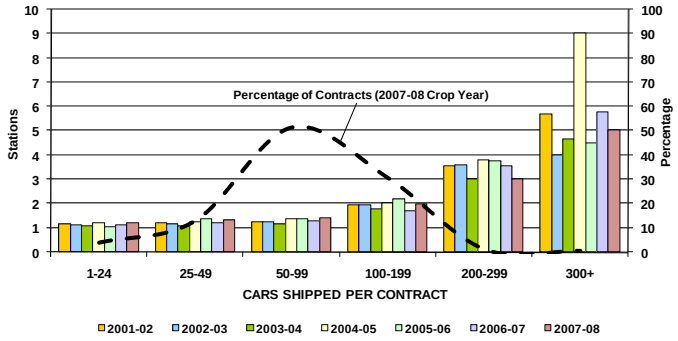


The monthly volume of grain actually shipped under the tendering program showed a largely similar distribution pattern. Averaging 152,900 tonnes per month, these shipments ranged from a low of 41,500 tonnes to a high of 299,600 tonnes. The quarterly distribution continued to show a fairly strong correlation with the tonnage called. The forces underscoring this appear to be twofold: a structural lag that sees much of the tendered volume actually moved some four to six weeks after the call was issued by the CWB; and the volume that went unfilled. Much of the improved strength in the correlation appears related to the latter, which saw the proportion of tender calls that went unfilled decrease to 11.0% from 33.9% 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 267 contracts signed for the movement of tendered grain in the 2007-08 crop year, 63.3% involved grain drawn from a single delivery point. This proved only marginally different from the 62.2% observed a year earlier. The average number of delivery points observed for shipments made in blocks of less than 25 cars, 25-49 cars, and 50-99 cars, showed only minor year-over-year increases, averaging about 1.3 stations per contract overall. Although this average has gradually risen from the 1.2-station average of the 2001-02 crop year, the magnitude of the change has been

Figure 33: Tendered Grain – Delivery Points per Contract



[66] The CWB estimates that the overall mis-shipment rate for the 2007-08 crop year was 14%.

quite modest. [See Table 2A-16 in Appendix 4.]

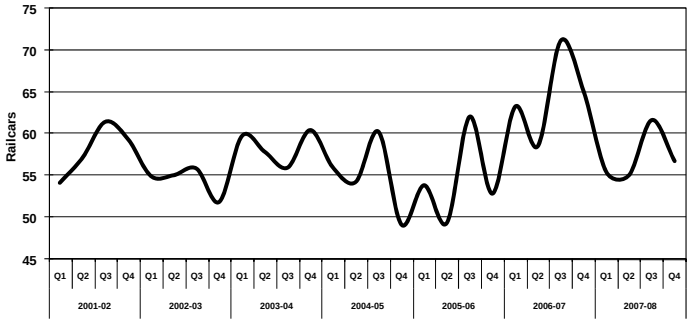
Contracts calling for the shipment of 100 or more cars typically drew grain from a greater number of delivery points. This relates simply to the larger amount of grain involved, and the fact that it often had to be drawn from a larger geographic area. In the case of shipments comprised of 100 to 199 cars, grain was drawn from an average of 2.0 delivery points; 3.0 stations for shipments of between 200 and 299 cars; and 5.0 stations for shipments involving 300 or more cars. Although the record shows more significant year-over-year change in these averages, they remain largely consistent with those first observed in the 2001-02 crop year.

Of all contracts signed in the 2007-08 crop year, 67.9% involved movements of less than 100 carloads of grain. Although this was somewhat greater than the 58.2% observed a year earlier, the result still proved to be consistent with the longer-term average of 72.4%. Still, the greater part of this, 51.3%, moved in lots of 50-99 cars. In addition to being well above the 37.1% recorded a year earlier, it also proved to be the largest yet recorded under the CWB's tendering program. On the whole, these observations reinforce earlier ones to the effect that grain companies have generally attempted to ship tendered grain in larger car block sizes whenever possible, but that the size of these shipments decreased somewhat in the 2007-08 crop year.

Multiple-Car Block Size

As mentioned previously, 88.8% of the tendered grain shipped in the 2007-08 crop year moved in blocks of 25 or more cars. In general, these multiple-car shipments averaged 57.5 cars in size, a value clearly above the 50-car threshold used to define movements from high-throughput elevators. What is more, this denoted an 11.1% decrease from the 64.7-car average of the previous crop year. Much of the impetus for this came from sharp reductions in the Vancouver and Thunder Bay averages. [See Table 2A-17 in Appendix 4.]

Figure 34: Tendered Grain – Weighted Average Car Block



In the case of Vancouver, the 2007-08 crop year's average declined by 19.0%, falling to 53.8 cars as compared to 66.4 cars a year earlier. Movements in the Thunder Bay corridor experienced a less dramatic reduction, falling by 9.9%, to an average of 55.5 cars from 61.6 cars. The annualized average exhibited in the Prince Rupert corridor also declined, albeit by a more modest 3.7%, to 62.0 cars from 64.4 cars the year before. The exception was in the Churchill corridor, where the CWB's decision not to issue tenders for a third consecutive year again resulted in a zero average.[67]

On the whole, the quarterly averages have shown a much greater degree of variability. To a large extent, these values presented an undulating pattern very much in keeping with that portrayed in previous years, although the upward momentum that characterized the two previous crop years was significantly reversed in the 2007-08 crop year.

Car Cycles

The average car cycle for tendered grain shipments amounted to 13.9 days in the 2007-08 crop year. This represented a 5.4% reduction from the 14.7-day average recorded a year earlier. This reduction proved to be consistent with the 5.8% betterment in the overall car cycle.[68] [See Table 2A-18 in Appendix 4.]

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

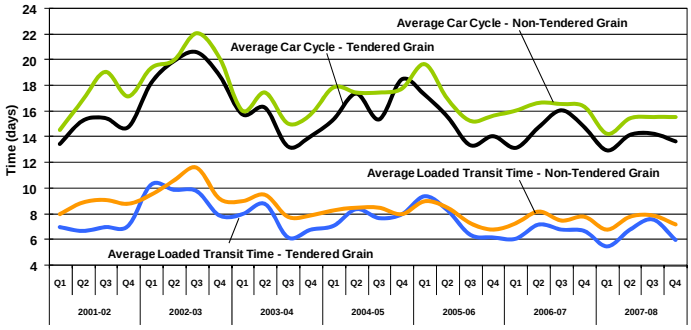
[68] General car cycles are discussed more fully in Section 3.3.

With 91.8% 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 8.6% less than that of non-tendered grain in the 2007-08 crop year, 13.9 days versus 15.2 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.[69] Over the course of the past seven crop years, the time advantage enjoyed by tendered grain shipments has proven fairly consistent, amounting to an average of 1.2 days, or 7.3%, less than that of the car cycle for non-tendered movements. Much of this advantage came from faster loaded transit times, although there was a benefit from faster empty transit times as well.

In the 2007-08 crop year, tendered grain's average loaded transit time amounted to 6.5 days. This represented a 3.0% improvement over the previous crop year's 6.7-day average. When the seven-year record is examined against that of non-tendered grain shipments, the loaded transit time advantage can be seen to have amounted to about 0.8 days, or 9.1%. The benefit derived from the difference between the average empty transit times for tendered and non-tendered grain proved somewhat less, and amounted to about 0.5 days, or 5.6%.

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



While railway operations have the most direct bearing on car cycles, it must be remembered that the size of the movement is also influential. Tendered grain's multiple-car-block average of 57.5 carloads underscores the fact that a significant proportion of this tonnage still moves in less-than-trainload lots. As long as tendered grain moves in such quantities, whether because the tender contracts specified an insufficient volume to move or because the facility at which it originates cannot physically accommodate their assembly, widespread improvement is likely to be limited. The statistics presented here continue to indicate that while tendered grain movements appear to have a structural advantage over non-tendered ones, there is still an overarching commonality to the railway service they both receive.

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.[70]

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.[71] 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.

[69] A pilot project conducted by the former 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.

[70] As used here, the term "major grain companies" refers specifically to Viterra Inc., Cargill Limited and Pioneer Grain Company, Limited. These companies effectively constitute the three largest firms sourcing grain within western Canada.

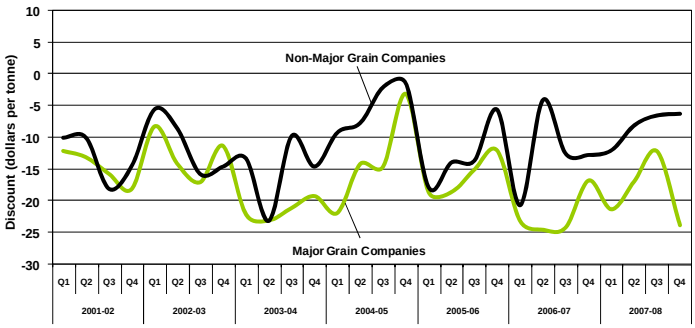
[71] The bids submitted are expressed as a per-tonne discount to the CWB's initial price for wheat, durum and barley.

The maximum discounts put forward by both groups show a significant degree of variation over the course of the past seven 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. [See Table 2A-19 in Appendix 4.]

Of particular interest was the 2004-05 crop year, when tight supplies of high-quality grain dramatically altered the nature of the bidding altogether. The discounts that the CWB had been able to extract from the grain companies up until then began to decline. 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. Although the 2005-06 crop year brought about similar patterns as a result of yet another poorer-quality crop, the CWB proved more adept at refocusing its tendering program under such circumstances. With limited exception, premiums were dramatically reduced and discounts rebounded substantially.

An improvement in market conditions in the 2006-07 crop year brought about a restoration of the bidding patterns that had been observed in the first three years of the CWB's tendering program. Premiums were effectively eliminated, and the maximum discounts bid moved noticeably higher. In the case of wheat, these forces pushed the maximum discount to a record $24.51 per tonne.

Figure 36: Maximum Discount from Initial Price – Wheat



The 2007-08 crop year saw the dollar value of these bids retreat somewhat in the face of diminishing grain shipments. Although the discounts advanced in the first quarter fell back marginally to $21.28 per tonne, they began to decline more substantially in the second quarter, eventually dropping to a low of $12.13 per tonne in the third quarter. It should be noted that although the record shows that the maximum discount rebounded dramatically in the fourth quarter, to a near-record $23.78 per tonne, this was an anomaly wholly attributable to a single contract movement.[72] In fact, the more typical discount bid during this period was comparable to those witnessed in the third quarter.

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

Market Share

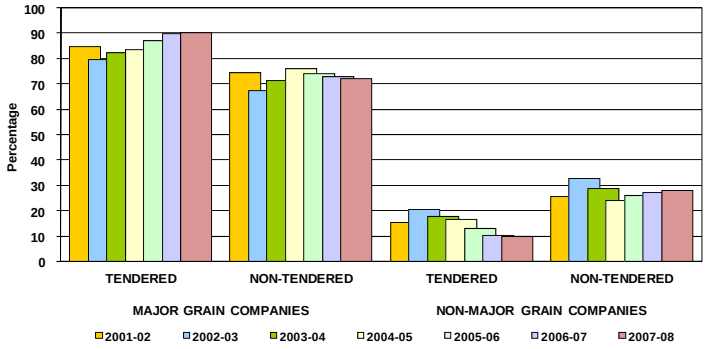
Unquestionably the best indicator of market dominance is the relative share held by both the major, and non-major, grain companies. Interestingly, the share secured by the larger grain companies in the movement of CWB grain, be it tendered or non-tendered, while having fluctuated over the course of the past seven crop years, has not materially changed. In the 2001-02 crop year, the major grain companies controlled 84.6% of the tendered volume. By the 2007-08 crop year that share had increased to a more substantive 90.3%. Yet the reverse was true of non-tendered CWB grains, with the majors' share having declined to 72.1% from 74.4%. [See Table 2A-20 in Appendix 4.]

[72] The maximum discount cited here related to a movement of Canada Western Red Winter wheat to Thunder Bay.

Necessarily, the market shares held by the non-major grain companies showed corresponding changes. Over the course of the past seven crop years they lost 5.7 percentage points from their share of the tendered grain movement while adding 2.3 percentage points to their share of non-tendered grain movements. To be sure, these differentials are more significant to the non-majors, particularly when it comes to a steadily diminishing role in moving tendered grain, but they are too restricted in scope to be indicative of a meaningful reduction in overall business activity. Moreover, the limited nature of the changes observed suggests that the major grain companies, despite their apparent competitive advantages, have not been able to easily displace their smaller rivals.[73]

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 37: Market Share – CWB Grains



Financial Savings

Given the aforementioned decrease in the discounts offered by the grain companies in their tender bids, the transportation savings accruing to the CWB – and ultimately passed back to producers through its pool accounts – fell appreciably in the 2007-08 crop year. Although these discounts figure prominently in the calculation of the CWB's overall transportation savings, they are not the sole offsets. Freight and terminal rebates, as well as any financial penalties for non-performance, also factor into this calculation. For the 2007-08 crop year, the CWB estimates that the savings generated from these various sources decreased by 12.8%, falling to $30.6 million from $35.1 million a year earlier.

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

In keeping with the decrease in total CWB grain shipments, the total tonnage moved under the advance car awards program fell by 22.5% in the 2007-08 crop year, to 1.8 million tonnes from 2.4 million tonnes a year earlier. This represented 13.7% of the total tonnage shipped to western Canadian ports by the CWB, which constituted a loss of 2.1 percentage points in comparison to the 15.8% share these movements garnered a year earlier.

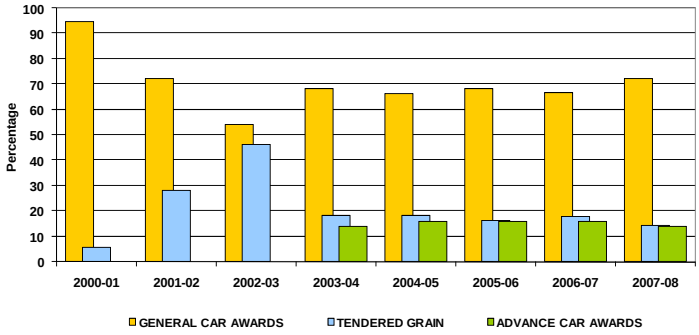
In conjunction with the 1.9 million tonnes that moved under its tendering program, a combined 28.0% of the CWB's total grain shipments moved under the auspices of these two programs. It must be noted, however, that this fell considerably short of the 40% that had been targeted, as well as the 36.2% that had been handled

[73] The competitive advantage referenced here relates more directly to the number of high-throughput elevators operated by the major grain companies. With over 80% of tendered grain shipments moving in multiple-car blocks from high-throughput elevators, the major grain companies are deemed to have more of the strategic assets needed to exploit these efficiencies than do their non-major rivals. In addition, the major grain companies also own the vast majority of the GHTS's terminal elevator assets, which serves to further enhance this advantage.

under these two programs in the 2006-07 crop year.[74] Moreover, this constituted the smallest combined share recorded since the advance car awards program was inaugurated in the 2003-04 crop year.

Part of the shortfall was attributable to the influence exerted by the comparatively light movement of grain under the advance car awards program in the first quarter, which represented just 7.4% of the CWB's total shipments for the period. Although the quarterly share accorded these shipments rose fairly steadily over the remainder of the crop year, reaching a height of 18.4% in the fourth quarter, they did not prove sufficiently compensatory. At the same time, the proportion that moved under the tendering program peaked at 18.1% in the third quarter, before then falling off sharply to 9.5% in the fourth quarter.

Figure 38: CWB Grain Movements – Western Canada



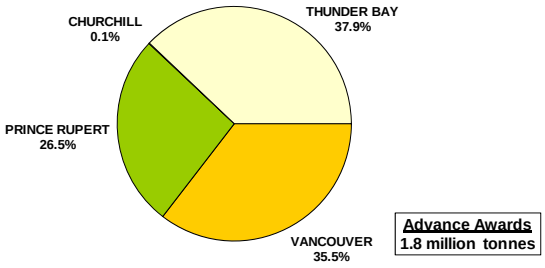
Traffic Composition

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 1.8 million tonnes shipped consisted of wheat, some 1.6 million tonnes, or 87.1%. This was in turn followed by another 0.2 million tonnes, or 12.7%, of durum, and a residual barley component of 3,100 tonnes, or 0.2%. As compared to tendered grain movements, wheat secured an additional 7.7 percentage points in share while that of durum rose by 0.8 percentage points, and barley lost 8.5 percentage points. [See Table 2B-1 in Appendix 4]

Unlike tendered grain, the largest portion of the volume moved under the advance car awards program, 0.7 million tonnes, or 37.9%, was destined to the port of Thunder Bay. This significantly exceeded the 26.2% share secured by the port, as well as its third-place ranking, in the movement of tendered grain.

Thunder Bay was followed in turn by Vancouver with 0.6 million tonnes and a 35.5% share; Prince Rupert with 0.5 million tonnes and a 26.5% share; and Churchill with 1,400 tonnes and a 0.1% share. [See Table 2B-2 in Appendix 4.]

Figure 39: Advance Car Awards – Destination Port



Originating Carrier

Well over half, 65.6%, of the volume moved under the advance car awards program during the 2007-08 crop year originated at points local to CP. This proved substantially greater than the 55.6% the carrier had secured a year earlier, as well as the 47.6% obtained as its share of the tendered grain movement. As in past years, this value was also greater than what the carrier had garnered as a share in the overall movement of western Canadian grain. [See Table 2B-3 in Appendix 4.]

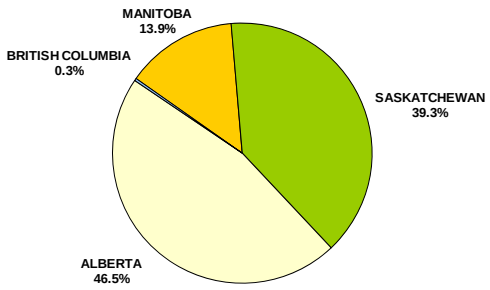
[74] Advance car awards are administered on the same basis as the CWB's general car awards program, but with an additional two-week lead time, and an early indication of the grains and grades required, in order to provide shippers with increased flexibility in managing their logistics programs.

Traffic Origination

As was the case with tendered grain shipments, the largest volume moved under the CWB's advance car awards program came from Alberta, almost 0.9 million tonnes. This volume also secured a marginally greater share of the total tonnage, 46.5% versus 44.7% for tendered grain. Shipments from the provinces of Saskatchewan and Manitoba followed, with originations of 0.7 million tonnes and 0.3 million tonnes respectively. A total of 5,200 tonnes was also shipped from British Columbia. [See Table 2B-4 in Appendix 4.]

The shares accorded to these latter provinces under the advance car awards program also differed marginally from those obtained through tendering. In the case of Saskatchewan, this amounted to 39.3% as compared to the tendering program's 37.5% share. However, Manitoba's 13.9% share of the advance car awards movement trailed the 16.9% it secured for tendered grain. Although comparatively small, the share of movements from British Columbia accounted for 0.3% of the total under the advance car awards program versus 0.9% under the tendering program.

Figure 40: Advance Car Awards – Provincial Origin

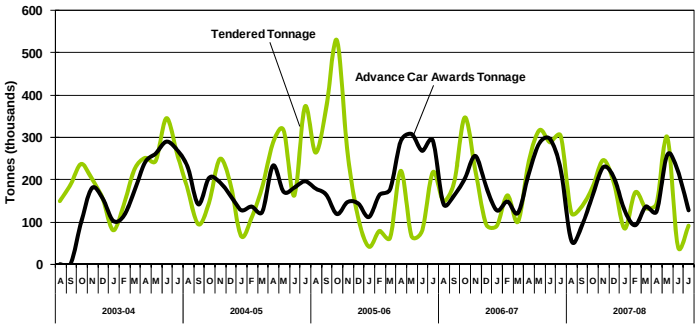


As was the case with tendered grain, the majority of the grain shipped under the advance car awards program, 89.9%, came from high-throughput elevators. This was somewhat greater than the 81.5% originated from these facilities a year earlier. High-throughput-elevator usage was greatest in Manitoba and Alberta, with originations of 96.8% and 94.0% respectively. Saskatchewan trailed with 83.3% of its advance car award tonnage having originated at such elevators. These share values were consistent with those observed for tendered grain shipments, with the exception of Saskatchewan, where the proportion of tendered grain originating at high-throughput facilities reached a notably greater 92.0%.

Monthly Distribution

The volume of grain moved under the CWB's advance car awards program averaged 152,600 tonnes per month, and varied from a low of 55,800 tonnes in August 2007, to a high of 258,400 tonnes in May 2008. Moreover, the distribution of these movements presented a pattern similar to that of tendered grain.

Figure 41: Advance Car Awards – Monthly Distribution

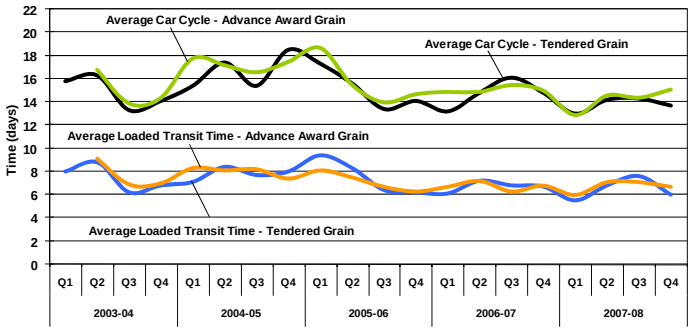


The similarity in these patterns effectively underscores what has been suggested by other indicators under the GMP: that grain moving under the advance car awards program does so largely in tandem with shipments made under the tendering program. It also indicates that the grain companies have been exploiting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

Car Cycles

The average car cycle for grain shipped under the CWB's advance car awards program amounted to 14.4 days in the 2007-08 crop year. This value proved to be 4.6% less than the 15.1-day average recorded in the 2006-07 crop year. In addition, it was little different from the 13.9-day average observed for tendered grain shipments. In fact, quarterly car-cycle values for advance car awards movements closely tracked those observed under the tendering program, and were equally consistent with the broader improvement in the overall car cycle for the period. [See Table 2B-6 in Appendix 4.]

Figure 42: Advance Car Awards – Car Cycle



The 6.8-day average loaded transit time for grain moved under the advance car awards program was also consistent with the 6.5 days given over to tendered grain shipments. Similarly, the average empty transit time proved only marginally greater than that of tendered grain, 7.6 days versus 7.4 days respectively.

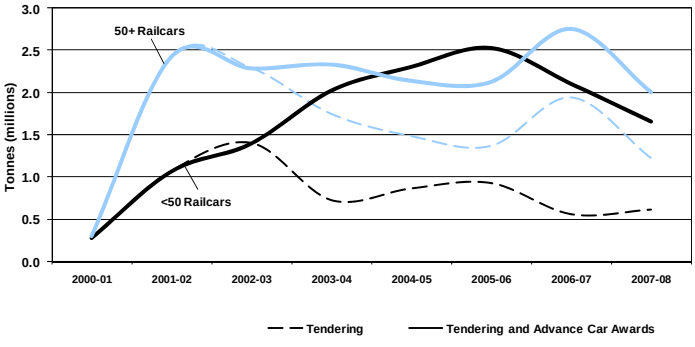
Although the comparative averages for advance car awards movements proved to be higher than those of tendered grain, they were somewhat lower than those posted for non-tendered movements in general. With the overall car cycle of non-tendered movements averaging 15.2 days, this benefit amounted to 8.6%. These similarities support the observation that grain shipped under the CWB's tendering and advance car awards programs move largely in concert with each other.

Multiple-Car Blocks

The proportion of grain moving under the incentive programs used by the railways to encourage shippers to move grain in multiple-car blocks has increased substantially under the GMP. To be sure, shipments in blocks of 50 or more cars have accounted for about three-quarters of the overall volume since the 2001-02 crop year. More often than not, the proportion applicable on tendered grain shipments proved marginally greater than that for non-tendered grain. And although this proportion fell to 66.7% in the 2007-08 crop year as a result of the smaller contracts issued by the CWB, these elevated values have often attested to the competitive 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

Figure 43: Grain Volumes Moved in Multiple Car Blocks



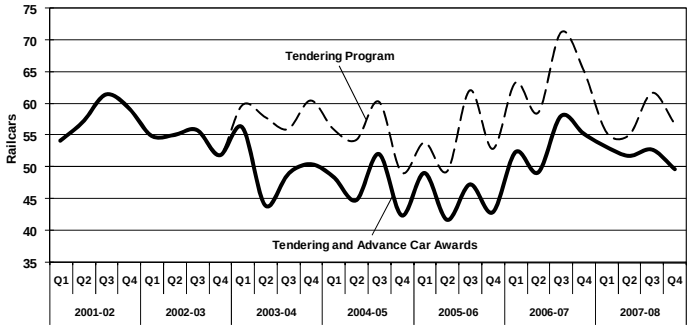
the movement of this 40% than they had been under the tendering program alone.[75]

Given the generally smaller facilities used by the non-major grain companies, shipments made using the equipment provided through advance car awards are comparatively smaller in size than those moved under the tendering program alone. This is equally true of shipments made by the major grain companies since they frequently fill-out their tendered movements whenever possible to take advantage of the higher discounts available to them from doing so. When combined for comparative purposes, the result is an increased concentration of movements made in blocks of less than 50 cars, and a dilution of those made in blocks of 50 or more cars. Whereas 33.3% of tendered grain movements were in blocks of less than 50 cars, the proportion climbed to 45.2% when pooled with those made using advance car awards. Conversely, the proportion moving in blocks of 50 or more cars decreased from 66.7% in the case of tendered grain shipments alone, to 54.8% when combined with those moved under the advance car awards program. [See Table 2B-7 in Appendix 4.]

