

PORT PERFORMANCE FREIGHT STATISTICS WORKING GROUP MEETING MINUTES: SEPTEMBER 23, 2016

OVERVIEW

The *Fixing America's Surface Transportation Act* (FAST Act, P.L. 114-94; Dec. 4, 2015), Section 6018 (codified at 49 USC 6314), directed the Bureau of Transportation Statistics (BTS) to implement a Port Performance Freight Statistics Program (Program) on behalf of the U.S. Department of Transportation (U.S. DOT). As part of this Program, Section 6018 requires BTS to develop nationally consistent performance measures for, at minimum, the Nation's top 25 ports by tonnage, 20-foot equivalent unit (TEU), and dry bulk. Section 6018 also directs BTS to establish a Port Performance Freight Statistics Working Group (Working Group) to provide recommendations for specifications and data measurements for port performance measures, and for a process to collect them.

The second meeting of the Working Group convened on September 23, 2016, at the U.S. DOT Headquarters building in Washington, D.C. Working Group Vice-Chair, Ms. Rebecca Yackley, of the Saint Lawrence Seaway Development Corporation (SLSDC), presided over the meeting. Ms. Anne Aylward, Director of U.S. DOT's Volpe National Transportation Systems Center (Volpe), facilitated the meeting.

In accordance with the provisions of Public Law 92-463, the meeting was open to the public from 9:00 AM to its adjournment at 3:30 PM.

WORKING GROUP MEMBERS PRESENT

The following members were present:

- Mr. David Adam, U.S. Maritime Alliance, Ltd.
- Mr. Jonathan Berkson, U.S. Coast Guard
- Mr. Kevin Brubaker, Environmental Law and Policy Center
- Mr. Edwin Ferris, International Longshore and Warehouse Union (ILWU), Local 10
- Mr. John Giorgis, Federal Transit Administration
- Mr. Jonathan Gold, National Retail Federation
- Mr. John Gray, Association of American Railroads
- Mr. Roger Guenther, Port of Houston (Texas)
- Mr. Randy Iwasaki, Contra Costa Transportation Authority (listening on the phone)
- Mr. Paul C. LaMarre, III, Port of Monroe, MI
- Ms. Michelle Livingstone, The Home Depot
- Mr. Luis Loarte, Federal Aviation Administration (listening on the phone)
- Mr. Andrew Lynn, Port Authority of New York and New Jersey
- Mr. Mike Mabry, Maritime Transportation System National Advisory Committee
- Mr. Don Marcus, International Organization of Masters, Mates and Pilots, ILA/AFL-CIO
- Dr. Kenneth (Ned) Mitchell, U.S. Army Corps of Engineers (USACE)
- Mr. Jeffrey Pavlak, Transportation Trades Department, AFL-CIO
- Mr. Michael Podue, International Longshore and Warehouse Union
- Ms. Caitlin Rayman, Federal Highway Administration
- Mr. Eugene Seroka, Port of Los Angeles (California)
- Dr. Mindy Shalaby, Pipeline and Hazardous Materials Safety Administration
- Dr. Thomas Wakeman III, Stevens Institute of Technology
- Mr. Curtis Whalen, American Trucking Associations

- Mr. Dennis Wilmsmeyer, Americas Central Port, Granite City, IL
- Mr. Tyler Wood, Federal Maritime Commission
- Ms. Rebecca Yackley, SLSDC (Working Group Vice-Chair)
- Dr. Allison Yoh, Port of Long Beach (California)

STAFF PRESENT

Several staff from the U.S. DOT Office of the Assistant Secretary for Research and Technology (OST-R), BTS, and Volpe were in attendance:

- Ms. Anne Aylward, Volpe
- Ms. Laura Black, Volpe
- Mr. Matthew Chambers, BTS
- Mr. Daniel Hackett, Hackett Associates (contractor to Volpe)
- Ms. Pat Hu, BTS
- Ms. Alisa Fine, Volpe
- Ms. Lydia Rainville, Volpe
- Mr. Pepper Santalucia, Digital iBiz (contractor to Volpe)
- Dr. Rolf Schmitt, BTS
- Mr. Dan Smith, The Tioga Group, Inc. (contractor to Volpe)
- Mr. Mike Sprung, BTS

