Monitoring the Canadian Grain Handling and Transportation System

Annual Report
2002-2003 Crop Year

1 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 2003, and focuses on the various events, issues and trends manifest in the movement of Western Canadian grain during the past year. This is the third 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 2002-03 crop year is largely gauged against that of the 2001-02 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 four 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 3 as required.

QUORUM CORPORATION

Edmonton, Alberta
December 2003

TABLE OF CONTENTS

EXECUTIVE SUMMARY

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

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

The 2002-03 crop year proved to be yet another difficult one for many in the Canadian grain industry. Not only did all confront the effects of a second consecutive year of drought, but many also had to deal with the forces that were changing Canada's Grain Handling and Transportation System (GHTS). In this period, the country elevator network – now numbering less than half the facilities it had four years earlier – continued to contract; labour strife between the grain companies and their port terminal employees closed the port of Vancouver for a period of four months; the largest grain companies continued to grapple with their mounting financial problems; and many debated the merits of change to the tendering program of the Canadian Wheat Board (CWB). These are discussed at length in the report that follows, but are summarized below.

It must be noted, however, that the widespread drought in Western Canada continued to make it difficult for the Monitor to distinguish between changes in GHTS efficiency brought on by abnormally lower grain volumes, and those that might have been prompted by governmental reform or other factors. As pointed out in the Monitor's previous Annual Report, caution must therefore be urged before drawing any definitive conclusions in this regard for the period discussed, particularly since many of the measures used in the Grain Monitoring Program (GMP) have been adversely influenced by the sharp decline in the volume of grain handled – be it through the country elevator, railway, or terminal elevator systems.

Grain Production, Supply and Shipments

For the second time in as many growing seasons, Western Canada found itself in the grips of a widespread drought. Totalling 31.5 million tonnes, Western Canadian grain production for the 2002-03 crop year fell by 26% from the 42.5 million tonnes posted a year earlier. This represents a virtual halving of the 54.6 million-tonne production average noted during the first two years of the GMP.

Production declines in the order of 20-40% were posted for all major grains with the exception of durum and oats. With carry-forward stocks from the preceding crop year totalling only 6.1 million tonnes, the overall grain supply for the 2002-03 crop year reached 37.6 million tonnes – the lowest seen under the GMP.

Correspondingly, the GHTS saw the volume of grain moved to Western Canadian ports decline sharply. Aggregate railway shipments for the 2002-03 crop year totalled 12.7 million tonnes – a decrease of 32% from that handled of a year earlier. This pattern was largely mirrored in the volumes moved to the principal export gateways of Vancouver and Thunder Bay. And while Vancouver continued to account for the greatest proportion of the overall volume (41%), grain shipments to that port fell by 55% to 5.2 million tonnes. Rather than denoting a shift away from Asian-Pacific markets, however, this decline was the by-product of a labour dispute that saw Vancouver's licensed terminal elevators closed for almost four months.

Infrastructure

Since the beginning of the 1999-2000 crop year, the number of licensed primary and process elevators located in Western Canada has fallen from 1,004 to 416 – a reduction of 59%. However, the pace of decline abated somewhat during the 2002-03 crop year, perhaps signalling that the most dramatic reductions have now been realized. Regardless, the changes witnessed to date underscore a very clear industry migration towards the use of high-throughput elevators. Over the course of the past four crop years, the total number of the conventional facilities fell by 73% while the high-throughput facilities increased by 47%. By the end of the 2002-03 crop year, high-throughput facilities accounted for 42% of all elevators, and 74% of overall storage capacity – a considerable expansion from the respective 12% and 39% shares they held at the beginning of the GMP.

In contrast with the country elevator network, the GHTS's railway infrastructure has changed very little. By the end of the 2002-03 crop year, total network mileage had dropped by less than 3% to stand at 18,909 route-miles overall. Although the total number of route-miles operated remained unchanged in the 2002-03 crop year, about 260 route-miles were transferred by the Canadian National Railway to two new shortline railways (the Prairie Alliance for the Future, and the Wheatland Railway). Despite these two transfers, the number and storage capacity of the elevators tied to shortline carriers are now declining at faster rates than those associated with the major railways.

In light of this, as well as sharply reduced grain volumes, it seems increasingly likely that the economics of light-density branch line operations are being eroded. Although the return of normalized grain volumes might reverse this, the continued operation of these branch lines, along with the survival of some shortline railways, remains uncertain. One force providing a partial counter to this stems from the fact that producer-car loading has replaced – at least in part – a portion of the grain volume that would otherwise have been lost following the closure of many of these local elevators. And although total producer-car shipments fell by about one-half in the 2002-03 crop year, they accounted for an estimated 26% of the overall grain volume originated by shortline carriers in the 2002-03 crop year. Moreover, this proportion is almost twice the 15% it constituted three years earlier, and clearly denotes an important source of revenue for these smaller carriers. Similarly, their proportion in relation to the total number of hopper cars shipped stands at just over 2% – twice that estimated for the 1999-2000 crop year.

CWB Tendering

The 2002-03 crop year was the third under the Canadian Wheat Board's tendering program. Moreover, it marked the first year in which the CWB committed itself to tendering a minimum of 50% of its overall grain shipments to the four western ports – effectively doubling the proportion pledged during the initial two years of the program. Although this proportion was increased, the actual volume of grain called, bid, and moved under the tendering program changed little from the 2001-02 crop year owing to the sharp decline in the grain supply.

In total, the CWB issued 445 tenders calling for the shipment of 5.8 million tonnes of grain in the 2002-03 crop year. These were met by 2,587 bids offering to move an aggregated 11.8 million tonnes – slightly more than twice the volume sought. Ultimately, 784 contracts were signed for the movement of 3.7 million tonnes – 64% of the amount called. More importantly, this represented 46% of grain volume shipped by the CWB to Western Canadian ports during the 2002-03 crop year – marginally short of the 50% minimum commitment established under the Memorandum of Understanding (MOU) that governed its tendering program.

The advances made in its tendering program have generated financial returns that are ultimately being passed back to producers through the CWB's pool accounts. Derived largely from a savings in transportation costs as a result of the bidding inherent in the tendering process itself, these returns also include freight and terminal rebates, as well as financial penalties for non-performance. The CWB estimates the savings generated from these activities for the 2002-03 crop year at $33.8 million. While this represents a 17% decline from the $40.9 million reported saved a year earlier, the reduction appears largely tied to diminished grain volumes. More importantly, the per-tonne value of these savings actually increased by 9% in the 2002-03 crop year – to $2.70 per tonne from $2.47 a year earlier.

A concern brought forward by several industry stakeholders, and reported by the Monitor in earlier reports, has been the potential ability of the major grain companies to use the tendering program as a means to displace smaller competitors in the marketplace. With this in mind, the Monitor adopted a series of additional indicators

for the 2002-03 crop year aimed at assessing that dominance. One of these indicators involved measuring the relative market shares of the major, and non-major, grain companies. This indicator revealed that the share secured by the larger grain companies in the movement of CWB grain actually declined in the last crop year – from 85% to 80% in the case of tendered grain, and from 74% to 67% in the case of non-tendered grain.

It is worth noting that this decline also extended to non-CWB commodities as well. In the first year of the GMP, the major grain companies had handled 81% of the overall grain moved, but by the end of the 2002-03 crop year that share had fallen to 74%. Similarly, their command over the total storage capacity of the primary elevator network had fallen from 81% to 67%. To some extent, these shifts indicate that the level of competition in the GHTS has actually been heightened – a feature that is at odds with the expectations of those who, at the outset of the GMP, voiced the concern that industry rationalization would significantly reduce competition.

In the spring of 2003, the CWB initiated discussions with its 26 agents on the level of tendering that was appropriate for the coming 2003-04 crop year. This was precipitated by the fact that the MOU only stipulated tendering levels up to – and including – the third year of the program. This provoked renewed discussions within the industry on the workings of the program itself. Notwithstanding shifts in market share, few stakeholders appeared to believe that the tendering program was truly providing the GHTS with the more commercial, and competitive, orientation that was perceived by many as the ultimate goal. In fact all seemed to agree that the process by which tendering was administered was flawed, and that this – rather than the level at which tendering should be set – was the central issue to be addressed. While not unanimous, these discussions led to an agreement on a tendering program for the 2003-04 crop year that was supported by the majority of participants.

It is clear that the stakeholder community is polarized in regard to the various issues that surround the CWB's tendering program. It is widely understood that at the heart of the matter is the question of logistical control, and each party's role and responsibility within that framework. As with other industrial marketers, the CWB asserts that in order to effectively exercise its role as the marketer of Western Canadian grain, it is imperative that it maintain control over the logistics. Conversely, the grain companies contend that they must control the logistics if they are to properly coordinate grain movements, and optimize the utilization of their assets. Despite these differences, most concurred with the view that there must be a new agreement between all stakeholders on the roles and responsibilities to be accorded each in the movement of tendered grain.

Other Commercial Matters

In addition to the aforementioned, a number of other commercial developments occurred in the 2002-03 crop year that are worth noting:

- The British Columbia Terminal Elevator Operators Association locked out its employees belonging to Vancouver's Grain Workers Union, thus setting the stage for what proved to be a protracted labour dispute, and the virtual closure of Vancouver as the principal gateway for export grain on the west coast for four months. In the face of significantly lower grain volumes, however, the redirection of traffic to Prince Rupert effectively minimized the dispute's impact.

- Following one of its lowest-volume shipping years on record, serious consideration was given to the possibility of closing the port of Churchill for the 2003 shipping season. Due in large part to a $2.2-million aid package from the Canadian and Manitoba governments, the port did in fact open. In addition, the port's owner subsequently entered into an agreement with Louis Dreyfus – a grain company with international interests – to assume responsibility for the marketing and management of the port.

- One of the principal assets employed in the movement of Western Canadian grain is the federal government's fleet of covered hopper cars. A number of events brought renewed attention to the various issues surrounding its ownership, as well as its ability to fully accommodate the GHTS's future grain-carrying needs.

- In two separate – but interrelated trade actions, the United States challenged Canada in what it deemed to be unfair trade practices in respect to the international movement of grain. The first of

these involved Canadian grain imported into the United States, while the second related to the treatment of American grain imported into Canada.

  - In a complaint brought forward in September 2002, the US International Trade Commission upheld the imposition of countervailing and anti-dumping duties amounting to 14% on Canadian hard spring wheat imported into the US. The Canadian government and the Canadian Wheat Board are appealing this decision.

  - At the same time, the US also alleged before the World Trade Organization that Canada did not fulfil its international trade obligations relating to the practices of the CWB, and that US producers were unable to gain access to producer cars and grain movements under the revenue cap. A decision in this case is pending.

- In February 2003, the government released a document – entitled "Straight Ahead" – that presented a new policy framework for transportation in Canada. This framework outlined several changes to the Canada Transportation Act, which were introduced in Parliament as Bill C-26.

The GHTS Supply Chain

The Monitor has concluded that the amount of time taken by grain in its movement through the GHTS reached an annualized average of 79.7 days in the 2002-03 crop year. This constituted a distinctly slower pace than observed in either of the three preceding crop years. This 12.3-day (or 18%) increase over the 2001-02 average stemmed chiefly from a substantial rise in the amount of time spent by grain in storage in the primary elevator system – which climbed to an average of 47.9 days from 38.0 days a year earlier.

Much of this deterioration in performance appears directly attributable to a sharp reduction in the sales programs for both CWB and non-CWB grains. Without a higher level of sales activity, country elevator inventories naturally grew – and aged – as producers continued to deliver their grain to local elevators. This build-up in inventory is perhaps best reflected by the reduction in the amount of available primary elevator space during the first quarter – which fell to about 25% of working capacity – and remained at about this level throughout much of the ensuing second and third quarters.

Even so, the continued decline in the capacity turnover ratios associated with both the country and terminal elevator networks – which fell by 18% and 24% respectively – underscores the fact that more capacity existed within the system than was needed. Indeed, had GHTS capacity – and specifically that portion attributable to the country elevator network – not been shrinking over the course of the past several years, that decline would have proven even deeper. And while this reduction in capacity draws attention to the fact that handling productivity has been increased by an estimated 30% over the past four crop years, it continues to raise questions about the level of capacity needed by the GHTS. To be sure, the system's ability to handle normalized grain volumes remains untested.

Input Costs

The posted rates for many of the GHTS's component services have been rising. The nominal input costs tied to country elevator handling, rail transportation, terminal elevator handling, and even use of the St. Lawrence Seaway, have all increased since the beginning of the GMP. In and of themselves, much of this would appear to be in keeping with inflationary pressures, and an attempt to pass rising costs onto their respective customers. Yet some of these increases are significant, and figure more prominently in the increasing overall cost of delivering grain to export positions.

The Revenue Cap

As one of the reforms aimed at creating a more commercial, competitive, and accountable grain handling and transportation system, 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 a greater degree of latitude in pricing grain movements, but also "caps" the overall revenues that they can derive from it. The revenue cap is adjusted each year to take into account changes in the volume of grain handled, the average distance over which that tonnage moved, and inflation. For the 2002-03 crop year, these adjustments resulted in the revenue caps for CN and CP being set at a combined $425.5 million.

In December 2003, the Canadian Transportation Agency determined that statutory grain revenues for both carriers totalled $401.7 million. This meant that the railways' total statutory grain revenues were $23.9 million (or 6%) below the maximum allowed for the 2002-03 crop year. Moreover, the Agency's determination also revealed that each carrier's revenues had fallen below their respective caps by noticeably different degrees – by 9% in the case of CN, and by 3% in the case of CP.

In the 2000-01 crop year – the first under the new regime – statutory grain revenues for both CN and CP fell below their respective caps by margins of less than one percent. The most substantive force underlying these widening spreads are the incentive discounts applied to grain shipments moving in blocks of 25 or more railcars. Long used in other sectors of the railway industry, these discounts are strategically aimed at drawing greater volumes of grain into facilities that can provide for movement in either full, or partial, trainload lots.

Despite two consecutive years of declining grain volumes, the posting of statutory revenues below that allowed by the revenue caps indicates that both railway companies have surrendered more revenue than prescribed by law. And while these results may show competitive forces at work, a longer record will be needed before any definitive conclusions can be drawn.

System Efficiency and Reliability

Once again, the decline in overall grain volume effectively eased the pressure brought to bear on the GHTS as a whole, and idled a significant proportion of its terminal handling capacity. In large measure, this is reflected in a rise in the amount of time spent by grain in inventory at terminal elevators, and in a decline in the average amount of time spent by vessels in port.

In the face of this lesser demand, the railways moved to reduce the number of locomotives and crews used to move grain to the ports. An elongation in the railways' average car cycle from 17.1 days to 20.4 days also reflects the reduced demands that were placed on the hopper car fleet, and the handling capacity that was rendered idle as a result.

Even so, stock-to-vessel requirement, and stock-to-shipment, ratios confirm that sufficient grain was made available at the terminals to meet prevailing demand. Moreover, the degree of coverage afforded by these stocks increased markedly. To the extent that the reliability of a supply chain can be gauged by its ability to actually deliver product at the time and place specified, it would appear that the reliability of the GHTS was adequate, and appropriate to the task demanded – despite the impact of a prolonged labour dispute in Vancouver.

Export Basis and Producer Netback

In the four crop years now covered by the GMP, the financial returns to producers have generally improved as a result of rising prices in the world market. By way of example, the netback for wheat producers over this period has increased by almost 45% (or $65.72 per tonne) – from $147.10 per tonne to $212.82. For canola, the increase proved a marginally better 53% (or $126.29) – up from $238.10 per tonne to $365.39.

Price, however, is not the sole determinant. Producer returns are also impacted by the export basis, which includes both the direct operating costs as well as any offsetting benefits producers receive. For wheat, the export basis rose steadily from $65.82 per tonne in the 1999-2000 crop year, to $79.81 in the 2002-03 – an increase of $13.99 (or 21%). Over this same period, the export basis for canola actually declined by $3.54 per tonne (or 7%) – falling from $52.51 to $48.97.

Beginning with the 2002-03 crop year, the CWB made a series of changes in the manner by which it had previously treated certain operating revenue and expense items in its pool accounts. Of particular importance to the GMP is the fact that the CWB's direct costs now include provisions for ocean and rail freight that had previously been treated as revenues. The Monitor has restated the values previously calculated for both the export basis and the producer netback in order to be consistent with the CWB's new treatment practices.

While the export basis for wheat increased by $13.99 per tonne over the course of the GMP, this increase is largely attributable to an increase of $14.24 in CWB costs. These cost contain a number of elements that can vary significantly from year to year (as in the freight tied to sales), as well as those that are of a more fixed

nature (such as administrative costs for example). When these CWB costs are isolated, it can be observed that the remaining component costs in the export basis actually declined initially, before then returning to the level first seen in the 1999-2000 crop year. More importantly, these costs have not risen as much as those embodied in Statistics Canada's Farm Input Price Index for Western Canada crop production – which increased by 8% over this period.

Producer benefits, such as trucking premiums and CWB transportation savings, have emerged as the real force in containing the rise in the export basis of CWB grains. Trucking premiums paid by grain companies appear to have risen largely because of increased competition, a shrinking elevator network, and reduced grain production. This is not the case with respect to non-CWB commodities. Both canola and large yellow peas receive significantly less in per-tonne premiums than do the CWB grains. In fact, trucking premiums paid out for canola and peas have declined significantly over the course of the past four crop years. 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.

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. These variations encompass a myriad of individual differences in the applicable cost of freight, the Freight Adjustment Factor, elevation, and producer benefits. By way of example, the export basis for wheat can be seen to vary by as much as 12% from the Western Canada average.

In an effort to improve the information used in calculating the export basis, and to enable producers to access the database used for the producer netback analysis, the Monitor has developed the Producer Netback Calculator. This Internet-based tool will allow producers to enter site-specific data, and estimate the returns that they may derive from the delivery of their grain to various elevator facilities. At the same time, the data they return will provide valuable information regarding their average length of haul to elevators, choice of equipment, and other farm gate to elevator delivery issues – all of which will be used to enhance future reporting by the Monitor.

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 – 2002-03 Crop Year

Grain Production and Supply

- *Grain production declined by 25.9% to 31.5 million tonnes due to a widespread prairie drought during the 2002 growing season.*
  - *Alberta hardest hit with a 44.0% decline in overall grain production.*
  - *All commodities except durum and oats experience declines of 20-40%.*
    - *Durum production increased 26.9%.*
    - *Oat production increased by 1.6%.*
- *Carry forward stock decreased by 30.6% to 6.1 million tonnes.*
  - *Provincial stocks fell by 20-40%.*
  - *Declines noted for all commodities save canola.*
    - *Canola stocks increased by 14.3%.*

Railway Traffic

- *Railway grain volume fell 32.1% to 12.7 million tonnes.*
  - *Reflected reduced volume of grain available for movement.*
- *Significant swings in grain volume moved to all Western Canadian ports as a result of Vancouver labour dispute.*
  - *Vancouver volume reduced by 54.7% to 5.2 million tonnes.*
  - *Resulted in a virtual doubling of the Prince Rupert volume; 2.1 million tonnes.*
  - *Volume to Thunder Bay fell by 12.6%; share of traffic climbs to 40.0%.*
  - *Churchill volumes fell to 0.3 million tonnes; lowest recorded under GMP.*

Country Elevator Infrastructure

- *Elevator rationalization efforts of major grain companies eased.*
  - *Grain delivery points reduced by 16.2% to 289.*
  - *Number of elevators fell by 16.8% to 416.*
- *Elevator storage capacity reduced by 6.2% to 5.7 million tonnes.*
  - *Fell below 6.0-million-tonne threshold for the first time.*
- *Elevators capable of loading in blocks of 25 or more cars falls 7.9% to 269; accounted for 64.7% of total elevators in GHTS.*
  - *Share of GHTS storage capacity rose to 86.9%*

Railway Infrastructure

- *Western Canadian rail network remained unchanged at 18,909 route-miles.*
- *CN branchline transfers resulted in the establishment of two new shortlines in Saskatchewan.*
  - *Expanded regional and shortline network by 5.2% to 5,193 route-miles.*
- *CP and the Southern Manitoba Railway took initial actions to abandon 127.1 route-miles of infrastructure.*

Terminal Elevator Infrastructure

- *Licensed GHTS terminal elevators remained unchanged at 17.*
  - *Storage capacity held at 2.7 million tonnes.*
- *Terminal elevator unloads fell by 38.2% to 125,339 railcars.*

Indicator Series 1 – Industry Overview

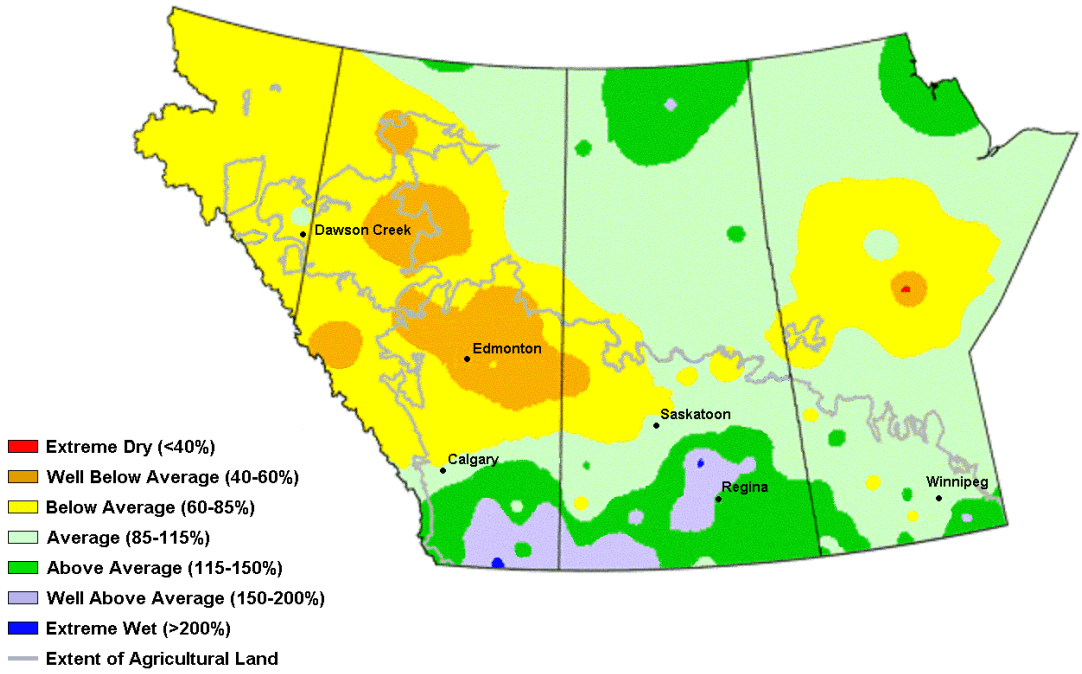
Table	Indicator Description	Notes	BASE 1999-00	CURRRENT REPORTING PERIOD (1) 2001-02	2002-03	% VAR	
	Production and Supply [Subseries 1A]						
1A-1	Crop Production (000 tonnes)	(2)	55,141.7	42,541.4	31,539.9	-25.9%	▼
1A-2	Carry Forward Stock (000 tonnes)	(2)	7,418.2	8,750.6	6,070.8	-30.6%	▼
	Grain Supply (000 tonnes)	(2)	62,559.9	51,292.0	37,610.7	-26.7%	▼
	Rail Traffic [Subseries 1B]						
1B-1	Railway Grain Volumes (000 tonnes) – Origin Province						
1B-2	Railway Grain Volumes (000 tonnes) – Primary Commodities		26,441.0	18,765.1	12,736.4	-32.1%	▼
1B-3	Railway Grain Volumes (000 tonnes) – Detailed Breakdown						
	Country Elevator Infrastructure [Subseries 1C]						
1C-1	Grain Delivery Points (number)		623	345	289	-16.2%	▼
1C-1	Grain Elevator Storage Capacity (000 tonnes)		7,443.9	6,125.2	5,747.3	-6.2%	▼
1C-1	Grain Elevators (number) – Province						
1C-2	Grain Elevators (number) – Railway Class		917	500	416	-16.8%	▼
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	292	269	-7.9%	▼
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	29	31	6.9%	▲
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	310	115	-62.9%	▼
1C-12	Grain Elevator Closures (number) – Railway Line Class						
1C-13	Grain Delivery Points (number) – Accounting for 80% of Deliveries	(3)	217	107	n/a	n/a	–
	Railway Infrastructure [Subseries 1D]						
1D-1	Railway Infrastructure (route-miles) – Grain-Dependent Network		4,876.6	4,480.7	4,480.7	0.0%	–
1D-1	Railway Infrastructure (route-miles) – Non-Grain-Dependent Network		14,513.5	14,428.1	14,428.1	0.0%	–
1D-1	Railway Infrastructure (route-miles) – Total Network		19,390.1	18,908.8	18,908.8	0.0%	–
1D-2	Railway Grain Volumes (000 tonnes) – Grain-Dependent Network		8,683.6	6,228.7	3,670.1	-41.1%	▼
1D-2	Railway Grain Volumes (000 tonnes) – Non-Grain-Dependent Network		16,976.0	12,048.0	8,601.2	-28.6%	▼
1D-2	Railway Grain Volumes (000 tonnes) – Total Network		25,659.6	18,276.6	12,271.3	-32.9%	▼
1D-3	Shortline Railway Infrastructure (route-miles)		3,043.0	3,090.9	3,348.6	8.3%	▲
1D-3	Shortline Railway Grain Volumes (000 tonnes)		2,090.5	2,061.0	1,111.7	-46.1%	▼
1D-5	Railway Grain Volumes (000 tonnes) – Class 1 Carriers		23,569.1	16,215.7	11,159.6	-31.2%	▼
1D-5	Railway Grain Volumes (000 tonnes) – Class 2 and 3 Carriers		2,090.5	2,061.0	1,111.7	-46.1%	▼
1D-6	Grain Elevators (number) – Grain-Dependent Network		371	179	140	-21.8%	▼
1D-6	Grain Elevators (number) – Non-Grain-Dependent Network		513	305	261	-14.4%	▼
1D-6	Grain Elevator Storage Capacity (000 tonnes) – Grain-Dependent Network		2,475.4	1,726.7	1,564.8	-9.4%	▼
1D-6	Grain Elevator Storage Capacity (000 tonnes) – Non-Grain-Dependent Network		4,847.6	4,334.0	4,123.5	-4.9%	▼
	Terminal Elevator Infrastructure [Subseries 1E]						
1E-1	Terminal Elevators (number)		15	17	17	0.0%	–
1E-1	Terminal Elevator Storage Capacity (000 tonnes)		2,678.6	2,733.6	2,733.6	0.0%	–
1E-2	Terminal Elevator Unloads (number) – Covered Hopper Cars		278,255	202,943	125,339	-38.2%	▼

(1) – In order to provide for more direct comparisons, the values for the 1999-2000 through 2002-03 crop years are "as at" or cumulative to 31 July unless otherwise indicated.
(2) – Values quoted represent the supply available for movement during the crop year.
(3) – Statistics relating to grain deliveries by station, as compiled by the Canadian Grain Commission, are generally produced six months after the close of the crop year. The most recent statistics available are those for the 2001-02 crop year.

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

For the second time in as many growing seasons, Western Canada found itself in the grips of a widespread drought. The resultant decline in overall grain production made the 2002-03 crop year yet another difficult one for the stakeholders in Canada's Grain Handling and Transportation System (GHTS).

Figure 1: Percentage of Average Precipitation – April 1 to August 31, 2002



Source: Prairie Farm Rehabilitation Administration

With precipitation in most areas recorded at below-average levels, 2002's drought hit northeastern British Columbia, Alberta and western Saskatchewan particularly hard.[1] As a result, grain produced in these areas posted a second consecutive year of decline. And while moisture conditions in the prairie's southern tier proved better, it was largely insufficient to overcome the deficiency built up through three straight years of limited precipitation.

With steadily worsening conditions, the drought has brought economic hardship to many in the agriculture industry. Indeed, a wide number of producers have claimed that these conditions rival those of the 1930s. The impact is reflected in statistics that show not only a sharp year-over-year decline in grain production, but in general GHTS activity as well.

Totalling 31.5 million tonnes, Western Canadian grain production for the 2002-03 crop year fell by 25.9% from the 42.5 million tonnes posted a year earlier. Yet the magnitude of the overall deterioration in production cannot be properly measured by a simple year-over-year comparison. For that, it must be gauged as a virtual halving of the 54.6 million-tonne production average noted during the first two years of the Grain Monitoring Program (GMP). [See Table 1A-1 in Appendix 3.]

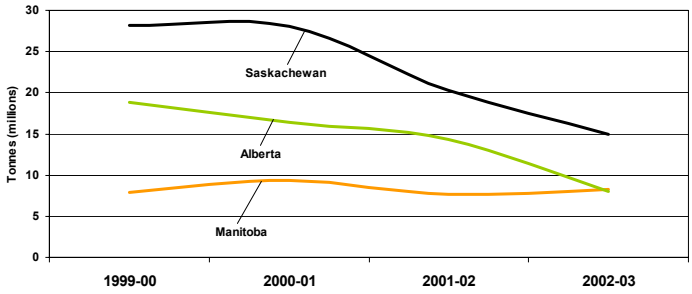
[1] The comparative average precipitation levels cited here are based upon historical data gathered by the Prairie Farm Rehabilitation Administration for the 30-year period between 1961 and 1990.

Provincial Grain Production

The impact of the 2002 drought is widely reflected in provincial grain production statistics. Alberta, where the drought proved most pervasive, saw its overall production fall by 44.0% – to 8.1 million tonnes from 14.4 million tonnes the previous year . With three years of consecutive declines, the 2002-03 crop year's production amounted to about two-fifths of that for the 1999-2000 crop year, and constitutes the steepest relative decline among the three principal grain-producing provinces of Western Canada.

Saskatchewan followed on Alberta's heels with a year-over-year decline of 26.3% for the 2002-03 crop year – to 14.9 million tonnes from 20.3 million tonnes the year before. Even though somewhat better insulated from the drought, Saskatchewan's production still fell to half that of the 28.1 million tonnes recorded for the 1999-2000 crop year. Moreover, owing to its normally larger production volume, Saskatchewan's 5.4-million-tonne reduction accounted for about one-half of the total drop in Western Canadian production for the 2002-03 crop year.

Figure 2: Provincial Grain Production



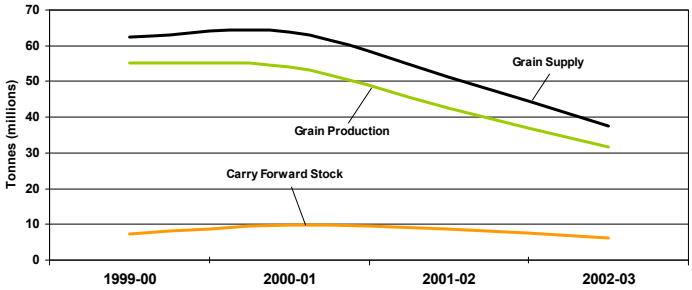
This was in turn followed by British Columbia with a reduction of 22.8% to 0.2 million tonnes. Only Manitoba, with its comparatively better growing conditions, managed to post an increase of 9.5% for the 2002-03 crop year – to 8.3 million tonnes from 7.6 million tonnes a year earlier. Furthermore, while displaying some variability, Manitoba's production volume has proven to be the most stable in Western Canada over the course of the four crop years now covered by the GMP.

With the exception of durum and oats, production declines were posted for all major grains. Although significant provincial differences arose as a result of varied growing conditions, reductions in the order of 20-40% were typical. Wheat, with a year-over-year reduction of 6.1 million tonnes (or 36.3%), had the most noteworthy impact and accounted for just over half of the 11.0-million-tonne net decline in total Western Canadian production. This was followed by barley with a reduction of 3.9 million tonnes (or 38.0%). Combined, declines in wheat and barley represented 91.3% of the overall reduction in the harvest attributable to the 2002-03 crop year. Particular mention, however, must be made of the fact that durum production actually increased by 26.9% to 3.9 million tonnes. This arose chiefly as a result of the above-average precipitation occurring in the durum-growing areas of southern Saskatchewan and Alberta.

Carry-Forward Stock and Western Canadian Grain Supply

Although current-year grain production has always had the most direct bearing on the Western Canadian grain supply, the volume of grain held over as inventory from the previous crop year (be it on the farm or at primary elevators) also has an impact. Carry-forward stocks averaged about 8.6 million tonnes in the first two crop years of the GMP, and accounted for as much as one-fifth of the overall grain supply in the 1999-2000 and 2000-01 crop years.[2]

Figure 3: Western Canadian Grain Supply



[2] Carry-forward stocks for Western Canada are based on data drawn from Statistics Canada and the Canadian Grain Commission.

As at 31 July 2002 – the end of the 2001-02 crop year – these carry-forward stocks totalled 6.1 million tonnes. Combined with the 31.5 million tonnes harvested in 2002, theses stocks pushed the overall grain supply to 37.6 million tonnes in the 2002-03 crop year. This supply, however, constituted the lowest seen under the GMP. [See Table 1A-2 in Appendix 3.]

Like grain production itself, relative changes in carry-forward stocks can vary widely by province and grain, and reflect a number of determinants. The overall stock carried forward into the 2002-03 crop year declined by 30.6% from the 8.8 million tonnes held over a year earlier. Provincial reductions ranged from a low of 20.1% for British Columbia, to a high of 38.4% for Manitoba. Fully three-quarters of the carry-forward stock was comprised of wheat, durum and barley.

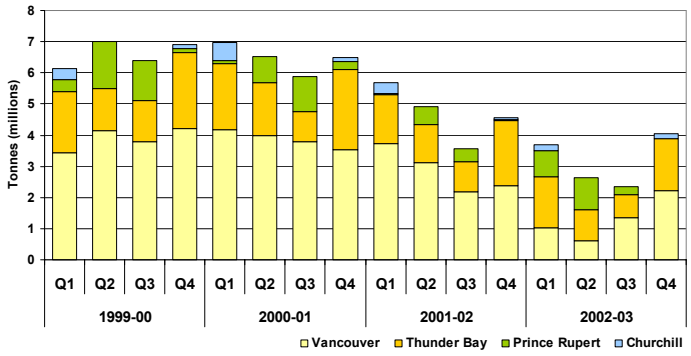
The change in production often serves as a leading indicator of changes in year-end grain inventories. By way of example, the general decline in production for the 2002-03 crop year suggested that stocks to be carried forward into the 2003-04 crop year would decline. This was in fact the case, with inventories having fallen to 5.5 million tonnes – 9.6% less than that carried into the 2002-03 crop year. Here declines in durum, barley, canola, and flaxseed stocks more than offset the modest increases noted for wheat and oats to reduce the comparative tonnage by 0.6 million tonnes.

1.2 Rail Traffic *[Measurement Subseries 1B]*

Reflecting yet another decline in the grain supply, the volume of grain moved by rail to Western Canadian ports fell sharply for a second consecutive year. Aggregate volume for the 2002-03 crop year totalled 12.7 million tonnes – a decrease of 6.0 million tonnes (or 32.1%) from that of a year earlier.[3] Although quarterly volumes were notably lower throughout the course of the crop year, comparative reductions were sharpest during the first half. For the second quarter alone, the overall volume fell by 46.6% from the same period a year earlier. [See Tables 1B-1, 1B-2, and 1B-3 in Appendix 3.]

This same pattern was largely evident in the volumes moved to the principal export gateways of Vancouver and Thunder Bay. And while Vancouver continued to account for the greatest proportion of the overall volume – 40.6% – grain shipments to that port fell by 54.7% to 5.2 million tonnes. Rather than denoting a shift away from Asian markets, this decline was the by-product of a labour dispute that saw Vancouver's licensed terminal elevators closed for almost four months.[4] Grain destined to Thunder Bay declined by a significantly lesser 12.6% to 5.1 million tonnes. This served to increase the port's overall share of the total traffic volume to 40.0% from 31.1% a year earlier.

Figure 4: Railway Grain Volumes



The results for the secondary ports of Prince Rupert and Churchill differed greatly. With Prince Rupert used as an alternate destination during the Vancouver labour dispute, its annual volume effectively doubled – to 2.1 million tonnes from 1.1 million tonnes the year before. Despite a comparatively strong fourth quarter, movements to Churchill for the 2002-03 crop year as a whole fell by 24.7% to 0.3 million tonnes – the lowest volume thus far observed under the GMP.

[3] 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. It does not include grain traffic originating in Western Canada and destined to either Eastern Canada or the United States of America.

[4] For a fuller discussion of the labour dispute that prompted the closure of the terminal elevators in Vancouver, see Section 2.22.

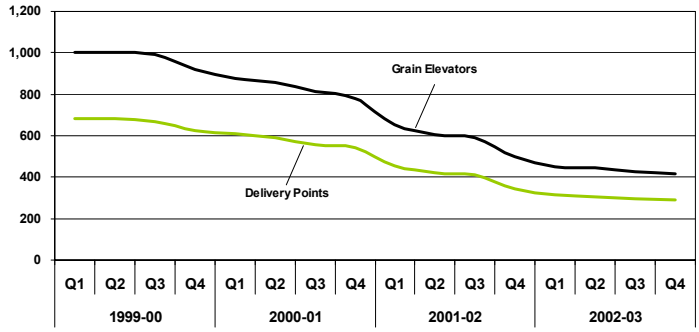
Provincial Origins

In a reflection of the changes in overall grain production, railway volumes from each of the producing provinces fell off sharply. About half of the decline observed during the 2002-03 crop year can be attributed to reduced tonnage from Saskatchewan alone. Rail shipments from that province fell by 3.0 million tonnes (or 31.7%) to 6.4 million tonnes. This was followed respectively by Alberta with 3.7 million tonnes (a reduction of 43.4%), and Manitoba with 2.7 million tonnes (a reduction of 7.0%). Shipments reported under the GMP for origins in British Columbia – which amounted to 54,800 tonnes in the 2001-02 crop year – were effectively reduced to zero.[5]

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

The decline in the number of licensed country elevators located throughout Western Canada is arguably the most visible facet of the continuing evolution in the GHTS. At the outset of the 1999-2000 crop year, there were 1,004 licensed primary and process elevators situated on the prairies. Over the course of the next three crop years, that number had fallen by a factor of one-half – to 500 as at 31 July 2002.[6] More particularly, this period was marked by a continuing increase in the rate at which these facilities were being removed from the system: 87 in the first crop year; 136 in the second; and 281 in the third.