Multiple-Car Block Size

In a parallel expression of these same forces, the average car-block size also decreases. Although the tendering program produced an average car block of 57.5 cars for the 2007-08 crop year, when combined with movements under the advance car awards program the overall average was reduced by 9.6% to 52.0 cars. [See Table 2B-8 in Appendix 4.]

Figure 44: Average Car Block – Tendering and Advance Awards



Despite only five 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 served to pull down the tendering program's higher average. Moreover, these averages display patterns that again draw attention to the complementary nature of these movements.

2.3 Commercial Relations – Other Developments

2.31 Grain Industry Again Seeks Redress on Railway Service Issues

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

One aggrieved grain shipper, Great Northern Grain Terminals Ltd. (GNG), opted to file a level-of-service complaint with the Canadian Transportation Agency in March 2007. In its complaint, GNG alleged that CN's advance products discriminated against it and other small shippers in the allocation of railcars, thus rendering them uncompetitive in the marketing of grain. Furthermore, the company alleged that CN had also failed to provide the complainant with an adequate level of rail service under its general car allocation program. In

[75] 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.

many ways the case acted as a lightning rod for a host of smaller shippers, with over 20 separate organizations having sought intervener status in the case.

In July 2007, the Agency determined that CN's car allocation practices had resulted in a significant deterioration in the service provided to GNG. Moreover, it found that CN had in fact breached its common carrier obligations and that GNG would likely suffer substantial commercial harm if the breach went unchecked.[76] Although CN was directed to make reasonable accommodation for GNG's specific transportation needs, the Agency also found the difficulties encountered by GNG were not isolated, but rather the product of a widespread "systemic" failure.[77]

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

On 5 September 2007 the CWB, along with five other companies, filed a series of new complaints with the Agency regarding the level of service they were receiving from CN.[78] Each alleged that the carrier was still failing to provide them with adequate rail service owing to what they perceived to be the inherent failings of the car allocation process. In arguments that largely paralleled those put forward by GNG six months before, it was asserted that CN's advance products were still discriminatory and ultimately hindered the efficient movement of grain. More specifically, it was alleged that owing to the inherent preference given by CN in allocating cars to shippers capable of guaranteeing 100-car train movements over a consecutive 42-week period, smaller shippers were simply unable to get the cars that they needed for their own operations.

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

In January 2008 the Agency issued an interim decision that found that CN's advance products had caused the complainants substantial commercial harm in the 2006-07 crop year, and that the carrier was in breach of its level-of-service obligations.[79] Moreover, the Agency found that further harm was likely to be incurred if some form of corrective action was not taken. However, the Agency recognized that CN had made some effort at revising its advance products in order to better reflect the wider needs of shippers as the 2007-08 crop year got underway. Still, the Agency concluded that it simply could not gauge the effects of these changes in the absence of the data necessary to make such an assessment. Accordingly, the Agency deferred a final

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

[77] Ibid.

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

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

decision in the matter until all of the requisite data could be assembled and analyzed.[80] As the 2007-08 crop year came to close, that final decision had still not been rendered.

2.32 Federal Government Passes Bill C-8 and Launches Review of Railway Service

The complaints registered by the grain industry over railway service have not been unique. Other industries have also voiced dissatisfaction with the service their shippers were receiving from the railways. In many instances these shippers expressed a similar concern over what they claimed to be the railways' lack of accountability, and also argued that regulatory change provided the only practical means of rectifying the failings they perceived. Moreover, they were able to successfully ally themselves in bringing these complaints to the federal government for attention.

Although the railways contended that no such regulatory change was necessary, and that most problems could be resolved satisfactorily through private dispute resolution mechanisms, the shipping community continued to press for legislative changes it felt were needed. In May 2006, Transport Canada advised shippers that the government intended to address their complaints about railway service through amendments to the *Canada Transportation Act*. A little over a year later, on 30 May 2007, the government tabled these promised changes to the Act in the House of Commons. In general terms, Bill C-58 was aimed at protecting rail shippers from the potential abuse of market power by the railways, and included more effective means of addressing their concerns over service and rates. Furthermore, the government also committed itself to a review of railway service within 30 days of the Bill being passed into law.

Although Bill C-58 died on the order paper as a result of the proroguing of Parliament in September 2007, it was effectively reintroduced in the House of Commons as Bill C-8 a month later. With Royal Assent having been given on 28 February 2008, the federal government began to work on the terms of reference that would structure the review that had been promised. In early April 2008, with railway and shipper input having already been incorporated, the Minister of Transport, Infrastructure and Communities outlined the scope of the examination that was to follow.

This envisioned a two-staged review taking as much as a year-and-a-half to complete. In the first of these, consultants would be engaged to gather and analyze the shipper, railway and terminal data needed to properly assess railway performance. This would be followed by a second stage, where a panel of three eminent persons would be charged with assessing the analytical work that had been completed, and developing the recommendations that could lead to improvements in railway service.

A formal request for proposals, centered on the first stage of this review, was issued by the Government of Canada on 24 July 2008. This was followed approximately one month later with an announcement from the Minister of Transport, Infrastructure and Communities that Edmonton-based QGI Consulting had been selected to spearhead the first stage of this review, which was expected to be completed by the spring of 2009.[81]

2.33 Federal Government Concludes New Operating Agreements with CN and CP

Following the federal election of 23 January 2006, the newly installed Conservative government reversed the previous Liberal government's decision to transfer its fleet of covered hopper cars to the Farmer Rail Car Coalition (FRCC). These 11,900 cars had been provided to both CN and CP under an operating agreement that allowed both carriers to use them as part of their general grain fleets.[82] While both railway companies supplemented these cars with their own equipment in order to meet prevailing market demand, the public fleet

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

[81] Quorum Corporation, which serves as the Monitor of the Canadian Grain Handling and Transportation System, is a sister company of QGI Consulting. Although the companies are related, their commercial activities are separate and distinct.

[82] Over time, attrition has diminished the 13,000 covered hopper cars that were originally in the federal government's fleet. By the beginning of the 2007-08 crop year an estimated 11,900 cars remained. At one time, this fleet was supplemented by another 6,000 cars: some 2,000 of which were owned by the CWB; 2,000 administered by the CWB on leases paid by the federal government; 1,000 owned by the government of Alberta, and 1,000 owned by the Saskatchewan Grain Car Corporation. These cars have also diminished in number over the course of the last quarter century.

has been the principal asset employed in moving grain. In choosing to retain ownership of the fleet, the federal Minister of Transport, Infrastructure and Communities indicated that this had been done to maximize the benefits accruing to farmers and taxpayers alike.[83]

In the year that followed, Transport Canada began to negotiate new agreements with CN and CP to replace the former operating agreement. These agreements were intended to cover the refurbishment, maintenance and operation of the cars. Under the general terms of the agreements that had been individually concluded with CN and CP by the beginning of the 2007-08 crop year, the government would continue to provide these cars to the railways free of ownership costs so long as they were used to transport grain. This meant that there would be no resultant increase in the carriers' revenue caps as a result of any car hire incurred from their transfer to a third party such as the FRCC.

Although the government committed itself to the periodic inspection of these cars in order to ensure that they were being refurbished and maintained to an acceptable standard, it must be noted that the new agreements also provided for the longer term replacement of this aging fleet.[84] A key dimension to this was that although the capacity lost through attrition would be replaced, it need not necessarily be on a car-for-car basis. That is to say that the railways could replace these comparatively smaller, older cars with the equivalent capacity provided by their substitution with jumbo hoppers, which has become the industry norm.[85] Similarly, an improvement in the car cycle could also be used to counter capacity lost through attrition without replacing a car physically.

By the end of the 2007-08 crop year this process was reportedly well under way, with CN having already begun to scrap many of the aluminum hopper cars that had been identified as unfit for further service.

2.34 Revenue Cap Adjusted to Reflect Reduced Maintenance Allowances

One of the more contentious issues that arose during the debate over the future of the hopper car fleet related to the actual costs incurred in maintaining them. This effectively came to a head when the Farmer Rail Car Coalition made a bid to acquire these cars in 2004. The FRCC's proposal was founded largely on the principle that these costs could effectively be reduced to an estimated annual average of $1,500 per car from the $4,329 per car that the railways were provided under the revenue cap.[86] A subsequent examination into the matter revealed that these actual maintenance costs did in fact fall well below the allowances that had been granted.

To correct this, the federal government brought forward an amendment to the *Canada Transportation Act* that would permit a one-time adjustment to the maintenance allowances accorded to CN and CP.[87] By more closely aligning this compensation with the actual cost of maintaining the hopper cars in regulated grain service, it was estimated that allowable carrier revenues could be reduced by as much as $2.00 per tonne. Towards the close of the 2006-07 crop year, the federal Minister of Transport, Infrastructure and Communities formally requested that the Canadian Transport Agency make this adjustment.

Since the calculation of this adjustment was expected to take several months to complete and be applicable to the revenues that CN and CP would earn over the course of the entire 2007-08 crop year, the Agency issued

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

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

[85] The hopper cars belonging to the Government of Canada are largely of a standardized design, with a capacity of 4,550 cubic feet. Although CN and CP are known to have jumbo hopper cars with capacities in the area of 5250 cubic feet, about 15% more than that of a government-owned hopper car, some newly designed cars provide for as much as 6,300 cubic feet.

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

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

an interim decision wherein it advised the railways that the Volume Related Composite Price Index (VRCPI) was being rolled back from its previously determined value of 1.1611 to 1.0884.[88]

On 19 February 2008 the Agency rendered its final determination in the matter, finding that a one-time adjustment of $72.2 million was warranted. This translated into an estimated $2.59 per tonne as compared to the $2.00-per-tonne value that had been approximated initially. As a result, the Agency rolled back the VRCPI for the 2007-08 crop year even further: to 1.0639 from the interim estimate of 1.0884.[89]

Having disagreed with various aspects of the process as well as the final determination, both CN and CP appealed the Agency's decision to the Federal Court of Appeal. However, the court ultimately ruled against the railways, which allowed the one-time adjustment of $72.2 million to be factored into the Agency's calculation of allowable carrier revenues for the 2007-08 crop year.[90]

2.35 Port of Churchill Witnesses a Sharp Increase in Volume

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

In response, the Manitoba government moved to provide the port with an interim package of financial support, which was complemented by additional funds from the federal government. With a renewed focus on attracting business to the port, these efforts appeared to have yielded positive results in the 2003-04 crop year. Throughput increased to 542,700 tonnes and the traffic base broadened to include peas, canola and other non-CWB grains. Even so, the amount of grain passing through this northern port over the course of the next three crop years seldom exceeded 0.5 million tonnes.[91] Furthermore, this volume constituted about half of the 1.0 million tonnes that many claimed was necessary for the port's long-term commercial success.

However, the volume of grain that passed through Churchill in the 2007-08 crop year proved to be the largest since the 2000-01 crop year: a total of 594,500 tonnes.[92] More importantly, there were a number of distinctions for the port in this result. Perhaps the most noteworthy pertained to a modest shipment of milling wheat to Halifax. Using an arctic supply vessel that would otherwise have returned empty to Montreal, a total of 11,600 tonnes was shipped as a domestic backhaul movement. This constituted the first instance where marine transportation was employed to move grain between Churchill and a destination within Canada. Although such movements are constrained by the limited number of vessels engaged in bringing supplies to the country's northern communities, it clearly demonstrated that an alternative to interregional railway and seaway shipments was possible.

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

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[88] The Volume Related Composite Price Index for the 2007-08 crop year was originally given a value of 1.1611 by the Agency. See Canadian Transportation Agency Decision Number 211-R-2007, dated 27 April 2007. This was subsequently reduced to 1.0884 in consideration of the previously estimated $2.00-per-tonne adjustment the Agency was being asked to make. See Canadian Transportation Agency Decision Number 388-R-2007 dated 31 July 2007.

[89] See Canadian Transportation Agency Decision Number 67-R-2008, dated 19 February 2008.

[90] See consolidated decision of the Federal Court of Appeal, *Canadian National Railway Company v. Canadian Transportation Agency,* 2008 FCA 363, dated 24 November 2008.

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

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

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

2.36 Amendments to the Canada Grain Act Introduced

In September 2006 the federal government tabled a report completed by Compas Inc., a Toronto-based research firm, which had been selected to lead an independent statutory review of the Canadian Grain Commission (CGC) and the *Canada Grain Act*. Built on its consultations with hundreds of stakeholders, the Compas report recommended a number of substantive changes to the mandate of the CGC, many of which would fundamentally alter the way the GHTS works today.[93] Of particular importance were the implications arising from the report's recommendation regarding quality assurance, and the potential alteration of a classification system that has long been based solely on Kernel Visual Distinguishability (KVD).[94]

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

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

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

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

Finally, the elimination of the producer payment security program was aimed at reducing costs and bringing the western Canadian grain industry in line with that of eastern Canada and other agricultural sectors. The program, commonly referred to as "bonding", was seen as a barrier to potential new entrants. Its removal was

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

[94] KVD has provided a low-cost method of identifying wheat types that fit into the various uniform classes established as part of the variety registration system in Canada. In order for unrestricted registration, production and handling of a wheat variety, it has to conform to visual recognition that it is part of a "class" indicative of intrinsic and processing quality.

intended to open the door to producer driven initiatives, such as the development of a "commodity clearing house," in order to manage commercial risks in a more cost-effective manner.[95]

In addition to these formal legislative amendments, the Minister of Agriculture and Agri-Food also announced in mid February 2008 that the KVD-based system which had been used to classify western Canadian wheat would end with the 2007-08 crop year. As of 1 August 2008, it would be replaced by a system involving farmer-based declarations. The intent of this regulatory change was to encourage the development and introduction of new varieties of wheat with enhanced characteristics for traditional users as well as different quality attributes and yield potential for ethanol and feed usage. The CGC was to work with the industry to ensure that the changeover did not compromise the integrity of the existing quality assurance system, and in developing a rapid-testing mechanism for implementation at a future date.

While the regulatory elimination of the KVD-based system was unaffected by the subsequent proroguing of the 39th Parliament, the legislative changes being advanced under Bill C-39 were directly impacted. As such, Bill C-39, which by the prorogation of Parliament on 7 September 2008 had only received first reading, died on the House of Commons order paper.

2.37 Government Moves Forward With Marketing Choice

As one of the planks in its 2006 election platform, the federal Conservative Party promised to provide western Canadian farmers with greater choice in the marketing of their grain. In general terms, this pledge suggested that the CWB would no longer have exclusive jurisdiction over the sale of wheat, durum and barley grown in western Canada for export as well as domestic human consumption. In fact, the term "marketing choice" was intended to mean that farmers would be given the ability to sell the wheat and barley they grew to any domestic or foreign buyer they chose, including a transformed CWB.[96]

Following a task force report and plebiscite, the government continued with what it maintained was the requisite amendments to the *Canadian Wheat Board Regulations* in order to initially extend marketing choice to barley. Having argued that its mandate could only be varied through a legislative change to the *Canadian Wheat Board Act* itself, the CWB moved to have the Federal Court review the legality of the government's actions following the Minister's announcement that these regulatory amendments had been finalized in June 2007.

During a two-day hearing held in late July 2007, both parties argued the merits of their respective positions. In the end, the court sided with the CWB, ruling that legislative amendments enacted in 1998 clearly showed that Parliament had reserved unto itself the power to change the CWB's mandate.[97] As a result, the government's attempt to remove the CWB's single-desk control over the marketing of barley through regulatory change was initially set aside. On 26 February 2008 the Federal Court of Appeal upheld the earlier decision.[98]

Soon afterwards, the federal government introduced amendments to the *Canadian Wheat Board Act* that that would authorize the Governor-in-Council to repeal the regulation that extends the single desk to barley. Bill C-46 also included a requirement respecting commercial dispute resolution for producers and grain companies to use with the CWB. By the close of the 2007-08 crop year, however, Bill C-46 had only received first reading. As was the case with Bill C-39, the amendments put forward under Bill C-46 also died on the House of Commons order paper when the 39th Parliament was prorogued on 7 September 2008.

2.38 Ocean Freight Rates

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

[96] For further information on the government's initiative, please refer to section "*2.31 Government Moves Forward With Marketing Choice"* in the Grain Monitor's Annual Report for the 2006-07 crop year.

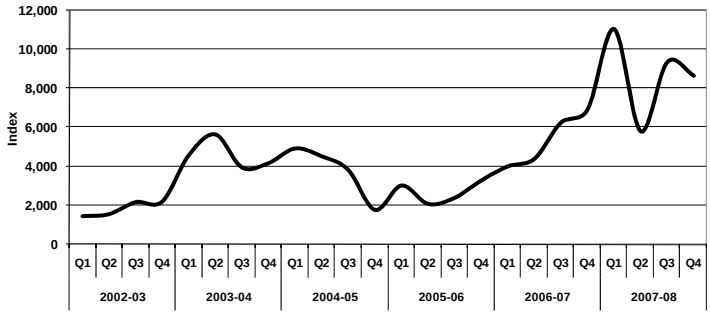
[97] See decision of the Federal Court, *The Canadian Wheat Board v. Attorney General of Canada*, Docket T-1124-07, dated 31 July 2007.

[98] See decision of the Federal Court of Appeal, *Attorney General of Canada v. The Canadian Wheat Board*, Dockets A-384-07 and A-385-07, dated 26 February 2008.

As discussed in previous editions of the Monitor's reports, ocean freight rates have fluctuated dramatically since the 2002-03 crop year. Half way through the 2003-04 crop year, they had climbed to a level that was four times what they had been just 18 months earlier. Ultimately, however, this marked a plateau from which they soon began to fall. To an extent, the undulating pattern exhibited was repeated in both the 2004-05 and 2005-06 crop years, as ocean freight rates drifted steadily lower. After bottoming out in the second quarter of the 2005-06 crop year, however, these rates again began to rise. By the end of July 2006, the Baltic Dry Index (BDI) had risen to about 3,300 points.[99] A year later, it was closing in on a loftier 6,900 points; a level almost five times greater than that witnessed at the outset of the 2002-03 crop year.

Much of this price movement reflected the prevailing, and perceived future, demand for vessels to service China's growing trade in raw materials and finished goods. 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. By way of example, 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. The growing spread between other benchmark ocean freight rates resulted in more grain being moved through ports in the US Pacific Northwest as well as eastern Canada.

Figure 45: Ocean Freight Rates – Baltic Dry Index



Ocean freight rates rose even more dramatically in the first quarter of the 2007-08 crop year. With the BDI surging past the 11,000 level for the first time ever, ocean freight rates proved to be almost eight times greater than they had been six years before. From this pinnacle, however, they then began to plummet; falling by a factor of almost 50% in just three months. Even so, by early June 2008 they had regained all of this lost ground, and then some. By this time the BDI had reached another all-time high, coming within striking distance of 12,000 points. But as before, once again began to tumble. With the close of the 2007-08 crop year the BDI had fallen to 8,600 points.

China's economic expansion continued to be viewed as the main driver in both the rise and unprecedented volatility of ocean freight rates. With iron ore and coal needing about half of the shipping industry's dry bulk capacity, the increase in rates was being fuelled by a seemingly insatiable Chinese demand for these commodities.[100] Moreover, the periodic pricing standoffs that the Chinese were having with the exporters of these commodities produced sharp demand swings that added to their instability.

None of this helped improve Canada's competitive standing in the international grain market. Western Canadian grain usually trades at a freight disadvantage in many parts of the world owing to the greater distances involved in shipping it to market. As ocean freight rates rise, so too does the cost disadvantage for buyers located around the world. Fortunately, the demand for Canada's grain proved strong enough to overcome this financial difficulty.

2.39 Vancouver Transloading Facilities

[99] 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 accompanying chart is drawn from publicly available secondary sources.

[100] In comparison, the marine movement of grain accounts for about 10% of the global dry bulk trade.

In recent years, the GMP has examined several aspects of grain moving in containers, including the merits of their being loaded in the country (source loading) versus at a point closer to its actual export point (port loading). In a 2007 study focusing on container utilization, the Monitor concluded that the port loading of containers was likely to grow as a consequence of the increased focus given by the shipping lines on improving the utilization of their container assets, and reducing overall cycle times. Against this background, the Monitor has continued to watch for changes in the practices surrounding the movement of grain in containers, which mostly involves the shipment of special crops overseas.

The shipment of grain-laden containers through the port of Vancouver grew by 68% between 2005 and 2007.[101] For the 2008 calendar year, however, such shipments were showing signs of weakening. The volumes handled through to the end of August 2008 proved to be some 11% less than they had been in the first eight months of 2007. This largely reflected the tightening of grain supplies in the latter half of the 2007-08 crop year, although shipments in the first half proved strong. Notwithstanding this recent downturn, it is estimated that the general increase in traffic volume is taxing the port's limited transloading capacity. In some instances, this has resulted in facilities adding a second or third shift to deal with the surge in demand.

				YTD	
	2005	**2006**	**2007**	Aug-08	Aug-07
Grain – ALL (Tonnes)	12,069,592	14,004,921	13,677,574	7,986,798	8,776,065
Grain in Containers (Tonnes)	1,413,226	1,574,776	2,282,427	1,279,587	1,433,858
% in Containers	12%	11%	17%	16%	16%
Total TEUs Export Grain	78,470	87,440	126,733	71,049	79,615
Total TEUs Transloaded in Vancouver (estimated)	54,929	62,520	92,515	53,998	58,119
AverageTEUs/ Week	1,052.7	1,198.2	1,773.0	1,552.3	1,670.7

Even so, many of the impediments to the growth of port loading continue to be of a physical nature. Much of this is reflected in the congestion that arises when railcars arrive at the port in comparatively large number or without respect for scheduled container ship sailings. As a result, railcars get delayed, congesting rail yards and transloading facilities alike. Although this leads to the assessment of demurrage by the railways, it is the constricted movement of the railcars during such periods that poses the bigger logistical problems for the facility operators. In an effort to address some of these issues in the Greater Vancouver Area, the operators of these facilities have been making new infrastructure investments. A few of these are outlined as follows:

- Western Transloading, located on Annacis Island and served by the Southern Railway of British Columbia (SRY), installed a two-table system capable of simultaneously loading about eight 20-foot containers per hour. This constituted a four-fold increase in facility processing ability. In addition, the company also extended the length of its storage track to accommodate 12, as opposed to eight, railcars.

- Parish and Heimbecker established a new facility, also serviced by the SRY, in Cloverdale. Like Western Transloading, it too is capable of loading up to eight 20-foot containers per hour. Moreover, the company has the capacity to handle up to 22 inbound railcars, and a trackmobile that gives it greater switching flexibility. Planning for the future, the company has reserved space for the expansion of its transloading capabilities as well as the possible addition of more onsite storage.

- The third investment relates to the one made by Ray-mont Logistics, which took over an older inbound feed and animal meal transloading facility in Richmond. Serviced by CN, this gave the company a toehold in the Vancouver market. While this comparatively small setup differs dramatically from its

[101] The statistics cited here were drawn from the Grain Monitoring Program and Port Metro Vancouver.

larger operation in Montreal, it seems likely that the company will follow its pioneering model and expand significantly in the next year.

The capital investments noted above will undoubtedly have an impact on total transloading capacity in the Greater Vancouver Area. Quorum Corporation believes that these actions have already effectively doubled their earlier handling limits, raising it from an estimated 1,600 TEUs per week to over 3,000 TEUs.[102] Although these investments may well help mitigate some of the logistics problems that have plagued the transloading industry in the past, they also serve to better position these facilities to accommodate future traffic growth.

2.4 Summary Observations

The 2007-08 crop year denoted the eighth for the Canadian Wheat Board's (CWB) tendering program. More significantly, it was the fifth year in which the CWB targeted to move a fixed 40% of its overall grain movements to the four ports in western Canada using a combination of tendering and advance car awards. Under the terms of this arrangement, about half of this volume – representing a maximum of 20% of its overall grain movements – was to be tendered.

The CWB issued a total of 190 tenders calling for the shipment of approximately 1.9 million tonnes of grain, about half of the 3.8 million tonnes that had been sought a year earlier. As in past years, the vast majority of the grain put out to tender, 81.3%, called for the movement of wheat. For the 2007-08 crop year this entailed a potential movement of 1.5 million tonnes, which stood 44.7% less than the previous crop year's 2.8 million tonnes. Durum tenders ranked second in terms of overall size, with calls for over 0.2 million tonnes, or 12.2% of the overall total, having been issued. Barley calls, which took a 6.5% share, accounted for the remaining 0.1 million tonnes.

There was also a noticeable shift in the comparative amounts these tenders sought to direct to the four ports in western Canada. Of the total volume called, 73.3% was intended for export through the west coast ports of Vancouver and Prince Rupert. Although this was somewhat below the levels observed in the two preceding crop years, there was a further shift in the allocation between these two ports. Prince Rupert's share dipped only slightly, to 41.3% from the previous crop year's 41.5% record, while Vancouver's declined to 32.0% from 40.3%. The share accorded to the port of Thunder Bay showed a marked increase in the face of Vancouver's decline, rising to 26.7% from 18.2% a year earlier. For the third consecutive year, no calls were issued in favour of Churchill.

The CWB's tender calls were met by 629 bids offering to move 4.4 million tonnes of grain, almost two-and-a-half times the amount sought. The majority of these bids, 81.3%, responded to calls for the movement of wheat. Another 15.0% responded to those issued for durum, while the remaining 3.7% answered those for barley. On the whole, there was a general increase in overall bidding activity, with the grain companies appearing to have given some preference to durum tenders.