MEMBERS OF THE PUBLIC PRESENT

Members of the public present for the meeting or a portion of it were:

- Mr. Paul Bea, Jr., PHB Public Affairs
- Ms. Bianca Blomquist, ILWU
- Mr. Michael Christensen, Port of Long Beach
- Mr. John Crowley, National Association of Waterfront Employers
- Mr. Ingolf Esders, International Longshoremen's Association (AFL-CIO)
- Mr. Peter Friedman, Agricultural Transportation Coalition
- Ms. Robin Lanier, Alliance Management Group
- Mr. David Libatique, Port of Los Angeles
- Mr. Doug McDonald, U.S. Maritime Administration (MARAD)
- Ms. Lindsay McLaughlin, ILWU
- Mr. Fred McLuckie, International Brotherhood of Teamsters
- Ms. Susan Monteverde, American Association of Port Authorities (AAPA)
- Mr. Kyle Mulhall, Rosemont Strategies
- Mr. Leo Penne, Ecologix Group
- Mr. Joe Ruddy, Virginia Port Authority
- Ms. Jennifer Safavian, Retail Industry Leaders Association
- Ms. Courtney Stevenson, Federal Motor Carrier Safety Administration
- Ms. Amy Tujague, USACE
- Mr. John Young, AAPA

WELCOME AND PORT PERFORMANCE FREIGHT STATISTICS PROGRAM UPDATES

Ms. Hu, Director of BTS, welcomed Working Group members to the meeting. She provided updates on BTS' activities relating to the Port Performance Freight Statistics Program that occurred since the first meeting of the Working Group on July 15, 2016. BTS conducted a comprehensive literature review and examined data sources that could be used to develop throughput and capacity measures. BTS also compiled and synthesized input received thus far from the Working Group. The forthcoming presentations and meeting materials reflect the synthesized input.

Ms. Hu reminded Working Group members of two upcoming deadlines. The Working Group's recommendations are due to BTS by December 4, 2016. BTS must submit its first *Annual Report* to Congress by January 15, 2017. Because of the time constraints represented by these deadlines, BTS will use publicly available or existing data sources to develop its first *Annual Report* to Congress. For subsequent reports, BTS will consider the recommendations of the Working Group and input provided by the public as to other data sources that could be used. Ms. Hu said that BTS will use three criteria when considering any recommendations:

1. Performance measures need to be nationally consistent for all ports
2. BTS must be able to validate the quality of any performance measures
3. Developing performance measures or collecting/compiling data must be within BTS' budget

Finally, Ms. Hu said that BTS wants to ensure that all Working Group member communications to BTS are part of the public record. She asked Working Group members to copy portstatistics@dot.gov when submitting any comments or inputs to BTS.

AGENDA OVERVIEW

Ms. Aylward of U.S. DOT's Volpe Center asked Working Group members to introduce themselves. Members provided names and organizations. Ms. Aylward then provided an overview of the agenda.

WORKING GROUP UPDATE

Ms. Yackley, of SLSDC, asked Working Group members if they had any amendments to the July 15, 2016, meeting minutes. Mr. Wilmsmeyer, of Americas Central Port, noted that the minutes indicated that he was in attendance at the July meeting when in fact he was not. Some Working Group members asked to see hard copies of the minutes. Further discussion of the minutes was postponed until the afternoon.

Ms. Yackley asked Working Group members if there were any concerns with the proposed Working Group bylaws. There were no comments. The bylaws were approved.

Ms. Yackley said that a draft work plan was emailed to the Working Group on August 26, 2016. She noted that the draft work plan would be discussed and hopefully approved by the Working Group later in this meeting.

Ms. Yackley added that approximately three-quarters of Working Group members provided responses to the three questions posed to the group at the end of the July meeting. Those responses were compiled and analyzed; the resulting synthesis comprises the focus of the afternoon breakout sessions.

Ms. Aylward added that the Transportation Trades Department, AFL-CIO, submitted a comment dated July 15, 2016, which was included in the meeting packets distributed for the October meeting.

