

# Grain Monitoring Program: The GHTS at a Glance



## Key Measures for 1999-2014

	1999-00	2000-01	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	Change over last CY	5 Year Avg.	GMP Report Reference	Notes
<b>Productions and Supply</b>																			
Western Canadian Crop Production (tonnes 000)	55,142	54,073	42,541	31,540	47,655	53,401	56,003	49,265	48,517	60,352	56,144	50,071	53,544	56,882	76,340	34.2%	58,596	Measure 1A-1	Crop production in 2013 was the largest in Western Canadian history. The 34.2% increase was the result of above average yields from a combination of optimal growing conditions across the prairies and improved agronomy. When combined with smaller carry forward stocks, the total grain supply for the year also proved to be the largest in Western Canadian history.
Carry Forward Stocks (tonnes 000)	7,418	9,776	8,751	6,071	5,489	6,647	10,768	12,425	7,451	5,647	9,515	11,200	8,628	5,733	4,890	-14.7%	7,993	Measure 1A-2	
Total Grain Supply (tonnes 000)	62,560	63,849	51,292	37,611	53,144	60,048	66,771	61,690	55,968	65,998	65,659	61,271	62,172	62,615	81,230	29.7%	66,589	Calculated	
<b>Traffic and Movement</b>																			
Shipments from Primary Elevators (tonnes 000)	32,494	33,282	25,924	19,052	28,527	28,594	32,105	33,453	31,886	35,349	33,861	32,270	35,339	34,279	40,676	18.7%	35,285	Measure 2A-1	A sizeable increase in movement out of primary elevators, railway traffic to ports and shipments from the terminal elevators was observed as the record crop was moved to market.
Railway Movement (tonnes 000)	26,441	25,885	18,765	12,736	20,659	20,832	25,304	24,312	22,767	27,338	28,444	28,008	29,262	29,601	34,837	17.7%	30,030	Measure 2B-1	
Port throughput (tonnes 000)	23,555	23,941	18,005	11,807	18,962	18,944	23,723	22,824	22,026	25,639	25,760	25,428	26,897	26,923	31,111	15.6%	27,224	Measure 2C-1	
<b>Infrastructure (as of the end of the crop year)</b>																			
Delivery Points in the Western GHTS	626	543	348	292	288	282	275	272	276	273	274	273	271	274	261	-4.7%	n/a	Measure 3A-1	As noted in previous reports, the single largest change in the GHTS over the term of the GMP has been the reduction in grain elevators and delivery points. The last few years has seen a slow down in the closure of grain elevators. The 2013-14 crop year saw a reduction of 20 elevators, bringing the total number of licensed elevators in western Canada to 371. There was also a decrease in the number of delivery points. Following a trend that began 8 years ago, the total amount of storage capacity has grown, even as the number of facilities falls. This year saw an increase in licensed storage capacity of 478,000 tonnes.
Elevators in the Western Canadian GHTS	917	781	500	416	404	385	374	371	378	367	366	366	386	391	371	-5.1%	n/a	Measure 3A-1	
Storage Capacity of Primary Elevators (tonnes 000)	7,444	7,137	6,125	5,747	5,689	5,846	5,871	5,808	5,953	6,060	6,343	6,369	6,740	6,852	7,330	7.0%	n/a	Measure 3A-1	
Route Miles of rail lines in the GHTS	19,390	19,021	18,924	18,924	18,823	18,764	18,595	18,495	17,978	17,905	17,905	17,830	17,830	17,800	17,600	0.0%	n/a	Measure 3B-1	
Western Canadian Terminal Elevators	15	16	17	17	16	16	16	16	15	15	15	15	16	15	15	0.0%	n/a	Measure 3C-1	
<b>Commercial Matters</b>																			
<b>Average Single Car Rail Freight Rates</b>																			
CN - Vancouver	\$36.93	\$35.54	\$36.87	\$38.35	\$38.99	\$36.83	\$39.43	\$43.03	\$43.00	\$41.25	\$37.73	\$38.56	\$41.46	\$49.79	\$47.57	-4.5%	n/a	Measure 4C-1	Despite a 1.8% decrease in the CTA's VRCPi for this year, rate adjustments in all but one corridor proved to be even deeper. The railways' desire to direct freight to specific corridors may have impacted pricing decisions, as well as changes in the traffic mix that determines compliance with the Maximum Revenue Entitlement (MRE).
CP - Vancouver	\$36.72	\$34.96	\$36.58	\$38.10	\$38.47	\$36.25	\$39.14	\$42.63	\$39.17	\$40.74	\$42.57	\$41.89	\$42.57	\$52.20	\$44.12	-15.5%	n/a	Measure 4C-1	
