



"They put a container terminal WHERE? Why would anyone route their cargo through the remote mountains of northern Canada?"

In this paper, we'll demonstrate the emergence of Canadian ports as a major gateway to Asia by comparing them to the legacy terminals of the coastal United States. We'll answer these questions by exploring comparative factors for intermodal and multimodal solutions to/from the Midwest U.S. Then we'll take a closer look through the logistics innovations making all of this not only possible, but practical and advantageous to the U.S. West Coast. To get there, let's first unpack the challenges faced by the US port system.





CHALLENGES OF TRADITIONAL U.S. WEST COAST ROUTES

The US West Coast port network runs from Pacific Northwest down to Southern California and is comprised mainly of eight major ports with 24 terminals. This system accounts for 70% of all US imports by sea, with the LA/Long Beach network making up 40% on its own.

The only U.S. terminals large enough to handle vessels up to 18,000 Twenty-foot Equivalent Units (TEUs), are the ports of Los Angeles, Long Beach, Oakland, Seattle, and Tacoma. These locations will be the points of comparison for the Canadian alternatives we'll discuss later.

Port of Long Beach has long been North America's crown jewel of Transpacific trade and spent decades growing along with the increase in offshoring and general demand increases. This added volume, while beneficial to the local economies in many ways, has over time put a large strain on the port's operational capacity and efficiency. With the equipment and labor force stretched to the maximum and beyond, there's less capability to adapt and overcome.

Source: JOC.com "https://www.joc.com/special-topics/west-coast-ports"



In international trade, cost is still king, but in the case of California's import operations it's the time delays that will ultimately be the catalyst for change. To share an example that is all still fresh in our minds, let's look at what the COVID-19 constraints have done to wait times in the US West Coast.

CONTAINER SHIPS AT ANCHOR IN SAN PEDRO BAY AND AT BERTH IN PORTS OF LOS ANGLES AND LONG BEACH



The chart itself only tells part of the story, considering that it purely tracks the number of ships at anchor. According to a story published by FreightWaves in May 2021, the unseen damage of this and future backlogs, is that average ship sizes impacted have jumped from >10,000 TEUs in 2015 to closer to 14,000 TEUs just 6 years later and with continued momentum. That means the total containers delayed and stranded in the west coast increases with every jam.

Chart by American Shipper based on data through May 2021,25,

WHAT COMES NEXT?

often long-term slowdowns/shutdowns in the western USA ports: labor disputes

The coastal US terminals are all served by laborers of the same worker's union, the International Longshore and Warehouse Union (ILWU). This alliance has a contract with the terminals that runs through a set date for all of them, July 1, 2022. The past predicts the future, so what happened in the last contract negotiation in 2014? A major stoppage when talks deteriorated, plunging the west coast US port system into gridlock. Finally, after more than 8 months of negotiating, there was a tentative agreement that put the union back to work.

Even if this backlog begins to clear, the West Coast USA is by no means out of the woods. For decades, there's been one consistent cause for delays and

6	What could be worse than the unexpected shipping delays and congestion
	during a strike? The resulting bottlenecks and surcharge spikes after labo
	issues are resolved can be just as harsh, and in 2015 the backlog took me
	of the year to dissolve. Considering the ship size trend we just covered, a
	a labor force feeling overworked from 2+ years of post-lockdown surge,
	means that any stoppage will only compound the total containers delaye
	and stranded in the west coast in 2022.



WESTERN CANADA: THE NEW GATEWAY **TO MIDWEST USA**

The west coast strike in 2014 caused many importers to consider their alternatives. Between 7 and 15% of what was coming into LA and Seattle was lost for good, and Portland's container terminal was shuttered for five years after all three of its major shipping lines pulled out.

BUT WHERE DID EVERYONE GO?

Just look at a map of shipping routes from Asia to North America, and you'll notice that the fastest sailing times are for port cities in west coast Canada. Add to that their direct, reliable rail connections to Chicago and Memphis and, as Steve Rothberg of Mercator International told JOC.com last year "There's not a lot of advantage in routing Midwest freight through Portland". The sailing time to LA is even longer, so it's no surprise that in the last decade it's been western Canada making impressive strides in the world of port operation.





