January 14, 2016

The Honorable Anthony Foxx
Secretary
Department of Transportation
1200 New Jersey Avenue, SE
Washington, D.C. 20590

RE: Coalition Input on FAST Act Port Performance Statistics Report – Key Metrics

Dear Secretary Foxx:

On behalf of the undersigned organizations representing manufacturers, farmers and agribusinesses, wholesalers, retailers, importers, exporters, distributors, transportation and logistics providers, and other supply chain stakeholders, we are writing to provide our thoughts and suggestions for developing key metrics as part of the Port Performance Freight Statistics Program contained in Section 6018 of the *Fixing America's Surface Transportation (FAST) Act* which was recently signed into law (Public Law No: 114-94).

Our interest in this proposal is focused on U.S. container ports, which represent critical nodes on the international intermodal freight network. Having efficient, modern ports is important for the free flow of international trade, both imports and exports, and is critical for our respective industries.

Our interest in performance measures is long-standing, but has been recently spurred by significant congestion and cargo delivery delays at the nation's largest container ports. These delays have a ripple effect throughout the supply chain, impacting all of our collective members, as well as the overall U.S. economy. It has become increasingly clear that the combination of larger containerships, the growth of very large scale operating alliances between containership owners, changing business practices regarding critical equipment such as chassis, and a lack of sufficient investment in infrastructure have combined to create significant bottlenecks at container ports that increase costs for exporters and importers, reduce U.S. competitiveness, and directly affect U.S. GDP.

In the business world, measures to improve productivity always start with baseline measurements and the development of key performance indicators (KPI). By measuring key indices of efficiency, businesses can develop plans and programs to improve productivity. For many years, importers and exporters have worked with some of the nation's largest ports to stress the importance of developing key performance indicators for port and container terminal operations. The development of such metrics has been a central point of discussion in working groups that have already been established at the ports of Los Angeles and Long Beach, California, and New York/New Jersey, and are being contemplated by other U.S. ports.

We believe Section 6018 of the FAST Act can jump-start private efforts to reduce port congestion and improve port efficiency. Moreover, developing key metrics for the nation's ports

will also be an important tool for U.S. policy-makers on a wide variety of issues, from the development of an intermodal freight policy to international trade policy.

We believe KPIs need to be developed in four important areas:

1. Metrics for activities at the berth.
2. Metrics for activities within marine terminal yards.
3. Metrics for truck gate operations.
4. Metrics for on-dock rail operations.

Below you will find more detailed thoughts about the specific metrics we believe the Bureau of Transportation Statistics should incorporate as part of the working group effort set up under section 6018 of the FAST Act.

Berth Operations

The main activity of a container port is the loading and unloading of shipping containers to and from vessels. Almost by definition, a statistics program that measures port performance must include data on the efficiency of these loading and unloading operations. Because both ships and ports come in different sizes, the metrics for berth operations should take into account both ship and berth size. A berth equipped with the newest and largest cranes is likely to be more efficient than a berth equipped with older and smaller cranes.

At a minimum we would suggest that the following metrics be included in the port statistics program:

1. **Monthly average lifts per hour by vessel size and berth size.** This would be a measure of the number of containers moved either from a ship to the yard or from the yard to the ship, by a single crane in a single hour, averaged over all terminals within a port over a monthly period. It is important to recognize that this key measure of productivity will differ from operations on vessels carrying 4,000 TEUs and vessels carrying 14,000 TEUs (or larger). For this reason, an appropriate list of vessel and berth classes by size should be developed as part of the methodology.

2. **Monthly average vessel turn time by vessel size and berth size.** This would be a measure of the number of days a vessel sits at berth, including fractions of a day. As in the above measure, the statistics would have to indicate vessel size, because it obviously takes less time to load and unload a smaller ship than it does a larger one. Once again, it would be helpful to develop a list of vessels and berth classes by size as part of the methodology.

U.S. port authorities already have access to this information through their terminal tenants, or as part of their own operations. In fact, port authorities regularly issue press releases about lifts per hour or lifts per shift. They also issue press releases about monthly increases or decreases in cargo volumes through their ports. A quick Internet search will find publicly available data on lifts per hour. These metrics should be easy to collect. To ensure data is

comparable across ports, the BTS working group should develop a standard methodology for collecting these statistics with due recognition of the expected variations for ships and berths of different capacities.

Yard (Terminal) Operations

Terminal operations are not limited to loading and unloading ships. A significant portion of terminal activity takes place in the yard once containers are unloaded or are prepared for loading. Import containers wait in the yard to be picked by trucks, or are loaded onto on-dock rail cars, or moved to off-dock rail yards. Export containers dwell in the port until they are loaded onto a ship. Any program of statistics on port performance must measure yard activity and throughput. Unlike the container data collected at berth, we do not believe relevant data on operations within terminals will be impacted by variations in ship size. If, however, your analysis reveals a sensitivity to ship size, then appropriate allowances will need to be considered.

