

Grain Monitoring Program: The GHTS at a Glance

Key Measures for 1999-2017

	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	2014-15	2015-16	2016-17	Change over last CY	5 Year Avg.	GMP Report Reference	Notes
Productions and Supply																						
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	77,021	62,855	64,739	72,581	12.1%	66,815	Measure 1A-1	The 2016-17 crop year marked a continuation in a trend that began in 2013-14, with the total grain supply exceeding 80 MMT for the second time in four years. The increase was largely shaped by the second largest grain harvest in Western Canadian history. Although rain frustrated early harvesting efforts, a warmer period of fall weather permitted the near complete gathering of a near-average quality crop.
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	14,196	9,163	7,505	-18.1%	8,297	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	81,911	77,051	73,901	80,086	8.4%	75,113	Calculated	
Traffic and Movement																						
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	41,433	42,369	42,381	45,643	7.7%	41,221	Measure 2A-1	Steady shipments from primary elevators coupled with consistent railway service led to the heightened flow of export grain through the terminal elevator network for much of the crop year.
Railway Shipments to Western Ports (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	29,291	29,607	34,837	38,390	37,957	39,651	4.5%	36,088	Measure 2B-1	
Railway Shipments to Western Domestic Destinations (tonnes 000)																562	540	616	14.0%	573	Measure 2B-1	Heavier wheat, barley and canola shipments drove an increase in domestic rail movements.
Railway Shipments to Eastern Canada (tonnes 000)																3,016	2,797	3,294	17.8%	3,036	Measure 2B-8	Increased wheat and canola shipments to Montreal were largely responsible for heightened Eastern Canadian volumes.
Railway Shipments to US & Mexico (tonnes 000)																7,693	7,024	7,172	2.1%	7,296	Measure 2B-15	Heightened wheat, durum, canola and oat shipments led an increase in US-bound traffic. Volumes to Mexico were buoyed by an increase in special crop and canola products.
Total Railway Movement (tonnes 000)																49,661	48,318	50,733	5.0%	49,571	Measure 2B-15	Generally consistent rail service led to a stronger movement in the 2016-17 crop year.
Shipments by Truck to US Destinations (tonnes 000)																3,248	2,287	2,270	-0.8%	2,601	Measure 2D-1	Although truck volumes were down slightly from the previous crop year, they remained comparable.
Total Grain Shipments to North American Destinations (tonnes 000)																52,908	50,605	53,003	4.7%	52,172	Calculated	A comparatively problem-free year resulted in the second largest movement on record.
Western Canadian 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	35,762	35,588	36,836	3.5%	33,244	Measure 2C-1	Relatively smooth, efficient movement to ports ensured supplies to meet aggressive sales programs throughout the crop year.
Infrastructure (as of the end of the crop year)																						
Delivery Points in the Western GHTS	626	543	348	292	288	282	275	272	276	273	274	273	271	274	261	262	271	277	2.2%	269	Measure 3A-1	The 2016-17 crop year saw the licensed elevator network expand by a total of eight facilities. This gain was largely the product of the licensing of 23 facilities along with the delicensing of 15 others. Elevator construction and expansion saw the addition of 318,000 tonnes of storage, lifting the system total to almost 8.2 MMT.
Elevators in the Western Canadian GHTS	917	781	500	416	404	385	374	371	378	367	366	366	386	391	371	370	383	391	2.1%	381	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	7,335	7,845	8,163	4.1%	7,505	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	17,600	17,600	17,424	17,288	17,276	-0.1%	17,438	Measure 3B-1	Grain-dependent branchline abandonments resulted in a 12-mile reduction in the railway network.
Average Fleet Size (number of hopper cars)																2,997	2,933	2,933	7.3%	2,922	Measure 3B-2	The active hopper-car fleet increased by 300 cars to meet additional demand pressures.
Western Canadian Terminal Elevators	15	16	17	17	16	16	16	16	15	15	15	15	16	15	15	17	15	16	6.7%	16	Measure 3C-1	Reflects the relicensing of the terminal facility operated by AGT Foods at Thunder Bay.
Commercial Matters																						
Average Single Car Rail Freight Rates																						
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	\$52.08	\$48.79	\$50.40	3.3%	\$49.73	Measure 4C-1	It should be noted that the GMP measures year-over-year changes in rail freight rates using those in place at the end of the crop year. A 4.8% increase in the CTA's VRCPI led to corresponding rate adjustments. The railways' desire to direct freight to specific corridors coupled with periodic adjustments ultimately shape their final pricing decisions, which in turn must respect the provisions of the Maximum Revenue Entitlement (MRE).
CP - Vancouver	\$36.72	\$34.96	\$36.58	\$38.10	\$38.47	\$36.25	\$39.14	\$42.63	\$38.17	\$40.74	\$42.57	\$41.89	\$42.57	\$52.20	\$44.12	\$53.95	\$50.30	\$48.19	-4.2%	\$49.75	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	\$52.09	\$49.19	\$50.40	2.5%	\$49.81	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	\$48.74	\$48.21	\$50.39	4.5%	\$47.93	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	\$45.05	\$43.35	\$40.12	-7.5%	\$41.40	Measure 4C-1	
Total 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)	(\$9.0)	(\$4.4)	(\$6.9)	55%	(\$3.5)	Measure 4C-3	For the 2016-17 crop year, the MRE for CN and CP were set at \$802.4 million and \$724.4 million respectively, or \$1,526.8 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 \$808.2 million and \$725.5 million respectively, or \$1,533.7 million on a combined basis. These determinations resulted in overages of \$5.8 million for CN and \$1.1 million for CP.