CN - Prince Rupert	\$41.82	\$38.03	\$39.37	\$40.86	\$41.49	\$36.86	\$39.46	\$42.39	\$39.12	\$38.23	\$37.19	\$37.29	\$40.86	\$49.80	\$47.58	-4.5%	n/a	Measure 4C-1	
CN - Thunder Bay	\$32.36	\$30.84	\$31.90	\$33.16	\$33.91	\$32.36	\$34.76	\$38.91	\$46.06	\$37.21	\$41.07	\$39.01	\$43.66	\$45.51	\$46.80	2.8%	n/a	Measure 4C-1	
CP - Thunder Bay	\$30.76	\$30.79	\$30.11	\$31.23	\$31.53	\$29.42	\$31.83	\$35.09	\$35.32	\$34.25	\$35.19	\$35.03	\$36.89	\$42.78	\$35.70	-16.6%	n/a	Measure 4C-1	
Tot. Maximum Revenue Entitlement Differential (\$ Millions)	-	\$5.8	\$22.2	\$23.9	\$0.9	\$0.7	(\$3.4)	(\$1.3)	(\$57.9)	\$0.5	\$5.4	(\$0.3)	(\$0.6)	\$6.2	(\$3.3)	-153%	\$1.5	Measure 4C-3	For the 2013-14 crop year, the MRE for CN and CP were set at \$667.1 million and \$625.3 million respectively, or \$1,292.4 million on a combined basis. The Canadian Transportation Agency determined that the statutory revenues derived from the movement of regulated grain by CN and CP amounted to \$672.1 million and \$623.6 million respectively, or \$1,295.7 million on a combined basis. These determinations produced dissimilar results for the carriers: \$5.0 million more than allowed in the case of CN against \$1.7 million less than allowed for CP.
Grain Company Elevation Charges - Index (Aug 1, 1999=100)	100	107.2	108.4	109.4	110.4	112.3	112.3	114.5	118.2	121.3	123.3	122.8	122.9	123.5	131.2	6.2%	N/A	Measure 4B-1 for Elevation	Posted tariffs for country elevation exhibited a significant increase, reflecting greater demand consistent with the larger crop production.
<b>System Efficiency and Performance</b>																			
Time Grain Spends in the GHTS (days)	68.1	63.1	65.6	77.5	60.4	56.4	54.7	56.6	58.4	49.9	52.2	52.3	47.1	46.2	41.3	-10.6%	47.8	Measure 5E-1	The GMP measures the average time taken by grain to move through the GHTS from producer delivery at the country elevator to vessel loading at port. The 2013-14 crop year produced the fastest time yet seen under the GMP, the fourth straight year of improvement.
Country Elevator Annual "Turns"	4.8	5.0	4.5	3.7	5.6	5.6	6.2	6.5	6.0	6.6	6.2	5.7	6.0	5.8	6.8	17.2%	6.1	Measure 5A-1	The number of "turns" made by an elevator refers to the number of times its capacity has been fully utilized (total throughput volume divided by total storage capacity). Although these values are largely influenced by the total throughput volumes, the number of turns are also impacted by changes in the network's total storage capacity.
Terminal Elevator Annual "Turns"	9.1	8.9	6.6	5.0	7.0	7.5	8.7	8.3	8.5	10.0	10.0	9.9	11.1	11.1	13.5	21.6%	11.1	Measure 5C-1	
<b>Average Railway Car Cycles: Total (days)</b>	<b>19.9</b>	<b>16.4</b>	<b>17.1</b>	<b>20.4</b>	<b>16.7</b>	<b>18.7</b>	<b>17.3</b>	<b>16.8</b>	<b>15.9</b>	<b>13.4</b>	<b>13.2</b>	<b>14.3</b>	<b>13.9</b>	<b>14.0</b>	<b>13.7</b>	<b>-2.1%</b>	<b>13.8</b>	Measure 5B-1	A railway car cycle is defined as the time a rail car takes to travel from its loading point, through to its destination and back for its next load. Throughout the GMP, car cycles have exhibited a high degree of seasonal variability. However, the longer term trend shows general improvement, with this year's being no exception. West Coast cycles showed the greatest improvement, driven largely by the railways directional choices stemming from the minimum volume directives implemented by the Federal Government in March and in effect to the end of the crop year.
to Vancouver (days)	19.6	16.8	17.8	23.0	17.8	19.2	18.3	18.6	17.0	14.1	14.0	15.2	14.3	14.6	13.4	-8.2%	14.3	Measure 5B-1	
to Prince Rupert (days)	26.1	26.2	21.9	22.5	13.9	18.4	15.6	15.9	14.3	11.8	12.0	12.5	12.2	13.3	12.5	-6.0%	12.5	Measure 5B-1	
to Thunder Bay (days)	20.5	15.7	16.3	18.2	17.0	18.2	17.2	15.6	15.4	13.7	12.8	13.9	14.5	13.6	12.7	-6.6%	13.5	Measure 5B-1	
<b>Average Railway Loaded Transit (days)</b>	<b>7.8</b>	<b>7.3</b>	<b>7.0</b>	<b>7.9</b>	<b>7.0</b>	<b>7.0</b>	<b>6.7</b>	<b>6.7</b>	<b>6.3</b>	<b>5.5</b>	<b>5.5</b>	<b>6.0</b>	<b>5.6</b>	<b>5.4</b>	<b>5.3</b>	<b>-1.9%</b>	<b>5.6</b>	Measure 5B-4	
Total Avg CV	0.429	0.376	0.325	0.314	0.342	0.355	0.351	0.352	0.329	0.327	0.308	0.323	0.309	0.309	0.304	-1.6%	0.3	Measure 5B-4	
