ORIGINS OF THE ONGOING SUPPLY CHAIN CRISIS AND IMPACTS TO WASHINGTON STATE

This summer and fall has seen a surge in port traffic, forcing shipping delays and upended retail distribution channels and manufacturing supply chains. News coverage has been replete with stories of shipping bottlenecks and images of hundreds of container vessels idle offshore. The backlog at the Ports of Los Angeles and Long Beach (LA/LB) has now reached a historic high, with more than 100 vessels waiting to unload, some waiting weeks in anchor or adrift off the coast. LA/Long Beach terminals handle 40% of all U.S. inbound container imports and 30% of outbound export containers. On October 14, the Biden Administration, in an unprecedented move, announced LA/LB would operate 24/7 to help clear the backlog. However, this expanded operations window has been largely unused.

Surging container traffic is not just limited to Southern California. According to RBC Capital Markets, an estimated 77% of ports globally are experiencing abnormally long times for turnaround container traffic. According to the U.S. Census Bureau, import container volumes, measured in tonnage, handled at the Ports of Seattle and Tacoma (The Northwest Seaport Alliance) were up 23% in August year-to-date. In August alone, import container cargo tonnage was up 25% compared with August 2020. Total NWSA twenty-foot equivalent unit (TEU) volume increased 7.1% September 2021 compared with September 2020 and is up 15.9% year-to-date.

The increase in volumes began in the summer of 2020. Volumes never actually cycled down but have accelerated instead. This past summer has been unprecedented and the forecast is for continued demand for transport in excess of the current system capacity to handle the volumes.

Causes of Supply Chain Delays

Delays come as a result of a confluence of factors. These include increased household goods purchasing, especially of e-commerce goods; 2) depleted inventories; 3) overseas and domestic labor shortages; and 4) limited shipping capacity, extending from ports to rail to warehouses to trucking. The availability of goods also varies by product type and source. Large amounts of goods are moving, so much so that a large share are being held back due to congestion. Some goods are in a state of congestion but are on shore and will eventually make it to the store shelf. Other goods were not manufactured at all due to the COVID-19 lockdowns in Vietnam, Malaysia, India, and other major global manufacturing hubs. And, some goods have been priced out of the market due to exceptionally high transportation costs.

Several rounds of stimulus under both the Trump and Biden administrations have left households with $1.6 trillion in savings, equal to 9.4% of their disposable income (well above pre-pandemic levels). Private sector nominal wages were up 4.6% in September from a year earlier, helping to further boost consumption, according to the U.S. Bureau of Labor Statistics.

Wage and income gains are coming to fruition as consumer spending. In September 2021, retail sales rose 13.9% from a year earlier. *Retailers* sales are a more accurate measure of goods, as they include only sales of stores and e-commerce (leaving out food and gasoline). Year-to-date through August, these sales were up 20% compared with the first eight months of 2020. This is the highest increase for the first eight months on record (dating back to 1992); the next closet August YTD increase was 8.5% in 1994.

Retailers, after letting inventories draw down, are now moving to rebuild these inventories in advance of the upcoming holiday season. Starting in April 2020, retailers inventories experienced year-over-year declines for 13 consecutive months before slowly rebounding.

Global labor shortages have also ensnared supply chains and deliveries. The COVID-19 pandemic has depleted available labor in major manufacturing hubs, both in the U.S. and abroad. In the U.S., workers are showing more selectivity in employment. The most recent U.S. Labor Department's monthly Jobs Openings and Labor Turnover Survey, released on October 12, showed that there were still 10.4 million job openings in the economy, including 870,000 in manufacturing and 537,000 in transportation, warehousing, and utilities. The number of people leaving their jobs (the so-called "quits rate") rose to 4.3 million, the highest level seen on records dating back to December 2000. Overseas manufacturing hubs, such as Vietnam, have experienced labor shortages due to the pandemic, further aggravating a precarious situation.

Lastly, capacity limits have pushed spot market shipping container prices to historic levels. Over the past year, the cost to have one container shipped by freighter from China to the West Coast has soared from around $3,000 in August 2020 to more than $20,000 in September of this year. By another measure, the cost of shipping a container holding roughly 35,000 books has risen from $2,500 to as much as $25,000. Part of this is attributable to the reduction in passenger airflights, which are typically also a mode of airfreight (in the form of belly freight).

These constraints extend to warehouses and trucking. About 98% of warehouses in Southern California's logistics-heavy Inland Empire region are fully occupied, while the entire Western U.S. has a very low 3.6% vacancy rate. Shortages among truckers owes both to COVID-19 infections and longer term structural challenges, including declining interest among younger generations in truck driving as a career. According to American Trucking Associations Inc., there is an 80,000 driver shortage in 2021, a historic high. Based on current trends, this shortage is projected to surpass 160,000 drivers by 2030.

Inland, intermodal rail volumes have been higher than in in 2019 and 2020. Even during the best of times, the need to rapidly ramp up labor force capacity and equipment is probably beyond the near-term capabilities of the international freight system.

Implications for Washington State

Supply chain shortages impact manufacturers, retailers, and households. According to WCIT's own analysis, an estimated 40% of Washington state jobs are tied to trade. Any loss in trade capacity along the West Coast translates into delayed shipments of final goods of critical inputs and potentially lost revenues.

Imports are a key element to Washington's economy. According to the Washington State Input-Output Table, each year, Washington state businesses make foreign imports equal to more than 7% of total sales. Foreign imports by value represented nearly 8% of household consumption in Washington state before the pandemic. Trump era Trade War tariffs and rising prices from inflation and (and in part from) shipping bottlenecks will mean higher prices for the average household, especially as we enter the holiday shopping season.

Moving cargo creates jobs and wealth, irrespective of origin or destination. Washington’s global trade and supply chain management system directly employed nearly 100,000 workers in the state in 2019. These include workers at terminal operators, warehouses, intermodal freight and railyards, drayage and short- and long-haul trucking, freight forwarders, and port staff and security. These are high paying jobs that support Washington state families throughout the state. Any reduction in cargo handling can lead to delayed or lost revenues and income for these operations and businesses.

Spencer Cohen, PhD is principal and founder of High Peak Strategy LLC, an economics and research consulting firm based in Seattle. He is a 2021-2023 National Committee on U.S.-China Relations Public Intellectual Program fellow and affiliate faculty in the University of Washington Department of Geography.