IMPACT OF COVID-19 ON PORTS
UPDATE - ONE YEAR LATER
COVID-19: WHERE WE WERE

- Ports deemed essential
- Continue to Serve, Safely
  - Access to PPE
  - Safety protocols allowed construction to continue
  - Ports partner on testing and vaccination
- Keep local economies moving
COVID-19: WHERE WE ARE TODAY

- Factory shutdowns
- V-shaped demand curve
- Parts shortages
- Shipping delays
- Insufficient equipment availability
- Labor availability & shortages
- Factory shutdowns
- Source: Association of American Railroads
Pandemic Port Congestion: The Big Picture

ANATOMY OF A GLOBAL SUPPLY CHAIN CRISIS

The global supply chain is a complex network of manufacturers, shippers, port facilities, logistics providers and transportation companies. Here’s how the pandemic impacted nearly every link in the chain - and how we can prevent the next supply chain crisis.

Spending Extremes
- In response to the pandemic, U.S. consumer spending drops 30 percent in April 2020, then rebounds sharply later in the year - shocking a supply chain that had thrived as economies fell into recession.
- When consumers start buying again, spending shifts dramatically from travel and entertainment to clothing, computers and household goods. Shipping demand skyrockets.

Manufacturing Whiplash
- As the pandemic spreads through Asia, factories close in places like China, Korea, Taiwan and Singapore that produce goods for U.S. consumption.
- Factory shutdowns and travel lockdowns halt shipping and disrupt the global supply of shipping containers that will be needed for a late-2020 recovery.
- When orders surge for medical equipment and PPE, Chinese factories unexpectedly come back online. The supply chain is unprepared.

Shipping Volatility
- Pre-pandemic, seagoing carriers cut capacity as the industry consolidated and reacted to new tariffs and a global recession.
- As economies suffer in 2020, carriers idle even more vessels and cancel additional routes.
- When demand surges, ships aren’t positioned to respond.
- Demand for import cargo to the U.S. is so high, some shippers refuse to fill empty containers with U.S. exports before returning to Asia.

Port Worker Shortage
- Quarantines and illness keep thousands of port workers off the docks in 2020.
- At one gateway port, 1,800 port workers are (temporarily) sidelined due to COVID-19 protocols.
- The industry’s urgent call to prioritize port workers for COVID testing and vaccination goes unanswered.

Container Scarcity
- The pandemic shutdown in Spring 2020 leaves 25 million containers in the wrong place to meet re-emerging demand later in the year.
- Container manufacturers, predicting a yearlong drop in demand, slash production.
- North America faces a 40% container imbalance - for 100 containers that arrive, only 40 are exported.
- North America faces a shortage of container chassis for semi trucks, caused by 2019 tariffs and aging equipment, compounds the problem.

Trucking Shifts Gears
- When the pandemic hits, several large trucking companies go bankrupt, disrupting an industry that moves 71% of U.S. freight.
- 100,000 trucking jobs are lost in 2020.
- Remaining truckers are transferred from retail to priority industries such as food, healthcare and cleaning supplies.
- A shortage of container chassis for semi trucks, caused by 2019 tariffs and aging equipment, compounds the problem.

Fewer Flights for Freight
- Shippers typically use empty cargo space on passenger flights - space that disappears when air travel all but ceases during the pandemic.
- Air freight volume rises 50% over 2019. Airlines fly at peak freight capacity - some even re-open dormant overseas passenger routes just to carry cargo - but the industry can only meet 85% of demand.

THE WAY FORWARD:
A RESILIENT SUPPLY CHAIN

America’s seaports are doing their part, investing $31 billion in port infrastructure every year with plans to spend $163 billion between 2021-2025 to improve port facilities. To prevent future freight congestion, the nation needs long-term infrastructure investment for a secure, resilient supply chain - and to keep products abundant and affordable for American consumers.

