

# Data Requirements for a Transparent Market

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## Executive Summary

The objective of this report is to determine which market information would be most useful to growers, and how best to make it available in a regular and efficient manner. Consideration was given to where data is already collected, and to the manner of reporting.

Section 1 identifies the most important producer data gaps faced by Canadian producers of crops in Western Canada pertaining to crop selection decisions as well as to marketing decisions throughout the year. Criteria affecting crop selection include acreage and production projections and all aspects of crop balance sheets, with an emphasis on generating solid ending stock numbers. Criteria affecting marketing decisions include export projections and export progress as well as sales data and pipeline cost data. Current reporting practices are outlined by major agency: Statistics Canada (STC), Agriculture and Agri-Food Canada (AAFC), and the Canadian Grain Commission (CGC). Mercantile (MCV) has made observations about how various supply chain participants use the reports.

Section 2 identifies who should collect the required data and the desired publishing time frames. A good portion of the data needed currently exists, but much more discipline with respect to quality and timeliness is essential. Other reports need to be re-established or initiated. Principally, following the rationale and the lead of the US program in a more simplified form, a transparent Canadian market model would require the weekly reporting of export sales by Canadian exporters. Such a report would elevate the data gathering above historic data reporting to current data intelligence, and thus has great value to producers who need to assess/understand ongoing market dynamics. This same report should be used for improved calculations of agriculture transportation needs and for assuring that there are sufficient available railcars to an industry which has high-priced commodities to accommodate all export opportunities.

Section 3 discusses data requirements by agency. Mercantile has compiled a list of reports and data that are currently published. This is to ensure that Sask Wheat has the fullest possible picture of what variables are handled in the various reports. These more detailed listings can be found in Appendix 5.

The final section summarizes the report recommendations. Any changes to the current system will require the political will of the government as well as the desire of all the system participants to create an overall more transparent and efficient system.

## Introduction

There are three main sources of data – AAFC, Statistics Canada and the Canadian Grain Commission - to support the agri-food system. In this report, we address in considerable detail, what is in those data sources, how they are used and how they serve the agricultural industry. We analyze, from the farmers' perspectives, the data sources' accuracy, timeliness and completeness. Recommendations follow on how to ameliorate the situation.

Historical backdrop:

The Canadian agriculture and agri-food system is a very important, vibrant and growing part of the overall economy in Canada. Domestically, according to AAFC, the agri-food system generated \$111.9 billion of gross domestic product (GDP) and accounted for 6.7% of Canada's total GDP in 2016. It also employed approximately 2.3 million people, representing 12.5% of Canadian employment in 2016, the latest national figure available. GDP in the agriculture and agri-food system grew by 11% from 2012 to 2016. In comparison, the Canadian economy grew more slowly at 7.8% over the same time period. Farm market receipts reached a record high of \$57.6 billion in 2016.<sup>1</sup>

In terms of trade, the value of Canada's agriculture and agri-food exports reached \$56 billion in 2016, and with the addition of \$4.2 billion in seafood exports, a total of \$62.6 billion. Canada's agriculture and agri-food sector saw growth in exports and imports in 2016 relative to 2015. On a value basis, it is estimated that in 2016 just over one-half of the value of primary agricultural production in Canada was exported either directly as primary agricultural commodities or indirectly as processed food and beverage products.<sup>2</sup>

This is impressive data which is showcased on the current AAFC website. However, we note that the latest available data on domestic GDP data is quite old (2016 data), and the regional breakdown of the data is difficult to determine and fails to highlight the even proportionally greater importance of this industry to the Prairies.

Using Statistics Canada data by region<sup>3</sup> shows that 'Crop and Animal Production [BS11A]'<sup>4</sup> alone accounted for 8.4-9.6% of the Saskatchewan GDP between 2013 to 2017 (latest data), which is significantly higher than the Canadian average of 1.53%.

Examination of Statistics Canada export data yields more recent data (to the end of 2020) and further illustrates the importance of agriculture exports to Saskatchewan and, more generally, the Prairies. Agriculture exports make up 'only' 9% of total Canadian exports in 2020, while agriculture exports in Saskatchewan and on the Prairies comprise a considerable 56% of total Saskatchewan exports and 22% of total Prairie exports (See Table 1).<sup>5</sup>

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<sup>1</sup> <https://www.agr.gc.ca/eng/canadas-agriculture-sectors/an-overview-of-the-canadian-agriculture-and-agri-food-system-2017>, viewed March 2021.

<sup>2</sup> <https://www.agr.gc.ca/eng/canadas-agriculture-sectors/an-overview-of-the-canadian-agriculture-and-agri-food-system-2017>, viewed March 2021.

<sup>3</sup> Statistics Canada. [Table 36-10-0487-01 Gross domestic product \(GDP\) at basic prices, by sector and industry, provincial and territorial \(x 1,000,000\)](#), accessed March 23, 2021.

<sup>4</sup> Defined as farm, fishing, and intermediate food products.

<sup>5</sup> Statistics Canada. [Table 12-10-0144-01 Canadian international merchandise trade by province and country, and by product sections, customs-based, annual \(x1,000\)](#), accessed March 23, 2021.

Table 1: Export Origin Geography by Total Industries and by Crop and Animal Production 2016-2020

Canadian international merchandise trade by province and country, and by product sections, customs-based, annual (x 1,000,000)															
Geography	Total industries					Crop and animal production [BS11A]									
	2016	2017	2018	2019	2020	2016		2017		2018		2019		2020	
	Dollars	Dollars	Dollars	Dollars	Dollars	Dollars	% of Total	Dollars	% of Total	Dollars	% of Total	Dollars	% of Total	Dollars	% of Total
Canada	468,225.70	500,761.42	538,132.79	544,612.31	478,099.71	37,608.12	8.03%	38,445.78	7.68%	39,265.63	7.30%	37,491.47	6.88%	43,232.53	9.04%
Manitoba	13,450.55	13,885.79	15,483.75	15,819.79	15,554.02	3,976.57	29.56%	4,443.47	28.70%	4,425.88	28.45%	4,053.64	25.62%	4,709.96	30.28%
Saskatchewan	26,437.17	28,656.99	30,633.84	29,608.75	30,351.83	14,363.88	54.33%	13,276.47	43.34%	13,355.13	44.00%	12,830.54	43.33%	16,874.73	55.60%
Alberta	79,333.24	100,492.62	117,654.07	117,201.61	91,396.50	6,706.61	8.45%	8,368.82	7.11%	8,299.03	9.08%	7,705.07	6.57%	8,428.69	9.22%
MB-SK-AB	119,220.96	143,035.40	163,771.67	162,630.15	137,302.35	25,047.05	21.01%	64,534.55	39.41%	65,345.68	47.59%	62,080.71	38.17%	30,013.38	21.86%

Source: Statistics Canada, 2021

While this data paints a glowing picture of the agri-food sector, there are questions about transparency and the distribution of returns through the market chain, and what can be done to support this sector to maintain and to enhance the growth path the industry is on.

In January this year, no fewer than five important grower groups specifically identified gaps in marketing information and named the lack of access to that same information through the market chain as a barrier to value creation and growth. The following resolution was passed unanimously by all five grower organisations:<sup>6</sup>

**Market Transparency Resolution**

**WHEREAS** wheat producers in Saskatchewan have found significant gaps in information for the marketing of their production;

**WHEREAS** markets function best when all parties have access to the same information;

**WHEREAS** Canada currently does not have mandatory export sales data reporting and the greater portion of Saskatchewan producer’s wheat is exported;

**BE IT RESOLVED** that Sask Wheat work with other commissions and organizations to advocate for the establishment of an Export Sales Reporting Program where all sales over the set minimum volume for wheat, wheat products and other crops, must be reported daily, to be compiled weekly, and released in a timely fashion, to add valuable knowledge to aid producers in the marketing of their production.

Given this, the ongoing Canada Grain Act (CGA) review is now seen as an opportunity to push for improved data and an improved data collection and dissemination schedule.

The lack of market data throughout the supply chain of the Canadian grain industry is not a new problem. It is producers who have borne the brunt of the data gaps and late arriving data for the past two decades. Since the removal of single desk marketing for export wheat and barley (December 2012), and the immense consolidation of the Canadian grain system over the past 40 years<sup>7</sup>, the asymmetry in information between producer and exporter has only grown. In Canada, there is no sales reporting (volume or price), and actual export data arrives with a five-to-six-week delay. This means that the export market dynamics are not readily visible to agricultural producers. At the same time as the Canadian producers are expected to make considered and rational sales and crop choice decisions, they are at a distinct competitive disadvantage to others in the market chain when it comes to information.

In 2014, the Producer Recommendations on the Future of Canada’s Transportation Act by APAS, SWDC, SBDC and SPG stated the following principles for change in items 2 and 4:

<sup>6</sup> Saskatchewan Wheat Development Commission, Saskatchewan Canola Development Commission, Saskatchewan Barley Development Commission, Saskatchewan Flax Development Commission, , Saskatchewan Pulse Growers.

<sup>7</sup> The number of grain delivery points has fallen from 5,327 Canadian elevators in 1962 to 802 in 2020 (or specifically 2,878 primary elevators in SK in 1962 to 183 in 2020), which led to a reduction in competition. (CGC data extracted February 2021).

- 2) *Market transparency is critical to system efficient performance. - Markets require adequate and transparent information to operate efficiently.*
  - *The identification of information needs, its collection, and dissemination will be critical to future system performance.*
- 4) *Primary grain producers need their interests represented in the design and ongoing operations of the grain transportation system.*
  - *Grain producers represent a unique financial interest in the design and operational effectiveness of our future system that will not be met by other players in the industry.*<sup>8</sup>

Statistics Canada also appears to recognize the need for improved data and information in this important sector for all parties involved in the production and export of Canadian grain by stating on their website the following:

*International commitments recently made by Canada in an effort to stabilize agricultural commodity markets and record high food prices will have an impact on how Statistics Canada collects data. The G20 Agriculture Ministers met in June 2011 and stressed the importance of "better market information that improves transmission of market signals, more open trade, comprehensive rural development and agricultural policies, and sustained investments [that] would enable agricultural producers to increase production, enhance their income and improve global supply of food and food security."*<sup>9</sup>

However, few major changes in the AAFC or Statistics Canada data systems have been implemented since 2011. There have been no basic changes by the agencies to the data on sales and exports or any apparent considerations regarding the timeliness of export data.

There have been a number of comprehensive inventories of all the data gaps in the Canadian system, notably the SJT Solutions report<sup>10</sup>. Committees have reviewed and discussed them, but little has been done by government or statistical agencies to implement suggestions or ameliorate the situation.

Rather than restate the overall data gaps, the MCV study will narrow down the data gaps to what the producers (farmers) consider the most critical missing elements and recommend how to implement the changes to make this data available in a regular and efficient manner.

Report structure:

The first section explores a) which data aspects can be used by producers to help maximize cropping decisions: acreage and production projections, crop balance sheets with an emphasis on generating solid ending stock numbers and cost of production data; and b) identifies which data aspects are meaningful to help improve producers' marketing decisions and why they are helpful: export projections, export progress, sales data and pipeline cost data. The second section identifies who should collect the required data and the publishing time frames. Section three aligns existing and potential reporting agencies with the existing gaps to create a proposed data report plan. The final section summarizes the report recommendations.