Figure 5: Licensed Grain Elevators and Delivery Points



By 31 July 2003, the number of licensed elevators had fallen by a further 84 (or 16.8%) to 416 – 58.6% below that in place at the beginning of the GMP. Moreover, this 84-elevator reduction contrasts sharply with the reductions made during the preceding two crop years. And while indicating that elevator rationalization continues, it may well signal that the most dramatic reductions have now been realized, and that the rate of reduction is itself moderating. [See Tables 1C-1, and 1C-2 in Appendix 3.]

In concert with this, the facilities remaining within the elevator network are congregated around a lesser number of grain delivery points. By the end of the 2002-03 crop year, the number of active delivery points had fallen to 289. This represents a reduction of 16.2% from the 345 seen at the end of the preceding crop year, and a reduction of 57.7% from the 684 observed at the outset of the GMP. Statistics from the 2001-02 crop year show that a full 80% of that year's producer deliveries were made at just 107 – or roughly one-third – of the then active delivery points.[7] Although this proportion fell to a low of 26.0% in the 2000-01 crop year, it is little different from that observed at the beginning of the GMP. [See Table 1C-13 in Appendix 3.]

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[5] 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 is handled by BC Rail, the volume handled in line-haul movements by federally regulated carriers has proven to be comparatively small – amounting to well below 100,000 tonnes annually. In 2002 the Canadian National Railway entered into a private haulage agreement with BC Rail that saw traffic originating on CN's line in the Dawson Creek area moved to Vancouver by BC Rail instead. The Canadian Transportation Agency deemed that BC Rail's movement of this traffic effectively removed it from being considered a regulated grain for the purpose of calculating the revenue cap. In a reflection of this status change, CN ceased to report any information concerning these movements for the 2002-03 crop year.

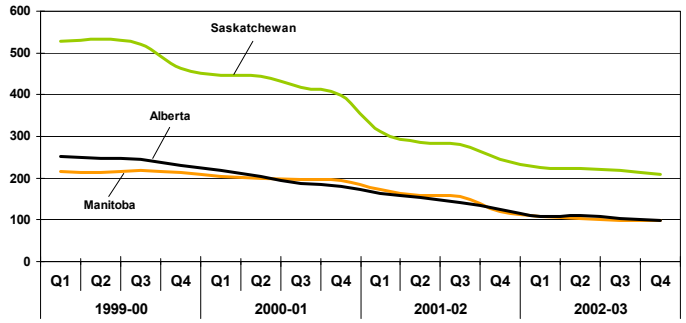
[6] The reduction in licensed elevators cited here reflects the net change arising from elevator openings and closures over a given period. This net reduction should not be construed as elevator closures alone. Elevator openings and closures are discussed elsewhere in this report, and the statistics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

[7] Statistics relating to grain deliveries by delivery point are normally produced by the Canadian Grain Commission a full six months after the close of the crop year. The most recent statistics available are those pertaining to the 2001-02 crop year.

Provincial Distribution

With 210 elevators as at 31 July 2003, Saskatchewan continues to possess the greatest proportion – 50.5% – of the 416 licensed facilities located in Western Canada. Since the beginning of the GMP, the overall proportion of elevators based in the province has never varied significantly from one-half of the GHTS total. This is followed in succession by Manitoba and Alberta, whose respective 99 and 98 elevators each account for just under a quarter of the total. The remaining nine are situated in the provinces of British Columbia and Ontario.[8]

Figure 6: Licensed Grain Elevators – Provincial Distribution

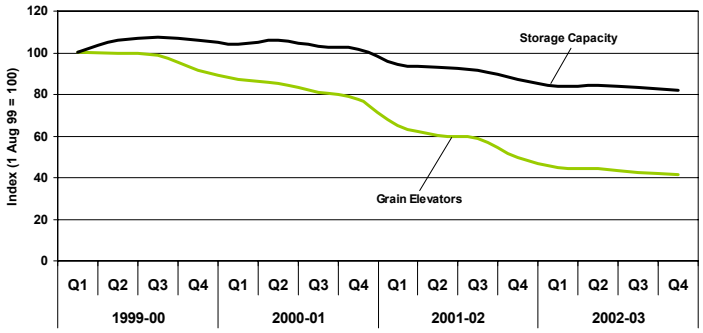


And while the greatest numerical reduction in licensed facilities is also attributable to Saskatchewan, it is Alberta that has posted the largest relative decline since the beginning of the 1999-2000 crop year – 61.1% (or 154 elevators). This rate, however, is very closely followed by Saskatchewan with a net reduction of 60.2% (or 317 elevators); and Manitoba with a drop of 54.2% (or 117 elevators). Despite periodic shifts in momentum, the overall rate of decline for all three provinces has been substantially the same. This effectively underscores the fact that elevator reductions have been geographically distributed, and that no one province's facilities were unduly targeted for rationalization in comparison to another's.

Elevator Storage Capacity

Despite the steep decline in the overall number of elevators, the storage capacity associated with these facilities fell by a comparatively lesser 18.2% during the past four crop years – from 7.0 million tonnes to 5.7 million tonnes. This more moderate rate of decline stems from the fact that while grain companies were methodically reducing capacity through the closure of their less-efficient conventional elevators, they were also adding capacity by constructing new high-throughput facilities.

Figure 7: Relative Change in Grain Elevators and Storage Capacity



Until the latter part of the 1999-2000 crop year, the capacity added through investment in new or expanded facilities marginally outpaced that being removed through closure. This actually served to expand overall storage capacity by 7.4% – which reached a height of 7.5 million tonnes in the third quarter of the 1999-2000 crop year. Since then, the GHTS's total storage capacity has been falling at about one-half the average annual rate of decline in elevators.

[8] There are nine licensed primary and process elevators located outside the provinces of Manitoba, Saskatchewan, and Alberta. Specifically, these include one in Ontario, and eight in British Columbia as at 31 July 2003. 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. Readers interested in the elevator data associated with these specific provinces should consult the tables presented in Appendix 3.

Facility Class

The initial target in elevator rationalization was clearly the conventional wood-crib facility. Of the 714 elevators closed since the beginning of the GMP, the overwhelming majority – some 600 (or 84.0%) – have been Class A facilities.[9] Comparatively smaller in size than the modern-day high-throughput elevator, these facilities typically had limited grain storage, and insufficient track capacity to support the loading of 25 or more railcars at a time. [See Tables 1C-10 through 1C-12 in Appendix 3.]

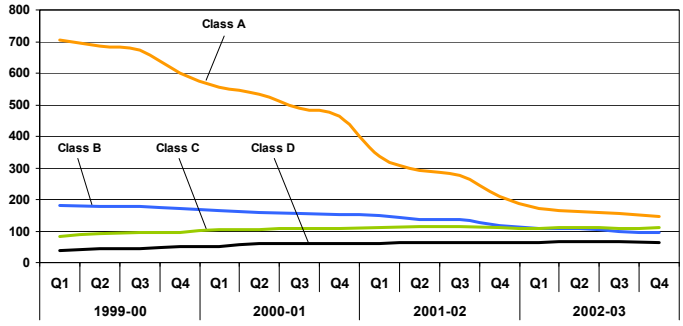
With the introduction of the financial incentives that promoted the movement of grain in blocks of 25 or more railcars at a time, these facilities became increasingly obsolete.[10] From the vantage point of an individual grain company, these incentives harboured the potential to reduce costs significantly, and unlock the economic efficiencies inherent in the operation of high-throughput facilities. As the number of these new high-throughput facilities grew, the existing system of conventional elevators was further marginalized. Their closure is but a natural extension of a grain company's effort to fully leverage these efficiencies.

And while this rationalization process is still at work today, it is no longer directed towards Class A facilities alone. Despite the fact that shipments from Class B facilities were eligible to receive an incentive discount of $1.00 per tonne, 96 were closed during the course of the past four crop years. Together, Class A and B facilities account for 97.5% of all recorded closures.

Conversely, of the 126 elevators opened during this same period, only 54.0% were Class A and B facilities.[11] The differing mix of closed and opened elevators calls attention to the fact that only the high-throughput elevators – those garnering the highest potential discounts – posted a net increase in number. [See Tables 1C-7 through 1C-9 in Appendix 3.]

In specific terms, the net changes in elevator infrastructure recorded over the past four crop years are as follows: Class A facilities – down by 79.1%, from 705 to 147; Class B facilities – down by 47.8%, from 180 to 94; Class C facilities – up by 35.8%, from 81 to 110; and Class D facilities – up by 71.1%, from 38 to 65. To a large extent, these patterns are equally evident when examining the change in terms of storage capacity.

Figure 8: Licensed Grain Elevators – Facility Class



Either way, these changes underscore a very clear industry migration towards the use of high-throughput elevators. This can be readily seen when considering their relative share of total GHTS elevators or storage capacity. By the end of the 2002-03 crop year, high-throughput facilities accounted for 42.1% of all elevators, and 74.3% of overall storage capacity – a considerable expansion from the respective 11.9% and 39.4% shares they held at the beginning of the GMP.

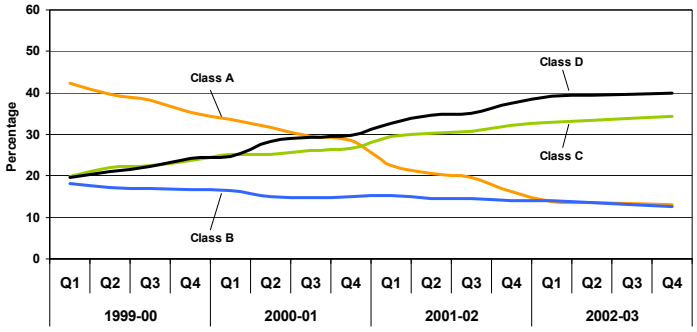
[9] For comparison purposes, primary and process elevators are grouped into classes that reflect their loading ability (as defined by the number of car spots at each facility). The Class A facilities referenced have less than 25 car spots. Those facilities having 25-49 car spots are denoted as Class B; those with 50-99, Class C; and those with 100 or more, Class D. Furthermore, those capable of loading in blocks of 50 or more cars (Class C and D facilities) are deemed to represent high-throughput elevators.

[10] Canada's major railways first introduced incentives for the movement of grain in multiple-car blocks in 1987. They are predicated on drawing significantly greater grain volumes into facilities that can provide for movement in either partial, or full, trainload lots. From the outset of the GMP, these incentives have been built around shipment thresholds of 25, 50 and 100 cars. Since 1 August 2000, shipments in blocks of 25-49 cars received a discount of $1.00 per tonne from the published tariff rate for single car movements; those in blocks of 50-99 cars, $4.00 per tonne; and those in blocks of 100 or more cars, $6.00 per tonne.

[11] Statistics associated with elevator closures and openings are imprecise since they do not discriminate between licensed facilities that may have been closed by one grain company, but later reopened by another, as a result of their sale.

These values expand when Class B facilities – the only other entitled to receive incentive discounts – are included. And while the total number of elevators that could receive such discounts fell from 299 to 269 during this period, the associated storage capacity actually increased from 4.1 million tonnes to 5.0 million tonnes.[12] More importantly, by the end of the 2002-03 crop year, these elevators accounted for 64.7% of the GHTS total, and 86.9% of its associated storage capacity. This marks a significant departure from the relative proportions observed at the beginning of the 1999-2000 crop year – 29.8% and 57.7% respectively. [See Tables 1C-4 through 1C-6 in Appendix 3.]

Figure 9: Share of Storage Capacity – Facility Class

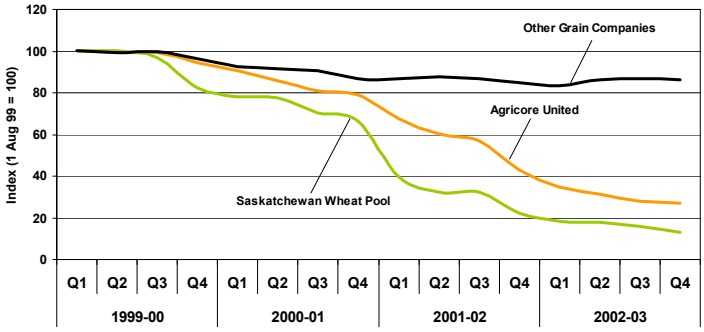


Grain Companies

Elevator rationalization continues to be the domain of the larger grain companies. The sheer number of facilities each operated gave rise to broader consolidation opportunities than were possible for companies with fewer elevator assets. Saskatchewan Wheat Pool (SWP) remains the most aggressive in this pursuit, having reduced the number of its elevators by 86.9% – from 305 to 40 – over the course of the past four crop years.[13] The 2001-02 crop year proved to be the most intensive period of this retrenchment, with some 135 elevators – just over half of the company's total 265-facility reduction – having been removed from its network.

This record was followed closely by Agricore United, which reduced its network by 72.9% (or 280 elevators) over the same four-year period. As with SWP, almost half of this reduction came in the 2001-02 crop year, and may well have been fuelled by the rationalization opportunities afforded in the wake of the merger of its two predecessor companies.[14] Combined, the reductions made by SWP and Agricore United accounted for 92.7% of the overall net decline in GHTS elevators.

Figure 10: Licensed Grain Elevators – Grain Company



Pioneer Grain and Cargill posted the next deepest declines with reductions of 40.0% and 39.0% in their respective elevator networks. Coupled with that of others in the trade, their collective rationalization efforts reduced the total number of elevators operated by companies other than SWP and Agricore United from 315 to 272 over the same period – a strikingly lesser decline of 13.7%. As a result, these smaller companies – which accounted for 31.4% of the elevators, and 46.9% of the associated storage capacity at the outset of the GMP – have seen

[12] The inclusion of Class B facilities – which declined from 180 to 94 during this period – counters the comparatively smaller numerical increases made by the Class C and D elevators to produce a net reduction in the total number of facilities eligible to receive incentive discounts.

[13] The facilities attributed to SWP do not include those operated under the commercial name of AgPro Grain in the provinces of Manitoba and Alberta. This latter operation – encompassing some 12 facilities as at 31 July 2003 – is treated as a separate business entity under the GMP. Were they to be included here, the total number of elevators would have fallen from 316 to 52, and the relative decline would have proven a marginally lesser 83.5%.

[14] On 1 November 2001, Agricore Cooperative Ltd. formally merged with United Grain Growers Limited to form Agricore United. Although the relative reduction in the company's elevators falls slightly short of SWP's, the physical count is greater – 280 versus 265 for SWP.

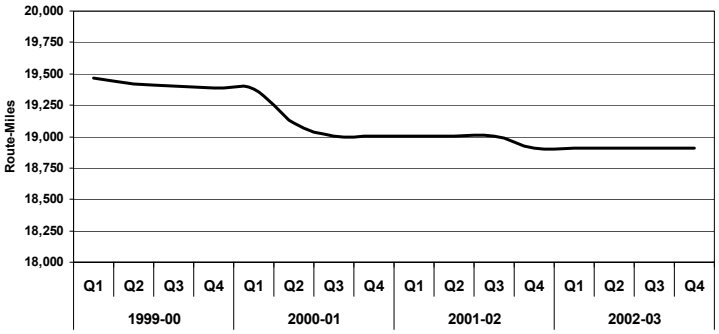
their relative shares grow to majorities of 65.4% and 66.7% respectively. Yet SWP and Agricore United remain the dominant handlers of grain in Western Canada. The implication is that these larger companies have moved to increase the productivities of their networks far more, and far faster, than that of their competitors. With their focus on high-throughput elevators, this strongly suggests that the larger grain companies are building a significantly greater competitive advantage. [See Table 1C-3 in Appendix 3]

1.4 Railway Infrastructure *[Measurement Subseries 1D]*

At the outset of the 1999-2000 crop year, the railway network in Western Canada encompassed a total of 19,468.2 route-miles. Of this, Class 1 carriers operate 14,827.9 route-miles (or 76.2%), while the smaller Class 2 and 3 carriers operated the remaining 4,640.3 route-miles (or 23.8%).[15]

As reported by the Monitor in its Annual Report for the 2001-02 crop year, that network changed little during the first three years of the GMP. By the beginning of the 2002-03 crop year, total network mileage had dropped by a mere 559.4 route-miles (or 2.9%) to stand at 18,908.8 route-miles overall. The greater part of this total reduction – 84.7% – was derived from the abandonment of 474.0 route-miles of light-density, grain-dependent branch lines.

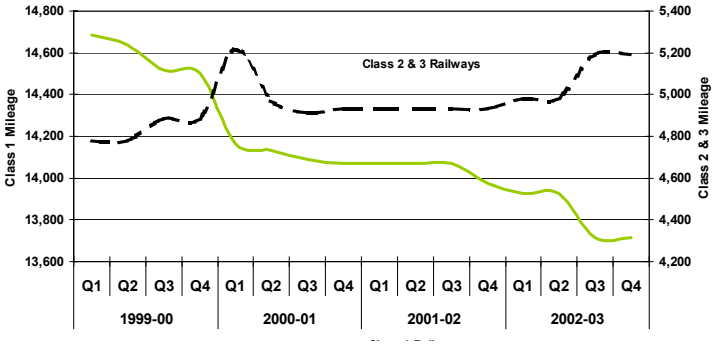
Figure 11: Western Canadian Railway Infrastructure



Although the total number of route-miles operated by the railway industry in Western Canadian was unchanged in the 2002-03 crop year, about 260 route-miles of Saskatchewan branch line operations were transferred by the Canadian National Railway (CN) to two new shortline railways. Given the number of route-miles involved, these commercial transactions signified the second most concentrated period of rationalization activity observed since the beginning of the GMP.

The first of these saw CN lease 46.2 route-miles of its Cudworth subdivision to the Wheatland Railway at the beginning of 2002-03 crop year.[16] Under the terms of the lease, the Wheatland Railway assumed responsibility for track maintenance and traffic solicitation – widely expected to comprise carloads of producer-loaded grain. At the same time, CN became the sole provider of contracted railway services to the new venture under an arrangement that called for CN personnel and equipment to be used during off-peak periods.

Figure 12: Western Canadian Railway Infrastructure (route-miles)



The second transaction involved a 211.5-route-mile network made up of CN's Robinhood, Turtleford, and a portion of its Blaine Lake, subdivisions. These branch lines were leased to the Prairie Alliance for the Future (PAFF) in mid-January 2003 under arrangements reportedly similar to those

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

[16] The Wheatland Railway is a commercial entity established by six Saskatchewan municipalities in an effort to preserve rail service to their communities.

respecting the Wheatland Railway. Combined, these two transfers reduced the amount of infrastructure directly operated by the major railways to 13,716.1 route-miles – a decrease of just 1.8%. By extension, that operated by the smaller Class 2 and 3 carriers increased by 5.2% to 5,192.7 route-miles. [See Table 1D-1 in Appendix 3.]

And while these transfers enlarged the span of shortline railway operations by 8.3% during the 2002-03 crop year, their grain handlings diminished appreciably.[17] The commercial threat posed by this decline was underscored in May when the Southern Manitoba Railway (SMR) announced that it would abandon about 40% of its current network – some 62 route-miles – during the first half of the 2003-04 crop year. Citing the trucking incentives used by the larger grain companies to draw grain into their non-local high-throughput facilities, along with the further closure of licensed elevators local to its own railway line, the SMR observed that their originated grain volume had fallen by a factor of one-half since the company commenced operations in 1999.[18]

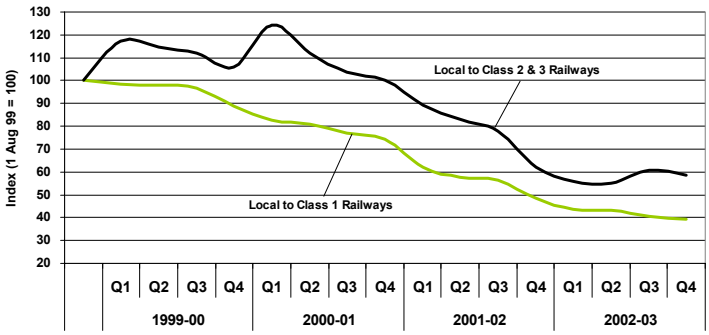
The Canadian Pacific Railway (CP) also announced that it was moving forward with its plans to divest itself of some 65.1 route-miles of uneconomic, grain-dependent branch lines in Saskatchewan and Alberta.[19] Under the timetable proscribed by the Canada Transportation Act, these lines are likely to be transferred or abandoned by CP sometime during the course of the 2003-04 crop year.

Local Elevators

While railway infrastructure has remained largely unchanged over the course of the past four crop years, the elevator network served by it has been significantly transformed. In specific terms, the overall number of facilities tied to the railway network has decreased by 59.0% – from 979 at the outset of the GMP, to 401 by the end of the 2002-03 crop year.[20] [See Table 1D-6 in Appendix 3.]

This general reduction, however, conceals differences that exist between the elevator networks tied to major, and non-major, railways. Those local to the major Class 1 carriers fell by 60.6% – from 897 to 353. Correspondingly, those associated with Class 2 and 3 carriers fell by 41.5% – from 82 to 48. Conversely, the relative decline in associated storage capacity was only 17.5% in the case of elevators local to Class 1 carriers, and 24.6% in the case of those tied to non-Class 1 carriers.

Figure 13: Relative Change in Local Elevators – Railway Class



These differentials underscore the fact that the investment being made in elevator infrastructure is largely directed towards facilities local to the networks of the Class 1 carriers. It is along these routes, rather than those of the smaller regional and shortline carriers, that the vast majority of new high-throughput elevators have been constructed. Buoyed by the storage capacities of these new facilities, the net decline in the storage capacity of facilities local to the major railways has been noticeably less than that experienced by the non-major carriers, despite having had a significantly deeper reduction in the actual number of facilities.

[17] With the establishment of the Wheatland Railway and the Prairie Alliance for the Future, the infrastructure operated by shortline carriers increased by 8.3% – to 3,348.6 route-miles as at 31 July 2003, from 3,090.9 route-miles a year earlier.

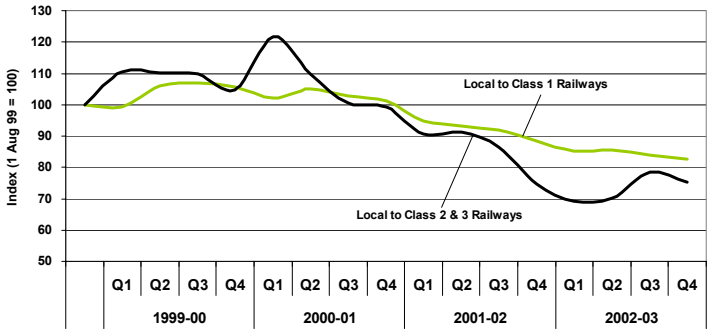
[18] The Southern Manitoba Railway assumed operation of CN's former Miami and Hartney subdivisions in 1999.

[19] In May 2003 CP announced that it was acting on its intention to sell or abandon some 39.6 route-miles of railway infrastructure in Saskatchewan – comprised of portions of the company's Arcola, Burstall, and Rocanville subdivisions. This was followed in July by another announcement stating that the company was also acting on its intention to sell or abandon 25.5 route-miles of its Alberta situated Cardston and Sterling subdivisions.

[20] The values quoted here differ marginally from those quoted in Section 1.3 by virtue of the fact that they exclude facilities not directly served by rail.

These net declines, however, can understate the full magnitude of the reductions experienced. By way of example, this measurement fails to recognize that the number of elevators tied to the shortline railways actually increased by 24.4% in the initial years of the GMP – as a result of the establishment of Red Coat Road and Rail, and the Great Western Railroad – before then beginning to fall.

Figure 14: Relative Change in Storage Capacity – Railway Class

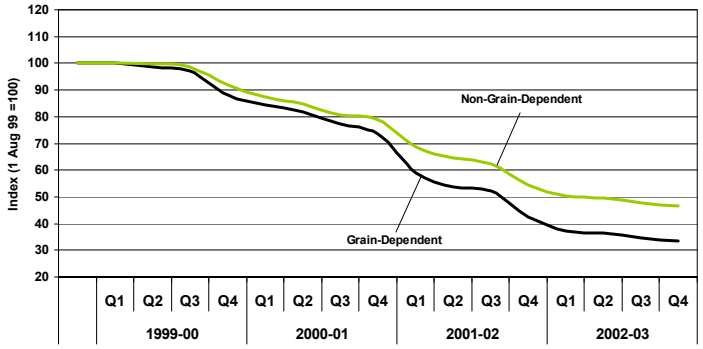


In equal measure, the establishment of PAFF at the beginning of the third quarter of the 2002-03 crop year resulted in an 11.1% increase in the number of elevators local to the Class 2 and 3 railways. When adjustments are made to correct for such distortions, it can be seen that both the number and storage capacity of the elevators tied to shortline carriers are declining at faster rates than those associated with the major railways.

Grain-Dependent Network

The different rates of decline for facilities local to the grain-dependent, and non-grain-dependent, railway networks can also be seen.[21] The number of elevators situated along the grain-dependent network fell by 68.3% over the past four crop years – from 420 to 133. Those situated along the non-grain-dependent network fell by a more moderate 54.6% – from 559 to 254. On the whole, these patterns indicate that elevators tied to the grain-dependent railway network are diminishing at a somewhat faster rate than those linked to the non-grain-dependent network. This trend became particularly evident during the course of the 2001-02 crop year, when the net number of elevators removed from the GHTS reached a peak of 281.

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



Traffic Volumes

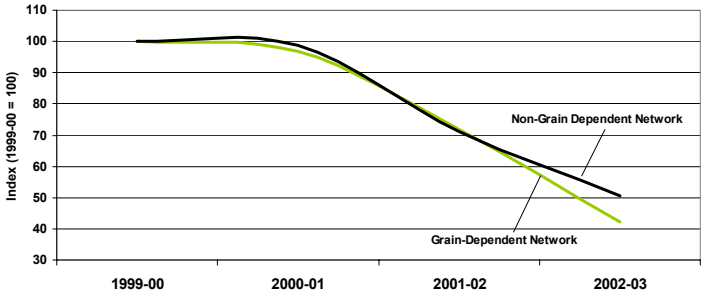
On the whole, these changes in the makeup of the elevator network are beginning to be reflected in railway traffic volumes. By way of example, the decline in railway traffic for the 2002-03 crop year was borne disproportionately by the grain-dependent, as opposed to the non-grain-dependent, network. The tonnage originating on the former declined by 41.1% – falling from 6.2 to 3.7 million tonnes – while that originating on the non-grain-dependent network fell by a comparatively lesser 28.6% – falling from 12.0 to 8.6 million tonnes. As a result, the proportion of overall grain shipments originating on the non-grain-dependent network has begun to increase – to 69.6% in the 2002-03 crop year from 65.9% the year before. This may well signal the beginning of a growing divergence should the decline in the number of elevators tied to the grain-dependent

[21] The term "grain-dependent branch line", while self-explanatory, also 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.

network continue to fall at a faster rate than those of the non-grain-dependent network.[22] [See Table 1D-2 in Appendix 3.]

At the same time, the volume of grain originated by regional and shortline carriers shows a sharper year-over-year decline than that of the major railways. Whereas, Class 1 carriers saw their 2002-03 crop year tonnage fall by 31.2% from a year earlier, the volume originated by Class 2 and 3 carriers fell by 46.1%. The differential is noteworthy since the shorter timeframe helps overcome the distortion occasioned by the establishment of new shortline operations over the course of the past four crop years.

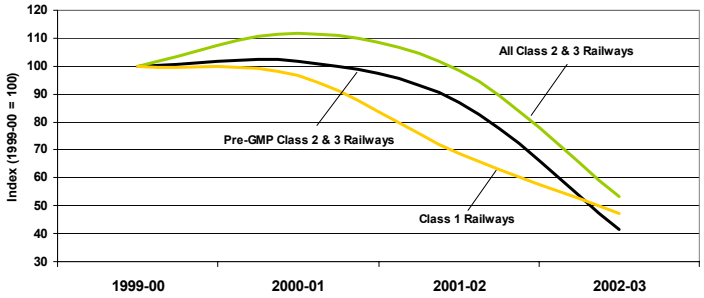
Figure 16: Relative Change in Grain Volumes – Railway Line Class



In this instance, the additional volumes tied to new shortline entrants has masked the real decline in volume experienced by shortline railways since the GMP was introduced at the beginning of the 1999-2000 crop year.[23] When the annual volume associated with shortline railways operating prior to the inception of the GMP is isolated, the underlying trend becomes clearer. Specifically, it shows an adjusted four-year net decline in volume of 58.5% versus 46.8% otherwise. Moreover, this decline exceeds that posted by the Class 1 carriers – 51.6% on an adjusted basis. [See Tables 1D-3 and 1D-5 in Appendix 3.]

Notwithstanding the preceding, the volume of traffic originated by the shortline railways has not fallen as sharply as the decline in its associated elevator infrastructure would suggest. The evidence indicates that this is largely because producer-car loading has replaced – at least in part – a portion of the grain volume that would otherwise have been lost following the closure of these local elevators.[24] Indeed, producer loadings accounted for an estimated 26.0% of the overall grain volume originated by shortline carriers in the 2002-03 crop year.[25] Moreover, this proportion is almost twice the 14.8% it constituted three years earlier, and clearly denotes an important source of revenue for these smaller carriers.

Figure 17: Relative Change in Railway Grain Volumes



[22] 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.

[23] The distortions cited here apply equally to the statistics generated for Class 1 carriers, but given its significantly larger traffic base, the impact is statistically insignificant.

[24] A number of producer loading sites have been established using elevator assets purchased from grain companies following their closure of these facilities. 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.

[25] Based on data from the Canadian Grain Commission. See Section 5.6 for a more in-depth discussion of producer loading activities.

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

As outlined in the Monitor's 2001-02 Annual Report, the number of licensed terminal facilities in operation actually increased from 14 at the outset of the 1999-2000 crop year, to 17 at the close of the 2001-02 crop year. During this period, the overall licensed terminal storage capacity at Western Canadian ports increased by 6.9% to just over 2.7 million tonnes. These increases, however, were largely the result of the licensing, rather than the actual establishment, of three modest-sized facilities. No changes to this network were recorded during the course of the 2002-03 crop year. [See Table 1E-1 in Appendix 3.]

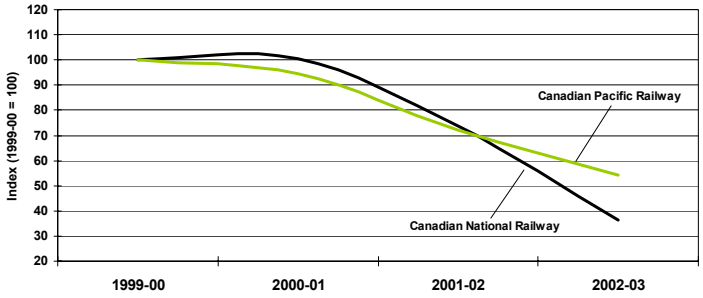
Terminal Elevator Unloads

The number of covered hopper cars unloaded at these terminal facilities during the 2002-03 crop year declined by 38.2% from the year before – to 125,339 from 202,943.[26] The number of covered hopper cars originated by CN showed the greatest overall reduction of the two major carriers operating in Western Canada. The company's handlings fell by 50.4% – to 52,867 from 106,588 cars. The most substantive reductions were registered against the company's handlings into Vancouver and Churchill, which fell by 71.8% and 63.0% respectively.[27] A lesser decline of 23.5% was noted at Thunder Bay, while handlings into Prince Rupert increased by 19.3%.

In comparison, CP's overall handlings declined by a lesser 24.8% – to 72,472 from 96,355 cars. As with CN, the company's handlings into Vancouver and Thunder Bay fell noticeably – by 59.6% and 11.4% respectively. Its volumes into Prince Rupert and Churchill, on the other hand, climbed sharply.[28]

These shifts produced a noticeable change in the relative proportion of traffic originated by CP in the 2002-03 crop year – 57.8% versus 47.5% a year earlier. Much of this gain can be traced directly back to the fact that the drought of 2002 had less impact on CP's more southerly service area than it did on CN's.

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



It is also worth noting that CP's handlings into the port of Prince Rupert climbed to 10,699 carloads – 42.8% of the port's overall volume – from zero the year before. This arose directly from the redirection of grain traffic to that port as a result of the labour dispute that effectively closed Vancouver's terminal elevators for much of the first half of the crop year. In addition, the company's handlings into Churchill increased by 150.3% over that of a year earlier – to 1,927 from 770 cars. This too was largely attributable to the drought, and the fact that grain supplies from the port's traditional catchment area were sharply reduced. [See Table 1E-2 in Appendix 3.]

1.6 Summary Observations

For the second time in as many growing seasons, Western Canada found itself in the grips of a widespread drought. The resultant decline in overall grain production made the 2002-03 crop year yet another difficult one

[26] 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.

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

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

for the stakeholders in Canada's GHTS. Totalling 31.5 million tonnes, Western Canadian grain production for the 2002-03 crop year fell by 25.9% from the 42.5 million tonnes posted a year earlier. This represents a virtual halving of the 54.6 million-tonne production average noted during the first two years of the GMP.

With the exception of durum and oats, production declines were posted for all major grains. Although significant provincial differences arose as a result of varied growing conditions, reductions in the order of 20-40% were typical. Wheat, with a year-over-year reduction of 6.1 million tonnes (or 36.3%), had the most significant impact and accounted for just over half of the 11.0-million-tonne net decline in total Western Canadian production.

With carry-forward stocks from the 2001-02 crop year totalling 6.1 million tonnes, the overall grain supply for the 2002-03 crop year reached 37.6 million tonnes – the lowest seen under the GMP. Its impact is manifest not only in the economic hardship brought to many in the agriculture industry, but also in a sharp year-over-year decline in GHTS activity as measured by a variety of GMP indicators.

Typical of this impact was the decline in the volume of grain moved by rail to Western Canadian ports. Aggregate volume for the 2002-03 crop year totalled 12.7 million tonnes – a decrease of 6.0 million tonnes (or 32.1%) from that of a year earlier. This pattern was largely mirrored in the volumes moved to the principal export gateways of Vancouver and Thunder Bay. And while Vancouver continued to account for the greatest proportion of the overall volume – 40.6% – grain shipments to that port fell by 54.7% to 5.2 million tonnes. Rather than denoting a shift away from Asian markets, however, this decline was the by-product of a labour dispute that saw Vancouver's licensed terminal elevators closed for almost four months.

As was noted in the Monitor's 2001-02 Annual Report, the drought's impact makes it extremely difficult to distinguish between changes in the GHTS that were brought on by abnormally lower grain volumes, and those that might have been prompted by governmental reform or other factors. Nevertheless, the GHTS continues to be reshaped. Since the beginning of the 1999-2000 crop year, the number of licensed primary and process elevators located in Western Canada has fallen from 1,004 to 416 – a reduction of 58.6%.

Moreover, the pace of this decline abated significantly during the 2002-03 crop year. This may well signal that the most dramatic reductions have now been realized, and that the rate of reduction is moderating. These changes, however, underscore a very clear industry migration towards the use of high-throughput elevators. Over the course of the past four crop years, the total number of smaller Class A and B facilities fell by 79.1% and 47.8% respectively, while that of the high-throughput Class C and D facilities increased by 35.8% and 71.1% respectively. By the end of the 2002-03 crop year, high-throughput facilities accounted for 42.1% of all elevators, and 74.3% of overall storage capacity – a considerable expansion from the respective 11.9% and 39.4% shares they held at the beginning of the GMP.

With their focus on high-throughput elevators, this suggests that the larger grain companies are building a significantly greater competitive advantage over other stakeholders in the GHTS. Owing to drought-reduced grain volumes, the full magnitude of this advantage has likely lain hidden, and is unlikely to become visible until grain volumes return to normal, or near-normal, levels.

In contrast with the country elevator network, the GHTS's railway infrastructure has changed very little. By the end of the 2001-02 crop year, total network mileage had dropped by a mere 2.9% to stand at 18,908.8 route-miles overall. No further reductions were recorded during the 2002-03 crop year. At the same time, however, CN transferred some 260 route-miles of its Saskatchewan branchline network to two new shortline railways – the Wheatland Railway, and the Prairie Alliance for the Future. In addition, both CP and the Southern Manitoba Railway announced their intentions to move forward with the abandonment of another 127.1 route-miles of infrastructure – likely to be completed sometime in the 2003-04 crop year.

And while railway infrastructure has itself remained largely unchanged, the number of elevators tied to that infrastructure has declined significantly: by 60.6% in the case of elevators local to the railway lines of Class-1 carriers; and by 41.5% in the case of those serviced by non-Class-1 carriers. Moreover, the number and storage capacity of the elevators tied to shortline carriers are now declining at faster rates than those associated with the major railways.

In light of this, as well as sharply reduced grain volumes, it seems increasingly likely that the economics of light-density branch line operations are being eroded. Although the return of normalized grain volumes might

reverse this, the continued operation of these branch lines, along with the survival of some shortline railways, remains uncertain. One force providing a partial counter to this is producer-car loading which has replaced – at least in part – a portion of the grain volume that would otherwise have been lost following the closure of local elevators. In fact, producer-car loadings accounted for an estimated 26.0% of the overall grain volume originated by shortline carriers in the 2002-03 crop year. Moreover, this proportion is almost twice the 14.8% it constituted three years earlier, and clearly denotes an important source of revenue for these smaller carriers. It is important to note that while the alternative of producer-car loading continues to increase in popularity, it represents less than two percent of total grain shipments.

Unlike either the country elevator or railway networks, the GHTS's terminal elevator network has actually increased over the course of the past four crop years. This gain, however, was largely as a result of the licensing, rather than the establishment, of three modest-sized facilities. No changes to this network were recorded during the course of the 2002-03 crop year.

As with other measures of volume, the number of covered hopper cars unloaded at these terminal facilities showed a 38.2% decline – 125,339 versus 202,943 a year earlier. Moreover, the number originated by CN showed the greatest overall reduction of the two major carriers operating in Western Canada – 50.4% as compared to the lesser 24.8% for CP. These shifts produced a noticeable change in the relative proportion of traffic originated by CP in the 2002-03 crop year – 57.8% versus 47.5% a year earlier. Much of this gain, however, can be traced directly back to the fact that the drought of 2002 had less impact on CP's more southerly service area than it did on CN's.

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 is the introduction, and gradual expansion of tendering for Canadian Wheat Board (CWB) grain shipments to Western Canadian ports. By the 2002-03 crop year, the CWB was committed to tender at least half of its grain shipments to the ports of Vancouver, Prince Rupert, Thunder Bay and Churchill.