A total of 267 contracts were subsequently signed for the movement of almost 1.9 million tonnes of grain, almost all of the amount called. This represented 14.3% of the tonnage shipped by the CWB to western Canadian ports during the 2007-08 crop year, and fell well short of its 20% target. Of the tonnage moved, 38.8% was shipped to Prince Rupert, 35.0% to Vancouver, and 26.2% to Thunder Bay. Owing to the increased proportion directed to Prince Rupert these rankings differ significantly from those observed in the 2004-05 crop year. In addition to showing a diminished role for Vancouver and Churchill in the movement of tendered grain, these results mark the third instance where Thunder Bay failed to place at least second in terms of the largest export gateways for tendered grain.

Improved market conditions in the 2006-07 crop year brought about a restoration of the bidding patterns that had been observed in the first three years of the CWB's tendering program. Premiums were effectively

[102] The estimate cited here is based on two shifts per day, five days a week, for all facilities. It is important to note that all of the transloading facilities in the Vancouver area schedule their operating hours in accordance with their actual workload. As such, work schedules can, and do, vary from as few as one eight-hour shift per day to as many as can be accommodated by a continuous, around-the-clock operation. The capacity of the system changes correspondingly.

eliminated, and the maximum discounts bid moved noticeably higher. The 2007-08 crop year saw the dollar value of these bids retreat somewhat in the face of diminishing grain shipments. Although the discounts advanced on wheat in the first quarter fell back marginally to $21.28 per tonne, they began to decline more substantially in the second quarter, eventually dropping to a low of $12.13 per tonne in the third quarter.

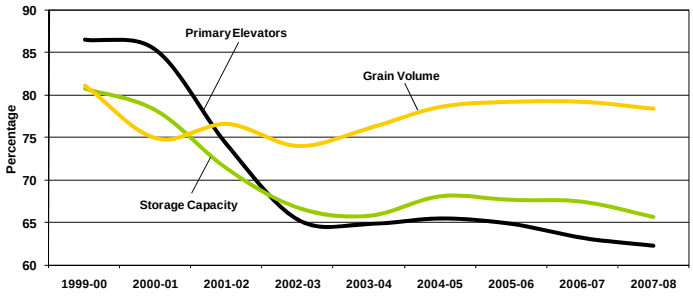
Given the decrease in the discounts offered by the grain companies in their tender bids, the transportation savings accruing to the CWB – and ultimately passed back to producers through its pool accounts – fell appreciably in the 2007-08 crop year. The CWB estimates that the savings generated from these and other sources decreased by 12.8%, falling to $30.6 million from $35.1 million a year earlier.

A total of 1.8 million tonnes of grain moved under the CWB's advance car awards program during the 2007-08 crop year. This represented 13.7% of the CWB's total shipments to western Canadian ports, which constituted a loss of 2.1 percentage points from the 15.8% share garnered a year earlier. In conjunction with the volume that moved under its tendering program, a combined 28.0% of the CWB's total shipments moved under these two programs. This fell considerably short of the 40% that had been targeted, as well as the 36.2% that had been handled in the 2006-07 crop year.

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

Despite the concern raised by a number of stakeholders respecting the potential ability of major grain companies to displace their smaller competitors in the marketplace, the overall market share secured by the larger grain companies has not changed significantly in the last nine crop years, falling to 78.4% from 81.1%. Moreover, they still dominate the primary elevator network. As of 31 July 2008, the major grain companies still held sway over 62.2% of the elevators, and 65.7% of the storage capacity, although these constituted significant reductions from the 86.5% and 80.7% shares respectively held at the end of the GMP's first year.

Figure 46: Relative Shares of the Three Largest Grain Companies



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

Among other important commercial events recorded during the 2007-08 were:

- Dissatisfaction over CN service led a number of grain shippers to bring level-of-service complaints against the carrier before the Canadian Transportation Agency. Moreover, long-standing complaints on the part of rail shippers in general led to the federal government's decision to undertake a review of railway service. The two-stage review is expected to take as much as a year-and-a-half to complete.

- The federal government concluded new operating agreements with both CN and CP for the continued use of its covered hopper car fleet. Key provisions in these agreements required the railways to

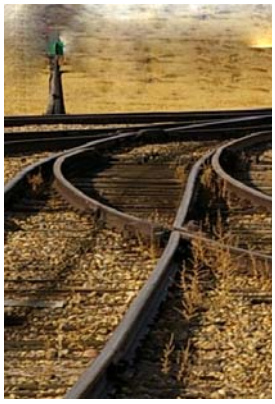
refurbish the cars as well as provide for their longer-term replacement. This came at the same time as the federal government moved to reduce the allowances that the carriers had been receiving for the maintenance of these cars under the revenue cap.

- Building on earlier policy statements, the federal government moved forward with its plans to give western Canadian farmers greater choice in the marketing of their grain by introducing amendments to the *Canadian Wheat Board Act*. However, this bill, along with another to amend the Canada *Grain Act*, both died on the House of Commons order paper when Parliament was prorogued in September 2008.

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 – 2007-08 Crop Year

Trucking

- *The Composite Freight Rate Index for short-haul trucking climbed by 1.9% to 125.5 by the end of the first quarter.*
  - *Data for remaining quarters unavailable; measurement under review.*

Country Elevators

- *Throughput for 2007-08 crop year decreased by 4.7% to 31.9 million tonnes.*
  - *Record showing in the first half tempered by weaker second half.*
- *The average elevator capacity-turnover ratio decreased 7.7% to 6.0 turns.*
  - *Performance was bolstered by a 1.1-million-tonne reduction in elevator storage capacity over the past nine crop years.*
- *Average weekly stock levels decreased 3.9% to 2.7 million tonnes.*
  - *Inventory decreases largely tied to diminished throughput.*
  - *Long-term reduction reflects sensitivity to declining storage capacity.*
- *Average number of days-in-store increased by 1.3% to 31.1 days.*
- *Average weekly stock-to-shipment ratio remained unchanged at 4.5.*
  - *Initial reduction largely offset by declining volumes later in the crop year.*
- *Posted tariff rates for elevator handling activities all increased:*
  - *Receiving, elevation and loading – increased by 0.4%.*
  - *Cleaning – increased by 2.6%.*
  - *Storage – increased by 6.2%.*

Rail Operations

- *Average car cycle fell by 5.8% to 15.9 days.*
  - *Empty transit fell by 8.9% to 7.9 days; loaded transit fell 2.4% to 8.0 days.*
  - *Continued improvement in overall car cycles.*
    - *Spurred largely by improvement in empty transit times.*
- *Proportion of grain moving under incentive programs increased marginally to 76.7%.*
  - *Proportion in blocks of 50 or more railcars increased to 76.7%.*
    - *Reflected elimination of last discounts on smaller car blocks.*
  - *Railway incentive payments estimated at $93.3 million – down 3.2%.*
    - *Driven largely by a 7.0% decrease in total grain shipments.*
    - *Average discount increased 2.0% to $5.51 per tonne.*
- *Significant price movement throughout the crop year.*
  - *Rates initially increased but largely fell later in the crop year.*
  - *CP posted a year-over-year decrease of 8.3% on rates to Vancouver while increasing those to Thunder Bay by 1.4%.*
  - *CN's year-end rates to Thunder Bay and Churchill increased by 17.1% while rates to Vancouver increased by 0.6%.*
  - *CN decreased its rates to Prince Rupert by a further 7.0%.*
    - *Increased price advantage over Vancouver to about 10%.*
- *Canadian Transportation Agency established Revenue Cap of $756.9 million.*
  - *Total grain revenues $816.7 million; $59.8 million more than allowed.*
    - *CN exceeds its cap by $26.0 million.*
    - *CP exceeds its cap by $33.8 million.*
  - *Average revenue increased 1.9% to $30.46 per tonne.*

Terminal Elevators and Port Performance

- *Terminal throughput decreased by 3.5% to 22.0 million tonnes.*
- *The average elevator capacity-turnover ratio increased by 2.5% to 8.5 turns.*
- *Average weekly stock level increased 3.4% to 1.4 million tonnes.*
- *Average time in port decreased 5.7% to 5.0 days.*
- *Posted tariff rates for terminal elevator handling activities increased.*
  - *Receiving, elevation and loading – increased by 2.9%.*
  - *Storage charges – increased by 3.6%.*

Indicator Series 3 – System Efficiency

Table	Indicator Description	Notes	BASE 1999-00	CURRENT REPORTING PERIOD (1) 2006-07	2007-08	% VAR	
	Trucking [Subseries 3A]						
3A-1	Composite Freight Rate Index – Short-haul Trucking		100.0	123.2	125.5	1.9%	▲
	Primary Country Elevators [Subseries 3B]						
3B-1	Grain Volume Throughput (000 tonnes)		32,493.9	33,452.6	31,886.4	-4.7%	▼
3B-2	Average Elevator Capacity Turnover Ratio		4.8	6.5	6.0	-7.7%	▼
3B-3	Average Weekly Elevator Stock Level (000 tonnes)		3,699.3	2,814.7	2,705.5	-3.9%	▼
3B-4	Average Days-in-Store (days)		41.7	30.7	31.1	1.3%	▲
3B-5	Average Weekly Stock-to-Shipment Ratio – Grain		6.2	4.5	4.5	0.0%	–
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		25,662.3	23,736.9	22,084.0	-7.0%	▼
3C-3	Hopper Car Grain Volumes (000 tonnes) – Detailed Breakdown						
3C-4	Railway Car Cycle (days) – Empty Transit Time		10.7	8.7	7.9	-8.9%	▼
3C-4	Railway Car Cycle (days) – Loaded Transit Time		9.2	8.2	8.0	-2.4%	▼
3C-4	Railway Car Cycle (days) – Total Transit Time		19.9	16.8	15.9	-5.8%	▼
3C-5	Railway Car Cycle (days) – Non-Special Crops		19.3	16.6	15.7	-5.6%	▼
3C-6	Railway Car Cycle (days) – Special Crops		25.8	20.0	18.1	-9.4%	▼
3C-7	Railway Car Connections (days)						
3C-8	Hopper Car Grain Volumes (000 tonnes) – Non-Incentive		12,715.9	5,888.5	5,149.5	-12.6%	▼
3C-8	Hopper Car Grain Volumes (000 tonnes) – Incentive		12,945.5	17,848.4	16,934.5	-5.1%	▼
3C-9	Hopper Car Grain Volumes ($millions) – Incentive Discount Value		$31.1	$96.5	$93.3	-3.2%	▼
3C-10	Traffic Density (tonnes per route-mile) – Grain-Dependent Network		442.5	418.0	427.5	2.3%	▲
3C-10	Traffic Density (tonnes per route-mile) – Non-Grain-Dependent Network		292.4	291.5	269.3	-7.6%	▼
3C-10	Railway Traffic Density (tonnes per route-mile) – Total Network		330.3	320.1	303.1	-5.3%	▼
3C-11	Composite Freight Rates – Rail	(2)					
3C-12	Multiple-Car Shipment Incentives – Rail	(2)					
3C-13	Effective Freight Rates – CTA Statutory Revenue ($ per tonne)		n/a	$29.90	$30.46	1.9%	▲
	Terminal Elevator and Port Performance [Subseries 3D]						
3D-1	Annual Port Throughput (000 tonnes) – Grain		23,555.5	22,823.9	22,026.4	-3.5%	▼
3D-2	Average Terminal Elevator Capacity Turnover Ratio		9.1	8.3	8.5	2.5%	▲
3D-3	Average Weekly Terminal Elevator Stock Level (000 tonnes)		1,216.2	1,385.3	1,432.7	3.4%	▲
3D-4	Average Days-in-Store – Operating Season (days)		18.6	19.2	21.0	9.4%	▲
3D-5	Average Weekly Stock-to-Shipment Ratio – Grain	(2)					
3D-6	Average Weekly Stock-to-Shipment Ratio – Grade	(2)					
3D-7	Average Vessel Time in Port (days)		4.3	5.3	5.0	-5.7%	▼
3D-8	Distribution of Vessel Time in Port	(2)					
3D-9	Distribution of Berths per Vessel	(2)					
3D-10	Annual Demurrage Costs ($millions)		$7.6	$15.1	$23.3	54.0%	▲
3D-10	Annual Dispatch Earnings ($millions)		$14.5	$24.6	$29.3	19.1%	▲
3D-11	Average Handling Charges – Terminal Elevators	(2)					

(1) – In order to provide for more direct comparisons, the values for the 1999-2000 through 2007-08 crop years are "as at" or cumulative to 31 July unless otherwise indicated.
(2) – Changes in the data cited cannot be depicted within the summary framework presented here. The reader is encouraged to consult the detailed data tables found in Appendix 4 as required.

3.1 Trucking *[Measurement Subseries 3A]*

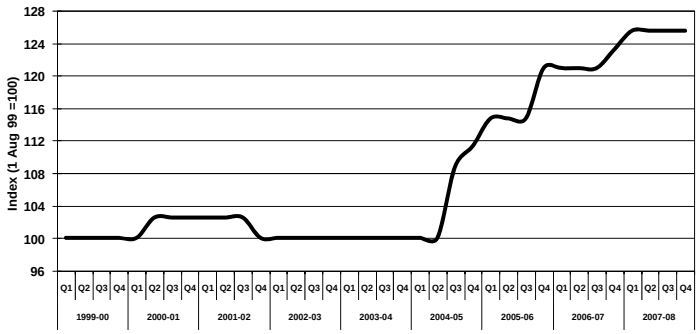
The first step in the process of moving grain through the GHTS typically involves its shipment by truck to a country elevator. Although the distance traveled in doing so can be as little as a few miles, it can also extend to upwards of 100 or more. Furthermore, a wide assortment of equipment is employed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

The GMP tracks the freight rates posted by the principal grain companies for local grain pick-up and delivery services in, and around, a representative sample of 37 specific delivery points. These rates have been combined to create a composite rate scale for commercial truck movements within western Canada, and

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

To a large extent, an excess of capacity in the face of reduced demand 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 had been rising steadily.

Figure 47: Composite Freight Rate Index – Short-Haul Trucking



Over the course of the next three crop years, commercial trucking rates rose by a factor of 23.2%. Ultimately, this increase reflected the effects of rising fuel and labour costs. Increased grain shipments also served to heighten the demand for carrying capacity, which gave service providers a greater degree of latitude in passing these costs onto their customers.

During the first three months of the 2007-08 crop year, short-haul trucking rates rose a further 1.9%. This increased inflationary pressure resulted in the composite price index rising to 125.5 by the close of the first quarter. Much of this inflationary pressure was again due to the escalating price of fuel, which had been rising in conjunction with crude oil prices since the end of the 2006-07 crop year. By the end of October 2007 the price of West Texas Intermediate crude oil had increased by a factor of 20%, rising from about $75 US per barrel to $90 US per barrel. The price of crude fluctuated around this level through to the end of the second quarter before then beginning to rise again. By mid July 2008 the per-barrel price had risen by another 50%, to over $140 US before then pulling back to about $120 at the close of the crop year. This spurred domestic fuel prices even higher.

Such pressure undoubtedly had a further impact on commercial trucking rates. However, it must be noted here that owing to consolidations within the grain industry, the rate data that had been used in calculating the composite price index was no longer being made available to the Monitor. As such, information pertaining to the changes in commercial trucking rates beyond that recorded for this period was unavailable. As such, the year-end value of the composite price index, 125.5, only reflects changes registered through to the end of the first quarter. Notwithstanding this, the Monitor continues to examine alternative methodologies that would allow for the future continuation of this data series. [See Table 3A-1 in Appendix 4.]

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

Primary country elevator throughput for the 2007-08 crop year declined by 4.7% in comparison to that handled a year earlier, falling to 31.9 million tonnes from a GMP record of 33.5 million tonnes. Notwithstanding this overall reduction, throughput in the first half proved to be quite substantial. In fact, the volume passing through the system in the first quarter reached a GMP record of 9.4 million tonnes. Moreover, this volume also supported the record 17.5 million tonnes that were handled in the first half. It was diminishing third and fourth quarter volumes that proved to be the undoing of these early achievements. Even so, they still afforded the GMP with an opportunity to again gauge the operational efficiency of the primary country elevator system under a comparatively heavy initial workload.[103]

[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.

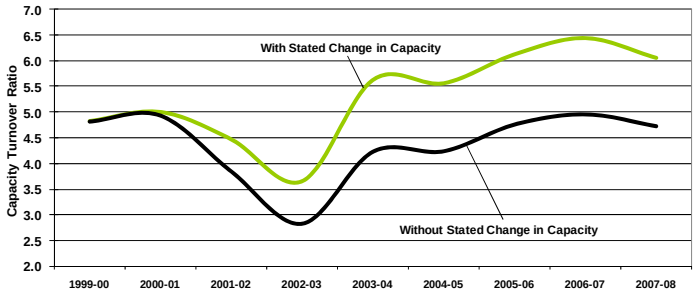
Much of the overall decline in throughput could be attributed to the two largest grain-producing provinces, Saskatchewan and Alberta. With its 10.3% reduction in throughput, Saskatchewan posted the largest comparative decline, shipping a total of 15.1 million tonnes as compared to 16.9 million tonnes the year before. This was in turn followed by Alberta, which shipped 10.2 million tonnes, some 1.9% less than its record 10.4 million tonnes of the previous year. Manitoba reported an increase of 5.7%, with throughput rising to 6.2 million tonnes from 5.8 million tonnes a year earlier. Although British Columbia trailed the pack with 0.3 million tonnes in primary elevator throughput, its year-over-year increase of 8.2% was actually the largest posted among the producing provinces. [See Table 3B-1 in Appendix 4.]

Capacity Turnover

The effect of changes in both throughput and storage capacity are reflected in the primary elevator system's capacity-turnover ratio. Although throughput fell by 4.7%, the capacity-turnover ratio decreased by a more substantive 7.7%, falling to 6.0 turns from the GMP record of 6.5 turns set a year earlier. The comparatively greater decline in this value was due to the influence exerted by a 150,100-tonne increase in the primary elevator system's storage capacity.

As with the overall ratio, the ratios of most producing provinces also declined. Although Alberta's ratio fell by 3.9%, its ratio again outranked all others, standing at 7.3 turns in comparison to the record-setting 7.6 turns of the previous crop year. A modest 1.6% decrease was also posted by Manitoba, which reported 6.3 turns as compared to 6.4 turns a year earlier. Rounding out this group was Saskatchewan, where a 3.9% decline drew down its ratio to 5.5 from 5.9. For British Columbia, the only province to post an increase, the ratio rose by 16.0%, to 5.8 turns from 5.0 turns the year before. [See Table 3B-2 in Appendix 4.]

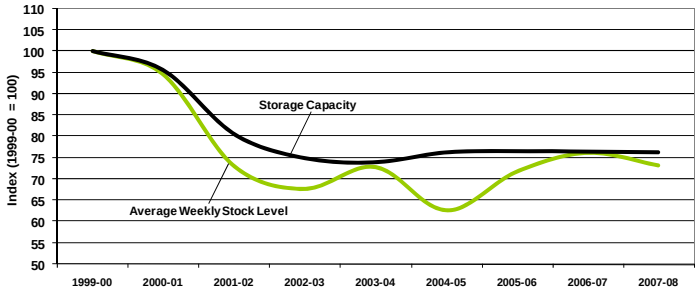
Figure 48: Change in Capacity – Impact on Capacity Turnover Ratio



Although the changes 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 a 17.5%, or 1.1-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.

In truth, had storage capacity not been reduced, the 2007-08 crop year's ratio would have been 4.7 turns instead of 6.0 turns. This 1.3-turn differential draws attention to the fact that the primary elevator system has improved its handling efficiency by an estimated 28.1% over the course of the last nine crop years.

Figure 49: Relative Change in Primary Elevator Storage Capacity and Average Stock Levels



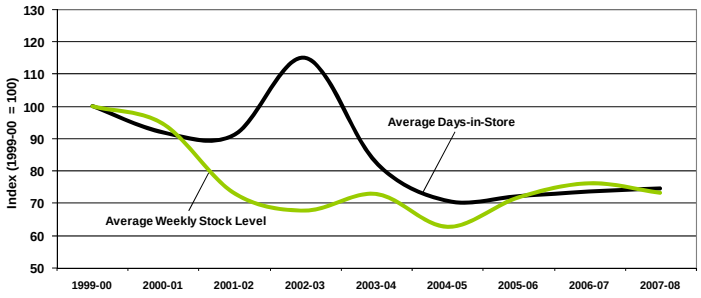
Elevator Inventories

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.

In concert with the general reduction in storage capacity, grain inventories have also been declining. By the end of the 2002-03 crop year, the primary elevator network's average weekly stock level had fallen to 2.5 million tonnes. And even though the 2003-04 crop year's average climbed to 2.7 million tonnes, it still remained below the GMP's first year benchmark of 3.7 million tonnes. This downward trend was accentuated even further in the 2004-05 crop year when a late harvest heightened the demand for high-quality grain and reduced the average to a record low of 2.3 million tonnes. From this point inventories began to rise, reaching an average of 2.8 million tonnes for the 2006-07 crop year. [See Table 3B-3 in Appendix 4.]

The 2007-08 crop year saw a modest reduction in prairie grain inventories, with the average having fallen by 3.9% to 2.7 million tonnes. This decline, however, largely reflected the full-year effect of tightening grain supplies, which resulted in the fourth-quarter average falling to 2.2 million tonnes in comparison to the almost 2.9 million tonnes that had been held in inventory for the first nine months of the crop year.

Figure 50: Relative Change in Average Weekly Stock Levels and Average Days in Store



It is worth noting that the 26.9% net decline in primary elevator inventories over the course of the last nine crop years only marginally exceeded the 23.6% reduction in storage capacity. This means that, despite periodic fluctuations in average inventories, the amount of grain maintained in inventory has largely declined in step with the system's overall storage capacity. In fact, the 52.0% of the capacity taken up by this inventory was comparable to that observed at the beginning of the GMP.[104]

Just as the average stock level has moved generally lower, so too has the average amount of time spent by grain in inventory. From a benchmark 41.7 days in the GMP's base year, to 29.5 days in the 2004-05 crop year, the average number of days-in-store fell by 29.3%.[105] As was the case with stocks, however, the average number of days spent by grain in inventory has since increased. By the 2006-07 crop year the average had risen to 30.7 days. The 2007-08 crop year produced another 1.3% increase, with the average amounting to 31.1 days. Fluctuations in the quarterly values followed the same pattern presented earlier for inventories: rising to an average of 35.0 days in the third quarter before falling back to a low of 28.0 days in the fourth. [See Table 3B-4 in Appendix 4.]

Some of the more noteworthy year-over-year changes in these averages are summarized as follows:

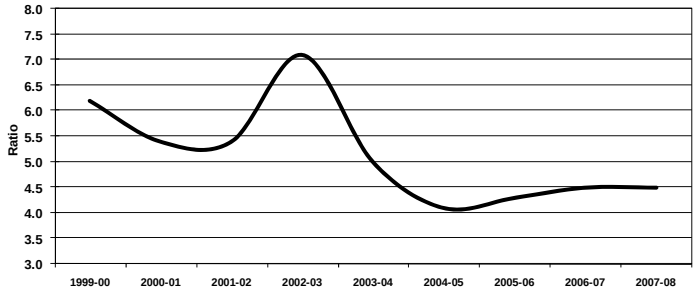
Province	Days-in-Store	Change	Grain	Days-in-Store	Change
British Columbia	36.5 days	Down 12.9%	CWB Grains		
Manitoba	29.9 days	Down 6.9%	Wheat	36.9 days	Down 1.6%
Alberta	27.6 days	Down 5.5%	Barley	21.4 days	Up 9.7%
Saskatchewan	33.7 days	Up 9.4%	Durum	38.7 days	Up 9.9%
			Non-CWB Grains		
			Peas	21.2 days	No Change
			Oats	26.7 days	Up 1.5%
			Flaxseed	32.0 days	Up 8.8%
			Canola	26.4 days	Up 23.4%

[104] Primary elevator inventories assumed an average of 54.3% of the system's storage capacity in the 1999-2000 crop year.

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

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.[106]

Figure 51: Primary Elevators – Stock-to-Shipment Ratio



A review of the average weekly stock-to-shipment ratios recorded during the GMP's first five years reveals that the quarterly average seldom fell below a value of 5.0. As such, the inventory on hand at the close of any given week generally exceeded that required in the next by a factor of at least five. Notwithstanding the anomaly of the 2002-03 crop year, when reduced grain sales prompted a build-up in primary-elevator stocks that greatly inflated the ratio, by the 2006-07 crop year the annual average had declined by 27.4%, to 4.5 from 6.2.[107]

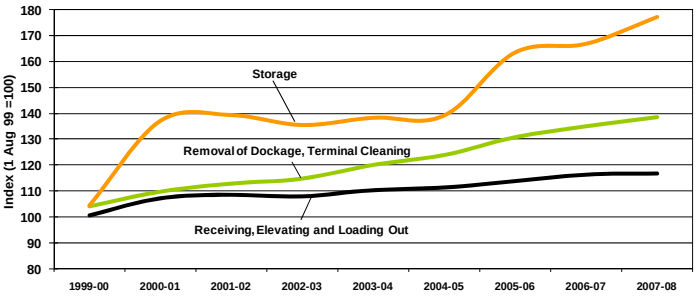
Although the ratio's quarterly values tracked somewhat below those posted a year earlier, the annualized value remained unchanged at 4.5. This result was heavily influenced by an increase in the fourth quarter's ratio, which reflected the combined effects of a sizable downturn in shipments along with a comparatively greater reduction in inventories. [See Table 3B-5 in Appendix 4.]

Average Handling Charges

The rates assessed by grain companies for a variety of primary elevator handling activities vary widely. These differences reflect not only the specific services offered – be it elevation, cleaning or storage – but the diversity of grains involved and the province in which the service was provided. Given the myriad of tariff rates, the GMP necessarily uses a composite price index to track the movement in these rates.[108]

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 52: 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

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

[107] 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.