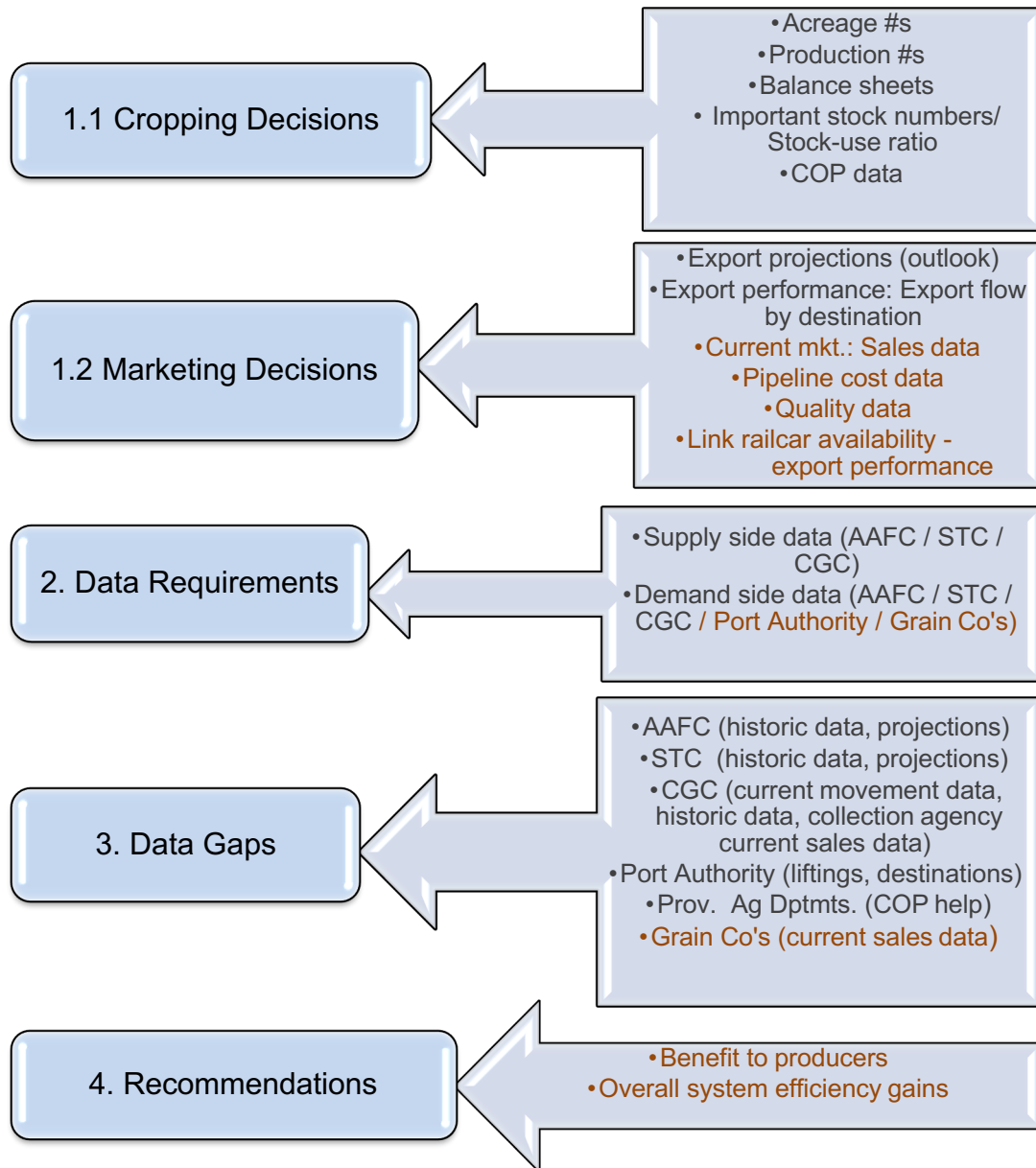
MCV has provided the following graphic to summarize the report structure. We hope that it helps you to navigate the text.

<sup>8</sup> APAS, SWDC, SBDC, and SPG. (2014). *Producer Recommendations on the Future of Canada's Transportation Act*.

<sup>9</sup> Ministerial Declaration: "Action Plan on Food Price Volatility and Agriculture," Meeting of the G20 Agriculture Ministers, (Paris), June 22-23, 2011. p. 2. [http://un-foodsecurity.org/sites/default/files/110623\\_G20\\_AgMinisters\\_Action\\_Plan\\_Agriculture\\_Food\\_Price\\_Volatility.pdf](http://un-foodsecurity.org/sites/default/files/110623_G20_AgMinisters_Action_Plan_Agriculture_Food_Price_Volatility.pdf) (accessed to June 4, 2012).

<sup>10</sup> SJT Solutions, Strengthening Canada's Agricultural and Agri-Food Business Data Systems – Final Report, March 31, 2016.

### Study Schematic Report Outline



## 1 Most Important Producer Data Gaps

To quote a paper published by the FAO in 2017<sup>11</sup>:

*“All actors involved in agricultural value chains can theoretically benefit from an improved Market Information System (MIS). Farmers can use market information to decide to whom to sell and at what price, plan their production and harvest and, in some cases, select the optimal market channel. The availability of market information should facilitate negotiations with traders. As for agricultural traders, improved MIS provide support in making efficient decisions on where to trade. MIS also provide fundamental inputs into assessments of food security and enable issuance of early warnings of impending problems, as they can help to identify areas of possible shortage and signal whether prices are below or above seasonal trends.”*

The focus in this paper is specifically on data gaps faced by Canadian producers of crops in Western Canada. Mercantile has split the data requirements important to farmers' decision making into two categories:

- a) Data pertaining to crop selection decisions, and
- b) Data relating to marketing decisions.

### 1.1 Cropping Decisions

Under cropping decisions, we discuss acreage numbers, production numbers, balance sheets, important stock numbers and stock-use ratio plus cost of production data.

#### 1.1.1 Acreage & Production Numbers

The basic data elements required to help farmers with their cropping decisions are the acreage projections and the production numbers. The relevant agency reports are listed in Appendix 1.

- a. Acreage projection by crop & confirmation of acreage after seeding
  - projections are most useful well before seeding
- b. Production estimates (numbers)
  - projections are most useful well before harvest

Timely *acreage projections* are an essential starting point of the new crop supply and demand calculation that comprise each crop's balance sheet. **AAFC** balance sheets are available online, and AAFC publish their first new crop projections by crop **annually in their January issue** of the 'Outlook for Principal Field Crops' report. The AAFC acreage numbers give a first glimpse of new crop acreage expectations, mostly based on export performance by crop and export price development. The projections also include supply side projections (acreage, yield, production, import numbers), as well as demand side projections (cumulative exports, domestic use numbers). The exports are not broken down by import region nor destination.

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<sup>11</sup> Food and Agriculture Organization of the United Nations, Building Agricultural Market Information Systems: A Literature Review, Rome 2017; [http://www.amis-outlook.org/fileadmin/user\\_upload/amis/docs/resources/building%20amis%20lit%20review.pdf](http://www.amis-outlook.org/fileadmin/user_upload/amis/docs/resources/building%20amis%20lit%20review.pdf)



These numbers are reviewed on a monthly basis. A major problem identified is the number and size of revisions throughout the year; see recent examples shown on page 10. The acreage projections are also the first important input to new crop ending stock projections discussed below.

**Statistics Canada** currently does provide *acreage projections* by crop starting with the March 'seeding intentions report' (published in April). Note that at time of publication, crop planning has long been concluded and seeding is underway or imminent. The March seeding intentions report is followed by the July *production estimates* (published in August), and the Model-based production estimates (published in September). The final November production estimates are published in early December. The discrepancy in acreage and production numbers between reports and the number of corrections can be quite high.

To be of use during the crop planning cycle, acreage projections must be accessible well before seeding. To be of use while planning the marketing cycle, production data should be available well before harvest.

### 1.1.2 Crop Balance Sheets

**AAFC** currently publishes monthly balance sheets for the following crops: wheat, durum, wheat excluding durum, barley, corn, oats, rye, canola, flaxseed, soybeans, peas, lentils, dry beans, chickpeas, mustard seed, canaryseed and sunflower seed. New crop projections are first published in the January edition of their report.

AAFC export projections are limited to overall export numbers by crop for the crop year without any breakdown even by major destinations. A breakdown of exports by destination would make it much easier for farmers to monitor the export progress throughout the crop year (via the monthly Statistics Canada export statistics) and to identify and isolate potential problem areas. The ability to easily download 10-year export data by destination would enable farmers to discern trends and changes as they occur.

Domestic use data deserves more scrutiny, especially for commodities with formalized domestic use, like canola (via crush), wheat (flour milling), peas (fractioning), barley (malt), and for feed grains (barley, peas, wheat, etc. feed compounding). As value added manufacturing increases in Canada/ on the Prairies, this also becomes more important. Current domestic use numbers leave the impression as being used as a slush fund for adjustments throughout the crop year.

Similarly, ending stock data can be extremely important to farmers' decisions (see examples below), and need to be as accurate as possible. Due diligence to generate these numbers should be a priority.

The relevant agency reports and are listed in Appendix 1.

- a. Production and supply data
  - i. New crop acreage projections  
AAFC currently issues this data by crop in January.
  - ii. Historic data – to discern trends  
Has recently been made available on the AAFC website in form of the G002 & G003 downloadable reports
- b. Export data
  - iii. New crop export projections by crop are shown only as overall exports, no breakdown by country is available

- iv. A breakdown of the overall export number by destination will be helpful to monitor export progress through the crop year by matching it with more timely monthly Statistics Canada export data by destination.
- c. Domestic use data  
Currently is not vetted
- d. Ending stock projections  
These vary too much throughout the year to be used as meaningful decision points by producers.

### 1.1.3 Importance of Stock Numbers

The decision of which crops to cultivate depends on a number of variables ranging from soil type, water availability, rotations to the market outlook for the various crops. For the purpose of this paper the focus is on factors that determine the basic supply and demand outlook for each crop - the market “fundamentals”.

The data on fundamentals, if well researched, generates valuable information on relative crop scarcity by showcasing an ending stocks number for each commodity. This is after accounting for supply (production + carry-in + imports) against demand (export and domestic demand).

Specifically, given the exceptional ability of farmers to store crops in Western Canada and barring cash-flow considerations, relatively low stocks and low stock-use ratios are the main input to the decision to store commodities after harvest in anticipation of potential price increases. Conversely, high stocks or stock-use ratios may persuade farmers to sell early as oversupplied markets have a much smaller chance to run up. Stock numbers are thus an important indicator of relative scarcity and deserve a lot of scrutiny before publication but are currently subject to regular and significant revisions.

Here are two examples taken from the current crop year to illustrate this point.