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

Highlights – 2002-03 Crop Year

Tendering

- *Minimum tendering commitment doubled to 50% of total CWB volume for the 2002-03 crop year.*
- *445 tender calls were issued by the CWB during the 2002-03 crop year.*
  - *Called for the movement of 5.8 million tonnes to export positions.*
    - *Thunder Bay delivery – 41.8%.*
    - *Vancouver delivery – 33.3%.*
    - *Prince Rupert delivery – 21.3%.*
    - *Churchill delivery – 3.6%.*
  - *Distribution shifts reflect impact of the labour disruption at the port of Vancouver.*
- *2,587 bids received from 24 grain companies.*
  - *Offered an aggregated 11.8 million tonnes.*
    - *Heightened aggressiveness in the face of reduced grain volumes.*
- *784 contracts concluded for the movement of 3.7 million tonnes.*
  - *Thunder Bay deliveries – 47.9%; Prince Rupert – 28.4%;Vancouver – 22.3%; and Churchill – 1.5%.*
  - *No contracts concluded for the movement of malting barley.*
  - *Represented 46.1% of CWB volume moved to ports in Western Canada.*
    - *Marginally below established 50% minimum commitment.*
- *Tenders for 30.1% of the tonnage called – 1.7 million tonnes – either partially, or not at all, filled.*
  - *805,000 tonnes – insufficient quantity bid.*
  - *420,000 tonnes – no bid.*
  - *314,000 tonnes – non-compliance with tender specifications.*
  - *203,000 tonnes – unacceptable bid price.*
- *Proportion of volume moving in multiple car blocks fell marginally to 91.2%.*
  - *Proportion moving in blocks of 50 or more cars fell to 62.1%.*
- *7,122 cars assessed penalties for failure to meet grade or protein specifications.*
  - *Penalization rate climbed to 17.0% from 10.2% a year earlier.*
- *Major grain companies overall market share for the movement of CWB grains fell to 72.9% from 77.2% a year earlier.*
- *Discounts bid by major grain companies exceeded those of non-majors by about 20.0%.*
- *CWB estimated 2002-03 savings from grain company tendering, freight and terminal rebates, and financial penalties for non-performance, at $33.8 million.*
  - *Declined by 17.4% from 2001-02's $40.9 million savings.*

Other

- *Vancouver's Grain Workers Union locked-out by the British Columbia Terminal Elevators Association on 25 August 2002.*
  - *West coast grain largely redirected to Prince Rupert until March 2003.*
- *Agricore United and Saskatchewan Wheat Pool initiate restructuring of their respective debts.*
- *Expiry of the railways' right of first refusal in any sale of the federal government's fleet of 13,000 hopper renewed interest of the Farmer Rail Car Coalition.*
- *United States launched trade complaint against the grain trading practices of Canada and the CWB.*
  - *Imposed countervailing and anti-dumping duties on imports of wheat from Canada. An appeal is being advanced under the provisions of the NAFTA.*
  - *Separate action filed with the WTO relating to the practices of the CWB, US producer access to producer cars, and movements of grain under the Revenue Cap A decision is pending.*
- *Sharp decline in grain volume through Churchill threatened the port's long-term commercial viability.*
  - *Prompted a controversial $2.2 million financial aid package from the governments of Canada and Manitoba.*
  - *Louis Dreyfus assumed responsibility for marketing and management of the port under an agreement with OmniTRAX.*
- *Licence-exempt producer-car loading facilities increased from 5 to 30 during the 2002-03 crop year.*

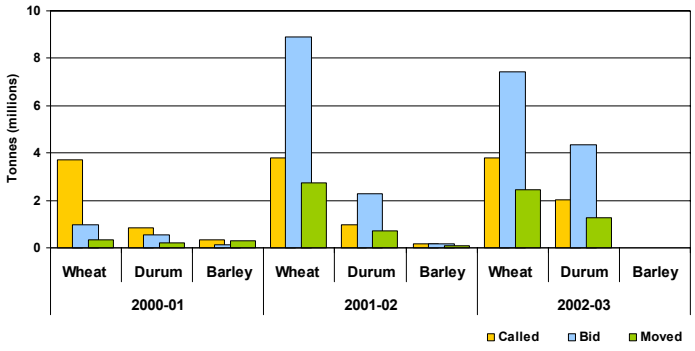
Indicator Series 2 – Commercial Relations

Table	Indicator Description	Notes	BASE 1999-00	CURRRENT REPORTING PERIOD (1) 2001-02	2002-03	% VAR	
	Tendering [Subseries 2A]						
2A-1	Tenders Called (000 tonnes) – Grain		n/a	4,961.4	5,794.2	16.8%	▲
2A-2	Tenders Called (000 tonnes) – Grade						
2A-3	Tender Bids (000 tonnes) – Grain		n/a	11,400.8	11,778.1	3.3%	▲
2A-4	Tender Bids (000 tonnes) – Grade						
2A-5	Tendered Movements (000 tonnes) – Grain	(2)	n/a	3,566.0	3,685.2	3.3%	▲
2A-6	Tendered Movements (000 tonnes) – Grade	(2)					
2A-7	Unfilled Tender Volumes (000 tonnes)		n/a	1,487.3	1,742.5	17.2%	▲
2A-8	Tendered Movements (000 tonnes) – Not Awarded to Lowest Bidder		n/a	96.1	126.8	31.9%	▲
2A-9	Tendered Movements (000 tonnes) – FOB		n/a	71.3	0.0	-100.0%	▼
2A-9	Tendered Movements (000 tonnes) – In-Store		n/a	3,494.7	3,685.2	5.5%	▲
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 (railcars) – Port		n/a	38.3	35.6	-7.0%	▼
2A-18	Railway Car Cycle (days) – Tendered Grain		n/a	14.8	19.3	30.6%	▲
2A-18	Railway Car Cycle (days) – Non-Tendered Grain		n/a	16.7	20.0	19.9%	▲
2A-19	Maximum Accepted Tender Bid ($ per tonne) – Wheat		n/a	-$18.07	-$16.99	-6.0%	▼
2A-19	Maximum Accepted Tender Bid ($ per tonne) – Durum		n/a	-$14.17	-$17.27	21.9%	▲
2A-20	Market Share (%) – CWB Grains – Major Grain Companies		n/a	77.2%	72.9%	-5.6%	▼
2A-20	Market Share (%) – CWB Grains – Non-Major Grain Companies		n/a	22.8%	27.1%	18.9%	▲

(1) – In order to provide for more direct comparisons, the values for the 1999-2000 through 2002-03 crop years are "as at" or cumulative to 31 July unless otherwise indicated.
(2) – 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 tables found in Appendix 3 as required.

2.1 Commercial Relations – Tendering *[Measurement Subseries 2A]*

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



The Canadian Wheat Board's (CWB) tendering program was implemented in accordance with a Memorandum of Understanding (MOU) between the CWB and the Minister responsible for the CWB, and took effect on 1 August 2000.[29]

In accordance with the MOU, the 2002-03 crop year was the third under the program, and the first that required the CWB to adopt a higher minimum tendering commitment. Doubling the proportion pledged during the initial two years of the program, the CWB committed to move at least one-half of its overall grain shipments to the four western ports under tender in the 2002-03 crop year. And although this proportion was increased, the actual volume of grain called, bid, and moved under the tendering program changed little from the 2001-02 crop year owing to the sharp decline in the grain supply.

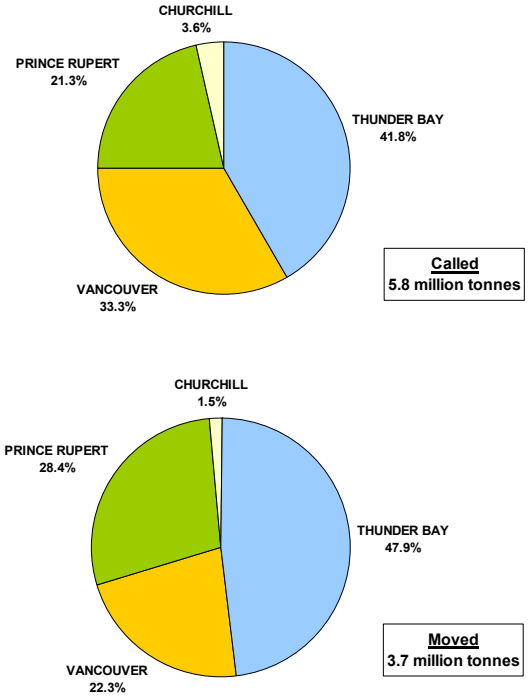
[29] The MOU was complemented by a tri-party agreement between the CWB, the Western Grain Elevator Association (WGEA), and the Inland Terminal Association of Canada (ITAC), respecting administration of the CWB's tendering program. In broad terms, this tri-party agreement delineated how the tendering program was to be managed, and included provisions for performance incentives and penalties. While this agreement was unsigned, it provided the basis for the conducting of business through the period under discussion.

Tender Calls

During the 2002-03 crop year, the CWB issued a total of 445 tenders calling for the shipment of approximately 5.8 million tonnes of grain – a volume only 16.8% greater than was sought a year earlier. The vast majority of this volume – some 3.8 million tonnes (or 65.3%) – related to the movement of wheat. The remaining 2.0 million tonnes (or 34.7%) dealt with durum shipments.

Over half of the volume called was intended for export through West Coast ports: 33.3% to Vancouver; and 21.3% to Prince Rupert. Another 41.8% was to be directed to Thunder Bay, while Churchill was to handle the remaining 3.6%. [See Tables 2A-1 and 2A-2 in Appendix 3]

Figure 20: Tendered Volume – Destination Port

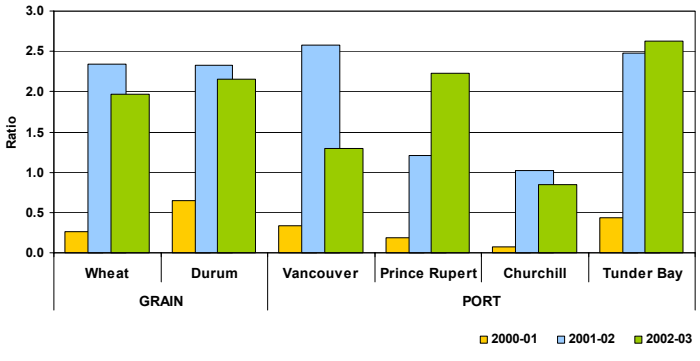


Tender Bids

The tender calls issued by the CWB were met by 2,587 bids offering to move an aggregated 11.8 million tonnes of grain – slightly more than twice the volume sought. The scope of this response contrasts sharply with the pattern initially witnessed in the first quarter, where the volume bid roughly equalled the volume called. Moreover, the annualized result also obscures the fact that during the second and third quarters, the volume bid exceeded the volume called by factors of almost 3-to-1 and 5-to-1 respectively.[30] This denotes a significantly higher response rate than observed at any other point under the CWB's tendering program. Likewise, it also underscores the aggressive stance that appears to have been adopted by the grain companies in the 2002-03 crop year.

To some extent, this aggressiveness is reflected in a decline in the proportion of the called volume that went unfilled in both the second and third quarters – 11.8% and 5.8% respectively. These quarterly values denote the lowest observed during the course of the three crop years in which the tendering program has been in effect.

Figure 21: Tendered Volume – Ratio of Tonnage Bid to Tonnage Called



In terms of observable patterns, the volumes bid largely parallel those called: 65.3% versus 63.1% in the case of wheat; and 34.7% versus 36.9% for durum. On the whole, this indicates that bidders gave equitable consideration to the grains called for under tender. This is also reflected in similar values for the ratio of tonnage bid, to tonnage called, for wheat and durum – both of which were in the area of 2.0.

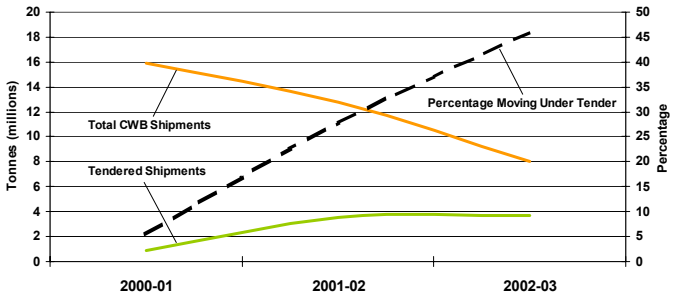
[30] The proportion observed in the fourth quarter fell back substantially from these levels – to about 1.6-to-1.

When the bidding is examined with respect to the port specified in the tender call, however, these ratios show a clear preference for grain moving to Vancouver and Thunder Bay. Although data from the 2002-03 crop year bears the marks of the labour disruption that affected west coast operations, the longer-term patterns provide compelling evidence that tenders issued for the movement of grain to Prince Rupert and Churchill have garnered the weakest bidding responses among the four ports in Western Canada. [See Tables 2A-3 and 2A-4 in Appendix 3.]

Contracts Awarded

A total of 784 contracts were subsequently signed for the movement of approximately 3.7 million tonnes of grain – about two-thirds of the amount called. This represents 46.1% of the overall grain volume shipped by the CWB to Western Canadian ports during the 2002-03 crop year, and falls marginally short of the 50% minimum commitment established under the MOU.[31] [See Tables 2A-5 and 2A-6 in Appendix 3.]

Figure 22: Tendered Shipments Versus Total CWB Shipments

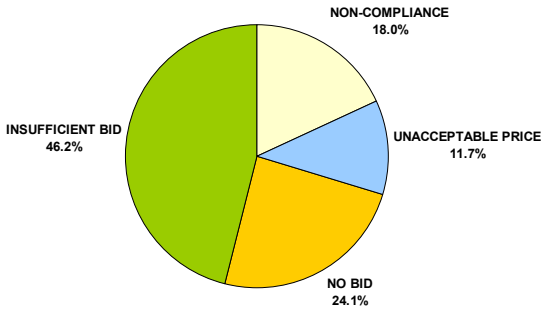


Of the 3.7 million tonnes moved under the provisions of the MOU, 47.9% was shipped to Thunder Bay, 28.4% to Prince Rupert, 22.3% to Vancouver and 1.5% to Churchill. These results contrast sharply with those of the 2001-02 crop year, wherein Vancouver was the principal destination.[32] The displacement of Vancouver by Thunder Bay and Prince Rupert reflects the impact of the labour dispute that impeded the movement of grain through Vancouver in the first and second quarters of the 2002-03 crop year. The extraordinary nature of this event camouflages any shifts that may have been taking place as a result of the tendering program itself. It should be recalled that in the 2001-02 crop year, the proportions accorded movements to Vancouver and Thunder Bay were marginally higher than specified by the tender calls put forward by the CWB, while those tied to the northern ports of Prince Rupert and Churchill proved lower. [See Table 2A-10 in Appendix 3.]

Tendered Volumes Not Filled

Of the 5.8 million tonnes for which tender calls were issued, just over 1.7 million tonnes (or 30.1%) went either partially, or completely, unfilled. Of this, some 805,300 tonnes (or 46.2%) went unfilled because an insufficient quantity was bid. For another 420,200 tonnes (or 24.1%), no bids were received whatsoever. An additional 313,800 tonnes (or 18.0%) resulted in no award being granted due to the bidders' failure to comply with the specifications set out in the tender itself. No award was granted in the case of 203,200 tonnes (or 11.7%) where the bid price was deemed unacceptable.

Figure 23: Composition of Tendered Volumes Not Filled



[31] Since the tendering of malting barley predates adoption of the MOU, malting barley volumes are normally considered independent of the grain volumes tendered under the MOU, but are nevertheless included in the calculation of the total volume of tendered grain moved by the CWB. Since no malting barley moved under tender during the 2002-03 crop year, the tendered volumes moved under the MOU, and by the CWB in aggregate, are the same.

[32] Vancouver-destined movements accounted for 58.2% of total tendered volumes in the 2001-02 crop year. This was followed by Thunder Bay with 30.5%; Prince Rupert with 9.9%; and Churchill with 1.5%.

In comparison to the 2001-02 crop year, the proportion for which either no bid was received or the price proved unacceptable fell by a factor of almost one-half – to 35.8% from 63.5% a year earlier. Conversely, the proportion not filled as a result of an insufficient bid, or non-compliance with the specification of the tender, virtually doubled – to 64.2% from 36.6% the year before. Much of this reversal seems to underscore the enhanced aggressiveness of the bidding activity, and the relative difficulties in securing sufficient volumes of the grains specified by the tender calls in a year of comparative shortage. [See Table 2A-7 in Appendix 3.]

Of the 445 tender calls issued, 29 resulted in contracts being awarded to companies that did not put forward the lowest-priced bid. Involving an aggregate volume of 126,800 tonnes – a volume 31.9% greater than in the preceding crop year – these lowest-priced bids failed to garner contract awards because they also included conditions that could not always be accommodated. These conditions specified that either the entire bid (providing for a specified minimum number of cars) had to be accepted, or that the bid was contingent on an accompanying bid also being accepted. Such conditions, however, did not automatically result in bids being refused. There were circumstances where such conditions did not preclude the awarding of contracts in accordance with the criteria laid out in the tri-party agreement. [33] [See Table 2A-8 in Appendix 3.]

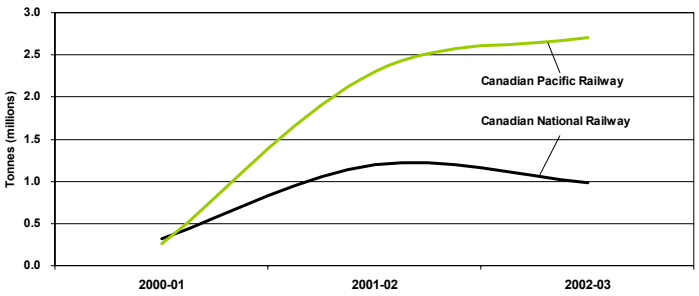
Malting Barley

During the 2002-03 crop year, no tenders were issued for malting barley. Despite comparatively low volumes, malting barley represented the only tendered grain delivered Free on Board (FOB) in the 2001-02 crop year. With the loss of this volume, all tendered grain deliveries in the 2002-03 crop year were on an "in-store" basis.[34] [See Table 2A-9 in Appendix 3].

Originating Carrier

Almost three-quarters – 73.3% – of the volume moved under tender during the 2002-03 crop year originated at points local to the Canadian Pacific Railway (CP). This marks a significant gain from the 44.6% the carrier forwarded during the first year of the CWB's tendering program. Rather than being indicative of a fundamental shift in the competitiveness of either the Canadian National Railway (CN) or CP, all available data suggests that this increase simply reflects the wider availability of grain – in the grades specified by the tender – being located in areas serviced by CP. [See Table 2A-11 in Appendix 3.]

Figure 24: Tendered Volume – Originating Carrier



Multiple-Car Blocks

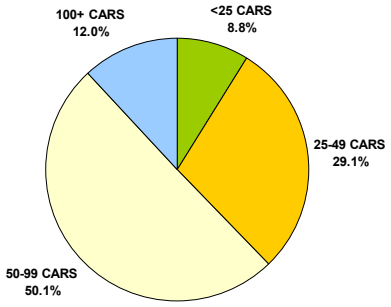
As noted in previous issues of the Monitor's annual report, the vast majority of grain moving under tender also moves in the multiple-car blocks that garner discounts from prevailing railway freight rates. Between the 2000-01 and 2001-02 crop years, this proportion grew from 85.9% to 94.3%. And while the preponderance of tendered grain still moved in blocks of 25 or more cars during the 2002-03 crop year, the overall proportion fell marginally to 91.2%.

[33] The tri-party agreement established the criteria that the CWB uses in awarding tenders: lowest price (greatest savings to farmers); consolidation of stocks to three terminals or less; and where the full amount of the tender award can not be determined by the first two criteria, the past performance of each grain company with respect to the execution of tender movements is used to determine the successful bid.

[34] Tendered malting barley movements amounted to 71,300 tonnes in the 2001-02 crop year – just 2.0% of the overall total for tendered grain. These movements have traditionally been sold FOB (at spout), and represent the only grains so sold.

Much of this decline is derived from modest – rather than significant – swings in the relative volume of grain moving in each of the respective car block sizes. These swings ranged from a reduction of 4.1 percentage points in the case of cars moving in blocks of 100 or more, to an increase of 4.3 percentage points for those moving in blocks of 25-49 cars.[35]

Figure 25: Tendered Volumes – Multiple Car Blocks

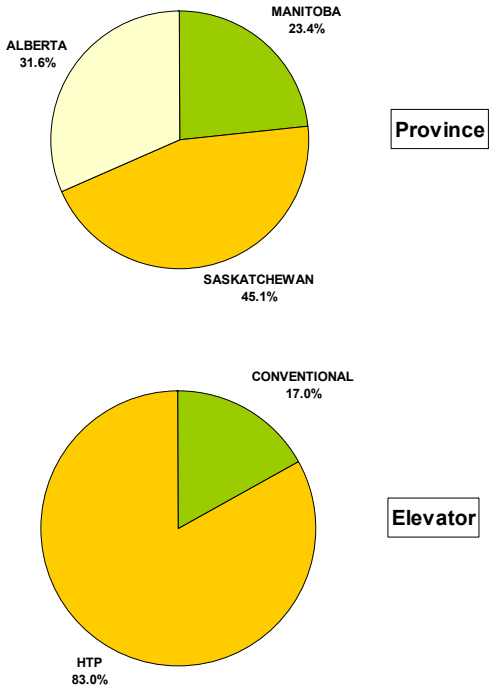


Owing to the difficulties associated with securing the right grains and grades throughout the 2002-03 crop year, these changes are not deemed to be indicative of a reversal in the broader trend towards railway shipments in the largest car block sizes available. Rather, they are viewed as temporary aberrations occasioned by a general constriction in grain supplies.[36] [See Table 2A-12 in Appendix 3.]

Tendered Origins

Some of the forces shaping this result are reflected in the origins from which the grain was drawn. As was the case a year earlier, almost half of the grain that moved under tender in the 2002-03 crop year – 45.1% – originated in Saskatchewan. This was followed by Alberta with an additional 31.6% of the total, and Manitoba with the remaining 23.4%.

Figure 26: Tendered Volumes – Movement Origin



Unlike Saskatchewan, whose relative contribution to the total tendered grain volume remained largely unchanged from the year before, the relative contribution of Alberta declined by 6.4 percentage points, while that of Manitoba increased by 8.2 percentage points. Much of this change stems directly from the fortunes accorded each in the 2002 growing season.

And although the overall proportion of tendered grain originated by high-throughput (HTP) elevators fell only slightly in the 2002-03 crop year – to 83.0% from 83.4% the year previous – provincial draws showed marked differences.[37] For grain originating in Saskatchewan, the proportion handled through these facilities increased to 87.7% from 81.0%. This was not,

[35] The swings tied to the other car block sizes were less: an increase of 3.1 percentage points in the case of cars moving in blocks of less than 25 cars; and a reduction of 3.3 percentage points in the case of cars moving in blocks of 25-99 cars.

[36] Data relating to the movement of non-tendered grain in conjunction with tendered grain as part of a multiple car block is unavailable. These estimates should therefore be considered as a minimum.

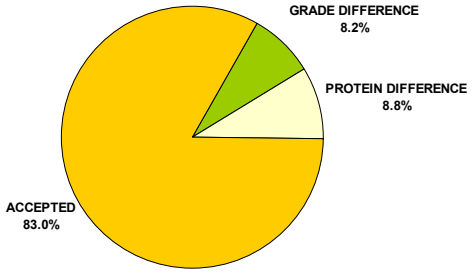
[37] High throughput elevators are deemed to be those capable of loading blocks of 50 or more cars (Class C and D facilities).

however, the case for its neighbouring provinces, where the HTP proportion fell to 79.9% from 84.3% in Alberta, and to 78.2% from 88.5% in the case of Manitoba. [See Table 2A-14 in Appendix 3.]

Applied Penalties

A total of 7,122 railcars were assessed financial penalties for failing to meet either the established grade or protein specifications of the tender contract. In addition to marking a second year of increases in the actual number of such shipments, their proportion in relation to the total number of tendered shipments also climbed.

Figure 27: Tendered Volumes – Penalized Shipments



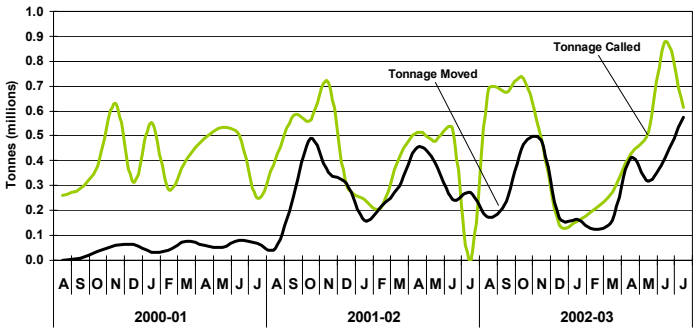
Indeed, the penalization rate has gone from 1.6% in the first year of the tendering program, to 10.2% in its second, and to 17.0% in the year just ended. And while this proportion has been rising, it is important to remember that it is widely considered to be significantly better than the mis-shipment rates tied to the movement of non-tendered grain.

As opposed to the preceding crop year, where almost two-thirds of the penalized volume stemmed from protein mis-shipments, these shipments were almost evenly matched in the 2002-03 crop year with those penalized for grade differences – 8.8% versus 8.2% respectively.[38] [See Table 2A-13 in Appendix 3.]

Monthly Distribution

The distribution of tender calls for the 2002-03 crop year shows significant monthly fluctuations, and ranged from a low of 140,800 tonnes in December 2002, to a high of 878,500 in June 2003. Moreover, this distribution appears to have a defined pattern of peaks and valleys, with the largest volumes tied to both the beginning and end of the crop year. Over two-thirds of the called tonnage came during the first and fourth quarters – 36.0% and 34.7% respectively.

Figure 28: Monthly Distribution of Tendered Tonnage



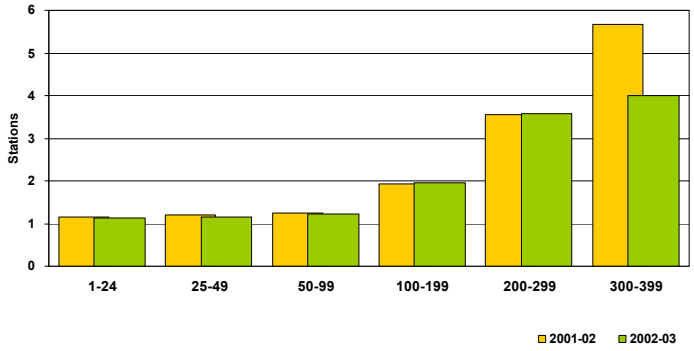
The overall tonnage moved shows a similar, albeit somewhat dampened, distribution pattern. Although both patterns are reflective of the CWB's overall sales program, the difference between them stems from two forces: the volume of tenders that go unfilled; and the structural lag that sees the tendered volume actually moved some four to six weeks later. By way of example, some 54,900 tonnes of grain tendered in the 2002-03 crop year was actually delivered early in the 2003-04 crop year. [See Table 2A-15 in Appendix 3.]

[38] 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.

Delivery Points per Tender Contract

Of the 784 contracts signed for the movement of tendered grain in the 2002-03 crop year, the vast majority – some 667 (or 85.1%) – dealt with shipments of less than 100 cars. The preponderance of these contracts – a total of 577 (or 73.6%) – saw grain drawn from a single GHTS delivery point. The average number of delivery points observed for movements in blocks of 1-24, 25-49, and 50-99, railcars varied only marginally between 1.1 and 1.2.

Figure 29: Tendered Grain – Number of Delivery Points per Contract

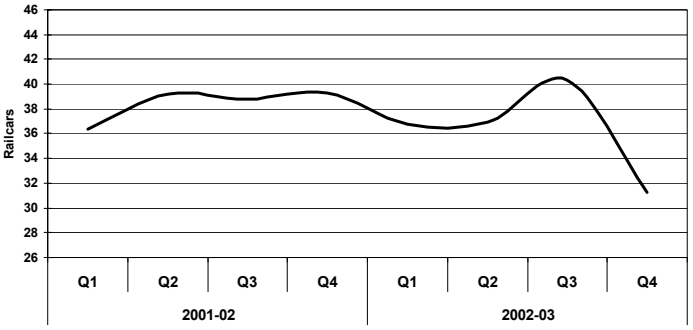


Not surprisingly, owing to the larger amount of grain being moved, contracts involving the shipment of 100 or more railcars drew grain from a greater number of delivery points. In the case of shipments comprised of 100 to 199 railcars, grain was drawn from an average of 2.0 delivery points; 3.6 for shipments of between 200 and 299 railcars; and 4.0 for shipments of 300 or more railcars. [See Table 2A-16 in Appendix 3.]

Multiple-Car Block Size

To a large extent, tendered grain shipments moved in a block size that averaged 35.6 railcars for the 2002-03 crop year as a whole. This was only marginally less than the 38.3-railcar average recorded a year earlier. The quarterly average has proven itself quite stable, and only began to show significant fluctuations in the last crop year as a result of tighter grain supplies.

Figure 30: Average size of Tendered Car Block



On the whole, these characteristics appear to hold for movements in each of the primary export corridors. The only noteworthy exception relates to movements to Vancouver, where the annualized average block size fell by 19.7% – to 33.2 railcars from 40.1 a year earlier. As with other indicators, this variation is largely deemed to be but another reflection of the unusual operating environment that affected the GHTS in the last crop year. [See Table 2A-17 in Appendix 3.]

Car Cycles

One area where a competitive advantage has long been suspected relates to the service accorded HTP elevators – which account for 83.0% of the originated tendered volume. The belief holds that given the ability to accommodate larger trainload lots, the service from these points must be superior to that of non-tendered grain – which has a greater proportion of conventional elevator originations. Indeed, a pilot project conducted by Saskatchewan Wheat Pool and CN in 2002 showed that back-to-back movements of 100-car shuttle trains from HTP elevators could achieve an average car cycle of 6.5 days.[39]

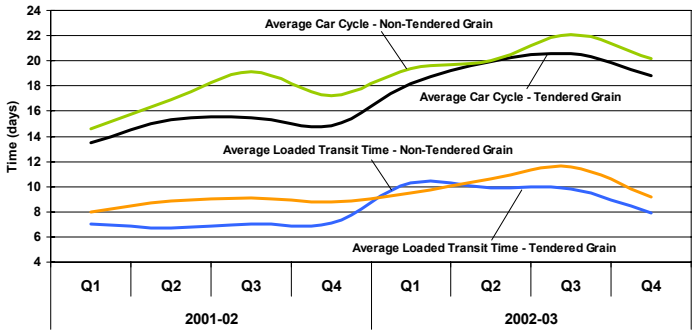
To a large extent, a comparison of tendered, and non-tendered, CWB grain movements over the course of the past two crop years supports the view that railway service built around high-throughput elevator operations does have a positive impact on car cycles. In evidence of this, the overall average car cycle for tendered grain

[39] Saskatchewan Wheat Pool reported on this project in its 2003 Annual Report.

was 3.5% less than that of non-tendered grain – 19.3 days versus 20.0 days respectively – in the 2002-03 crop year. Further, the average loaded transit time was 4.1% better – 9.4 days versus 9.8 days respectively.

Although these results are more marginal than initially suspected, it should be remembered that they are also impacted by the operational problems that arose from redirecting traffic to Prince Rupert in the first half of the crop year. The comparative advantage given tendered grain in the 2001-02 crop year proved more substantive: 1.9 days (or 11.4%) for the overall car cycle; and 1.7 days (or 19.8%) for the loaded transit time.

Figure 31: Car Cycles – Tendered and Non-Tendered CWB Grains



The potential depth to which car cycle times may be reduced is largely a function of the grain volume – be it tendered or non-tendered – that actually moves in 100-car lots from a single shipping point, to a destination port, and then back again. At this point in time, that proportion remains comparatively small. Nor do these movements take full advantage of the shuttle train programs offered by the railways as a means of enhancing that performance.

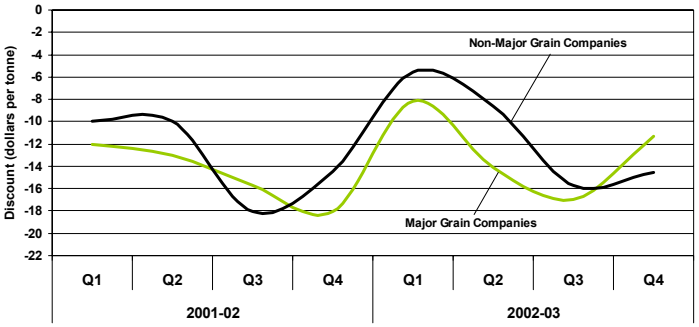
As long as Western Canadian grain moves in less-than-trainload lots, and in smaller block sizes – such as the 35.6-car average cited for tendered grain in the 2002-03 crop year – it will be denied the full measure of the efficiency gains that these instruments offer. What these statistics reveal, however, is that the major grain companies appear to be moving steadily towards this objective. [See Table 2A-18 in Appendix 3.]

Accepted Bids

The Monitor has previously mentioned the concern that a number of stakeholders have raised respecting the potential ability of the major grain companies to displace their smaller competitors in the marketplace. Indeed, many contend that further industry consolidation is unavoidable. With the CWB's tendering program having been intended to stimulate competition, the Monitor has adopted a series of additional indicators for the 2002-03 crop year aimed at assessing that dominance. The first of these involves measuring the bids advanced by the major, and non-major, grain companies in their quest to secure tender contracts.[40]

Although the actual winning bids remain confidential, the CWB releases the range of bids received. As "price takers," it is in the CWB's best commercial interest to accept the lowest bid put forward.[41] To this end, the maximum discount offered by grain companies, and subsequently 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.

Figure 32: Maximum Accepted Discount from Initial Price – Wheat



A comparison of the bids advanced for wheat reveals that the maximum discounts offered by the major grain companies

[40] As used here, the term "major grain companies" refers to the four largest companies sourcing grain in Western Canada .

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

generally exceeded those of their smaller competitors.[42] Moreover, over the course of the past two crop years, this margin averaged about 20.0%. [See Table 2A-19 in Appendix 3.]

Furthermore, the time series shows that these discounts have fluctuated significantly. During the first quarter of the 2001-02 crop year, the maximum discount from the CWB's Initial Price was benchmarked at $12.06 per tonne by the major grain companies. By the end of the crop year, the maximum discount had deepened to $18.07 per tonne.

After retreating to $8.18 per tonne in the first quarter of the 2002-03 crop year, however, renewed competitive bidding brought reductions of as much as $16.99 per tonne by the third quarter. This pattern supports the evidence discussed earlier regarding the enhanced aggressiveness of the bidding in the second and third quarters of the crop year.

Noteworthy is the fact that the maximum discounts advanced by the non-major grain companies actually exceeded – at least on occasion – that of the major grain companies. To a large extent, this is believed to reflect behavioural changes on the part of the bidders. At the outset of the 2001-02 crop year, the deeper discounts advanced by the majors appears to have prompted a competitive response by the non-majors – who assumed the role of price leader in the third quarter. The major grain companies in turn bettered these bids in the fourth quarter. At this point, it appears that all bidders began to accept the view that such deep discounts were simply not sustainable over the longer-term, and the maximum discounts bid fell back by a factor of more than one-half in the first quarter of the 2002-03 crop year.

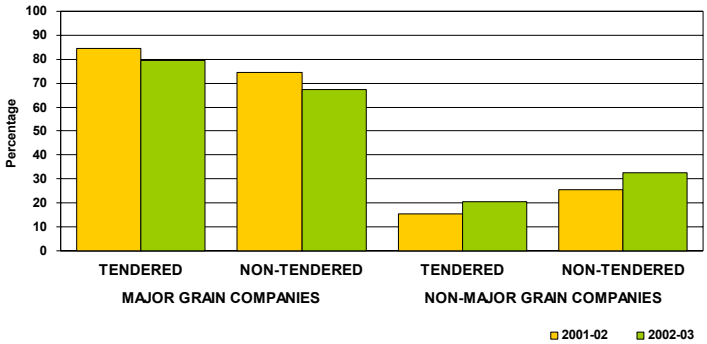
In the face of tight volumes, this lull did not last long. The non-major grain companies began to voice the view that the major grain companies had moved aggressively to secure a greater percentage of the tendered grain volume. This is reflected in maximum discounts that reached $16.99 per tonne in the third quarter. At this point, however, anticipation of a better crop for the 2002-03 crop year, as well as a curtailment in both the proportion and volume of grain to be tendered by the CWB in the 2003-04 crop year, appears to have checked the magnitude of the bids advanced – particularly as regards those advanced by the major grain companies.

Market Share

Another indicator aimed at assessing the potential ability of the major grain companies to displace their smaller competitors in the marketplace involves measuring the relative market shares of 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 – has actually declined in the past crop year. In the 2001-02 crop year, the major grain companies controlled 84.6% of the tendered volume. A year later, that share had dropped – albeit only marginally – to 79.5%. This was also the case regarding non-tendered CWB grains, where the major grain companies' share fell from 74.4% to 67.4% during the same period. [See Table 2A-20 in Appendix 3.]

Figure 33: Market Share – CWB Grains



The maximum bids advanced by the major grain companies seems to underscore their apparent effort to secure a greater share of the CWB's tendered business. With the potential for an expansion in the grain volumes to be moved under the CWB's tendering program, tendering accorded these companies an important instrument with which to secure a greater share of CWB grain movements in future years.

[42] The pattern applies equally to the bids advanced by these companies for the movement of durum.

Nevertheless, the fact remains that the non-major grain companies actually increased their share of the CWB grain market at a time when they were seemingly at a comparatively greater competitive disadvantage.[43] It should be noted, however, that these gains in market share are too limited to be indicative of a trend and are most likely the result of the same forces that saw smaller elevators increase their overall handlings in a difficult crop year.

Financial Savings

According to the CWB, the advances made in its tendering program have generated significant financial returns that are ultimately being passed back to producers through the CWB's pool accounts. Derived largely from a savings in transportation costs as a result of the bidding inherent in the tendering process itself, these returns also include freight and terminal rebates, as well as financial penalties for non-performance. The CWB estimates the savings generated from these activities for the 2002-03 crop year at $33.8 million. This marks a 17.4% reduction from the $40.9 million reportedly saved in the 2001-02 crop year.[44] As with other indicators of activity, this overarching reduction appears to have been the result of the diminished grain handlings witnessed throughout the GHTS. It is important to note, however, that the per-tonne value of these savings actually increased by 9.3% in the 2002-03 crop year – to $2.70 per tonne from $2.47 a year earlier.

2.2 Commercial Relations – Other Developments

2.21 The Canadian Wheat Board's Tendering Program

The CWB's tendering program was implemented in accordance with a Memorandum of Understanding (MOU) between it and the federal Minister responsible for the CWB, and took effect on 1 August 2000. This document, which defines the federal government's policy with respect to the adoption of a tendering program by the CWB, also addressed the volumes that would be tendered in the first three years of the program. This period – which pertained to the 2000-01 through 2002-03 crop years – effectively committed the CWB to tender a minimum of 25% of the overall volume destined to Western Canadian ports in the first and second crop years, and a minimum of 50% in the third crop year.

