



# The Washington Port System:

## Gateways to Growth at Home and Opportunities Abroad

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# Introduction

## Background and Purpose

The importance of trade to Washington state is undisputed. With approximately 40 percent of all jobs tied to international commerce, Washington is the most trade-reliant state in the nation<sup>1</sup>. Geographic advantages including proximity to the Pacific Ocean, natural deep water harbors courtesy of the Puget Sound and an unparalleled network of roads, railways, and waterways have made the region a gateway for trade and commerce.

Essential to the region's preeminent role as an engine of international trade and economic growth is the extensive system of ports that serve communities throughout the state. Washington's public ports system is publicly owned and operates 75 distinct port districts across 33 of the 39 counties in the state. The state has more separate ports than any other state, with some quite small in area and population.<sup>2</sup> The public ports system includes seaports and airports and provides critical infrastructure that drives economic development across the state.

This paper focuses on the importance of Washington's ports to the statewide economy. These ports constitute important economic activity assets by facilitating trade, the movement of passengers, tourism, supply chains, and industrial activities.

## Overview of the Port Districts System in Washington

Ports play a crucial role for Washington's economic competitiveness, by ensuring the safe and efficient movement of goods. Washington's wide-ranging marine terminal system, shown in



**Exhibit 1**, displays the breadth of marine cargo ports located not only on the Pacific Coast, but throughout the state. The extensive array of commodities handled at each port in the state is reflected in **Exhibit 2**.

**Exhibit 1. A Statewide Network of Ports: The Marine Terminal System and Railroads**

Source: Washington State Public Ports Economic Impact and Jobs Analysis, Community Attributes, 2017.

**Exhibit 2. Statewide Marine Freight System: Commodities**

<b>Marine Freight Waterway</b>	<b>Port</b>	<b>Primary Commodities</b>
<i>Pacific Ocean</i>	Grays Harbor	Autos, soybeans, compressed natural gas
<i>Salish Sea</i>	Shelton	Lumber
	Olympia	Lumber, logs, breakbulk, grain, livestock, heavy lift
	NWSA (ports of Tacoma and Seattle)	Dry containers, refrigerated containers, breakbulk, roll-on/roll-off, grain, seafood, logs
	Bremerton	Military, fuel
	Everett	Aircraft parts, logs
	Bellingham	Bulk and break bulk
	Anacortes	Shipbuilding and repair
	Port Angeles	Logs and lumber
<i>Columbia-Snake River System (Deep draft ports)</i>	Vancouver	Grain, auto, steel, heavy lift
	Kalama	Grain, steel
	Longview	Grain, bulk, heavy lift, general cargo, petroleum coke, logs
<i>Columbia-Snake River System (Shallow draft ports)</i>	Clarkston	Forest products, heavy lift, containers
	Whitman-Wilma	Grain
	Whitman-Almota	Grain
	Garfield-Central Ferry	Grain
	Whitman-Central Ferry	Grain
	Benton	Military, heavy lift
	Pasco	Containers, refrigerated, heavy lift
	Walla Walla	Grain, refrigerated
	Klickitat	Logs

Source: Washington State Department of Transportation, 2017; Community Attributes, 2020.

Location and geography give Washington state ports specific advantages compared to other West Coast ports. Washington ports are closer to Asian markets than other United States ports, and they are also well connected to the upper Midwest. This gives them a competitive edge for the bulk movement of agricultural products between Asia and the Midwest and all points in between. The ports of Seattle and Tacoma (whose cargo operations are managed by The Northwest Seaport Alliance) are natural deep-water ports which require minimal dredging relative to other ports in the U.S. They also benefit from an extensive distribution center capacity nearby for transloading freight to and from domestic containers<sup>3</sup>.

Ports facilitate trade through sea and river access, airports, and rail connections, which are vital to trade activities, and do much more for economic development. State law directs Washington state public port districts to focus on local job development, efficient land use, industry growth, and recreation preservation. As such, ports can invest in land and capital facilities in the name of job creation in ways not allowed to municipalities. These regional functions contribute enormously to regional and statewide economies.

