Incent and Invest:
Supply Chain Fluidity at American Ports

How did we get here?

Since the onset of the COVID-19 pandemic, the United States has experienced an unprecedented supply chain crunch, with increases in cargo leading to blockages in overheated supply chains.

Seaports have made extensive efforts — from enhancing working hours to better communications with supply chain partners and customers — to mitigate these events.

The situation is looking brighter: 2021 was a record year for American seaports, in both imports and exports. American retail saw a 14.1 percent increase in holiday sales, based on data from the U.S. Census Bureau, and the American agricultural industry announced its highest annual export levels ever recorded, totaling $177 billion in exports of U.S. farm and food products to the world — surpassing the 2020 total by 18 percent — as well as exceeding the previous record — set in 2014 — by 14.6 percent, according to the U.S. Department of Agriculture.

However, the pandemic exposed, and exacerbated, issues long endured by American seaports, including a lack of sustained, long-term funding. Though seaports received historic funding with the enactment of the Bipartisan Infrastructure Law, of this $17 billion topline allotted for *ports and waterways*, only about $5.35 billion is exclusively allocated to seaports. These figures are substantial, but relative to the cargo entering and exiting United States ports, which equates to approximately $5.4 trillion in trade per year (as of 2018, and rising), these resources do not rise to the full challenge. AAPA estimates United States seaports alone will require over $66 billion in infrastructure investments in the coming decade to keep up with current volumes, which are anticipated to rapidly increase.

According to American Civil Engineers' Infrastructure Report Card's most recent estimate, the United States' (over 300) seaports equate to 26 percent of total U.S. GDP. In other words, the consequences of inaction are dire.

We have ideas.

The American Association of Port Authorities, or AAPA — *the unified voice of seaports in the Americas* — is working with seaports, supply chain partners, and policymakers on solutions to address supply chain fluidity challenges.

AAPA strongly believes that in addition to a) robust funding and b) operational enhancements in and around ports, ***supply chain partners must work together***.

This is AAPA's *Incent and Invest* plan, with six pillars for immediate policy and operational enhancements as well as further considerations for how to *incent* fluidity and *invest* for growing freight volumes.

About AAPA:

- The American Association of Port Authorities represents 80 deep draft maritime ports across the U.S.
- The commerce at America's maritime ports supports *31 million jobs* and *over a quarter of U.S. GDP*.
- AAPA resolutely believes the U.S. needs better port infrastructure.
- According to the recently-published Department of Transportation's (DoT) Bureau of Transportation's (BTS) statistics, freight activity will *double* by mid-century. The COVID-19 pandemic quickened and laid bare many downward trends and shortcomings, and revealed what America's future may look like ***if we do not act***.
- Over the next ten years, America's ports need $40B in waterside and landside investment ***just to meet the current floor*** of trade volumes. This number continues to grow. AAPA's estimate says port waterside and landside investments need $65 or $66 billion in the longer term. The investments necessary to keep American supply chains from disaster are in the tens of billions and will require decades of funding.

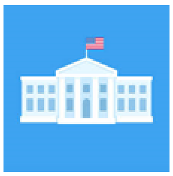
Supply Chain Incentives and Investments Six-Point Action Plan:

1. Support the construction and conversion of warehouse space. Private sector forces are already moving quickly in this area, but support — in the form of accelerated permitting at the local and state levels — is warranted to drive this solution further along.

U.S. warehouses are out of space. At warehouses serving port facilities, capacity hovers between 2-4 percent — well below what is needed to meet demand for space.

- With no place to unload and store shipments, the lack of warehouse space exacerbates equipment shortages.
- Pop-up container/cargo storage space is needed to make space on-dock so the 'bags' don't start piling on top of each other on the 'carousel.'
- The development of off-port 'pop-up grounding' space to free up dock space and equipment for temporary storage of imports (container and cargo), and as return

depots for empty containers, in order to expedite freeing up on-dock space and equipment such as chassis ('street dwell' for containers, i.e. off-port property, is much longer than the dwell on-dock, but on-dock dwell is the number one issue within the ports control for freeing up the system) is needed. Moving freight away from seaport terminals to off-dock terminals create a new calculus for trucking, with more double moves and with easier in-and-out access for more truck 'turns' per shift.
- Charging fees for ultra-long-dwelling cargo clogging up precious dock space, instead of using these docks as 'free' warehousing space, have proven effective.



