Items

- Grain Monitoring Program
- The Canadian GHTS
- Canada – US Comparison
- Canadian Grain Regulatory overview
- Summary
Who is Quorum?

- Transportation and Logistics consulting firm with a focus on North American surface modes – rail, truck, container, bulk commodity and grain
  - Established 1999
  - Specialization in transportation data management and IT
  - Divisions – Quorum Corp, QGI Consulting
- Grain Monitor for the Federal Government since 2001
- QGI Consulting provided quantitative analysis for the Rail Freight Service Review
The Canadian Grain Monitoring Program

- Activity and Performance Measures
  - Industry volumes, activity and performance metrics
  - Farm gate to ocean vessel departure
  - Establishes the industry benchmarks
  - Used by broad cross section of the industries stakeholders

- 15 Year time series providing ongoing assessment and analysis through the measures and of the industry’s evolution

- The Grain Monitor strives to retain a neutral and balanced position on issues …
The Canadian Grain Handling and Transportation System

- Overview
- Country
- Rail
- Ports
The Canadian “Playing Field”

- Exports 27-36 MMT/annually
- Worth Up To $20 Billion Annually
- Carry Canadian grain to over 1,000 destinations
Licensed Elevators – August 1999

1,004 elevators in 685 communities
Licensed Elevators – 2015

386 elevators in 272 communities
GHTS Rail Network: 1980
GHTS Rail Network: 2014
Canadian Port Terminal Network

Western Canada
- Terminals: 16
- Storage: 2.56 MMT

Eastern Canada
- Terminals: 11
- Storage: 2.07 MMT
Where Canada’s Grain Moves …

Key Modal Flows – All Grains

- Prairie Provinces
- USA and Mexico
- ONT / QC
- Prince Rupert
- Vancouver
- Montreal
- Quebec
- Churchill
- Thunder Bay
- Sorel
- Trois Rivieres
- Montreal
- Port Cartier
- Baie Comeau
- Sarnia
- Windsor
- Halifax

Legend:
- Green: RAIL TO PORT
- Black: RAIL DIRECT
- Red: ROAD
- Blue: SEAWAY

Quorum Corporation
US – Canada Comparison

- Country Origin
- Ports
Country Network – Compared to the US Model?

Canada

- 386 facilities (Process and Primary)
- 6.7 MMT storage
- 62.1 MMT production/supply

- Data from GMP DW
Country – the US Model?

Western Canada
- 386 facilities (Process and Primary)
- 6.7 MMT Storage
- 62.1 MMT production/supply

US Mid West
- 512 facilities (Licensed Primary and unlicensed)
- 21.4 MMT Storage
- 82.4 MMT production/supply

- Data from GMP DW
- Facilities from GIPSA Data – 2011
- Production from USDA – 3 Yr Avg for those states 2009-11
US – Canada Market Comparison

Exports % of Production

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<thead>
<tr>
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<th>US</th>
<th>Canada</th>
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<tbody>
<tr>
<td>Exports</td>
<td>16%</td>
<td>43%</td>
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</table>

Off Farm Storage % of Production

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<thead>
<tr>
<th></th>
<th>US</th>
<th>Canada</th>
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<tbody>
<tr>
<td>Storage</td>
<td>53%</td>
<td>12%</td>
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Port Terminals – US Options
Grain Terminals: BC and PNW

- PNW terminal capacity has not been a viable alternative in the past.
- 11 terminals (and growing) with new access provisions may change that in the future.
Canadian Regulatory and Legislative Changes and Issues

- The MRE (Revenue Cap)
- Interswitching Regs
- CTA vs STB
- Removal of Single Desk
- Complaints and Litigation
The term “Revenue Cap” is a misnomer
- No absolute “cap” on railway revenue

It is a statutory limit on the amount of revenue a prescribed railway can earn from the movement of regulated grain in western Canada.

It is effectively a dynamic control mechanism
- Limits the amount of revenue per tonne that a railway may earn in the movement of regulated grain

... It does not penalize the railways for:
- Handling more grain; greater length of haul
- Inflationary effects (VRCPI)
Under the Revenue Entitlement ….

