

Canadian Grain Overview

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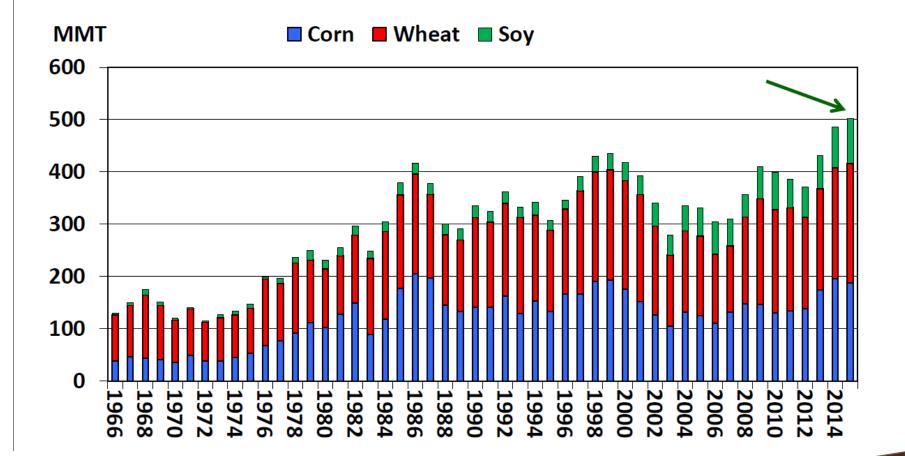
- A. Macro Overview
- B. Prairie Crop Production Outlook
- C. Transportation
- D. West Coast Infrastructure Investments

Macro Overview

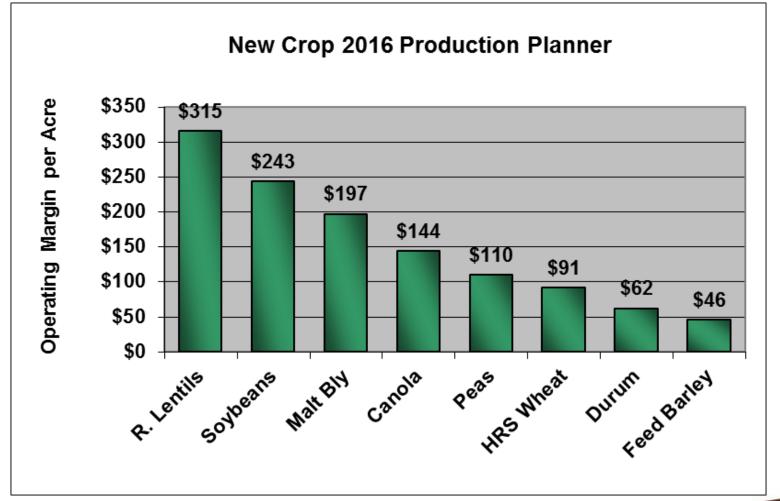
- World is awash in grains
- World grain production rising faster than demand
- Global grain trade struggles with biggest surplus of cereal grains in history
- China has record high grain inventories
- China looking at regulatory ways to slow imports
 - Example: imposing 1% dockage restriction on Canadian canola imports
- Nobody knows what Chinese reserves are, but they will add to global supply if liquidated

2015/16 World Grain Stocks – Record Large at 501 MMTs– A World Awash in Grain/Soy!





Gross Margin



2016/17 Western Canadian Acres

Commodity	Acres
Wheat	17,000,000
Durum	4,800,000
Canola	20,400,000
Barley	6,400,000
Oats	2,500,000
Peas	4,200,000
Flax	1,400,000
Lentils	4,600,000
Soybeans	1,800,000
Other	1,200,000
Total	64,300,000

Prairie Crop Production Outlook

- Good spring and planting conditions
- Timely rains, favourable temps for most of prairies
- Wet stop and start harvest
- With harvest progress we started to see above average yield results
- Quality is poor especially wheat, durum, lentils and malting barley
- Canola tolerant to wet harvest

Let's look at Projections

Canola Yield Projections

2013 achieved record canola yields, almost 41 bushels per acre.