We suggest the follow metrics for yard operations:

1. **Average monthly container dwell time for import and export containers.** This would be a measure of the number of days a container sits in the yard before it is moved to rail, picked up by a truck, or loaded on an outbound ship.

2. **Average monthly port capacity.** Given that congestion has been a key problem at the nation's ports, a measure of container throughput per month would be a useful measure of real capacity. Such a measure would take into consideration not only the "on-the-ground" footprint of space set aside to hold containers, but also the vertical stacking limits and turnover (or flow) rates for containers moved through any given terminal. Terminal operators know how much excess capacity they have on hand to handle additional containers. A monthly statistic on excess capacity would be helpful. The BTS working group should develop a standard methodology for collecting this statistic.

   It would also be useful to understand the relationship between capacity and dwell time, and the "tipping point" where available capacity (or lack thereof) begins to significantly affect efficiency, dwell time, number of moves, etc. For example, total capacity of a terminal may reflect its available physical space for containers; however, the maximum operating capacity at which the terminal can operate with a greater degree of efficiency would be some percentage of the total capacity.

We believe these metrics are already available. Terminals keep track of their capacity and individual container throughput as part of normal business operations. Ports and terminals use this existing information to charge importers and exporters a fee for dwell time that exceeds permissible limits known as demurrage. In many cases the port authority itself establishes the number of days a container can dwell in the yard without incurring these fees. Moreover, many cargo owners represented by the organizations below have contractual agreements with their ocean carriers to measure their container dwell time. Dwell time for many of the largest

importers and exporters is already a KPI that carriers and shippers are measuring to improve performance and to reduce the payment of demurrage fees.

Truck Gate Operations

Truck mobility at the nation's ports has long been a sore point for shippers, surface carriers, and state and local governments concerned about air quality. Many ports are already working with stakeholder groups to develop helpful metrics that could lead to improvements in truck mobility and support the development of truck appointment systems. Reducing truck wait times has a positive impact on air quality. Equally important, reduced waiting times allow drayage drivers to make multiple deliveries in a day, which in turn increases driver income. We suggest the following metrics:

1. **Average monthly total truck turn time.** The single most important measure of truck gate efficiency is the time a trucker has to wait in line in order to get into a terminal, followed by the time it takes the trucker to pick up or drop off the container. Terminal operators regularly measure the turn time within their terminal. This so-call "pedestal to pedestal" time is important, but it doesn't provide the total picture. To be meaningful, "turn times" also need to include all of the time a trucker spends queuing outside the terminal gate. Accuracy for this wait time metric is particularly critical because federal regulations limit a truck driver's legal Hours of Service (HOS) work capabilities and time waiting in line outside the gate also counts as "hours-on-duty" under the law.

   While attempts to measure total turn time are already in place, most notably in the ports of Los Angeles and Long Beach, we believe it is imperative to reach a consensus on a standardized definition of total turn time and develop methodologies for measuring total "true" queue time. As a starting point we suggest an investigation of both GPS and RFID methodologies. Capturing both the "pedestal to pedestal" data and the total turn time data is critically important.

   In addition, it would be extremely useful to have statistics on the variability of wait times; i.e., deviations from monthly averages. Variation from monthly averages, including both shortest and longest times, will provide important visibility into the causes of long wait times.

   Lastly, it would also be useful to collect data on gate–facility daily hours of operations (net-minus lunch or dinner breaks).

2. **Chassis Availability.** The availability of truck chassis has become problematic in recent years because of a sea change in the way ocean carriers manage this important piece of equipment. Ocean carriers have divested themselves of chassis. Instead, chassis are now managed by third-party leasing companies or gray chassis pools. The model for chassis management differs from port to port; nevertheless, the lack of available chassis at peak times has been perhaps the single most important driver of port congestion in recent years. A standard metric

on chassis availability needs to be developed by the working group. Data which would help measure the actual range of chassis availability for deployment include:

- Total number of "good order" chassis available for interchange at terminal gate daily opening (by size-20ft or 40ft);
- Percent of chassis that are issued "trouble tickets," which must be processed prior to leaving the facility (see below);
- Average number of chassis Out of Service (OOS);
- Average chassis provider-facility equipment utilization rate; and
- Average chassis to container ratio by location to measure the disconnect between the location of chassis and the location of containers.

3. **Trouble Tickets.** A 2011 study by the National Cooperative Freight Research Project (NCFRP – Report 11), entitled Truck Drayage Productivity Guide[1] outlines the impact of "trouble tickets" on gate operations. A "trouble ticket" is issued to a trucker when the container he/she has come to pick up is not available because of a Customs issue with the import, a failure to pay demurrage, if the chassis the trucker is using needs repair, or some other issue. NCFRP-11 found that trouble tickets were an area worthy of future study and could, if better business practices were in place, lead to improved truck turn times. Terminal operators clearly have information about trouble ticket issues. The researchers who worked on NCRFP-11 obtained "trouble ticket" data directly from terminal operators. The working group should establish metrics on trouble windows and trouble tickets.