With that commitment set to expire at the close of the 2002-03 crop year, it was incumbent upon the CWB to craft an industry agreement that would define the volume of grain to be tendered thereafter. As the CWB and its 26 agents began to discuss an appropriate level of tendering for the coming crop year, the Monitor had occasion to discuss the various issues surrounding the program as part of its regular dialogue with the stakeholder community under the GMP. Since not one of the more than 30 stakeholder groups was without an opinion or position, the Monitor came to better understand how these issues are perceived within the stakeholder community.

Industry Perspectives

As one of the central pillars in the reforms brought forward by the federal government in 2000, the CWB's tendering program has produced mixed results. On the one hand, it has undoubtedly provided a savings that is being shared with farmers through the CWB's pool accounts. The CWB determined that its total transportation savings for the 2002-03 crop year amounted to $33.8 million. It is important to note that the bids advanced by grain companies to win tender contracts provide for a significant part of these savings. It is not, however, the only contributory element. The penalties paid by grain companies for their performance failures – be it with respect to the movement of tendered or non-tendered grain – as well as the volume rebates received from the railways, denote other important contributions.

[43] The competitive disadvantage referred to here relates specifically to the comparatively lesser number of HTP elevators operated by the non-major grain companies. With over 80% of tendered grain shipments moving in multiple-car blocks from HTP 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.

[44] In the opinion of the Monitor, the estimate of the savings accruing to the CWB is reasonable.

The true nature of the savings generated by the tendering program has been questioned in light of other rising input costs. In particular, some producers have argued that the costs incurred by a grain company to secure tender contracts are being offset by the additional revenues generated through an escalation in the rates posted for their elevation and cleaning services – be it at country or terminal elevator facilities. Although it is not possible to attribute changes in either solely to a need on the part of grain companies to be compensated for the monies they expend under the tendering program directly, it may well have been an important consideration.

Even the grain companies – the chief advocates of a tendering process for moving grain – were themselves divided in their judgment of its impact and effectiveness. Some expressed qualified support for increasing the proportion of CWB grain moving under tender to a level well beyond the 50% committed to in the 2002-03 crop year. Most others maintained that this benchmark should either be reduced or eliminated entirely.

In a general sense, perspectives were divided between the larger, more fully integrated grain companies and their smaller, less integrated competitors. In specific terms, it is argued that grain companies possessing both country, as well as terminal, elevators were accorded an unfair competitive advantage under the tendering program. By way of example, companies having only a country elevator network found themselves obligated to negotiate terminal services with their larger competitors. This undermined their own positions, and accorded their rivals competitive intelligence that they would otherwise not be privy to. And while some industry leaders acknowledged that owning terminal elevators did provide some degree of market power, they quickly point out that it also came at a cost in terms of both capital and business risk.

Notwithstanding this basic division, and the acknowledged savings being passed back to producers through the CWB's pool accounts, neither group appeared to believe that the tendering program was truly providing the GHTS with the more commercial, and competitive, orientation that was perceived by many as the ultimate goal. All seemed to agree that the tendering process was largely flawed, and that this – rather than the level at which tendering should be set – was the central issue to be addressed. A myriad of stakeholder complaints – some of which were at odds with each other – spotlighted mechanisms that purportedly placed each at some unfair disadvantage. Perhaps the most widely perceived flaw, however, was the limited logistical control given to the grain companies in order to attain the objectives inherent in tendering.

When tendering was first advanced during the Kroeger process, most grain companies envisioned a system wherein the company awarded the tender would have full control over the physical movement – from the producer's bin through to the point at which it was loaded onto a vessel. Such a system would have effectively separated the marketing and logistics activities of the CWB in the movement of tendered grain, and vested the latter with the grain companies instead. The tendering process as implemented, however, did not provide the grain companies with this latitude of logistical control. Moreover, the CWB also continued to manage that portion of its business that did not move under the tendering program.

The existence of two distinct grain delivery protocols – tendered as well as non-tendered grain – within the sphere of the CWB's existing responsibility was cited as the underlying reason for the emergence of a number of perceived "disconnects." One related to what many described as a breakdown in the traditional working relationship between producers and their favoured elevator.

In accordance with the Canada Grains Act, local elevators serve as public warehouses, and are obliged to accept grain when space is available. Before tendering, railcars were supplied to elevators using a formula based on actual deliveries. However, tendering changed this. Specifically, tendering assured the needed railcar supply to those firms that had secured tender contracts, and distributed the remainder afterwards. This often resulted in a lesser allocation of the residual car supply to the grain companies that were unsuccessful in securing tender contracts. This "disconnect" in terms of the linkage between deliveries into, and movement out of, country elevators led to congestion. In turn, a number of facilities were unable to accept grain from, nor properly service, their traditional customers. Consequently, these customers found themselves forced to truck their grain to other, more distant, and often competing, elevator facilities.

It is clear that the stakeholder community is polarized in regard to the various issues that surround the CWB's tendering program. The challenge faced by the industry as a whole in the administration of any tendering program focuses on balancing the operational policies of the CWB directed at meeting their mandate in the competitive international marketplace, with those that drive competition between the grain companies

themselves.[45] It is widely understood that at the heart of the matter is the question of logistical control as it affects each party's competitive responsibility.

As with other industrial marketers, the CWB asserts that in order to effectively exercise its role as the marketer of Western Canadian grain, it is imperative that it maintain control over the logistics. Conversely, the grain companies contend that they must control the logistics if they are to properly coordinate grain movements, and optimize the utilization of their assets. Despite these differences most concurred with the view that there must be a new agreement between all stakeholders on the roles and responsibilities to be accorded each in the movement of tendered grain.

The 2003-04 Crop Year Plan

It was against this background that, in the spring of 2003, the CWB and its 26 agents began to discuss the level of tendering that was appropriate for the coming 2003-04 crop year. With such a diversity of views, it was not altogether surprising that a common agreement on the future of tendering could not be reached. Rather than being unanimous, these consultations lead to an agreement that was supported by the majority of its participants.[46] Beginning with the 2003-04 crop year, this agreement prescribes that a fixed 40% of the CWB's grain movements to the four ports in Western Canada will be accomplished through a program that combines tendering as well as advance car awards. In specific terms, the CWB's tendering commitment shall extend to a *maximum* of 20% of its overall volume – a significant change from the 2002-03 crop year's minimum commitment of 50%. But should the CWB decide to ship a lesser amount under tender, an equal amount shall then be apportioned to movements under the advanced car awards program in order to attain the stated overall commitment of 40%.

It is also worth mentioning, that this latter proportion involves a car allocation that is corridor specific. That is to say that – subject to the availability of railcars – may be deployed by the grain companies at any facility within the specified port catchment area, and in any quantity, that they deem appropriate. The entire mechanism is intended to provide them with some measure of control in planning for the most efficient use of their facilities. For the 60% of CWB shipments not governed by this aspect of the agreement, railcars will be subject to a weekly general allocation based on an equal weighting of actual elevator deliveries over the course of a preceding 18-week period, and farmers' future delivery intentions.

It is clear that the stakeholder community is polarized in regard to the various issues that surround the CWB's tendering program. It is widely understood that at the heart of the matter is the question of logistical control. As with other industrial marketers, the CWB asserts that in order to effectively exercise its role as the marketer of Western Canadian grain, it is imperative that it maintain control over the logistics. Conversely, the grain companies contend that they must control the logistics if they are to properly coordinate grain movements, and optimize the utilization of their assets. Despite these differences, most concurred with the view that there must be a new agreement between all stakeholders on the roles and responsibilities to be accorded each in the movement of tendered grain.

2.22 Labour Dispute at the Port of Vancouver

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

[45] The CWB was incorporated under the Canadian Wheat Board Act "… with the object of marketing in an orderly manner, in interprovincial and export trade, grain grown in Canada." To this end, the CWB's organizational goals – as defined by its "Vision, Mission and Goals" statement – include providing "equitable opportunity for prairie farmers to access world grain markets;" and to "distribute returns to prairie farmers in a manner consistent with the relative value of their products through mechanisms that strive for fairness and equity."

[46] Of the 26 grain companies involved in these consultations, 24 supported the final agreement. The two that did not were the largest handlers of grain in Western Canada – Agricore United and Saskatchewan Wheat Pool.

protracted labour dispute, and the virtual closure of Vancouver as the principal gateway for export grain on the west coast.

In the days that followed, the Vancouver Grain Exchange issued an "event of delay" notice to its membership (a group that encompasses a wide portion of the GHTS stakeholder community). As a result, the Canadian Wheat Board and the grain companies invoked the force majeure provisions found within their respective contracts to limit the financial obligations that could arise from any delay in the movement of grain brought on by the labour dispute. This was done largely to provide protection against the potentially heavy assessment of vessel demurrage.[47]

(photograph courtesy of the Grain Workers Union)

Figure 34: Locked-out employees of the Grain Workers Union on the Vancouver picket line in late August 2002.

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

In response to the use of Prince Rupert, the GWU established a picket line at the terminal facilities of PRG on 10 September 2002. Although this action initially interrupted the flow of grain moving through the port, service resumed three days later when a court injunction granted to PRG ordered the removal of the picketers. Despite such actions, grain continued to move through PRG for the first half of the 2002-03 crop year without further interruption. A total of 25,010 railcars were unloaded by PRG during this period – slightly more than twice that of the entire 2001-02 crop year.

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

The labour dispute was resolved on 14 December 2002, when the BCTEOA and the GWU concluded a new collective agreement. Although a few issues remained outstanding, these were ultimately referred to binding arbitration for settlement. Even though the movement of grain to Vancouver resumed shortly thereafter, a full return of shipping activity to Vancouver did not occur until late March 2003.[48]

2.23 Restructuring Grain Company Indebtedness

The financial difficulties faced by producers and businesses alike are widely known within the grain industry. The droughts that have plagued production, have also taken an increasingly heavier toll on the financial

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

[48] Resumption in the movement of grain traffic to Vancouver was not immediate. Tender contracts entered into during the labour disruption denoted delivery to be made at Prince Rupert. Although the conclusion of a new collective agreement saw new tender contracts specifying west coast delivery at Vancouver, existing contractual arrangements providing for delivery to Prince Rupert still remained in effect. As a result, the transition back to the use of Vancouver as the principal west coast gateway was more gradual.

positions of all stakeholders. As the largest publicly-owned grain companies operating in Western Canada, the challenges confronting Agricore United and Saskatchewan Wheat Pool as they struggled with the realities of reduced grain volumes, depressed revenues, and increased losses, are among the most visible to the stakeholder community at large.

Servicing their accumulated debts in the face of such losses has been a pressing issue for both of these companies. In October 2002, Agricore United announced that it was working to restructure its existing indebtedness, and had received a commitment from its bankers to provide it with a secured $500 million credit facility. This credit was intended to refinance the company's existing revolving credit, a portion of its long-term debt, and other general corporate needs.

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

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

And although these efforts to restructure have proven beneficial, both companies reported losses for the 2002-03 crop year – $2.4 million in the case of Agricore United, and $50.3 million in the case of Saskatchewan Wheat Pool.[49] Nevertheless, these losses are less than those incurred in the 2001-02 crop year, and point to some measure of success in containing costs, and weathering the downturn in business. Moreover, both companies reported net earnings for the fourth quarter on the strength of sales in seed, crop nutrients, and crop protection products. The anticipated increase in the volume of grain to be moved in the 2003-04 crop year harbours the best commercial promise for not only these two companies, but all industry stakeholders.

2.24 Government-Owned Hopper Cars

One of the principal assets used in the movement of Western Canadian grain is the federal government's fleet of covered hopper cars. This fleet constitutes the backbone of the GHTS. Yet a number of stakeholders have begun to question whether these cars, along with others comprised as part of the public fleet, are nearing the end of their useful lives. A commonly heard concern expressed by many within the stakeholder community is that age-related attrition has removed a significant portion of the public fleet's carrying capacity, and that further declines will begin to undermine the reliability of the GHTS. It is within this broader context that the Monitor has moved to briefly examine these issues.

(photograph courtesy of Brian D. Switzer)

Figure 35: A number of the covered hopper cars in the Government of Canada's 13,000-car fleet are seen enroute to port. Although the oldest of these cars entered service in the early 1970s, they remain an integral element in the movement of Canadian export grain.

Background

Between 1972 and 1986, the federal government spent approximately $570M to

[49] The losses cited here are drawn from the unaudited quarterly financial reports issued by Agricore United and Saskatchewan Wheat Pool. The losses reported here have been assembled to reflect those sustained during the 2002-03 crop year, and not necessarily the fiscal year of each company.

purchase some 13,000 covered hopper cars for use in the movement of Western Canadian grain. These, and another 6,000 publicly supplied covered hopper cars, are provided to CN and CP under operating agreements that allow for their use as part of the carriers' general grain fleet.[50]

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

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

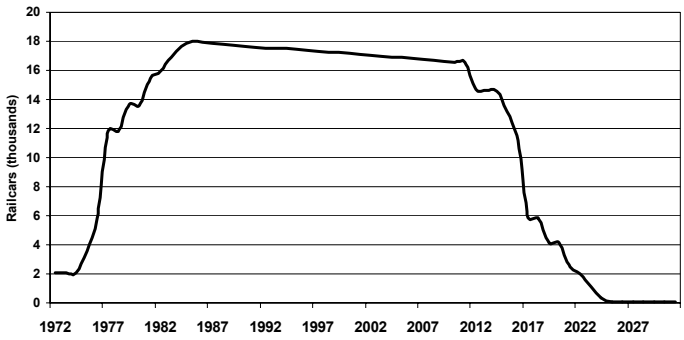
When the railways' ROFR expired on 30 June 2002, interest in the possible acquisition of these cars was revitalized. In particular, the Farmer Rail Car Coalition (FRCC) – an organization representing farmers in the potential sale of the government's fleet – had begun to lobby for a plan that would see ownership of these cars transferred to a non-profit, farmer-owned company for a nominal sum.

It is important to remember, however, that such a proposal is but one option open to the federal government. Others, which range from a retention of ownership to a public auction, remain within the span of alternatives open to the federal government.

Carrying Capacity

By the end of the 2002-03 crop year, the public fleet encompassed an estimated 17,800 covered hopper cars with an average age of 25.1 years.[51] These cars are largely of steel construction, with a capacity of 4550 cubic feet, and a maximum gross weight of 263,000 pounds. Compared to the present generation of covered hopper cars that have a capacity of 5150 cubic feet, and a maximum gross weight of up to 286,000 pounds, the public fleet is becoming obsolete. With the railway industry's movement towards heavier loadings, these limitations detract from the potential efficiencies that might be gained from using larger railcars. Nevertheless, the covered hoppers found within the public fleet remain typical of those used throughout North America today, and still lend themselves well to the movement of grain in Western Canada.

Figure 36: The Public Fleet – Serviceable Covered Hoppers



[50] For the purpose of this discussion and analysis, there is deemed to be 13,000 covered hopper cars held in the federal government's fleet, although different forms of attrition has reduced this amount to an estimated 12,400 cars as at the end of the 2002-03 crop year. The fleet is supplemented by another 2,000 cars owned by the CWB; 2,000 cars administered by the CWB on leases paid by the federal government; 1,000 cars owned by the government of Alberta, and 1,000 cars owned by the Saskatchewan Grain Car Corporation. Combined, a total of approximately 19,000 covered hopper cars were directed towards the movement of Western Canadian grain.

[51] The 17,800 cited here is an estimate of all covered hopper cars owned or leased by the governments of Canada, Alberta and Saskatchewan – including their Crown corporations – and is based on information contained in the July 2003 issue of *The Official Railway Equipment Register*. An estimate based on secondary information for that portion of the public fleet provided through the Saskatchewan Grain Car Corporation is made necessary by its exclusion from this registry.

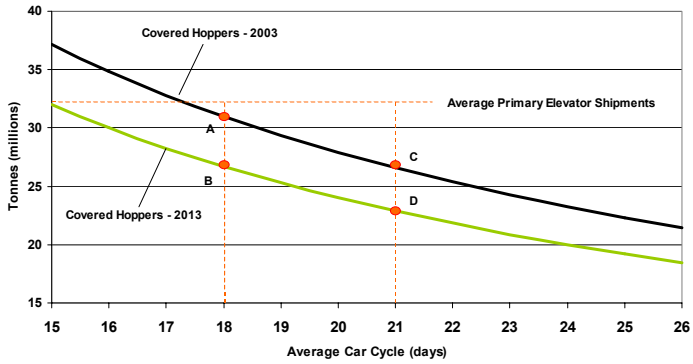
Yet with an expected service life of about forty years, the greater part of the public fleet is well into the last half of that life.[52] Based on an observed annual attrition rate of 0.3% per year, the serviceable public fleet is expected to decline by some 2.3% to an estimated 17,400 cars by the end of 2011.[53] The first significant reduction in this pool is expected in 2012 when the oldest of the cars (those built in 1972) are slated for retirement. This is likely to be followed beginning in 2015 by a much larger wave of reductions that will see the bulk of the fleet withdrawn from service altogether.

In gauging the carrying capacity of the public fleet, it is important to note that it is a function of not only its overall size, but also the speed with which the cars themselves move. The shorter the amount of time taken by a railcar in delivering a load of grain to destination, and then repositioning it for another load, ultimately increases the number of trips that the car can make, and the volume of grain it can move in a given period of time.

As a result, the carrying capacity of the public fleet is not static, but dynamic. Were the public fleet – having a current total of 17,800 cars – to exhibit an average car cycle of 18 days, then it could reasonably be expected to handle some 31.0 million tonnes of grain in a given year. This is denoted by point A on the accompanying chart. However, were the average cycle time to prove longer – say 21 days – then the same sized fleet could only be expected to handle a lesser 26.6 million tonnes (point C).

It is important to note that the carrying capacity of the public fleet is largely insufficient for the purpose of carrying all of the grain shipped from prairie elevators. With an overall average car cycle of 18 days, the carrying capacity of the present fleet falls about 1.4 million tonnes (or 4.3%) below the past decade's 32.4-million-tonne average for primary elevator shipments.[54] To do so would require a lower overall average car cycle – one of about 17 days. The implication is clear: in order to handle the volume available for movement given the prevailing average car cycle, additional cars are needed. In practice, both CN and CP supplement the public fleet with their own equipment in order to meet current demands.[55]

Figure 37: Nominal Carrying Capacity of the Government Fleet



At the same time, however, the steady erosion in the size of the government fleet does serve to constrain the volume of grain that can readily be handled by cars with a given car cycle. By 2013, the public fleet is projected to total just over 14,600 cars – some 3,200 (or 18.0%) less than that in place today. Assuming an average car cycle of 18 days, the overall carrying capacity of the fleet will have then dropped to about 26.7 million tonnes from the 31.0 million tonnes cited earlier (point B). Of course, should the average car cycle be

[52] The 40-year service life cited here is based on operational norms, and the general requirement for the refurbishing of railcars (as specified by the interchange rules of the Association of American Railroads) if they are to be used in interline service beyond this point. It should be noted, however, that Transport Canada in its evaluation of the Canadian government's hopper car fleet in 2002 estimated a 40-year life for cars constructed prior to 1974, and a 50-year life for cars constructed in 1974 or later.

[53] The serviceable public fleet is an estimate based on the assumption of a 40-year expected life, the renewal of any lease up until the time a car reaches the end of that life, and a 5% bad order rate.

[54] The issue of the public fleet's carrying capacity involves the movement of all grains to all destinations – not just those moving within the confines of Western Canada, or subject to examination under the GMP. The 18-day average car cycles presented here with respect to primary elevator shipments has a wider national scope, and is drawn from statistics made available by Transport Canada for the 2000-01 crop year.

[55] Throughout the 1990s, the number of covered hopper cars in grain service is estimated to have varied between 22,000 and 28,000 annually. Differentials with the public fleet reflect the amount of equipment brought to bear by the railways themselves in moving grain to market.

improved to about 15 days, the nominal carrying capacity of the smaller fleet would still be comparable to that of the 17,800-car fleet today. Conversely, a longer average cycle time – such as that of 21 days – would result in the reduction of handling capacity to 22.9 million tonnes (point D).

General Assessment

From the available evidence it would appear that the carrying capacity of the public fleet is not an immediate concern, but an emerging one. In equal measure, it should not be forgotten that the nominal carrying capacity of the public fleet can easily be undermined by inefficient use. Impediments to the fluid movement of these cars – whether brought on by physical obstructions such as that of a derailment, congestion within receiving terminals, or a lack of sufficient locomotives and train crews – can prove more detrimental than the actual size of the fleet itself. Nevertheless, as the public fleet constricts further in size, added pressure to enhance its productivity will be brought to bear. This is already in evidence in the railway incentive programs being used to entice shippers into moving railcars in larger single-block sizes, as well as trainload lots.

Although it naturally follows that if the grain companies avail themselves more fully of these instruments, car cycles and the public fleet's carrying capacity can be improved, it also implies that the fleet would have to gravitate towards servicing the more efficient high-throughput elevators. This would, however, undoubtedly entail reducing the cars available to service the remaining network of conventional elevators and producer loading sites. To the extent that car cycles cannot be improved, the public fleet's carrying capacity can only diminish as it ages. As a result, the GHTS would have to augment the public fleet to an even greater extent than that now accomplished by CN and CP with the supplementing of their own equipment.

2.25 Trade Disputes with the United States

In two separate – but interrelated trade actions, the United States challenged Canada in what it deemed to be unfair trade practices in respect to the international movement of grain. The first of these involved Canadian grain imported into the United States, while the second related to the treatment of American grain imported into Canada.

Action under US Domestic Law

In September 2002, the North Dakota Wheat Commission and the US Durum Growers Association filed petitions with the United States government seeking countervailing and anti-dumping duties on wheat and durum imports from Canada. The petitions alleged that the Government of Canada and the CWB subsidized both of these products; that the CWB sold these products for less than full market value in the United States; and that American industry was being injured as a result of their importation. A month later, the US Department of Commerce (DOC) announced that it would proceed with an investigation into these allegations.[56]

In March 2003, the DOC rendered a preliminary determination in its countervail investigations, and found that subsidies were being employed. As a result, a 3.94% duty on imports of Canadian wheat and durum was imposed – comprised of a 3.59% duty relating to government guarantees of CWB borrowings, and a 0.35% duty tied to the railways' use of government-owned hopper cars.[57] This was followed in May 2003 by a DOC preliminary determination that dumping was also taking place, and the imposition of additional duties amounting to 6.12% on spring wheat and 8.15% on durum. These levies were later revised upward when the DOC rendered its final determinations in August 2003 – to 5.29% for the countervailing duty; to 8.86% for the anti-dumping duty on wheat; and to 8.26% for the anti-dumping duty on durum.

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

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

These assessments were subject to the findings of the US International Trade Commission's (ITC) investigation into whether or not injury had been sustained by the American wheat industry as a result of the Canadian imports. In October 2003, the ITC found that US producers were being injured through imports of Canadian hard red spring wheat, but not durum. As a result of the ITC's decision, the combined duties of 14.15% on wheat were allowed to stand, while those amounting to 13.55% on durum were rescinded.

With no evidence of wrongdoing or unfair trading practices having been found in any of the nine previous cases launched in the past decade, many stakeholders contend that the current trade action was little more than harassment of Western Canadian grain producers by American special interest groups. The Canadian government subsequently filed a request under the provisions of the North American Free Trade Agreement (NAFTA) for the establishment of a bi-national panel to review the DOC's final determinations. As a means of remedying trade disputes, these five-member panels are charged with ascertaining whether or not the determinations made by the DOC were consistent with the trade laws of the country that conducted the investigation. The findings of the review panel are expected sometime in 2004, and are binding on both parties.

US Actions at the World Trade Organization

In a concurrent action brought to the World Trade Organization (WTO) by the US, a panel was established to examine certain aspects of Canada's grain and transportation sector policies. The focus of US allegations is that the actions of the federal government and the CWB are inconsistent with Canada's obligations under the General Agreement on Tariffs and Trade (GATT) Article XVII – State Trading Enterprises. This article requires that the activities of state trading enterprises be carried out in a manner that is consistent with the general principles of non-discriminatory treatment, and solely in accordance with commercial considerations.

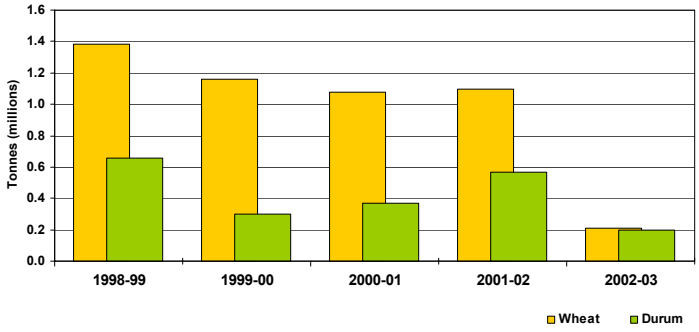
The US also alleges that Canada's domestic policies with respect to grain segregation, grain entry authorization requirements, allocation of producer cars (railcars that producers load directly themselves), and the grain transportation revenue cap, contravene GATT Article III (National Treatment) in that imported grain is afforded less favourable treatment than domestic grain.

A decision from the WTO panel examining these matters is currently pending.

Impact on the GHTS

Throughout the course of both these proceedings, the Canadian government has vigorously defended its trading policies, and those of the CWB. The imposition of any duties or penalties on Canadian export grain has important repercussions for Canada as a grain-producing nation, and the GHTS that supports it.

Figure 38: Annual Exports to the United States – Selected Grains



The United States constitutes an attractive foreign market for Canadian grain. US imports of Canadian wheat and durum averaged some 1.4 million tonnes over the course of the past five crop years.[58] During the 2001-02 crop year alone, the movement of 1.7 million tonnes to the United States accounted for 10.8% of Canada's total wheat and durum exports. Preliminary data for the 2002-03 crop year shows that Canadian exports have fallen significantly, largely in reflection of diminished grain supplies.

[58] The value cited here is based on data from the Canadian Grain Commission, and is derived for the five-year period beginning with the 1998-99 crop year, and ending with the 2002-03 crop year.

The imposition of punitive duties along the lines of those brought by the US can present significant impediments to international trade. Assuming that the determinations that underlie them are flawed – as is the contention of the Canadian government and the CWB – then any long-term barrier to the US market artificially restricts trading opportunities. This ultimately has a negative impact on the economic efficiency of the GHTS, since it will then begin to redirect grain towards less lucrative secondary markets.

2.26 Port of Churchill

During the 2000-01 crop year, a total of 665,100 tonnes of grain were shipped through the port of Churchill. Since then, the volume of grain moving through the port has steadily declined – to 477,100 tonnes in the 2001-02 crop year, and to 351,900 tonnes in the 2002-03 crop year.[59] Of particular concern is the fact that these volumes are well below the 1.0-million-tonne threshold deemed necessary by the port's owner to ensure its long-term economic viability. With this in mind, the Port of Churchill Advisory Board warned that another year of low grain shipments might well prove ruinous.[60] Many earnestly wondered whether the port would even open for the 2003 shipping season.

Although the port's owner – Denver based OmniTRAX, Inc. – has promoted Churchill as a competitive gateway, the drought of the past two years has undermined these efforts.[61] With the threat of a potential cessation of operations, both the Port of Churchill Advisory Board and OmniTRAX called upon the CWB to direct a greater amount of grain through Churchill during the 2003 shipping season. The CWB, however, resisted making any definitive commitment indicating that its primary obligation rested in maximizing the returns it generates for producers, and that market forces would ultimately determine shipping decisions.

Considering Churchill to be of vital interest to the province's economy, the Manitoba government moved to provide the port with some measure of interim financial support. With additional funding supplied by the federal government, this support package was advanced in an effort to help ensure a sustainable economic future for both the port and the Hudson Bay Railway.

The support package, however, met with stiff opposition from the Western Grain Elevator Association (WGEA) and the Inland Terminal Association of Canada (ITAC) who claimed that this assistance distorts the competitive dynamics of the marketplace, and simply adds to the funds already invested by both governments on these two ventures over the past six years. They contend that such financial support has the potential to divert grain that would normally move through ports and facilities

(photograph courtesy of the Hudson Bay Port Company)

Figure 39: An aerial view of the grain-handling facilities belonging to the Hudson Bay Port Company at Churchill, Manitoba.

[59] Statistics relating to grain throughput at the port of Churchill are normally maintained on the basis of either the shipping season or the calendar year. The grain volumes cited here have been adjusted to provide greater consistency with other statistics maintained under the Grain Monitoring Program, and are reported on a crop year basis. In addition, these volumes relate only to the grain handled by OmniTRAX since it assumed control of the port in 1997. The actual record for throughput at the port of Churchill is 735,000 tonnes, and was attained during the course of the 1976 shipping season. Comprised primarily of wheat and durum, the volume of grain shipped through the port in the 2000 shipping season amounted to 693,800 tonnes, and accounted for over 95% of the port's total movement – some 710,000 tonnes in all.

[60] The Port of Churchill Advisory Board is a four-person body appointed by the Manitoba government in the summer of 2002. The Board's purpose rests in enhancing the economic viability, and long-term commercial potential, of the port of Churchill.

[61] OmniTRAX's interests in the port of Churchill are two-fold: it owns the Hudson Bay Port Company, which oversees actual terminal and port operations; as well as the Hudson Bay Railway Company, which provides local railway service to the port and its facilities.

that do not receive such support.

Proponents of the Churchill gateway counter that these arguments ignore the public funds that were directed towards building, and operating, the St. Lawrence Seaway over much of the past 50 years. They also contend that the grain companies have long opposed shipping grain through Churchill, and have instead favoured the use of ports with terminal facilities that they either own or have a vested interest in.

During the fourth quarter, OmniTRAX entered into an agreement with Louis Dreyfus – a grain company with international interests – to assume responsibility for the marketing and management of the port. Despite the scope of its international operations, the company's Canadian presence is limited to eleven licensed grain elevators in Western Canada, and one transfer elevator at Port Cartier, Quebec. At first glance the arrangement appears mutually beneficial since each seems to possess something the other lacks: a Western Canadian based terminal elevator in the case of Louis Dreyfus; and grain marketing expertise in the case of OmniTRAX.

Determining whether this collaboration is in fact furthering the goal of securing the port's long-term viability is difficult to assess given the limited amount of time under which the arrangement has been in place. Moreover, total hopper car shipments to the port in the 2002-03 crop year shows a year-over-year decline of 25.0% – to 340,200 tonnes from 453,600 tonnes the year before. Yet, this decline masks the fact that shipments to the port in the fourth quarter – the first with Louis Dreyfus managing the port – virtually doubled to 160,000 tonnes from 85,500 tonnes a year earlier. More importantly, terminal throughput in the fourth quarter also increased – to 72,700 tonnes from zero. Although such statistics must be encouraging, they remain well below the level needed to ensure success. Whether this continues to be the case will ultimately be answered over the course of the next few crop years.

2.27 Licence-Exempt Producer-Car Loading Facilities

In April 2002 the Canadian Grain Commission (CGC) announced that producer-car loading facilities would be exempted from the licensing provisions of the Canada Grain Act as long as certain minimum conditions were met. From the perspective of a number of producers in Western Canada, developing such facilities provided them with an effective means by which to address the closure of an elevator that had long served their communities.

During the course of the 2002-03 crop year, another 25 facilities joined the ranks of those having received licensing exemptions the year before – increasing from five to 30 in total. Twenty-six of these facilities – 86.7% – are situated in Saskatchewan, while the provinces of Manitoba and Alberta account for two apiece. The majority of these facilities – 17 in all – are tied to the operations of shortline railways, while another 13 are found along the rights-of-ways of the larger Class 1 carriers.

Noteworthy is the fact that a full one-third of these facilities are local to the lines of the Great Western Railway (GWR) – a shortline carrier operating in southwestern Saskatchewan. This comparatively high concentration of facilities reflects the effort of the GWR to promote the establishment of producer-loading sites. In fact, approximately one-third of all producer-cars loaded during the 2002-03 crop year originated from sites local to the GWR.

2.28 Government Transportation Policy

On 25 February 2003 Transport Minister David Collenette released "Straight Ahead – A Vision for Transportation in Canada". In large part, the Straight Ahead document built on the recommendations of the Canada Transportation Act Review Panel, and was intended to set a public policy framework for Canada's transportation industry that addressed the economic, social and environmental needs of the next decade and beyond. In particular, the framework focused on airline and railway competition issues, critical infrastructure needs, environmental pressures, as well as safety and security imperatives.

The document also discussed a number of issues relative to both the public policy and regulatory frameworks under which federally-regulated Canadian railways operate. Chief among the proposals advanced in this respect were:

- That no change to the running rights or level of service provisions as presently prescribed in the Canada Transportation Act would be made.

- That final offer arbitration provisions be adjusted to address disputes under $750,000, where "the arbitrator would be required to consider as well whether alternative, effective, adequate and competitive means of transportation are available". Additionally, a group of shippers would be able to join together in one proceeding, and submit a single collective offer for arbitration when seeking common relief.

- That the current interswitching provisions be retained. However, the rates will be set as a prescribed maximum.

- That, when seeking a regulated rate to an interchange point with a second carrier beyond the 30-kilometre limit prescribed for interswitching, a shipper will no longer have the obligation of securing an agreement with the connecting carrier beforehand.

- That the test for substantial commercial harm be removed.

- That the government would continue monitoring the impact of its 2000 grain policy reforms before making any further policy changes.

Concurrent with the release of the Straight Ahead document, the government introduced into Parliament Bill C-26, intended to bring these and other policy changes cited in Straight Ahead into effect.,

2.3 Summary Observations

The 2002-03 crop year was the third under the CWB's tendering program, and the first that required the CWB to adopt a higher minimum tendering commitment. Effectively doubling the proportion pledged during the initial two years of the program, the CWB committed to move at least one-half of its overall grain shipments to the four western ports under tender in the 2002-03 crop year. And although this proportion was increased, the actual volume of grain called, bid, and moved under the tendering program changed little from the 2001-02 crop year owing to the sharp decline in the grain supply.

The CWB issued a total of 445 tenders calling for the shipment of approximately 5.8 million tonnes of grain in the 2002-03 crop year – a volume only 16.8% greater than was sought a year earlier. The vast majority of this volume – some 3.8 million tonnes – related to the movement of wheat. The remaining 2.0 million tonnes related to shipments of durum.

These calls were met by 2,587 bids offering to move an aggregated 11.8 million tonnes of grain – slightly more than twice the volume sought. The nature of this response is significantly greater than that observed in either of the preceding two crop years, and underscores the aggressive stance that appears to have been adopted by the grain companies in the 2002-03 crop year.

In terms of observable patterns, the volumes bid largely parallel those called: 65.3% versus 63.1% in the case of wheat; and 34.7% versus 36.9% for durum. On the whole, this indicates that bidders gave equitable consideration to the grains called for under tender. However, a clear preference for grain moving to Vancouver and Thunder Bay was also noted in the bidding patterns.

A total of 784 contracts were subsequently signed for the movement of approximately 3.7 million tonnes of grain – 63.6% of the amount called. This represented 46.1% of the overall grain volume shipped by the CWB to Western Canadian ports during the 2002-03 crop year, and fell only marginally short of the 50% minimum commitment established under the MOU.

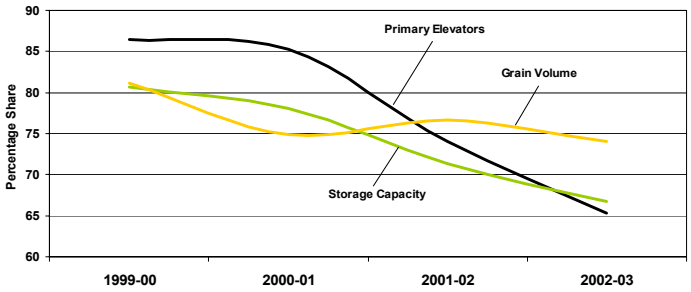
According to the CWB, the advances made in its tendering program have generated significant financial returns that are ultimately being passed back to producers through the CWB's pool accounts. Derived largely from a savings in transportation costs as a result of the bidding inherent in the tendering process itself, these returns also include freight and terminal rebates, as well as financial penalties for non-performance. The CWB estimates the savings generated from these activities for the 2002-03 crop year at $33.8 million – a 17.4% reduction from the $40.9 million reported saved a year earlier. As with other indicators of activity, this overarching reduction appears to have been the result of diminished grain volumes. It is important to note, however, that the per-tonne value of these savings actually increased by 9.3% in the 2002-03 crop year – to $2.70 per tonne from $2.47 a year earlier.

The Monitor has previously mentioned the concern that a number of stakeholders have raised respecting the potential ability of the major grain companies to displace their smaller competitors in the marketplace. With this in mind, the Monitor adopted a series of additional indicators for the 2002-03 crop year aimed at assessing that dominance. One of these indicators involved measuring the relative market shares of 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 – actually declined in the last crop year. In terms of tendered grain handlings, the major grain companies saw its share decline – albeit only marginally – from 84.6% to 79.5%. This was also the case regarding non-tendered CWB grains, where the major grain companies' share fell from 74.4% to 67.4% during the same period.

It is worth noting that this decline also extended to non-CWB commodities as well. With the close of the 1999-2000 crop year, the major grain companies had handled 81.1% of the overall grain moved to the ports of Western Canada, but by the end of the 2002-03 crop year, that share had fallen 7.1 percentage points to 74.0%. At the same time, their command over the primary elevator network – be it in terms of actual number or storage capacity – has also diminished. As of 31 July 2003, the major grain companies held sway over 65.3% of the elevators, and 66.7% of the storage capacity – a marked reduction from the respective 86.5% and 80.7% shares held four years earlier.

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. This was particularly evident when the member firms of the Inland Terminal Association of Canada were largely left unopposed to seize 3.8% of the overall volume of grain moved by the CWB in the first year of its tendering program.[62]

Figure 40: Relative Shares of the Four Largest Grain Companies



The emergence, and subsequent increase in number, of a variety of independent elevator operations has undoubtedly helped to build the market position of the non-major grain companies. In addition, the establishment of licence-exempt producer-car loading facilities, and the relative gain in producer-car movements, has also been a contributory factor. Even so, a significant portion of this change is also derived from the rationalization efforts of the major grain companies themselves. Regardless, the fact remains that the major grain companies actually garnered a somewhat smaller share of the overall grain market during the course of the past four crop years.