Canola: This crop year (2020/21), AAFC projected canola ending stocks for the '20/21 crop at 2.3 mln mt as late as November 10, 2020 (10.5% stock-use ratio), while the AAFC February '21 canola ending stock number dropped to only 700k mt (31% of the earlier stock number; 3.3% stock-use ratio). The first number indicates a balanced supply-demand situation, while the latter indicates a severely undersupplied market situation. By showing a balanced market into the winter, AAFC may have significantly contributed to producers' decisions to deliver more than 10 million mt of canola into the handling system by the end of December 2020, thus missing most of the price increase after harvest. Canola futures increased from \$470/mt in late August, to \$500/mt in early September, to \$569/mt late November, to \$776/mt in early March. Had growers sold 5 mln mt of their stocks at a later date instead, farm earnings would have gained an additional \$1 billion assuming an average gain of \$200/mt.

Wheat: AAFC projected 5.7 mln mt wheat ending stocks for '20/21 crop wheat as late as January 25, 2021, while the February '21 ending stocks estimate dropped to only 4.9 mln mt (86% of the earlier stock number). More than 11.3 million mt of wheat (excl. durum) had already been delivered by growers into the handling system by the end of January 2021, thus missing some of the price increase after harvest. Spring wheat futures increased from US\$5.20/bu in mid-August, to US\$6.36/bu on March 10<sup>th</sup>. That is a gain of up to C\$54/mt. Had growers sold 3 mln mt at a later date instead at an average gain of \$30/mt, farm earnings would have increased by an additional \$90 million.

At the present time, much of the basic supply side of the data necessary for the cropping decisions is already being generated by Statistics Canada and AAFC. Demand side data is presented in form of overall estimates by commodity for export and domestic use, but there seems to be a lack of appreciation as to how important these projections can be to the decisions made by farmers.

The lack of timely and quality market intelligence can lead to suboptimal resource allocation and to missed opportunities by producers, but given the importance of agriculture in the West, it also greatly affects the overall economic performance. According to the latest data from Statistics Canada, Canadian agricultural crop production in 2017 had a total output multiplier of 1.84, one of the largest across major Canadian industries.<sup>12</sup> This means that every \$1 of additional output generated by Canadian crop production creates an additional \$0.84 of gross revenue for the economy. Across the Western Prairies, 2017 output multipliers for crop production are 1.86 for Manitoba, 1.83 for Saskatchewan, and 1.77 for Alberta.<sup>13</sup> The total Canadian industry output multiplier in 2017 was 1.94.

While the output multiplier is sometimes criticized for double inputs, GDP multipliers show the increase in overall output given a change in output in an industry. For example, according to Statistics Canada, the GDP multiplier for Canadian crop production in 2017 was 0.93. This means that every \$1 million increase in output of Canadian crop production results in a \$930,000 increase in GDP. From 2010 to 2017 the Canadian crop production GDP multiplier has been relatively stable, and it would be safe to assume that it is currently around 0.90. According to Statistics Canada, GDP multipliers across the Western Prairies for 2017 were 0.96 in Manitoba, 0.90 in Saskatchewan, and 0.93 in Alberta. Now imagine the forgone GDP to the Canadian economy given the fact that farmers may have lost more than \$1 billion due to the lack of quality data available to them.

#### 1.1.4 Cost of Production Data (COP)

Cost of Production (COP) calculations are important when conducting return per acre comparisons between commodities during the crop selection process. Provincial agriculture agencies publish annual templates for COP calculations, which along with the growers' own data should allow for a detailed COP analysis.

Each cost of production report for the respective province is issued in January of the upcoming growing season. The appropriate links are listed in Appendix 1.

## 1.2 Marketing Decisions

Producer marketing decisions for any particular commodity are based on the farmer's perception of the depth of demand relative to supply (balance sheet), and on the pace of sales. In the past, futures markets were seen as interpreting the fundamental information across the marketplace, and as offering an opportunity to hedge production. But in recent years, increasing volatility of futures markets, amplified by Fund participation and increasingly driven by algorithms, has led to a frequent divorce of futures moves from fundamental signals.

This development has made it harder to use futures markets as an information and hedging tool. There are also more commodities being grown that have no futures markets backing (pulse crops

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<sup>12</sup> Statistics Canada. [Table 36-10-0013-01 Input-output multipliers, summary level](#).

<sup>13</sup> Statistics Canada. [Table 36-10-0113-01 Input-output multipliers, provincial and territorial, summary level](#).

and special crops). These developments make input on the timing of sales of the crops produced through the marketing year all the more important. In fact, getting the timing right generally is the decisive factor between profitability or deficit for primary producers.

To judge the depth of overall demand and the speed of export movements, farmers need regular and timely access to sales and export data. Access to such data does nothing more than put producers on an equal footing with the rest of the commodity chain. Their buyers, grain companies and processors, already have access to this data as they are involved in volume buying (as opposed to individual farm sales) and the processing or movement of grain. Indeed, the US Export Sales Reporting program was partially based on the notion that

*“there was growing concern that some companies might have an unfair advantage in situations like this because they had access to market-sensitive information that was unavailable to the public.”<sup>14</sup>*

The US program has been in place since 1973 and is thought to help facilitate price stability by guaranteeing that everyone has access to the same information at the same time.

To support effective and efficient decision making by producers in Canada, the following data must be made available regularly and in a timely fashion: *export projections, export flow by commodity, actual sales data, pipeline cost data (annual), quality data. And linking crop and export flow projections with railcar availability to the Ag Industry will enhance export performance.*

### 1.2.1 Export projections

The monthly **AAFC** reports provide market information and analyses on the current situation and outlook for Canadian principal field crops, including grains, oilseeds, and some pulse and special crops. AAFC publishes overall export projections with their monthly balance sheets. The first new crop projection comes with the January report. There is no breakdown of the export projection number by destination.

### 1.2.2 Export Flow by commodity by destination

Currently available are monthly *export by destination* reports for each crop issued by **Statistics Canada**. Unfortunately, these reports are issued five-to-six weeks after completion of the shipping month, so they say very little about the ongoing market activity.<sup>15</sup> Given improvements to data collection technology, we recommend that the export data by destination be issued within 5 days of the month-end, which will be a significant improvement to this data. Bill of Lading data could be used for preliminary numbers.

Until 2012, the **Vancouver Port Authority** issued a weekly report on export loadings by commodity and by company, as well as indicating the destination of the vessels loaded. This data was significantly timelier than the Statistics Canada export data, as it showed the actual commodity flow as it occurred. The report was discontinued after the CWB was dismantled. The grain companies owning the facilities in the Port of Vancouver chose to no longer support the report. A reinstatement of the old report would significantly speed up the information flow on export loadings.

<sup>14</sup> FAS. (2006). Fact Sheet, USDA's Export Sales Reporting Program: Provides Markets with an Early Alert, p.1

<sup>15</sup> CIMT. (2021). 2021 Release Dates, <https://www150.statcan.gc.ca/n1/en/release-diffusion/2021-eng.pdf?st=t4ADWMIF>, viewed March 2021.

### 1.2.3 Actual sales data

According to the FAO, one can differentiate between “current” market information, which meets the immediate commercial needs of farmers and traders and “historical” information which, when analysed, can be used for planning purposes by farmers and policy makers<sup>16</sup>. Export data only tells the demand story well after that demand materialized, because the sales execution generally happens well after the sale date. To get an idea about ongoing, or current demand, sales data is necessary. To their collective benefit, the US recognized the necessity for all parties involved in the production and export of U.S. grain to have access to up-to-date export sales information when Congress mandated the Export Sales Reporting program in 1973.

The USDA system works for the benefit of the whole market chain. The USDA Export Sales Reporting system provides information on sales on a daily and weekly basis. Created in 1973 in response to the 1972 great Russian grain robbery, the Export Sales Reporting Program was implemented specifically to combat the asymmetry of information between exporters and producers. The Program provides timely information on the level and location of the demand for US agricultural goods. It can be used as an indicator on the competitiveness of US products on the world market, as well as give information on the effect of foreign demand on the domestic supply and prices of agricultural commodities.<sup>17</sup>

Following is some basic detail on the workings of the USDA program. The Export Sales Reporting program provides daily data on the amount and location of large sales (100,000 mt or more) to a destination and large cumulative sales (200,000 mt or more over a reporting period) to a single destination of most major US agricultural products. Exporters are required to report the type, class, quantity, marketing year of shipment, and destination (if known) of the commodities to be exported. Daily sales are reported in the afternoon of the day after the sale is made. Summaries are then sent out the next business day morning. Anyone can access or subscribe to these reports on the FAS website free of charge.

FAS also releases a compiled weekly report of the amount and destination of all major US agricultural goods on a weekly basis. The report is published each Thursday morning on the FAS website.

Historical weekly sales data can also be found on the FAS Export Query System. The Export Query System is a user-friendly tool to query historical data, see performance indicators, and generate graphs.

Commodities included in the Export Sales Reporting Program were chosen through consultations between the USDA, commodity group organizations and traders.<sup>18</sup> The US Secretary of Agriculture has the power to add commodities to the list of those covered. The Export Sales Reporting System is administered by the Foreign Agricultural Service (FAS) of the USDA under the oversight of the FAS. Authority is granted in section 602 of the Agriculture Trade act of 1978 and Trade Act 1990. The Sales Reporting System is governed by the FAS Administrator who has the authority to make amendments and revisions to the reporting requirements.<sup>19</sup> Exporters are required to fill out the

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<sup>16</sup> FAO, The Role of Market Information, <http://www.fao.org/3/AB795E/ab795e02.htm>, viewed March 2021.

<sup>17</sup> FAS. (2006). *FACT SHEET: USDA's Export Sales Reporting System: Early Alert System*. United States Department of Agriculture (USDA) Foreign Agricultural Service. <https://apps.fas.usda.gov/export-sales/FACT%20SHEET.pdf>, Retrieved on [2021-03-07].

<sup>18</sup> The Export Sales Reporting Program currently includes the following commodities: Wheat, corn, barley, sorghum, rice, soybeans, soybean cake and meal, soybean oil, cotton, hides and skins, beef, pork.

<sup>19</sup> GPO. (2021). *Part 20 – Export Sales Reporting Requirements*. National Archives and Records Administration (NARA) Government Publishing Office (GPO). <https://www.ecfr.gov/cgi->

applicable forms (sources of data are shown in Appendix 2) and submit the sales data promptly. Should the exporter fail to report the required information, they could be fined up to \$25,000, receive up to one year of jail time, or both.<sup>20</sup>

The USDA's FAS meets with exporters to check the accuracy and reporting practices. In addition to this, exporters are required to provide quarterly contract information to verify the accuracy of the reported data. Discrepancies are resolved via a memorandum of understanding with USDA's Grain Inspection, Packers and Stockyards Administration.

Additionally, the USDA makes a searchable database accessible. The Global Agricultural Trade System (GATS) is a division of the FAS. GATS is a searchable trade database that includes trade data on a wide variety of agricultural, fish, forest, and textile products.<sup>21</sup> GATS contains monthly, quarterly, annual, or bi-annual data on exports and imports with all US trading partners on a national, state, and customs district level. The data is updated monthly and can be queried by value and quantity.