Statistics Canada published 38 bushel estimate as too low

Canola Yield (bu per acre) vs. 15 Year TrendLine



Spring Wheat Yield Projections

2013 there was a record average at 53 bushels per acre

Spring wheat and other cereal grain yields appear to be less likely to repeat that record for yields

> Spring Wheat Yield (bu per acre) vs. 15 Year TrendLine



Lentil Yield Projections

2013 there was a record lentil yield at 1,850 lbs per acre We will not be close to that level, showing an abandonment rate at 8%

Showing a net impact of poor lentil yields and higher abandoned acres is north of 1.5M tonnes.

Lentil Yield (lbs per acre) vs. 15 Year TrendLine



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2016 Overall Field Crop Production

2016 Overall Field Crop Production ¹ 2013 Benchmark: 76.6 M tonnes	
crop mix change:	<1.5 M tonnes>
lower cereal yield:	<2.5M tonnes>
higher canola yield:	0.2 M tonnes
lower lentil yield/higher abandonment:	<1.5 M tonnes>
P&H 2016 Projection:	71.3 M tonnes (14.0% above 5 year avg.)
Statistics Canada August 23 rd estimate:	67.2 M tonnes

¹ includes all wheat, oats, barley, fall rye, canola, flaxseed, grain corn, dry peas, lentils, chick peas, dry beans, soybeans, mustard seed, canary seed and sunflowers

Parrish and Heimbecker Ltd. Crop Nutrients, Regina Saskatchewan

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Canadian Grain Handling

The Canadian grain handling system has four components, each one is an essential link in the supply chain for maximum efficiency each link must improve and adapt to the growing Canadian grain supply.

- 1. Farm logistics and storage
- 2. Inland elevator handling
- 3. Rail to port location
- 4. Terminal exports and vessel logistics



Producers



44 MT B train trucks are now employed to haul grain to inland elevators, replacing smaller inefficient trucks

Producers have built 68.2 million MT of permanent on farm storage in Western Canada and can adapt to large crops with temporary surpluses with temporary storage such as grain bags.



Inland Terminals

There is a continued growth of high throughput inland terminals

Terminal's can load now 100 -136 cars in under 24 hours.



Total inland licenced capacity has grown to over 7.9 million MT with more conversion to high throughput terminals every year. Despite a 63% decline in the number of facilities since 2000

Currently there are over a dozen new inland terminals under construction now. Each terminal can cost over 40 million dollars and handle 250 -400,000 MT per year

Average turn times of inland terminals continues to improve



Railways

CP and CN rail will at any time have roughly 18,000 to 24,000 hopper bottom rail cars in service and operate 27,000 kilometers of rail in Canada

Average cycle times of western port bound rail cars measured from time grain is loaded until empty cars are returned to the prairies for reload has dropped to 13.2 days from 19.2 days in 2001

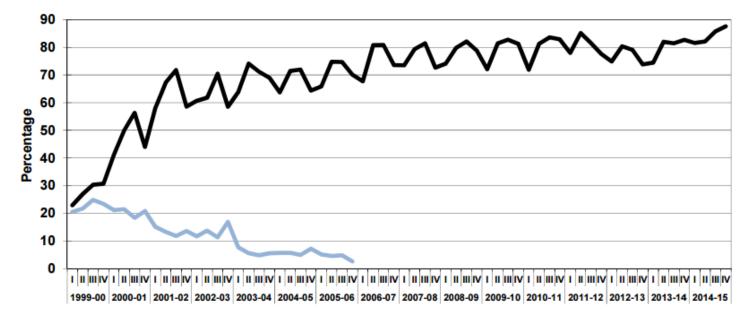
Hopper car size and train sizes are increasing with 136 spots and 103 mt cars now available.

Innovative new products from both railways that enhance and reward efficiency to the shipper have been met with good success





Increase of Unit Train Movement



25-49 CARS 50+ CARS

Source: Quorum Corp.

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What is Spurring Investments?