- The railways have the ability to set rates:
  - To reflect differences in commodity type, geographic location at both origin and destination, the season etc..
  - To price differentially for the car block size (known as multi car block rates).
  - To differentiate grain movements so as to incent shippers towards specific routes, origins, destinations or seasons.
Rail Freight Rates since 1980
- single car rate from mid–Saskatchewan (Brass)
Supply Chain Relationships

Generic Supply Chain Model

Canadian Grain Supply Chain Model *(Bulk through Grain Company)*
Railway Competitiveness

- 4 facilities are dual served
- 14 capable of interswitching
- These 18 facilities represent 9.6% of total system capacity
- 3 of 4 dual served facilities are unit train capable
- 8 of 14 interswitching facilities are unit train capable
## CTA Regulatory Oversight

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<tr>
<th>Category</th>
<th>Description</th>
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</thead>
<tbody>
<tr>
<td><strong>Shipper Protection</strong></td>
<td>Standard common carrier protections; Level of service; service level agreements</td>
</tr>
<tr>
<td>- Interswitching</td>
<td>30 Km (160 Km in MB, SK, AB)</td>
</tr>
<tr>
<td><strong>Investigative Powers</strong></td>
<td>By Complaint (No power to initiate investigations – only acts on formal complaints)</td>
</tr>
<tr>
<td><strong>Authority (Ability to Act)</strong></td>
<td>Quasi Judicial - Decisions are usually appealed to a civil court</td>
</tr>
<tr>
<td><strong>Economic Authority</strong></td>
<td>No authority to level fines or penalties (must come from Ministers office); AMP fines to Gov’t general revenue</td>
</tr>
<tr>
<td><strong>Legislative Authority</strong></td>
<td>By passages in the Canada Transportation Act, recent actions allow for short term setting of targets from Ministers</td>
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Western Canada Interswitching Zones
Elimination of the CWB Single Desk

- **Structural Changes**
  - Glencore/ Richardson
  - Foothold by some major international players – little action or cap investment yet though
  - Crop diversification

- **Trade Flows**
  - Higher volumes through west coast driven by economics and logistics arbitrage

- **Competition between companies for market share**
  - Missing the opportunities for consolidation?

- **Concerns:**
  - Railways focus and market control
  - Grain company market concentration
The Challenge of the 2013-14 Crop Year

- A record breaking crop
- An abnormally cold winter
- And then followed by….
  - Inability of railways to meet the committed car allocation
  - … creating and imbalance of stocks (country vs. Port)
  - … causing a record lineup of ocean vessels on the west coast
  - … and impacting the ability of producers to deliver grain
  - … causing a cash flow issue for many producers
  - … creating an emotional response
  - … followed by the Government response
Government Response:

- Government/industry funded project to improve supply chain efficiency and reliability
- Expanded mandate for Grain Monitor
- Order In Council
  - Minimum weekly targets - 500,000 tonnes/railway/week
- Bill C30 – Fair Rail for Grain Farmers Act
  - Minimum targets continue; fines for failure
  - Extend prairie inter-switching to 160 km (from 30 km)
  - Regulatory authority for enhance Service Level Agreements with railways and grain company contracts with producers
Current Actions in Progress

- **Level of Service**
  - Louis Dreyfus – CN appeal of CTA decision
  - Decision on related Viterra/ Richardson complaint

- **Interswitching**
  - CP appeal of extended Interswitching limits
  - Parish and Heimbecker application on interswitching at Milk River

- **Review of Canada Transportation Act**
  - Every 15 years
  - Advanced to begin in 2014
  - Scheduled to be completed by Autumn, 2015
Summary

- Many common/complimentary threads in the Canada – US grain markets
  - Company's, buyers, sellers
- Just as many differences
  - Trading patterns, origin options, types of grain, logistical options
- Different legislative and regulatory approaches
  - STB vs CTA
Thank You