[108] 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.

loading out grain. Through to the end of the 2006-07 crop year, these rates had risen by a total of 16.3%. During the 2007-08 crop year they increased a further 0.4%, bringing the cumulative increase for the last eight years to 16.7%.[109]

The rates in place for the removal of dockage are the only ones to have posted increases in each of the last nine crop years.[110] For the 2007-08 crop year, these rates were raised by about 2.6%. This resulted in the composite price index for dockage having increased by a total of 38.3% under the GMP.

The most substantive rate escalation observed thus far has been with respect to elevator storage. Much of the initial price shock came towards the end of the 2000-01 crop year, when these rates were raised by a factor of almost one-third. Although these rates pulled back moderately in the 2002-03 crop year, increases were applied in each of the following four crop years. The 2007-08 crop year witnessed a further escalation in storage costs, with rates having risen by about 6.2%. As a result, storage charges in place at the end of the 2007-08 crop year were effectively 76.9% higher than at the beginning of the GMP. [See Table 3B-6 in Appendix 4.]

3.3 Rail Operations *[Measurement Subseries 3C]*

The volume of grain moved in covered hopper cars during the 2006-07 crop year posted a year-over-year decrease of 7.0%, falling to 22.1 million tonnes from 23.7 million tonnes the year before.[111] Much of the reduction was registered by Saskatchewan, where rail shipments fell by 1.7 million tonnes, or 14.4%, to 10.4 million tonnes. Although Manitoba also posted a reduction of 0.3%, the decline had little measurable impact on the 2.5 million tonnes of grain that was shipped from the province. Much the same was true of Alberta, where a gain of 0.5% resulted in total shipments of almost 9.0 million tonnes. And while British Columbia registered a 29.2% increase in rail volume, total originations amounted to just under 0.3 million tonnes.[112]

Reductions in the amount of grain shipped to most ports in western Canada were also observed. Movements to Vancouver fell by 3.6%, to 11.9 million tonnes from 12.3 million tonnes a year earlier, giving it a 53.8% share of the total railway volume. Thunder Bay saw its volume decrease by 14.0%, to 5.1 million tonnes from 6.0 million tonnes the year before. After having reached a GMP record of 4.9 million tonnes in the previous crop year, railway shipments to Prince Rupert fell by 9.6% to 4.5 million tonnes. Running counter to these results was the volume of traffic directed to Churchill, which posted a 19.6% increase to 0.6 million tonnes. [See Tables 3C-1, 3C-2, and 3C-3 in Appendix 4.]

Car Cycles

In the context of the GHTS, the car cycle measures the average amount of time taken by the railways in delivering a load of grain to a designated port in western Canada, and then returning the empty railcar back to

[109] By way of comparison, the Industrial Product Price Index increased by 17.3% during this period.

[110] 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.

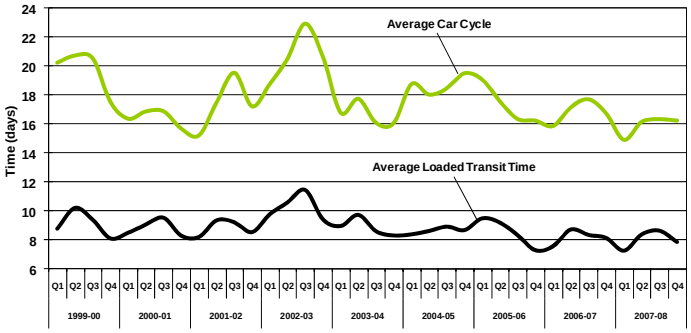
[111] The overall volume of grain cited here as having moved by rail to western Canadian export positions in the 2007-08 crop year contrasts with the 22.8 million tonnes mentioned in Section 1.2. This latter value is a broader measurement that includes grain movements in boxcars, trailers and containers. 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.

[112] 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 2007-08 crop year reflects a fourth full year of statistics relating to railway grain movements from British Columbia.

the prairies for reloading. The railways' average car cycle for the 2007-08 crop year fell by 5.8%, to 15.9 days from 16.8 days a year earlier.[113] This average proved to be the lowest yet reported under the GMP.[114]

As has often been the case, the onset of winter had an adverse impact on railway car cycles, which rose from a first-quarter low of 15.0 days to a height of 16.4 days in the third. Even so, these values proved to be comparatively better than those posted in the same period of the previous crop year.[115]

Figure 53: Average Railway Car Cycle



Without exception, improvements were noted in each of the operating corridors. The Prince Rupert corridor posted the largest of these, with a decrease of 9.8%, which drew down the average to 14.3 days from 15.9 days a year earlier. The Vancouver corridor posted the next largest reduction, with its overall average falling by 8.3% to 17.0 days. A 1.0% improvement in the Thunder Bay corridor resulted in a 15.4-day average versus 15.6 days twelve months before. See Table 3C-4 in Appendix 4.]

These improvements extended equally to the car cycle's loaded and empty transit time components. In the case of the former, the average loaded transit time fell by 2.4%, to an average of 8.0 days from 8.2 days a year earlier. As for the average empty transit time, the betterment amounted to 8.9%, with the average falling to 7.9 days from 8.7 days.

In large measure, these results were driven by the improvements made by CN. To be sure, CN posted a 9.1% reduction in its overall car cycle while CP's rose by 4.1%. The results were equally mixed with respect to each carrier's loaded and empty transit times. As regards their loaded transit times, the CN average fell by 5.7% while the CP average rose by 0.7%. For their empty-transit-time averages, CN posted a 13.0% reduction in comparison to a 4.1% increase for CP.

The average car cycle for non-special crops amounted to 15.7 days in the 2007-08 crop year. This value proved to be 13.5% less than the 18.1-day average tied to special crops. On the whole, these results indicate that there is a structural difference in the service provided for the movement of special crops. This difference was particularly evident in the Vancouver corridor, where the average cycle on non-special crops totalled 16.8 days in comparison to an 18.6-day average on special-crop movements. For the Thunder Bay corridor, however, the results were somewhat reversed, with a 15.4-day average on non-special crop movements proving marginally greater than the 15.2-day average given over to special crops. [See Tables 3C-5 and 3C-6 in Appendix 4.]

These structural differences were equally evident in the loaded and empty transit times of both groups. In the case of loaded transit times, there was a 1.3-day advantage for non-special crop movements, which averaged

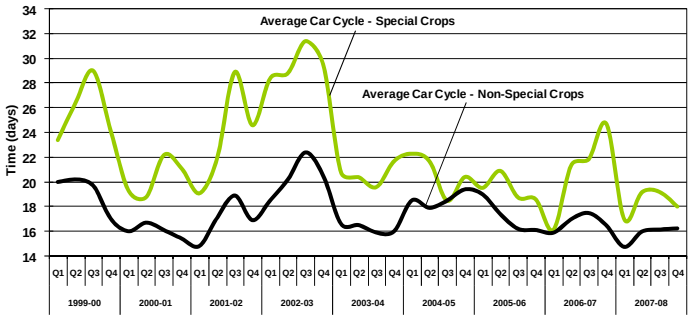
[113] Western Canada's average car cycle of 15.9 days is derived from 178,156 movements: 79,349 in the Vancouver corridor; 53,244 in the Thunder Bay corridor; and 45,563 in the Prince Rupert corridor. The relative weighting accorded these movements is dependent on the number of acceptable records received, 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.

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

[115] Service disruptions occasioned by landslides in the Rockies and a nation-wide strike at CN had a negative impact on average car cycles in the 2006-07 crop year.

7.9 days versus 9.2 days for special crops. The advantage on empty transit times proved somewhat narrower at 1.1 days, with non-special crops posting a 7.8-day average in comparison to 8.9 days for special crops.

Figure 54: Average Car Cycle – Special and Non-Special Crops

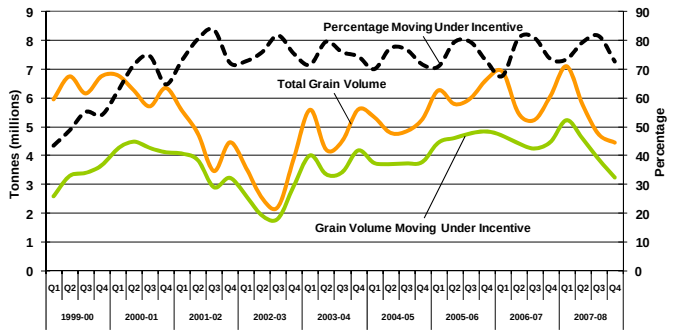


The demand for railway carrying capacity typically surges at harvest time. Moreover, the larger the crop, the more intense the resultant strain on the GHTS becomes. With what amounted to a record grain movement under the GMP in the first quarter, this undoubtedly placed added pressure on the system's railway resources. Notwithstanding this, nor the difficulties associated with the onset of winter operations in the second and third quarters, the railways posted what proved to be the best car cycles yet recorded under the GMP. To an extent, the strides made by CN in narrowing the performance gap that it had opened with CP almost three years before was a significant factor in this achievement.[116] And while a greater emphasis on unit train operations has had a positive effect on the car cycles posted in both the Vancouver and Thunder Bay corridors, it is the increased volume of grain moving to Prince Rupert – which consistently posts some of the lowest corridor averages under the GMP – that has had the greatest influence over these results.

Multiple-Car Blocks

During the course of the 2007-08 crop year, the railways handled a total of 16.9 million tonnes of grain under the incentive programs they use to encourage shippers to move grain in multiple-car blocks. This represented a reduction of 5.1% from the 17.8 million tonnes handled under these programs a year earlier. In large measure, this reduction reflected the overall decline in the grain supply.

Figure 55: Railway Volume Moving Under Incentive



To be sure, although the grain supply has a broad influence over the volumes handled under these programs, as was demonstrated by the droughts in both the 2001-02 and 2002-03 crop years, the monetary incentives put forward by the railways have also been shown to have a great amount of sway.

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

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

these advances, movements in blocks of 25-49 railcars began to wither. Moreover, both railways promoted this shift through the systematic reduction of the incentives they offered on smaller shipments.[117]

Even with the elimination of the small-block incentives the overall proportion of grain moving under these incentive programs remained largely unchanged. In the 2007-08 crop year, this proportion amounted to an estimated 76.7%, and differed very little from the average values recorded in each of the previous six crop years. Moreover, the greatest gains were made in the first three years of the GMP when this proportion rose from an estimated 50.4% for the base year to 76.9% in the 2001-02 crop year.[118] Although the quarterly values show a greater degree of seasonal variability, the data suggests that the overall proportion of the grain moving under these programs has stabilized at about the 75% level.[119] [See Table 3C-8 in Appendix 4.]

It must be noted, however, that 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. Rather, the elimination or redefinition of the car blocks used in both programs has effectively reduced the direct comparisons that can be made to two: incentive shipments in blocks of less than 50 cars; and those in blocks of 50 or more cars.

Since the GMP began, the share of the total volume moving in blocks of 50 or more cars has climbed fairly steadily, from 27.8% to 76.7% in the 2007-08 crop year. Although increases in the incentive discounts payable on these larger-block shipments largely fuelled this migration, there can be little doubt that a simultaneous rollback in the discounts applicable on shipments in blocks of 25-49 railcars also had an effect. Until these lesser discounts were eliminated entirely in the 2006-07 crop year, the proportion of shipments earning them had been falling steadily; from an estimated 22.6% share in the first year of the GMP to just 4.2% in the 2005-06 crop year.

Figure 56: Composition of Multiple-Car Block Incentive Movements

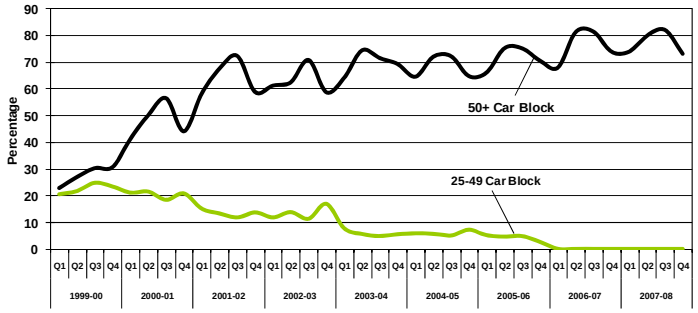
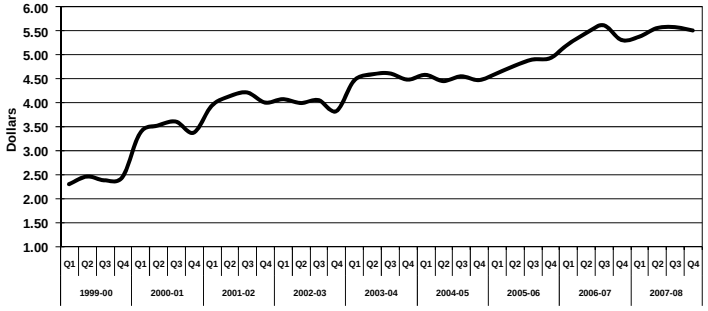


Figure 57: Average Incentive Discount Earned (dollars per tonne)



The annual value of the discounts earned by grain shippers – estimated as a gross savings in railway freight charges – has tripled in the last nine years, climbing to an estimated $93.3 million from $31.1 million. Yet only $9.6 million, or 15.4%, of this $62.2-million increase was derived from the additional volume of grain shipped under these programs. The majority, $52.6 million, came from the expanded use of the larger car blocks, which carried the higher per-tonne discounts offered by the railways.

[117] CN eliminated its $1.00-per-tonne discount on shipments in blocks of 25-49 railcars at the beginning of the 2003-04 crop year. Although CP reduced its incentive to $0.50 per tonne at the same time, it ultimately did away with these discounts three years later, at the commencement of the 2006-07 crop year.

[118] 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.

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

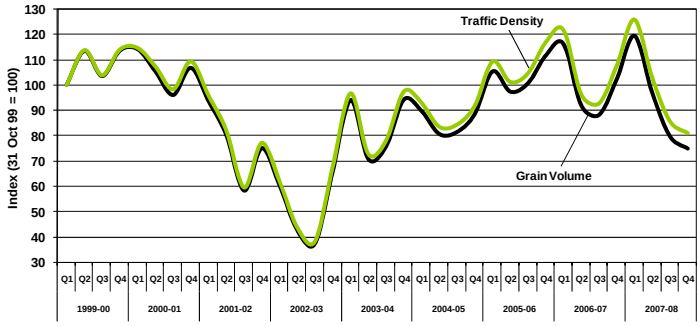
The average discount earned underscores the incremental gains realized by the grain companies. Between the 1999-2000 and 2006-07 crop years, the average discount earned under these programs climbed to an estimated annualized average of $5.41 per tonne from $2.40 per tonne.[120] The 2007-08 crop year saw this average gain a further 2.0%, climbing to a record $5.51 per tonne. Again, this increase largely reflects the growth in the proportion of movements that went in blocks of 50 or more cars. [See Table 3C-9 in Appendix 4.]

Traffic Density

A broad indicator of railway efficiency is traffic density. With a quarterly average of 303.1 originated tonnes per route-mile, overall density in the 2007-08 crop year was 5.3% less than the 320.1 tonnes per route-mile observed a year earlier. This value was also 8.2% below the 330.3-tonnes-per-route-mile average recorded in the first year of the GMP.[121]

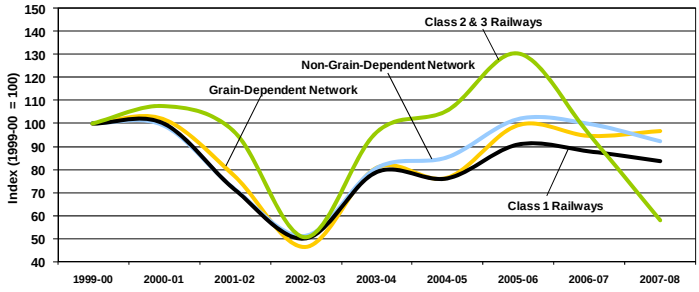
The limited transformation of the railway network over the past nine years has largely sensitized this indicator to changes in traffic volume.[122] This can best be seen when comparing quarterly changes in traffic density with that of grain volume, patterns that are almost indistinguishable. It is for this same reason that any examination of traffic density, be it with respect to differences between railway classes or railway line classes, ultimately accentuates volume-related changes as well.

Figure 58: 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. Initially, this largely reflected the more significant underlying changes to their infrastructures, be it through sale or abandonment. Although this is still true, the virtual halving of the regional and shortline network has left the measure more sensitive to changes in volume. A 45.4% reduction in the average quarterly tonnage for Class 2 and 3 carriers was the primary force behind a 39.3% decline in this grouping's traffic density in the 2007-08 crop year.

Figure 59: Relative Change in Railway Traffic Density



Such gyrations are largely tempered if the networks being examined are less prone to continual redefinition, as is the case when the densities of the grain-dependent, and non-grain-dependent, networks are compared. Through to the end of the 2003-04 crop year, the traffic densities of these lines moved largely in tandem. This arose not as a result of comparatively similar changes in either of the underlying infrastructures or traffic

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

[121] 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.

[122] With traffic volume held constant, the resultant effect of all changes to railway infrastructure under the GMP has been a 6.6% improvement in traffic density.

volumes, but because the decline in grain-dependent infrastructure tempered the impact of an even greater reduction in originated tonnage.

This was not the case in the 2004-05 crop year when a gain in volume for the non-grain-dependent network, coupled with a decline in that for the grain-dependent network, caused their traffic densities to begin moving in opposing directions. Notwithstanding the broader changes in tonnage that have since impacted both networks, a comparatively greater decline in the physical scope of the grain-dependent network has actually helped to strengthen its density values. For the 2007-08 crop year, a 4.9% decline in volume, offset by a steeper 7.0% reduction in infrastructure, resulted in the traffic density of the grain-dependent network increasing by 2.3%, climbing to an average of 427.5 tonnes per route-mile from 418.0 tonnes per route-mile a year earlier. For the non-grain-dependent network, a 7.8% drop in volume coupled with a 0.2% decline in infrastructure produced a 7.6% reduction in density, which fell to an average of 269.3 tonnes per route-mile from 291.5 a year earlier. [See Table 3C-10 in Appendix 4.]

Railway Freight Rates

As one of the reforms aimed at making the GHTS more commercial, competitive, and accountable, the federal government ended its long-standing policy of regulating maximum railway freight rates for the movement of grain in western Canada. Instead, it adopted a policy that provided the railways with greater latitude in pricing, but limited the overall revenues that they could derive from moving grain in western Canada.[123]

To achieve this, the railways chose a two-pronged approach that involved adjusting both their published single-car freight rates as well as the incentive discounts applicable on the movement of grain in multiple-car blocks. As outlined in the Monitor's previous reports, although the revenue cap accorded both CN and CP greater freedom in setting freight rates, their pricing actions remained largely similar through to the end of the 2002-03 crop year, with nominal freight rates having increased by about 3.8% from their 1999-2000 crop year levels.[124] At the same time, they also increased the incentive discounts applicable on larger car-block movements.[125]

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

The 2006-07 crop year brought even more changes to the prevailing rate structure. The most striking element in this was CN's decision to phase out its wholesale per-tonne rates, and to replace them with commodity-specific, per-car charges.[126] And while CP did not immediately follow suit with a similar change to its rate structure, both carriers increased their rates substantially. Due in large measure to the inflationary pressures

[123] 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.

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

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

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

brought on by higher fuel costs, the rates associated with moving a single carload of wheat were raised by anywhere between 7.3% and 12.1% depending on the corridor and carrier involved. These proved to be among the largest year-over-year increases recorded under the GMP.

For the 2007-08 crop year, both railways brought forward rate increases that exceeded the 3.3% reduction that the Canadian Transportation Agency indicated would likely ensue as a result of a one-time adjustment to its Volume-Related Composite Price Index.[127] By the end of the first quarter CN had increased its single-car rates in most corridors by a factor of 1.0%, although it again reduced those applicable on movements to Prince Rupert by about 5.5%. This action served to widen the average benefit on westbound movements to about 8.8% in Prince Rupert's favour.[128] CN also finalized the transition of its rates into per-car, rather than per-tonne, charges.[129] CP did much the same, increasing its rates in the Vancouver and Thunder Bay corridors by 0.8% and 0.3% respectively, while also converting their tariffs to per-car charges.

The second quarter saw more significant increases to these rates. With the exception of the rates applicable on movements to Churchill, which remained unchanged, CN increased its rates by a further 2.2%. Similarly, CP applied an across-the-board increase of 3.0% on its movements to Vancouver and Thunder Bay. This was followed in the third quarter by a series of more diverse rate adjustments as well as yet another structural change. CN reduced the rates applicable on movements to the west coast by about 2.6% in the case of Vancouver, and by 3.9% in the case of Prince Rupert. The carrier also restructured its rates, linking them to the weight-based, rather than volume-based, limit of the car being loaded.[130] CP's adjustments proved to be broader in scope, with its rates in the Vancouver and Thunder Bay corridors being reduced by about 1.9%.[131]

The fourth quarter brought even further changes as CN moved to increase its rates in the Thunder Bay corridor by 8.0% at the beginning of June, and another 5.0% at the beginning of July. This was largely mirrored in the Churchill corridor with increases of 10.4% and 5.0% respectively. The compound effect was a year-over-year increase of 17.1% in both corridors. The story was considerably different on CN's westbound rates, which remained unaltered during this period. With the close of the 2007-08 crop year, the resultant impact on these rates amounted to an increase of 0.6% on single-car movements to Vancouver, and a 7.0% reduction on those to Prince Rupert. CP also brought forward additional changes to its rates in June 2008, although these were confined to a 10.0% reduction on shipments to Vancouver. In the face of these latter adjustments, by the close of the 2007-08 crop year CP's rates had fallen by about 8.3% in the Vancouver corridor while increasing 1.4% in the Thunder Bay corridor.

When placed within a longer-term context, these recent actions reveal some significant changes in railway pricing. To be sure, the majority of rates have been increased over the course of the last nine crop years, but by no means uniformly. In the Vancouver corridor, CN's rates on single-car movements of wheat have climbed by a factor of 17.5%, while the gain posted by CP amounted to a far less 5.7%. The comparative increases

[127] The revenue cap is adjusted annually for inflation by the Canadian Transportation Agency. For the 2007-08 crop year, the Agency had initially determined that the Volume-Related Composite Price Index used to accomplish this was to be increased by 3.2%. See Canadian Transportation Agency Decision Number 211-R-2007 dated 27 April 2007. However, since the federal Minister of Transport, Infrastructure and Communities had requested the Agency make a one-time adjustment to this index in order to remove an excess allowance given over to the maintenance of the government's hopper car fleet, this inflationary increase was later varied, with a projected 3.3% reduction being substituted. See Canadian Transportation Agency Decision Number 388-R-2007 dated 31 July 2007. A final determination by the Agency later enlarged this reduction to about 5.4%. See Canadian Transportation Agency Decision Number 67-R-2008 dated 19 February 2008.

[128] At the beginning of the GMP, single car rates for grain moving to Prince Rupert were about 13% greater than those applicable on its movement to Vancouver. The actions taken by CN in reducing its rates in the Prince Rupert corridor over the course of the last several years denotes a significant change in its traditional pricing strategy, and one that has resulted in a substantial increase in volume for this more northerly port.

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

[130] Up until this point CN's freight charges had been structured around a car's volume-based carrying capacity; 4550 cubic feet in the case of most government-owned covered hoppers. Given the railway's commitment to upgrade a portion of the government-owned fleet for heavier axle loading, the per-car charge was amended to reflect the car's new weight-based carrying capacity, which was effectively being increased from 201,000 lbs to 207,000 lbs.

[131] CP actually reduced its rates substantively in March 2008 before escalating them again in mid April. The reduction noted here highlights the net change between the rates that were in place at the end of the second and third quarters.

observed in the Thunder Bay corridor proved even more striking: 39.7% in the case of CN and 18.3% for CP.[132] More telling perhaps is the fact that prior to the close of the 2007-08 crop year, the pricing differential in both corridors was much narrower, with CN's accumulated rate increases having only marginally exceeded those put forward by CP.[133] [See Table 3C-11 in Appendix 4.]

While there was much to suggest that the carriers were again trying to manage their revenues under the revenue cap, it appeared that both were also attempting to influence the flow of traffic. The more substantive rate increases applied on shipments destined to Thunder Bay and Churchill, rather than those moving to the west coast, made this especially evident. Of particular interest, however, remains the preference that CN has continued to place on movements to Prince Rupert. At the outset of the GMP, CN's rates to Prince Rupert generally exceeded those applicable on movements to Vancouver by a factor of 13%. In some circles, this differential was considered discriminatory, and prejudicial to the movement of grain to Prince Rupert. But, beginning in the 2000-01 crop year, CN began to lower its rates in this corridor. By the end of the 2006-07 crop year, movements to Prince Rupert carried a 1.5% rate advantage, which helped increase the port's volume to a GMP record of 4.9 million tonnes. Further reductions in the 2007-08 crop year helped widened this advantage to about 10%.

There were no changes noted in the incentive programs offered by the railways. In the case of CP, these discounts amounted to $4.00 per tonne on movements in blocks of 56-111 cars, and a maximum of $7.00 per tonne on shipments in blocks of 112 cars.[134] In comparison, CN continued to offer a discount of $3.00 per tonne for movements in blocks of 50-99 cars and $7.00 per tonne for block movements of 100 or more cars. [See Table 3C-12 in Appendix 4.]

Although these incentives had increasingly been tied to the use of the carriers' advance booking options, it must be noted here that these bonds began to weaken in the 2007-08 crop year.[135] It is worth remembering that these options, and more specifically those marketed by CN, were increasingly being viewed as discriminatory by a number of shippers. In fact, this perspective figured prominently in the level-of-service complaints brought against CN early in the crop year.[136] These actions ultimately led to CN's decision to temper some of the more contentious elements of its programs, and to its introduction of a new car-ordering system in February 2008.