PORT DEFINITIONS AND DATA SOURCES TO GENERATE PORT LISTS BY TEU/TONNAGE/DRY BULK

Mr. Hackett, a contractor to Volpe working in support of BTS and the Working Group, said that one of the major goals for the September meeting is to finalize the port definitions and data sources used to develop the port lists by tonnage, TEU, dry bulk, as required by FAST Act Section 6018. He said that he would discuss feedback provided by Working Group members following the July meeting on how the port lists should be generated, discuss the pros and cons of different methodologies considered by BTS, and finally present the three port lists developed using a proposed methodology. These lists will also be discussed in more detail during the afternoon breakout sessions.

Suggestions by Working Group Members

Mr. Hackett said that Working Group members' suggestions on the port lists and data sources ranged widely. Several Working Group members stated that BTS should use annual data that are publicly available in order to generate the port lists. Others responded that the data to compile the lists should be drawn from U.S. Department of Commerce and USACE sources, both of which use statutorily established Customs Districts to define ports.

Mr. Hackett noted that most of the Working Group members' suggestions centered on identifying the top 25 ports by tonnage, TEU, and dry bulk. Some suggested it should include more than just the top 25 ports in these lists. Other suggested a minimum threshold of activity as a "cutoff" to compile these lists. One member suggested using the much larger list of ports in the National Multimodal Freight Network. For container ports, there appeared to be consensus among members that the lists should be based on both loaded and empty movements. Most members suggested that all three lists be generated from a consistent data source.

There were multiple suggestions about how port data should be organized: by geography, by freight volumes handled, or by role or function in the national freight transportation system.

Proposed Methodology for Developing Port Lists

Mr. Hackett described the proposed data source and methodology for developing the port lists. The proposed data source is USACE's Waterborne Commerce Statistics Center (WCSC). WCSC data is publicly available and provides a nationally consistent source for generating all three lists. Domestic tonnage data in the WCSC is based on operator reports; foreign tonnage data is based on information compiled from the Port Import Export Reporting Service (PIERS), the Census Bureau, and Customs and Border Protection (CBP) entrance and clearance reporting.

Following this proposal, BTS would define ports as does the WCSC: by legislative enactments of state, county, or city governments. Mr. Hackett noted that the advantage of this approach is that it avoids setting a precedent for including non-legislatively passed entities. A disadvantage is that it may be necessary (when developing the metrics) to break out data for ports that are currently reported at an

aggregate level (e.g., the Northwest Seaport Alliance does not currently release TEU data at the port level for the Ports of Seattle and Tacoma).

Mr. Hackett emphasized that the data source used to generate the three port lists may differ from the data sources used to develop the capacity and throughput metrics. For example, WCSC data does not include movements of empty containers bound for foreign destinations. However, any reporting on capacity and throughput metric will take both loaded and empty containers into account.

Mr. Hackett stated that in generating the three lists of ports, total tonnage handled by ports was measured in short tons, and this tonnage excludes the weight of containers. The dry bulk numbers are also measured in short tons. He then explained how dry bulk tonnage numbers were developed to generate the list of top 25 ports by dry bulk. Working in coordination with Ms. Tujague at USACE, Mr. Hackett and Ms. Tujague identified vessel types transporting dry bulk cargo according to International Classification of Ships by Type (ICST) codes. Ms. Tujague then ran several queries on the data to identify ports on the dry bulk list. Using ICST codes was a safer option than trying to query individual commodities; given the sheer number of commodities transported, a key commodity might accidentally be omitted. Nevertheless, the queries generated the same 25 ports regardless of whether an ICST query was used, a dry bulk commodity query, or a combined query that required both requirements to be fulfilled.

Mr. Hackett then presented the preliminary lists of the top 25 ports by TEU, tonnage, and dry bulk, as generated by the proposed methodology (and based on preliminary 2015 WCSC data). After presenting the lists, Mr. Hackett introduced Ms. Tujague, of USACE, to describe the WCSC database in more detail.

Overview of the WCSC

Ms. Tujague provided a detailed overview of the WCSC and the methodology that USACE uses to collect and synthesize WCSC data. USACE primarily uses WCSC data to analyze the feasibility of new port projects, set priorities for new investments, and for the operation, rehabilitation, and maintenance of existing projects. The *Rivers and Harbors Act of 1922* authorizes USACE to collect, distribute, and archive the data included in the WCSC.