Grain Company Primary 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	135.3	133.1	134.7	1.2%	131.6	Measure 4B-1 for Elevation	Posted tariffs for country elevation remained relatively constant with that observed the previous year.
System Efficiency and Performance																						
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	41.1	42.0	41.8	40.6	-2.9%	42.3	Measure 5E-1	The GMP measures the time taken by grain in moving through the GHTS, from producer delivery at a country elevator to a vessel loading at port. The 2016-17 crop year saw another reduction, attributable to decreased time in storage, belt in the country and at port, which offset an increase in the railways' loaded transit time.
Average Country Elevator Capacity Turnover Ratio	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	6.6	6.3	6.4	1.6%	6.4	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. Overall port terminal capacity turnover performance reflects a record under the GMP.
Average Terminal Elevator Capacity Turnover Ratio	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	17.1	18.4	21.4	16.3%	16.3	Measure 5C-1	
Average Railway Car Cycles: Total (days)																						
to Vancouver (days)	19.9	16.4	17.1	20.4	16.7	18.7	17.3	16.8	15.9	13.4	13.2	14.3	13.9	14.0	13.0	13.7	13.3	14.1	6.2%	13.6	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. While the longer-term trend shows general improvement, the increase in this year's cycles suggests some deterioration in the overall velocity for both railways.
to Prince Rupert (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	14.6	13.5	14.3	5.9%	14.1	Measure 5B-1	
to Thunder Bay (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	12.4	12.2	13.8	12.7%	12.9	Measure 5B-1	
Average Railway Loaded Transit (days to Western Ports)	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	12.6	13.4	13.5	1.1%	13.2	Measure 5B-1	
to Vancouver (days)	7.8	7.3	7.0	7.9	7.0	7.0	6.7	6.7	6.3	5.5	5.5	6.0	5.6	5.4	5.3	5.8	4.8	5.2	8.3%	5.3	Measure 5B-4	
to Prince Rupert (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	6.0	4.9	5.3	8.8%	5.5	Measure 5B-4	
to Thunder Bay (days)	0.548	0.487	0.415	0.393	0.439	0.438	0.453	0.494	0.405	0.418	0.419	0.433	0.414	0.417	0.357	0.415	0.387	0.403	4.1%	0.396	Measure 5B-4	
Average railway multiple car incentives (\$/tonne)	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	5.4	4.5	5.6	23.4%	5.4	Measure 5B-4	
Prince Rupert CV	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	5.4	5.0	4.7	-6.4%	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	0.444	0.448	0.408	-8.9%	0.433	Measure 5B-4	
% of total traffic incentive was paid on	\$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	\$7.47	\$7.49	\$7.55	0.8%	\$7.40	Measure 5B-14	The value of the freight discounts earned by grain shippers has climbed steadily since the beginning of the GMP, now averaging \$7.55 per tonne. Much of this gain has come from an increase in the proportion of traffic moving in blocks of 50 or more cars, which reached a record 85.7% in the 2015-16 crop year but fell slightly in the 2016-17 crop year, to 83.9%.
Average Vessel time in port (days)	50.4%	68.0%	76.8%	75.7%	75.1%	73.6%	75.5%	75.2%	76.6%	78.8%	79.3%	79.7%	80.6%	77.2%	80.3%	84.2%	85.7%	83.9%	-2.1%	82.2%	Measure 5B-13	
Terminal Shift Utilization Performance (Out of Car Time)	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	10.2	7.9	10.3	30.4%	10.1	Measure 5D-1	After a decrease last year, time in port has increased again this year due in large part to increases at the Port of Vancouver, where the winter period again saw long vessel lineups.
																17%	12%	12.1%	3.4%	13.6%	Measure 5C-5	This measures the time port terminals are without cars to unload as a percentage of the total time they are staffed and operating.
Producer Impacts																						
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	\$323.38	\$296.49	\$322.28	8.7%	319.5	Measure 6A-10A	Despite downward pressure on wheat prices due to increased production levels in Canada and other competing countries, they continue to be relatively high by historical standards.
Volume-related Composite Price Index	100.0	103.5	104.4	102.0	101.1	105.5	112.5	106.4	114.9	106.4	113.8	117.8	129.2	126.9	133.2	126.7	132.8	132.8	4.8%	129.8	CTA	
Industrial Product Price Index	100	101	101	100	105	105	109	108	118	110	111	120	120	121	124	124	122	125	2.1%	123	Statistics Canada	The modest decrease in IPPI 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.
Western Canada Crop Production Farm Input Price Index	-	-	100	110	121	126	120	138	187	148	154	159	178	170	182	176	170	170	-0.1%	174	Measure 6A-10A	The Farm Input Price Index base year is 2002 (=100). Although the index declined slightly from last year, over the longer term, it exhibits increases for most grain production costs which exceed those experienced in grain handling and transportation.



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 (GHTS), 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 GHTS, 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 173 tables for each quarter of the eighteen years covered by the monitoring program. In the 2014-15 crop year, the GMP shifted to monthly reporting. The majority of measures are now calculated on a monthly basis, supplemented quarterly and annually. Six new areas of measurement were also introduced in the 2014-15 crop year.

The reports prepared by the Grain Monitor 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.

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GHTS at a Glance

1999-2000 to 2016-2017 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 sixteen years the Grain Monitoring Program has produced over 270 Weekly, Monthly, Quarterly and Annual 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.