INTRODUCING PRINCE RUPERT'S FAIRVIEW TERMINAL

Located in far northern British Columbia, Prince Rupert is a small outpost that's getting big attention for its Fairview Container Terminal. The hype began in 2015 when we began operations at Fairview. Since then, there's been a Compounded Annual Growth Rate (CAGR) of more than 18% leading to more than 1.1m TEU throughput. But why would anyone move their products through a seemingly far-flung port, with little road access, near the remote Alaskan border?



8 WAYS PRINCE RUPERT ANSWERS THE CALL



Lower cost – Typical door-to-door shipping cost via Prince Rupert saves at least USD \$400 savings per FEU compared to Long Beach. Terminal Handling Charges (THC) are also lower in West Coast Canadian ports v/s USA



Shorter transit time – North America's closest port to Asia – Nearly two less days sailing time from Shanghai when compared to Seattle imports, and 3 full days closer than Los Angeles



Proven market leading intermodal service, built on the back of trains up to 12,000 feet in length, and capable of accommodating the 90% of Prince Rupert's total cargo



Exceptionally smooth Customs clearance into Canada with an average cleared time of less than 4 hours after vessel arrival. The same metric for US clearance is 2 days. Source: Freightos



Far less gateway congestion compared to the metropolitan ports of west coast USA. Average two-day dwell time at port and Expedited Rail Service (ERS) offerings that can reduce to same-day outbound. Total delays before port gate-out in the West Coast USA average more than 20 days in early 2021



Much smoother rail grades to the heartland compared with U.S. West Coast, translating to fewer accidents and delays along with much lower carbon emissions

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U.S. imported goods through Canada avoid certain tariffs, such as the U.S. Harbor Maintenance Tax of 8/1 percent cargo value. For the estimated \$20B of US-bound imported goods that pass through each year, that adds up quickly



Harmonious labor climate in the port and terminals of Western Canada, with less than two weeks of interruption since 2012





EVOLUTION OF OUR PRESENCE INCANADA



OUR RAPID CANADIAN EXPANSION

In 2014, when we assumed operations at the iconic Centennial Terminal in downtown Vancouver, few would have predicted that in 6 short years they would grow our Canadian capabilities fivefold. And while the investments in Prince Rupert in 2015 and Saint John 2 years later certainly made a statement, it was the additions within the Vancouver port complex that have really revolutionized the West Coast transportation model. Let's explore a few of them and how they've come together to open new opportunities.



2028-2030 Prince Rupert 2



SHORT-SEA SHIPPING SERVICES

In Nanaimo, we operate the main container terminal on Vancouver Island, it is about the size of Taiwan and home to about 1M people. Historically Vancouver Island had many obstacles for international trade, not the least of which being absent of bridges to the mainland. This means that international freight must be trucked between the deep-sea terminals in Vancouver and the ferry terminals around the city. This was a costly method, not to mention unnecessary pollution and damage to the surface streets.

All the truck traffic in a growing city only made congestion in metro Vancouver worse. Add in the natural working hours to the local trucking fleets and ferry schedules, and there was simply not enough capacity to unload when so many trucks started arriving on Monday at 8am. So, in 2012, we started a direct barge between Centennial and Nanaimo, creating further connectivity for the island's exporting lumber and bottled water companies that headquarter there. This allowed Nanaimo to become the island's port of origin/destination on freight bills for any global location that serves Vancouver.







IN EARLY 2020,

We completed the acquisition of a multi-purpose terminal which was known as Fraser-Surrey Docks. This terminal not only receives its own TransPacific vessel calls but is in the industrial epicenter for Vancouver and an attractive location with strong rail connectivity and truck access

IN MARCH 2021,

By virtue of operating 3 container terminals in such proximity, we began the first and only fixed 3-way barge service to connect the Vancouver metro area by sea. To complement this first and only short-sea service in town, they standardized first/last mile drayage as a no-cost element of the short-sea service which generates notable savings to the customer's transportation cost

CREATING POSITIVE SUSTAINABILITY

According to the Environmental Defense Fund, the average 25-ton haulage emits 4kg CO² per mile. For a 40-mile round trip through the city, not accounting for the higher degree of stop and start in city traffic, each trip eliminated avoids 80kg CO². At 250 container capacity and two weekly trips, this takes as much as 40,000kg CO² out of the atmosphere. Even considering the 20kg/mile barge emissions that's 38,000kg CO² minimum reduction of footprint and a lot of happier commuters in the City of Glass









STUCK AT THE PORT? NO PROBLEM, WE'LL SEND A BARGE!