The Biden administration has [pledged to help alleviate congestion at the Port of Savannah] by funding the Georgia Port Authority pop-up container yards project. This type of partnership and funding should extend to other ports during a nationwide crisis. There is an easy argument to make for additional pop-up space to help seaports, and the Federal government and state governments can easily partner with seaports to enable this reality. If governmental agencies are unwilling to act, the incentive can begin with a national coalition of seaports on this issue.

In a heightened situation, the fiscal year 2021 National Defense Authorization Act (NDAA) included the Maritime Transport System Emergency Relief Act (MTSERA) (Codified at 46 U.S.C. 50308). With a national or state emergency declaration, the White House is empowered by MTSERA to ask Congress for funds for emergency operations of maritime transportation under the direction of the Secretary of Transportation. Such funds would enable public port authorities to locate and fund off-dock properties, enabling the pop-up container grounding operations.

2. Incent more reliable, predictable, and accessible business arrangements between transport providers and cargo owners.

- While the bulwark of the shipping supply chain is sturdy and sustainable, there is a need for improvement in the efficiency of impacted business and operational practices. Rule updates are underway at the Federal Maritime Commission (FMC), and use of digital contracting platforms has exploded in recent years.
- One major long-term driver of port congestion is the continual decrease of container "double moves" at port terminals. For example, if a dray truck drops an outbound container and picks up an inbound container on the same route, it's a double move. For obvious reasons, double moves are twice as efficient as single moves. The dislocation of equipment, and the general inefficiency of having multiple drop-off and pick-up locations, can improve with better data and operational processes.

- Much further upstream from the port complex itself, inland shippers are having more trouble than ever accessing the equipment and containers needed for the small, but important, containerized agriculture cargo segment. Inland container ports, as well as container provisioning operations, are ramping up to serve these customers.
- The uncertainty of the supply chain crunch has led both shippers and carriers to hedge their bets with contract terms that sometimes go unfulfilled. “Ghost bookings” by large shippers seeking to secure their own carriage space was a non-issue when there was space for everyone, but in the crunch, ghost bookings reduce the space other, smaller shippers direly need. One solution underway in the industry is more enforceable ‘two-way’ contracts requiring all parties to meet their quantity commitments in good faith.
- Enhancing communications among ports and cargo owners and other transport providers — so all parties know of their options, including expanded hours (so seaport gates are not idly open) and dedicated time and space for exporters to have their goods received at terminals — is an area in which ports can continue to lead.
- The dislocation of the pandemic has wrought havoc on customer reliability. A return to more predictable vessel schedules, and customer information, will give shippers more time to meet their Earliest Return Dates (ERDs), or the windows when they can drop off outbound cargo or equipment at the terminals.
- Predictability and consistency between ocean carriers and cargo owners to load and discharge cargo at contractually agreed-upon ports will aid in the avoidance of greater vessel bunching.

Increased efficiency and transparency as a matter of necessity and trust-building are already underway. Data collection, sharing, and aggregation will, in the medium- and long-term, mean efficiency in how players structure their contracts and make decisions on business and operations. To the extent Congress can do anything to ‘help’ the supply chain, it should first ‘do no harm’ and recognize that financial and contractual provisions will ultimately guide behavior. One proposal making its way through Congress would incent more use of digital shipping exchanges.

3. Fast-track manufacturing incentives for critical supply chain equipment.

- The means and methods of freight transport have advanced considerably with mechanization and containerization.
- Faster, cleaner, safer cargo movement requires modern cargo moving equipment, which is becoming more electrified and connected.