The Canadian situation: While Statistics Canada does report export shipments by commodity and by destination (albeit late), there currently is *no* commodity sales report available in Canada. Following the rationale and the lead of the US program in a simplified form, a transparent Canadian market model would require the weekly reporting of export sales by Canadian exporters. As a reminder, this would *not* be this first time that a sales reporting system for grain was implemented in Western Canada. Before the Grain Transportation Agency (GTA) was disbanded in 1996, grain companies reported their sales by crop to the agencies on a weekly basis to help coordinate the car allocation process.<sup>22</sup>

Daily and weekly reporting should be required for certain 'reportable commodities' including wheat and wheat products, durum, rye, oats, corn, canola, soybeans, flaxseed, mustard seed, barley (malting barley & feed barley), pulses (peas, lentils, chickpeas, beans), canaryseed.<sup>23</sup>

Daily reporting on large export sales of certain commodities can be defined as minimum 10,000 mt for grains and oilseeds (as this would include wheat sales to Japan), and a minimum 5,000 mt or more for pulses and special crops of one commodity in one day to a single destination.

Weekly reports would show cumulative sales for the week by commodity and end destination.

We note that sales must be reported to a neutral party which administers the program in terms of data dissemination and verification of the data. Company names and sales prices are not disseminated. A compromise might also be to only show cumulative weekly sales.

The CGC should be well placed to spot check the sales data given by the companies based on its role of providing quality assurance and by terminal elevator receipts in the ports and linking it to

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bin/retrieveECFR?gp=1&SID=0334adcd2c434b32227f13bfd7c55065&h=L&mc=true&r=PART&n=pt7.1.20#se7.1.20\_12, Retrieved on [2021-03-11].

<sup>20</sup> GPO. (2021). *Part 20 – Export Sales Reporting Requirements*. National Archives and Records Administration (NARA) Government Publishing Office (GPO). [https://www.ecfr.gov/cgi-bin/retrieveECFR?gp=1&SID=0334adcd2c434b32227f13bfd7c55065&h=L&mc=true&r=PART&n=pt7.1.20#se7.1.20\\_12](https://www.ecfr.gov/cgi-bin/retrieveECFR?gp=1&SID=0334adcd2c434b32227f13bfd7c55065&h=L&mc=true&r=PART&n=pt7.1.20#se7.1.20_12), Retrieved on [2021-03-11].

<sup>21</sup> GATS. (2021). *GATS Home*. United States Department of Agriculture (USDA) Global Agricultural Trade System (GATS). <https://apps.fas.usda.gov/GATS/default.aspx>, Retrieved on [2021-03-07].

<sup>22</sup> Seguire, M., for Transport Canada, *Grain Transportation and Logistics in Western Canada: Evolving Allocation Process*, 2005

<sup>23</sup> This follows broadly the listing used in the Grain Monitor Report on the Canadian Grain Handling and Transportation System; see Appendix 3.

contract data. The CGC is a neutral member which already is active in the grain handling system and already is privy to much of the information needed.

*Mercantile recommends the following data be made available:*

- i. Daily reporting on sales tonnages by destination based on the min. tonnages outlined above. Sales tonnages to be reported by the seller within 5 days of conclusion of contract. The seller's identity will not be reported.*
- ii. Cumulative weekly tonnage sold by destination based on the tonnages outlined above. This will protect the name of the seller(s) while divulging the overall size of demand and where the demand is coming from.*

#### 1.2.4 Pipeline cost data (annual)

There are other areas where improved data will help with overall transparency. Importantly, knowledge about actual elevation costs at the primary elevator levels as well as the terminal elevator and average rail transportation costs will enable farmers to translate international market prices to the farm level equivalent. This tells producers how closely elevator bids are reflecting international prices.

Understanding pipeline costs is vital to interpreting international market signals, translating them to the domestic market situation and then assessing the relative competitiveness of these elevator bids. In fact, knowing basic pipeline data is a prerequisite to understanding how Canada is faring in export markets. In the past, when Canada still had public export elevators in port positions, it was easy to determine the costs of elevation. Today, the fobbing rates shown by CGC represent maximum charges by elevator companies and are not representative of actuals.

The USDA addresses this challenge by making resources available to producers in a regular and easily accessible fashion. The Agricultural Marketing Service (AMS) actively seeks to create “domestic and international marketing opportunities for American farmers”<sup>24</sup> via their Market News service and their Transportation and Marketing Program. Market News is a free source providing price and sales information including wholesale, retail, and shipping data.<sup>25</sup> The Transportation and Marketing Program reports the cost of transportation and the quantity of agricultural goods in transit. The data provided includes train transport costs, price spreads between US point of origin and export positions, rail deliveries, barge movement, grain inspections, vessel loading, and more. A table with a complete list of the products offered can be found in Appendix 2. The data sources listed in Appendix 2 are used in the weekly Grain Transportation Report (GRT). The GRT reports all things affecting grain transportation both domestically and globally, including the volume and prices of barge, rail, truck, and ocean freight.<sup>26</sup>

In Canada, with deregulation of rail movement and the changes to the CWB, it has become increasingly difficult to ascertain even basic intelligence about the pipeline. Major pipeline cost components, such as average multiple car or unit train freight rates from major delivery points to port, or such as handling and fobbing costs in the interior and in port position, are very hard to

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<sup>24</sup> AMS. (2019). *Creating Opportunities for American Farmers and Businesses*. United States Department of Agriculture (USDA) Agricultural Marketing Service (AMS).

[https://www.ams.usda.gov/sites/default/files/media/AMS\\_Fact\\_Sheet\\_2019.pdf](https://www.ams.usda.gov/sites/default/files/media/AMS_Fact_Sheet_2019.pdf), Retrieved on [2021-03-07].

<sup>25</sup> AMS. (2019). *Creating Opportunities for American Farmers and Businesses*. United States Department of Agriculture (USDA) Agricultural Marketing Service (AMS).

[https://www.ams.usda.gov/sites/default/files/media/AMS\\_Fact\\_Sheet\\_2019.pdf](https://www.ams.usda.gov/sites/default/files/media/AMS_Fact_Sheet_2019.pdf), Retrieved on [2021-03-07].

<sup>26</sup> AMS. (2021). *Grain Transportation Report*. United States Department of Agriculture (USDA) Agricultural Marketing Service (AMS). Retrieved on [2021-03-05].

ascertain. Most rail rates are based on special agreements between the rail companies and the grain handlers (as they are in the US). Even if a producer manages to look up single car rail rates from major delivery points to terminal elevator destinations, these will not reflect average multiple car rates, unit train rates, or High-Efficiency-Product train program rates (CP).

Pertaining to grain handling costs, fobbing rates are only listed as 'maximum tariffs' on the CGC website. The CGC currently lists primary, process and terminal elevator tariffs by company. But these are maximum tariffs and do not reflect actual costs. We also observe that the published maximum rates are used by Canadian elevators to make it expensive for growers to cancel grain sales to a company.

This means that producers can only guess at the actual costs involved.

*Mercantile proposes that **Quorum Corporation** publish annual indications of 'average rail freight rates' within their role as the "the monitor for the prairie grain handling and transportation system".<sup>27</sup>*

*Mercantile also proposes that the CGC make average fobbing costs, both at primary and terminal elevators, visible to growers. This will help producers, policy analysts, Government agencies and politicians to understand and assess the true costs of the system.*

- i. Transportation cost data  
Publication of average 112 car rail rates, not single car rates*
- ii. Handling/ fobbing costs (not MAX. tariffs)  
Knowledge about the actual cost of elevation is generally based on experience*

### 1.2.5 Price data

While data on export prices achieved would complete efforts at market transparency, price data tends to be the hardest data to obtain from export companies due to 'competitive issues'.

An observation on price data:

In Canada, within the theme of price transparency, we can distinguish between crops where Canada is dominant in the international trade context, and crops where Canada is a price taker.

We define crops with market power as those which have a significant market share internationally, so that the Canadian fundamentals matter materially to the overall market. In this case, Canadian exporters tend to be price setters. Canadian durum, with a 40-45% market share in international durum trade is a good example. Other Canadian crops with a significant market presence include canola, peas, lentils, flaxseed, and canaryseed. For these crops, the availability of Canadian sales data is especially important, because other origins tend to follow the Canadian lead as international data is less determinant.

Crops where Canada is a price follower are those where the Canadian share in international trade is moderate, and where Canadian crops need to compete with more dominant players. Wheat (excl. durum) is a good example. In recent years, the Canadian market share of the international wheat trade has diminished to only 11-12%. Canada tends to be the price taker in the wheat market; and depending on the destination, Canadian wheat competes with US, Argentine, Australian, Black Sea and EU wheat. Canada is a relatively minor player in the international markets for soybeans, corn and barley. Ironically, it is easier to detect export price levels for the price taking crops by using reported values of other origins. For example, US PNW wheat prices (available on the Internet) are a good proxy for wheat export values in Vancouver.

<sup>27</sup> [http://www.quorumcorp.net/about\\_us.html](http://www.quorumcorp.net/about_us.html), accessed March 2021.



This actually means that it might be more significant to publish price data for crops where Canada is dominant in the markets than for crops where Canada is a price taker.

Price data categories:

- a. Crops with Canadian mkt power in global context  
Durum wheat (~45% global mkt presence), canola, peas, lentils, flaxseed, canaryseed → domestic price data availability is more important
- b. Crops that are 'price takers'  
Wheat (~12% global mkt presence), corn, soybeans, barley  
→ price data may be found elsewhere

### 1.2.6 Quality data

If published in a timely fashion, quality data can be used constructively by farmers as an additional indicator for depth of demand. A prime example is for crops, such as canola and peas, that are being processed into major components. If the oil content of the canola crop is relatively high, then the demand for canola is inevitably higher. This is especially true when vegetable oil prices are high relative to meal, as this will drive demand towards an oil dominant crop like canola, and away from a meal driven crop, like soybeans. Likewise, we expect that the protein content of peas and other pulses will become equally important as the pulse fractioning industry evolves in Canada.

The CGC collects and publishes grain quality data as part of their harvest sample program. Producers in the Western Prairies can voluntarily send harvest samples to the CGC for analysis. For wheat, once enough samples have been analysed, the CGC publishes harvest quality data on a weekly basis (usually starting mid-September). The final quality report for all major Canadian grains is posted in January.

### 1.2.7 Link between railcar availability to the Agriculture Industry and export performance

The 2020/21 crop year may be the perfect year to again discuss the relationship between overall export volumes of agriculture products and railcar availability to the industry. In 2020/21, as exports from other industries like coal and crude oil were reduced during the Covid-19 pandemic, railcar availability for agriculture products increased significantly.<sup>28</sup> As exports for other commodities dropped, rail operators directed more rail capacity towards agriculture, and agriculture exporters responded by utilizing the additional capacity.

According to week 32 CGC data<sup>29</sup>, crop year 2020/21 agriculture exports have increased by an impressive 35%, or 8.8 million mt during the first 32 weeks of the ongoing crop year relative to the previous crop year. Assuming an average value of \$400/mt, this represents an additional \$3.5 billion in the hands of farmers instead of locked away in bins. Consider how this will improve the GDP and export data for 2020 and 2021 shown in the introduction.