During the pandemic surge in Transpacific containerized trade, Our Canadian Logistics team identified a trend. They observed that Asian export containers were being staged speculatively and then loaded for any Transpacific vessel not already completely sold out, regardless of whether the ship was headed to their destination city! Then during the ocean voyage, the landside delivery methods would be mapped out utilizing any rail or road methods that work. There was little regard to cost, considering the ocean freight market spiked by up to 1100% (not a misprint) in the height of the surge!



In mid-May 2021, the Canada logistics team offered a creative solution when a large volume of cargo arriving in Seattle needed to ultimately get to Vancouver, with OEC Group, which represents Walmart's Canada-bound shipments. OEC had a large volume of cargo destined for Vancouver but the mother vessel was calling Seattle.

Knowing of the extensive congestion in the Port of Seattle, at that moment more than 2 weeks, the our Canadian Logistics team contacted the key cargo owners to lend a hand. What they proposed was a dedicated barge service to call at the Seattle terminal, pick up the entire lot of nearly 300 TEUs, and sail to our terminal in Fraser Surrey, Vancouver.



Our action took 140 long-haul trucks off the road and saved the customers both time and cost to arrange so many driver pickups. More importantly, with the road and rail backlogs at Port of Seattle, the cargo avoided an estimated 10-day delay in the container yard.

Due to the success on its first voyage and the cost/time savings tied to it, new barge services were requested, and many more voyages began in Summer 2021. Beginning with these voyages, We were able to also arrange last-mile trucking solutions when the cargo reached Fraser Surrey. As a true trade enabler and by virtue of the agility and proactiveness of our Canadian Logistics team, this new supply chain solution for North American cargo has been invented especially for containerised goods.

This strategy will allow them to continue pursuing new opportunities to provide cost effective greener transportation solutions to customers by moving containers by barge throughout the Pacific North West Coast.







FURTHER LOGISTICS CAPABILITIES INCANADA

NVOCC/OCEAN FREIGHT SERVICES

By virtue of its positive trade relationship with South Korea and other important East Asian countries, Canadian logistics providers like our own can meet today's challenges for beneficial cargo owners. Despite a universal shortage of space on container ships, forwarding businesses like our Canadian Logistics team have contracted space availabilities for many routes and on an ongoing basis. The logistics community in Vancouver is also rich with partnerships, and one popular service being offered in the region is container-to-trailer transloading. Many importers are taking advantage of the fact that four 40-foot containers can be consolidated into three 53-foot trailers. In doing this, the shipper reduces over-the-road transportation by 3/1 and also returns those critical shipping containers to the lines so they can refill much sooner.

These services, from the traditional to the innovative, prove why West Coast Canada is a high value proposition for U.S importers to consider.





ERS SERVICE

Remember our look at Prince Rupert, with the time advantage by exiting the slow boat first? Now there is a way for the customer to take even more time out of the supply chain. With Expedited Rail Service, or ERS, we are meeting the customers' needs by expediting processes for critical shipments. With this service, the customer can choose to prioritize or rush arriving containers by notifying the terminal 24 hours in advance. With this indication, the container yard team pulls these critical containers directly to the rail staging area to be loaded on the very first train destined for Chicago, Memphis, Toronto, or Montreal. This takes at least another one to two days out of the time-to-market and is a clear alternative from the more traditional west coast ports.





CONCLUSION

For a growing number of U.S. businesses, leveraging Canada's world-class rail solutions to the US interior offers greater efficiency, less stress, lower cost, shorter transit time and more reliable service in comparison to the U.S. West Coast. Judging by Prince Rupert's 10-year Cumulative Annual Growth Rate (CAGR) of 16.4%, compared to 3.6% in LA, a transformation is underway, and they will be ready. With Fairview Terminal's increased capacity from 1.35M TEU to 1.8M TEU by 2023, and with an entirely new terminal on the horizon, Prince Rupert is positioned to become a 4M TEU gateway by the 2030s. Competing and winning on cost, time-to-market, and agility, Prince Rupert will continue to change the game for U.S. businesses who seek a reliable alternative to the status quo.