Vessel operating companies must report to USACE the movements of vessels engaged in domestic waterborne commerce. Data collected from vessel operating companies for the WCSC include: vessel and vessel type; commodities; and tonnage. USACE acquires foreign cargo data from PIERS, CBP, and the Census Bureau. PIERS is the primary source; Census data is supplemental and is also used for quality control. CBP provides data on foreign entrances and clearances.

USACE validates and cross-checks the data in multiple ways. For example, dock-level information on CBP entrance and clearance data is matched to both the Census and PIERS foreign cargo files to put foreign commerce at the correct docks. Having a dataset with dock-level specificity allows aggregation at any geographic level.

USACE also maintains a Navigation Infrastructure Inventory of over 200 commercial ports and more than 9,000 individual docks. This inventory is used to perform quality assurance on waterborne commerce data and identify industries served by Federal navigation channels.

Outputs of the WCSC that are made available online include:

- *Waterborne Commerce of the United States*
- *Waterborne Transportation Lines of the United States*
- Public Domain Database
- Principal Ports file
- Waterway Network and Waterway Link Commodity Data

Discussion of Port Lists and the WCSC

Mr. Pavlak, of the Transportation and Trades Department, AFL-CIO, asked what information about mechanical handling equipment is included in the Navigation Infrastructure Inventory. Ms. Tujague was unsure. Mr. Smith clarified that the information included is primarily focused on fixed infrastructure such as cranes and pipelines.

Dr. Yoh, of the Port of Long Beach, inquired about the amount of time required to produce the WCSC data. Ms. Tujague responded that USACE typically requires less than two years to release the data from any given calendar year. She said that data for calendar year 2015 will be available in October 2016. Mr. McDonald, of MARAD, stated that the time lag is closer to nine months, not two years.

Dr. Wakeman, of the Stevens Institute of Technology, asked if there were any “natural breaks in the curve” that occurred in generating the top 25 port lists. Ms. Tujague said that when doing her preliminary analysis she introduced an artificial threshold to cut off the port lists after the top 100. Mr. Hackett said that this issue could be explored by the breakout groups in the afternoon.

Ms. Rayman, of FHWA, asked if there were things about the WCSC data that USACE would like to improve or if there were assumptions that the Working Group should be made aware of. Ms. Tujague said that she considers the quality assurance steps that USACE takes as being above and beyond what is typical. She added that there are some small operators that do not report data on vessel movements, but all of the large operators do report. There have been compliance issues in the Great Lakes region, so USACE is working to get dock receipts from the ports in that region.

Mr. Brubaker, of the Environmental Law and Policy Center, asked how the WCSC data interact with data on landside freight movements. Dr. Mitchell, of USACE, said that one major issue is that data sources on landside freight movements are usually comprised of either sample data or else highly aggregated data. He added that there is a report by the National Freight Cooperative Research Program that addresses this issue.

Dr. Yoh said that there is a known issue with how the Census Bureau allocates tonnage and bulk movements to the Ports of Long Beach and Los Angeles. Ms. Tujague said that USACE is aware of this issue but that USACE can work around this because the WCSC has data down to the dock level.

Mr. LaMarre, of the Port of Monroe, said that different Federal agencies use different definitions of a port and suggested that there may be an opportunity to align all Federal agencies around a common definition. Mr. Hackett said that the *Annual Report* may include spotlight topics; the use of different definitions and opportunities to align them could be one of the spotlight topics.

Mr. Seroka, of the Port of Long Beach, commented on the fact that the WCSC data do not include international empty containers. He said that this should be re-examined, because those empty containers are part of the process of conveyance. Mr. Hackett responded that one of the limitations with using a single data source to generate all three port lists is that there is no perfect source for all three lists. While WCSC does not include international empties and thus this information was not included to generate the port lists, data on international empties will be included when generating capacity and throughput metrics.

Mr. Wilmsmeyer asked about how the WCSC defines inland ports. Ms. Tujague stated that some ports are taking steps to have USACE count multiple facilities as a single “port,” leading to a higher placement on USACE lists. She said that decisions about how ports are defined are made at USACE headquarters.