Smaller ports naturally have a more modest effect on state economy when expressed as a percentage of the whole. However, for local communities, ports with relatively small tax bases and operating budgets still have a tremendous impact on their local economies. For example, the **Port of Skagit County** partnered with the Washington State University Bread Lab to support wheat production in the county. The **Port of Whitman County** has created numerous business parks that give local companies their start and has transformed telecommunications infrastructure to provide broadband connections to rural areas. The **Port of Ridgefield**, through a partnership with the Washington State Department of Ecology, completed a 20-year land remediation project to restore environmental health to the downtown shoreline. These investments illustrate the pro-active and collaborative role ports can play in serving local economies.<sup>4</sup>

## State Ports: Impacting All of Washington

### Ports Create Community Jobs

Both as a conduit and gateway for international trade and directly through employment at facilities throughout the state, **Washington state ports create good paying jobs**. In 2015, activities at Washington's public ports supported 71,250 direct jobs, of which 4,350 were from marine terminal operations on port district lands (**Exhibit 3**). Approximately 40% of the direct jobs are supported by Washington state ports other than the Port of Seattle and Port of Tacoma. On average, these jobs paid \$76,200 in labor compensation, including benefits, which is 9% higher than the statewide estimated loaded wage across all industries (U.S. Bureau of Economic Analysis, 2016).

**Exhibit 3. Jobs Supported by Washington Public Ports Tenants**

<b>Jobs</b>	<b>Direct</b>	<b>Total</b>
Commercial and Industrial	36,700	87,700
Maritime Operations	16,300	43,700
Commercial and General Aviation	10,600	25,300
Marine Terminal Operations	4,350	8,950
Tourism	3,300	9,600
<b>Total</b>	<b>71,250</b>	<b>175,250</b>

Source: *Washington State Public Ports Economic Impact and Jobs Analysis, Community Attributes, 2017.*

Statewide, through supply chain linkages and worker income expenditures, activities at Washington's public ports support an additional 104,000 jobs, bringing the total number of jobs to 175,250. Marine terminal operations support roughly 9,000 jobs or 5% of total jobs supported by Washington public ports tenants.

### Ports are National and Global Gateways

Marine terminals serve as critical infrastructure for the flow of goods entering and exiting the U.S. They are the primary gateway for many types of Washington state exports, like apples. Washington produced \$2 billion worth of apples in 2019. Of this, \$1.85 billion (95%) was fresh apples, while \$106 million (5%) was designated for processing. In 2019, Washington exported an estimated \$731 million worth of apples.

In the Pacific Northwest, **the Columbia and Snake River systems** are a leading gateway for wheat exports with 53% of U.S. wheat destined for export coming down the Columbia River alone. The rivers can move more volume at once, with greater fuel efficiency, making them more effective for moving grain to market than by rail or truck. Eastern Washington wheat farmers benefit from two transportation alternatives to move millions of bushels to ocean export locations each year - rail transportation and barge transportation. The **Port of Grays Harbor** and several along the Columbia River, including the ports of Kalama, Vancouver, and Longview, support the movement of exported agricultural products to foreign markets. About 60% of Washington's grain moves on the Snake/Columbia River System with the other 40% loaded at one of five 110 car rail shuttles<sup>5</sup>.

Kalama is the largest grain port on the West Coast<sup>6</sup> and plays an important role in how Washington wheat feeds the world. At the **Port of Kalama**, the Temco terminal handles up to 250 million bushels of grain per year and employs 120 local workers loading as much as 2 million bushels of grain every 24 hours. Together, Port of Kalama companies and facilities employ 1,024 individuals, reported nearly \$10 million in marine terminal operating revenues, and accounted for nearly 14 million tons of grain exports in 2017<sup>7</sup>.