Notwithstanding these shifts in market share, neither the major nor the non-major grain companies appeared to believe that the tendering program was truly providing the GHTS with the more commercial, and competitive,

[62] Few grain companies chose to participate in the first year of the CWB's tendering program owing to a lack of industry accepted processes and standards. The 3.8% share cited here relates to that proportion of the CWB's total grain movement for the 2000-01 crop year that was governed by the MOU, and does not include tendered volumes of malting barley.

orientation that was perceived by many as the ultimate goal. Indeed, all seemed to agree that the tendering process was largely flawed, and that this – rather than the level at which tendering should be set – was the central issue to be addressed. A myriad of stakeholder complaints – some of which were at odds with each other – spotlighted mechanisms that purportedly placed each at some unfair disadvantage.

With the diversity of views held, it was not altogether surprising that a common agreement could not be reached when, in the spring of 2003, the CWB and its 26 agents began to discuss the level of tendering that was appropriate for the coming 2003-04 crop year. Rather than being unanimous, these consultations lead to an agreement that was supported by the majority of its participants. Beginning with the 2003-04 crop year, this agreement prescribes that a fixed 40% of the CWB's grain movements to the four ports in Western Canada will be accomplished through a program that combines tendering as well as advance car awards.

It is clear that the stakeholder community is polarized in regard to the various issues that surround the CWB's tendering program. It is widely understood that at the heart of the matter is the question of logistical control. As with other industrial marketers, the CWB asserts that in order to effectively exercise its role as the marketer of Western Canadian grain, it is imperative that it maintain control over the logistics. Conversely, the grain companies contend that they must control the logistics if they are to properly coordinate grain movements, and optimize the utilization of their assets. Despite these differences, most concurred with the view that there must be a new agreement between all stakeholders on the roles and responsibilities to be accorded each in the movement of tendered grain.

At the same time, other forces appeared to be working at changing the way the Canadian grain industry operates. In Vancouver, the British Columbia Terminal Elevator Operators Association (BCTEOA) locked out its Grain Workers Union (GWU) employees. This set the stage for what proved to be a protracted labour dispute, and the virtual closure of Vancouver as the principal gateway for export grain on the west coast for four months. In the face of significantly lower grain volumes, however, the redirection of traffic to Prince Rupert effectively minimized the dispute's impact.

Although reduced volumes played a role it mitigating problems on the west coast, many earnestly wondered whether the port of Churchill would even open for the 2003 shipping season. Due in large part to a $2.2-million aid package from the Canadian and Manitoba governments, it later did. More importantly, the port's owner also entered into an agreement with Louis Dreyfus – a grain company with international interests – to assume responsibility for the marketing and management of the port.

One of the principal assets used in the movement of Western Canadian grain is the federal government's fleet of covered hopper cars. This fleet constitutes the backbone of the GHTS. Yet a number of stakeholders have begun to question whether these cars, along with others comprised as part of the public fleet, are nearing the end of their useful lives. A concern expressed by many within the stakeholder community is that age-related attrition has removed a significant portion of the public fleet's carrying capacity, and that further declines will begin to undermine the reliability of the GHTS. Indeed, from the available evidence it would appear that the carrying capacity of the public fleet is not an immediate concern, but an emerging one.

In two separate – but interrelated trade actions, the United States challenged Canada in what it deemed to be unfair trade practices in respect to the international movement of grain. The first of these involved Canadian grain imported into the United States, while the second related to the treatment of American grain imported into Canada.

As a result of a complaint brought forward in September 2002, the US International Trade Commission upheld the imposition of countervailing and anti-dumping duties amounting to 14.16% on Canadian wheat imported into the US. The Canadian government and the CWB are appealing this decision under the provisions of the North American Free Trade Agreement (NAFTA).

At the same time, the US also brought action before the World Trade Organization (WTO) claiming Canada did not fulfil its international trade obligations relating to the practices of the CWB, and that US producers were unable to gain access to producer cars and to grain movements under the revenue cap.

Throughout the course of both these proceedings, the Canadian government has defended its trading policies, and those of the CWB. Beyond merely asserting that its practices are consistent with applicable trade law, the

imposition of any duties or penalties on Canadian export grain has important repercussions for Canada as a grain-producing nation, and the GHTS that supports it. The final determinations of both the NAFTA and WTO reviews are expected sometime in 2004.

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

Highlights – 2002-03 Crop Year

Trucking

- *The Composite Freight Rate Index for short-haul trucking remained at 100.0 throughout the year.*
  - *Reduced demand for trucking services helped stabilize existing prices.*

Country Elevators

- *Throughput for the 2002-03 crop year fell by 26.5% to 19.1 million tonnes.*
- *The average elevator capacity turnover ratio declined by 18.1% to 3.7 turns.*
  - *Greater decline avoided due to a 1.4-million-tonne reduction in elevator storage capacity over the past four crop years.*
- *Average weekly stock levels fell 7.3% to 2.5 million tonnes.*
  - *Overall reduction in the past four crop years exceeds decline in storage capacity; underscored a real decline in country elevator inventories.*
- *Average number of days-in-store increased by 26.0% to 47.9 days.*
  - *Wide variations observed between commodities and provinces.*
- *Average weekly stock-to-shipment ratio climbed by 31.1% to 7.1.*
  - *Denoted sharp reduction in sales programs for CWB as well as non-CWB commodities.*
- *Posted tariff rates for elevator handling activities showed modest change.*
  - *Receiving, elevation and loading – decreased by 0.6%.*
  - *Cleaning – increased by 2.0%.*
  - *Storage – decreased by 2.6%.*

Rail Operations

- *Average car cycle increased by 18.9% to 20.4 days.*
  - *Significant increase noted during the third quarter; reflecting reduced grain volumes.*
  - *Average loaded transit time increased 15.1% to 10.1 days.*
- *Proportion of grain traffic moving in multiple-car blocks decreased by 2.0 percentage points to 74.8%.*
  - *Reflected dynamics of tighter grain supply, and limitations on the ability of grain companies to fully employ their high-throughput elevators.*
  - *Modest gains in the use of 1-24 and 25-49 car blocks, relative to 100s.*
  - *Railway incentive payments estimated at $36.4 million – down 36.4%.*
    - *Average discount falls 2.5% to $3.97 per tonne.*
    - *Reflects reduced volume and lower proportion moving in blocks of 100+ cars.*
- *Posted single-car freight rates increased by about 4.0% in August 2002.*
- *Canadian Transportation Agency established Revenue Cap of $425.5 million.*
  - *Determined statutory grain revenues for CN and CP totalled $401.7 million.*
    - *$23.9 million less than allowed.*
    - *Average revenue fell 3.0% to $24.52 per tonne.*

Terminal Elevators and Port Performance

- *Terminal throughput fell by 34.4% to 11.8 million tonnes.*
  - *Labour dispute produced volume shifts at West Coast ports.*
- *The average elevator capacity turnover ratio declined by 24.2% to 5.0 turns.*
- *Average weekly stock levels fell 8.7% to 1.0 million tonnes.*
- *520 vessels loaded at Western Canadian ports during the 2002-03 crop year.*
  - *Average time in port fell by 12.2% to 4.3 days.*
- *Posted tariff rates for terminal elevator handling activities increased.*
  - *Receiving, elevation and loading – increased by 5.5%.*
    - *Churchill tariff increases were significantly greater; 10%-20%.*
  - *Storage charges remained largely unchanged.*

Indicator Series 3 – System Efficiency

Table	Indicator Description	Notes	BASE 1999-00	CURRRENT REPORTING PERIOD (1) 2001-02	2002-03	% VAR	
	Trucking [Subseries 3A]						
3A-1	Composite Freight Rate Index – Short-haul Trucking		100.0	100.0	100.0	0.0%	–
	Primary Country Elevators [Subseries 3B]						
3B-1	Grain Volume Throughput (000 tonnes)		32,493.9	25,923.8	19,052.1	-26.5%	▼
3B-2	Average Elevator Capacity Turnover Ratio		4.8	4.5	3.7	-18.1%	▼
3B-3	Average Weekly Elevator Stock Level (000 tonnes)		3,699.3	2,699.8	2,502.0	-7.3%	▼
3B-4	Average Days-in-Store (days)		41.7	38.0	47.9	26.0%	▲
3B-5	Average Weekly Stock-to-Shipment Ratio – Grain		6.2	5.4	7.1	31.1%	▲
3B-6	Average Handling Charges – Country Delivery Points	(2)					
	Rail Operations [Subseries 3C]						
3C-1	Hopper Car Grain Volumes (000 tonnes) – Province						
3C-2	Hopper Car Grain Volumes (000 tonnes) – Primary Commodities		25,659.6	18,276.6	12,271.3	-32.9%	▼
3C-3	Hopper Car Grain Volumes (000 tonnes) – Detailed Breakdown						
3C-4	Railway Car Cycle (days) – Empty Transit Time		10.7	8.3	10.2	22.8%	▲
3C-4	Railway Car Cycle (days) – Loaded Transit Time		9.2	8.8	10.1	15.1%	▲
3C-4	Railway Car Cycle (days) – Total Transit Time		19.9	17.1	20.4	18.9%	▲
3C-5	Hopper Car Grain Volumes (000 tonnes) – Non-Incentive		12,735.5	4,217.2	3,092.8	-26.7%	▼
3C-5	Hopper Car Grain Volumes (000 tonnes) – Incentive		12,924.2	14,059.4	9,178.6	-34.7%	▼
3C-6	Hopper Car Grain Volumes ($millions) – Incentive Discount Value		$31.1	$57.2	$36.4	-36.4%	▼
3C-7	Traffic Density (tonnes per route-mile) – Grain-Dependent Network		442.3	342.0	204.8	-40.1%	▼
3C-7	Traffic Density (tonnes per route-mile) – Non-Grain-Dependent Network		292.4	208.8	149.0	-28.6%	▼
3C-7	Railway Traffic Density (tonnes per route-mile) – Total Network		330.3	240.7	162.2	-32.6%	▼
3C-8	Composite Freight Rates – Rail	(2)					
3C-9	Multiple-Car Shipment Incentives – Rail	(2)					
3C-10	Effective Freight Rates – CTA Statutory Revenue ($ per tonne)		n/a	$25.28	$24.52	-3.0%	▼
	Terminal Elevator and Port Performance [Subseries 3D]						
3D-1	Annual Port Throughput (000 tonnes) – Grain		23,555.5	18,004.6	11,806.9	-34.4%	▼
3D-2	Average Terminal Elevator Capacity Turnover Ratio		9.1	6.6	5.0	-24.2%	▼
3D-3	Average Weekly Terminal Elevator Stock Level (000 tonnes)		1,216.2	1,113.6	1,016.5	-8.7%	▼
3D-4	Average Days-in-Store – Operating Season (days)		18.6	20.6	21.7	5.4%	▲
3D-5	Average Weekly Stock-to-Shipment Ratio – Grain	(2)					
3D-6	Average Weekly Stock-to-Shipment Ratio – Grade	(2)					
3D-7	Average Vessel Time in Port (days)		4.3	4.9	4.3	-12.2%	▼
3D-8	Distribution of Vessel Time in Port	(2)					
3D-9	Distribution of Berths per Vessel	(2)					
3D-10	Annual Demurrage Costs ($millions)		$7.6	$2.9	$0.8	-73.6%	▼
3D-10	Annual Dispatch Earnings ($millions)		$14.5	$7.0	$4.4	-37.5%	▼
3D-11	Average Handling Charges – Terminal Elevators	(2)					

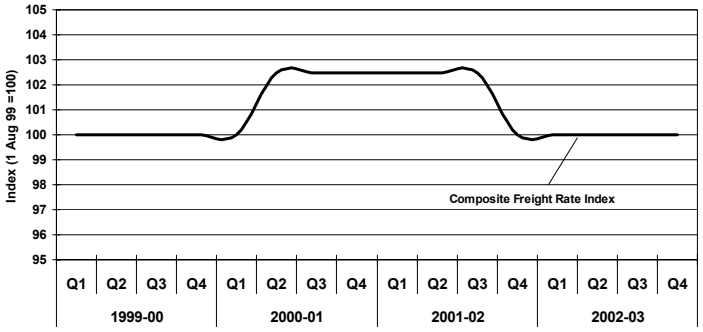
(1) – In order to provide for more direct comparisons, the values for the 1999-2000 through 2002-03 crop years are "as at" or cumulative to 31 July unless otherwise indicated.

(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 3 as required.

3.1 Trucking *[Measurement Subseries 3A]*

The Monitor surveys the posted commercial rates tied to the "in-house" trucking services of the principal grain companies for local grain pick-up and delivery services in, and around, a representative sample of 37 specific grain delivery points. These rates are then combined to create a composite rate scale depicting the cost of typical truck movements. The rates in this scale are used as a proxy for, and a barometer of, the commercial trucking costs for grain.

Figure 41: Composite Freight Rate Index – Short-Haul Trucking



As outlined previously by the Monitor, this survey has revealed that the larger grain companies offer 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 both the 2000-01 and 2001-02 crop years – the underlying structure of these commercial trucking costs has remained unchanged throughout the course of the GMP.

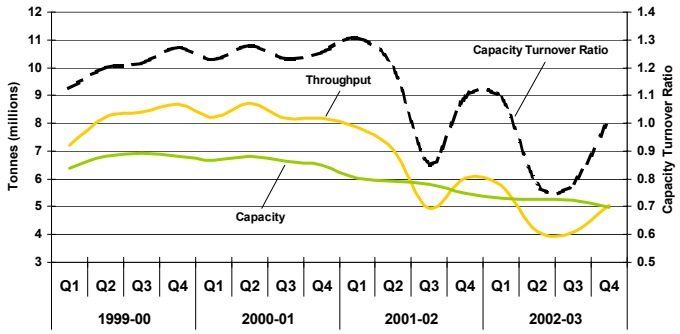
To some extent, the lack of change noted for the 2002-03 crop year is partially explained by the fact that a sharp reduction in the grain supply contributed to an oversupply of trucking capacity during this period. In the face of reduced demand for their services, this effectively worked to stabilize the existing price structure. [See Table 3A-1 in Appendix 3.]

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

The drought's impact on the efficiency of the GHTS becomes apparent when grain first enters the system. Total country elevator throughput has declined sharply since the beginning of the GMP. Aggregate volume for the 2002-03 crop year fell to 19.1 million tonnes from 25.9 million tonnes a year earlier – a reduction of 26.5%.[63] Moreover, this volume is only about three-fifths of that handled in either the 1999-2000 or 2000-01 crop years.

Year-over-year reductions in primary elevator shipments were recorded for Saskatchewan, Alberta, and British Columbia, with declines of 35.9%, 30.4%, and 11.8% respectively. Only Manitoba's primary elevators, which shipped a total of 5.2 million tonnes of grain, posted an increase in throughput – albeit only 3.8%. [See Table 3B-1 in Appendix 3.]

Figure 42: Primary Elevator Capacity, Throughput and Turnover



Capacity Turnover

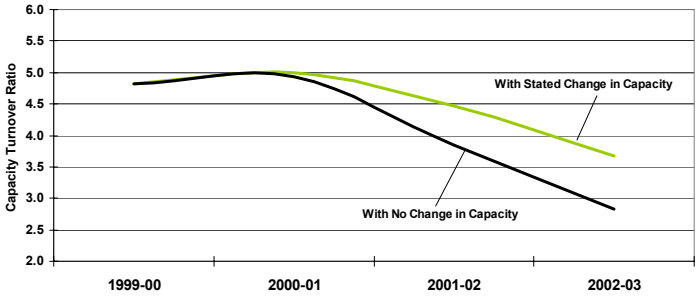
The effect of changes in both throughput and storage capacity are reflected in the capacity turnover ratio of the primary elevator system. To the extent that throughput has proven to exert the greatest influence over the course of the past two crop years, its decline is mirrored in the resultant values for this indicator.

[63] The focus of the GMP is on shipments from primary elevators only. The throughput associated with process elevators is excluded from consideration in the measures presented here.

During the course of the 2002-03 crop year, the quarterly capacity turnover ratio for Western Canada as a whole ranged from a low of 0.8 turns to a high of 1.1 turns – as much as one-third less than what would have been considered the norm in the first two years of the GMP. The decline in throughput is also manifest in an 18.1% reduction in the ratio's annual value – which fell to 3.7 turns from 4.5 turns the year previous. [See Table 3B-2 in Appendix 3.]

These results, however, have also been buoyed by a 1.4-million-tonne net reduction (or 22.1%) in the storage capacity of the primary elevator system since the GMP began. In a broad sense, this reduction reflects the efforts of the grain companies to improve the utilization of their elevator assets. Had throughput levels over the past four crop years proven more consistent, the capacity turnover ratio would have undoubtedly shown improvement.

Figure 43: Change in Capacity – Impact on Capacity Turnover Ratio



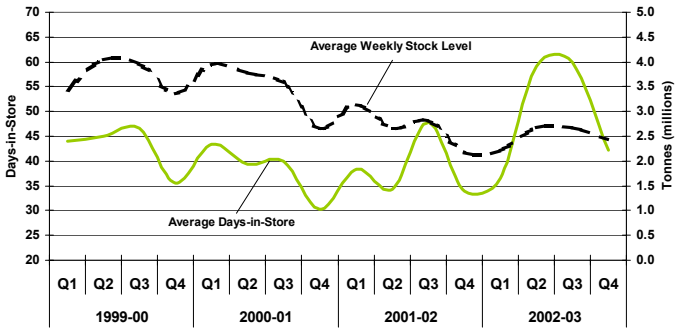
Instead, the progressive decline in volume for both the 2001-02 and 2002-03 crop years has served to camouflage this improvement, and to produce lower ratios in the process. Nevertheless, had the storage capacity of the primary elevator system not been reduced, the ratio's annual value would have fallen even further than it did – to an estimated 3.8 turns and 2.8 turns in the 2001-02 and 2002-03 crop years respectively. Such comparisons draw attention to the fact that the primary elevator system has improved its handling productivity by an estimated 29.7% over this same period.

Elevator Inventories

In addition to the capacity turnover ratio, the GMP also uses primary elevator inventories to assess operational efficiency. Beyond actual stock levels, this examination focuses on the average number of days grain spends in inventory, and the magnitude of these stocks in relation to pending shipments.

In concert with a reduction in storage capacity, the amount of grain held in inventory has also been declining over time. This is perhaps best reflected by the change in the average weekly primary elevator stock level – which has fallen from a height of 4.1 million tonnes in the second quarter of the 1999-2000 crop year, to 2.2 million tonnes in the fourth quarter of the 2001-02 crop year.

Figure 44: Primary Elevators – Weekly Stock Level and Days-in-Store

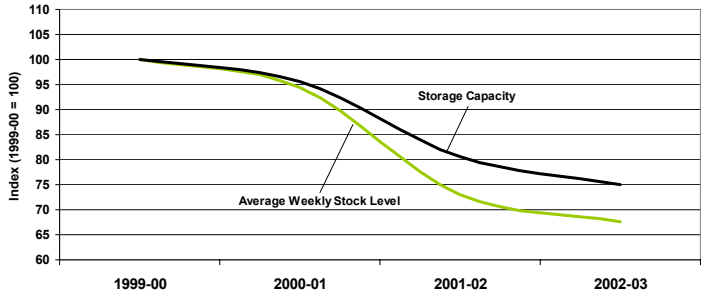


Although increases over this latter level were noted in the following 12 months, the annualized average of 2.5 million tonnes for the 2002-03 crop year still fell below the 2.7-million-tonne average recorded a year earlier. Moreover, this value is about two-thirds that of the 3.7-million-tonne average noted in the first year of the GMP. [See Table 3B-3 in Appendix 3.]

Perhaps more revealing is the fact that over this same timeframe the relative decline in primary elevator inventories has exceeded that of its associated storage capacity – 32.4% versus 24.9% respectively. This implies that less inventory was being maintained per unit of storage capacity in the 2002-03 crop year than in either of the preceding three crop years. Moreover, this differential underscores the fact that there has been a real reduction in grain inventories – beyond that occasioned by the rationalization of the primary elevator network itself – of about 9.9%.

And while average quarterly stock levels have moved generally lower, the average amount of time spent by grain in inventory has not fully kept pace. After having moved gradually downwards during the first two years of the GMP, the average number of days-in-store climbed sharply, and reached a record height of 59.9 days in the third quarter of the 2002-03 crop year.

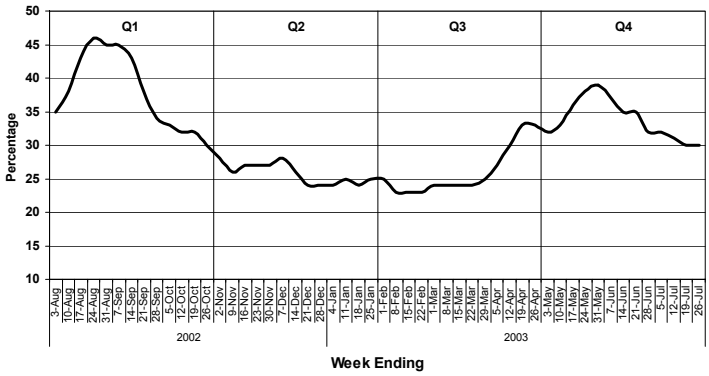
Figure 45: Relative Change in Primary Elevator Storage Capacity and Average Stock Levels



The year-end average of 47.9 days marks the highest recorded thus far under the GMP. Most provinces posted sharp year-over-year increases: Saskatchewan, up by 51.9% to 57.6 days; British Columbia, up by 50.1% to 56.5 days; and Alberta, up by 24.0% to 45.3 days. Only Manitoba showed a net reduction of 16.1% in its overall average – falling to 33.9 days from 40.4 the year before. Among the grains posting increases in the average number of days-in-store were: wheat, up by 32.6% to 53.8 days; barley, up 40.2% to 43.4 days; canola, up 72.6% to 40.1 days; and oats, up by 49.2% to 38.7 days. Those posting decreases proved far fewer: durum, down by 10.7% to 50.3 days; and flaxseed, down by 19.3% to 26.1 days. [See Table 3B-4 in Appendix 3.]

Much of this reversal appears directly attributable to a striking reduction in the sales programs for both CWB, and non-CWB, grains. Without a higher level of sales activity, country elevator inventories naturally grew – and aged – as producers continued to deliver their grain to local elevators. This build-up in inventory is perhaps best reflected by a corresponding reduction in available primary elevator space during the first quarter – which fell to about 25% of working capacity – and remained at about this level throughout much of the second and third quarters.

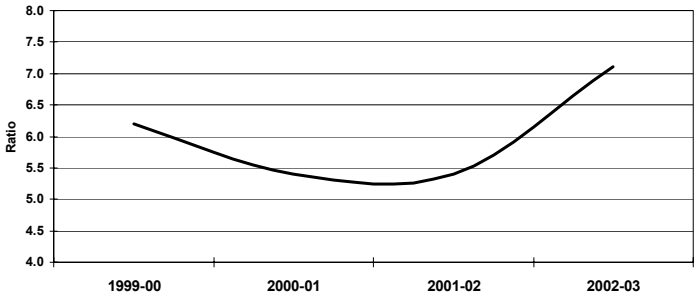
Figure 46: Available Primary Elevator Space



Source: Canadian Wheat Board

With an acute drop in grain shipments and a build-up in stocks during the second and third quarters, grain inventories proved more than sufficient to meet prevailing demand. The overall average stock-to-shipment ratio for major grains during these two quarters rose to 8.3 and 8.8 respectively – the highest observed under the GMP.

Figure 47: Primary Elevators – Stock-to-Shipment Ratio



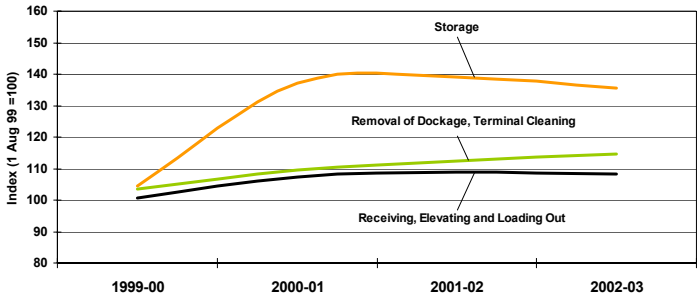
These results helped push the overall margin of coverage for the crop year up 31.1% – to 7.1 from 5.4 a year earlier. This average even surpassed the 6.2 recorded at the outset of the GMP by a further 14.5%. [See Table 3B-5 in Appendix 3.]

Average Handling Charges

The published rates for a variety of primary elevator handling activities vary widely, and differ not only in terms of the activity itself, but also by virtue of the province in which the activity is conducted, as well as the specific grain involved. Given the myriad of individual tariff rates, any discussion of general price movement is best focused using some composite index since increases in one area are often accompanied by decreases in another.[64]

The per-tonne charges assessed by the grain companies for these various services are the primary drivers of grain company revenues. Comparatively, the per-tonne charges assessed for the receiving, elevating and loading out of grain are the most costly. This in turn is followed by the charges assessed for the removal of dockage and terminal cleaning, as well as storage.

Figure 48: Relative Change in Composite Handling Charges



Although changes in the tariff rates for the receiving, elevating and loading out of grain varied significantly between provinces and grains, the composite price index for these services posted an overall decline of 0.6% in the 2002-03 crop year. Nevertheless, since the beginning of the GMP the rates for these activities have increased by about 8.2% – the lowest observed escalation rate among all mainstream handling charges.

Tariff rates for the removal of dockage and terminal cleaning are the only ones to have posted progressive increases in each of the four years now under the GMP.[65] During the course of the 2002-03 crop year, this increase amounted to about 2.0%. Over the course of the past four crop years, however, the composite price index for these services has climbed by 14.7%.

The most substantive increase observed thus far under the GMP relates to elevator storage. Much of the overall increase took place towards the end of the 2000-01 crop year, and has since shown modest year-over-year reductions. And while the composite price index shows a decline of about 2.6% in the 2002-03 crop year, today's storage charges are effectively 35.6% higher than at the outset of the GMP. [See Table 3B-6 in Appendix 3.]

3.3 Rail Operations *[Measurement Subseries 3C]*

Totalling 12.3 million tonnes, the overall volume of grain moved in covered hopper cars during the 2002-03 crop year shows a 32.9% decline from that seen a year earlier.[66] With the exception of Prince Rupert, which benefited from the redirection of westbound traffic in the face of the labour disruption that took place in Vancouver, the volumes destined to all ports experienced significant year-over-year reductions. Naturally, the most adversely impacted was Vancouver, where volume plunged by 56.6% – falling to 4.7 million tonnes from

[64] 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.

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

[66] The overall volume of grain cited here as having moved by rail to Western Canadian export positions in the 2002-03 crop year conflicts with the 12.7 million tonnes presented in Section 1.2. This latter volume figure 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 wider tonnage volume.

10.9 million tonnes a year earlier. Traffic destined to Churchill followed with a reduction of 25.0%, while Thunder Bay's volume fell by a lesser 12.8%.

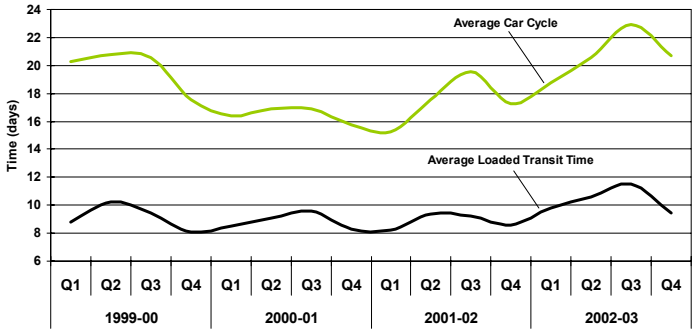
In a reflection of the changes in overall grain production, railway volumes from each of the producing provinces fell off sharply. About half of the decline observed during the 2002-03 crop year can be attributed to reduced tonnage from Saskatchewan alone. Rail shipments from that province fell by 2.9 million tonnes (or 32.2%) to 6.2 million tonnes. This was followed respectively by Alberta with 3.5 million tonnes (a reduction of 44.2%), and Manitoba with 2.6 million tonnes (a reduction of 8.4%). Shipments reported under the GMP for origins in British Columbia – which amounted to 54,400 tonnes in the 2001-02 crop year – were effectively reduced to zero.[67] [See Tables 3C-1, 3C-2, and 3C-3 in Appendix 3.]

Car Cycles

In the context of the GHTS, the car cycle measures the average amount of time taken by the railways to deliver a load of grain to port and then return the empty car to the prairies for reloading. In the 2002-03 crop year, the overall car cycle averaged 20.4 days – an 18.9% increase over the 17.1-day average observed a year earlier.[68] Furthermore, this overall increase is not attributable solely to an adverse performance in either the loaded, or empty, transit portions of the car cycle. In fact, the overall increase in the car cycle has been fuelled by equally pronounced upward trends for both the empty and loaded components of the cycle. [See Table 3C-4 in Appendix 3.]

Most importantly, the overall loaded transit time – which bears directly on the relative speed with which grain moves through the GHTS – showed a year-over-year increase of 15.1%, and climbed to an average of 10.1 days in the 2002-03 crop year. Accompanying this was a 22.8% increase in the empty transit portion of the car cycle, which reached an annualized average of 10.2 days.

Figure 49: Railway Car Cycle



As discussed in previous reports of the Monitor, much of the elongation in these times stem from the reduced productivity of the railcar fleet in the face of declining grain volumes. Given that most of the activities tied to the car cycle – be it loading, unloading, or dwell times – have all posted increases, the physical movement of grain by rail is one of the few areas in which a real decline in GHTS productivity is in evidence.

Despite these general effects, some corridor-specific differences are worth noting. Chief among these is the fact that movements in the Vancouver corridor posted the most pronounced year-over-year increase – 29.3%. As compared to the 17.8-day average of the previous year, movements to Vancouver in the 2002-03 crop year were taking a total of 23.0 days to complete – the highest annualized average thus far seen under the GMP. And although a portion of this result is undoubtedly attributable to delays that arose as a result of the labour

[67] Statistics relating to the railway movement of grain in Western Canada centres on the volume handled by federally regulated carriers. Given that much of the grain originating in British Columbia is handled entirely by BC Rail, the volume handled in line-haul movements by federally regulated carriers has proven to be comparatively small – amounting to well below 100,000 tonnes annually. In 2002 the Canadian National Railway entered into a private haulage agreement with BC Rail that saw traffic originating on CN's line in the Dawson Creek area moved to Vancouver by BC Rail. The Canadian Transportation Agency deemed that BC Rail's movement of this traffic effectively removed it from being considered a regulated grain for the purpose of calculating the revenue cap. In a reflection of this status change, CN ceased to report any information concerning these movements for the 2002-03 crop year.

[68] The Western Canadian average car cycle of 20.4 days is derived from 72,218 movements: 19,510 in the Vancouver corridor; 38,194 in the Thunder Bay corridor; and 14,514 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.

dispute in Vancouver, the fact that the average car cycle in each quarter – and not just that immediately affected by the dispute – was above that of the same period a year earlier suggests that the underlying force is more general in nature.[69]

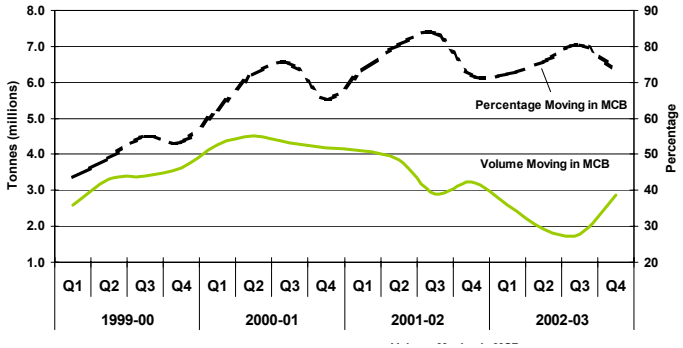
These same observations hold true for movements in the Thunder Bay corridor – albeit the magnitude of the gain in the 2002-03 crop year was but half that of Vancouver's. In specific terms, the car cycle for shipments to Thunder Bay rose to an annualized average of 18.2 days – an increase of 11.8% over the 16.3-day average of the year before. Here too, the broad nature of the increases suggests a general underlying cause consistent with reduced fleet activity.

Also worth noting is the fact that the redirection of grain traffic to Prince Rupert during the labour dispute provided the GMP with its first real opportunity to examine the car cycle in this corridor. Interestingly, the 2002-03 crop year average of 22.5 days is only marginally higher than the 21.9-day average observed the year before.[70] More importantly, it is little different from that exhibited for the Vancouver corridor as a whole, and as such, would have had a limited distorting effect upon the global average.

Multiple-Car Blocks

Although the volume of grain moving under the incentive programs of the railways has been declining over the course of the past three crop years, the proportion moving in blocks of 25 or more cars has continued to increase. Moreover, since the beginning of the GMP the proportion has climbed from an annualized value of 50.4% in the 1999-2000 crop year, to a height of 76.9% in the 2001-02 crop year.[71] The 2002-03 crop year marked the first wherein this proportion actually slipped – albeit marginally – to 74.8%. [See Table 3C-5 in Appendix 3.]

Figure 50: Railway Volume Moving in Multiple-Car Blocks (MCB)



Of greater interest is the relative use of the various block sizes existing under these incentive programs. The largest of these – namely blocks of 50-99 cars, as well as 100 or more cars – have proven to be the most popular with the grain companies. This stems from the simple reality that they provide the deepest monetary discounts, and allow the grain companies to realize the greatest financial returns. Over the course of the past four crop years, the share of total volume moving in these two blocks has climbed from 27.8% to 61.1%. Movements in blocks of 50-99 cars constitute the largest single segment, and have increased from an estimated 20.2% of the overall volume in the 1999-2000 crop year, to 41.9% by the close of the 2002-03 crop year. This was followed by movements in blocks of 100 or more cars, which grew from an estimated 7.6% of the total to 19.2% in the same period.

And while the amount of grain shipped in blocks of 1-24 cars has fallen from 49.6% to 25.2% of the total in the past four crop years, the gain in larger block usage has not come at the expense of the less efficient Class A

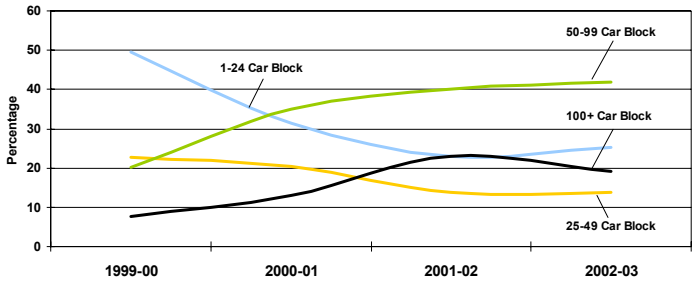
[69] Data from the second quarter – the period most directly impacted by the labour dispute in Vancouver – shows that the car cycle in the Vancouver corridor rose to an average of 28.8 days. The reduction in volume passing through the port at this time, however, served to mitigate its influence on the broader statistics associated with operations in the Vancouver corridor, and for the hopper car fleet as a whole.

[70] Owing to the lack of sufficient useable data, information relating to car cycles in the Prince Rupert corridor during the 1999-2000, 2000-01, and 2001-02 crop years were based on a very limited number of observations. The use of Prince Rupert as an alternative port during the lockout of the Vancouver Grain Workers Union provided the Monitor with substantially more useable data for the 2002-03 crop year. Caution, however, must still be advised when making any year-over-year comparison using these statistics.

[71] 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.

elevators alone. There has also been a migration away from movements in the smallest of the block sizes available under the railways' incentive programs. Whereas 22.6% of all shipments in the 1999-2000 crop year were from Class B facilities, that share had been virtually halved by the end of the 2002-03 crop year. In fact, the 13.7% share now accorded Class B elevators has evolved into the lowest of any elevator class. Moreover, this decline appears to have accelerated since the railways widened the monetary gap between its various block sizes at the beginning of the 2000-01 crop year.

Figure 51: Multiple-Car Block Composition

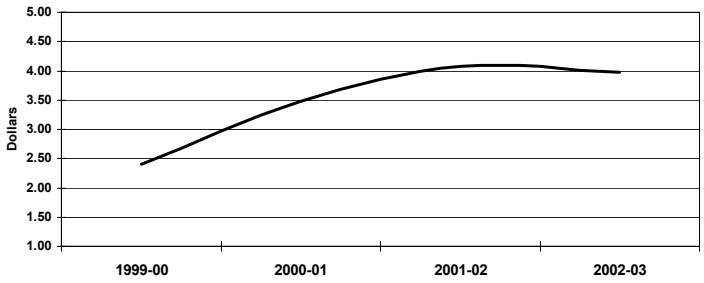


Also worth noting is the fact that the relative volume moving in blocks of 100 or more cars actually declined in the 2002-03 crop year – to 19.2% from 23.1% a year earlier. Much of this weakening appears to be directly linked with the overall reduction in grain volumes, and a prevailing scarcity that limited the ability of the larger grain companies to fully employ these assets. Conversely, these forces appear to have also lent temporary support to the smaller country elevators. This can be seen in the volume shares of Class A facilities having increased from 23.1% to 25.2%, while that of Class B facilities remained unchanged at 13.7%.

With the proportion of grain receiving discounts having steadily increased, the value of these discounts – in terms of a gross savings in railway freight charges – ballooned from an estimated $31.1 million in the 1999-2000 crop year, to $57.2 million in the 2001-02 crop year.[72] However, this was reversed in the 2002-03 crop year when the tonnage moving under these incentive programs fell by 34.7% – to 9.2 million tonnes from 14.1 million tonnes a year earlier. This ultimately lowered the value of the discounts earned to an estimated $36.4 million.

Such a reduction effectively masks the incremental gains being realized by the grain companies under the railways' incentive programs. The average discount earned provides a better perspective in this regard. Indeed, between the 1999-2000 and 2001-02 crop years, the average discount earned by grain moved under these programs climbed from an estimated $2.41 per tonne to $4.07 per tonne.[73] The average for the 2002-03 crop year, however, fell to $3.97 per tonne as a result of the cited decline in the proportion of cars garnering the deepest discounts. [See Table 3C-6 in Appendix 3.]

Figure 52: Average Incentive Discount Earned (dollars per tonne)



Traffic Density

A widely used indicator of system efficiency in the railway industry is traffic density. With a quarterly average of 162.2 tonnes per route-mile, overall density in the 2002-03 crop year was 32.6% below that of the 240.7 tonnes per route-mile observed a year earlier, and 50.9% below the 330.3 tonnes per route-mile recorded in the first year of the GMP.[74]

[72] The value of these discounts is estimated to have reached a height of $60.1 million in the 2000-01 crop year.