to Vancouver (days)	8.2	7.4	7.1	8.2	7.1	6.8	7.1	7.0	6.5	5.7	5.8	6.4	5.7	5.6	5.5	-1.8%	5.8	Measure 5B-4	
Vancouver CV	0.548	0.487	0.415	0.393	0.439	0.438	0.453	0.484	0.405	0.418	0.419	0.433	0.414	0.417	0.357	-14.4%	0.4	Measure 5B-4	
to Prince Rupert (days)	10.0	7.0	7.8	9.9	6.2	7.1	6.4	6.8	6.2	5.1	5.2	5.9	5.9	5.9	5.6	-5.1%	5.7	Measure 5B-4	
Prince Rupert CV	0.708	0.349	0.236	0.399	0.388	0.358	0.399	0.422	0.391	0.351	0.317	0.340	0.310	0.364	0.381	4.7%	0.3	Measure 5B-4	
to Thunder Bay (days)	6.9	7.1	6.9	7.0	7.4	7.1	6.5	6.1	6.1	5.4	4.9	5.2	5.1	4.7	4.7	0.0%	4.9	Measure 5B-4	
Thunder Bay CV	0.482	0.416	0.400	0.418	0.438	0.447	0.453	0.435	0.429	0.408	0.441	0.389	0.366	0.419	0.449	7.2%	0.4	Measure 5B-4	
Average railway multiple car incentives (\$ tonne)	\$2.41	\$3.48	\$4.07	\$3.97	\$4.54	\$4.52	\$4.81	\$5.41	\$5.51	\$6.25	\$6.65	\$6.74	\$6.80	\$7.09	\$7.39	4.2%	\$6.93	Measure 5B-6	The annual value of the discounts earned by grain shippers has continued to climb since the beginning of the GMP, now averaging \$7.39 per tonne. This crop year saw a slight increase in the percentage of traffic moving in car blocks of over 50 cars, from 77.2% to 80.3%.
% of total traffic incentive was paid on	50.4%	68.0%	76.8%	75.7%	75.1%	73.6%	75.5%	75.2%	76.6%	78.8%	79.3%	79.7%	80.7%	77.2%	80.3%	4.0%	79.4%	Measure 5B-5	
Average Vessel time in port (days)	4.3	5.9	4.9	4.3	4.0	4.9	4.8	5.3	5.0	4.6	6.2	9.9	6.6	9.7	12.5	28.9%	9.0	Measure 5D-1	Challenges in the movement of grain from country to port position meant that the right grain was not always in position at port for vessel loading. This resulted in longer than normal vessel waiting times and higher levels of ocean vessel demurrage. The 2013-14 crop year saw the highest average vessel time in port, exceeding 24 days during the third quarter.
<b>Producer Impacts</b>																			
Average Weighted Applicable Freight for 1 CWRS Wheat (\$ per tonne)	\$31.87	\$30.93	\$32.31	\$34.73	\$33.32	\$33.74	\$34.80	\$37.18	\$37.57	\$37.83	\$35.49	\$35.41	\$35.35	n/a	n/a	n/a	n/a	Measure 6A-10A	Changes in the Canadian Wheat Board's marketing mandate resulted in changes to the reporting of producer related measures. Individual component costs are no longer used in preparing producers' cash tickets. The basis now takes account of all cost components as well as marketers' risk and reward premiums.
Average Trucking Premium for 1CWRS Wheat (\$ per tonne)	\$2.32	\$3.01	\$3.62	\$3.96	\$4.25	\$3.68	\$4.56	\$5.15	\$5.55	\$6.17	\$6.78	\$6.57	\$8.17	n/a	n/a	n/a	n/a	Measure 6A-10A	
Avg. Total Logistics Costs (Export Basis) for 1CWRS Wheat (\$ per tonne)	\$54.58	\$52.92	\$50.88	\$57.15	\$55.51	\$57.77	\$61.81	\$63.20	\$67.65	\$66.74	\$65.86	\$73.35	\$74.75	n/a	n/a	n/a	n/a	Measure 6A-10A	
Logistics Costs as a % of the Final Realized Price	28%	26%	23%	23%	26%	28%	32%	30%	18%	21%	28%	21%	23%	n/a	n/a	n/a	n/a	Calculated	
Final Realized Price for 1 CWRS (based on 13.5% protein) (\$/ tonne)	\$192.43	\$202.58	\$217.02	\$250.20	\$211.14	\$205.10	\$195.14	\$212.89	\$372.06	\$311.36	\$236.80	\$344.96	\$326.04	\$328.26	\$327.12	-0.3%	\$312.64	Measure 6A-10A	Although improvement in production levels in Canada and other competing countries exerted downward pressure on wheat prices, they remained high by historical standards.
Industrial Product Price Index	97.9	101.2	100.0	98.5	103.9	103.8	108.6	108.4	116.6	108.2	109.4	118.3	118.6	119.8	123.2	2.9%	n/a	Statistics Canada	The modest increase in IPI this year is also reflected in other cost indices such as the CPI and the CTA's VRCPi used in the Maximum Revenue Entitlement calculation. The 2014 IPI was not available at the time of this printing.
Western Canada Crop Production Farm Input Price Index	-	-	100.0	110.0	120.6	125.9	119.9	137.8	186.7	147.7	153.5	165.7	170.2	167.9	175.2	4.3%	n/a	Statistics Canada	The Farm Input Price Index base year is 2002 (=100). At 175.2 for 2014, it reveals increases in most other producer related costs that far exceed those experienced in the handling and transportation of grain.