The Port of Grays Harbor, the only deep-draft port directly on the Pacific Ocean in Washington capable of handling ocean-going vessels, is one of Washington's most export-oriented ports, with more than 95 percent of shipping activity at the port based on exports. The port also has grain storage facilities and a liquid bulk facility.

The Northwest Seaport Alliance (NWSA) is the second largest port in the country as measured by agricultural trade tonnage. In specialized agriculture markets the importance is even more pronounced. For example, the NWSA is the nation's leading export gateway for refrigerated agriculture products, representing nearly 20 percent of national volumes<sup>8</sup>.

Puget Sound ports' role as a national gateway for imports is important for the prosperity of Washington's economy, which depends heavily on goods imported by container through marine and landside transportation infrastructure. Imports support the infrastructure, ocean carrier calls and availability of shipping containers needed by companies in Washington to export their products overseas. Producers in Washington would face either higher operating costs or fewer options without a high volume of goods from Asia, as they would need to seek other port gateways to export their products<sup>9</sup>.

### *From Agriculture to Manufacturing: Ports Support Washington's Leading Industries*

Washington's public ports are instrumental to the movement of goods or provision for the state's leading industries. Many public port districts invest in industrial and commercial lands that are particularly important for value-added agriculture production and manufacturing. Manufacturers and commodity producers across the state rely on efficient, robust port systems to reach global markets and strengthen supply chains. Public port marine terminals facilitated the movement of an estimated \$111.6 billion in merchandise and commodities exports and imports.

The **Port of Everett** directly serves the Boeing Company assembly plant in Snohomish County and is the third largest container port in the state. As the region's premiere breakbulk facility, handling high-value, over dimensional cargoes that cannot be put in containers, the Port of Everett is instrumental in facilitating the movement of goods in the aerospace, manufacturing, construction, agriculture, energy and forest products industries. Most notably, the Port is essential in the supply chain for aerospace, accommodating all of the oversized aerospace parts for the 747, 767, 777, 777X airplanes<sup>10</sup>.

Washington ports also facilitate imports which provide a variety of benefits for Washington companies and consumers. In 2018, over 11,400 Washington companies imported goods from 187 countries around the world<sup>11</sup>. Many of Washington's imports are also components for Washington exports. In 2019, Washington ports imported an estimated \$303 million of unroasted coffee. In

return, \$69 million of roasted coffee was shipped through Washington ports<sup>12</sup>. This is just one example of a mutual dependency between Washington's industries and its ports and the importance of the ports in facilitating the flow of goods that help fuel Washington state's trade economy.

### *Ports are Important Economic Assets and Drivers of Growth for Local Communities*

Rural coast ports serve as important assets to their local communities. They typically represent a large share of local employment. For example, the ports of Ilwaco and Chinook are important centers for Washington's fishing industry. Together they are the second largest port district of landed fish in the state of Washington after Westport in Grays Harbor County. Between 2008 and 2017, Ilwaco and Chinook averaged roughly \$21 million of landed fish per year. In 2018, commercial fishing activity at **Port of Ilwaco** and **Port of Chinook** marinas supported roughly 400 direct jobs in these communities, representing 6% of all jobs in Pacific County.

The Ilwaco and Chinook marinas provide mooring facilities and support recreational boating activity, attracting visitors that generate spending in these local communities. The marinas are also a hub of charter fishing activity and offer great access to adjacent sport fishing waters. Overall, economic activity (including real estate tenants) at Port of Ilwaco and Port of Chinook supported more than 1,300 jobs and \$82.5 million in business revenue for the local and regional economy in 2018<sup>13</sup>.

### **The ports of Seattle and Tacoma and The Northwest Seaport Alliance serve local communities throughout Washington state.**

The ports of Seattle and Tacoma are the two largest ports in Washington. Common commodities flowing through these ports include dry containers, refrigerated containers, breakbulk, roll-on/roll-off/ grain, seafood, and logs.<sup>14</sup> The NWSA – a marine cargo operating partnership of the ports of Tacoma and Seattle - serves numerous Washington communities each year through the breadth of goods they move through their ports.