- The last time port cargo cranes were manufactured in the U.S., the iconic, colorful, standard shipping container did not even exist.
- Nine of the ten largest manufacturers of shipping containers in the world are located overseas.
- The imbalance and scarcity in shipping containers create a profit motive for carriers to 'reposition' empty containers back to Southeast Asia, as the East-West head haul is four times more profitable than the West-East backhaul.
- If more equipment such as next-gen cranes, trucks, and containers were made in the U.S., it would hasten efficiency, resilience, and decarbonization.

The U.S. Government can incent the domestic manufacture of next-generation electrified cargo-moving equipment, electric dray trucks, and shipping containers. The combination of the Bipartisan Infrastructure Law Funds and the still-developing U.S. competition legislation create an historic opportunity for U.S. manufacturing.

4. Eliminate or reduce import restrictions on truck chassis and incent to build them domestically.

- Many empty shipping containers are sitting unused on truck chassis, which are in short supply, exacerbating both the global chassis shortage and container dislocation.
- The U.S. International Trade Commission has imposed a massive import duty on Chinese-made truck chassis.
- The move has nearly tripled the cost of chassis used by importers, exporters, truckers, and chassis providers.
- To maximize the available supply, ports and terminals have 'pooling' agreements so chassis can deploy dynamically and so supply can be repaired and replaced on a strategic, rolling basis.

The U.S. should immediately remove import tariffs on truck chassis from China and other overseas chassis manufacturers for the duration of the supply chain crisis. There are several means of approaching this, such as the reduction of import restrictions on cargo chassis, eliminating restrictions entirely, or potentially using fees levied to fund the construction of domestic chassis-making factories. Simultaneously, the U.S. and supply chain partners should simultaneously work with the Federal government to fund chassis factories domestically. Chassis pool agreements among ports and terminals are smart, efficient, local solutions.

5. Reduce barriers to truck driver *hires* and *apprenticeships*.

- The trucking industry moves 71 percent of U.S. freight and handles most of the freight to and from U.S. ports.
- 100,000 trucking jobs were lost in 2020, compounding a pre-pandemic shortage of 60,000.
- Current law prohibits commercial truck drivers under 21 years old from crossing state lines.
- Inexplicably, Federal law defines truck movement into/out of a port complex as interstate movement.

The U.S. Department of Transportation (DoT) and the U.S. Department of Labor (DoL) announced the expansion of trucking apprenticeships, as well as new truck driver boards and studies, to improve the working conditions of truck drivers. Supply chain partners should work with the White House to immediately expand a Federal Motor Carrier Safety Administration pilot program that recruits and extensively trains 18-20-year-olds for interstate trucking jobs. Supply chain partners should also endorse the Safe Driver Apprenticeship Pilot ("SDAP") and funding to states for commercial driver licensing. (Port of NY and NJ is implementing an apprenticeship training program, which is an exemplary starting point.) Congress should repeal the law that deems a port move to be interstate. Insurance regulators and the insurance industry should work to determine safe and affordable rates for younger drivers and apprentices.

6. Encourage cross-sector cooperation for expanded port operating hours.

- Ports are moving record amounts of freight. In the ports of Los Angeles and Long Beach, dockworkers and terminal operators moved a record-setting 9.38 million containers in 2021, shattering the previous record of 8.11 million set the year before in 2020, which was 16 percent over the previous record in 2018.
- Ports also reduced the number of containers sitting on the docks for more than nine days by about 60 percent since the announcement of the long dwell fees, which are described above.
- However, longer dock and gate hours are meaningless if customers or downstream entities do not use them, or if labor costs are prohibitive.
- '*It all starts with the customer.'* Large importers and retailers can help themselves by:
    - Opening downstream receiving locations during night hours,
    - Requiring logistics and transport providers to use expanded port hours,

- Exploring whether ‘peel off’ cargo diversionary methods would help identify if large, consolidated shipments can be immediately removed from cargo terminals to maintain space and fluidity for other customers, and
- Generally supporting the movement to enhanced hours and working schedules.