The Revenue Cap

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

[132] The Thunder Bay and Vancouver corridors are deemed the most competitive since both CN and CP offer direct rail services to these ports. 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 shows a net increase of about 39.6% for Churchill, and a net decrease of about 5.7% for Prince Rupert, over the same period of time.

[133] The comparative measurement employed here indicates that, since the beginning of the GMP, the relative rise in CN's single-car freight rates was 11.8 percentage points greater than that of CP's in the Vancouver corridor, and 21.4 percentage points greater in the Thunder Bay corridor. At the end of the previous crop year, these differentials amounted to just 1.7 percentage points in the Vancouver corridor, and 2.6 percentage points in the Thunder Bay corridor.

[134] For several years, shippers capable of loading 112 cars in a 10-hour window have been able to earn a slightly greater discount of $7.50 per tonne. Those unable to do so, however, were restricted to the lower $7.00-per-tonne discount. Owing to its limited application, CP eliminated the incremental benefit for loading within 10 hours in the latter half of the 2007-08 crop year.

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

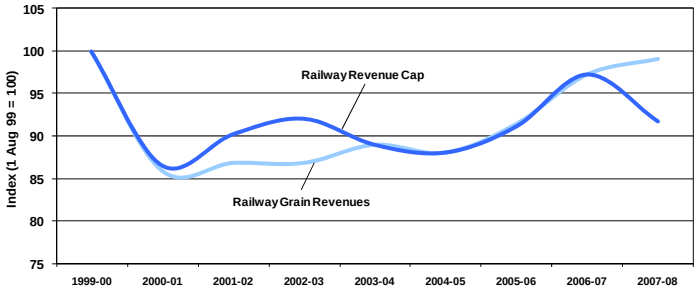
[136] A fuller discussion of these level-of-service complaints is presented in Section 2.31.

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

The revenue cap for each carrier, however, is not a static target. Each year, the limits attributable to CN and CP are adjusted to take into account changes in the actual volumes of grain handled, the average distances over which these volumes moved, and the effects of inflation on railway costs. With the exception of the inflationary component, these adjustments are determined by the Canadian Transportation Agency following a detailed analysis of the traffic data submitted to it by CN and CP.[138] For the 2007-08 crop year, these adjustments resulted in CN and CP being accorded revenue caps of $383.3 million and $373.6 million respectively, or $756.9 million on a combined basis.[139] [See Table 3C-13 in Appendix 4.]

At the same time, the Agency determined that the statutory grain revenues for CN and CP amounted to $409.3 million and $407.4 million respectively, or $816.7 million on a combined basis. This meant that the industry's grain revenues came in $59.8 million above the maximum allowed. In this instance, CN's revenues proved to be $26.0 million more than allowed, while those of CP exceeded its limit by $33.8 million. As a result, the Agency ordered both carriers to pay out their excess revenues, along with a 15% penalty, to the Western Grains Research Foundation.

Figure 60: Railway Revenue Cap Compliance



This marked the first occasion since the 2002-03 crop year where carrier revenues actually differed substantially from what they were entitled to earn under the revenue cap. In fact, through the next four crop years this difference amounted to no more than 1.0% on a combined basis. Yet the 2007-08 crop year saw total CN and CP revenues exceed the allowable limit by a factor of 7.9%.[140] Since both carriers had shown themselves increasingly adept at managing their revenues under the revenue cap regime, it seems likely that the 2007-08 crop year's $59.8-million variance was the product of a wider miscalculation.

To this end, it must be remembered that both CN and CP chose to escalate their freight rates in the face of a pending reduction in the allowances that they receive for hopper car maintenance under the revenue cap. Such contrarian pricing actions could hardly have been expected to surrender the $72.2 million in revenues that the Canadian Transportation Agency ultimately determined these allowances to be worth. To be sure, both carriers appeared to question the legality of the Agency's approach in calculating the revenue rollback. Moreover, they argued from the outset that the Agency could not make its final determination in the matter, which at that time was expected sometime in early 2008, retroactive to the beginning of the 2007-08 crop year. This largely served as the basis for the legal challenge that the carriers later brought before the Federal Court of Appeal. Indeed, had they won that challenge, the railways might have been able to sidestep a large portion of – if not the entire – revenue rollback. If this was the railways' legal gambit, it appeared to have failed. Ultimately, the Court upheld the Agency's previous determinations, and affirmed the reduction in allowable revenues.[141]

[138] A volume-related composite price index, which is used to adjust for inflation under the revenue cap regime, is determined annually by the Canadian Transportation Agency in advance of the crop year. For the 2007-08 crop year, the Agency determined the final value of the volume-related composite price index to be 1.0639, which represented a year-over-year decrease of 5.4%. See Canadian Transportation Agency Decision Number 67-R-2008 dated 19 February 2008. This net reduction was the result of a one-time adjustment to the maintenance allowances accorded to CN and CP under the revenue cap. See section 2.34 for a fuller discussion of this one-time adjustment to the maintenance allowances.

[139] See Canadian Transportation Agency Decision Number 628-R-2008 dated 30 December 2008.

[140] Considered individually, CN's revenues stood 6.8% above its cap while those of CP proved to be 9.1% more.

[141] Both CN and CP subsequently sought leave to appeal this decision before the Supreme Court of Canada.

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

Port throughput, as measured by the volume of grain shipped from the terminal elevator and bulk loading facilities located at Canada's four western ports, totalled 22.0 million tonnes in the 2007-08 crop year.[142] This represented a 3.5% reduction from the previous year's throughput of 22.8 million tonnes. This overall result was, however, heavily influenced by a 24.5% decline in fourth quarter throughput. Until that point, the year-to-date volume stood consistently ahead of that recorded a year earlier. In fact, terminal throughput reached a GMP record of 7.1 million tonnes in the first quarter before then beginning to fall off. [See Table 3D-1 in Appendix 4.]

Decreases in throughput were noted for the GHTS's three primary ports. For the largest of these, Vancouver, total marine shipments fell by 1.1%, to 11.0 million tonnes from 11.1 million tonnes a year earlier. Moreover, this accounted for about half, 50.1%, of the GHTS's total throughput volume. Much of the port's 1.2-percentage-point gain in share was drawn from Prince Rupert, where shipments fell by 7.0%, to 4.6 million tonnes from 4.9 million tonnes the year before. When combined, the volume passing through these two west coast ports accounted for 70.9% of the overall total. This marked the third consecutive year in which this share actually reached above the 68.8% garnered in the first year of the GMP.

Given the limited scope of this net change, there was a minimal impact on the shares accorded to the GHTS's other two ports. To be sure, the combined share secured by the ports of Thunder Bay and Churchill has remained largely unchanged from that witnessed nine years earlier, falling to 29.1% from 31.2% over this period. At Thunder Bay, the dominant eastern gateway, throughput in the 2007-08 crop year declined by 6.5%, to 5.8 million tonnes from 6.2 million tonnes the year before. Churchill, the port with traditionally the lowest volume, saw its throughput increase by 15.1%, to 594,500 tonnes from 516,300 tonnes.

Figure 61: Western Canadian Ports – Grain Throughput

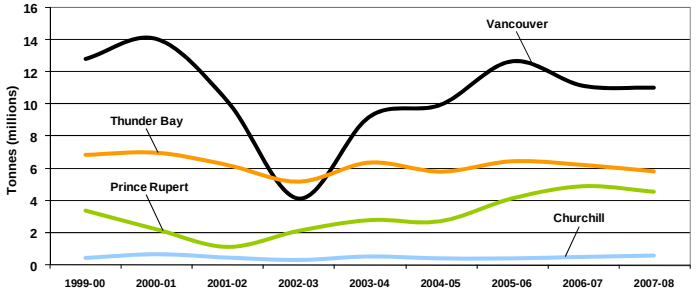
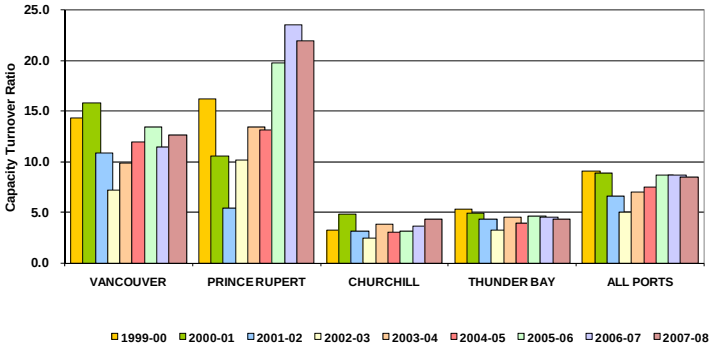


Figure 62: Average Terminal Elevator Capacity Turnover



Capacity Turnover

Despite a 3.5% decrease in the volume passing through the ports in the 2007-08 crop year, the system's capacity-turnover ratio posted an increase of 2.5%, rising to 8.5 turns from 8.3 turns a year earlier.[143] Even so, not all of the ports reported gains. The ratio for the port of Prince Rupert showed the most significant reduction, falling by 6.9% to 21.9 turns from a record 23.5 turns the year before. Similarly, Thunder Bay, with a decrease of 5.4%, posted the next largest decline, with 4.3 turns versus 4.5 turns a year earlier. For the most part, these results reflected an associated decrease in throughput volume. Correspondingly,

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

[143] 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 change cited here does not necessarily correspond to that of throughput alone.

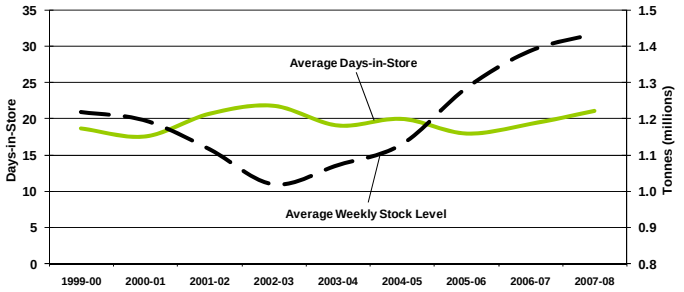
Churchill, which posted a 15.1% increase in volume, saw its ratio rise by 16.6%, to 4.3 turns from 3.7 turns. Much of the impetus for the system's overall increase came from Vancouver, where a surge in the volume handled by Alliance Grain Terminal Ltd. served to bolster the port's turnover ratio by 9.3%, to 12.6 turns from 11.5 turns, despite a 1.1% decrease in total throughput.[144] [See Table 3D-2 in Appendix 4.]

Terminal Elevator Inventories

Over the course of the GMP, the amount of grain held in inventory at terminal elevators has proven itself sensitive to changes in the system's overall handlings, seldom straying from 6% of the total throughput. Despite a 3.5% decrease in throughput for the 2007-08 crop year, the average weekly stock level rose by 3.4% to more than 1.4 million tonnes. This was due in large measure to a sharp build-up in inventories at Vancouver and Prince Rupert, which rose by 10.1% and 44.2% respectively. These increases were tempered by reductions at Thunder Bay and Churchill, where average inventories declined by 5.3% and 6.7% respectively.

Although wheat normally takes up about half of the inventory, it has increasingly been displaced by other commodities in recent years. The 2007-08 crop year proved no different, with a 9.3% decrease to 0.5 million tonnes pulling its share down to 37.4%. Canola stocks were again the second largest, increasing by 37.6% to an average of 0.4 million tonnes. A further 0.4 million tonnes was given over to equal amounts of durum and barley, while peas and flaxseed rounded out much of the remaining 0.2 million tonnes. [See Table 3D-3 in Appendix 4.]

Figure 63: Terminal Elevators – Weekly Stock Level and Days-in-Store



In conjunction with the increase in terminal stocks came an increase in the amount of time grain spent in inventory, with the overall average number of days-in-store climbing by 9.4%, to 21.0 days from 19.2 days the year before. Much of the impetus for this came from sharp increases at Prince Rupert and Vancouver, which rose by 64.9% and 11.8% respectively. And while Thunder Bay's average also rose, it amounted to just 1.6%. Running counter to this was Churchill, which posted a 37.0% reduction. [See Table 3D-4 in Appendix 4.]

It should be noted that the average storage times recorded during the 2007-08 crop year ranked among the highest observed under the GMP. Much of this, however, appeared to have been tied to the progressive decline in quarterly throughput discussed earlier. Some of the more pronounced year-over-year changes in the 2007-08 crop year are summarized in the table that follows:

	Days in Store	Change	Remarks
Terminal Ports			
Churchill	20.1 days	Down 37.0%	
Thunder Bay	32.1 days.	Up 1.6%	Highest average number of days-in-store
Vancouver	17.1 days	Up 11.8%	
Prince Rupert	12.2 days	Up 64.9%	Lowest average number of days-in-store
Notable Grains			
Barley	24.6 days	Down 26.3%	
Flaxseed	38.1 days	Down 1.0%	
Wheat	17.0 days	No Change	Lowest average number of days-in-store
Canola	26.0 days	Up 43.6%	
Oats	41.3 days	Up 159.7%	Highest average number of days-in-store

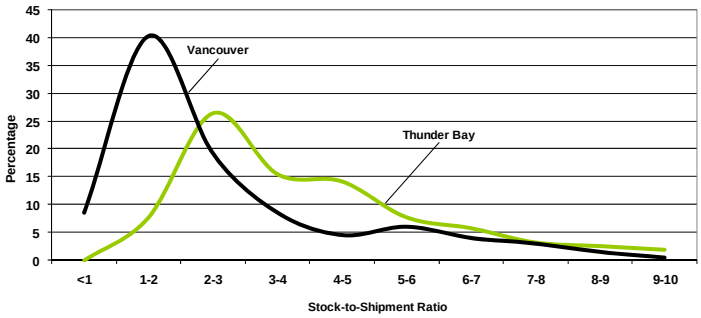
[144] It should be noted here that, owing to the use of simple averages, the virtual doubling of the volume passing through the Alliance Grain Terminal was enough to raise the average for the port as a whole.

Whether sufficient stocks were on hand to meet demand can best be gauged by the average weekly stock-to-shipment ratios. This ratio provides an indication of how terminal stock levels related to the volume of grain loaded onto ships during the course of any particular week.[145] For Vancouver, the average ratios on all grains were either at, or comfortably above, a value of 2.0. With the exception of the declines posted by barley, oats and peas, these ratios moved generally higher. The magnitude of these increases ranged from a low of 5.0% on flaxseed, to a high of 39.6% on canola. [See Table 3D-5 in Appendix 4.]

As with Vancouver, the average ratios posted by Thunder Bay were all well above a value of 2.0. However, since the port's inventories fell along with its throughput, a number of the ratios also declined. These ranged from a modest 7.9% decline in the ratio on flaxseed, to a more substantive 68.1% reduction on that of peas. At Prince Rupert, which maintains comparatively tighter stock levels, the results showed a 31.2% increase in the ratio on wheat.[146] The ratios posted by Churchill all showed reductions: by 25.6% in the case of wheat; and by 39.3% in the case of durum.

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

Figure 64: Distribution of Weekly Stock-to-Shipment Ratios



When examining the frequency with which weekly stock-to-shipment ratios fell below a value of 1.0, the ports of Vancouver and Thunder Bay can both be seen to have had fewer such instances in the 2007-08 crop year.[147] In the case of Vancouver this happened about 8.5% of the time, about equal to the preceding crop year's 8.6% occurrence rate. At Thunder Bay the incidence of occurrence actually fell to zero from 4.0% a year earlier.

Port Operations

A total of 761 vessels called for grain at western Canadian ports during the 2007-08 crop year. This represented a 1.0% decrease from the 769 ships that arrived for loading a year earlier. While this was consistent with a 3.5% decrease in throughput, it also suggested that larger vessels were continuing to play a larger role in moving export grain. This has been most evident in the movement of grain from Prince Rupert, where 86.2% of the 87 ships that arrived took on loads in excess of 30,000 tonnes.[148]

[145] 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.

[146] 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 nine crop years covered by the GMP.

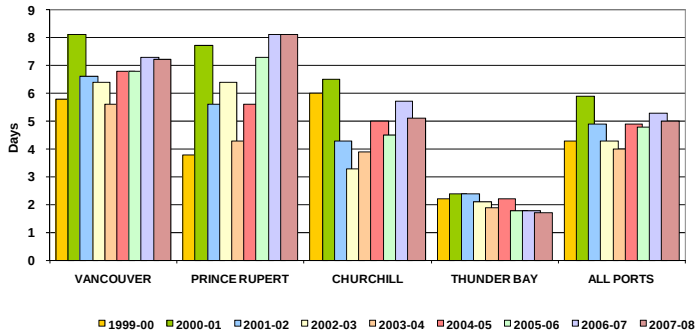
[147] A stock-to-shipment ratio of less than 1.0 does not mean that the port's terminal elevators were unable to meet vessel demand. Rather, it implies that existing grain inventories were insufficient, and that the shortfall would have to be covered using future railway deliveries. Direct-hit railway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

[148] Feed wheat and feed barley accounted for a large portion of the increased volume of grain passing through Prince Rupert in recent years. These commodities are generally shipped in larger quantities than higher-quality grains. Comparatively, only 66.2% of the ships loaded at Prince Rupert in the 2003-04 crop year took on loads in excess of 30,000 tonnes. This increased progressively to 83.9% in the 2004-05 crop year and to 85.5% in the 2005-06 crop year before falling back somewhat to 73.8% in the 2006-07 crop year. The 86.2% cited here for the 2007-08 crop year denotes the largest proportion yet achieved under the GMP.

Despite the variation in volume witnessed over the course of the GMP's first five years, the amount of time spent by vessels in port has generally fluctuated between 4.0 and 4.5 days.[149] However, the quarterly averages posted since the 2004-05 crop year has shown a comparatively greater degree of variability. This was especially evident in the 2006-07 crop year when the delays occasioned by adverse weather conditions on the west coast pushed the quarterly average to a record height of 9.0 days in the third quarter, and elevated the overall average for the crop year to 5.3 days.

The average amount of time spent by vessels in port decreased by 5.7% in the 2007-08 crop year, falling to an average of 5.0 days. Much of this reduction was driven by a significant year-over-year improvement in the values posted for the third and fourth quarters. On the whole, improvements were noted with respect to the amount of time these vessels spent waiting to load, which decreased by 7.7% to an average of 2.4 days, as well as that given over to their loading, which fell by 3.7% to an average of 2.6 days.[150]

Figure 65: Average Vessel Time in Port

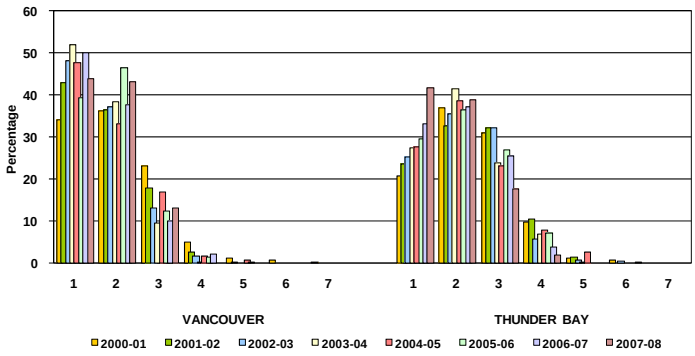


For the most part these results reflected improvements at each of the four ports in western Canada. The more modest improvements were posted on the west coast, with Vancouver realizing a 1.4% reduction in its annualized average, which fell to 7.2 days from 7.3 days a year earlier, while the average time spent by vessels in Prince Rupert remained unchanged at 8.1 days.

The largest decrease was reported by Churchill, where the average fell by 10.5%, to 5.1 days from 5.7 days the year before. This result was driven largely driven by a 30.0% decrease in the amount of time vessels spent loading at the port, which fell to an average of 3.5 days from 5.0 days a year earlier. Much of the improvement, however, was countered by a 128.6% increase in vessel waiting time, which climbed to 1.6 days from the preceding crop year's 0.7-day average.

With a 1.7-day average, the overall amount of time spent by vessels in Thunder Bay fell by 5.6% from that posted a year earlier. This resulted in the setting of yet another record low under the GMP. The improvement was wholly driven by a 7.7% reduction in the average loading time, which fell to 1.2 days in comparison to the previous year's 1.3-day average. The amount of time waiting to load remained unchanged at an average of 0.5 days. Thunder Bay's averages continue to represent the lowest of the four ports in western Canada. This stems chiefly from the greater regularity with which vessels move through the St. Lawrence Seaway, the port's ample storage capacity, and the limited delays incurred by vessels waiting to berth. [See Table 3D-7 in Appendix 4.]

Figure 66: Number of Berths per Vessel



[149] During the first five years 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.

[150] 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.

In conjunction with the reduced averages noted above, fewer ships were reported to have needed more than five days to clear. At Vancouver, the proportion of ships needing more time in port fell to 46.4% from 48.5% a year earlier. Conversely, Prince Rupert saw this proportion increase to 54.0% from 47.7%. At Thunder Bay, where this proportion has traditionally been even lower, just 1.0% required stays of more than five days as compared to 2.1% a year earlier. Churchill saw the proportion of vessels in port for longer than five days fall to 45.0% from 46.2% the year before. [See Table 3D-8 in Appendix 4.]

The 2007-08 crop year provided some interesting contrasts regarding the number of vessels needing to berth at more than one terminal.[151] At Vancouver, this proportion rose to 56.1% from 49.9% a year earlier. One of the contributing factors in this result could be traced back to the increased volume of grain loaded at the Alliance Grain Terminal, where the shallower berth often necessitated the "topping up" of larger vessels at other terminals. In comparison, the proportion of vessels needing more than one berthing at Thunder Bay fell to its lowest level under the GMP, to 58.4% from 66.9% a year earlier. [See Table 3D-9 in Appendix 4.]

Demurrage and Dispatch

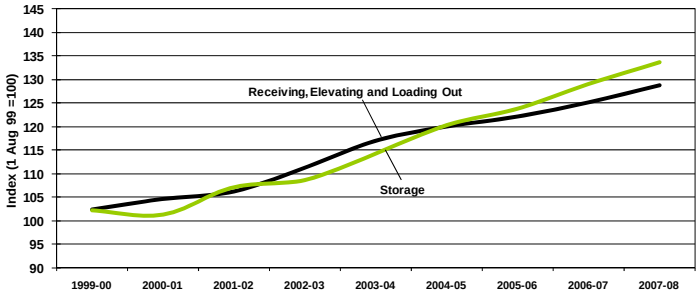
Members of the WGEA and the CWB reported total vessel demurrage costs and dispatch earnings to the Monitor.[152] This is intended to provide some indication of the effectiveness with which grain flowed through western Canadian ports. For the 2007-08 crop year, net earnings decreased by 36.3% from what they had been a year earlier, falling to $6.1 million from $9.5 million.

This result was largely fuelled by a 54.0% increase in demurrage costs, which rose to $23.3 million from $15.1 million the year before. It is worth noting that this constituted a record high for demurrage costs under the GMP. The overall rise was driven in large measure by a 57.5% increase in the demurrage costs incurred along the Pacific Seaboard, which climbed to $21.7 million from $13.8 million. In comparison, the charges arising from the delay of vessels at Churchill, Thunder Bay, and along the St. Lawrence Seaway increased by a lesser 17.5%, to $1.5 million from $1.3 million the year before.

A 19.1% increase in total dispatch earnings for the 2007-08 crop year, which rose to $29.3 million from $24.6 million a year earlier, helped mitigate some of the financial damage. As with demurrage costs, this too constituted a high watermark under the GMP. On the west coast, dispatch earnings climbed by 24.9% to $19.9 million. An 8.4% increase in dispatch earnings was posted for Churchill, Thunder Bay, and the St. Lawrence Seaway, which climbed to $9.4 million from $8.7 million a year earlier. [See Table 3D-10 in Appendix 4.]

On the whole, the sharp rise in demurrage costs experienced in the 2007-08 crop year, along with a corresponding increase in the amount of time vessels spent in port, suggests that a significant number of vessels were unable to be loaded in accordance with the lay days provided in their charters.

Figure 67: Relative Change in Terminal Handling Charges



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

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

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

the end of the 2007-08 crop year these ranged from a low of about $8.08 per tonne for wheat delivered at Churchill, to a high of $13.96 for flaxseed shipped to Vancouver. The daily charge for storage ranged from about $0.07 to $0.13 per tonne.

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 2007-08 crop year. Increases posted by Vancouver's terminal elevators ranged from 0.9% to 4.5%. At Prince Rupert, this spread went from 2.0% to 3.6%. Thunder Bay put forward increases that ranged from 3.1% to 8.9%. Churchill, where these rates remained unchanged for a fourth consecutive year, proved to be the exception. The composite price index used by the Monitor shows that the cost of these services effectively rose by a further 2.9% in the last crop year, and that the combined value of all increases made since the beginning of the GMP had reached 28.6%. [See Table 3D-11 in Appendix 4.]

The charges for terminal storage have also risen since the beginning of the GMP. In the 2007-08 crop year, these rates rose by 3.6%, and brought the accumulated price increase over the last nine years to 33.5%. Thunder Bay reported the largest year-over-year gain, with an increase of 10.2%. The terminals at Prince Rupert and Vancouver followed with increases that averaged 8.6% and 0.7% respectively. The overall increase in the composite price index was tempered by the fact that Churchill also chose to extend its existing storage rates for a fourth consecutive year.[153]

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. For the 2006-07 crop year, it was observed that this process required an average of 58.1 days; some 1.5 days more than had been the case a year earlier when the GMP's record-setting average of 56.6 days was achieved.