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<sup>28</sup> Media reports about transportation repeatedly talked about the slowdown in coal and crude oil exports over the past year. Mercantile attempted to detail recent developments in rail movement by commodities, including coal, crude oil, fertilizer into 2020, but was unable to do so using Transport Canada data (only show data into 2018). Mercantile contacted Quorum Corporation, which could not confirm the breakdown by commodities beyond grain into 2020 “due to reporting differences between the rail companies”.

<sup>29</sup> Canadian Grain Commission, Grain Statistics Weekly, 2020-21, Week 32, March 14, 2021

## Mercantile: Understanding the Data Requirements for a Transparent Market

Canadian Grain Exports (CGC numbers)		Wk. 32			
('000 MT)	Canola	Wht. & Durum	Peas (bulk)	Lentils (bulk)	All Grains
Crop Year To date	7,551	15,841	1,950	648	34,096.0
Year Ago	5,778	12,337	1,591	547	25,331.0
Change this Cr.Yr. in MT	1,773	3,504	359	101	8,765
Change this Cr. Yr. in Percent	131%	128%	123%	118%	135%

Source: Mercantile based on CGC data

Canada is unique among major exporters in that it is almost exclusively dependent on rail movement to get agriculture exports to tidewater. There are no big navigable rivers or canals, and trucking huge distances is inefficient and costly. At the same time, Canada is heavily dependent on the export market since our domestic usage is relatively small compared to many other exporters. About 55% of our crop production is exported.

However, agriculture exports in Canada have long suffered from the fact that limited rail capacity has actually curtailed sales and exports, because shippers could not be sure they could move commodities reliably and in a timely fashion into export position. For example, commercial stocks in Western Canada are generally reported at around 7 mln mt at any time against about 1 million mt weekly movement, so there always is enough grain to load. The bottleneck is the rail movement. From the point of view of food security and ending stocks, there is no reason to carry more than 2 months of usage at the end of the crop year, as new crop production always exceeds domestic use. This ongoing crop year, rail capacity available to agriculture was raised, and total agriculture exports expanded very significantly indeed.

The link between rail capacity available to agriculture and overall ag exports achieved requires some attention in order to maximize the returns to agriculture and also to maximize the economic returns to Canada. The underlying problem is that rail capacity is a scarce resource within Canada with no viable alternatives for the users, while at the same time the 'scarce resource' allocation is based on relatively narrow decision dynamics as opposed to broad national objectives.

Given that our main rail operators, CNR and CPR are private corporations, the railroad operators naturally allocate this resource based on narrow railroad balance sheet and shareholder considerations. This may lead to rail capacity allocation decisions that are not optimal from a national point of view. For example, coal (a rival to agriculture for rail capacity) is currently valued at US\$95/mt. This compares to \$772/mt of canola in SK (~US\$617/mt, ~6.5 times the value of coal). From a rail point of view, if coal fetches \$1/mt more in rail freight, the railroad is acting rationally by preferring to move coal over canola. This is especially true because coal is moved from a limited number of origin points to port and generates a higher revenue for the company. But from the point of view of the overall Canadian economy, there is no question that the much higher valued canola should be moved first. Currently there is no mechanism to address such an imbalance or to consider the national interest.

*MCV recommends that, at minimum, improved, timelier, and more transparent sales data reflecting ongoing agriculture industry activities must be used for improved calculations of agriculture transportation needs and to assure that there are sufficient railcars available to an industry with high priced commodities to accommodate all export opportunities.*

An additional consideration should be that agriculture commodities are renewable resources, while coal and crude oil are and non-renewable resources.

Data required for improved agriculture export – rail capacity coordination:

- a. AAFC/ Statistics Canada production projections (annual)  
*Determine overall volume expectations and link to railroad capacity dedicated to agriculture exports*

- b. AAFC/ Statistics Canada export projections (annual & monthly)  
*Link export projections by corridor to railroad capacity dedicated to ag exports*  
*Refine/ adjust rail capacity targets monthly*
- c. Weekly sales reports (possibly administered by CGC)  
*Data gives an actual snapshot of upcoming transportation requirements, versus working exclusively with historic data. This will help prevent major shortfalls and help coordinate and gear up for high export commitments.*

Using improved and more timely production, export and sales data, should allow for better planning and a more proactive handling of the rail transportation issue. The idea is that rail supply should not be a determinant factor to supply and demand and the export volume of Canadian crops. If successful, it would enable the agriculture industry and the overall economy to maximize overall returns to agriculture production.

*Mercantile proposes that rail car availability be tied to a scale that represents the best GDP results for Western Canada. We also believe that the total production capability and export potential for Western Canada can only be determined when cars ordered are provided without restriction.*

Incidentally, Mercantile is not alone in this assessment. To quote Quorum Corporation (Government appointed Grain Monitor) from their 2014 Supply Chain study:

*“Improving the visibility and transparency of the Canadian grain supply chain would empower supply chain members to optimize their transportation and logistics strategies by proactively identifying potential or current bottlenecks in the systems and planning their operations accordingly. Improved performance measures and supply chain processes would support more accurate forward planning and provide early indications of when and where the supply chain may be weakening.”<sup>30</sup>*

## 2 Data Collection & Publishing Time Frames

In this section we identify who should collect the data and the publishing time frames. Table 2 summarizes the data requirements discussed above.

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<sup>30</sup> Quorum Corporation: Grain Supply Chain Study – Final Report, Sept. 2014, p. 12

Table 2: Data Requirements: current and ideal (with comments)

Data Requirements														Comments:	
		Timing of reports:													
		January	February	March	April	May	June	July	August	September	October	November	December		
<b>Data points needed:</b>															
<b>Supply side:</b>	<b>Acreage projection</b>	<i>current:</i> AAFC			<i>current:</i> StatsCan									<i>Quality needs to improve</i>	
		<i>ideal:</i> AAFC			<i>ideal:</i> StatsCan									<i>Add destination breakdown; Jan.-AAFC</i>	
	<b>Production numbers</b>	<i>current:</i>						StatsCan			StatsCan (final #'s)			<i>Finalize earlier</i>	
		<i>ideal:</i>						StatsCan			StatsCan (final #'s)			<i>Quality needs to improve</i>	
	<b>Ending stocks</b>	<i>current:</i> AAFC	AAFC	AAFC	AAFC	AAFC	AAFC	AAFC	AAFC	AAFC	AAFC	AAFC	AAFC	<i>Monthly; need to be &gt;&gt; accurate</i>	
		<i>ideal:</i> AAFC	AAFC	AAFC	AAFC	AAFC	AAFC	AAFC	AAFC	AAFC	AAFC	AAFC	AAFC	<i>March, July, December stock numbers</i>	
	<b>Ending stocks</b>	<i>current:</i> StatsCan		<i>current:</i> StatsCan			<i>current:</i> StatsCan			<i>current:</i> StatsCan			<i>Improve timing.</i>		
		<i>ideal:</i> StatsCan		<i>ideal:</i> StatsCan			<i>ideal:</i> StatsCan			<i>ideal:</i> StatsCan					
<b>Demand side:</b>	<b>Exports-overall numbers</b>	<i>current:</i> AAFC													
		<i>ideal:</i> AAFC													
	<b>Exports-by destination</b>	<i>current:</i>												<i>Occur monthly, but with ~ 2mos. delay</i>	
		<i>ideal:</i> StatsCan	StatsCan	StatsCan	StatsCan	StatsCan	StatsCan	StatsCan	StatsCan	StatsCan	StatsCan	StatsCan	StatsCan	<i>Publish within 5 days of mos.-end</i>	
	<b>Domestic use</b>	<i>current:</i> AAFC													
		<i>ideal:</i> AAFC												<i>Monthly; need to be &gt;&gt; accurate</i>	
	<b>Grain Handling data-wkly.</b>	<i>current:</i> CGC													
		<i>ideal:</i> CGC												<i>Continue; add directional rail movement back in</i>	
	<b>CGC grain exports-monthly</b>	<i>current:</i> CGC	CGC	CGC	CGC	CGC	CGC	CGC	CGC	CGC	CGC	CGC	CGC	CGC	<i>Continue</i>
		<i>ideal:</i> CGC	CGC	CGC	CGC	CGC	CGC	CGC	CGC	CGC	CGC	CGC	CGC	CGC	
	<b>Port load data-weekly</b>	<i>current:</i> n/a												<i>Need requirement that Gr.Co's report loadings by dest'n; reported in past to Port Authority &amp; GTA</i>	
		<i>ideal:</i> Port Auth.												<i>Re-establish wkly. load data by ports</i>	
	<b>Actual Sales-daily</b>	<i>current:</i> n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	<i>CGC has access to weigh/ B/L data</i>	
		<i>ideal:</i> CGC (>mt)												<i>CGC has access to B/L data</i>	
	<b>Actual sales-weekly</b>	<i>current:</i> n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a		
		<i>ideal:</i> CGC (>mt)													
<b>Other:</b>	<b>Rail cost data (annual)</b>	<i>current:</i> n/a													
		<i>ideal:</i> Quorum												<i>Annual in January</i>	
	<b>Handling Costs (annual)</b>	<i>current:</i> n/a													
		<i>ideal:</i> CGC												<i>Annual in January</i>	
	<b>C O P tables</b>	<i>current:</i> Prov. Ag.												<i>Annual in January</i>	
		<i>ideal:</i> Prov. Ag.													
Areas where improvement needed.															

Source: Mercantile Consulting Venture, 2021

A good portion of the data needed exists today, but much more discipline with respect to quality and timeliness is essential. This applies specifically to the quality of **AAFC** projections (export and domestic demand and the resulting ending stock estimates), as well as to the detail of the data (exports by destination).

**Statistics Canada** data must also become timelier. Production estimates might be moved up by a month, and with the help of current technology, export statistics should be published within five working days of month end.

The much-utilized weekly **CGC** handling data must be continued, and the portion of the data showing directional rail movement (in transit data by commodity) that has been discontinued over the past year, must be reinstated. Monthly CGC export data by destination should also remain available to growers, as it is presented in an easier-to-use fashion than Statistics Canada data.

The reports highlighted in the grey area (see Table 2) need to be re-established or initiated. Vessel load reports were previously issued on a weekly basis by the **Vancouver Port Authority**, and there is merit in restarting the report. It showed actual load data, which is more timely than past exports. This report likely necessitates a reporting requirement for the grain companies loading in the port. The Port Authority could be required to assemble the commodity load report. The destinations of the loaded vessels should be indicated.

*Daily and weekly sales data should be established as outlined above.*

This report elevates the data gathering above historic data reporting to current data intelligence, and thus has great value to producers when trying to assess ongoing market dynamics! Again, it merely puts producers on a more equal footing with respect to market intelligence with their buyers. The **CGC** currently verifies the weighing of grain during the loading of vessels<sup>31</sup>, and as such is most closely involved in the daily workings of the grain industry.