Building on move longer port hours in California – through discussions with union and industry representatives, the White House should leverage its influence to encourage and incent cargo owners and truck/rail transport providers to make use of extended port hours to ease freight congestion. Further expansion of dock and gate hours to allow for more time for cargo operations and to provide more time slot options for drayage in and out of ports and terminals will prove helpful. Requiring U.S. Customs and Border Protection (CBP) to coordinate with ports to determine the extended gate hours that work best for the ports’ unique operations will prove impactful.

Additional Measures Seaports and Policymakers Can Take:

Incent:

AAPA believes these operational enhancements, implemented between supply chain partners and the Federal government, will help improve supply chain functionality:

1. Pay and staff (CBP) extended inspection hours to avoid a lack of coverage, creating an adverse reduction of gate hours and ship backups.
2. Recalibrate night fees, leverage long dwell fees, support user rebates, and extend night hour cash incentives, all for the purpose of enhancing fluidity and preventing dock space from being used as free warehousing space.
3. Apply PIDP funding to assist breakbulk ports as the funding allows for transit shed construction. With the increases in container costs, breakbulk ports are experiencing robust business, seeing record tonnages through 2021. Many of these terminals are running at capacity and still resolving some supply chain issues without much fanfare. Seaports should ensure the Federal Government and Agencies allocate significant PIDP funds to breakbulk ports.
4. Continue the regular dialogue with the Office of the White House Port Envoy to share experiences and results of the suggestions above and identify other potential steps to ease congestion. Work with the Administration to solidify another Port Envoy when Port Envoy John Porcari leaves his post.

5. Strengthen the FMC so it has the resources it needs. Where reforms could prove necessary to ensure all users have a fair shot of accessing the system, policymakers should consider how better accountability, transparency, and enforcement can, for example, incent more exports, without upending the system.
6. Fund CBP capital needs, equipment, and staffing because each dollar squeezed from a port for government inspections is a dollar taken from a port project for cargo speed and efficiency.
7. Support digital infrastructure, such as data-sharing platforms, for the purpose of visibility, predictability, and reliability across the system, as well as improved data collection to drive efficiency.

***Invest*:**

AAPA believes investing in the following will improve supply chain operations:

1. Longer-term infrastructure investments for a secure and resilient supply chain in the long term.
    - The Bipartisan Infrastructure Law is an effective down payment on future U.S. supply chain improvement and resilience, but additional and sustained investment, Federal and otherwise, is required to expand and strengthen infrastructure, and to keep products abundant and affordable for American consumers.
2. Legislation to address vital parts of the supply chain and major drivers of the current *congestion* crisis — *without inadvertently undercutting fluidity tools that are proven to work for keeping cargo moving*.
    - Congress should include in these bills common-sense policy fixes to address all relevant industry sectors, including rail, trucking, logistics and warehousing.
3. The fiscal year 2021 National Defense Authorization Act (NDAA) included the Maritime Transport System Emergency Relief Act (MTSERA).
    - If a national or state emergency declaration becomes a necessity, the White House could ask Congress for funds for emergency operations of maritime transportation under the direction of the Secretary of Transportation. Such funds would enable public port authorities to handle the financial burden of locating and paying for off dock property enabling the pop-up container grounding operations. Should the government deem the economic and national threats posed by the supply chain serious enough, there would exist a tool to immediately shore up the system with funds to implement the above incentives, particularly the establishment of off-dock container grounding locations.
4. If necessary, the Maritime Transportation System Emergency Relief Act, or MTSERA, would allow the President to declare a national transportation emergency at ports.

- Request an appropriation for MARAD to get more funds for ports to develop more near-port container and equipment storage areas, further cash incentives for customers to use the expanded hours, and more.

5. Keeping an eye on inflation as transport costs across all modes of transport increase.
6. The USDOT, particularly in remembering ports when distributing grant funds from the law, including INFRA, RAISE, and CRISI. Likewise, investments in USDOT and MARAD are needed to get shovels in the ground as quickly and effectively as possible.