- Dismantling of CWB monopoly Aug 1, 2012
- 2013 crop was a wake-up call
- Yield/production trend-line 2%-3% increase on average
- West Coast exports have increased 40% since 2012

Export Terminals



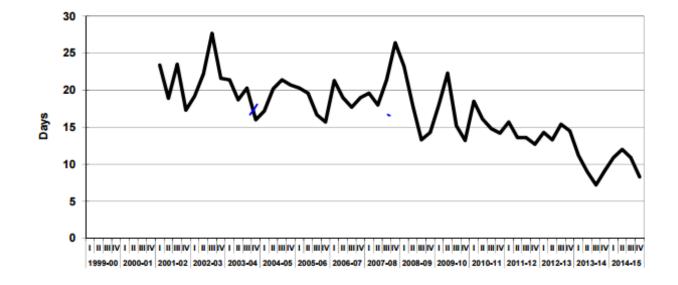
Every Vancouver terminal has or is being invested in to create efficiency and build more capacity

- James Richardson's 80,000 MT storage increase completed \$140M
- Cargill major rail improvements completed \$75M
- Pacific elevators major refit completed \$200M
- Alliance grain terminal new shipping gallery 2018 completion \$40M
- Fraser surrey docks new terminal build late 2018 completion \$200M
- G3 new terminal build slated for 2020 completion \$500M
- Vancouver has been the biggest beneficiary, but there have been substantial investments in Tbay and St. Lawrence



* Estimates only from unreliable source!

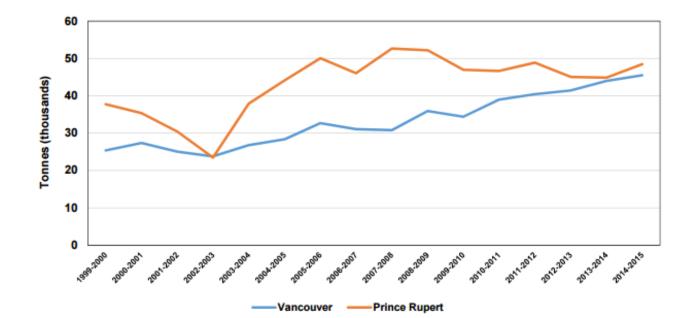
Average Days Instore Terminal Vancouver



Source: Quorum Corp.

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Average Shipment Size





Source: Quorum Corp.

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Loading Improvements

- Faster shipload speeds
- Better loading in inclement weather due to loading thru cement feeder holes and tarping
- More efficient rail switching and service
- Increased storage capacity
- Increased overall capacity
- Larger vessels and better berth utilization

Harvest Logistics



- With the early planting and good growing conditions trade expected an early and large harvest of pulse crops which were delayed
- Wheat harvests were also pushed back later than planned and quality became more problematic
- With bad quality grain companies struggled to get the right stocks in place for the previously made sales
- Grain had to flow in non-traditional corridors to match sales
- To compound issues due to china not taking its traditional volume of canola, the commodity mix was heavily reliant on wheat sales

Going Forward

- We have a better understanding of the crop quality and have made adjustments to our shipping plans
- Large pulse crop push is behind us
- More fluid canola shipments have resumed to china
- October loading weather was wetter than normal

Minister Garneau's Strategic Plan for the Future of Transportation in Canada.

He has announced that he will introduce legislation in the spring of 2017 that will:

- * Establish the ability to apply reciprocal penalties between railway companies and their customers in their service level agreements,
 - * Better define "adequate and suitable service",

* Improve access and timelines for Canadian transportation agency decisions; and

* Address the future of the maximum revenue entitlement and extended interswitching.

* Has committed to \$10B in infrastructure spending

Rail Network Vancouver



West Coast Infrastructure Investments

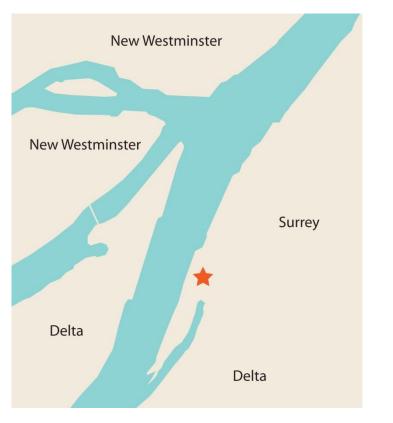


FRASER GRAIN TERMINAL





- Joint venture between P&H and PGF
- Proposed grain export facility
- On port industrial lands in surrey, B.C.
- Adjacent to fraser surrey docks