@PortsUnited
@PortsUnited
www.aapaports.org
PRESIDENTIAL ACTION: WHERE WE ARE

- Executive Action in February 2021 designed to increase competition in markets where a small number of businesses have a large portion of market share

- October 13\textsuperscript{th} Action
  - Ports of Los Angeles & Long Beach (CA) will sustain 24/7 operations
  - Retailers and parcel carriers to expand service to 24/7
  - Ports partner on testing and vaccination
  - Keep local economies moving
REATIONS: SUPPLY CHAIN DISRUPTION

“If federal support is needed, I will direct all appropriate action. And if the private sector doesn’t step up, we’re going to call them out,” Biden said. “Our goal is not only to get through this immediate bottleneck but to address the longstanding weaknesses in our transportation supply chain that this pandemic has exposed.”

President Joseph Biden

“We are seeing unprecedented times in the global supply chain...(it’s) all hands on deck.”

John Wolfe, CEO, Northwest Seaport Alliance

“The supply chain disruptions we’re experiencing reflect demand roaring back far faster than decades-old infrastructure can handle. President Joe Biden and this administration have been working to address near-term issues and invest in resilient port infrastructure.”

Pete Buttigieg, Secretary, United State Department of Transportation
BY THE NUMBERS: SUPPLY CHAIN DISRUPTION

Vessels waiting for a berth (at anchor or drifting)

<table>
<thead>
<tr>
<th>Port</th>
<th>July 30</th>
<th>Aug 13</th>
<th>Sep 3</th>
<th>Sep 17</th>
<th>Oct 1</th>
<th>Oct 15</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sea/Tacoma</td>
<td>13</td>
<td>8</td>
<td>15</td>
<td>14</td>
<td>20</td>
<td>20</td>
</tr>
<tr>
<td>LA/LB</td>
<td>22</td>
<td>40</td>
<td>33</td>
<td>60</td>
<td>65</td>
<td>68</td>
</tr>
<tr>
<td>Oakland</td>
<td>6</td>
<td>7</td>
<td>1</td>
<td>0</td>
<td>2</td>
<td>0</td>
</tr>
<tr>
<td>Vancouver</td>
<td>1</td>
<td>4</td>
<td>1</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Prince Rupert</td>
<td>0</td>
<td>3</td>
<td>0</td>
<td>0</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>TOTAL</td>
<td>42</td>
<td>62</td>
<td>50</td>
<td>77</td>
<td>93</td>
<td>95</td>
</tr>
</tbody>
</table>
### Weekly Train Starts (by destination)

<table>
<thead>
<tr>
<th>Destination</th>
<th>July 30</th>
<th>Aug 13</th>
<th>Sep 3</th>
<th>Sep 17</th>
<th>Oct 1</th>
<th>Oct 15</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chicago (dest)</td>
<td>19</td>
<td>20</td>
<td>21</td>
<td>19</td>
<td>18</td>
<td>20</td>
</tr>
<tr>
<td>Chicago (bynd)</td>
<td>18</td>
<td>18</td>
<td>16</td>
<td>20</td>
<td>21</td>
<td>19</td>
</tr>
<tr>
<td>Portland</td>
<td>4</td>
<td>1</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>All Others</td>
<td>13</td>
<td>11</td>
<td>13</td>
<td>11</td>
<td>9</td>
<td>12</td>
</tr>
<tr>
<td>TOTAL</td>
<td>54</td>
<td>50</td>
<td>53</td>
<td>53</td>
<td>51</td>
<td>53</td>
</tr>
</tbody>
</table>
ANECDOOTES: SUPPLY CHAIN DISRUPTION

- Union Pacific embargoed all west coast intermodal service for two weeks to allow its Chicago terminals to catch up
- Retailers are purchasing shipping containers and chartering their own vessels to gain greater control over supply chains
- International air passenger service continues to lag causing exporters to charter flights or look for new domestic customers
- Washington State exporters are challenged to secure containers
OVERCOMING CHALLENGES: CURRENT CRISIS AND LONG TERM NEEDS

- Infrastructure needs
- Competitiveness
- Labor Shortages
- Ports as good neighbors
- Trade/Tariff Policy
- Land Use