In 2020, the ports of Seattle and Tacoma exported more than \$325 million worth of milk products, an increase of nearly \$80 million from 2015. This accounted for most Washington state's dairy exports. The growth in dairy exports can be attributed to Washington dairy companies turning to international buyers given the downward pressure on milk prices within the United States. Exporting to countries such as China and Singapore have helped alleviate the financial pressures to dairy farms caused by low domestic milk prices.

In 2018, Darigold (a Seattle based milk processor and seller) reported that 40% of its output were exports and hoped to export more than 50% of their total output in the near future.<sup>15</sup> The Northwest Dairy Association (NDA) cooperative, which owns and provides milk to Darigold, is comprised of a large group of dairy farms located in the northwest. In total, 26 farms within the cooperative are in **Skagit County**, and a large proportion of **Whatcom counties** 98 dairy farms also operate under the NDA.<sup>16</sup> As Darigold continues to increase their exports, the NWSA will continue to play a more significant role in supporting local Washington dairy farmers throughout the state.

The NWSA also handles most of all pen and pencil, diaper, and video game console imports flowing through Washington's ports, with a significant share coming from China. These commodities are common products imported by retailers such as Target, which is estimated to import 34% of their products from China, a major Washington trade partner. In 2003, Target built a 1.5 million square foot distribution warehouse in Lacey, Washington. This is designed to receive and redistribute imported goods throughout the U.S.<sup>17</sup> At the time of building, the warehouse generated 350 new jobs<sup>18</sup>, and continues to stimulate economic activity in the Lacey area today.<sup>19</sup>

Philips Healthcare is a well-known global company that specializes in healthcare equipment and has a large presence in Bothell. It is estimated that roughly 80% of Philips' ultrasound equipment shipped worldwide is manufactured in Bothell.<sup>20</sup> In 2020, Washington exported nearly \$590 million in ultrasound equipment. Of this, more than \$23 million was shipped through the Port of Seattle. This accounted for 100% of all ultrasound equipment exports leaving Washington state via maritime shipping methods.

### *Ports Lead Economic Development*

In addition to the geographic advantages of the northwest region's ports, there are structural, organizational, and jurisdictional features that enhance the impact the state's ports have on the Washington state economy. Many of the details are spelled out in the Washington State Public Ports Economic Impact and Job Analysis study.<sup>21</sup> Based on interviews with various port districts throughout the state as part of this study, there are some telling conclusions for how ports contribute to economic development statewide:

- Port districts act as "public enterprises" that are nimble and focused on implementation.
- Port districts play a unique role in community and statewide infrastructure development.
- Port districts are community focused.
- Port districts can have local impacts that belie their size.

The Washington State Public Ports Economic Impact and Job Analysis study includes case studies that illustrate these ways many ways in which ports drive economic development in Washington state communities.

## Conclusion

The March 2021 incident where the Suez Canal was blocked by a container ship (*The Ever Given*) highlights the interconnectedness of global commerce. Additionally, it emphasizes the need for ongoing infrastructure improvements to ensure the free flow of imports and exports that support Washington state's trade-reliant economy. This interconnectedness of global economies and movement of imports and exports are evident in the recent changes in the flow of container traffic caused by the Covid-19 pandemic. These disruptions have not only impacted agriculture exports in Washington state but also have increased the risk for Washington state exporters of losing market opportunities to foreign competitors.

Washington's ports are a critical economic engine employing tens of thousands of workers and contributing to the state's position as one of the country's top exporting states as well as to the

economic development and stability of communities throughout Washington. The state's ports must function efficiently, reliably, and competitively to remain both a renowned global hub and a vital source of community employment. Investing in port-related infrastructure, pursuing policies and measures to improve operational predictability, and supporting freight mobility investments that make local corridors efficient and reliable can help ensure that Washington's ports continue to play a crucial role as a gateway to growth at home and opportunities abroad.

# Endnotes

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