EXPORT GRAIN PRODUCTS INCLUDING:

- Wheat
- Barley
- Oil seeds
- Pulses
- Specialty grains

THROUGHPUT OF 4 MT/A





Following demolition of two existing buildings, new construction includes:

- Unloading station and transfer tower
- Fully enclosed conveying and built-in dust suppression
- 34 above-ground steel storage bins
- Travelling shiploader with telescopic cascading spout





Following demolition of two existing buildings, new construction includes:

- Semi-loop rail track
- Container loading facility
- Storage yards
- Rail and truck loading facility
- Administration building
- Maintenance shop



Project Status



- Vancouver fraser port
 authority PER process
- In the preliminary review phase
- Application will be submitted winter 2016
- Technical studies are underway



Technical Studies

- Air quality
- Biophysical (including vegetation and species-atrisk)
- Environmental management
- Hazardous materials management
- Noise
- Lighting
- Spill prevention and emergency response
- Stormwater pollution prevention
- Traffic
- View and shade

Next Steps

Preliminary public comment period ends Thursday, December 1, 2016

- Application will be submitted winter 2016
- Demolition begins early 2017
- Construction begins spring 2017

FGT website

HTTP://WWW.FRASERGRAINTERMINAL.CA/



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About Fraser Grain Terminal

Fraser Grain Terminal Ltd. is a joint venture of Parrish and Heimbecker, Limited (P&H) and Paterson GlobalFoods Inc. (PGF) to construct a grain handling facility along the Fraser River in Surrey, British Columbia. P&H and PGF are Canadian family-owned and operated grain companies with more that 100 years of experience in agribusiness and locations across Canada, including the Alliance Grain Terminal, located on the south shore of the Burrard Inlet. Serving more than 10,000 Canadian farmers and producers, they market grain to over 40 countries.

About The Project

Fraser Grain Terminal proposes to build a grain export facility at 11041 Elevator Road adjacent to Fraser Surrey Docks on Vancouver Fraser Port Authority land in Surrey, B.C. It will be used to trans-ship bulk grain products including wheat, barley, oil seeds, pulses and other specialty grains with a throughput of 4 million tonnes per annum (Mt/a). This new facility will receive grains by rail and load the agriproducts on to cargo vessels. The facility and travelling shiploader will have a modern design that minimizes noise and dust from grain handling operations and will replace an aging and obsolete manufacturing warehouse on vacant port land that has not been used for more than two years.





Sign Up For Project Updates

Download Materials

Project Information Sheet

Letter to Residents - November 2016

Letter to Stakeholders - November 2016

Fill out our feedback form

Online Feedback Form

VANCOUVER MARITIME ARBITRATORS ASSOCIATION

ABOUT MEMBERSHIP RULES SUGGESTED CLAUSES INITIATING PROCEEDINGS ICMA CONTACT NEWS

Arbitrators

- · Arsoniadis-Stein, Kaity
- " Bernard, Peter Q.C.
- " Bilkhu, Sukhvir
- · Bromley, John
- · Chapelski, Shelley A.
- . Dean, Kenneth
- . Dunbar, Rodney
- · Egger, Doreen
- . Ellis, Edmund G.
- . Fulton, Bonnie
- . Giaschi, Chris
- · Jones, William
- . Koh, Peter
- . McCawley, Casey
- " McEwen, David F. O.C.
- · McIntyre, JJ
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Blog Traffic

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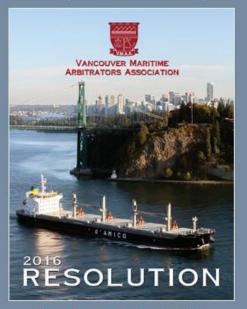
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🐻 Home

The VMAA recently updated its Arbitration and Mediation Rules to make them more responsive to the needs in the 21st century of the transportation community which trades in the carriage of goods to or from Canada and the businesses serving that community.

Click here to download the new rules.

"Advocating education and standards which foster reasoned and cost effective arbitrations, mediations and others forms of dispute resolution that will result in impartial and efficient solutions for parties involved in maritime disputes"



Download the latest VMAA Resolution or View past issues

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The End

Thank you!

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