*Mercantile proposes that the grain companies be legislated to report daily and weekly sales over a specified size to the CGC, which then makes it available on their website, similar to the CGC grain handling report.*

Interested parties should then be able to subscribe to the daily and weekly reports, similar to the workings of the US Export Sales Reporting Program.

Rail cost data: While there are confidential agreements between grain companies and the rail companies, **Quorum** (the Government appointed Grain Monitor) should publish an average multi-car rail rate for midpoint Saskatchewan (Alberta, Manitoba) to port positions to enable producers to more easily interpret international price signals.

*Handling costs: The CGC must publish average fobbing costs, both at primary and terminal elevators.*

Cost of production (COP) tables are already well covered by the provincial agriculture departments.

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<sup>31</sup> CGC, Vessel Loading Standard for Official Weighing, Version 2.0, effective Spt. 1, 2015 – CGC – WS-STAN 4.1

### 3 Existing Data Points & Data Gaps

Market information can be regarded as a public good, particularly where there are numerous small farmers who are unable to pay for information.<sup>32</sup> The idea of data and information as a public good points towards the approach that government agencies should be intimately involved in the collection of select data, and that the agencies must be given the legislative mandate and authorisation to do so. It also makes sense to build on currently existing programs, albeit with tighter timelines adjusted to the digital age. Much of this has been discussed in the previous section, but the proposed data reports are summarized by agency below.

Table 3: Proposed Data Reports

Data Requirements by Agency					
Agency	Current Reports	Timing	Final Reports	Timing	Comments
AAFC	Acreage projection	Jan.	Acreage projection	Jan.	More accuracy More accuracy, fewer changes
	Export projection	Jan. /monthly	Export projection	Jan.	
	Domestic use	Jan. /monthly	Exports by destination	Jan.	
	Ending stocks	Jan. /monthly	Domestic use	Jan. /monthly	
	Ending stocks	Jan. /monthly	Ending stocks	Jan. /monthly	
Statistics Canada	Acreage projection	Apr./ quarterly adj's	Acreage projection	Apr./ quarterly adj's	Move reporting up by 1 mos.
	Production numbers	Aug./ quarterly adj's	Production numbers	July/ quarterly adj's	
	Exports by destination	Monthly	Exports by destination	Monthly, but within 5 working days of mos. end	
	Ending stocks	Quarterly	Ending stocks	Quarterly	
CGC	Grain handling tables	Weekly	Grain handling tables	Weekly	Add directional movement back in
	Exports by destination	Monthly	Exports by destination	Monthly	Provides current vs. historic data
			Sales data	Daily (certain size)	Avg. cost by commodity
			Sales data	Weekly summary	
	Elevator Charge Summary Annual		Avg. fobbing costs	Annual	
Port Authority	n/a		Port loading data	Weekly summary	Same format as formerly; need grain co. consent
Quorum	n/a		Avg. rail cost major points	Annual	Within role as grain monitor
Prov. Ag. Dpt's	COP data	Annual	COP data	Annual	
Newly initiated reports in bold					

Source: Mercantile Consulting Venture, 2021

#### Statistics Report Details:

Mercantile has compiled a list of reports and statistics data that are currently or used to be published, to ensure that Sask Wheat has the fullest possible picture of what variables are handled in the various reports. Each Statistical agency basically has one core report each and then they draw from that for the various sub-reports. AAFC's core report is the Outlook for Principal Field Crops. The Statistics

<sup>32</sup> FAO, The Role of Market Information, <http://www.fao.org/3/AB795E/ab795e02.htm>, viewed March 2021.

Canada core report is the Field Crop Reporting Series. The CGC's core report is based on the Grain Stats Weekly. See Appendix 5 for the detailed report descriptions.

## 4 Recommendations

*“At big moments we need good quality, trustworthy and relevant evidence and good use of that evidence to help us make decisions. Without it we hear the selective voice of vested interests. We see the headlines that emphasise the extreme or the unlikely. We are subjected to the rhetoric of a yarn designed to lure us into a fictional world. And we are denied the opportunity to set these influences in context.”<sup>33</sup>*

The review of the Grain Act is an opportunity to modernize and update the Act to accommodate all parties involved in the production and export of Canadian grain.

The most effective way to tackle a review of an existing system is to start with the end goal. What does Canada actually want to achieve within the Canadian agri-food system? If it is to maximize exports and to maximize overall GDP returns generated by agriculture, then improved data quality, data transparency and improved access to data through the market chain, as addressed by the resolution of five important grower groups this winter, should be given serious consideration.

Specifically, the adoption of a weekly cumulative sales reporting program in Canada may help to put producers on a more equal footing with the rest of the commodity chain and enable more informed marketing decisions by producers. In addition, current sales data (as opposed to historic export numbers) would be equally (if not more) useful to start addressing the main bottleneck to increasing agriculture exports. Improved forecasting could be linked to adequate rail capacity available to the agriculture industry, so that all export opportunities can be exploited. Agriculture commodities are relatively high priced, renewable commodities and should be accommodated.

On a practical level, a revised Grain Act must ensure that STC has continued access to good farm data to accommodate the STC surveys and leave room for future expanded surveys. Similarly, the CGC (or other appointed agency/ies) must be granted access to handling and movement data from crop handlers and exporters, as well as the means to enforce timely and accurate reporting by the companies. Serious consideration must also be given to compel rail companies to provide commodity movement data in a form useful to the system.

In the US, USDA worked on the issue of market transparency to the benefit of all some 40 years ago. The USDA program works and with political will, a similar program can benefit Canadian producers and the agri-food system as well.

Table 4 summarizes the recommendations detailed above.

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<sup>33</sup> United Nations Economic Commission for Europe (UNECE), Recommendations for Promoting, Measuring and Communicating the Value of Official Statistics, UN New York and Geneva, 2018; <https://unece.org/fileadmin/DAM/stats/publications/2018/ECECESSTAT20182.pdf>

Table 4: **Summary of Recommendations** (new reports highlighted in red)

<b>Recommendation Summary</b>				
<b><i>Cropping Decisions</i></b>				
<b>Data Gap</b>	<b>Collected from Whom</b>	<b>By Whom</b>	<b>When</b>	<b>Benefit</b>
<b>Forecast exports by destination</b>	AAFC/ STC from customs data, destination intel	AAFC/ STC	Monthly, January onward	Producers
<b>Domestic use numbers</b>	Processors/ manufacturers	AAFC/ STC	Monthly, need to be researched	Producers
<b>Stock numbers/ Stock-use ratios</b>	AAFC calculation derived from above factors	AAFC	Monthly, more consistent month to month	Producers
<b><i>Marketing Decisions</i></b>				
<b>More timely exports by destination</b>	Customs data	STC	Monthly; s/b within 5 days of month end	System: producers, trade, transportation
<b>Quality data</b>	Farm sample program	CGC	ASAP after harvest	Producers, trade
<b>Export loadings at port</b>	Export Co's	Port Authorities	Weekly	Producers, trade
<b>Weekly Sales by Crop; show destinations</b>	Export Co's	CGC	Weekly	Producers, trade, improved system performance (if used wisely)
<b>Linking overall sales data &amp; export projections with rail capacity available to accommodate agriculture exports</b>	Co's, railroads	Quorum, RR's, AAFC, Trade Cda.	Monthly	<i>Improved system performance/ export maximization/ Productivity gains Cdn. Agric. &amp; Food System</i>
<b><i>Other (System cost basics)</i></b>				
<b>Fobbing costs (avg.)</b>	Elevator Co's	CGC	Annual	Producers
<b>Rail costs (avg. main points to ports)</b>	Rail Co's	Quorum	Annual	Producers, trade



## Appendices

### Appendix 1 - List of Canadian Agency Reports

#### **STATISTICS CANADA (STC)**

##### **Estimated areas, yield, production, average farm price and total farm value of principal field crops, in metric and imperial units**

Table: 32-10-0359-01 (formerly CANSIM 001-0017)

Frequency: Annual

<https://www150.statcan.gc.ca/t1/tbl1/en/tv.action?pid=3210035901>

##### **Stocks of grain and oilseeds at March 31, July 31 and December 31**

Table: 32-10-0007-01 (formerly CANSIM 001-0040)

Frequency: Occasional Monthly

<https://www150.statcan.gc.ca/t1/tbl1/en/tv.action?pid=3210000701>

##### **Estimated areas, yield and production of principal field crops by Small Area Data Regions, in metric and imperial units**

Table: 32-10-0002-01 (formerly CANSIM 001-0071)

Frequency: Annual

*Geography:* Province or territory

<https://www150.statcan.gc.ca/t1/tbl1/en/tv.action?pid=3210000201>

##### **Supply and disposition of grains in Canada**

Table: 32-10-0013-01 (formerly CANSIM 001-0041)

Frequency: Occasional Monthly (Jly, Dec., Mch. data)

*Geography:* Canada

<https://www150.statcan.gc.ca/t1/tbl1/en/tv.action?pid=3210001301>

##### **Exports of grains, by final destination**

Table: 32-10-0008-01 (formerly CANSIM 001-0015)

Frequency: Monthly

*Geography:* Canada

(exports to Regions & country destinations)

<https://www150.statcan.gc.ca/t1/tbl1/en/tv.action?pid=3210000801>

##### **Canadian International Merchandise Trade Database (CIMT)**

Export by destination data based on HS codes

Frequency: Monthly

Eg. Pea exports: [https://www5.statcan.gc.ca/cimt-cicm/topNCountries-pays?lang=eng&getSectionId\(\)=0&dataTransformation=0&refYr=2021&refMonth=2&freq=6&countryId=0&getUsaState\(\)=0&provId=1&retrieve=Retrieve&country=null&tradeType=1&topNDefault=25&monthStr=null&chapterId=7&arrayId=0&sectionLabel=II%20-%20Vegetable%20products&scaleValue=0&scaleQuantity=5&commodityId=071310](https://www5.statcan.gc.ca/cimt-cicm/topNCountries-pays?lang=eng&getSectionId()=0&dataTransformation=0&refYr=2021&refMonth=2&freq=6&countryId=0&getUsaState()=0&provId=1&retrieve=Retrieve&country=null&tradeType=1&topNDefault=25&monthStr=null&chapterId=7&arrayId=0&sectionLabel=II%20-%20Vegetable%20products&scaleValue=0&scaleQuantity=5&commodityId=071310)

## **AGRICULTURE AND AGRI- FOOD CANADA (AAFC):**

### **Reports and Statistics Data for Canadian Principal Field Crops Outlook for Principal Field Crops**

Standard reports, monthly

<https://www.agr.gc.ca/eng/canadas-agriculture-sectors/crops/reports-and-statistics-data-for-canadian-principal-field-crops/?id=1613662952721>

[→ include new crop projections starting in January.]

Agricultural Industry Market Information System

The Agricultural Industry Market Information System (AIMIS) is AAFC's new on-line database and information system which allows you to perform queries and to access data on screen or create downloadable files with alternative formats and data components.