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

[74] 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,

The limited transformation of the railway network over the past four crop years has largely sensitized this indicator to changes in traffic volume alone. This can best be seen when comparing the quarterly changes in traffic density and grain volumes – patterns that are virtually indistinguishable.

The minor differences that do exist, however, underscore the fact that traffic density values are approximately 3.0% better than they would have otherwise been if Western Canadian railway infrastructure had not been reduced by 2.9% since the beginning of the GMP. 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 – will ultimately accentuate the same volume-related trends discussed earlier in Section 1.4.

In such an examination, it can again be demonstrated that the decline in traffic density for the grain-dependent network, as well as the lines operated by Class 2 and 3 carriers, is now steeper than that of either their non-grain-dependent or Class 1 counterparts. This in turn merely reiterates the fact that there has been a deeper erosion in the elevator assets tied to these networks. [See Table 3C-7 in Appendix 3.]

Figure 53 Relative Change in Traffic Density and Grain Volumes

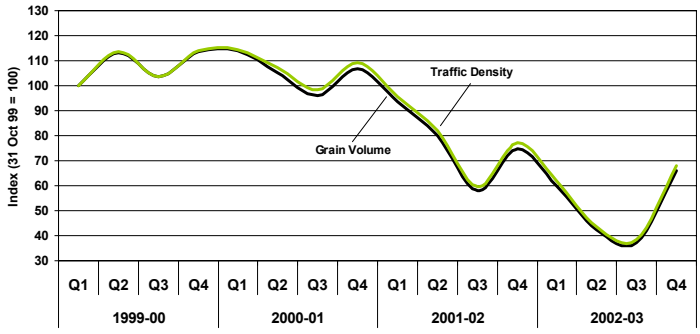
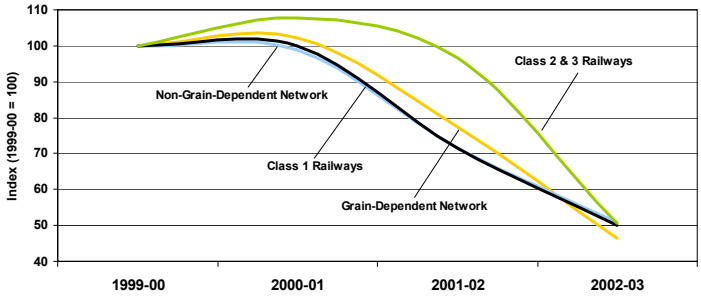


Figure 54: Relative Change in Railway Traffic Density



Railway Freight Rates

As one of the reforms aimed at creating a more commercial, competitive, and accountable grain handling and transportation system, 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 a greater degree of latitude in pricing, but "capped" the overall revenues that they could derive from the movement of grain in Western Canada. 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.[75]

To achieve this, the railways chose a two-pronged approach. Firstly, the published rates for single-car movements in the 2000-01 crop year were reduced by approximately 3.0% from those in place at the end of the 1999-2000 crop year.[76] However, since this reduction also avoided a pending rate increase of 4.5% prescribed

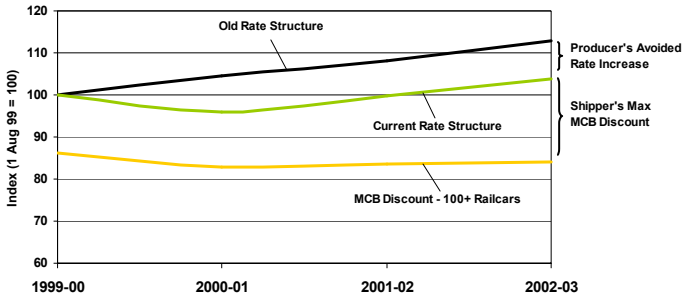
they cannot be directly gauged against quarterly measurements. For this reason, an average of the year's quarterly values is used as a substitute.

[75] 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.

[76] The 3.0% rate reduction cited represents the weighted average reduction in published tariff rates for single-car movements as determined by the Canadian Transportation Agency for CN and CP combined (see Decision Number 669-R-2001). Actual rate reductions differ noticeably between carrier and corridor. By way of example, CN posted rate reductions in the Vancouver, Thunder Bay, and Churchill corridors of approximately 4.0%, while those of CP ranged anywhere from 2.0% to 3.0%. Furthermore, CN's single-car rates for grain destined to Prince Rupert from origins in Manitoba, Saskatchewan, and Alberta, were effectively reduced by about 9.0%, while CP ceased to publish single-car rates for grain destined to Prince Rupert in October 2000.

under the old maximum rate program, these singe-car rates produced a spread of about 7.5% with those that would otherwise have come about without the reform.

Figure 55: Railway Freight Rates – General Structure



The railways chose to achieve the remainder of the prescribed revenue reduction through the continued use of the incentive discounts that were applied to grain moving in multiple-car blocks. Long used in other sectors of the railway industry, these discounts are strategically aimed at drawing greater volumes of grain into facilities that can provide for movement in either full, or partial, trainload lots. These incentives, which provide for general discounts of up to $6.00 per tonne, can effectively reduce a shipper's railway transportation cost by as much as one-third when applied against the single-car rates associated with short-haul movements, such as between Winnipeg and Thunder Bay.[77]

With the beginning of the 2001-02 crop year, published single-car freight rates were increased by about 4.0%. This was followed by another increase of about 4.0% in mid-August 2002. As a result, since the beginning of the GMP, nominal freight rates have risen by about 3.8%. Nevertheless, the single-car freight rates generally paid by individual producers during the 2002-03 crop year were still lower than the rates estimated to have otherwise come about without the adoption of the revenue cap. Although difficult to determine with any degree of precision, the spread between the two contrasting rate structures would appear to be in the area of 9.0 percentage points.[78] [See Table 3C-8 in Appendix 3.]

As noted previously, the incentive discounts now in place were increased for the larger multiple-car blocks at the beginning of the 2000-01 crop year. These remained unchanged during the 2002-03 crop year. [See Table 3C-9 in Appendix 3.]

The Revenue Cap

When the federal government introduced the revenue cap, it stipulated that combined statutory grain revenues for CN and CP in the 2000-01 crop year should not exceed a total of $710.9 million. This was based on an estimated annual grain movement of 26.3 million tonnes, with an average length of haul equal to 967 miles. The revenue cap, however, is adjusted each year to take into account changes in the volume of grain handled, the average distance over which that tonnage moved, and inflation. For the 2002-03 crop year, these adjustments resulted in the revenue cap being set at $425.5 million – $193.0 million for CN, and $232.6 million for CP.

In December 2003, the Canadian Transportation Agency determined that statutory grain revenues totalled $401.7 million, and was comprised of $175.7 million for CN, and $226.0 million for CP. On a combined basis, this meant that railway grain revenues were $23.9 million (or 5.6%) below the maximum allowed. Moreover, the Agency's determination also revealed that carrier revenues had fallen below their respective caps by

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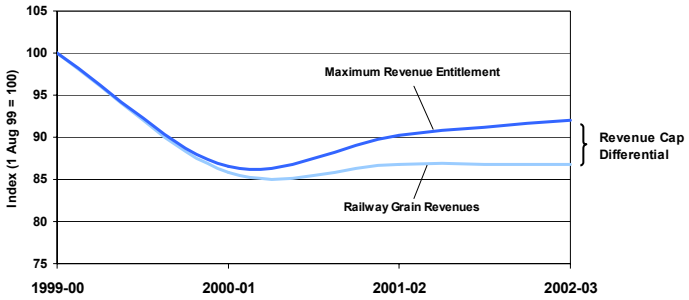
[77] In addition to the general discounts cited, the railways also provide incentives discounts when a shipper commits to moving a multiple number of trainload lots (100 or more cars) during a specified period of time. Deemed generically by the Monitor as "shuttle services," these discounts provide for an additional $0.50 per tonne when applied to movements of 100 or more cars. In addition to these, CP offers a further $0.50 per tonne discount when multiple trainload lots involving 112 or more cars are subscribed to.

[78] By way of example, the accompanying chart (Figure 55) contrasts the theoretical rate structure under the old and current regimes for a movement of approximately 1,000 miles. The differential cited here assumes that the maximum rate scale for the 2000-01, 2001-02, and 2002-03 crop years – had it still been in place – would have been escalated by 4.5%, 3.5%, and 4.4% respectively. The curve depicting the associated maximum potential discount is based on the railways' published incentives for movements in blocks of 100 or more cars: $5.00 per tonne in the 1999-2000 crop year; and $6.00 per tonne beginning in the 2000-01 crop year. It is, however, acknowledged that these results will differ widely given other distances, and parameters. The reader is reminded that the case depicted is for illustration purposes only.

noticeably different degrees – by 9.0% in the case of CN, and by 2.8% in the case of CP.[79] [See Table 3C-10 in Appendix 3.]

These results indicate that the margin of difference between the amount of revenue the railways were entitled to earn, and that which they actually did earn, widened for a third consecutive year. In the 2000-01 crop year – the first under the new regime – statutory grain revenues for CN and CP fell below their caps by a much narrower 0.8% and 0.7% respectively. The 2001-02 crop year saw these margins increase to 4.6% and 3.0% respectively.

Figure 56: Revenue Cap – Railway Compliance



The most substantive force underlying this increasing spread is the incentive discounts applied to grain shipments moving in blocks of 25 or more railcars. As outlined earlier, shippers have moved increasingly towards the use of these discounts, with the proportion of traffic garnering the deepest discounts showing the largest relative gains. The modest differences observed in the volumes moving under these programs over the course of the last two crop years, however, does not fully explain the comparatively greater widening in the margin for CN versus CP.

It must be remembered, that statutory revenues are derived from a number of elements, and not just freight rates or the incentive discounts applied against them.[80] Although two consecutive years of declining grain volumes suggests that the widening margin is derived from a revenue reduction element that is of a fixed – rather than variable – nature, caution must be urged in drawing any specific conclusions in the absence of detailed information.[81]

Moreover, the posting of statutory revenues below that defined by the revenue cap indicates that both railway companies have surrendered more revenue than prescribed by law. Although the competitive environment may have pushed real railway revenues to a slightly lower level than that envisioned when the new policy was adopted, the data available is ultimately inconclusive. The longer-term record will undoubtedly provide more definitive evidence as to whether or not this is indeed the case.

Beyond this, a number of other considerations have also had an impact on the calculation of statutory revenues. Firstly, the revenue cap applies only to the prescribed railways serving the four ports of Western Canada. Since traffic destined to Churchill is handled by the Hudson Bay Railway – a non-prescribed railway under the Canada Transportation Act – the revenues associated with between 0.3 million tonnes and 0.7 million tonnes has been excluded from consideration since the onset of the revenue cap regime.

Secondly, in 2002, CN entered into a private haulage agreement with BC Rail for the movement of traffic originating at facilities served by CN in the Dawson Creek area. This agreement effectively saw grain redirected to Vancouver over the railway lines of BC Rail instead. Up until then, this traffic was factored into the calculation of CN's statutory revenues. As in the case of traffic moving to Churchill, however, the Agency

[79] See Canadian Transportation Agency Decision Number 713-R-2003 dated 29 December 2003.

[80] The calculation of prescribed railway's grain revenues under the revenue cap also takes into consideration a number of secondary elements, such as the amounts received for ensuring car supply or premium service. In addition, certain reductions from these revenues are also allowed, and include amortized contributions for the development of grain-related facilities not owned by the railway (Industrial Development Fund contributions), and amounts paid for interswitching. For a complete listing of the elements included in the calculation of statutory grain revenues, please consult Canadian Transportation Agency decisions 114-R-2001, and 664-R-2001.

[81] The Canadian Transportation Agency does not make public any information pertaining to the specific makeup of the reductions applied when calculating the statutory grain revenues of either CN or CP. A fixed annual reduction, such as might be embodied in the annualized contributions made by CN for non-railway-owned grain facilities (i.e., Industrial Development Funds), also implies that the margin will narrow should grain volumes return to a more normalized level.

deemed that BC Rail's handling of this traffic – amounting to about 100,000 tonnes annually – served to remove it from the calculation.

Finally, when the revenue cap was adopted, the Agency outlined the elements that would be factored into the calculation of railway revenues. Among other items, the Agency considered the changes that had been made by CN and CP with respect to the financial penalties they assess for railcars delayed in loading or unloading. Ultimately, the Agency determined that a portion of the penalties assessed under these new demurrage programs should be treated as statutory grain revenues.[82]

CP challenged this decision arguing that the Agency's jurisdiction was limited to determining whether the amounts earned by the company could reasonably be characterized as demurrage, rather, than whether the penalties themselves were "reasonable." Following the Agency's affirmation that a portion of the demurrage charged by the railway would be deemed as statutory revenue, CP appealed the decision to the Federal Court of Appeal.[83]

On 23 June 2003, the Federal Court of Appeal ruled that the Agency was not empowered to determine the reasonableness of the overall amounts earned by CP following the change in its demurrage program. As a result, the Agency's earlier decision was quashed, and the matter remitted to the Agency for a re-determination of CP's statutory revenues for the 2000-01 and 2001-02 crop years. This re-determination resulted in CP's revenues being retroactively reduced by $17,400 and $45,148 respectively, which widened the margin by which they fell below the revenue cap in these crop years by an equal amount.[84]

Since CN did not appeal the original decision, its revenues were not re-determined for either the 2000-01 or 2001-02 crop years. Nevertheless, CN argued that its demurrage charges should be excluded from the calculation of statutory revenues for the 2002-03 crop year. Notwithstanding CN's arguments, the Agency continued to include a portion of CN's demurrage charges as revenue for the 2002-03 crop year as it found that one of the conditions pertaining to the start of the demurrage clock upon constructive placement of railcar for unloading at port resulted in amounts that could not reasonably be characterized as demurrage.

Despite these anomalies, the bulk of the grain moving within Western Canada – more than 95% – remains subject to the provisions of the revenue cap. Moreover, its influence is reflected in the pricing decisions made by the railways – decisions that involve not only changes to the posted tariff rates, but to the incentive discounts accorded for the movement of grain in blocks of 25 or more railcars.

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

Port throughput for the 2002-03 crop year, as measured by the volume of grain shipped from the terminal elevator and bulk loading facilities located at Canada's four western ports, totalled 11.8 million tonnes.[85] This represents a 34.4% decline from the 18.0 million tonnes recorded a year earlier, and is consistent with the general patterns noted elsewhere in the GHTS. [See Table 3D-1 in Appendix 3.]

In addition to the overarching influence of diminished volumes, the single greatest factor affecting throughput in the 2002-03 crop year was the labour dispute that effectively closed the port of Vancouver for a period of several months. As a result, the volume directed through Vancouver dropped by 59.2% – to 4.2 million tonnes from 10.2 million tonnes a year earlier. Despite the virtual doubling of the throughput at Prince Rupert as a result – which climbed to 2.1 million tonnes from 1.1 million tonnes the year before – the overall share of grain moved through these west coats ports fell from 62.8% to 53.3%.

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[82] See Canadian Transportation Agency Decision Number 114-R-2001 dated 16 March 2001.

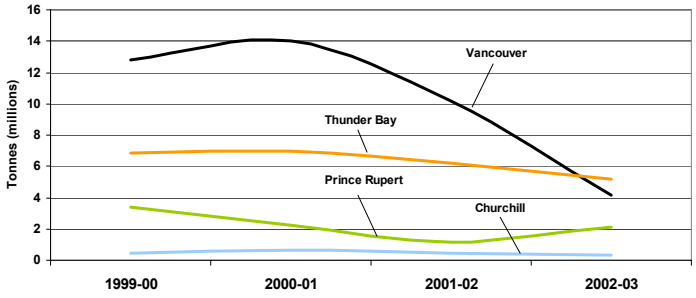
[83] See Canadian Transportation Agency Decision Number 664-R-2001 dated 21 December 2001.

[84] See Canadian Transportation Agency Decision Number 667-R-2003 dated 1 December 2003.

[85] Includes grains, oilseeds and special crops covered by the Canada Grain Act as recorded by the Canadian Grain Commission.

To the east, the shifts in grain volume proved less extreme, but nevertheless produced the lowest throughputs seen under the GMP to date. At Thunder Bay – the dominant eastern gateway – throughput fell by 17.0% to 5.2 million tonnes. Churchill, the port with traditionally the lowest volume, saw its throughput fall by 26.2% to just 0.4 million tonnes.

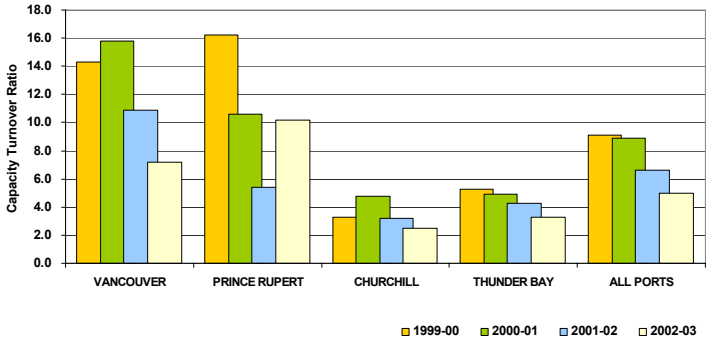
Figure 57: Western Canadian Ports – Grain Throughput



Capacity Turnover

The reduction in throughput is the chief force behind a 24.2% decline in the capacity turnover ratio of the GHTS's terminal elevators – which fell to 5.0 turns from 6.6 turns a year earlier. With the exception of Prince Rupert, where additional volumes served to almost double the turnover, year-over-year declines were noted for each of the ports: Vancouver, down by 33.9%; Thunder Bay, down by 23.3%; and Churchill, down by 21.9%. [See Table 3D-2 in Appendix 3.]

Figure 58: Average Terminal Elevator Capacity Turnover

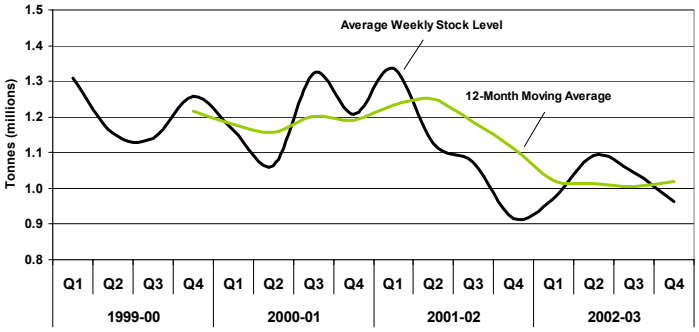


As mentioned previously, the terminal elevator system has seen the addition of three new facilities since the beginning of the GMP. And while this gain is chiefly the result of the actual licensing of three pre-existing facilities, the associated 176,200-tonne increase in storage capacity adversely impacts the capacity turnover ratio itself. In this particular case, the gain in storage capacity effectively reduces the ratio by 6.5% for a given amount of throughput. Indeed, had the licensed storage capacity not been taken into account, the ratio would have been a moderately better 5.3 turns. In a broad sense, this expansion in storage capacity creates the illusion of a decrease in GHTS productivity – albeit only a marginal one – when it has, in fact, remained undiminished.

Terminal Elevator Inventories

In addition to the capacity turnover ratio, the terminal elevator system's reduced throughput is also reflected in the amount of grain held in inventory at these facilities. The average weekly stock level fell to 1.0 million tonnes in the 2002-03 crop year – a reduction of 8.7% from the 1.1-million-tonne average observed the year before.

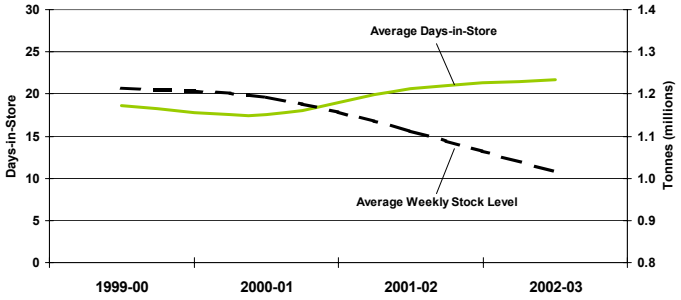
Figure 59: Terminal Elevators – Weekly Stock Level



Wheat stocks, which account for approximately half of the system's overall inventories, remained largely unchanged at about 0.5 million tonnes. The reduction came largely from declines in stocks of durum, barley, oats, and flaxseed. Running counter to the trend was canola, where the average weekly stock level actually increased by 24.0% to just below 0.2 million tonnes – almost one-fifth of the total inventory. [See Table 3D-3 in Appendix 3.]

To a large extent, the decline in terminal throughput was also accompanied by an aging of the grain maintained in inventory. The overall average number of days-in-store for the 2002-03 crop year shows a year-over-year increase of 5.4% – climbing to 21.7 days from 20.6 days the year before. Component averages varied widely by both port and commodity.

Figure 60: Terminal Elevators – Weekly Stock Level and Days-in-Store



The most significant change noted related to oats, where the average number of days-in-store increased by 149.8% – to 61.7 days from 24.7 the year before. Sharp increases were also seen for barley, which jumped 57.3% to an average of 98.6 days, and wheat, which rose 34.6% to an average of 21.4 days. The only grain to post a reduction in the amount of time spent in terminal inventory was durum, which fell by 40.2% to an average of 15.3 days – the lowest observed for any single grain. [See Table 3D-4 in Appendix 3.]

Whether these stocks were sufficient to meet short-term demand can be partially gauged by the average weekly stock-to-shipment ratio. This ratio is calculated for each of the major grains at all four ports using statistics produced by the Canadian Grain Commission. The ratio provides an indication of how terminal stock levels related to the volume of grain shipped by vessels during the course of any particular week. 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.[86] Due to the uneven nature of grain unloading, stock levels, and actual vessel shipments, a great deal of variability is witnessed in any week-over-week comparison of these ratios. [See Table 3D-5 in Appendix 3.]

For Vancouver, the posted averages of all stock-to-shipment ratios came in comfortably above a value of 2.0. The ratio for wheat showed the most substantive rise, increasing by 135.7% to 5.7. The principal decliners were: durum, down 32.9% to 2.3; and barley, down 11.2% to 4.1. At Prince Rupert, the average ratio for wheat fell by a mere 0.7% to 2.1.[87] Churchill saw noticeable decreases in the average ratios for both wheat and durum – which fell by 16.4% to 2.5, and 15.5% to 1.1 respectively. As with Vancouver, the average ratios for stocks held at Thunder Bay were well above a value of 2.0. Increases in the ratios for wheat, barley, canola, and flaxseed were noted, while those for durum and oats each declined.

On the whole, these measures affirm that sufficient terminal stocks were generally maintained in the face of a decline in throughput, and vessel demand. Although grade-based weekly stock-to-shipment ratios show a greater degree of variability, they equally confirm the sufficiency of the stocks maintained on hand at Western Canadian ports in the 2002-03 crop year. [See Table 3D-6 in Appendix 3.]

Port Operations

A total of 520 vessels called for grain at Western Canadian ports during the 2002-03 crop year – 31.9% less than the 764 noted the year before. With an average of 4.3 days, these vessels spent 12.2% less time in port than in the preceding crop year. Moreover, this marked a return to a global average not seen since the beginning of the GMP.

For Vancouver – where one-third of all vessel calls were made – total time spent in port averaged 6.4 days, with 2.5 days spent waiting to load, and 3.9 days loading.[88] This overall average represents a 3.0% reduction

[86] 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.

[87] 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 four crop years covered by the GMP.

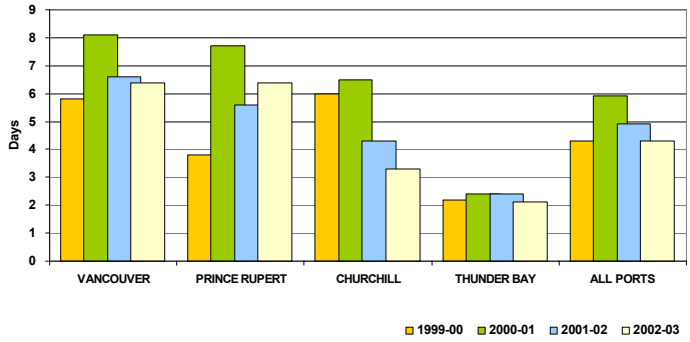
[88] The number of days a vessel spent waiting is determined using the difference between the time the vessel passed inspection by the Port Warden and Canadian Food Inspection Agency and the time at which loading was commenced.

from the 6.6-day average noted a year earlier, and a 21.0% reduction from the 8.1-day average recorded for the 2000-01 crop year. Still, it remains some 10.3% above the 5.8-day average recorded for the first year of the GMP.

With a 2.1-day average, the overall amount of time spent by vessels in Thunder Bay came in 12.5% under the 2.4-day average of the year before. Of this, 0.7 days were spent waiting to load, and 1.4 days actually loading. Worthy of particular mention is the fact that Thunder Bay continues to post the lowest general average of any Western Canadian port.

In comparison, Churchill has shown the best overall improvement. Its average of 3.3 days fell by almost one-quarter from the 4.3-day average of the 2001-02 crop year, and by almost one-half from the 6.5-day average of the 2000-01 crop year.

Figure 61: Average Vessel Time in Port



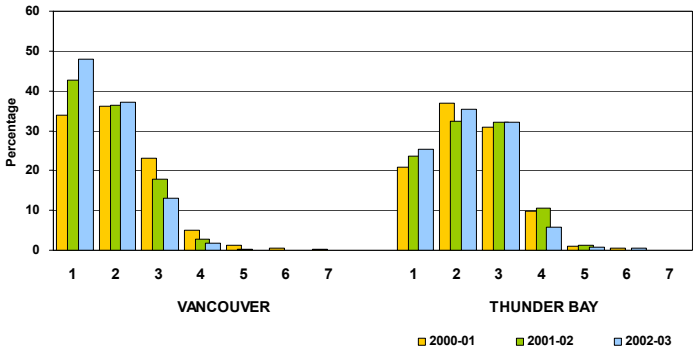
Against this general trend went Prince Rupert, where the redirection of vessels during the initial stages of the labour dispute in Vancouver produced a sharp increase in the amount of time ships spent waiting in port. This can be seen in the first quarter's average of 8.4 days – a full two-and-a-half times the 3.3-day average of the 2001-02 crop year. And while the elimination of this backlog ultimately saw waiting times reduced, its overall impact could not be reversed. As a result, the average amount of time vessels spent in port increased by 13.6% – to 6.4 days from 5.6 days a year earlier.

On the whole, this performance underscores the fact that, with few overall strains having been placed upon the GHTS during the 2002-03 crop year, and sufficient stocks of grain on hand at terminal elevators, vessels were able to avoid delays and improve their turnaround times in port. [See Table 3D-7 in Appendix 3.]

Part of the underlying reason for this improvement is reflected in the statistics pertaining to the distribution of vessel time in port. These show that vessels generally required less time to clear than in either of the previous two crop years. Much of this, however, is driven by the relative performances of Churchill and Thunder Bay, where the proportion of vessels requiring more than five days in port is significantly less than that of either port of the west coast. At Churchill, only one out of the nine vessels (or 11.1%) to call at the port were in port for longer than five days as compared to 20.0% the year before. At Thunder Bay, this proportion is traditionally even lower – only 4.1% in the 2002-03 crop year versus 7.9% a year earlier. [See Table 3D-8 in Appendix 3.]

At Vancouver, the proportion of vessels in port longer than five days increased to 54.9% from 51.8% the previous year. For Prince Rupert, the proportion increased to 40.7% from 37.8%. Much of the climb, however, stemmed directly from the delays occasioned by the redirection of vessels during the labour dispute that effectively closed the port of Vancouver in the first half of the year.

Figure 62: Number of Berths per Vessel



The proportion of vessels requiring multiple berths to load at Vancouver declined from 57.2% during the 2001-02 crop year to 52.0% in the 2002-03 crop year. At Thunder Bay, the proportional decrease was somewhat smaller, and fell from 76.4% to 74.7% during the same period. It should be noted, however,

that the number of berths that each vessel may make prior to the assessment of additional charges is negotiated as part of the charter contract. Larger vessels may have terms permitting them to berth more frequently than smaller ships without incurring any financial penalty. [See Table 3D-9 in Appendix 3.]

Demurrage and Dispatch

Members of the WGEA and the CWB provided total vessel demurrage costs and dispatch earnings for the three crop years under review.[89] Along the Pacific Seaboard, demurrage costs for the 2002-03 crop year fell significantly – from $2.8 million to $0.7 million (or 74.3%). This is consistent with the substantial decreases cited earlier regarding the average number of days spent by vessels in port, and in the actual volume shipped. At the same time, dispatch earnings declined from $4.2 to $1.9 million (or 54.7%). Annual vessel demurrage at Churchill, Thunder Bay, and along the St. Lawrence Seaway, declined by 62.1% – from $151,700 to $57,500. Dispatch earnings in the eastern system declined by 11.2% – from $2.8 million to $2.5 million. [See Table 3D-10 in Appendix 3.]

The reporting of the amount of demurrage paid, and dispatch earned, by vessels is intended to provide an indication of the effectiveness with which grain flows through Western Canadian ports. While a reduction in the volume handled cannot be ignored, the overall decline in both for the 2002-03 crop year indicates that vessels are loading in greater accordance with the lay days provided within their charters. To a large extent, this is reflected in the reduction in the average amount of time these vessels spend in port. It is, however, important to view these statistics in context, and to be cognizant of the varying risk management strategies employed among exporters. The number of lay days is negotiated as part of the vessel charter, and constitutes but one facet in the overall merchandising activities of these exporters.

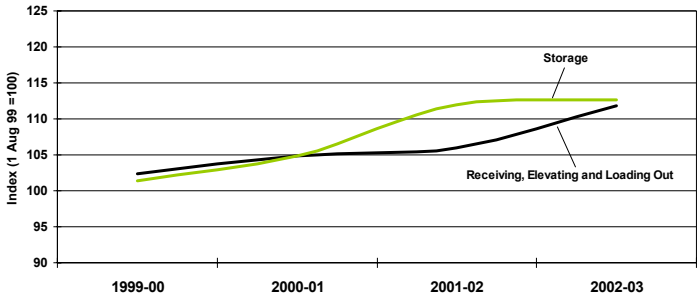
Average Handling Charges

As with the rates published for primary elevator handling activities, those for terminal elevator activities vary widely. Given the myriad of individual tariff rates, any discussion of general price movement is also best focused using a composite index.[90] As with those tied to the primary elevator system, the rates for the receiving, elevating and loading out of grain are the most costly – ranging from a low of about $7.50 per tonne (for wheat) to a high of about $12.25 (for flaxseed) as at 31 July 2003. These are supplemented by daily storage charges typically amounting to between $0.05 and $0.10 per tonne, per day.

With respect to the average posted rates for the receiving, elevating and loading out of grain, most terminals reported moderate increases. The composite price index for these services shows an overall increase of 5.5% in the 2002-03 crop year, and 11.8% since the beginning of the GMP.

At Vancouver, these increases ranged from 1.7% to 5.9%. At Prince Rupert, the posted tariff rates for these services remained unchanged from the preceding crop year. Thunder Bay posted increases that ranged from 2.1% to 6.2% for most commodities – the exception being rye, which posted a year-over-year increase of 12.7%. [See Table 3D-11 in Appendix 3.]

Figure 63: Relative Change in Terminal Handling Charges



The most substantive increases, however, were reserved for Churchill, where the majority of its rates increased by between 10.3% and 20.3% – the sole deviation being flaxseed, which increased by a comparatively lesser

[89] Notice 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 the respective organizations.

[90] 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.

3.2%. It must be noted, however, that the increases witnessed at Churchill appeared aimed at achieving greater parity with the comparatively higher per-tonne rates that had been posted by other terminal elevator companies since the beginning of the GMP.

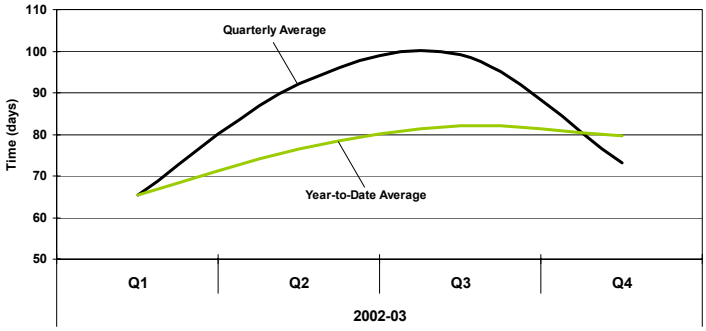
Of no less importance, is the 12.7% increase in terminal storage charges observed since the beginning of the GMP. Yet, for the 2002-03 crop year, these charges remained largely unchanged. This is reflected in a gain of only 0.6% in the composite price index, which came about chiefly because of an escalation in the storage rates for terminal elevators in Vancouver (which ranged from a low of 1.1% to a high of 2.9%).[91]

3.5 Summary Observations

As outlined in earlier editions of the Monitor's quarterly and annual reports, the supply chain model provides a valuable framework in which to examine the workings of the GHTS as a whole. The Monitor's Annual Report for the 2001-02 crop year concluded that the amount of time being taken by grain in its movement through the supply chain averaged 67.4 days. Although marginally higher than the 64.6 days recorded for the 2000-01 crop year, it was still some 2.9% better than the 69.4-day average observed during the first year of the GMP.

Given the first quarter's overall average of 65.4 days, all of the indicators used to gauge the amount of time taken by grain in moving through the GHTS initially pointed towards a modest improvement in this record for the 2002-03 crop year. Yet the second quarter saw this trend sharply reversed. With the quarterly average having increased from 65.4 days to 92.1 days in the second quarter, the year-to-date average moved to a markedly higher 76.4 days. This continued through the third quarter, where the average of 99.1 days pushed the year-to-date average to 82.1 days.[92] It was not until the last quarter that the three-month average actually fell back – to 73.2 days.

Figure 64: Average Days Spent by Grain in GHTS



Moreover, the annualized average of 79.7 days reveals that grain moved through the GHTS at a distinctly slower pace than at any other point in the preceding three crop years. This 12.3-day (or 18.2%) increase over the 2001-02 average stems chiefly from a substantial rise in the amount of time spent by grain in storage in the primary elevator system – which climbed to an average of 47.9 days from 38.0 days a year earlier. Indeed, the quarterly average reached a record height of 59.9 days in the third quarter.

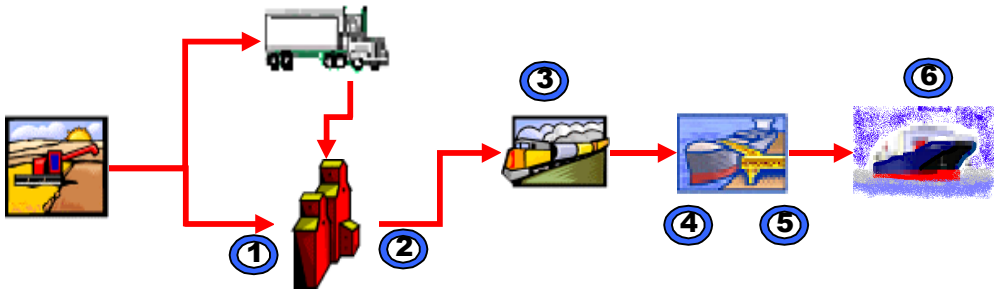
This was aggravated by a 1.3-day (or 15.1%) increase in the railways' average loaded transit time – which rose to an average of 10.1 days from the preceding crop year's 8.8-day average. In equal measure, the amount of time grain spent in inventory at terminal elevators also increased – the average climbing by 1.1 days (or 5.4%) to 21.7 days versus 20.6 days a year earlier.

This deterioration in the effectiveness of the supply chain was undoubtedly aggravated by a second consecutive year of sharp declines in the grain volumes handled by the country elevator, railway, and terminal elevator systems. Moreover, it remains exceedingly difficult to distinguish between changes in efficiency

[91] 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.

[92] The values cited are quoted from the Monitor's reports for the first, second, and third quarters of the 2002-03 crop year.

Figure 65: The GHTS Supply Chain



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

brought on by these depressed volumes, and those that might have been prompted by governmental reform or other factors. Nevertheless, some specific elements should be highlighted respecting the supply chain's performance during the crop year.

Firstly, much of the deterioration in performance appears directly attributable to a sharp reduction in the sales programs for both CWB and non-CWB grains. Without a higher level of sales activity, country elevator inventories naturally grew – and aged – as producers continued to deliver their grain to local elevators. This build-up in inventory is perhaps best reflected by the reduction in the amount of available primary elevator space during the first quarter – which fell to about 25% of working capacity – and remained at about this level throughout much of the ensuing second and third quarters.

Secondly, much of the comparative increase in the amount of time grain spent in storage at terminal elevators has been distorted by the disruption of terminal operations in Vancouver during the first half of the 2002-03 crop year. With the port largely closed down because of the lockout of the Grain Workers Union, westbound grain was redirected through Prince Rupert. Given the pent-up demand that was brought to bear on Prince Rupert initially, grain spent relatively little time in actual storage there – an average of 7.4 days in the first quarter.[93] Although this helped drive down the overall GHTS average in the first quarter, the clearing of this sales backlog soon gave way to normalized operations, including a rise in grain inventories, and in the average amount of time they spent in storage. Moreover, when service through the port of Vancouver was restored, stocks that had been aging in the port's terminal elevators since the onset of the dispute were suddenly made

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

available for shipment. The inclusion of these older stocks had a correspondingly negative impact on GHTS averages for the crop year.[94]

Thirdly, reduced volumes, and the generally greater distance involved in moving grain to Prince Rupert, were the chief factors underscoring a rise in the railways' loaded transit time – which increased from an average of 8.8 days in the 2001-02 crop year, to 10.1 days in the 2002-03 crop year.[95] In addition, the rerouting of CP-originated grain to Prince Rupert compelled CP to interchange a significant portion of its westbound traffic to CN at Edmonton. This too contributed to an observed increase in the average loaded transit time.

Finally, the redirection of vessels to Prince Rupert for loading produced a backlog – particularly during the initial stages of the labour dispute – that resulted in a sharp increase in the amount of time these ships spent waiting in port. The average amount of time spent by vessels in Prince Rupert jumped to 10.0 days during the first quarter of the 2002-03 crop year – an increase of 78.6% over the 5.6-day average recorded for the preceding crop year as a whole. The elimination of this backlog saw waiting times reduced significantly in the second quarter, and helped draw down the GHTS average for time in port to a record low 3.9 days. Yet the full resumption of service to Vancouver also brought about a lengthening of average loading times at both Prince Rupert and Vancouver. As a result the GHTS average for time in port climbed to 5.1 days in the third quarter, and to 4.3 days for the crop year as a whole.