The overall amount of time involved in moving grain through the supply chain increased by 2.0 days in the 2007-08 crop year, to an average of 60.1 days. This result was shaped largely by increases in two of the primary supply chain elements: country elevator storage time, which rose by 0.4 days; and terminal elevator storage time, which rose by 1.8 days. These stood in contrast against a 0.2-day reduction in the railways' loaded transit time.

This increase in the overall average reflected a general rise in the quarterly values, which progressed from a low of 56.1 days in the first quarter through to a high of 65.1 days in the third, before retreating somewhat in the fourth quarter to 62.3 days. Although the first quarter's average proved to have been one of the lowest yet witnessed under the GMP, the above-noted increases ultimately served to undermine this performance.

In addition to the preceding, there are a few other comments that should be made concerning the performance of the GHTS in the 2007-08 crop year:

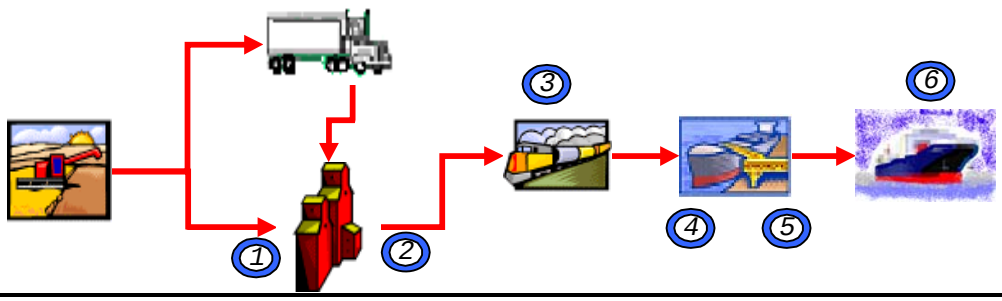
- Firstly, despite a 9.3% reduction in the grain supply, which totalled 56.0 million tonnes, a GMP record of 7.1 million tonnes ultimately passed through western Canadian ports during the first three months of the 2007-08 crop year. The same was true for the first half, where a record 12.8 million tonnes was also handled by the GHTS. However, the third and fourth quarters saw a sharp reduction in volume which significantly detracted from this record-setting pace. Even so, the pressures brought to bear on the GHTS during the first half proved to have been the most demanding under the GMP.

- Secondly, the heightened demand for Canadian export grain in the face of tight global supplies accentuated the pressures exerted on the GHTS during this period. Many of the problems encountered during this period focused on car supply and the need for more responsive railway service.

[153] 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.

- Finally, there is evidence to suggest that, despite the problems encountered during this period, grain continued to move through the supply chain at a consistently faster pace than in the first few years of the GMP. To be sure, much of the overall improvement came from a reduction in the amount of time spent by grain as inventory in the country elevator network, which has clearly been driven by the rationalization of these same facilities. Complementing this, however, has been the benefit of recent improvements in the railways' average loaded transit time. Although the impact of winter operations was again evident in the second and third quarters' higher averages, it is still worth noting that the 7.3-day average posted in the first quarter proved to be the best yet recorded under the GMP.

Table 1: The GHTS Supply Chain



	SUPPLY CHAIN ELEMENT	TABLE	1999-00	2003-04	2004-05	2005-06	2006-07	2007-08	SUPPLY CHAIN EFFECT
	SPEED RELATED								
2	Country Elevator – Average Days-in-Store	3B-4	41.7	34.4	29.5	30.1	30.7	31.1	▲
3	Average Railway Loaded Transit Time (days)	3C-4	9.2	8.9	8.7	8.6	8.2	8.0	▼
5	Terminal Elevator – Average Days-in-Store	3D-4	18.6	19.0	19.9	17.9	19.2	21.0	▲
	Average Total Days in GHTS		69.4	62.3	58.1	56.6	58.1	60.1	▲
	SERVICE / ASSET RELATED								
1	Average Country Elevator Capacity Turnover Ratio	3B-2	4.8	5.6	5.6	6.2	6.5	6.0	▼
4	Average Terminal Elevator Capacity Turnover Ratio	3D-2	9.1	7.0	7.5	8.7	8.3	8.5	▲
3	Average Railway Car Cycle (days)	3C-4	19.9	16.7	18.7	17.3	16.8	15.9	▼
6	Average Vessel Time in Port (days)	3D-7	4.3	4.0	4.9	4.8	5.3	5.0	▼

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 – 2007-08 Crop Year

Port Performance

- *Overall reliability reflected in:*
  - *Adequate terminal stock levels at the ports of Vancouver and Thunder Bay.*
    - *Stock-to-vessel requirement, and stock-to-shipment, ratios generally maintained at levels well above 2.0.*
- *Increased grain inventories reflected in generally higher average weekly stock-to-vessel-requirements ratios.*
  - *Vancouver*
    - *Wheat – 3.6; up by 7.1% from last crop year.*
    - *Canola – 3.7; up by 33.3%.*
  - *Thunder Bay*
    - *Wheat – 5.0; down by 28.2% from last crop year.*
    - *Canola – 8.3; up by 57.2%.*
- *Stock-to-shipment ratios revealed similarly modest changes.*
  - *Vancouver*
    - *CWB grains – 2.9; up by 0.6% from last crop year.*
    - *Non-CWB grains – 3.6; up by 0.1%.*
  - *Thunder Bay*
    - *CWB grains – 5.2; down by 16.3% from last crop year.*
    - *Non-CWB grains – 5.7; up by 27.8%.*
- *Terminal handling revenues increased by 11.5% to $319.8 million.*
  - *Vancouver revenues totalled $238.7 million.*
    - *Up by 17.6% from last crop year.*
  - *Thunder Bay revenues totalled $81.2 million.*
    - *Down by 2.8% from last crop year.*
- *CWB carrying costs decreased by 11.4% to $115.0 million.*
  - *Pacific Seaboard carrying costs totalled $77.4 million.*
    - *Down by 17.7% from last crop year.*
  - *Thunder Bay carrying costs totalled $37.6 million.*
    - *Up by 4.8% from last crop year.*

Indicator Series 4 – Service Reliability

Table	Indicator Description	Notes	BASE 1999-00	CURRRENT REPORTING PERIOD (1) 2006-07	2007-08	% VAR	
	Port Performance [Subseries 4A]						
4A-1	Avg. Weekly Stock-to-Vessel Requirements Ratio – VCR – Wheat		3.1	3.3	3.6	7.1%	▲
4A-1	Avg. Weekly Stock-to-Vessel Requirements Ratio – VCR – Canola		2.5	2.8	3.7	33.3%	▲
4A-1	Avg. Weekly Stock-to-Vessel Requirements Ratio – TBY – Wheat		5.6	7.0	5.0	-28.2%	▼
4A-1	Avg. Weekly Stock-to-Vessel Requirements Ratio – TBY – Canola		2.8	5.3	8.3	57.2%	▲
4A-2	Avg. Weekly Stock-to-Vessel Requirements Ratio – Grade	(2)					
4A-3	Avg. Weekly Stock-to-Shipment Ratio – VCR – CWB Grains		3.5	2.9	2.9	0.6%	–
4A-3	Avg. Weekly Stock-to-Shipment Ratio – VCR – Non-CWB Grains		3.6	3.6	3.6	0.1%	–
4A-3	Avg. Weekly Stock-to-Shipment Ratio – TBY – CWB Grains		4.6	6.2	5.2	-16.3%	▼
4A-3	Avg. Weekly Stock-to-Shipment Ratio – TBY – Non-CWB Grains		3.3	4.4	5.7	27.8%	▲
4A-4	Terminal Handling Revenue ($millions) – Vancouver		$192.7	$202.9	$238.7	17.6%	▲
4A-4	Terminal Handling Revenue ($millions) – Thunder Bay		$82.1	$83.5	$81.2	-2.8%	▼
4A-4	CWB Carrying Costs ($millions) – Pacific Seaboard		$63.3	$93.9	$77.4	-17.7%	▼
4A-4	CWB Carrying Costs ($millions) – Thunder Bay		$31.3	$35.9	$37.6	4.8%	▲

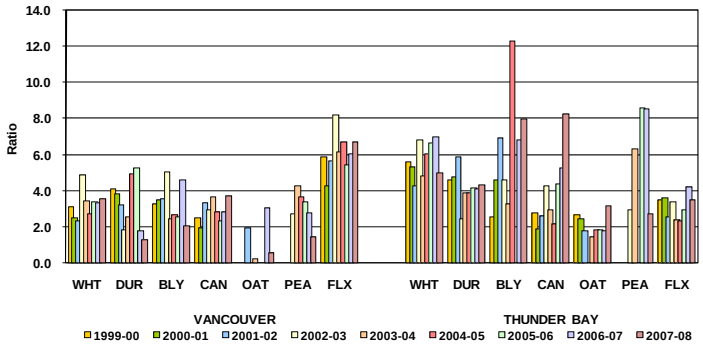
(1) – In order to provide for more direct comparisons, the values for the 1999-2000 through 2007-08 crop years are "as at" or cumulative to 31 July unless otherwise indicated.
(2) – Changes in the data cited cannot be depicted within the summary framework presented here. The reader is encouraged to consult 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.[154]

With respect to the average weekly stock-to-vessel requirements ratios for grains held in inventory at the port of Vancouver, the 2007-08 crop year produced some sharp year-over-year changes. Among CWB grains, the ratio posted for wheat climbed by 7.1%, to 3.6 from 3.3 a year earlier. This stood against a 29.3% reduction in the average ratio for durum, which fell to 1.3 from 1.8, and a 56.2% decline in that of barley, which dropped to 2.0 from 4.6 the year before.

Figure 68: Stock-to-Vessel Requirements Ratio



The average ratios for all non-CWB grains, save that of oats, also came in above the 1.0 threshold. The changes in these values proved equally mixed, with gains of 33.3% and 11.4% for canola and flaxseed respectively, and reductions of 81.1% for oats and 48.6% for peas.

The year-over-year changes in the ratios for Thunder Bay were also mixed, and equally as sharp. In the case of CWB grains, the ratio for wheat fell by 28.2%, to 5.0 from 7.0, while those for durum and barley registered

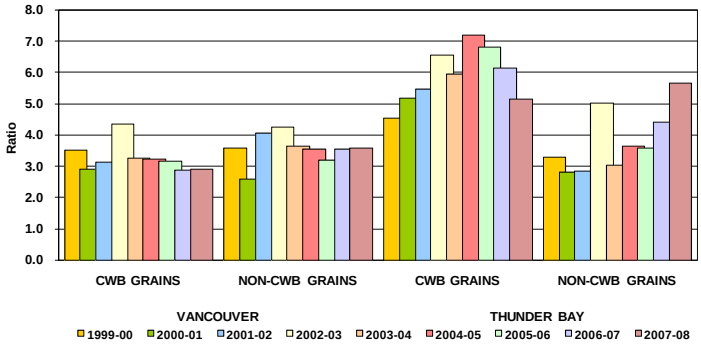
[154] Ratio values of one or more denote sufficient volume on hand to meet short-term demand. Upward or downward movements in this ratio are indicative of a relative change in short-term inventory levels. It should be noted that these ratios can display great variability owing to the uneven nature of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

increases of 5.5% and 17.0%, with resultant ratios of 4.3 and 8.0 respectively. As regards non-CWB grains, the ratios for canola and oats increased by 57.2% and 77.7% respectively, to 8.3 in the case of the former and 3.1 for the latter. It should be noted that these values constituted some of the highest yet recorded under the GMP. At the same time, the the ratio for peas declined by 68.4%, to 2.7, while that for flaxseed fell by a lesser 16.5%, to 3.5. [See Table 4A-1 in Appendix 4.]

Average weekly stock-to-vessel-requirement ratios by grade were calculated using a similar methodology. The variability in these weekly ratios is even more extreme, and largely distorted by blending, as is necessary for the shipment of "Western Canada Wheat." Even so, comparatively few of the grade-specific averages fell below a value of 1.0. Those that did were largely confined to the Pacific Seaboard, and generally restricted to the lower grades of wheat and comparatively smaller amounts of durum exported through these gateways. [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 69: 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 remained effectively unchanged at 2.9 for the 2007-08 crop year, increasing by just 0.6%. An even more modest increase of 0.1% was noted for non-CWB grains, which remained at a level of 3.6 for a second year. At Thunder Bay, the average ratio for CWB grains fell by 16.3%, to 5.2 from 6.2, while an increase of 27.8% in the average for non-CWB grains boosted the ratio to 5.7 from 4.4 the year before. Clearly, these values reveal that ample stocks were generally on hand to meet the prevailing short-term demand. [See Table 4A-3 in Appendix 4.]

Terminal Revenues and CWB Carrying Costs

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

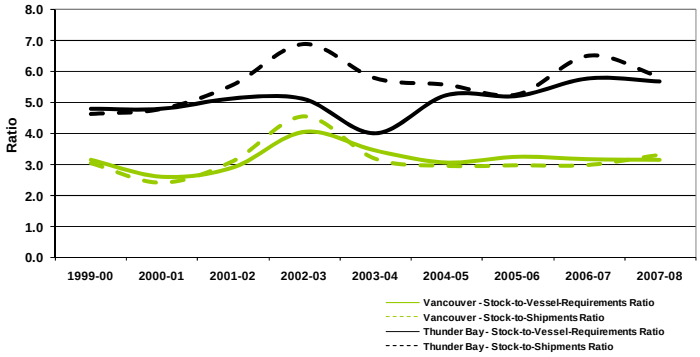
Total reported terminal revenues for the 2007-08 crop year increased by 17.6% at Vancouver, climbing to $238.7 million from $202.9 million. At Thunder Bay, total reported terminal revenues fell by 2.8%, to $81.2 million from $83.5 million.

Total CWB carrying costs along the Pacific Seaboard declined substantially in the 2007-08 crop year, falling by 17.7% to $77.4 million from $93.9 million the year before. The opposite was true for Thunder Bay, where carrying costs rose by 4.8%, climbing to $37.6 million from $35.9 million a year earlier.

4.2 Summary Observations

As a means of gauging the reliability of the GHTS, the GMP examines terminal stock levels against both the stated requirements and actual shipments of vessels loading at western Canadian ports. The resultant ratios provide an indication of whether or not sufficient quantities of grain were available at the terminals to meet the demand presented by the vessels loading during any particular week. Since the inception of the GMP it has been observed that these stocks generally exceed the immediate needs of these vessels by a comfortable margin. In fact, when examining the weighted ratios for both Vancouver and Thunder Bay it can be seen that three to five times the tonnage needed to accommodate the loading of these vessels was typically already in inventory. These values are well above those necessary to consider a delivery system as having met the minimum standards for reliability. In short, to the extent that the reliability of any supply chain can be gauged by its ability to actually deliver product at the time and place specified, the western Canadian GHTS can be deemed reliable.

Figure 70: Average Stock-to-Vessel Requirements and Stock-to-Shipments Ratios – Vancouver and Thunder Bay



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

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

Section 5: Producer Impact

One of the key objectives of the GMP rests in determining the producer impacts that stem from changes in the GHTS. The principal measure in this regard is the producer netback – an estimation of the financial return to producers after deduction of the "export basis."

The methodology employed in calculating these measures was developed following an extensive study conducted as a Supplemental Work Item under the GMP, and approved for incorporation into the mainstream indicators of the GMP by Transport Canada and Agriculture and Agri-Food Canada.

Highlights – 2007-08 Crop Year

Producer Netback and Sampling Methodology

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

Export Basis and Producer Netback – CWB Grains

- *Producer netback:*
  - *Increases driven by significant price gains.*
    - *Wheat – increased 101.4% to $314.29 per tonne.*
    - *Durum – increased 163.0% to $458.04 per tonne.*
- *Final Realized Price:*
  - *Sharp increases attributable to tighter global grain supplies.*
    - *Wheat – increased 74.8% to $372.06 per tonne.*
    - *Durum – increased 125.4% to $512.81 per tonne.*
- *Export Basis:*
  - *Wheat – increased 7.0% to $67.65 per tonne.*
  - *Durum – increased 10.8% to $84.44 per tonne.*
- *Average direct costs:*
  - *Weighted applicable freight increased 1.0% for wheat, and 3.8% for durum.*
  - *Trucking costs increased by 2.8%.*
  - *Primary elevation costs increased by 3.7% for wheat, and 3.6% for durum.*
  - *Gross CWB costs:*
    - *Wheat – increased by 43.0%.*
    - *Durum – increased by 28.0%.*
- *Total producer benefits:*
  - *Average trucking premiums:*
    - *Wheat – increased 7.8% to $5.55 per tonne.*
    - *Durum – increased 15.1% to $6.24 per tonne.*
  - *CWB transportation savings decreased by 1.7% to $1.76 per tonne.*

Export Basis and Producer Netback – Non-CWB Commodities

- *Producer netback:*
  - *Increases driven by significant price gains.*
    - *Canola – increased 56.6% to $503.29 per tonne.*
    - *Yellow Peas – increased 55.1% to $256.31 per tonne.*
- *Prices for non-CWB commodities increased as a result of heightened demand.*
  - *Canola – increased 51.6% to $556.76 per tonne.*
  - *Yellow Peas – increased 50.3% to $341.82 per tonne.*
- *Average western Canadian export basis for non-CWB commodities:*
  - *Canola – increased 16.7% to $53.47 per tonne.*
  - *Yellow Peas – increased 37.5% to $85.51 per tonne.*

Producer Car Loading

- *Number of producer-loading sites decreased by 4.2% to 454.*
  - *Class 1 railways post reduction of 6.0% to 346 sites.*
  - *Shortline post increase of 1.9% to 108 sites.*
- *Producer-car shipments decreased 14.4% to 10,729 carloads.*
  - *Share of total hopper car movement fell to 4.4%.*
  - *Share of CWB movement fell to 6.9%.*

Indicator Series 5 – Producer Impact

Table	Indicator Description	Notes	BASE 1999-00	CURRRENT REPORTING PERIOD (1) 2006-07	2007-08	% VAR	
	Export Basis [Subseries 5A]						
	Manitoba East						
5A-1A	1 CWRS Wheat ($ per tonne)	(2)	$54.20	$61.92	$66.91	8.1%	▲
5A-1B	1 CWA Durum ($ per tonne)	(2)	$60.29	$69.37	$77.05	11.1%	▲
5A-1C	1 Canada Canola ($ per tonne)	(2)	$61.58	$47.44	$50.03	5.5%	▲
5A-1D	Canadian Large Yellow Peas – No. 2 or Better ($ per tonne)	(2)	$54.93	$61.53	$84.56	37.4%	▲
	Manitoba West						
5A-2A	1 CWRS Wheat ($ per tonne)	(2)	$57.80	$64.89	$70.02	7.9%	▲
5A-2B	1 CWA Durum ($ per tonne)	(2)	$65.37	$74.82	$81.59	9.0%	▲
5A-2C	1 Canada Canola ($ per tonne)	(2)	$58.67	$51.04	$54.32	6.4%	▲
5A-2D	Canadian Large Yellow Peas – No. 2 or Better ($ per tonne)	(2)	$54.93	$61.53	$84.56	37.4%	▲
	Saskatchewan Northeast						
5A-3A	1 CWRS Wheat ($ per tonne)	(2)	$58.10	$68.81	$73.02	6.1%	▲
5A-3B	1 CWA Durum ($ per tonne)	(2)	$68.31	$79.53	$86.33	8.6%	▲
5A-3C	1 Canada Canola ($ per tonne)	(2)	$54.38	$54.03	$60.01	11.1%	▲
5A-3D	Canadian Large Yellow Peas – No. 2 or Better ($ per tonne)	(2)	$54.93	$62.39	$85.66	37.3%	▲
	Saskatchewan Northwest						
5A-4A	1 CWRS Wheat ($ per tonne)	(2)	$56.42	$64.74	$70.12	8.3%	▲
5A-4B	1 CWA Durum ($ per tonne)	(2)	$70.53	$79.21	$88.48	11.7%	▲
5A-4C	1 Canada Canola ($ per tonne)	(2)	$50.88	$49.22	$57.61	17.0%	▲
5A-4D	Canadian Large Yellow Peas – No. 2 or Better ($ per tonne)	(2)	$54.84	$62.07	$85.50	37.8%	▲
	Saskatchewan Southeast						
5A-5A	1 CWRS Wheat ($ per tonne)	(2)	$59.40	$69.98	$74.38	6.3%	▲
5A-5B	1 CWA Durum ($ per tonne)	(2)	$65.22	$74.15	$83.56	12.7%	▲
5A-5C	1 Canada Canola ($ per tonne)	(2)	$57.47	$50.71	$55.17	8.8%	▲
5A-5D	Canadian Large Yellow Peas – No. 2 or Better ($ per tonne)	(2)	$54.72	$62.19	$85.84	38.0%	▲
	Saskatchewan Southwest						
5A-6A	1 CWRS Wheat ($ per tonne)	(2)	$57.22	$63.32	$68.65	8.4%	▲
5A-6B	1 CWA Durum ($ per tonne)	(2)	$68.12	$75.97	$84.46	11.2%	▲
5A-6C	1 Canada Canola ($ per tonne)	(2)	$55.75	$43.45	$51.83	19.3%	▲
5A-6D	Canadian Large Yellow Peas – No. 2 or Better ($ per tonne)	(2)	$54.66	$62.13	$85.42	37.5%	▲
	Alberta North						
5A-7A	1 CWRS Wheat ($ per tonne)	(2)	$53.20	$58.35	$63.12	8.2%	▲
5A-7B	1 CWA Durum ($ per tonne)	(2)	$71.67	$81.18	$88.70	9.3%	▲
5A-7C	1 Canada Canola ($ per tonne)	(2)	$50.39	$40.46	$47.31	16.9%	▲
5A-7D	Canadian Large Yellow Peas – No. 2 or Better ($ per tonne)	(2)	$54.29	$62.35	$85.51	37.1%	▲
	Alberta South						
5A-8A	1 CWRS Wheat ($ per tonne)	(2)	$48.81	$54.31	$59.97	10.4%	▲
5A-8B	1 CWA Durum ($ per tonne)	(2)	$66.06	$69.22	$80.64	16.5%	▲
5A-8C	1 Canada Canola ($ per tonne)	(2)	$48.07	$36.33	$42.54	17.1%	▲
5A-8D	Canadian Large Yellow Peas – No. 2 or Better ($ per tonne)	(2)	$54.93	$62.41	$85.90	37.6%	▲
	Peace River						
5A-9A	1 CWRS Wheat ($ per tonne)	(2)	$53.57	$62.87	$68.08	8.3%	▲
5A-9B	1 CWA Durum ($ per tonne)	(2)	$71.00	$82.15	$91.82	11.8%	▲
5A-9C	1 Canada Canola ($ per tonne)	(2)	$52.14	$46.95	$57.42	22.3%	▲
5A-9D	Canadian Large Yellow Peas – No. 2 or Better ($ per tonne)	(2)	$54.93	$62.41	$85.90	37.6%	▲
	Western Canada						
5A-10A	1 CWRS Wheat ($ per tonne)	(2)	$54.58	$63.20	$67.65	7.0%	▲
5A-10B	1 CWA Durum ($ per tonne)	(2)	$67.63	$76.18	$84.44	10.8%	▲
5A-10C	1 Canada Canola ($ per tonne)	(2)	$52.51	$45.80	$53.47	16.7%	▲
5A-10D	Canadian Large Yellow Peas – No. 2 or Better ($ per tonne)	(2)	$54.76	$62.17	$85.51	37.5%	▲
	Producer Loading [Subseries 5B]						
5B-1	Producer Loading Sites (number) – Class 1 Carriers		415	368	346	-6.0%	▼
5B-1	Producer Loading Sites (number) – Class 2 and 3 Carriers		122	106	108	1.9%	▲
5B-1	Producer Loading Sites (number) – All Carriers		537	474	454	-4.2%	▼
5B-2	Producer Car Shipments (number) – Covered Hopper Cars		3,441	12,529	10,729	-14.4%	▼

(1) – In order to provide for more direct comparisons, the values for the 1999-2000 through 2007-08 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.[155] 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 delivery points scattered across the prairies, and four principal export gateways, the number of distinct origin-destination pairs that can be employed to move western Canadian grain exceeds 1,000.[156] 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.[157] Sampling techniques were 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: [158]

- 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 71. Within a larger context, these 43 grain stations currently encompass:[159]

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

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

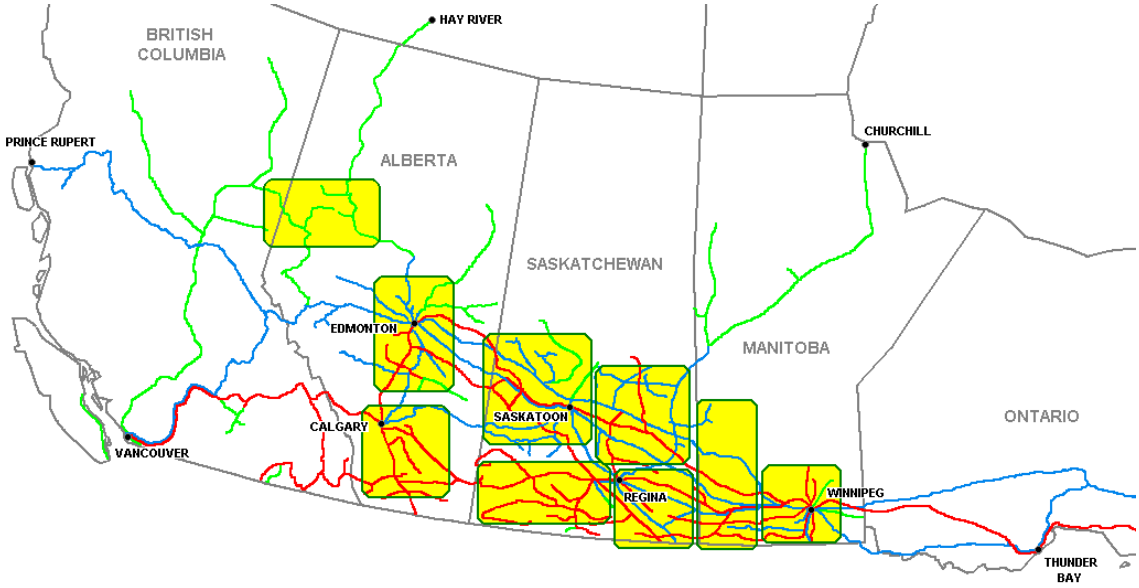
[156] Grain delivery points denote locations where at least one licensed primary elevator is situated. These do not include railway-designated producer-loading sites.