## About the Grain Monitoring Program

On May 10, 2000 the Government of Canada introduced Bill C-34, which prescribed a number of changes to the handling and transportation of prairie grain. In conjunction with its enactment on August 1, 2000 the government also announced that they would appoint an independent third party to monitor the overall efficiency of the prairie grain handling and transportation system, including the impact of changes on producers, the Canadian Wheat Board, railways, grain companies, and ports.

On June 19, 2001 the Federal Government announced that Quorum Corporation had been selected as the monitor for the prairie grain handling and transportation system.

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

To ensure that as broad a view as possible is taken in measuring the efficiency of the Grain Handling and Transportation System, Quorum Corporation consults extensively with the key stakeholders.

The statistics contained in this summary represent only a few of the over 4,900 discreet measurement elements in 166 tables for each quarter of the fifteen years covered by the monitoring program. The reports prepared by the Grain Monitor attempt to provide an objective assessment of the grain handling and transportation system in Western Canada. Quorum welcomes feedback on our reports, the program and industry issues. We encourage all stakeholders to provide their input and feedback by contacting the Grain Monitoring team at the location shown below.

### [About Quorum Corporation](#)

***Quorum Corporation is an independent subsidiary of the Quorum Group of Companies, with sole responsibility for the monitoring of Canada's Prairie Grain Handling and Transportation System.***

***More information can be found at our website below.***

Quorum Corporation  
Suite 701, 9707 - 110 Street  
Edmonton, AB T5K 2L9  
PH: (780) 447-2111  
FX: (780) 451-8710  
EMAIL: [info@quorumcorp.net](mailto:info@quorumcorp.net)  
WEB: [www.grainmonitor.ca](http://www.grainmonitor.ca)

# GHTS at a Glance

1999-2000 to 2013-2014 Crop Years



## Monitoring the Canadian Grain Handling and Transportation System

Quorum Corporation has served as the federal government's Monitor of the Canadian Grain Handling and Transportation System (GHTS) since 2001. In these fourteen years the Grain Monitoring Program has produced over 60 reports under the government's GMP mandate. The ***GHTS at a Glance*** is produced as a supplement to the annual report and is intended to provide a summary of the GHTS's activities over the term of the program, including selected measures in each of the six areas of examination: Production and Supply; Traffic and Movement; Infrastructure; Commercial Relations; System Efficiency and Performance; and Producer Impact.

The Monitor has now adopted the internet as the sole medium through which its reports and data tables are transmitted to the stakeholder community. PDF and MS Excel spreadsheet copies of the reports and data tables can be downloaded from the Monitor's website: [www.grainmonitor.ca](http://www.grainmonitor.ca).