# Southern Alberta: Growth of Import and Export Opportunities for West Coast Ports

**Executive Summary** 

Southern Alberta is a natural transportation and agriculture hub. This research highlights opportunity to grow and develop exports and key segments of the supply chain required to enable goods movement.





# Contents

Executive Summary Prince Rupert Study	3
Growth Potential for Agricultural Back-Haul Containers	3
The Calgary Region as a Distribution Hub	3
Development and Growth of Reefer Business	4
Automotive Distribution Centre in Calgary Region	4
Development and Growth of Bulk Business	4
Van Horne Institute	5
Triskele Logistics Ltd	5
JRSB Logistics Consulting Ltd.	5

We are delighted to offer an introduction to the five phase Report entitled, "Study of Southern Alberta for Import and Export Opportunities for West Coast Ports"

This report is designed to explore the opportunities for growth in a number of economic sectors in Southern Alberta, including:

- 1. Growth potential for agricultural backhaul containers.
- 2. The Calgary Region as a distribution hub.
- 3. Development and growth of the reefer business.
- 4. Automotive distribution centre in Calgary Region.
- 5. Development and growth of bulk business (liquid and dry).

For a number of years the Van Horne Institute has collaborated with governments at three levels, the transportation industry, expert consultants and academics in researching the Asia Pacific Gateway and Corridor Initiative. In a synthesis report in April 2008, entitled, "Thinking Ahead – Gateways, Corridors, Productivity and Development", authors David Gillen, Barry Prentice, Graham Parsons and the writer, discussed the role of gateways and corridors in a developing global, continental and national trading environment. This synthesis analyzed current and future movement of goods through Western Canada and included an analysis in the context of gateways and corridors in the development and expansion of inland ports.

In Western Canada the development of inland ports has been exponential. We have two vibrant and expanding seaports in Vancouver and Prince Rupert and at least five major inland ports whose growth reflects a critical interaction between their catchment area and the seaports to which they are connected by our critical rail and road networks.

The expanded volume of products identified in the five phases of this Report will require an efficient and effective supply chain to and from the west coast ports of Vancouver and Prince Rupert. The Province of Alberta is extremely fortunate to have access via both the southern and northern road and railway systems for connections to these ports.

The Van Horne Institute was honoured to be entrusted with the development of this research. We are very pleased to have been able to work with our principal consultants and researchers, Triskele Logistics and JRSB Logistics Consulting Limited.

We want to thank the following sponsors for their generous contributions without which this study would not have occurred:

- 1. Port of Prince Rupert
- 2. Government of Alberta
- 3. Rocky View County
- 4. Calgary Regional Partnership
- 5. Calgary Economic Development
- 6. Cando Rail Services

The identified areas of potential growth in the economy of Southern Alberta, reflect in part, a diversification strategy away from the reliance on oil and gas. We should recognize that the export of oil and gas products will continue to be, for a number of years, a very important element in this Province's economy. The Study examines the potential for growth in the five areas detailed above and suggests potential methods by which these expanded volumes of products can reach or be received from world markets. Ultimately, it will be the customer that will determine how this expanded product-base will be shipped. The end result however, will be an expansion of the economic activities for which the Province of Alberta already has a world class reputation.

Van Horne Institute

March 2017

# **Executive Summary Prince Rupert Study**

The purpose of this study is to capture and summarize opportunities for west coast ports to grow their imports and exports with Southern Alberta.

#### Growth Potential for Agricultural Back-Haul Containers

An assessment to grow the usage and volume of agricultural container stuffing in the Calgary Region for export was carried out to determine the opportunity for increased trade volumes through the west coast ports.

The main agricultural products that this phase of the study is targeting are commodities that can move in containers without requiring temperature control. This will include dry grains, pulse grains, as well as bagged and sealed products that have been processed from other agricultural products such as wheat, lentils, potato chips, dried soups etc.

Alberta Economic Development and Trade reported that "Exports of crops and livestock rose 65% between 2010 and 2015, while processed food exports increased by 35%." These numbers are expected to continue to grow. The bulk of the revenue in Alberta from Agriculture comes from cattle and calves and most of the remaining value coming from crops. The two largest sectors of crops are canola and wheat (including durum). Peas, beans and lentils are part of the pulse grain market which accounted for the next largest crop contribution.

There are many opportunities in the southern Alberta region for moving increased agricultural products through west coast ports. A large volume of product in the pulse markets already exists and continued growth is projected. Wheat and barley will continue to move in rail hopper cars for transfer directly into the holds of ocean vessels. There are potential export customers who see export through the Port of Prince Rupert as a viable opportunity as well as insurance that they are not dependent completely for exports on the Port of Vancouver.

Exports of pulses and grains via Prince Rupert face challenges including awareness of port capabilities, rail tonnage limitations for containers, and pricing constraints.

#### The Calgary Region as a Distribution Hub

An overview of the Calgary Region distribution and warehousing capacity and capability is detailed to determine whether the Calgary Inland Port can help attract increased volume through the Port of Prince Rupert.

The outlook for growth in the region is positive despite the current weakness in demand due to the oil and gas sector. By 2017, GDP is expected to return to growth with population steadily increasing. The Calgary Region Inland Port is expected to be formalized in the short term. Both factors will contribute towards organic trade growth.

Feedback from industry found that there are clear opportunities for increased volumes to be routed through both west coast ports. Importers are currently looking for ways to mitigate the risk of using one port of entry as well as trying to reduce lead times. The market will ultimately determine the chosen transportation corridor for export.

