

Cross Dock Feasibility Study - Facts & Findings

FACTS In June 2013, consultants completed a feasibility study intended to help Port decision makers evaluate the need for a cross-dock facility or other strategic investments that would increase the competitiveness the region. The study focused on the tree-fruit industry in North Central Washington, which supplies 72 million boxes of apples domestically and 37 million cases to international markets each year. The findings outlines transportation movement fruit from farm to market, and will assist with development of strategies that enhance the Douglas, Chelan and Okanagan fruit industry.

Tree Fruit Production The Wenatchee Valley tree fruit district stretches from Quincy to the south, Brewster to the north and includes Leavenworth, Cashmere, Chelan, and all of the fruit growing areas of Chelan and Douglas County in the Wenatchee and Columbia River valley areas.

- The region represents 36 million of the statewide 110 million 40lb boxes of apples, 9.5 million of the 13 million 45lb boxes of pears, 7 million of the 17.5 million 20lb boxes of cherries, and 500,000 boxes of other tree fruit.
- Growers have achieved higher productivity from higher density in orchards, resulting in an increase in boxes per acre. Coupled with new orchards, the industry expects a 20% increase in production by 2015.

Markets Statewide, the industry generates approximately \$3.5 billion in annual sales with 97% of consumption outside Washington State.

- Washington provides about one-half of apples grown in the United States. Apples represented the top agricultural commodity in Washington and the highest value crop in the nation at an average of \$1,221 billion for the period 2003-2007. The Chelan and Douglas regions share about \$1.5 billion (2012 crop) of the tree fruit industry.
- Export volumes for all countries in 2012 were over 37 million cases of fruit. Of the apples exported, approximately 15% of all fruit was trucked to Canada or Mexico, 10% moves through Puget Sound ports (8-10,000 containers) and 5% was trucked to Long Beach or railed to the East Coast ports for shipment to international markets.

Modes of Transport The dominant mode of transport is **by truck** including delivery to the seaports and airports totaling 200,000 truckloads of fruit leaving the district each year, averaging 250 partial or 200 full truckloads per day. Of these shipments, 70% is shipped out-of-state.

- **Containerized / Exports.** Approximately 30% of the apple crop is exported with one-half (15%) trucked north to Canada or south to Mexico, 10% moves through Puget Sound ports and 5% moves to southern California or east coast ports.
- **Rail.** Only 5% of the domestic fruit is shipped out of the district by rail.
- **Air-freight.** With delivery to markets occurring in a short shipment window, 70% of the cherry shippers use west coast airports.

Economic Impacts The WA Apple Commission's 2012 study notes in 2010-2011, the apple industry

- generated \$7.02 billion in direct, indirect and induced economic activity in 2010-2011,
- accounted for an estimated 59,650 jobs and total wages of \$1.95 billion
- generated business income resulting in tax contributions of \$188.7 million at the state and local level, with an estimated \$300.3 million in Federal tax revenues, and
- resulted in sales of approximately \$919.4 million to the apple industry in goods and services, which represents about 377 jobs, and benefits other sectors of the Washington economy such as paperboard carton suppliers, truck transportation, cold storage/warehousing, construction and building maintenance, tree nurseries and banking.

About the Port of Douglas County: The Port of Douglas County takes pride in helping create jobs, overseeing public resources and serving as a leader in the community. We accomplish this task in a multitude of ways, including the development of our own business park at Pangborn Memorial Airport, installation of infrastructure for industrial growth, issuing bonds to further economic development projects, and assisting companies with retention or expansion needs. In a nutshell, we seek out and embrace strategic partnerships that will stimulate and enhance the community's economy and quality of life. For more information, visit our website at www.portofdouglas.org or call Lisa Parks, Executive Director @ 509.884.4700



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Key Findings *Based on current market conditions and demand, industry practices, attributes and characteristics associated with successful cross-dock activities, the findings seem to determine that an additional facility could enhance freight movement in the region, but would only provide economic development benefits for smaller segments of shippers in the region. The study also indicates that the private sector is making strategic investments to consolidate activities in response to the questions raised at the 2010 Manufacturing Summit. The following outlines key findings from the study.*

Consolidation An estimated 80% of the fruit is received, processed, packed, stored, and shipped by 16 major fruit cooperatives or consolidated facilities. The trend of consolidation will likely continue as the industry sees continued reduction in the number of growers. Consolidation of growers occurs as business owners are retiring and costs of production have increased from changes in health care, food safety and immigration regulations. Consolidation of packing houses has achieved savings from higher volumes for receiving, storage, food safety protocols, inventory control, and shipping product to market. Finally, consolidation among the marketing firms has resulted from competition and the buyer's requirement to supply a diverse line of high quality, consistent product on a year-round basis.

Industry Practices Industry practices affect the logistics decisions related to tree fruit. The packing warehouse provides growers cold storage, food safety protocols, inventory control and ultimately distribution services. Packing houses and marketing firms seek control and would likely lease or rent space over using public storage so they can monitor quality, directly manage inventory and provide certainty in complying with food safety regulations. Logistics decisions are predominantly driven by a few large buyers. Tight control over product mix by the packing warehouses and marketing firms drives the location of storage and thus, consolidation. Most of the larger packing houses have transportation and logistics professionals that have achieved efficiency in the logistics chain over the years. There could be some savings achieved through coordinated local movement from orchards to packing house – or from packing house to warehouse controlled by marketing agents as many of these move in less than truckload (LTL) quantities. With continued consolidation, there will be less demand for cross-docking activities, as buying patterns drive the natural consolidation of product at the packing houses.

Intermodal Rail Shippers expressed interest in increasing freight movement via rail, particularly using intermodal services where containers are loaded at the packing house and delivered to an intermodal facility for movement to market. Service is driven by the destination market and volume contracts from buyers. As operators such as ColdTrain increase capacity and service additional eastern U.S. markets, volumes will likely increase for rail movements. If the private sector cannot provide the equipment/capacity required, there could be a role for public investment to help build the program.

Cross-dock/Warehousing for Boxcar moves The short-line operator, Cascade & Columbia River Railroad (CSCD), a division of Genesee & Wyoming, Inc., is interested in servicing the tree-fruit industry and has been in discussion with a private sector business looking at opening a facility to service growers in the region. The construction of a well-designed and properly located cross-dock facility could improve economic viability and provide incentive for businesses in the region as a box-car move is the equivalent of 3.5 truckloads, resulting in significant savings for shippers/buyers on long-haul moves. Shippers must provide adequate volume while the mainline rail carrier, BNSF, needs to support a new service on the short line. Dependable service is critical to helping maintain existing businesses and attracting new industries to an area.

Exports/Puget Sound Ports Westbound Intermodal Service has been explored in the past and the economics still don't pencil out for short-haul rail movements that compete with low-cost drayage rates from trucking companies. Also of significance is the gap in transit time, where it can take days for a rail movement that trucks can deliver in a few hours. The success of a westbound rail service would depend on many factors, including adequate demand for the service from the local producers, timely delivery, a competitive rate from and support from the Burlington Northern Santa Fe and agreements with the Puget Sound Ports. Apple crops are estimated to increase by 20% in production by 2015, which will drive demand for exports. Marketing Firms and fruit brokers typically control the transportation for export shipments, selling on CIF (Cost, Insurance Freight) or C&F (Cost & Freight) terms. As gateway ports and I-90 becomes more congested, there may be interest in moving freight off highways and onto rail. Future studies for westbound intermodal service should include central Washington origin - destination cargoes, not be limited to tree fruit.