### **G002 - Area, Yield, and Production of Canadian Principal Field Crops Report**

<https://aimis-simia.agr.gc.ca/rp/index-eng.cfm?action=pR&r=243&lang=EN>

[does not include projections]

### **G003 - Supply and Dispositions Table Report**

<https://aimis-simia.agr.gc.ca/rp/index-eng.cfm?action=pR&r=244&lang=EN>

[does not include projections]

## **CANADIAN GRAIN COMMISSION (CGC):**

### **Grain Statistics Weekly**

<https://www.grainscanada.gc.ca/en/grain-research/statistics/grain-statistics-weekly/>

### **Exports of Cdn. Grain and Wheat Flour**

<https://www.grainscanada.gc.ca/en/grain-research/statistics/exports-grain-wheat-flour/>

## **PROVINCIAL LINKS:**

### **Cost of production calculations:**

**SK:** <https://www.saskatchewan.ca/business/agriculture-natural-resources-and-industry/agribusiness-farmers-and-ranchers/farm-business-management/crop-planning-guide-and-crop-planner>

**AB:** <https://open.alberta.ca/publications/cost-and-return-benchmarks-crops-and-forages-dryland-crops>

**MB:** <https://www.gov.mb.ca/agriculture/farm-management/production-economics/cost-of-production.html>

**Appendix 2 - List of Data products Offered by USDA-AMS.**

**This data is used in the compilation of the Weekly AMS Grain Transportation Report**

<b>Extension</b>	<b>Name</b>	<b>Description</b>	<b>Reporting</b>	<b>Data Source</b>
AMS	<a href="#"><u>Grain Transport Cost Indicators (xlsx)</u></a>	Changes in truck, rail, barge, and ocean freight rates using diesel prices, nearby secondary rail market rates, Illinois barge rates, and ocean freight rates from U.S. Gulf and PNW to Japan as proxies.	Weekly	Transportation & Marketing Programs AMS USDA
	<a href="#"><u>Market Update: U.S. Origins to Export Position Price Spreads (\$/bushel) (xlsx)</u></a>	Compares interior prices of corn in Illinois and Nebraska and Gulf, Iowa and Gulf soybean prices, Kansa and Gulf Hard Red Winter wheat, North Dakota, and Portland Hard Red Spring wheat.	Weekly	Transportation & Marketing Programs AMS USDA
	<a href="#"><u>Rail Deliveries to Port (xlsx)</u></a>	Rail deliveries to port for the PN Texas Gulf, Mississippi River, and Cross-Border Mexico movements.	Weekly	Transportation & Marketing Programs AMS USDA
	<a href="#"><u>Railcar Auction Offerings (xlsx)</u></a>	Railcar bids/offers in the primary shuttle and non-shuttle railcar market.	Weekly	Transportation & Marketing Programs AMS USDA
	<a href="#"><u>Bids/Offers for Railcars to be Delivered in the Secondary Market (xlsx)</u></a>	Railcar bids/offers for the secondary non-shuttle and shuttle railcar Market.	Weekly	Transportation & Marketing Programs AMS USDA
	<a href="#"><u>Tariff Rail Rates for Unit and Shuttle Train Shipments (xlsx)</u></a>	Tariff rail rates and fuel surcharges for selected U.S. origin and destination pairs.	Monthly	BNSF UPRR KCSOUTHERN
	<a href="#"><u>Tariff Rail Rates for U.S. Bulk Grain Shipments to Mexico (xlsx)</u></a>	Tariff rail rates and fuel surcharges from selected U.S. origin states to selected Mexican regions. .	Monthly	BNSF UPRR KCSOUTHERN

Mercantile: Understanding the Data Requirements for a Transparent Market

<a href="#">Railroad Fuel Surcharges, North American Weight Average (xlsx)</a>	Weighted average railroad fuel surcharges.	Monthly	BNSF CN CRP CSX KCSI NSCORP UPRR
<a href="#">Figure 8; Table 9 (xlsx)</a>	Barge rates for major grain shipping points on the Mississippi, Ohio, Illinois, and Arkansas Rivers.	Weekly	Transportation & Marketing Programs AMS USDA
<a href="#">Barge Grain Movements (xlsx)</a>	Grain barge movements through specific locks and dams by grain type.	Weekly	U.S. Army Corps of Engineers
<a href="#">Grain. Barge Movements through Mississippi River Locks 27 (xlsx)</a>	Southbound grain barge movements through Lower Mississippi River Locks 27	Weekly	U.S. Army Corps of Engineers
<a href="#">Up Bound Empty Barges (xlsx)</a>	Northbound movements of empty barges through Mississippi River Locks 27, Arkansas River Lock and Dam 1, and Ohio River Locks and Dam 52.	Weekly	U.S. Army Corps of Engineers
<a href="#">Grain Barges Unloaded in the New Orleans Port Region (xlsx)</a>	Southbound grain barge movements through Mississippi River Locks 27, Arkansas River Lock and Dam 1, and Ohio River Locks and Dam 52 compared with the number of grain barges unloaded in the New Orleans Port Region ? Note: does not include barges originated south of Locks 27 near St. Louis, MO.	Weekly	U.S. Army Corps of Engineers AMS
<a href="#">U.S. Export Balances and Cumulative Exports (xlsx)</a>	Unshipped export sales balances and cumulative marketing-year-to-date export sales of wheat, corn, and soybeans.	Weekly	USDA FAS
<a href="#">Top 5 Importers of U.S. Corn (xlsx)</a>	Cumulative export sales commitments for the top 5 importing countries of U.S. corn that account for over 70% of U.S. corn exports.	Weekly	USDA FAS
<a href="#">Top 10 Importers of U.S. Wheat (xlsx)</a>	Cumulative export sales commitments for the top 10 importing countries of U.S. wheat	Weekly	USDA FAS

Mercantile: Understanding the Data Requirements for a Transparent Market

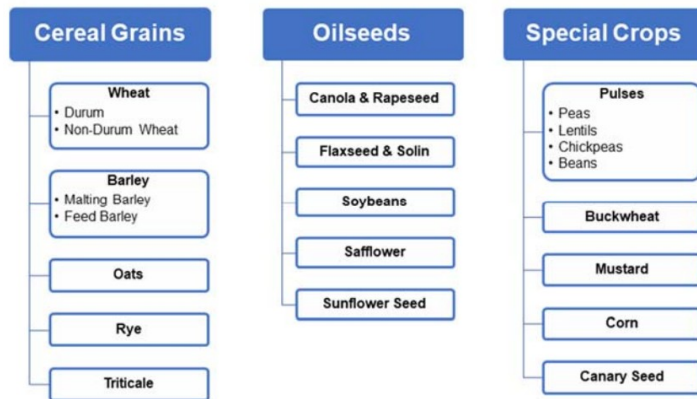
		that account for over 60% of U.S. wheat exports.		
	<a href="#">Grain Inspections for Export by Port Region (xlsx)</a>	Inspections of grain for export in the PNW, Mississippi Gulf, Texas Gulf, Great Lakes, and Atlantic.	Weekly	Grain Inspection Packers and Stockyards Administration USDA
	<a href="#">Weekly Port Region Grain Ocean Vessel Activity (number of vessels) (xlsx)</a>	Number of grain vessels loaded during the week and expected to be loaded within the next 10 days in the Gulf, PNW, and Vancouver, B.C.	Weekly	Transportation & Marketing Programs AMS USDA
	<a href="#">U.S. Grain Inspections: U.S. Gulf and PNW (xlsx)</a>	Inspections of grain for export in the U.S. Gulf and PNW, compared to the 3-year averages.	Weekly	Grain Inspection Packers and Stockyards Administration USDA
	<a href="#">U.S. Gulf Vessel Loading Activity (xlsx)</a>	Vessel loading activity in the U.S. Gulf compared to same period a year earlier and 4-year average.	Weekly	Transportation & Marketing Programs AMS USDA
	<a href="#">Grain Vessel Rates, U.S. to Japan (xlsx)</a>	Compares the monthly ocean freight rates for shipping bulk grain and the spread between the U.S. Gulf and PNW to Japan to the same period a year earlier and 4-year average.	Monthly	O'Neil Commodity Consulting

Source: <https://www.ams.usda.gov/services/transportation-analysis/gtr-datasets>

## Appendix 3 - Commodity Listing

Commodity listing used in the Grain Monitor Report on the Canadian Grain Handling and Transportation System:

The following provides a high-level overview of the various commodities discussed in this report. The delineations made here are drawn from the Canadian Grain Commission's Official Grain Grading Guide Glossary.



**Cereal Grains:** Cereal grains are any grain or edible seed of the grass family which may be used as food.

**Oilseeds:** Oilseeds include flaxseed and solin, canola and rapeseed, soybeans, safflower and sunflower seed.

**Canola:** The term “canola” was trademarked in 1978 by the Western Canadian Oilseed Crushers’ Association to differentiate the new superior low-erucic acid and low-glucosinolate varieties and their products from older rapeseed varieties.

**Special Crops:** Special crops are considered to be beans, buckwheat, chick peas, corn, fababeans, lentils, mustard, peas, safflower, soybeans, and sunflower.

**Pulses:** Pulses are crops grown for their edible seeds, such as peas, lentils, chick peas or beans.

## Appendix 4 - USDA Export Sales Forms

FAS-97, Report of Optional Origin Sales (weekly)

- <https://apps.fas.usda.gov/export-sales/instructions--1.pdf>

FAS-98, Report of Export Sales and Exports (weekly)

- <https://apps.fas.usda.gov/export-sales/instructions--2.pdf>

FAS-99, Contract Terms Supporting Export Sales and Foreign Purchases (monthly)

- <https://apps.fas.usda.gov/export-sales/instructions--4.pdf>

FAS-100, Report of Exports for Exporter’s Own Account (weekly)

- <https://apps.fas.usda.gov/export-sales/fas100.pdf>

## Appendix 5 - Statistics Report Details (Canada)

### 1. AAFC

#### a. Reports and Statistics Data for Cdn. Principal Field Crops – Outlook for Principal Field Crops

Description: Monthly outlook reports for principal Canadian principal field crops, including grains, oilseeds, and some pulse and special crops. The reports basically show a basic balance sheet by crop.

Table 4: Outlook for Principal Field Crops

Outlook for Principal Field Crops	
What factors are reported on	Areas seeded, area harvested, yield, production, imports, total supply, exports, Food & industrial use (grains, oilseeds), feed, waster dockage, total domestic use, carry-out stocks, avg price.
Crops covered	Wheat, durum, all wheat, barley, corn, oats, rye, mixed grains, total coarse grains, canola, flaxseed, soybeans, total oilseeds, dry peas, lentils, dry beans, chickpeas, mustard seed, canaryseed, sunflower seed, total pulse & special crops
How is data collected	Forecasts by AAFC except for area, yield and production, which are StatsCan based on their Field Crop Reporting Series. The outlook can incorporate recent data from the USDA WASDE report and the USDA Outlook conference.
Who provides the data	StatsCan & AAFC
Frequency	Monthly; ~mid-month for the ongoing month <u>New crop projections</u> are first published in the January edition of their report.
Reference Periods	Monthly
Problems with report	AAFC export projections are limited to overall export numbers by crop for the crop year without any breakdown even by major destinations. Domestic use data deserves more scrutiny, especially for commodities with formalized domestic use, like canola (via crush), wheat (flour milling), peas (fractioning), barley (malt), and for feed grains (barley, peas, wheat, etc. feed compounding). The changes to major data points like ending stocks are too frequent and too big. The data shown only covers a 3-crop year period.