To take advantage of potential opportunities several strategies have been outlined including infrastructure improvements, supply chain service capabilities, and development requirements to ensure goods move effectively and efficiently through the region.

#### Development and Growth of Reefer Business

Identification and analysis of opportunities was conducted for the growth of temperature controlled container exports through Canada's west coast ports from Southern Alberta.

Despite a decrease in worldwide global container shipping across all commodities in 2016, global shipments of reefers increased dramatically. In the first half of 2016, global reefer cargo is up by 163,000 TEU's (twenty-foot equivalent unit) compared to the first six months of 2015 (7% for chilled products and 4% for frozen products).

In order to ensure a more readily available supply of marine reefers into the Alberta marketplace, the traditional pattern of transloading product destined for Alberta from marine reefers into domestic refrigerated containers near the port for onward shipment and distribution in the Alberta marketplace, requires a change.

Increased volumes of product will demand the source loading of refrigerated or chilled products directly at the facilities in Alberta.

There are customers that are looking to grow their export business in southern Alberta. With the growing demand for reefer products to be shipped and the continued growth of reefer shipments worldwide, Southern Alberta will experience growth

#### Automotive Distribution Centre in Calgary Region

An assessment of the automotive industry in North America was conducted create an understanding of the opportunities available for transportation related activities, from the perspective of the west coast ports and the southern Alberta region.

A review of current market trends found that there has been sustained growth in automotive sales in North America. The proportion of overseas manufacturing is also shifting as automobile manufacturers are increasingly moving these operations to North America.

Ports on the west coast have growth potential with projected auto volumes in the coming years, with several seeing record figures for 2015. Another growing area is short sea shipping on the west coast as northbound rail capacity is strained in Mexico.

Of the class 1 railways in Canada, CN has the largest network, giving automotive access to most major cities in Canada as well as some in the US. This extended network may enable auto traffic moving from Asia through the Port of Prince Rupert to have an advantage based on superior rail access to certain markets as well as shorter marine transit times.

The study determined that although Calgary is an important market for western Canada, an emphasis on distribution to eastern Canada and parts of the US is required in order to achieve meaningful volumes.

#### Development and Growth of Bulk Business

The study conducted highlights the size of the market development opportunities from Southern Alberta and some of the key supply chain components needed to facilitate that growth. The liquid & dry bulk

business in Alberta is a key source of economic growth and includes commodities such as chemicals, plastics / rubber, wood and articles of wood, pulp & paper, base metals, and vegetable products.

This analysis has focused on the opportunity created for export from Southern Alberta of agricultural products produced in the Province. Grains, canola oils and specialty crops make up most of these potential products for export with other agricultural products, including beef, pork and poultry as prime candidates for export.

With the introduction of the new zone five for rail switching in Alberta, farmers have more transportation options. The worldwide demand for food driven by population growth and growth in demand for quality Canadian products will require the development of an enhanced supply chain and supply chain infrastructure in order to connect this anticipated increase in volume in product with world markets utilizing the assets of Western Canada's inland ports and west coast seaports. Traditional grains (wheat, barley, etc.) and specialty crops (lentils, beans, etc), are in high demand in Asian markets and Alberta producers should work in conjunction with the Government of Alberta to exploit this expanding opportunity.

The Port of Prince Rupert already has development plans for a facility to export propane (in conjunction with AltaGas). Propane is extracted all over Alberta but the bulk is consolidated and stored in the Edmonton/Fort Saskatchewan region. Other oil and gas products are also grouped in this region from all over the province and present opportunities to export through the west coast ports.

Fertilizer products that are exported from Alberta head almost entirely to the United States. In conjunction with food demand increasing worldwide, the requirements for fertilizers are also going to increase. Fertilizers are produced all over the world but there are still opportunities for fertilizer products from Alberta to be exported overseas to Asian markets.

Alberta and particularly Southern Alberta are extremely well positioned to expand its production of the products listed above, into world markets as a diversification strategy, which would see the province no longer as dependent as in the past, on the exports of oil and gas into world markets.

#### Van Horne Institute

The Van Horne Institute is recognized within Canada and internationally as a leading institute of public policy, education, and research in transportation, supply chain and logistics, regulated industries and Information and Communication. The Institute is incorporated federally as a not-for-profit organization, and is proud to be affiliated with the University of Calgary, The University of Alberta, SAIT Polytechnic, and with Athabasca University. Its Board of Directors bring together the experience and knowledge of a broad group of individuals representing all facets of the transportation industry, government, and the academic community that have an interest in transportation, logistics, and related regulatory issues. For additional research studies, events, courses and education please visit www.vanhorneinstitute.com.

### Triskele Logistics Ltd.

Triskele Logistics is a supply chain consulting company that enables its customers to achieve cost reduction and efficiency in their supply chain. In addition, we manage projects and complete supply chain research using our industry knowledge, connections and expertise. Founded in 2013 by Corrie Banks, Triskele applies simple, efficient change methodologies to work with you to achieve your vision and execute your projects. From strategy to project execution to sustainment, Triskele Logistics brings it all together.

For more information on Triskele Logistics please visit www.triskelogi.com

# JRSB Logistics Consulting Ltd.

Jim Brown is a private Logistics Consultant. Born and educated in Montreal, Quebec he began his transportation career with C P Rail in Montreal 1969 and transferred to Calgary in 1977 with C P Ships. Joined DB Schenker of Canada Ltd (International Freight Forwarder & Customs Broker) Calgary in 1984 and retired in 2012. An extensive background in Projects for the Oil & Gas Industry, as well as an understanding of the current Geographic constraints of ports and the proposed Port Gateways being considered for future development.