DISCUSSION OF JULY 15 MEETING MINUTES

Mr. Pavlak said that he would like to amend one of his statements documented in the July minutes to include his opinion of the legislative history of the provision that created the Working Group. He requested that the following sentence be added to his statement: “the removal of some metrics from the final version of the FAST Act legislation demonstrates clear Congressional intent to no longer accommodate those issues.”

Mr. Ferris, of the International Longshore and Warehouse Union, requested an amendment to add the phrase “and compromise worker safety” to the end of one of his statements documented in the July minutes. The amended sentence should read, in full: “Mr. Ferris stated that data collected under the Program would not help address the highest priority challenges faced in the port industry and that the metrics developed may lead to a drive to ‘ramp up’ productivity and comprise worker safety.”

Ms. Yackley made a motion to approve the minutes as amended. The motion was seconded by Dr. Wakeman. The minutes were approved by the Working Group.

OVERVIEW OF SUGGESTED PERFORMANCE METRICS FOR PORT CAPACITY AND THROUGHPUT

Mr. Smith provided an overview of the capacity and throughput metrics suggested by the Working Group members during and following the July meeting.

Measures of Port Infrastructure

Working Group members suggested several port infrastructure-related metrics. Terminal acreage was proposed by several members. This information is generally publicly available for public ports but is harder to obtain for private bulk terminals. However, acreage for those terminals can be estimated

using Google Earth. The number of berths at each port was another suggestion; this information is also typically available to the public.

An additional metric suggested was number and type of cranes, as well as channel depth. There are some technical issues involved with counting the number of container cranes at each port, as there are three different sizes of cranes that need to be considered. The Working Group would need to decide if all types of cranes should be counted. There are multiple measures of channel depth, but Mr. Smith suggested that BTS use authorized channel depth. Suggested metrics on landside access to ports can be described in numerous ways; for example, proximity to major rail lines and interstates could be documented. The presence of on-dock rail is easy to determine. However a suggestion to measure the “extent” of on-dock rail (e.g., how many terminals within a port have on-dock rail) would be harder to assess.

Measures of Port Throughput

Containers

Mr. Smith said that there was general consensus represented in the Working Group’s past feedback that annual TEUs should be used to assess throughput of container ports. Some Working Group members suggested annual container counts. Mr. Smith said that container count is a more useful metric for some purposes, because the level of effort expended to move cargo at container ports depends on the number of containers moved rather than TEUs. However, container counts are not always available, and ports use different conversion factors to calculate TEUs and containers. Some Working Group members had suggested splitting out container counts by imports, exports, and empties. Most ports publish these data, but not all of them split out the information according to these categories.

Bulk Freight

Mr. Smith said that there was clear consensus as represented in past Working Group to assess bulk freight throughput using annual tonnage. Revenue tonnage was also suggested as a possible measure, but this is less directly related to the physical activity occurring at ports.

Other Throughput Metrics

Working Group members also suggested cargo value as a throughput metric. Mr. Smith noted that this metric is not directly related to freight volumes, but he said that it is the most useful metric for discussing the economic impact of a port and its economic value to the nation. Data for this measure are available from CBP, the Census Bureau, and PIERS. Some Working Group members had also suggested using long-term averages when measuring throughput. Mr. Smith said that it would be possible to do this, and this would have the advantage of putting seasonal and annual fluctuations in perspective.

Measures of Port Capacity

Mr. Smith then presented on the capacity metrics suggested by the Working Group members. Several measures of design capacity were proposed. Design capacity for a terminal yard would have to be estimated by the port or the terminal operator. Mr. Smith said that many existing estimates are available, but they are not necessarily consistent. For container yards, static capacity (i.e., the maximum number of TEUs that can be stored in a yard at one point in time) would have to be combined with an

average container dwell time (i.e., the average duration that a container is in the yard) to gauge annual throughput capacity.

Some of the Working Group members' suggested capacity metrics for container yards, such as ground slots and stacking height, are actually data elements that could be used to calculate an overall capacity estimate for a container yard. Chassis capacity was also suggested as a possible metric, but Mr. Smith said that the data to support this metric are not currently available, and the complexity of current chassis supply practices would make this metric conceptually difficult to formulate.