[157] 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).

[158] 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.

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

Figure 71: 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.[160]

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.

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

Considerations in the Calculation of the Export Basis and Producer Netback

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

ELEMENT	CWB GRAINS	NON-CWB COMMODITIES
Price Differential		For 1 Canada Canola, a price differential – or spread – is calculated between the weighted Vancouver cash price and the weighted average spot price in each of the nine regions. For yellow peas, a price differential is calculated using the average weekly dealer closing price, track Vancouver, and the average weekly grower bid closing price for the months of October and November. These differentials effectively represent the incorporated per-tonne cost of freight, elevation, storage and any other ancillary elements. As such, it encompasses a large portion of the Export Basis.
Canola Growers and Pulse Associations		All elevator deliveries of canola in Manitoba are subject to a $0.50 per tonne "check-off" for provincial canola association dues. The applicable "check-off" on deliveries made in Saskatchewan and Alberta are somewhat higher, amounting to $0.75 per tonne and $1.00 per tonne respectively.[8] Similarly, a levy of 0.5% is deducted for the Manitoba Pulse Growers Association on the delivery of yellow peas, while 1.0% is deducted for the Pulse Growers Associations in Saskatchewan and Alberta.[9]
Trucking Premiums	Grain companies report on the trucking premiums they pay to producers at each of the facilities identified in the sampling methodology.[10] The amounts depicted reflects the average per-tonne value of all premiums paid for the designated grade of wheat or durum within the reporting area.	Grain companies use their basis (the spread between their cash and the nearby futures price) as the mechanism to attract producer deliveries. Narrowing their basis, resulting in higher return to producers, is the signal that a company needs a commodity. Conversely a wide basis signals a lack of demand for the product. Some companies, however, offer premiums over and above their basis in order to attract delivery of some non-Board commodities. These premiums, illustrated as "trucking premiums", are therefore factored into the GMP export basis, and are presented as a producer benefit. When weighted based on the applicable tonnage, and factored in at a regional level, they are relatively small sums due to the limited number of companies using this mechanism.
CWB Transportation Savings	The CWB Transportation Savings is an apportioned per-tonne amount representing the total financial returns to the pool accounts as a result of grain-company tendering, freight and terminal rebates, and any penalties for non-performance.	
Other Deductions	Other deductions, such as drying charges, GST on services, etc., may also be applied to, and appear as an itemized entry on the cash ticket of, any grain delivery. No attempt is made to capture these deductions within the framework employed here.	Other deductions, such as drying charges, GST on services, etc., may also be applied to, and appear as an itemized entry on the cash ticket of, any grain delivery. No attempt is made to capture these deductions within the framework employed here.

1) – ICE Futures Canada (formerly the Winnipeg Commodity Exchange) collects Vancouver cash prices and spot prices at selected country elevator locations weekly.
2) – Forward contracting and deferred delivery provisions make it impossible to accurately weight the canola price data. Testing was done with weekly producer delivery data and with weekly and monthly export data. In consultation with the WCE, weighting based on monthly exports was deemed the most appropriate.
3) – Data provided by Stat Publishing. Using a "snapshot" period of two months during the fall, when pricing of the new crop is relatively heavy, was deemed to be an appropriate representation of producer prices, thereby avoiding the need to incorporate a weighting factor.
4) – The single-car railway freight rates employed reflect those found in posted tariffs at the end of each crop year (July 31).
5) – Freight Adjustment Factors (FAF) were introduced in the 1995-96 crop year to account for a change in the eastern pooling basis point, from Thunder Bay to the Lower St. Lawrence, and for the location advantage of accorded shipments from delivery points near Churchill and markets in the United States. FAFs are established prior to the beginning of each crop year to reflect changes in sales opportunities, cropping patterns and Seaway freight rates.
6) – An examination into the actual trucking costs of producers was recommended in the Quorum Corporation study "*Report on the Identification of Producer Impacts Over and Above those Identified in the Producer Netback Methodology*," May 2002, which can be downloaded from the Monitor's website (www.quorumcorp.net). The issue of trucking costs is discussed further in Section 5.5.
7) – The costs published in the CWB's Annual Report are net of any transportation savings. Since the 2002-03 crop year, the CWB's Annual Reports has published its receipts at "contract prices." In order to provide a consistent time series, the CWB provides the Monitor with an adjusted reporting to reflect receipts and costs at "in-store" Vancouver or St. Lawrence.
8) – The Saskatchewan check-off was increased from $0.50 per tonne to $0.75 per tonne on 1 January 2005. The Alberta check-off was increased from $0.50 to $1.00 per tonne on 1 August 2003.
9) – Levies for Manitoba and Alberta producers are refundable. Previously set at 0.5%, the Saskatchewan levy stood at 0.75% on 1 August 2002, and rose to 1.0% on 1 August 2003. The Alberta levy also rose to 1.0% on 1 August 2003.
10) – Various terms are used by grain companies to describe the premiums they offer to producers in an effort to attract deliveries to their facilities – i.e., trucking premiums, marketing premiums, and location premiums. The most common term, however, remains "trucking premium," and it is utilized generically in the calculation of the Export Basis.

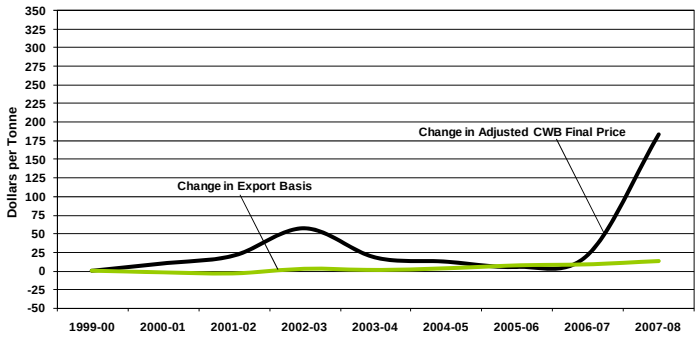
5.2 Export Basis and Producer Netback – CWB Grains (Wheat and Durum)

5.21 1CWRS Wheat

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

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 reduction in the producers' netback, which fell back to $160.28 per tonne. Although this downward pressure eased somewhat over the next two crop years, the price of 1CWRS continued to slide. When coupled along with further increases in the export basis, the producers' netback was reduced to a GMP low of $141.17 per tonne in the 2005-06 crop year.

Figure 72: Change in Netback Components – 1 CWRS Wheat



Owing in large measure to an upturn in the price of 1CWRS wheat in the 2006-07 crop year, the producer's netback again rose above the $143.25-per-tonne level set in the GMP's base year, to reach $156.04 per tonne. The continuing surge in prices resulted in the Final Realized Price of 1CWRS wheat rising to an unprecedented $372.06 per tonne in the 2007-08 crop year. This run-up in the price of 1CWRS wheat added another $179.63, or 93.3%, to the per-tonne revenues that had been benchmarked nine years earlier. This translated, almost dollar-for-dollar, into significantly greater financial returns for farmers.

The export basis, which during this same period rose by a total of $13.07 per tonne, or 23.9%, ate somewhat into this price gain. Even so, it must be remembered that this increase was also tempered by the financial benefits of higher trucking premiums and CWB savings. Still, the producer's netback moved sharply higher, attaining a GMP record of $314.29 per tonne in the 2007-08 crop year.

The changes figuring into this escalation are summarized in the following table.

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

							2007-08 / 1999-2000		
	1999-00	2003-04	2004-05	2005-06	2006-07	2007-08	$ VAR	% VAR	
CWB Final Price	$192.43	$211.14	$205.10	$195.14	$212.89	$372.06	$179.63	93.3%	▲
Plus: CWB Costs (Net)	5.40	4.65	5.01	7.84	6.35	9.88	4.48	83.0%	▲
Adjusted CWB Final Price	197.83	215.79	210.11	202.98	219.24	381.94	184.11	93.1%	▲
Direct Costs	56.90	62.90	62.94	67.69	70.14	74.96	18.06	31.7%	▲
Less: Trucking Premiums	-2.32	-4.25	-3.68	-4.56	-5.15	-5.55	-3.23	139.2%	▲
CWB Savings	0.00	-3.14	-1.49	-1.32	-1.79	-1.76	-1.76	n/a	▲
Export Basis	54.58	55.51	57.77	61.81	63.20	67.65	13.07	23.9%	▲
Producer Netback	$143.25	$160.28	$152.34	$141.17	$156.04	$314.29	$171.04	119.4%	▲

Final Realized Price

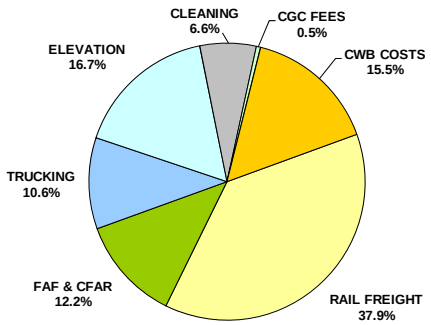
As already mentioned, better prices proved to be the chief force underlying improvements in the visible netback to producers of 1CWRS wheat throughout much of the GMP. From an initial value of $192.43 per tonne in the 1999-2000 crop year, shrinking global wheat stocks and the prospect of tighter supplies fuelled 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 raise the price to a peak of $250.20 in the 2002-03 crop year.

The Final Realized Price for 1CWRS wheat (13.5% protein) tumbled over the course of the next three years, reaching a low of $195.14 per tonne with the close of the 2005-06 crop year. However, prices began to rally again in the 2006-07 crop year as a result of a drought-induced reduction in Australian production. Prices were pushed even higher in the 2007-08 crop year as a result of production shortfalls in the United States, Europe and Australia, with the Final Realized Price for 1CWRS wheat reaching $372.06 per tonne. This proved not only to be the highest value yet witnessed under the GMP but, in nominal terms, also the highest value ever achieved for western Canadian wheat.

Export Basis

Although the export basis has increased since the beginning of the GMP, the last six crop years have produced the most significant gains. 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 $16.77 per tonne, or 33.0%. At $67.65 per tonne, the 2007-08 crop year's export basis marks the highest value yet attained under the GMP.

Figure 73: 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.[161] 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 nine crop years, the direct cost component of the export basis has climbed by 31.7%, from an average of $56.90 per tonne in the 1999-2000 crop year to $74.96 per tonne in the 2007-08 crop year. The largest single element in these costs is the applicable freight, which incorporates not only the charges for an average railway shipment, but the applicable CWB Freight Adjustment Factor (FAF) as well as the Churchill Freight Advantage Rebate (CFAR). In the 1999-2000 crop year, the average weighted applicable freight for 1CWRS wheat in western Canada amounted to $31.87 per tonne, which represented 56.0% of total direct costs. Although the per-tonne average climbed to $37.51 by the end of the 2007-08 crop year, its proportion of total direct costs declined marginally to 50.0%.

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

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

- Trucking Costs: The commercial costs tied to a 40-mile haul are estimated to have increased by 34.3% over the course of the last nine years, to $7.98 per tonne in the 2007-08 crop year from $5.94 per tonne at the beginning of the GMP. Although fuel surcharges had been applied temporarily in the 2000-01 and 2001-02 crop years, a significant rise in the price of fuel precipitated rather sharp rate increases in the last four crop years. Despite the magnitude of the overall increase in these costs, trucking's share of total direct costs has remained largely unchanged, climbing only marginally to 10.6% from 10.4%.

- Primary Elevation Costs: These costs averaged $9.75 per tonne in the 1999-2000 crop year, and comprised 17.1% of the total direct costs for 1CWRS wheat. Increases in the tariff rates over the next eight years effectively raised the cost of elevation by 28.4%, to an average of $12.52 per tonne in the 2007-08 crop year. However, their share of total direct costs fell to a marginally lower 16.7%. It should be noted that the posted tariffs reflect the maximum rates that grain companies may charge producers for these 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 38.5% over the course of the last nine crop years, to an average of $4.93 per tonne in the 2007-08 crop year, their contribution to total direct costs rose only marginally to 6.6%. 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 nine crop years. On a proportional basis, they constitute a mere 0.5% of total direct costs.[162]

- Gross CWB Costs: These costs effectively reflect the per-tonne operating costs of the CWB, which are ultimately paid by producers through the CWB's pool accounts. Given the nature of these costs, they can fluctuate substantially from year to year. In the 1999-2000 crop year, gross CWB costs averaged $5.40 per tonne, and constituted 9.5% of the total direct costs for 1CWRS wheat. By the 2007-08 crop year, these costs had increased to an average of $11.64 per tonne, and represented a comparatively larger 15.5% of total direct costs The gross CWB costs in the 2007-08 crop year measured a 43.0% increase over those in the 2006-07 crop year. A number of factors contributed to the substantially higher level of gross CWB costs in 2007-08. The most significant of these was the interest on borrowings.[163] Carrying charges related to CWB operations and the cost for Eastern freight movement also experienced an increase. To a lesser degree drying costs and the larger net deficit for demurrage and dispatch inflated the operating costs associated with the pool account for wheat.
-

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.[164] 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.

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[162] 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.

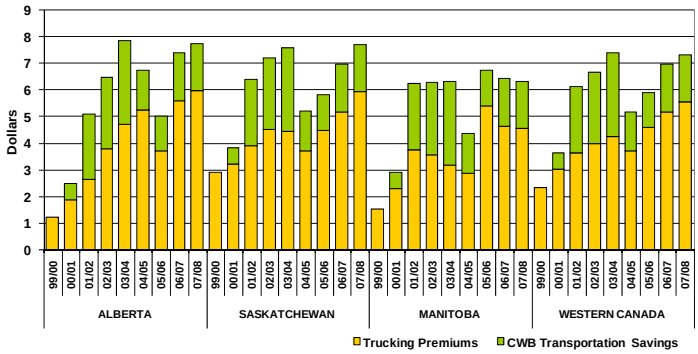
[163] The value of interim payments to producers was greater than in past years and these payments were made more promptly than in previous years. At the same time, payments made by customers were slower than in past years, resulting in the need for increased borrowings and related interest costs.

[164] 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.

Despite a reduction in the 2004-05 crop year, trucking premiums paid by grain companies for 1CWRS wheat deliveries in the nine sampling areas have more than doubled, increasing from an average of $2.32 per tonne in the 1999-2000 crop year to $5.55 per tonne in the 2007-08 crop year. On a proportional basis, these premiums have been offsetting an increasingly larger amount of the producer's direct costs: 4.1% in the 1999-2000 crop year as compared to 7.4% in the 2007-08 crop year.

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 amounted to an initial average of $0.61 per tonne, which offset the direct costs tied to 1CWRS wheat by 1.1%. By the 2003-04 crop year, these savings had increased more than five-fold, to an average of $3.14 per tonne and 5.0% of total direct costs. However, data collected over the next four crop years showed a considerable reduction in the value of these savings. By the end of the 2007-08 crop year, these savings had fallen to $1.76 per tonne, thereby reducing its direct-cost offset to 2.3%.

Figure 74: Wheat Export Basis – Producer Benefits (dollars per tonne)



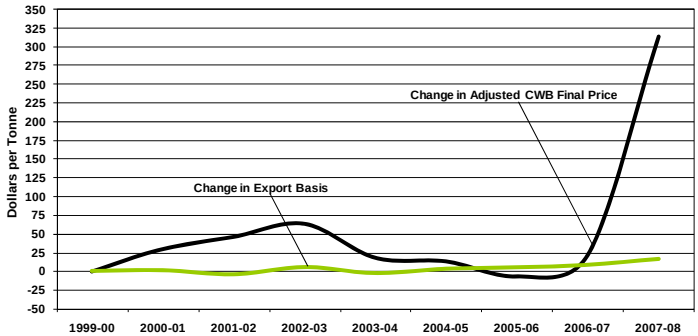
As a result of these forces, the financial benefit accruing to producers in the 2007-08 crop year averaged $7.31 per tonne, more than three times the $2.32 per tonne recorded in the first year of the GMP. What is more, the offset value of these financial benefits also increased, to 9.8% of total direct costs from 4.1% nine years earlier.

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 climbed to $218.96 per tonne by the end of the 2002-03 crop year, fuelled in large measure by an increase in the price of durum.

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

Figure 75: Change in Netback Components – 1 CWA Durum



However, world prices began to improve in the 2006-07 crop year. Due in large part to this upturn in the price of 1CWA durum, the producer's netback once again rose above the $160.48-per-tonne level set in the GMP's base year. This run-up in the price of durum accelerated in the 2007-08 crop year, adding $314.37 per tonne in net revenues, or 137.8%, to the $228.11 per tonne recorded in the base year. Not unexpectedly, a $16.81-per-tonne, or 24.9%, increase in the export basis over this same period ate into this price gain. Even so, had it not been for the tempering effects of a rise in the financial benefits derived

from higher trucking premiums and CWB savings, these costs could have been as much as $4.86 per tonne higher.

The changes contributing to this $297.56-per-tonne, or 185.4%, improvement in the producer's netback are summarized in the accompanying table.

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

							2007-08 / 1999-2000		
	1999-00	2003-04	2004-05	2005-06	2006-07	2007-08	$ VAR	% VAR	
CWB Final Price	$206.79	$229.20	$220.37	$199.35	$227.55	$512.81	$306.02	148.0%	▲
Plus: CWB Costs (Net)	21.32	17.32	21.30	22.20	22.76	29.67	8.35	39.2%	▲
Adjusted CWB Final Price	228.11	246.52	241.67	221.55	250.31	542.48	314.37	137.8%	▲
Direct Costs	70.77	72.54	76.46	78.69	83.39	92.44	21.67	30.6%	▲
Less: Trucking Premiums	-3.14	-4.68	-4.24	-4.76	-5.42	-6.24	-3.10	98.7%	▲
CWB Savings	0.00	-3.14	-1.49	-1.32	-1.79	-1.76	-1.76	n/a	▲
Export Basis	67.63	64.72	70.73	72.61	76.18	84.44	16.81	24.9%	▲
Producer Netback	$160.48	$181.80	$170.94	$148.94	$174.13	$458.04	$297.56	185.4%	▲

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.

In the 2003-04 crop year, however, the Final Realized Price for 1CWA durum tumbled 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 contributed to a worldwide oversupply of durum. Prices continued to weaken over the next two years, with the Final Realized Price for 1CWA durum ultimately falling to $199.35 per tonne in the 2005-06 crop year. However, prices began to rally in the 2006-07 crop year as a result of tightening North American supplies. Moreover, wide-spread production problems in the 2007-08 crop year led to a global shortage that propelled prices to even higher levels. As a result, the Final Realized Price for 1CWA durum rose to a GMP record of $512.81 per tonne.

Export Basis

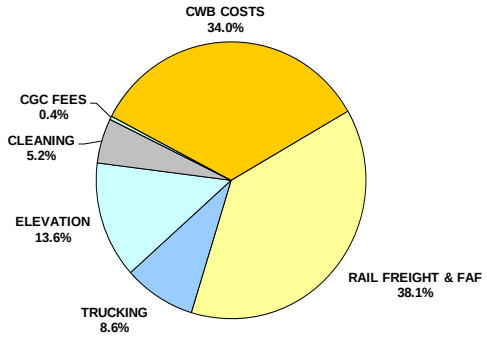
As was outlined previously with respect to 1CWRS wheat, the export basis for 1CWA durum has also risen fairly steadily over the course of the GMP. In fact, the cumulative effect of these increases was a 24.9% rise, with the export basis for the 2007-08 crop year reaching $84.44 per tonne as compared to the $67.63-per-tonne value recorded in the base year.

As 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 instrumental in containing the growth in direct costs, and ultimately the export basis.

The direct costs tied to 1CWA durum have risen in a somewhat more undulating manner than that presented for 1CWRS wheat. After climbing to $79.48 per tonne in the 2002-03 crop year, these costs dipped slightly before then beginning to rise again. By the close of the 2007-08 crop year, these costs had reached an average of $92.44 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.[165] For the 2007-08 crop year, the weighted average freight for the movement of 1CWA durum totalled $35.21 per tonne, 17.1% more than the $30.07 per tonne it had been nine years earlier. Still, its share of total direct costs actually fell from the 42.5% it constituted in the first year of the GMP, to 38.1%.

Figure 76: Durum Export Basis – Direct Costs



Gross CWB costs also increased over the course of the past nine crop years: from $21.32 per tonne in the first year of the GMP to $31.43 per tonne in the 2007-08 crop year. Notwithstanding year-to-year fluctuations, the share of total direct costs attributable to this element has risen somewhat, climbing from 30.1% to 34.0%. As was the case with 1CWRS wheat, the gross CWB costs for 1CWA durum increased sharply in the 2007-08 crop year, rising 28.0% from those seen in the 2006-07 crop year. Again, as with wheat, a significant contributing factor was the interest on borrowings.[166] In the durum pool account carrying costs for both country and terminal storage increased due to both higher inventory levels and value. Increased cost of eastern freight movement was also a factor.

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

- Trucking Costs: The commercial costs tied to a 40-mile haul increased to $7.98 per tonne in the 2007-08 crop year. These are the same values cited earlier with respect to wheat, and are 34.3% greater than the costs first recorded in the 1999-2000 crop year. On a proportional basis they accounted for 8.6% of total direct costs in the 2007-08 crop year as compared to 8.4% nine 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 33.4% to an average of $12.59 per tonne in the 2007-08 crop year. On a proportional basis, their share of total direct costs has remained largely unchanged, having risen only marginally to 13.6%.

- Dockage Costs: The cost of terminal cleaning averaged $3.62 per tonne in the 1999-2000 crop year, and comprised 5.1% of total direct costs. These costs increased by 34.0% to an average of $4.85 per tonne in the 2007-08 crop year, with its share of total direct costs remaining largely unchanged at 5.2%.

- CGC Weighing and Inspection Fees: These costs have remained unchanged at an average of $0.38 per tonne throughout the course of the GMP. On a proportional basis, they constitute only 0.4% of total direct costs.

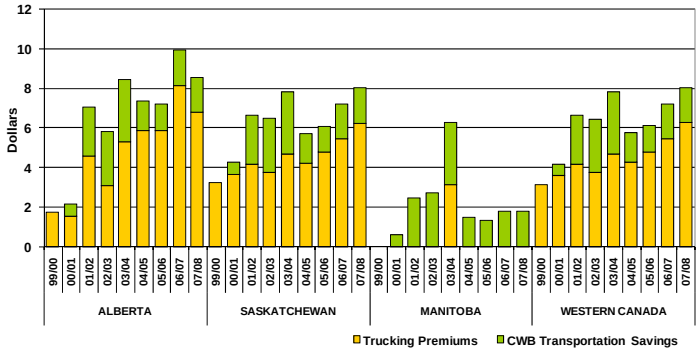
As with wheat, the trucking premiums paid by grain companies for 1CWA durum deliveries also rose between the 1999-2000 and 2003-04 crop years, climbing from an average of $3.14 per tonne to $4.68 per tonne. Similarly, despite having declined somewhat in the 2004-05 crop year as a result of changes in prevailing market conditions, they rebounded to a record $6.24 per tonne in the 2007-08 crop year. At 6.8%, this compensation proved somewhat greater than the 4.4% shielded in the first year of the GMP. It should be

[165] For 1CWA durum, the FAF constitutes a very small portion of the overall applicable freight – 1.4% in the 1999-2000 crop year. Moreover, the average FAF for 1CWA durum has been steadily decreasing. Although not large in absolute terms, the average FAF dropped from $0.41 per tonne in the 1999-2000 crop year, to a credit of $0.03 in the 2007-08 crop year. When treated as a credit, the FAF actually reduces the freight paid by producers.

[166] The value of interim payments to producers was greater than in past years and these payments were made more promptly than in previous years. At the same time, payments made by customers were slower than in past years, resulting in the need for increased borrowings and related interest costs.

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.[167] 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 they have since declined to $1.76 per tonne, they still stood at a level almost three times greater than in the first year of the CWB's tendering program, and accounted for an offset to total direct costs of 1.9%.

Figure 77: Durum Export Basis – Producer Benefits (dollars per tonne)



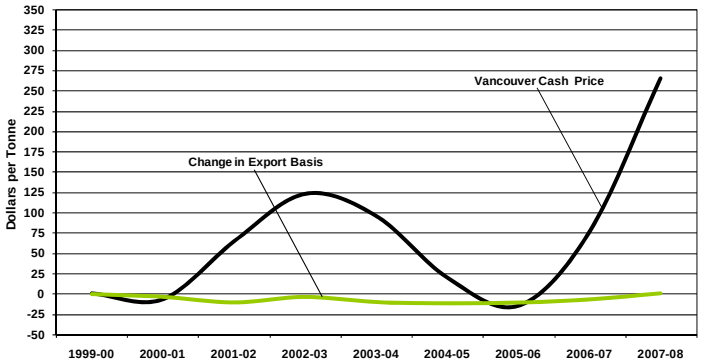
When examined on a combined basis, these producer benefits have moved generally higher, from a total of $3.14 per tonne in the 1999-2000 crop year to a record $8.00 per tonne in the 2007-08 crop year. These financial benefits have more than doubled over the course of the last nine crop years. Moreover, as an 8.7% offset to total direct costs, they have helped contain the escalation in the export basis over this same period.