The decline in the overall grain volume effectively meant that the GHTS saw a significant proportion of its handling capacity rendered idle. This is perhaps best reflected by the fact that the lockout of the Grain Workers Union in Vancouver sidelined 34.9% of the GHTS's terminal capacity for much of the first half. Yet, west coast volumes continued to move largely unimpeded through Prince Rupert. In fact, the overall reduction in volume actually helped avoid terminal congestion, and expedite the turnaround of vessels at Western Canadian ports.

Even so, the continued decline in the capacity turnover ratios associated with both the country and terminal elevator networks – which fell by 18.1% and 24.2% respectively – underscores the fact that more capacity existed within the system than was needed. Indeed, had GHTS capacity – and specifically that portion attributable to the country elevator network – not been shrinking over the course of the past several years, that decline would have proven even deeper. And while this reduction in capacity draws attention to the fact that handling productivity has been increased by an estimated 29.7% over the past four crop years, it only raises questions about the level of capacity needed. To be sure, the system's ability to handle normalized grain volumes remains untested.

In equal measure, the further elongation of the railways' average car cycle from 17.1 days to 20.4 days is also reflective of the reduced demands that were placed on the hopper car fleet, and the inherent handling capacity that was rendered idle as a result. More importantly, the railways have reduced their locomotives and crews in the face of this lesser demand. The industry's capacity to readapt to normalized grain volumes, and to improve upon past car cycle performance, will ultimately be contingent on their ability to secure a sufficient number of these resources.

And while these larger issues concerning the GHTS's ability to respond to an upturn in grain volumes remain unanswered, the posted rates for many of its component services have been rising. The nominal input costs tied to country elevator handling, rail transportation, terminal elevator handling, and even use of the St. Lawrence Seaway, have all increased since the beginning of the GMP. In and of themselves, much of this would appear to be in keeping with inflationary pressures, and an attempt to pass rising costs onto their respective customers. Yet some of these increases are significant, and figure more prominently in the increasing overall cost of delivering grain to export positions. These costs are discussed in greater detail in Section 5 – Producer Impact.

[94] To avoid distortions, grain stocks held in storage at licensed Vancouver terminal elevators were excluded from the calculation of average days in store for the duration of the labour dispute. Their inclusion afterwards resulted in the overall average for Vancouver increasing to 28.1 days in the third quarter, and to 24.8 days on a year-to-date basis – well above its traditional 15 day average. A similar impact was also had on the quarterly, and year-to-date, averages for the GHTS as a whole.

[95] The comparative distances to Prince Rupert and Vancouver from a common westerly point on the CN network such as Edmonton, Alberta, are approximately 955 route-miles and 760 route-miles respectively. Given the wider catchment area traditionally associated with Vancouver, this implies that much of the traffic redirected to Prince Rupert was subject to a time-distance penalty of at least 195 route-miles.

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 – 2002-03 Crop Year

Port Performance

- *Reduced volume did not hinder overall reliability of the GHTS in delivering grain to Western Canadian ports.*
  - *Impacted by extraordinary events – labour dispute at Vancouver.*
  - *Redirection of traffic trough Prince Rupert mitigated potential damage.*
- *Reliability reflected in:*
  - *Reduced average time spent by vessels in port.*
  - *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.*
- *Lower grain shipments at Western Canadian terminal elevators generally resulted in significant increases to the average weekly stock-to-vessel requirements ratio.*
  - *Vancouver*
    - *Wheat – 4.9; up 109.5% from last crop year.*
    - *Canola – 2.9; down 11.1%.*
  - *Thunder Bay*
    - *Wheat – 6.8; up by 59.2% from last crop year.*
    - *Canola – 4.3; up 64.7%.*
- *Stock-to-shipment ratios reinforce findings relating to reduced throughput.*
  - *Vancouver*
    - *CWB grains – 4.3; up by 38.4% from last crop year.*
    - *Non-CWB grains – 4.3; up 5.1%.*
  - *Thunder Bay*
    - *CWB grains – 6.6; up by 20.1% from last crop year.*
    - *Non-CWB grains – 5.0; up 75.8%.*
- *Terminal handling revenues declined as a result of reduced grain volume.*
  - *Vancouver revenues totalled $49.7 million.*
    - *Down by 64.4% from last crop year.*
  - *Thunder Bay revenues totalled $58.6 million.*
    - *Down by 8.7% from last crop year.*
- *CWB carrying costs declined as a result of reduced grain volume.*
  - *Pacific Seaboard carrying costs totalled $22.4 million.*
    - *Down by 54.4% from last crop year.*
  - *Thunder Bay carrying costs totalled $30.1 million.*
    - *Down by 12.4% from last crop year.*

Indicator Series 4 – Service Reliability

Table	Indicator Description	Notes	BASE 1999-00	CURRRENT REPORTING PERIOD (1) 2001-02	2002-03	% VAR	
	Port Performance [Subseries 4A]						
4A-1	Avg. Weekly Stock-to-Vessel Requirements Ratio – VCR – Wheat		3.1	2.3	4.9	109.5%	▲
4A-1	Avg. Weekly Stock-to-Vessel Requirements Ratio – VCR – Canola		2.5	3.3	2.9	-11.1%	▼
4A-1	Avg. Weekly Stock-to-Vessel Requirements Ratio – TBY – Wheat		5.6	4.3	6.8	59.2%	▲
4A-1	Avg. Weekly Stock-to-Vessel Requirements Ratio – TBY – Canola		2.8	2.6	4.3	64.7%	▲
4A-2	Avg. Weekly Stock-to-Vessel Requirements Ratio – Grade	(2)					
4A-3	Avg. Weekly Stock-to-Shipment Ratio – VCR – CWB Grains		3.5	3.1	4.3	38.4%	▲
4A-3	Avg. Weekly Stock-to-Shipment Ratio – VCR – Non-CWB Grains		3.6	4.1	4.3	5.1%	▲
4A-3	Avg. Weekly Stock-to-Shipment Ratio – TBY – CWB Grains		4.6	5.5	6.6	20.1%	▲
4A-3	Avg. Weekly Stock-to-Shipment Ratio – TBY – Non-CWB Grains		3.3	2.9	5.0	75.8%	▲
4A-4	Terminal Handling Revenue ($millions) – Vancouver		$192.7	$139.7	$49.7	-64.4%	▼
4A-4	Terminal Handling Revenue ($millions) – Thunder Bay		$82.1	$64.2	$58.6	-8.7%	▼
4A-4	CWB Carrying Costs ($millions) – Pacific Seaboard		$63.3	$49.1	$22.4	-54.4%	▼
4A-4	CWB Carrying Costs ($millions) – Thunder Bay		$31.3	$34.4	$30.1	-12.4%	▼

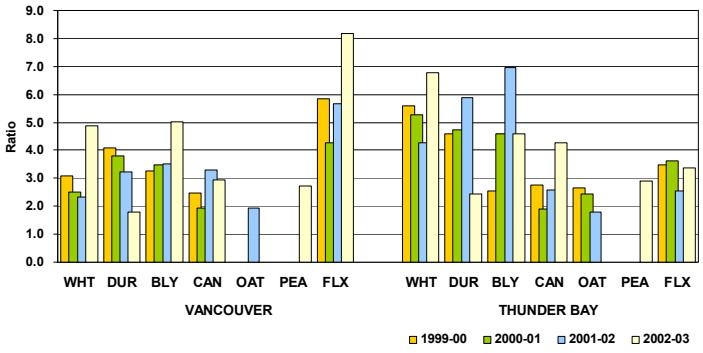
(1) – In order to provide for more direct comparisons, the values for the 1999-2000 through 2002-03 crop years are "as at" or cumulative to 31 July unless otherwise indicated.
(2) – Changes in the data cited cannot be depicted within the summary framework presented here. The reader is encouraged to consult the detailed data tables found in Appendix 3 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 actual 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 to load the vessels arriving in the next week.[96] Nevertheless, these ratios typically display great variability. This is due primarily to the uneven nature of grain flowing into, and through, the ports.

With some notable exceptions, the average weekly stock-to-vessel requirements ratios for the port of Vancouver in the 2002-03 crop year showed sharp increases over those posted a year earlier. The ratio posted for wheat showed the largest single gain – 109.5% – and climbed to 4.9 from 2.3 in the 2001-02 crop year. This was joined by a 44.8% increase in the average ratio for flaxseed – which climbed to 8.2 from 5.7 – and a 42.4% increase in that for barley. The only noteworthy decline was posted by durum, where the average ratio fell by 43.8% to 1.8 from 3.2 a year earlier. With the exception of this latter commodity, none of the ratios fell below a value of 2.0.

Figure 66: Stock-to-Vessel Requirements Ratio



At Thunder Bay, gainers just nudged out decliners. The average ratio for canola rose to 4.3 from 2.6 (or 64.7%), while those for wheat and flaxseed increased by 59.2% and 33.4% respectively. Conversely, durum and barley posted declines of 58.4% and 33.9% respectively. Here too, none of the average ratios fell below a value of 2.0. [See Table 4A-1 in Appendix 3.]

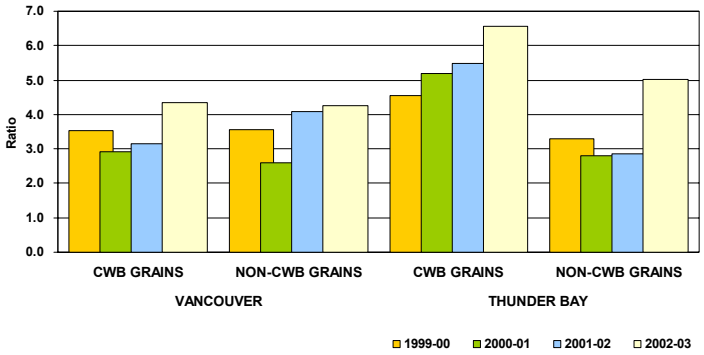
[96] Ratio values of one or more denote sufficient volume on hand to meet short-term demand. Upward or downward movements in this ratio are indicative of a relative change in short-term inventory levels.

Average weekly stock-to-vessel requirement ratios by grade were calculated using the same methodology as outlined above. The variability in these weekly ratios is even more extreme, and largely distorted by blending, as is necessary for the annual shipment of two to three million tonnes of "Western Canada Wheat." [See Table 4A-2 in Appendix 3.]

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 a manner similar to that of stock-to-vessel requirement ratios.

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 stock-to-shipment ratios for non-CWB grains include those for canola, oats and flaxseed.

Figure 67: Stock-to-Shipment Ratio



The average stock-to-shipment ratio for CWB grains at Vancouver increased by 38.4% during the 2002-03 crop year – to 4.3 from 3.1. The average ratio for non-CWB grains increased by 5.1% – to 4.3 from 4.1. At Thunder Bay, the average ratio for CWB grains rose to 6.6 from 5.5 (or 20.1%), while the average for non-CWB grains rose to 5.0 from 2.9 (or 75.8%). [See Table 4A-3 in Appendix 3.]

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 3.]

Total reported terminal revenues for the 2002-03 crop year declined significantly at Vancouver – falling from $139.7 to $49.7 million (or 64.4%). At Thunder Bay, total reported terminal revenues fell less sharply – from $64.2 to $58.6 million (or 8.7%). These declines are directly related to, and consistent with, the overall fall in throughput previously mentioned at these ports.

Total CWB carrying costs along the Pacific Seaboard fell by 54.4% in the 2002-03 crop year – to $22.4 million from $49.1 million the year before. At Thunder Bay, carrying costs fell by 12.4% – to $30.1 million from $34.4 million a year earlier. Again, these declines were chiefly the result of reduced throughput.

4.2 Summary Observations

The decline in overall grain volume effectively eased the pressure brought to bear on the GHTS as a whole, and idled a significant proportion of its terminal handling capacity. In large measure, this is reflected in a rise in the amount of time spent by grain in inventory at terminal elevators, and in a decline in the average amount of time spent by vessels in port. At the same time, a protracted labour dispute in Vancouver also impacted west coast operations during the first half of the 2002-03 crop year.

The stock-to-vessel requirement, and stock-to-shipment, ratios discussed above merely confirm that sufficient grain was made available at the terminals to meet prevailing demand. The degree of coverage afforded by these stocks increased markedly. To the extent that the reliability of any supply chain can be gauged by its ability to actually deliver product at the time and place specified, it would appear that the reliability of the GHTS was adequate for the task demanded. This came despite the impact of a prolonged labour dispute in Vancouver.

Balancing the need for both efficiency and reliability within the GHTS is one that continually challenges all within the stakeholder community. For those concerned with the operation of terminal elevators, these challenges often involve trade-offs between system efficiency and reliability. In a sense, any "just-in-time" approach to inventory management strives to reduce the time and cost associated with any product moving through the logistics chain to an absolute minimum without detracting from the chain's overall reliability. In the context of the GHTS, stock-to-vessel requirement, and stock-to-shipment, ratios with values of about 1.0 might be considered as an optimal target under such an approach.[97]

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

[97] Ratio values of 1.0 would indicate that one tonne of grain was being held in inventory for each tonne of grain needed to load the vessels arriving in the next week (stock-to-vessel requirement ratio) or for each tonne actually loaded onto vessels in the course of the week just ended (stock-to-shipment ratio). Such values would indicate that just enough grain was being maintained in inventory to meet immediate 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 – 2002-03 Crop Year

Producer Netback and Sampling Methodology

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

Export Basis and Producer Netback – CWB Grains

- *Producer netback:*
  - *Wheat – increased 11.6% to $212.82 per tonne.*
  - *Durum – decreased 6.4% to $235.10 per tonne.*
- *Weighted average price:*
  - *Wheat – increased 10.2% to $264.45 per tonne from last crop year.*
    - *Marks the highest price in five years.*
    - *A net gain of $68.17 per tonne since the 1999-2000 crop year.*
  - *Durum – decreased 4.6% to $283.02 per tonne from last crop year.*
    - *A net gain of $61.38 per tonne since the 1999-2000 crop year.*
- *Average export basis:*
  - *Wheat – increased 11.2% to $79.81 per tonne.*
    - *$13.99 per tonne higher than in the 1999-2000 crop year.*
  - *Durum – decreased 3.5% to $78.24 per tonne.*
    - *$13.45 per tonne higher than in the 1999-2000 crop year.*
- *Average direct costs:*
  - *Weighted applicable freight costs increased 7.5% for wheat, and 4.8% for durum.*
    - *Primary upward pressure stems from increased railway freight rates.*
    - *Secondary pressure from increases in the Freight Adjustment Factor.*
    - *Weighted Churchill Freight Advantage Rebate increases by 8.9%.*
  - *Trucking costs reduced by 2.6% owing to the removal of fuel surcharges.*
  - *Primary elevation costs increased by 2.9% for wheat, and 3.2% for durum.*
  - *CWB costs increased by 23.7% for wheat, and declined by 12.8% for durum.*
- *Total producer benefits:*
  - *Average trucking premiums.*
    - *Wheat – increased by 9.4% from $3.62 per tonne to $3.96.*
    - *Durum – decrease by 9.7% from $4.13 per tonne to $3.73.*
  - *Transportation savings passed through CWB tendering program increased by 9.3% to $2.70 per tonne in the 2002-03 crop year.*

Export Basis and Producer Netback – Non-CWB Commodities

- *Average prices for non-CWB commodities increased sharply.*
  - *Canola – increased 16.5% from $355.67 per tonne to $414.36.*
  - *Peas – increased 16.2% from $279.85 per tonne to $325.14.*
- *Average Western Canada export basis for non-CWB commodities:*
  - *Canola – increased 16.6% from $42.01 per tonne to $48.97.*
  - *Yellow Peas – increased 17.2% from $70.97 per tonne to $83.19.*

Producer Car Loading

- *Number of producer-loading sites increases 1.0% to 518.*
  - *Those tied to shortline railways increase 7.9% to 137.*
- *Producer-cars shipments decreased 51.3% to 3,200.*
  - *Decline mirrors that of volumes originated by shortline railways.*

Indicator Series 5 – Producer Impact

Table	Indicator Description	Notes	BASE 1999-00	CURRRENT REPORTING PERIOD (1) 2001-02	2002-03	% VAR	
	Export Basis [Subseries 5A]						
	Manitoba East						
5A-1A	CWRS Wheat ($ per tonne)	(2)	$65.44	$68.75	$77.42	12.6%	▲
5A-1B	CWA Durum ($ per tonne)	(2)	$57.45	$74.62	$71.53	-4.1%	▼
5A-1C	Canada Canola ($ per tonne)	(2)	$61.58	$52.37	$58.40	11.5%	▲
5A-1D	Canadian Large Yellow Peas – No. 2 or Better ($ per tonne)	(2)	$54.93	$71.61	$82.71	15.5%	▲
	Manitoba West						
5A-2A	CWRS Wheat ($ per tonne)	(2)	$69.04	$75.67	$82.84	9.5%	▲
5A-2B	CWA Durum ($ per tonne)	(2)	$62.53	$79.04	$74.72	-5.5%	▼
5A-2C	Canada Canola ($ per tonne)	(2)	$58.67	$52.42	$58.66	11.9%	▲
5A-2D	Canadian Large Yellow Peas – No. 2 or Better ($ per tonne)	(2)	$54.93	$71.61	$82.71	15.5%	▲
	Saskatchewan Northeast						
5A-3A	CWRS Wheat ($ per tonne)	(2)	$69.34	$73.33	$80.65	10.0%	▲
5A-3B	CWA Durum ($ per tonne)	(2)	$65.47	$84.10	$80.48	-4.3%	▼
5A-3C	Canada Canola ($ per tonne)	(2)	$54.38	$47.60	$52.99	11.3%	▲
5A-3D	Canadian Large Yellow Peas – No. 2 or Better ($ per tonne)	(2)	$54.93	$70.96	$83.33	17.4%	▲
	Saskatchewan Northwest						
5A-4A	CWRS Wheat ($ per tonne)	(2)	$67.66	$72.58	$79.92	10.1%	▲
5A-4B	CWA Durum ($ per tonne)	(2)	$67.69	$84.31	$80.34	-4.7%	▼
5A-4C	Canada Canola ($ per tonne)	(2)	$50.88	$39.88	$49.72	24.7%	▲
5A-4D	Canadian Large Yellow Peas – No. 2 or Better ($ per tonne)	(2)	$54.84	$71.43	$82.87	16.0%	▲
	Saskatchewan Southeast						
5A-5A	CWRS Wheat ($ per tonne)	(2)	$70.64	$77.56	$84.33	8.7%	▲
5A-5B	CWA Durum ($ per tonne)	(2)	$62.38	$79.97	$76.33	-4.6%	▼
5A-5C	Canada Canola ($ per tonne)	(2)	$57.47	$46.97	$52.82	12.4%	▲
5A-5D	Canadian Large Yellow Peas – No. 2 or Better ($ per tonne)	(2)	$54.72	$71.60	$83.31	16.4%	▲
	Saskatchewan Southwest						
5A-6A	CWRS Wheat ($ per tonne)	(2)	$68.46	$72.84	$80.18	10.1%	▲
5A-6B	CWA Durum ($ per tonne)	(2)	$65.28	$82.15	$79.71	-3.0%	▼
5A-6C	Canada Canola ($ per tonne)	(2)	$55.75	$43.71	$50.67	15.9%	▲
5A-6D	Canadian Large Yellow Peas – No. 2 or Better ($ per tonne)	(2)	$54.66	$70.67	$83.17	17.7%	▲
	Alberta North						
5A-7A	CWRS Wheat ($ per tonne)	(2)	$64.44	$69.94	$74.99	7.2%	▲
5A-7B	CWA Durum ($ per tonne)	(2)	$68.83	$85.66	$81.69	-4.6%	▼
5A-7C	Canada Canola ($ per tonne)	(2)	$50.39	$40.76	$40.88	0.3%	▲
5A-7D	Canadian Large Yellow Peas – No. 2 or Better ($ per tonne)	(2)	$54.29	$70.04	$82.71	18.1%	▲
	Alberta South						
5A-8A	CWRS Wheat ($ per tonne)	(2)	$60.05	$65.58	$70.42	7.4%	▲
5A-8B	CWA Durum ($ per tonne)	(2)	$63.22	$77.80	$75.31	-3.2%	▼
5A-8C	Canada Canola ($ per tonne)	(2)	$48.07	$35.53	$41.12	15.7%	▲
5A-8D	Canadian Large Yellow Peas – No. 2 or Better ($ per tonne)	(2)	$54.93	$69.60	$82.71	18.8%	▲
	Peace River						
5A-9A	CWRS Wheat ($ per tonne)	(2)	$64.81	$71.10	$79.47	11.8%	▲
5A-9B	CWA Durum ($ per tonne)	(2)	$68.16	$87.32	$82.21	-5.9%	▼
5A-9C	Canada Canola ($ per tonne)	(2)	$52.14	$41.08	$42.87	4.4%	▲
5A-9D	Canadian Large Yellow Peas – No. 2 or Better ($ per tonne)	(2)	$54.93	$71.61	$82.63	15.4%	▲
	Western Canada						
5A-10A	CWRS Wheat ($ per tonne)	(2)	$65.82	$71.74	$79.81	11.2%	▲
5A-10B	CWA Durum ($ per tonne)	(2)	$64.79	$81.10	$78.24	-3.5%	▼
5A-10C	Canada Canola ($ per tonne)	(2)	$52.51	$42.01	$48.97	16.6%	▲
5A-10D	Canadian Large Yellow Peas – No. 2 or Better ($ per tonne)	(2)	$54.76	$70.97	$83.19	17.2%	▲
	Producer Loading [Subseries 5B]						
5B-1	Producer Loading Sites (number) – Class 1 Carriers		415	386	381	-1.3%	▼
5B-1	Producer Loading Sites (number) – Class 2 and 3 Carriers		120	127	137	7.9%	▲
5B-1	Producer Loading Sites (number) – All Carriers		535	513	518	1.0%	▲
5B-2	Producer Car Shipments (number) – Covered Hopper Cars		3,441	6,583	3,209	-51.3%	▼

(1) – In order to provide for more direct comparisons, the values for the 1999-2000 through 2002-03 crop years are "as at" or cumulative to 31 July unless otherwise indicated.

(2) – The export basis includes the following elements where applicable: freight (adjusted by the FAF and CFAR); trucking; elevation; dockage; weighing and inspection; CWB costs; trucking premiums; and CWB transportation savings.

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.[98] By definition, both the export basis and the producer netback are location-specific calculations, and include charges for elevation, elevator cleaning and storage, and transportation (be it road, rail or marine). These charges also take into consideration any incentives or discounts that may be applicable.

With hundreds of grain delivery points scattered across the prairies, and four principal export gateways, the number of distinct origin-destination pairs that can be employed to move Western Canada grain easily exceeds 1,000.[99] 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.[100] In addition, a Weighted Scale Model was then used to select 43 separate grain stations as a representative sample in the calculation of the export basis and producer netback. These grain stations were then grouped into nine geographically based areas, comprising between four and six grain stations each, namely: [101]

- 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 68. Within a larger context, these 43 grain stations encompass:

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

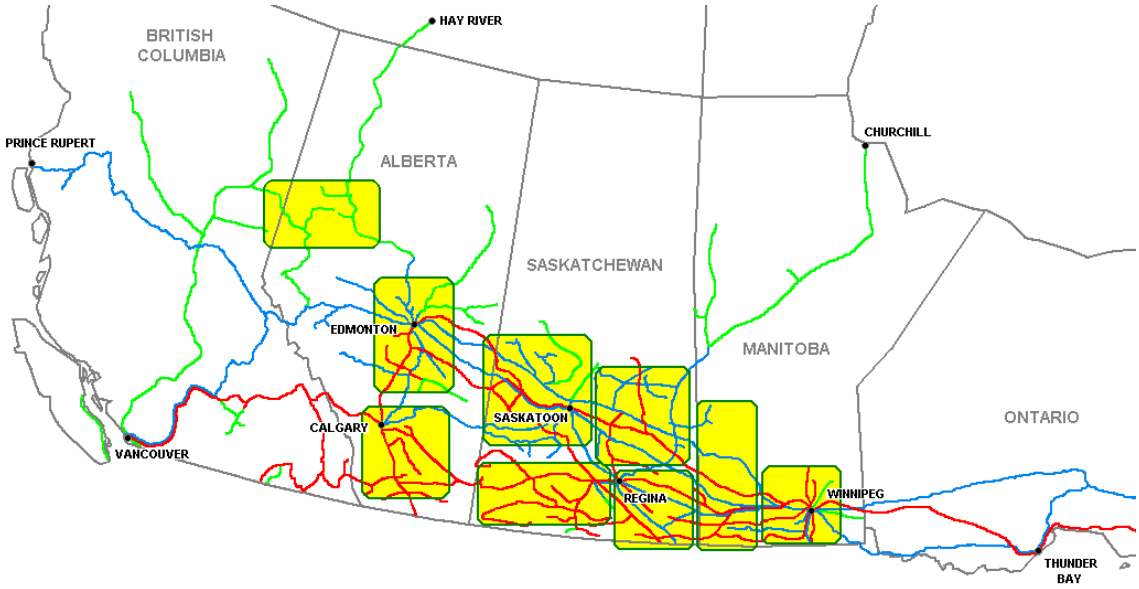
[98] In its basic form, producer netback equates to the residual left after subtracting the logistics cost from a grain's sale price.

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

[100] 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).

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

Figure 68: 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.[102]

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.

[102] 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 Weighted Average Price for both wheat and durum represents the per-tonne average of revenues and other income as reported by the CWB in its Annual Report. Since these revenues exclude CWB operating costs, and the Export Basis includes a separate provision for these costs, CWB Costs (net) are added back to produce Adjusted Weighted Average 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 as reported in the CWB's Annual Report, plus the apportioned value of its overall transportation savings.[7]	
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.

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

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

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

Beginning with the 2002-03 crop year, the CWB made a series of changes to the manner by which it had previously treated certain operating revenue and expense items. These changes stem from recommendations advanced by the federal Auditor General, and were undertaken in an effort to make its operating statements more transparent, relevant, and understandable.[103]

Of particular importance to the GMP is the fact that the CWB's direct costs now include provisions for ocean and rail freight that had previously been treated as revenues. Since ocean freight is now treated as a cost to the CWB, comparisons with either the in-store Vancouver or St. Lawrence price are no longer appropriate. Accordingly, the Monitor's calculation of the producer netback for both wheat and durum can no longer incorporate these prices. Rather, it must now be based on the total revenues reported for wheat and durum in the CWB's pool accounts. As a result, a weighted average price for both wheat and durum has replaced the CWB Final Prices for 1CWRS wheat and 1CWA durum that had been used before.[104]

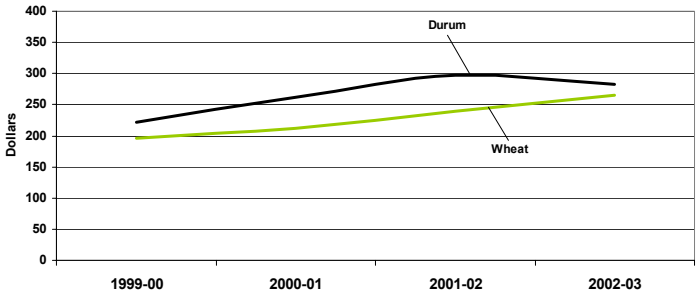
In order to be consistent with the CWB's new treatment practices, the Monitor has restated the values previously calculated for both the export basis and the producer netback in the first three years of the GMP. It is worth noting that this restatement results in CWB costs now assuming a much larger proportion of the direct costs found within the export basis. The gain is most dramatic in the case of wheat, but is no less significant with respect to durum. [See Tables 5A-1 through 5A-10 in Appendix 3.]

Weighted Average Grain Prices

The weighted average price of wheat from the CWB's pool account rose from $196.28 per tonne in the 1999-2000 crop year, to $212.69 in the 2000-01 crop year. Shrinking global wheat stocks, and the prospect of tighter supplies in the United States, were the chief forces underlying the first rebounding of wheat prices since the 1995-96 crop year. The 2001-02 crop year saw the weighted average price climb a further 12.9% to $240.03 per tonne. The price rose primarily as a result of the drought conditions that plagued Canada as well as other producing countries. In the 2002-03 crop year, an additional gain of 10.2% pushed the weighted average to $264.45 per tonne – the highest in five years, and the second highest on record.[105] Further gains were tempered by the late harvest of a drought-reduced crop; stiffer international competition from countries such as Russia, Ukraine and Kazakhstan; as well as an appreciation in the value of the Canadian dollar.

Similarly, durum prices also improved following several years of decline. Despite increased production in Canada, the United States, and European Union countries in 2000, the weighted average price for durum rose from $221.64 per tonne in the 1999-2000 crop year, to $262.13 in the 2000-01 crop year. This initial rise was prompted by limited supplies of high-grade milling durum, and was furthered in the 2001-02 crop year by a poor growing season that severely reduced North American production, and pushed the average price to $296.76 per tonne. In the 2002-03 crop year, this trend was reversed when the weighted average price slipped by 4.6% to

Figure 69: Weighted Average Grain Prices (dollars per tonne)



[103] These recommendations were made by the Auditor General in "Canadian Wheat Board – Special Audit Report," and were presented to the CWB's Board of Directors on 27 February 2002.

[104] It is important to note that the use of a weighted average price makes it impossible to focus on a particular grade of wheat and durum in determining the producer's netback.

[105] The 2002-03 wheat pool actually incurred a deficit of $85.4 million. Earnings from sales were actually $9.86 per tonne less than what was distributed to producers.

$283.02 per tonne. The relative decline in durum quality was the principal force underscoring a lowering of the per-tonne average.

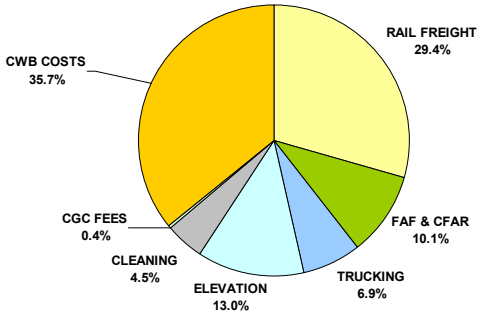
The Export Basis – Wheat

The export basis associated with wheat increased steadily over the course of the past four crop years. From a base of $65.82 per tonne in the 1999-2000 crop year, the export basis rose to $69.01 in the 2000-01 crop year, to $71.74 in the 2001-02 crop year, and to $79.81 in the 2002-03 crop year. This represents a net increase of $13.99 per tonne (or 21.3%).

The export basis has two structural components. The first relates to the direct costs incurred by producers in delivering grain to market. These costs include freight, trucking, elevation, dockage, CGC weighing and inspection, as well as the applicable operating costs of the CWB (gross CWB costs). The second component encompasses all of the financial benefits accruing to producers through the receipt of any offset to these expenses; typically trucking premiums and CWB transportation savings.[106] The increase in this latter component has helped to partially contain the rise in direct costs, which rose from an average of $68.14 per tonne in the 1999-2000 crop year, to $86.47 per tonne in the 2002-03 crop year – a net increase of 26.9%.

The largest single component in the direct costs for CWB grains is the applicable freight. This incorporates not only the direct charges for single-car railway movements, but also the CWB's Freight Adjustment Factor (FAF) – if applicable. Together, these elements define the freight charges associated with moving grain to either an east, or west, coast port. The average weighted applicable freight for wheat in Western Canada amounted to $31.87 per tonne in the 1999-2000 crop year, and represented 46.8% of the direct costs. Although the per-tonne average had climbed to $34.73 by the end of the 2002-03 crop year, its proportion of total direct costs declined to 40.2%.

Figure 70: Wheat Export Basis – Direct Costs



The decline in the proportion of total direct costs attributable to applicable freight stems from a significant rise in gross CWB costs – the second largest cost component. These costs effectively reflect the per-tonne freight, handling, storage, administration and other related operating costs of the CWB, and are ultimately paid by producers through the CWB's pool accounts. These costs have risen steadily over the four years covered by the GMP – from $16.64 per tonne in the 1999-2000 crop year, to $30.88 in the 2002-03 crop year. To some extent, this per-tonne increase stems from the fact that the CWB's fixed operating costs were being spread over a significantly reduced volume of grain. In any event, this resulted in its share of total direct costs having climbed from 24.4% to 35.7%.

The other elements in the direct costs applicable to wheat included:

- Trucking Costs: The commercial costs tied to a 40-mile haul are deemed to have fallen from $6.10 per tonne to $5.94 per tonne for the 2002-03 crop year. This decline was a result of a rollback in the fuel surcharges that had been applied throughout much of the 2000-01 and 2001-02 crop years. And although this means that the nominal cost of trucking returned to the value recorded in the first year of the GMP, its share of total direct costs has also fallen – from 8.7% in the 1999-2000 crop year to 6.7% in the 2002-03 crop year.

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

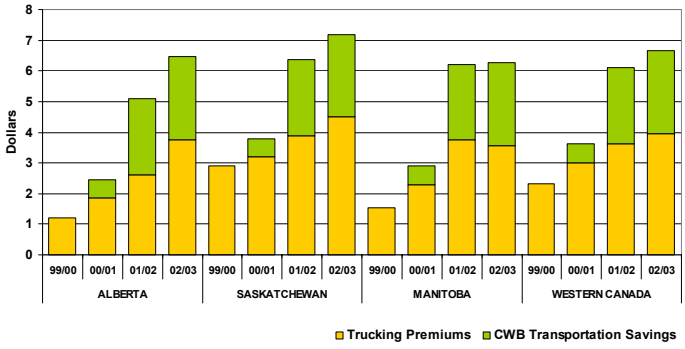
- Primary Elevation Costs: These costs averaged $9.75 per tonne in the 1999-2000 crop year, and comprised 14.3% of the total direct costs for wheat. Increases in the tariff rates raised the cost of elevation by 15.0% to an average of $11.22 per tonne in the 2002-03 crop year. In the face of other more significant cost increases, these costs fell to 13.0% of total direct costs. The posted tariffs reflect the maximum that grain companies may charge producers for services at their facilities. Although grain companies can charge less than the posted tariff rates, 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 5.2% of the total direct costs for wheat. These costs increased by 10.4% to an average of $3.93 per tonne for the 2002-03 crop year, but their contribution to total direct costs declined to 4.5%. As with primary elevation tariffs, the rates posted in the applicable tariffs represent the maximum that grain companies may charge. The Monitor's analysis of cash tickets suggests that this is typically the norm.

- CGC Weighing and Inspection Fees: These costs remained unchanged at an average of $0.38 per tonne throughout the course of the past four crop years. On a proportional basis, they constitute about 0.5% of overall direct costs.[107]

As mentioned earlier, the direct costs discussed above are offset by the financial benefits accruing to producers through the receipt of any trucking premiums and CWB transportation savings.[108] The trucking premiums reported as having been paid by grain companies for wheat deliveries in the nine sampling areas rose by 70.7% between the 1999-2000 and 2002-03 crop years – from an average of $2.32 per tonne to $3.96. On a proportional basis, these premiums have offset an increasingly larger amount of the direct costs borne by producers: 3.4% in the 1999-2000 crop year; 4.1% in the 2000-01 crop year; and 4.6% in both the 2001-02 and 2002-03 crop years.

Figure 71: Wheat Export Basis – Producer Benefits (dollars per tonne)



The grain companies' use of such premiums to attract grain into their facilities is neither new, nor a result of recent reforms to the GHTS. Indeed, their use is a long established practice. The available evidence suggests, however, that the competitive environment has been pushing these premiums higher – particularly in the case of wheat.

CWB transportation savings stem directly from, and coincide with the beginning of, the CWB's tendering program in the 2000-01 crop year. At that point in time, these savings totalled $0.61 per tonne, and offset the direct costs tied to wheat by 0.8%. By the 2001-02 crop year, these savings had increased four-fold – to $2.47 per tonne – and effectively reduced associated direct costs by 3.2%. Data for the 2002-03 crop year shows a further gain in these savings – which climbed by 9.3% to $2.70 per tonne. In the face of rising input costs, however, the offset value of these savings had fallen to a marginally lower 3.1%.

[107] 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 though their primary elevation tariffs, and a possible distortion of the export basis.

[108] 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.

On a combined basis, the net reduction in direct costs as a result of these benefits has steadily risen – from $2.32 per tonne (or 3.4%) in the 1999-2000 crop year, to $3.62 (or 5.0%) in the 2000-01 crop year; to $6.09 (or 7.8%) in the 2001-02 crop year, and to $6.66 (or 7.7%) in the 2002-03 crop year.

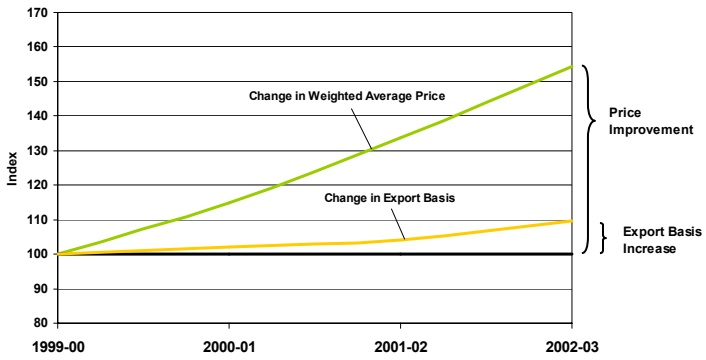
Contributory Changes to Producer Netback – Wheat (dollars per tonne)

	1999-2000	2000-01	2001-02	2002-03	2002-03 / 1999-2000 VARIANCE	% VAR	
Price	$212.92	$234.55	$262.52	$292.63	$79.71	37.4%	▲
Direct Costs	68.14	72.63	77.83	86.47	18.33	26.9%	▲
Less: Trucking Premiums	-2.32	-3.01	-3.62	-3.96	-1.64	70.7%	▲
CWB Savings	0.00	-0.61	-2.47	-2.70	-2.70	N/A	▲
Export Basis	65.82	69.01	71.74	79.81	13.99	21.3%	▲
Producer Netback	$147.10	$165.54	$190.78	$212.82	$65.72	44.7%	▲

Producer Netback – Wheat

Across Western Canada, the visible netback due to producers from the delivery of wheat has increased by $65.72 per tonne (or 44.8%) since the beginning of the GMP – from an average of $147.10 per tonne in the 1999-2000 crop year, to $212.82 in the 2002-03 crop year. With increases in a variety of direct input costs, this overall improvement has been driven by improvements in the weighted average price. A contribution of $79.71 per tonne came from positive movements in the weighted average price. This contribution, however, was drawn down by $13.99 (or 17.6%) as a result of an increase in the export basis itself.