On-Dock Rail Metrics

We recognize that not every port has the ability to build trains on-dock. But for those ports with on-dock rail capabilities, the ability to evaluate velocity through the ports is important. We believe the working group should work to determine metrics to measure this performance area. Such evaluations are already occurring on the West Coast through the Ports of Los Angeles and Long Beach Supply Chain Optimization Working Group. Leveraging the work of this ongoing activity should be considered.

Conclusion

In closing, we welcome this opportunity to provide our thoughts on the basic list of metrics that should be included in the port performance freight statistics program created by the FAST Act. We also recognize that while Section 6018 of the Act does not specifically direct BTS to include cargo owners or shippers among the participants of the working group, neither does it explicitly bar their inclusion. We believe that shipper and cargo interests should be

[1] NCFRP Report 11 *Truck Drayage Productivity Guide* 2011.
http://onlinepubs.trb.org/onlinepubs/ncfrp/ncfrp_rpt_011.pdf

included on the working group, either through their participation in the specifically named advisory committees, or through being directly appointed by BTS.

The cargo owners and shippers listed below were the main supporters of Section 6018. We have been the drivers of discussions about port key performance measures for many years. We believe it is imperative for BTS to take shipper interests into account in developing the port statistics program.

If you have any further comments on questions about this letter, please contact Jonathan Gold, Vice President, Supply Chain and Customs Policy with the National Retail Federation.

Sincerely,

Agricultural and Food Transporters Conference
Agriculture Transportation Coalition
Airforwarders Association
Alliance of Automobile Manufacturers
Almond Hullers & Processors Association
American Apparel & Footwear Association (AAFA)
American Chemistry Council
American Farm Bureau Federation
American Forest & Paper Association
American Frozen Food Institute
American Import Shippers Association
American Pyrotechnics Association
American Trucking Associations
Association of Food Industries
Association of Global Automakers
Auto Care Association
Bicycle Product Suppliers Association
California Business Properties Association
California Chamber of Commerce
California Farm Bureau Federation
California Fresh Fruit Association
California League of Food Processors
California Retailers Association
California Trucking Association
CAWA – Representing the Automotive Parts Industry
Chicago Customs Brokers and Forwarders Association
Columbia River Customs Brokers & Forwarders Association
Columbia-Snake River Irrigators Association
Corn Refiners Association
Craft & Hobby Association
Customs Brokers & International Freight Forwarders of Washington State
Customs Brokers and Forwarders Association of Northern California
Far West Agribusiness Association

Fashion Accessories Shippers Association (FASA)
Footwear Distributors and Retailers Association
Foreign Trade Association
Gemini Shippers Association
Global Cold Chain Alliance
Green Coffee Association
Grocery Manufacturers Association
Halloween Industry Association
Harbor Trucking Association
Juice Products Association
Idaho Potato Commission
Institute of Makers of Explosives
Intermodal Motor Carrier Conference
International Association of Movers (IAM)
International Dairy Foods Association
International Wood Products Association
Juvenile Product Manufacturers Association
Los Angeles Customs Brokers and Freight Forwarders Association
Meat Import Council of America
Midwest Shippers Association
Motor & Equipment Manufacturers Association
National Alfalfa & Forage Alliance
National Association of Chemical Distributors
National Association of Manufacturers
National Cotton Council
National Council of Farmer Cooperatives
National Customs Brokers and Forwarders Association of America, Inc. (NCBFAA)
National Fisheries Institute
National Grain and Feed Association
National Oilseed Processors Association
National Onion Association
National Pork Producers Council
National Potato Council
National Retail Federation
National Shippers Strategic Transportation Council (NASSTRAC)
National Waste & Recycling Association
New Jersey Motor Truck Association
New York/New Jersey Foreign Freight Forwarders and Brokers Association
North American Export Grain Association
North American Home Furnishings Association
North American Meat Institute
North American Shippers Association, Inc.
Northwest Food Processors Association
Northwest Horticultural Council
Outdoor Power Equipment Institute, Inc.
Pacific Coast Council of Customs Brokers and Freight Forwarders

Pacific Northwest Vegetable Association
Promotional Products Association International (PPAI)
Retail Industry Leaders Association
San Diego Customs Brokers Association
Specialty Crop Trade Council
The Fertilizer Institute
The Hardwood Federation
The Institute of Scrap Recycling Industries, Inc. (ISRI)
The National Industrial Transportation League
The Vinyl Institute
The Waterfront Coalition
Toy Industry Association
Travel Goods Association (TGA)
U.S. Apple Association
U.S. Fashion Industry Association
United Fresh Produce Association
United States Hide, Skin and Leather Association
Vinyl Building Council
Washington Association of Wheat Growers
Washington Cattle Feeders Association
Washington Cattlemen's Association
Washington Farm Bureau
Washington Grain Commission
Washington Retail Association
Washington State Hay Growers Association
Washington State Potato Commission
Western Growers
World Trade Center Kentucky

CC: Patricia S. Hu, Director, Bureau of Transportation Statistics
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