



Pacific Northwest Container Availability Study: West Coast Container Traffic Analysis (Summary)

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This is a summary of “Pacific Northwest Container Availability Study: West Coast Container Traffic Analysis,” by Eric Jessup, at Washington State University. Funding for this paper came from the Agricultural Marketing Service (AMS) through cooperative agreement number 17-TMTSD-WA-0006. The full paper is available at: http://ses.wsu.edu/wp-content/uploads/2019/08/Final_PNW_Container_Availability_Report.pdf

WHAT IS THE ISSUE AND HOW DOES THE REPORT ADDRESS IT?

Agriculture shippers in the Pacific Northwest (PNW) frequently have difficulties accessing containers for export of agricultural products. As the third largest port region for U.S. containerized agriculture exports, the PNW ports move more than 5.5 million metric tons of animal feed, potatoes, apples, corn, soybeans, meat, and more. Container availability challenges are due to many factors and issues. Research by Washington State University (WSU), titled “Pacific Northwest Container Availability Study: West Coast Container Traffic Analysis,” provides an analysis of container trade in this region and an economic evaluation, incorporating the business and economic realities of each participating entity.

HOW WAS THE REPORT CONDUCTED?

The WSU study evaluated container flow data for inbound and outbound agricultural trade through West Coast ports. The study also sought information and perspectives, related to container availability in the PNW, from a variety of stakeholders and shippers.

Shipping manifest data from Descartes Datamyne were analyzed to present trade flows through the ports of Seattle and Tacoma in Washington and Oakland, Los Angeles, and Long Beach in California. The analysis provides detailed descriptions of each major container port, including monthly import and export volumes, destination ports, commodities, empty container throughput, and the U.S. regions served.

The report also provides stakeholder perspectives on container challenges in the PNW. Researchers interviewed port authorities, commodity commissions, agricultural shippers, ocean carriers, freight forwarders, trans-loaders, class I railroads, and labor unions for the ports studied. All stakeholders were asked their perspective on issues including:

- Nature of the container availability problem;
- Adequacy of available empty containers in the PNW for agricultural shippers in the region to access;
- Impact of the port's considerable infrastructure investments and deepening of channel to accommodate larger container vessels on container availability;
- Remedy to improve access for regional agricultural shippers seeking containers; and
- Impact of consolidation among ocean carriers, reduced ports of call, and fewer frequency stops on the availability of containers in the region.

For stakeholders involved in shipping, questions were posed concerning the level of difficulty encountered in getting access to containers, seasonality of products, logistical issues, and potential solutions to mitigate the issues of moving freight out of the region.

WHAT DID THE REPORT FIND?

The study provides a thorough presentation of West Coast ports, for incoming and outgoing containerized trade, between 2012 and 2017. These data allow users to compare the size and scope of each major container port in the region. The analysis finds the southern California ports to be the busiest container ports on the West Coast, for both import and export cargoes. This is primarily due to the large population and consumer base in that region. The Ports of Seattle and Tacoma, Washington, also known as the Northwest Seaport Alliance, ranked second for container throughput on the West Coast; and the Port of Oakland, California, ranked third.

The Port of Oakland had the closest balance of trade volume between imports and exports, while imports through the Northwest Seaport Alliance and the Ports of Los Angeles and Long Beach far outpaced export traffic. However, most import containers through Los Angeles, Long Beach, and Oakland remain in California, providing a healthy pool of containers for agricultural exports that originate in the state. By contrast, a relatively low percentage of import containers through the ports of Seattle and Tacoma remain in the PNW. This reality limits availability of empty containers for agricultural exporters in the region. A relatively large proportion of exported loaded containers leaving the Ports of Seattle and Tacoma originate from either Washington or Oregon, comparable to the proportion of exports originating in California for the container ports in California. This fact implies that agricultural shippers in the PNW searching for export boxes compete for fewer available boxes, as compared to shippers in California.

Industry Interviews

Interviews with industry participants shed additional light on issues facing the exporters in the PNW. The interviews provided representative narratives of the container-related challenges faced by affected agricultural shippers in the PNW. These common themes emerged from the discussions:

- Large shippers are not significantly affected by the shortage of containers. Interviewees agreed that large agricultural shippers can leverage their volume and consistency with service providers, ensuring they generally get the containers they need. For exporters with smaller volumes to offer, and those that are captive to inconsistent seasonality issues, the interviewees said finding containers is a challenge.

- Increased use of alliances by ocean carriers limits the number of containers available. Because carriers share vessels within the three alliances, there are fewer vessels servicing the trades. Given fewer vessels, with each vessel having a maximum capacity, agricultural shippers now have a more limited number of containers available to them compared to the time before the carriers organized themselves into a larger group.
- Highway congestion is costly for shippers accessing the ports. Shippers said the Puget Sound region struggles with traffic and congestion and, with expected growth in population and economic activities in the coming years, the highway system in the region will become more congested. Congestion not only affects timely access to the port terminals, but also increases the shippers' transportation costs.
- The PNW ports terminals' business hours, together with port congestion and highway traffic, limit the number of turns trucks can make in a shift, and contribute to shipment delays. The impact of these delays is particularly costly for low volume agricultural exporters.

CONCLUSIONS

The final section of the study offers suggestions to help mitigate challenges accessing containers for PNW agricultural exporters. Given the complex nature of container trade and the multitude of participants involved in the logistics supply chain (ocean carriers, rail carriers, drayage firms, labor, port operators, logistic providers, shippers, truck drivers, etc.), identifying one simple solution is difficult. Focusing on a variety of efforts is more likely to improve container access. Some recommended approaches were presented in the study:

- Shippers suggested port operational improvements to eliminate congestion and periodic disruptions to service. Limits to container processing at the ports and terminals reduces supply chain efficiency for shippers.
- Individually and separately, small to medium-sized shippers in the PNW do not possess enough market presence to get the attention and service from the ocean carriers. But, collectively, across the PNW (Washington, Oregon, Idaho, Western Montana) there exists a wide variety of shippers, across a variety of commodities, that would utilize container services if there existed a common organizing body to coordinate container services.
- The most common suggested solution for addressing container availability issues for PNW agricultural shippers is an inland container terminal and one currently being promoted by the Northwest Seaport Alliance, with a facility located in Richland, Washington. These inland container terminals/hubs are said to expand the port's size and scope in the face of space constraints on ocean port property, reduce highway congestion/truck traffic near the port, and improve access to containers outside the urban area.

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