Figure 72: Relative Change in Producer Netback – Wheat



While on a per-tonne basis, producers are clearly enjoying better financial returns, this does not imply that gross farm receipts from the sale of wheat are also rising. Shipments of wheat from Western Canadian elevators declined by 50.1% in the past four crop years – from 16.5 million tonnes in the 1999-2000 crop year, to 8.3 million tonnes in the 2002-03 crop year.

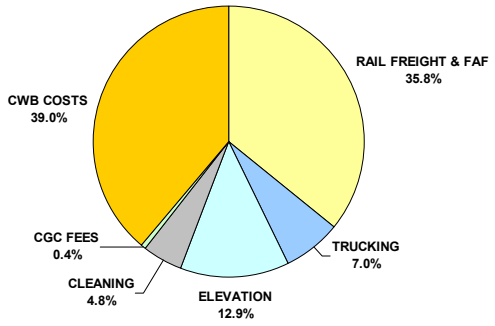
The Export Basis – Durum

The 2002-03 crop year saw the export basis for durum decline by 6.4% to $78.24 per tonne. This decline partially reversed the increase that pushed the export basis up from $64.79 per tonne in the 1999-2000 crop year to $81.10 in the 2001-02 crop year.

The direct costs paid by durum producers have gone from an average of $67.93 per tonne in the 1999-2000 crop year, to $84.67 per tonne in the 2002-03 crop year – a net gain of 24.6%. As with wheat, freight constituted the largest component in the direct costs tied to durum during the first two years of the GMP. Since then, however, freight's position has been displaced by CWB costs (gross). Over this period, the proportion attributable to freight has fallen from 44.3% to 35.8%.

Unlike wheat, 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 has dropped from $0.41 per tonne in the 1999-2000 crop year, to a credit of -$0.16 in the 2002-03 crop year.[109]

Figure 73: Durum Export Basis – Direct Costs



The CWB costs (gross) rose from $18.48 per tonne in the 1999-2000 crop year, to a height of $37.87 in the 2001-02 crop year, before subsiding to $33.02 in the 2002-03 crop year. More importantly, these costs assumed an increasingly larger proportion of total direct costs – which rose from 27.2% to 40.0% in the same period.

The other elements in the direct costs applicable to durum include:

- Trucking Costs: The commercial costs tied to a 40-mile haul fell from $6.10 per tonne to $5.94 per tonne in the 2002-03 crop year. These are the same values cited earlier with respect to wheat, and denote a similar return to the nominal trucking costs recorded in the first year of the GMP. As a proportion of total direct costs, they fell from 8.7% in the 1999-2000 crop year to 7.0% in the 2002-03 crop year.

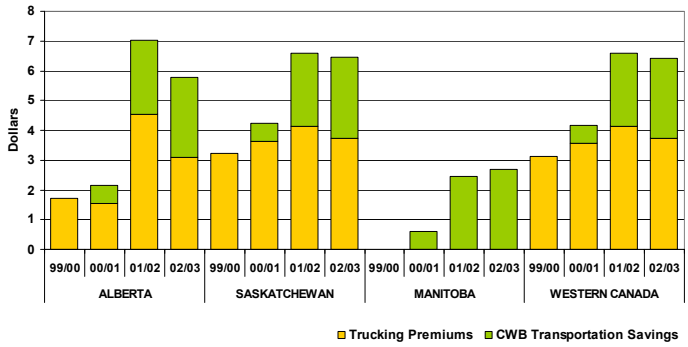
- Primary Elevation Costs: These costs averaged $9.44 per tonne in the 1999-2000 crop year, and comprised 13.9% of the total direct costs for durum. Increases in the tariff rates raised the cost of elevation by 16.1% to an average of $10.96 per tonne in the 2002-03 crop year, and constituted a lesser 12.9% of total direct costs.

- Dockage Costs: The cost of terminal cleaning averaged $3.62 per tonne in the 1999-2000 crop year, and comprised 5.3% of the total direct costs for durum. Although these costs have increased by 11.3% to an average of $4.03 per tonne, their contribution to total direct costs fell to 4.8%.

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

The trucking premiums reported as having been paid by grain companies for 1CWA durum deliveries in each of the nine sampling areas rose by 31.5% between the 1999-2000 and 2001-02 crop years – from an average of $3.14 per tonne to $4.13. For the 2002-03 crop year, however, these premiums fell by 9.7% to $3.73 per tonne. As an offset to direct costs, these premiums provided reductions of 4.6% in the base year, 5.1% in the 2000-01 crop year, 4.7% in the 2001-02 crop year, and 4.4% in the 2002-03 crop year. It is worth noting, that due in large part to the much lower volumes of durum handled in Manitoba, the trucking premiums paid out

Figure 74: Durum Export Basis – Producer Benefits



[109] For shipping points located in southern Manitoba and southeastern Saskatchewan, the FAF actually had a negative value. As credits, the FAF actually served to reduce the freight paid by producers. For all other locations, the FAF was zero .

to producers there were insignificant.

The CWB transportation savings reported earlier with respect to wheat have equal application in the movement of durum. In the 2000-01 crop year, these totalled $0.61 per tonne, and offset 0.9% of the direct costs associated with durum. By the 2001-02 crop year, this savings had increased four-fold – to $2.47 per tonne – and reduced direct costs by 2.8%. For the 2002-03 crop year, the per-tonne savings had increased to $2.70, and provided a slightly higher offset – 3.2%.

On a combined basis, these benefits have steadily risen – from $3.14 per tonne in the 1999-2000 crop year, to $4.17 in the 2000-01 crop year; and to $6.60 in the 2001-02 crop year. With the reduction noted for trucking premiums in the 2002-03 crop year, however, the value of these benefits fell for the first time under the GMP – to $6.43 per tonne. In terms of offsetting direct costs, these benefits have climbed from 4.6% to 8.7%.

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

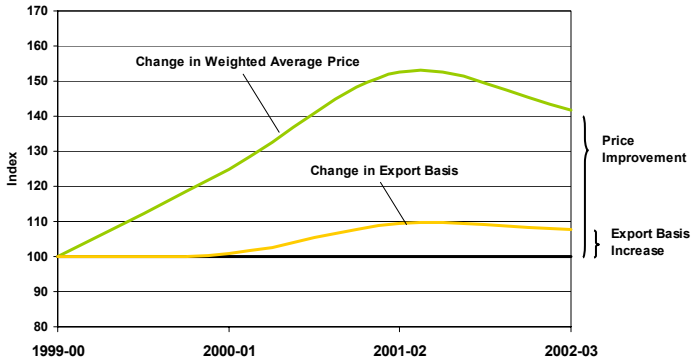
	1999-2000	2000-01	2001-02	2002-03	2002-03 / 1999-2000 VARIANCE	% VAR	
Price	$240.12	$283.62	$332.16	$313.34	$73.22	30.5%	▲
Direct Costs	67.93	70.40	87.70	84.67	16.74	24.6%	▲
Less: Trucking Premiums	-3.14	-3.56	-4.13	-3.73	-0.59	18.8%	▲
CWB Savings	0.00	-0.61	-2.47	-2.70	-2.70	N/A	▲
Export Basis	64.79	66.23	81.10	78.24	13.45	20.8%	▲
Producer Netback	$175.33	$217.39	$251.06	$235.10	$59.77	34.1%	▲

Producer Netback – Durum

As was seen in the case of wheat, the visible netback due to durum producers has increased by $59.77 per tonne (or 34.1%) over the course of the past four crop years – increasing from an average of $175.33 per tonne in the 1999-2000 crop year, to $235.10 in the 2002-03 crop year. And just as with wheat, the preponderance of the overall improvement stems from a significant rise in durum prices.

As with wheat, these gains do not necessarily mean that gross farm receipts from the sale of durum have increased. Shipments of durum from Western Canadian elevators declined by 9.8% during the same period – from 3.7 million tonnes in the 1999-2000 crop year, to 3.3 million tonnes in the 2002-03 crop year.

Figure 75: Relative Change in Producer Netback – Durum

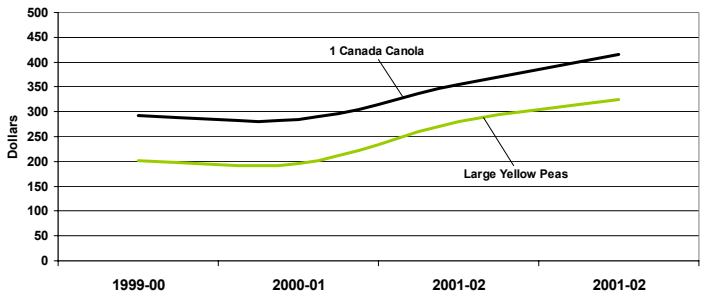


5.3 Export Basis and Producer Netback – Non-CWB Commodities (Canola and Peas)

Commodity Prices

As with CWB grains, changes in the price of both 1 Canada canola and Canadian large yellow peas have proven to be the key determinants in improving the producer's netback for these commodities. The price for both of these commodities is sensitive to the wider influences of changes in the international supply and demand for affiliated products. However, the price of large yellow peas – one of the major classes of food peas grown in Western Canada – is more sensitive to domestic changes.[110]

Figure 76: Non-CWB Commodity Prices (dollars per tonne)



Notwithstanding a modest decline in the 2000-01 crop year, the average annual price of canola rose by 42.1% between the 1999-2000 and the 2002-03 crop years – climbing from $291.61 per tonne to $414.36. The price of canola is closely tied to the global vegetable oil complex. The price strengthening previously witnessed, due in large measure to a general tightening of global supplies, continued through the 2002-03 crop year. Despite record soybean production in South America, the expectation of a record-high oilseed crush in the face of increasing usage was sufficient to maintain prices. In addition, the drought reduced Canadian canola production for the 2002-03 crop year to 4.1 million tonnes – the lowest in ten years. Although the average monthly Vancouver cash price for 1 Canada canola rose to over $470.00 per tonne by November 2002, it had slid to just under $360.00 by July 2003. This lost ground was driven by expectations of comparatively better crop production in 2003, greater competition in export markets, and the strength of the Canadian dollar.

Dry pea production in Western Canada fell to 1.4 million tonnes in 2002 – about one-half of the record 2.9 million tonnes set in 2000. As indicated previously, price is impacted more by the domestic supply and demand for large yellow peas. Notwithstanding a modest decline in the 2000-01 crop year, the average annual price of 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. Drought-reduced production, as well as general concerns over quality, helped maintain firm prices during the fall marketing period.

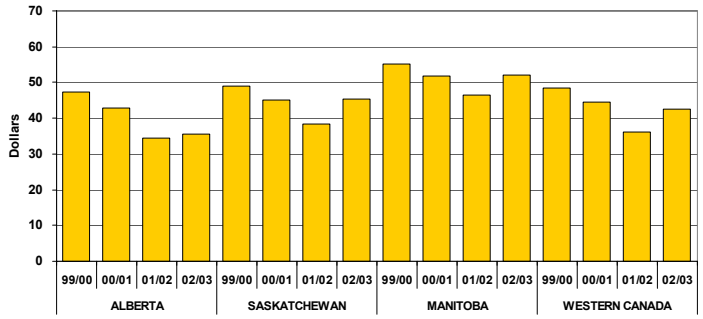
The Export Basis – 1 Canada Canola

Until the last crop year, the export basis for 1 Canada canola decreased by 20.0% – falling from an average of $52.51 per tonne in the 1999-2000 crop year, to $42.01 in the 2001-02 crop year. In the 2002-03 crop year, however, the export basis increased by 16.6% to $48.97 per tonne. As with CWB grains, the export basis for non-CWB commodities has two structural components: the direct costs incurred by producers in delivering grain to market; and any financial benefits accruing to producers that offset these expenses.
Unlike wheat and durum, the direct costs tied to 1 Canada canola fell during the initial years of the GMP – from an average of $54.99 per tonne in the 1999-2000 crop year, to $42.85 in 2001-02. The 2002-03 crop year saw this trend reversed, however, with direct costs having risen by 14.5% to an average of $49.08 per tonne. A large portion of the direct costs associated with non-CWB commodities, however, 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 for both canola and peas. This differential effectively includes the cost of freight, handling, cleaning, storage, weighing and inspection, as well as an opportunity cost or risk premium.

[110] 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*. Canada's leadership role was lost to France in 2002 as a result of reduced production.

In the case of canola, the price differential represents the spread between the Vancouver cash price and the relevant spot price in each of the nine geographic areas. This price differential narrowed by 25.3% over the first three years of the GMP – falling from an average of $48.55 per tonne in the 1999-2000 crop year, to $36.25 in the 2001-02 crop year. This narrowing of the price differential signals that the product is in demand, and that buyers are willing to surrender a greater proportion of the Vancouver price to the producer. The price differential encompasses the largest portion of the direct cost tied to canola – typically about 85%.

Figure 77: 1C Canola – Price Differential (dollars per tonne)

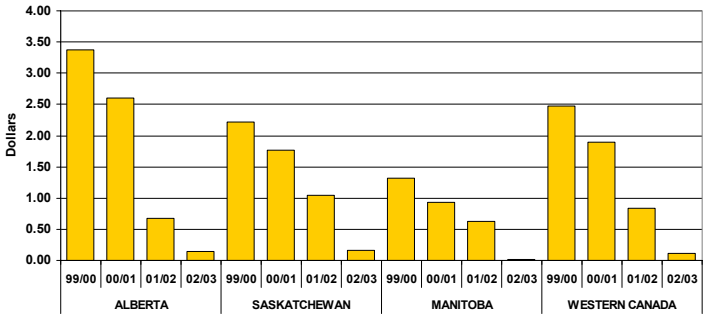


In the 2002-03 crop year, the price differential for 1Canada canola actually widened – by 17.6% to $42.64 per tonne. This signalled that demand for the product had fallen, and that buyers were no longer willing to surrender as great a proportion of the Vancouver price as they had been. An analysis of primary elevator inventories reveals that the average weekly canola stock level climbed by 57.1% – to 388,000 tonnes from 247,000 tonnes a year earlier. With ample inventories on hand, the grain companies were likely to reduce their spot price in order to discourage further producer deliveries.

The second largest component in the direct costs tied to canola is that of trucking from the farm gate to an elevator or processor. As with CWB grains, these costs are estimated to have returned to the levels witnessed in the 1999-2000 crop year. Amounting to $5.94 per tonne, these costs represented 12.1% of total direct costs in the 2002-03 crop year. The remainder of the direct costs – 1.0% – is derived from a $0.50-per-tonne check-off that is applied in each province to fund the Canola Growers' Association.

Trucking premiums are not as aggressively used to attract deliveries of non-CWB commodities. The trucking premiums reported as having been paid by grain companies for 1 Canada canola deliveries in each of the nine sampling areas fell by 95.6% between the 1999-2000 and 2002-03 crop years – decreasing from an average of $2.48 per tonne to $0.11. These premiums represented an offset of 4.5% to the direct costs during the base year, 3.7% in the 2000-01 crop year, and 2.0% in 2001-02 crop year. By the 2002-03 crop year, however, they provided an offset of just 0.2%.

Figure 78: 1C Canola – Producer Benefits (dollars per tonne)



It is also worth noting that, until the 2002-03 crop year, 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. Indeed, their stated position suggests that trucking premiums are likely to play a very limited role in future.

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

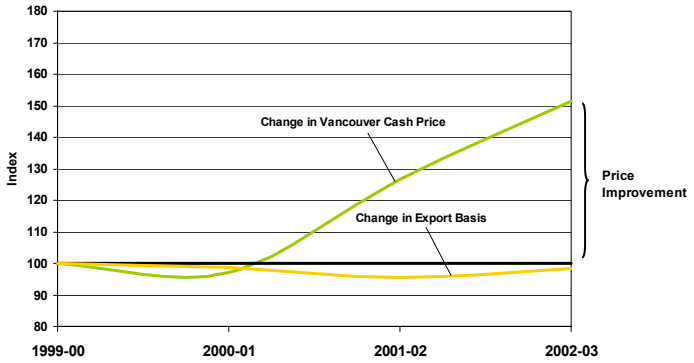
	1999-2000	2000-01	2001-02	2002-03	2002-03 / 1999-2000 VARIANCE	% VAR	
Price	$291.61	$284.46	$355.67	$414.36	$122.75	42.1%	▲
Direct Costs	54.99	51.00	42.85	49.08	-5.91	-10.7%	▼
Less: Trucking Premiums	-2.48	-1.89	-0.84	-0.11	2.37	-95.6%	▼
Export Basis	52.51	49.11	42.01	48.97	-3.54	-6.7%	▼
Producer Netback	$239.10	$235.35	$313.66	$365.39	$126.29	52.8%	▲

Producer Netback – 1 Canada Canola

Across Western Canada, the visible netback due to producers from the delivery of 1 Canada canola increased by $126.29 per tonne (or 52.8%) over the course of the past four crop years – increasing from an average of $239.10 per tonne in the 1999-2000 crop year, to $365.39 in the 2002-03 crop year. Although this arose from the combined effects of a concurrent increase in the market price, and a reduction in the export basis, the preponderance of the overall improvement stemmed from the former.

Indeed, of the $126.29 per tonne gain cited, $122.75 (or 97.2%) was derived from positive movements in the Vancouver cash price. The remaining $3.54 (or 2.8%) came from a reduction in the export basis itself.

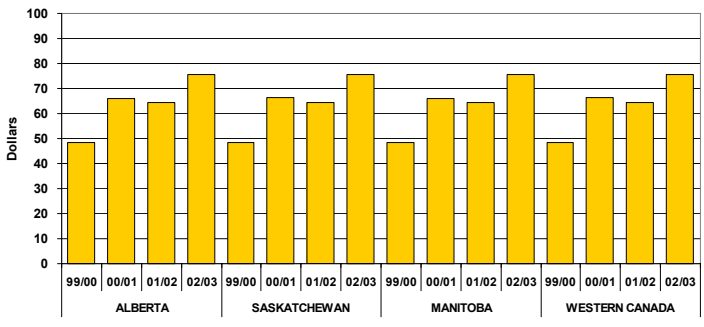
Figure 79: Relative Change in Producer Netback – 1 Canada Canola



The Export Basis – Large Yellow Peas

Over the course of the past four crop years, the export basis for Canadian large yellow peas has increased by 51.9% – rising from an average of $54.76 per tonne in the 1999-2000 crop year, to $83.19 in the 2002-03 crop year. During this same period, the direct costs tied to Canadian large yellow peas increased by 51.7% – climbing from an average of $54.94 per tonne in the 1999-2000 crop year, to $83.33 in the 2002-03 crop year. As with canola, the largest portion of the direct costs is derived from a price differential.

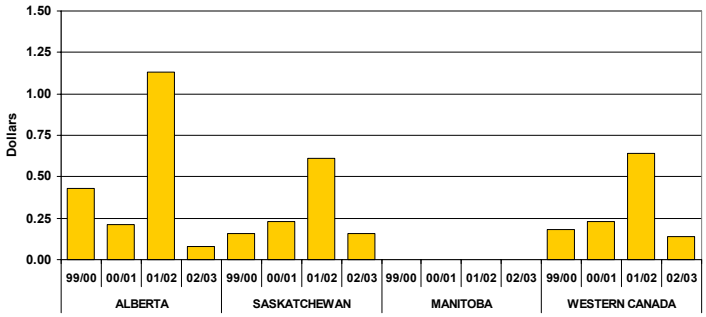
Figure 80: Large Yellow Peas – Price Differential (dollars per tonne)



For large yellow peas, this price differential is based on the spread between the dealer's closing price and the grower's bid closing price. Over the course of the past four crop years, this price differential increased by 56.6% – from $48.23 per tonne in the 1999-2000 crop year, to $75.52 in the 2002-03 crop year. The price differential comprised 90.6% of total direct costs in the 2002-03 crop year.

Similarly, the second largest component in the direct costs is trucking. As elsewhere, these costs are estimated based on an average haul of 40 miles, and are deemed to have returned to the level observed in the first year of the GMP. Amounting to about $5.94 per tonne in the 2002-03 crop year, these costs represented 7.1% of total direct costs. The remaining 2.2% is derived from a 0.5% levy assessed by the Pulse Growers Association at the time of delivery.

Figure 81: Large Yellow Peas – Producer Benefits (dollars per tonne)



The use of trucking premiums to encourage deliveries of peas is even less common than for canola. In Western Canada, these premiums increased from an average of $0.18 per tonne in the 1999-2000 crop year, to $0.64 in the 2001-02 crop year. In the 2002-03 crop year, however, such premiums fell to the lowest level thus far observed under the GMP – an average of $0.14 per tonne. These premiums represented an offset of less than 0.2% to the direct costs incurred – less than one-fifth of the 0.9% it represented in the 2001-02 crop year.

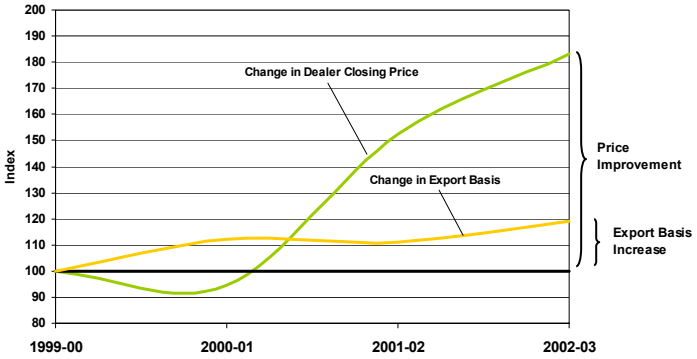
Contributory Changes to Producer Netback – Large Yellow Peas (dollars per tonne)

	1999-2000	2000-01	2001-02	2002-03	2002-03 / 1999-2000 VARIANCE	% VAR	
Price	$202.54	$194.60	$279.85	$325.14	$122.60	60.5%	▲
Direct Costs	54.94	72.95	71.61	83.33	28.39	51.7%	▲
Less: Trucking Premiums	-0.18	-0.23	-0.64	-0.14	0.04	-22.2%	▼
Export Basis	54.76	72.72	70.97	83.19	28.43	51.9%	▲
Producer Netback	$147.78	$121.88	$208.88	$241.95	$94.17	63.7%	▲

Producer Netback – Large Yellow Peas

As was seen in the case of canola, the visible netback due to producers from the delivery of Canadian large yellow peas increased by $94.17 per tonne (or 63.7%) over the course of the past four crop years – increasing from an average of $147.78 per tonne in the 1999-2000 crop year, to $241.95 in the 2002-03 crop year. And just as with canola, the preponderance of the overall improvement in the netback stemmed from a significant rise in the price of peas.

Figure 82: Relative Change in Producer Netback – Large Yellow Peas



Of the $94.17-per-tonne gain cited, $122.60 was contributed from positive movements in the dealer's closing price. This improvement, however, was partially countered by a net increase of $28.43 in

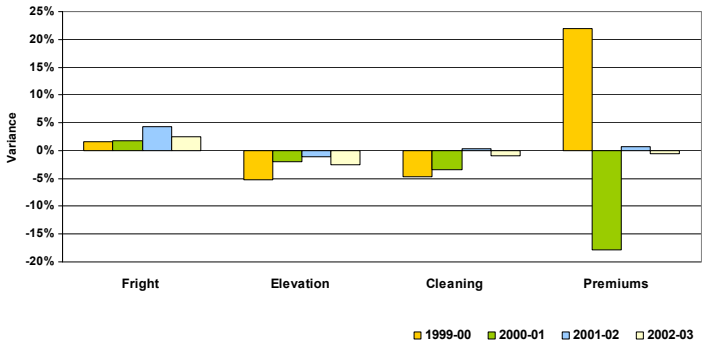
the export basis. Of the four commodities tracked under the GMP, peas represented the sole commodity to post a significant increase in its export basis, and to markedly detract from improvements in producer returns.

5.4 Cash Ticket Analysis

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

Figure 83 illustrates the variance observed in a comparison of the individual deductions and premiums identified on the cash tickets, and averages developed in the calculation of the export basis for wheat. For the 2002-03 crop year, the variances observed with respect to freight, elevation, cleaning, and competitive premiums were minimal. Moreover, the variability in the data relating to competitive premiums has improved significantly since the beginning of the GMP.

Figure 83: Cash Ticket Variance from Aggregated Averages



The GMP utilizes posted tariff rates to reflect freight, elevation and cleaning charges. The freight deductions seen in the sample of cash tickets were marginally higher than those reflected by the weighted averages used for applicable freight in the analysis. This variation, however, was within reason.[111]

For the most part, the charges for elevation and cleaning seen on the cash tickets were slightly higher than the averages drawn from the applicable tariffs. Tariff rates effectively represent the maximum that grain companies may charge for these services. Although the evidence would suggest that most charges are at tariff rates, some companies indicated that their deductions were below tariff level. In addition, the weighted average value of the sample data may produce results that differ from the nominal tariff average. In any case, the variance is within the bounds of statistical error.

Greater variability was observed with respect to the premiums reported as having been paid on these cash tickets. In the 1999-2000 crop year, data from the cash tickets revealed trucking premiums that were – on average – about 22% higher than that reported on an aggregated basis by the grain companies. In the 2000-01 crop year, data from cash tickets showed trucking premiums to be about 18% lower. The variances observed in both the 2001-02 and 2002-03 proved significantly better – differing only by a factor of about one percent.

The variance in the cash ticket data pertaining to trucking premiums during the first two crop years must be viewed in the context of the challenge involved in obtaining this information. The information systems used by the grain companies were not designed to extract this data. As a result, considerable effort was necessary to ensure that the data collected had a common basis, and was relatable for analytical purposes. The greater variances observed during the 1999-2000 and 2000-01 crop years reflect these initial difficulties.

In light of this, the Monitor has been encouraged by the improvement witnessed over the two most recent crop years. As a result, the Monitor is confident that the methodology used to determine both the export basis and

[111] 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.

the producer's netback, along with the aggregated data received from the grain companies, provides for a fair representation of the financial returns to Western Canadian grain producers.

5.5 The Netback Calculator

In an effort to improve the information base used in the export basis estimate and to enable producers to access the database used for the producer netback analysis, the Monitor has developed the Producer Netback Calculator (PNC). The PNC is an Internet based tool, and can be found at www.netback.ca.

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.[112] The PNC was designed to provide a cost-effective and non-intrusive means of gathering this data.

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

To gain access to the PNC, producers will be 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 will ensure 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.

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

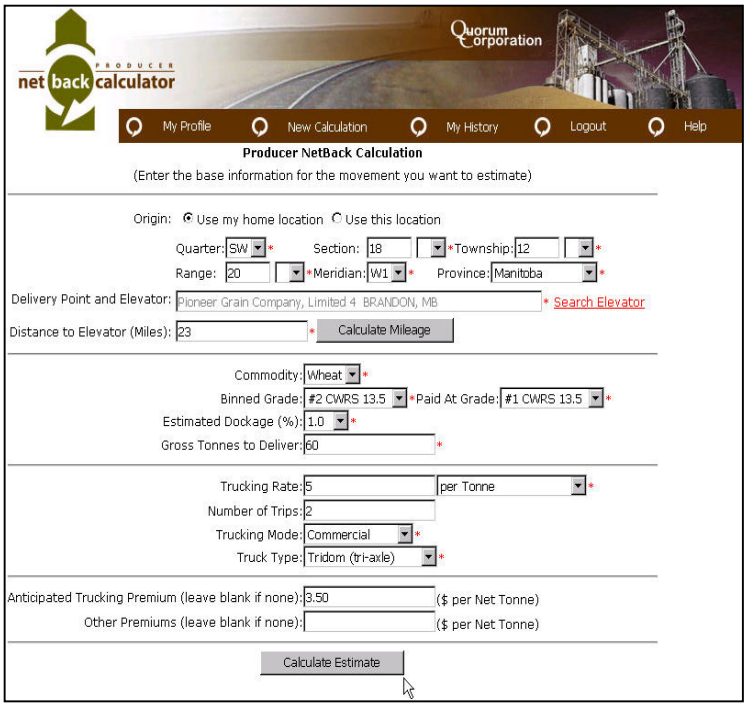


Figure 84: An image of the input screen for Quorum Corporation's Netback Calculator.

[112] 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.

returning to a previous screen, and changing any of the parameters used in the calculation (i.e., destination station, grain company, etc.).

Every estimate will be recorded and accessible to the producer through a "history" listing. It is through this screen that producers will be given the ability to create comparative reports that can present these estimates – or those they wish to see – in summary or detail, as well as printed or electronic (spreadsheet) formats. This is also the section of the system where the producer will identify 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.

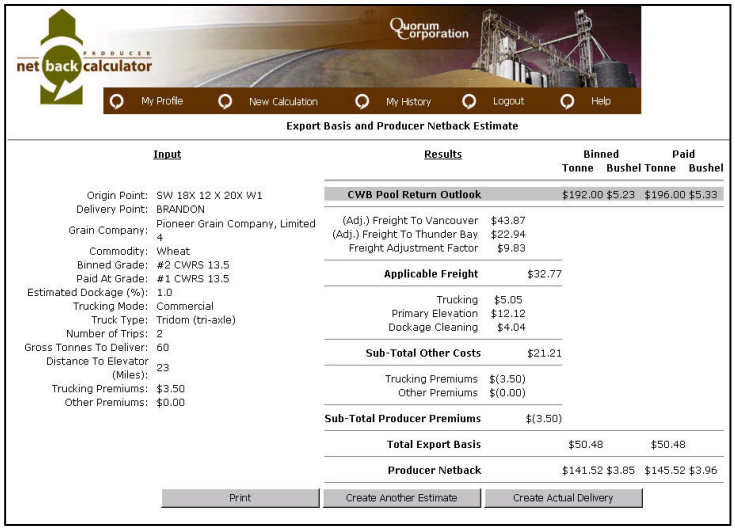


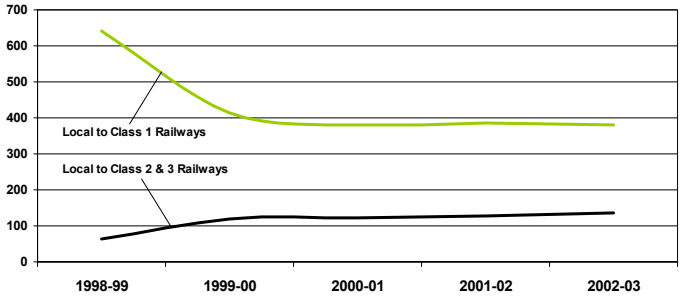
Figure 85: An image of the output screen for Quorum Corporation's Netback Calculator.

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

The aggregate number of producer loading sites has declined significantly since the beginning of the 1999-2000 crop year – falling from an estimated 706 to 518 by the end of the 2002-03 crop year (or 26.6%). Much of this overall decline stems from the net reduction in the number of sites local to the larger Class 1 carriers, which fell by 40.7% during the same period – from 643 to 381. Conversely, the number of sites local to the smaller Class 2 and 3 carriers more than doubled – increasing from 63 to 137 (or 117.5%). [See Table 5B-1 in Appendix 3.]

Regionally, Manitoba and Alberta posted the largest attrition rates, with the number of producer loading sites declining by an overall 41.6% and 34.7% respectively. The rate of decline in Saskatchewan was substantially less; the number of sites having fallen by 12.3% during the same four-year period. Hidden by these statistics is the fact that while the overall number of producer loading sites has declined significantly, there are signs that the network may be stabilizing. After having fallen to a low of 503 in the 2000-01 crop year, the number of producer loading sites has since increased – albeit only by a modest 3.0% to 518.

Figure 86: Producer Loading Sites (estimated as at 31 July)



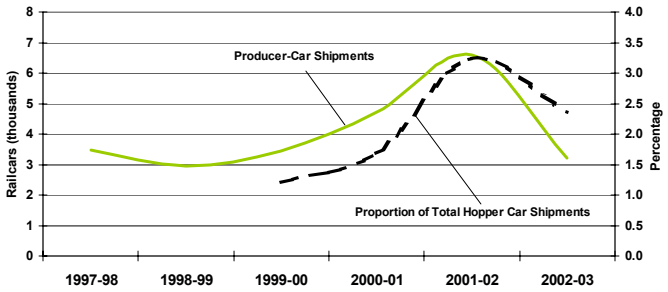
As discussed previously, some of the impetus for this stems from the recent establishment of non-licensed producer loading facilities. At the close of the 2001-02 crop year, five such facilities – all located within Saskatchewan – had received licensing exemptions from the CGC. The number of such facilities has

continued to expand. As at 31 July 2003, a total of 30 such facilities had received exemptions. And while they remain largely concentrated in Saskatchewan, a total of four were opened elsewhere – two in Manitoba, and two in Alberta.

Producer Car Shipments

Notwithstanding the overall reduction in the number of producer loading sites witnessed, producer-car shipments have been on the rise. During the first three years of the GMP, the annual volume of such shipments virtually doubled – increasing from 3,441 railcars to 6,583. And while still far below the peak levels witnessed in the early 1990's (when annual producer-car shipments averaged about 12,500), these volumes presented a clear upward trend.

Figure 87: Producer-Car Shipments



The loss of local elevator service due to closures, the advent of producer loading facilities, and aggressive marketing campaigns by shortline railways, local producer groups and the CWB, all contributed to increase producer-car shipments. The 2002-03 crop year, however, brought the first reversal of this trend. The year-over-year change in producer-car shipments fell by 51.3% to 3,209 railcars – less than that shipped in the 1999-2000 crop year. Despite this, their proportion in relation to the total number of hopper cars shipped stands at an estimated 2.4% – twice the 1.2% estimated for the 1999-2000 crop year.[113] [See Table 5B-2 in Appendix 3.]

Virtually all producer-car shipments involve the movement of CWB grains. Indeed, non-CWB commodities accounted for less than five percent of the total producer-car shipments made in each of the past four crop years.

5.7 Summary Observations

Data from the past four crop years clearly reveals that producer returns have improved significantly, but chiefly as a result of the steadily increase in commodity prices on the world market. As can be seen in the case of wheat, the producer's netback has increased by $65.72 per tonne (or 44.7%) – climbing from $147.10 per tonne in the 1999-2000 crop year, to $212.82 in the 2002-03 crop year. As for non-CWB commodities such as canola, the rise proved even greater – 52.8% – with the producer's netback increasing from $238.10 per tonne to $365.39 in the same period.

Operating costs however, also impact the returns accruing to producers. These costs are reflected in the export basis, which also contains any offsetting benefits that producers may receive. For wheat, the export basis rose from $65.82 per tonne in the 1999-2000 crop year, to $79.81 in the 2002-03 crop year – an increase of $13.99 (or 21.3%). After having declined for three years, the export basis for canola actually increased in the 2002-03 crop year to $48.97 – a value that still stands some $3.54 per tonne (or 6.7%) less than reported in the GMP's first year.

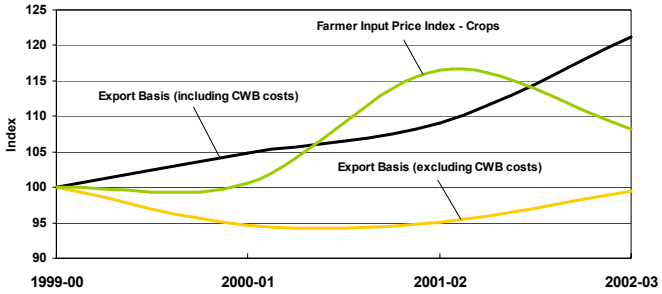
Beginning with the 2002-03 crop year, the CWB made a series of changes in the manner by which it had previously treated certain operating revenue and expense items in its pool accounts. Of particular importance to the GMP is the fact that the CWB's direct costs now include provisions for ocean and rail freight that had

[113] During the 2001-02 crop year, producer-car shipments represented about 3.2% of the overall grain volume moved in covered hopper cars to Western Canadian ports. While this share fell to 2.4% in the 2002-03 crop year, the reduction was not proportionate with the decline in grain volume.

previously been treated as revenues. The Monitor has restated the values previously calculated for both the export basis and the producer netback in order to be consistent with the CWB's new treatment practices.

These changes resulted in the export basis for wheat having increased by $13.99 per tonne over the course of the four years covered by the GMP. Moreover, this increase is largely attributable to a $14.24 per tonne rise in CWB costs alone.

Figure 88: CWB Cost Impact – Export Basis



It is important to note that meaningful comparisons are rendered particularly difficult as a result of the year-over-year variations in the freight tied to sales that are made in-store, free-on-board, and as cash and freight. Moreover, if CWB costs are excluded, it can be seen that other component costs in the export basis initially declined, and have only recently begun to rise. At the same time these costs have not risen as dramatically as those reflected in such inflationary measurements as Statistics Canada's Farm Input Price Index for Western Canada crop production – which increased from a value of 122.4 to 132.4 (or by 8.2%) over this same period.[114]

At the same time, the various benefits received by the producer – whether in the form of trucking premiums or CWB transportation savings – have emerged as the real force behind the reduction in the non-CWB cost related portion of the export basis. In the case of wheat, producer benefits have almost tripled – climbing from $2.32 per tonne in the 1999-2000 crop year, to $6.66 in the 2002-03 crop year. The trucking premiums paid by the grain companies appear to have risen in response to heightened competition, a shrinking elevator network, and reduced grain production. This is not the case for non-CWB commodities, however. Both canola and large yellow peas receive significantly less in terms of the per-tonne premiums that CWB grains do. More importantly, the trucking premiums paid for canola and peas have declined significantly over the course of the past four 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 $0.11 in the 2002-03 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. The net result is that, for the 2002-03 crop year, the export basis within any one area can vary significantly from the Western Canada average. By way of example, the export basis for wheat can be seen to vary by as much as 11.8%.

Notwithstanding these increases in producer netback, the per-tonne values are inextricably tied to the actual volume of grain produced and shipped. While producers may now be realizing a significantly higher netback than they did previously, this per-tonne improvement is tempered when applied against grain volumes that have decreased by a factor of 40% or more over the past four crop years.

On a final note, in an effort to improve the information used in calculating the export basis, and to enable producers to access the database used for the producer netback analysis, the Monitor has developed the Producer Netback Calculator. This Internet-based tool will allow producers to enter site-specific data, and estimate the returns that they may derive from the delivery of their grain to various elevator facilities. At the same time, the data they return will provide valuable information regarding their average length of haul to elevators, choice of equipment, and other farm gate to elevator delivery issues – all of which will be used to enhance future reporting by the Monitor.

[114] Statistics Canada reports the Farm Input Price Index on a calendar year basis, with 1992 set at 100).

Quorum Corporation

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APPENDIX 1: PROGRAM BACKGROUND

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

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

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

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

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

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

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

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

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

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

APPENDIX 2: ACKNOWLEDGEMENTS

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

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