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

5.31 1 Canada Canola

As was the case with the CWB grains discussed previously, the visible netback to producers from the delivery of 1 Canada canola increased fairly steadily in the first four years of the GMP, rising from $239.10 per tonne in the 1999-2000 crop year to $365.39 per tonne in the 2002-03 crop year. However, all of these gains were lost in the face of an ensuing three-year decline in canola prices, with the producer's netback falling to its lowest value under the GMP, $234.62 per tonne. But a sharp run-up in canola prices brought about a significant reversal in both the 2006-07 and 2007-08 crop years, with the producer's netback climbing to a record $503.29 per tonne.

Figure 78: Change in Netback Components – 1 Canada Canola



This represented a net increase of $264.19 per tonne, or 110.5%, from the netback value presented in the first year of the GMP. This gain was largely derived from a $265.15-per-tonne net increase in the Vancouver cash price of 1 Canada canola, but was tempered marginally by a small increase in the export basis, which rose by a mere $0.96 per tonne over this same period. It is worth noting that the 2007-08 crop year was the first in which the export basis actually rose above its base year value of $52.51 per tonne. The changes in these individual components are summarized in the following table.

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

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

	1999-00	2003-04	2004-05	2005-06	2006-07	2007-08	2007-08 / 1999-2000 $ VAR	2007-08 / 1999-2000 % VAR	
Vancouver Cash Price	$291.61	$387.11	$311.19	$276.38	$367.25	$556.76	$265.15	90.9%	▲
Direct Costs	54.99	42.79	41.31	42.19	46.30	53.96	-1.03	-1.9%	▼
Less: Trucking Premiums	-2.48	-0.28	-0.34	-0.43	-0.50	-0.49	1.99	-80.2%	▼
Export Basis	52.51	42.51	40.97	41.76	45.80	53.47	0.96	1.8%	▲
Producer Netback	$239.10	$344.60	$270.22	$234.62	$321.45	$503.29	$264.19	110.5%	▲

Vancouver Cash Price

As was the case with CWB grains, upward price movement proved to be the key driver in an 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 between the 1999-2000 and the 2002-03 crop years, climbing from $291.61 per tonne to $414.36 per tonne. With the price of 1 Canada canola being particularly sensitive to the wider influences of international supply and demand, this increase proved to be the product of tightening global supplies.

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

But the 2006-07 crop year brought about a significant shift in market conditions. A severe drought in Australia, which dramatically reduced production there, essentially removed that country as an export competitor. At the same time, the demand for canola was being stimulated by the growing need for feedstock in US and European biodiesel production. The 2007-08 crop year saw declining oilseed stocks coupled with rising consumption propelling canola prices to even further heights As a result, the average Vancouver cash price closed out the 2007-08 crop year at $556.76 per tonne, 90.9% above the $291.61-per-tonne average benchmarked in the GMP's base year.

Export Basis

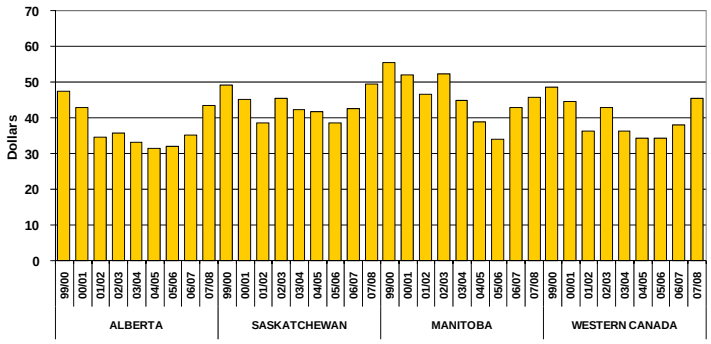
The export basis for 1 Canada canola has increased by just 1.8% over the past nine crop years, rising from an average of $52.51 per tonne in the 1999-2000 crop year to $53.47 in the 2007-08 crop year. Much of this increase came in the last three crop years, following a fairly steady reduction in the export basis during the first six years of the GMP.[168]

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.

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

In contrast to the patterns observed for wheat and durum, the direct costs tied to 1 Canada canola fell by 1.9% between the 1999-2000 and 2007-08 crop years, from an average of $54.99 per tonne to $53.96 per tonne. Much of this reduction stemmed from a 6.8% narrowing of the price differential.[169] By the end of the 2007-08 crop year, the price differential had fallen from an average of $48.55 per tonne to $45.23 per tonne, with its share of direct costs having declined from 88.3% to 83.8%. This narrowing of the price differential effectively signalled that the product was in demand, and that buyers were willing to surrender a greater proportion of the Vancouver price to the producer in order to acquire sufficient supplies.

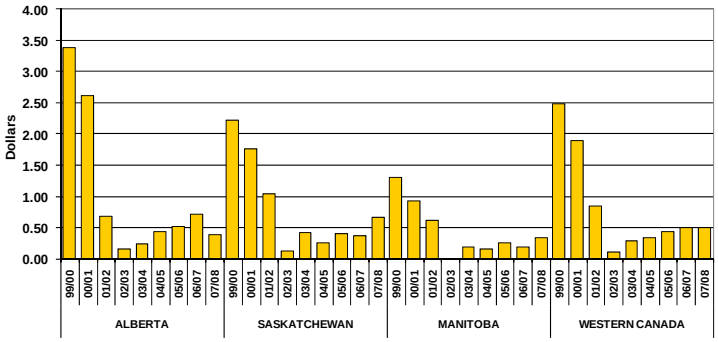
Figure 79: 1 Canada Canola – Price Differential (dollars per tonne)



The second largest component in canola's direct costs is that associated with trucking the commodity from the farm gate to an elevator or processor. As in the determination of the producers' netback for CWB grains, these costs are estimated to have climbed by 34.3% in the last nine crop years, increasing to an average of $7.98 per tonne as compared to $5.94 per tonne at the beginning of the GMP. Owing to the narrowing of the price differential over the past several years, trucking costs in the 2006-07 crop year accounted for a somewhat greater proportion of the total direct costs, 14.8% versus 10.8% in the 1999-2000 crop year. The remaining direct costs, which accounted for just 1.4% of the overall total, were derived from a provincial check-off that is applied as a means of funding the Canola Growers' Association.

Unlike CWB grains, trucking premiums are not as aggressively used to attract deliveries of non-CWB commodities. In fact, notwithstanding the nominal increases of recent crop years, trucking premiums have been all but eliminated. The premiums paid by grain companies for 1 Canada canola deliveries in each of the nine sampling areas fell by 80.2% between the 1999-2000 and 2007-08 crop years, decreasing from an average of $2.48 per tonne to only $0.49 per tonne. Similarly, their real value in offsetting direct costs has also fallen, declining from 4.5% of direct costs in the first year of the GMP, to just 0.9% in the 2007-08 crop year.

Figure 80: 1 Canada Canola – Producer Benefits (dollars per tonne)



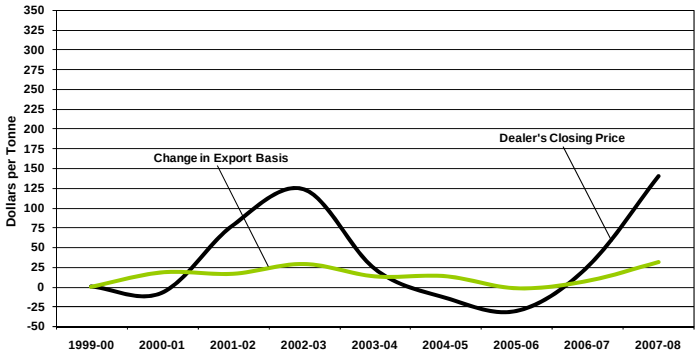
It is also worth noting that the reduction in trucking premiums has coincided with the narrowing of the price differential. This is consistent with comments received from grain companies to the effect that they prefer to use the spread between the spot price and the futures price as the primary signalling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

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

5.32 Large Yellow Peas

As opposed to the commodities already discussed, the visible netback arising to producers of large yellow peas has proven to be the most volatile. Indeed, reductions from the benchmark value of $147.78 per tonne were noted in three of the last nine crop years. In much the same manner as was cited earlier, this volatility was due in large measure to the rise and fall of market prices. An initial upturn in the price of large yellow peas helped raise the producer's netback to a height of $241.95 per tonne in the 2002-03 crop year before then beginning to slide to a low of $118.75 per tonne three years later.

Figure 81: Change in Netback Components – Large Yellow Peas



But another dramatic run-up in prices served to bolster the farmer's return in the 2006-07 crop year. This upward price movement continued on into the 2007-08 crop year, with the visible netback due to producers from the delivery of large yellow peas having increased to $256.31 per tonne. This denoted the highest value yet achieved under the GMP, and represented almost twice what had been returned to farmers some nine years earlier. The changes giving rise to these results are summarized in the following table.

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

							2007-08 / 1999-2000		
	1999-00	2003-04	2004-05	2005-06	2006-07	2007-08	$ VAR	% VAR	
Dealer's Closing Price	$202.54	$224.77	$188.17	$171.69	$227.43	$341.82	$139.28	68.8%	▲
Direct Costs	54.94	67.86	68.12	53.07	62.41	85.90	30.96	56.4%	▲
Less: Trucking Premiums	-0.18	-0.11	-0.14	-0.13	-0.24	-0.39	-0.21	116.7%	▲
Export Basis	54.76	67.75	67.98	52.94	62.17	85.51	30.75	56.2%	▲
Producer Netback	$147.78	$157.02	$120.19	$118.75	$165.26	$256.31	$108.53	73.4%	▲

Dealer's Closing Price

As with canola, this rise in price has proven to be the key determinant in the netback accruing to producers over the course of the last nine 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.[170]

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

[170] 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.

occurred in the 2004-05 and 2005-06 crop years as prices continued to fall, slipping to a GMP low of $171.69 per tonne. Even though production continued to decline, strong international demand in the face of tighter supplies resulted in prices rebounding sharply in the 2006-07 crop year. A sustained demand for human consumption peas in India helped drive up prices even more in the 2007-08 crop year, with the dealer's closing price having reached a GMP record of $341.82 per tonne.

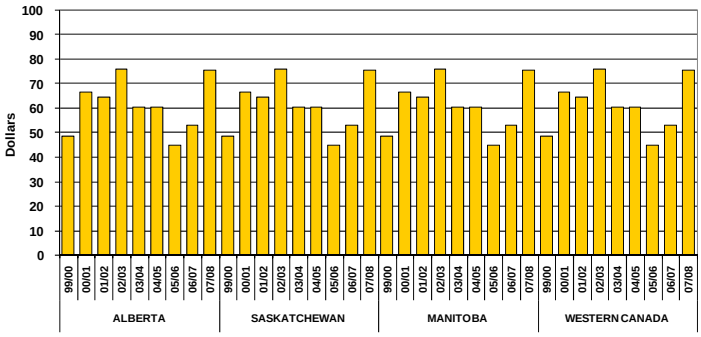
Export Basis

The export basis for large yellow peas has varied significantly over the course of the GMP. Under the first four years the program the export basis actually climbed by 51.9%, reaching a height of $83.19 per tonne in the 2002-03 crop year. This was followed by a fairly steady decline, with the export basis falling to a record low of $52.94 per tonne in the 2005-06 crop year. However, it began to rebound in the 2006-07 crop year, ultimately ascending to a height of $62.17 per tonne. This upward momentum continued into the 2007-08 crop year, with the export basis reaching a GMP record of $85.51 per tonne.

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

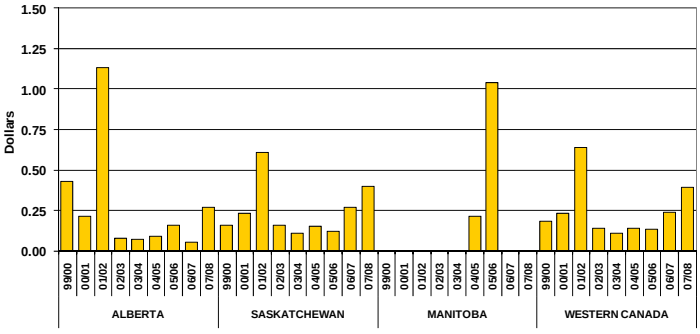
Over the first four years of the GMP, the price differential increased from $48.23 per tonne to $75.52 per tonne. This was followed by reductions in the 2003-04 through 2005-06 crop years, where the price differential fell to a low of $44.56 per tonne. The 2006-07 crop year, however, saw the price differential increase to a somewhat greater $52.90 per tonne. A more substantive increase was registered in the 2007-08 crop year, with the differential reaching a GMP record of $75.25 per tonne. Accounting for 87.6% of total direct costs, this proportion was largely unchanged from the 87.8% share noted in the base year.

Figure 82: Large Yellow Peas – Price Differential (dollars per tonne)



The second largest component in the direct costs of large yellow peas is trucking. As elsewhere, these costs are estimated using an average haul distance of 40 miles, and are deemed to have risen to about $7.98 per tonne in the 2006-07 crop year. On a comparative basis, this element accounted for 9.3% of total direct costs versus 10.8% at the outset of the GMP. The remaining 3.1% was derived from a levy assessed by the provincial Pulse Growers Association at the time of delivery.

Figure 83: 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 were largely on the decline for the first seven years of the GMP. From an average of $0.18 per tonne for the 1999-2000 crop year, these premiums fell to just $0.13 per tonne by the end of the 2005-06 crop year. However, they rose sharply in the 2006-07 crop year, climbing to an average of $0.24 per tonne. A further increase was noted in the 2007-08 crop year, with these premiums climbing to a GMP record of $0.39

per tonne. Even so, they represented an offset to direct costs of just 0.5%. Here too the value of this producer benefit as an offset to total direct costs has changed little from the 0.3% it constituted nine years earlier.

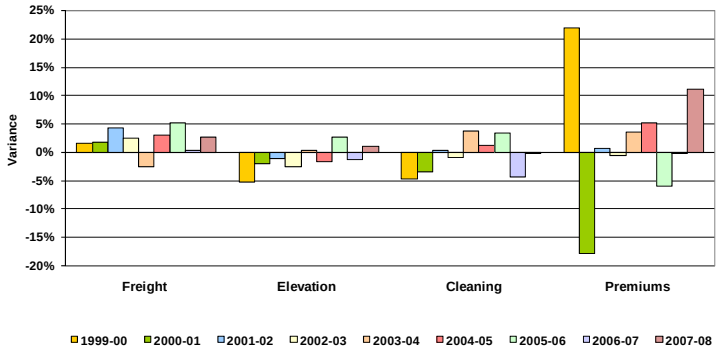
5.4 Cash Ticket Analysis

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 84 illustrates the variance observed in a comparison of the individual deductions and premiums identified on the cash tickets, and the averages developed in the calculation of the export basis for wheat. For the 2007-08 crop year, the variances observed with respect to freight, elevation and cleaning were minimal. The variability in the data relating to competitive premiums, although having increased from that recorded a year earlier, remains significantly less than that observed at the beginning of the GMP.

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 2007-08 crop year were essentially the same as those of the weighted averages used for applicable freight in the analysis.[171] Similarly, the charges for elevation and cleaning appearing on the cash tickets were little different from the averages drawn from the applicable tariffs. In all cases, the variance observed was within the bounds of statistical error.

Figure 84: Cash Ticket Variances



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.[172] 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. However, in the years that followed, the variance has steadily widened: from 3.5% in the 2003-04 crop year to 11.1% in the 2007-08 crop year. Much of variation observed in the last few crop year appears to be related to the receipt of poorer quality data. Even so, the variance is in the farmers' favour, as it suggests that the cash ticket data understates the premiums producers actually receive.

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

[171] 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.

[172] 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.

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 reviewing the concept, the federal government agreed to support the development of an internet-based system.

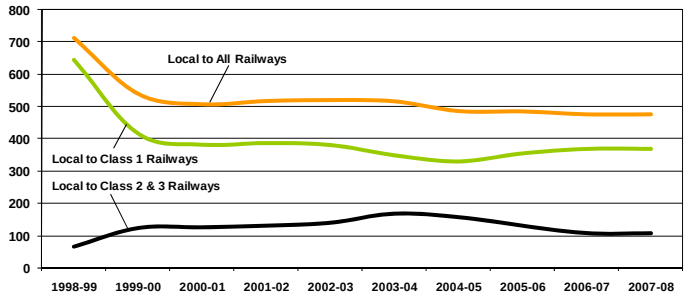
After considerable input from a broad spectrum of the industry, the detailed design and development of the system began in August of 2003. Completed in early 2004, the system was officially released in mid March, and has been actively promoted to producers since April of that year. The PNC is an easy-to-use system that provides producers with immediate access to the information that they need to make better delivery decisions.[173] 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 been met.

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

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

The aggregate number of producer loading sites has declined 36.0% since the beginning of the 1999-2000 crop year, falling from an estimated 709 to 454 by the end of the 2007-08 crop year. Much of this overall decline stems from the reduction in the number of sites served by the larger Class 1 carriers, which fell by 46.3% during the same period, from 644 to 346. Conversely, the number of sites local to the smaller Class 2 and 3 carriers increased from 65 to 108. [See Table 5B-1 in Appendix 4.]

Figure 85: Producer-Car Loading Sites



Regionally, Manitoba and Alberta posted the largest attrition rates, with the number of producer loading sites declining by 60.9% and 47.2% respectively. The rate of decline in Saskatchewan was substantially less; the number of sites having fallen by only 13.2% during the same nine-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 an overall value of 505 in the 2000-01 crop year, the number of producer loading sites has decreased by only 10.1%.

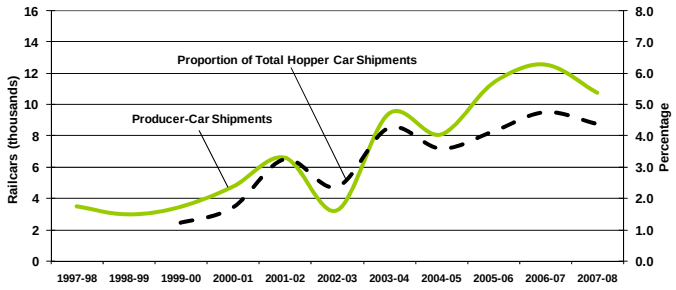
[173] For a more comprehensive review of the Producer Netback Calculator, see Appendix 2.

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 eight years of the GMP, these shipments more than tripled, increasing from 3,441 carloads to 12,529 carloads by the end of the 2006-07 crop year. However, in the 2007-08 crop year saw producer-car shipments fall by 14.4%, to 10,729 carloads, largely in reflection of the general decline in grain shipments.

Even so, these volumes are comparable to those shipped in the early 1990s. More importantly, their share of all covered hopper car movements has also been increasing. From an estimated 1.2% in the 1999-2000 crop year, producer-car shipments climbed to a GMP record of 4.8% in the 2006-07 crop year. Although reduced shipments in the 2007-08 crop year were largely responsible for this share falling back to 4.4%, or 6.9% of CWB grains alone, the upward trend makes it likely that further inroads will be made. [See Table 5B-2 in Appendix 4.]

Figure 86: Producer-Car Shipments



This increase in producer-car shipments has come as a result of many factors, not the least of which includes the closure of local elevators, better collaboration between producer groups and the CWB, as well as the advent of license-exempt facilities. With the close of the 2007-08 crop year, a total of 39 such facilities were in operation. This constituted a loss of one from the 40 that were in place at the end of the previous crop year, with 29 being located in Saskatchewan, seven in Alberta, and three in Manitoba.

5.7 Summary Observations

An examination of the per-tonne financial returns to producers of wheat, durum, canola, and large yellow peas, indicates that all have improved significantly since the 1999-2000 crop year. These gains ranged from a low of 73.4% in the case of large yellow peas, to as much as 185.4% for 1CWA durum. In all instances, these improvements came primarily as a result of increases in the market price of the commodity itself. Moreover, much of these gains came from the sharp across-the-board price increases witnessed in the 2007-08 crop year.

Within the wider framework of a time series, however, the producer's netback has fluctuated dramatically. After having steadily climbed to their respective highpoints in the 2002-03 crop year, virtually all of the gains that had been made were surrendered over the next three crop years. To be sure, all of this lost ground was reclaimed in the 2007-08 crop year as grain prices rose to record levels under the GMP. Such gyrations clearly underscore the sensitivity of the producer netback to changes in specific variables, most notably commodity prices.

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 23.9% (or $13.07 per tonne) in the case of wheat, and 24.9% (or $16.81 per tonne) for durum. As

for the non-CWB commodities, the changes proved to be more differentiated: an increase of 1.8% (or $0.96 per tonne) in the case of canola; and an increase of 56.2% (or $30.75 per tonne) for large yellow peas.

To a large extent, the full magnitude of increases to the export basis for the CWB grains was contained by an escalation in the financial benefits accruing to producers, whether in the form of trucking premiums or CWB transportation savings. These benefits, which amounted to $7.31 per tonne and $8.00 per tonne for wheat and durum respectively, acted as partial counterweights to increases in the direct cost of railway freight, 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 in order to secure the best possible trucking premium when delivering grain, overarching market forces have also played a role.

This, however, is not the case for non-CWB commodities. Both canola and large yellow peas receive significantly less in terms of these per-tonne premiums than CWB grains do. More importantly, the trucking premiums paid for both commodities have declined significantly over the course of the past nine 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 $0.49 in the 2007-08 crop year. This decline is consistent with the grain companies' stated preference to use a single pricing tool, namely the basis, as the competitive mechanism by which they attract these commodities into their facilities.
Also worth noting is the degree to which the export basis can vary between the nine geographic areas used to assess producer impact under the GMP, both in absolute as well as relative terms. These variations encompass a myriad of individual differences in the applicable cost of freight, the FAF, elevation, and producer benefits. As a result, the export basis within any one area can vary significantly from the western Canadian average.

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

Appendix 1: Program Background

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

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

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

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

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

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

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

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

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

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

Appendix 2: Producer Netback Calculator

A prime issue with many stakeholders is the impact that the shrinking GHTS network has had on the length of truck haul from farm gate to elevator. While all evidence suggests that truck hauls are increasing because of the reduced number of delivery points, the exact – or even approximate – amount of this increase is unknown. Following discussions with stakeholders and the government, a methodology that would allow the Monitor to gather the data necessary to enhance the quality and reliability of this component of the export basis has been developed.[174] The Producer Netback Calculator (PNC) was designed to provide a cost-effective and non-intrusive means of gathering this data.

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

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

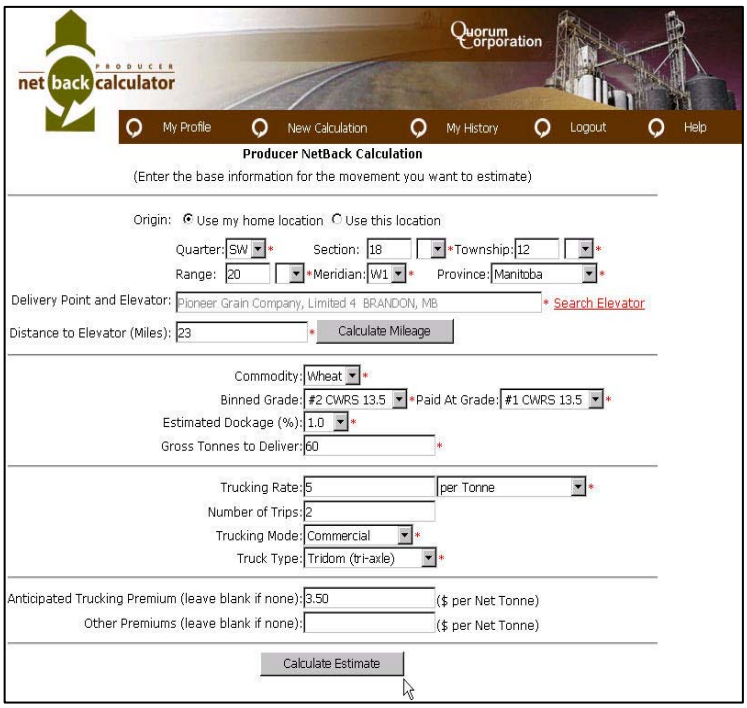

Figure A1: An image of the input screen for Quorum Corporation's Netback Calculator.

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

[174] 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.

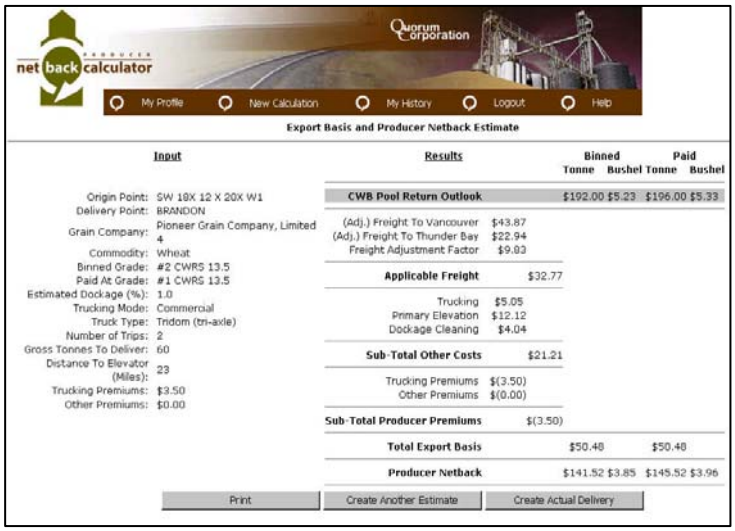

Figure A2: An image of the output screen for Quorum Corporation's Netback Calculator.

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.

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