#### b. AAFC reports G002 & G003

**Recently added on-line tools linked to the Outlook for Principal Field Crops under the new Agricultural Industry Market Information System (AIMIS) on-line data base, which allows for custom queries**

Description: G002: AIMIS for area, yield and production (AYP) data by Canada, Western Canada, Eastern Canada or by province for principal field crops in Canada up to 10 years during 1908 to 2020.

G003: AIMIS for supply and disposition data (S&D) (including data on food use, industrial use, seed use, and loss in handling) by commodity and by component, as well as price data, for crop years from 2000-2001 to 2019-2020 for principal field crops in Canada.

Same data as presented in the Outlook for Principal Feld Crops, but this offers an accessible data base to view longer time periods and to create custom tables. The database does not include any projections. That is, reports G002 and G003 currently does not show any projections relating to the 2021/22 crop.

## 2. Statistics Canada

### a. Field Crop Reporting Series

Description: This is a series of five data collection activities which are used in the release of estimates at pre-scheduled, strategic times during the crop year. These data are meant to provide “accurate and timely estimates of **seeding intentions, seeded and harvested area, production, yield and farm stocks**” of the principal field crops in Canada at the provincial level.

Table 5: Field Crop Reporting Series

Field crop Reporting Series	
What factors are collected	Seeding intentions, seeded and harvested areas, production, yield, farm stocks
Crops covered	'Principal field crops': Wheat, oats, barley, rye, flaxseed, canola, corn, soybeans, sunflower seeds, dry beans, dry field peas, lentils, mustard seed, canary seed, chickpeas
How is data collected	Field Crop Survey: As of March 2018, the questionnaire is offered in electronic format for use on the StatsCan website. The survey can now be self-completed as well as on the phone with an interviewer. As of the fall 2017, the September survey has been replaced with model-based principal field crop estimates obtained from satellite images.
Who provides the data	Farms, as defined by StatsCan
Frequency	5-times per year
Reference Periods	The field crop surveys are conducted in March, June, July, November and December. The data is released the following month.
Comment	This is the StatsCan base report in agricultural production of major crops, which also feeds into the stocks, small area production report and S & D report.

### b. Stocks of Grains and Oilseeds

Description: This report is part of the Field Crop Reporting Series. It specifies commercial, on farm and total stocks as of March 31, July 31, and December 31 each year.

Table 6: Stocks of Grains and Oilseeds

Stocks of Grains and Oilseeds	
What factors are collected	Commercial, and on-farm al stocks
Crops covered	'Principal field crops': Wheat, oats, barley, rye, flaxseed, canola, corn, soybeans, sunflower seeds, dry beans, dry field peas, lentils, mustard seed, canary seed, chickpeas
How is data collected	<u>Farm data</u> : Field Crop Survey to farmers. The 2020 survey also asked farmers about permanent on-farm storage capacity and the percentage of grain stored on farms using temporary storage methods. (The latter is available on request only). As of March 2018, the questionnaire is offered in electronic format for use on the StatsCan website. The survey can now be self-completed as well as on the phone with an interviewer. <u>Commercial data</u> : data on commercial stocks of western major crops originate from the CGC. Data on stocks of special crops originate from a survey of handlers and agents of special crops.
Who provides the data	Farms, CGC, Special crops handlers



Frequency	3-times per year
Reference Periods	Data is collected for stocks as of March 31, July 31, and December 31 each year. The data is generally published the following month. Stocks are subject to revision during the two years following their initial publication.

**c. Small Area Production Data**

Description: This report is also part of the Field Crop Reporting Series. It breaks down the data on seeded and harvested area, yield, and production to the census agricultural region level.

Table 7: Small Area Production Data

Small Area Production Data	
What factors are collected	Census ag region level data. In SK, small areas coincide with census division boundaries.
Areas covered	British Colombia, Alberta, Saskatchewan, Manitoba, Ontario, Quebec.
Crops covered	Principal field crops
How is data collected	Field Crop Survey
Who provides the data	Farms
Frequency	Annually
Reference Periods	The data is published in February each year.

**d. Supply and Disposition of Grains in Canada**

Description: National supply-disposition tables for the major grains and special crops.

Table 8: Supply and Disposition of Grains in Canada

Supply and Disposition of Grains in Canada	
What factors are reported on	Total supplies, total beginning stocks, beginning stocks on farms, beginning stocks in commercial positions, production, imports, total disposition, total exports, grain exports, product exports total domestic disappearance, human food, seed requirements, industrial use, loss in handling, animal feed, waste & dockage, other domestic disappearance, total ending stocks, ending stocks on farms, ending stocks in commercial positions
Crops covered	'Principal field crops' Wheat, oats, barley, rye, flaxseed, canola, corn, soybeans, sunflower seeds, dry beans, dry field peas, lentils, mustard seed, canary seed, chickpeas
How is data collected	Field Crop Survey, Commercial Stocks of Corn & Soybeans Survey, Commercial Stocks of Major Special Crops Survey, Monthly Millers Survey, Monthly Crushing Operations Survey, Grain used for Industrial Purposes Survey
Who provides the data	Farms, CGC, Special crops handlers, grain elevators (corn & soybeans), millers, crushers, ethanol & biodiesel plants in W Canada.
Frequency	Occasional monthly
Reference Periods	Monthly (CGC, Special crops handlers, grain elevators (corn & soybeans), millers, crushers, ethanol & biodiesel plants in W Canada) or March, June, July, November and December (farms).

### e. Exports of Grains, by Final Destination

Description: Exports by final destination. *Discontinued Dec. 2018.*

Table 9: Exports of Grains, by Final Destination

Exports of Grains, by final Destination	
What factors are reported on	Exports by destination to export regions and/or destinations
Crops covered	Wheat (excl. durum), durum, oats, barley, rye, flaxseed, canola, wheat flour, malt
How is data collected	Customs basis
Who provides the data	Canada Customs
Frequency	Monthly
Reference Periods	Monthly
Comment	Discontinued

### f. Canadian International Merchandise Trade data – Exports by Destination

Description: Exports by destination data based on HS codes

Table 10: Exports of Grains by Destination

Exports of Grains by Destination	
What factors are reported on	Exports by crop by destination in mt and value (\$) Export origin: Canada or by province.
Crops covered	All crops by HS code
How is data collected	Customs basis
Who provides the data	Canada Customs
Frequency	Monthly (published about 2 months after conclusion of reporting month)
Reference Periods	Monthly
Problems with data	Can only display/ download four periods on website; very difficult create data series beyond one period. It takes ~2 months between month-end and publication of data.

## 3. Canadian Grain Commission

### a. Grain Statistics Weekly

Description: Data on weekly and crop year to-date movement of principal grains and oilseeds from Canadian farms for domestic processing and exports, stocks in various commercial facilities and feed grain handlings.

Table 11: Grain Statistics Weekly

Grain Statistics Weekly	
What factors are reported on	<p><u>Summary page</u>: Commercial stocks, farmer deliveries, primary elevator exports, terminal elevator exports, producer car exports, container exports, domestic disappearance, crop year to date totals.</p> <p><u>Primary page</u>: Farmer deliveries, shipments, stocks, Condo storage</p> <p><u>Process page</u>: Farmer deliveries, other deliveries, shipments, milled/ mfg grain, stocks</p> <p><u>Producer cars page</u>: Producer deliveries to port terminals</p> <p><u>PPShipDist Page</u> (Disposition of Canadian Grain shipped from Primary &amp; Process elevators): Cdn. domestic, process elevators, Pacific coast, Churchill, Thunder Bay, E Terminal elevators, export destinations, container loaders</p>

Crops covered	<p><u>Feed grains page</u>: Primary deliveries, primary shipments, commercial disappearance</p> <p><u>Terminal exports page</u>: Exports of Cdn. grain by clearance sector</p> <p><u>Terminal disposition page</u>: Disposition of Cdn. grain shipments to -Cdn. domestic, - export destinations, - port terminals</p> <p><u>Imported grains page</u>: Grain reported according to grain country of origin, other than Canada.</p> <p><u>Ports of Clearance</u> – Terminal elevators: Pacific, Churchill, Thunder Bay, Bay &amp; Lakes Ports, St Lawrence Ports</p> <p>‘Principal field crops’: Wheat, oats, barley, rye, flaxseed, canola, corn, soybeans, sunflower seeds, dry beans, dry field peas, lentils, mustard seed, canary seed, chickpeas</p>
How is data collected	Reporting of licensed facilities to the CGC as mandated under the Canada Grain Act.
Who provides the data	<p>All statistics on grain handlings and dispositions are collected under the authority of the <u>Canada Grain Act</u>:</p> <p>Grain handlings by primary, process and terminal elevator facilities are regarded as licensed and have to report their activities to the CGC. (Statistics Canada provides total statistics representing all Canadian licensed and unlicensed grain handlings.)</p> <p>Export statistics are based on reporting by licensed elevators of shipments to the USA and Canadian Grain Commission certification of vessel cargoes to overseas destinations. (Statistics Canada reports total licensed and unlicensed grain exports from Canada independently of the Canadian Grain Commission and are based on data collected by Canada Border Services Agency.)</p>
Frequency	Weekly; published on the CGC website reach Friday morning
Reference Periods	weekly

## b. Exports of Canadian Grain and Wheat Flour

**Description:** A monthly and crop year to-date review of grains, oilseeds and wheat flour exported to country of destination. Includes port and sector points of exit.

Table 12: Exports of Canadian Grain and Wheat Flour

Exports of Cdn. Grain and Wheat Flour	
What factors are reported on	Licensed exports of Canadian grain. (Statistics represent exports from elevators licensed by the Canadian Grain Commission; unlicensed exports are reported separately.)
Crops covered	‘Principal field crops’: Wheat, oats, barley, rye, flaxseed, canola, corn, soybeans, sunflower seeds, dry beans, dry field peas, lentils, mustard seed, canary seed, chickpeas
How is data collected	Reporting of licensed facilities to the CGC as mandated under the Canada Grain Act.
Who provides the data	<p>All statistics on grain handlings and dispositions are collected under the authority of the <u>Canada Grain Act</u>:</p> <p>Grain handlings by primary, process and terminal elevator facilities are regarded as licensed and have to report their activities to the CGC. (Statistics Canada provides total statistics representing all Canadian licensed and unlicensed grain handlings.)</p> <p>Export statistics are based on reporting by licensed elevators of shipments to the USA and Canadian Grain Commission certification of vessel cargoes to overseas destinations. (Statistics Canada reports total licensed and unlicensed grain exports from Canada independently of the Canadian Grain Commission and are based on data collected by Canada Border Services Agency.)</p>
Frequency	Monthly
Reference Periods	All tonnage is allocated to the month when CGC official inspection started for a vessel-loading.