Measures of Port Utilization

Utilization metrics would indicate the extent to which a port or terminal is using its theoretical design capacity. Mr. Smith said that Working Group members made a few suggestions for measures of terminal utilization and chassis utilization. He suggested that terminal utilization measures do not seem feasible given the lack of a consistent capacity metric, which would serve as the denominator in the calculation of utilization. Chassis utilization is problematic because, as mentioned previously, the complexity of current chassis supply practices would make this metric conceptually difficult to formulate.

Measures of Port Activity

Mr. Smith then presented the Working Group members' other suggested metrics for port activity. Of these, he said that the only one for which public information is currently available is the number of vessels handled per reporting period. This information can be obtained from MARAD.

Mr. Smith suggested that terminal operators could conceivably provide the data for other suggested metrics of port activity, but operators would likely consider the data proprietary in nature. These other metrics include: average daily container count per terminal; average dwell time for loaded containers; and average time from ship arrival to container availability. Mr. Smith noted that container dwell time is affected by importers' and exporters' decisions on when to pick up or drop off each container. He added that terminals differ on when they consider containers to be "available."

Data on average crane moves per hour was another member suggestion. In theory, these data could be obtained from terminal operators but Mr. Smith noted that the Working Group came to a conclusion during its first meeting in July not to use this metric.

Average vessel turn time was another suggested port activity metric. This could potentially be obtained from multiple sources, but Mr. Smith noted that a definition would need to be established about when a ship has officially "arrived" at a port.

Measures of Gate and Truck Activity

Mr. Smith said that Working Group members made a number of suggestions on gate and truck activity metrics, such as annual number of terminal gate moves. This information may be available from terminal operators and could be aggregated by port authorities. However, only some terminals track movements of "bobtails" (i.e., tractors with no trailers). In addition, some port facilities have satellite

lots for empty storage, chassis, or loaded container staging. Movements at these facilities would have to be included.

Another suggested metric was average gate moves per hour. Mr. Smith said that the number of gate moves per hour depends on gate hours, which can differ between terminals in the same port. He added that this metric would be distorted by terminals that stay open for extended or “off-peak” hours, as those hours are usually lightly used. Terminals that stayed open to relieve congestion could thus appear to be relatively unproductive.

Working Group members had also suggested truck turn times. Mr. Smith said that gate-to-gate turn times are available in terminal operating systems, but it is hard to distinguish single from double transactions and data is proprietary. Overall turn times (which include waiting time outside terminal gates) are only available at ports with appropriate data collection technology installed. Other ports may have sample data available.

Mr. Smith said that the percentage of failed transactions is a potentially useful metric, but the data would be considered proprietary by terminal operators and would differ according to port and terminal practices. He added that some terminals turn away transactions with problems, while others issue “trouble tickets” and bring them in for resolution.

Rail Activity

Mr. Smith said that rail container dwell time, the average time from vessel discharge to rail departure, was one rail-related metric suggested by a Working Group member. Mr. Smith said that this metric would be useful for assessing a terminal’s performance over time, but not for making comparisons across ports and terminals.

Other Suggested Metrics

Working Group members proposed a number of other metrics, such as vessel on-time performance, which did not fall easily into any of the above categories. Mr. Smith said that vessel on-time performance is not under ports’ control, but it is a key issue for port productivity and reliability. Data is available from CargoSmart and perhaps other sources. Mr. Smith suggested that this metric would be a good candidate for spotlight discussion in a future *Annual Report*.

Ports’ compliance with the *International Convention for the Safety of Life at Sea* (SOLAS) was another suggestion made by a Working Group member. Under SOLAS, new requirements recently went into effect regarding verification of the gross mass of a packed container. Mr. Smith noted that it is carriers, not ports, which are responsible for SOLAS compliance. His understanding is that the U.S. Coast Guard is not collecting data on SOLAS compliance and has no plans to do so. SOLAS compliance could be a spotlight topic for a future *Annual Report*. Another metric suggested by a Working Group member was transit connectivity to ports (i.e., to assess connectivity for the port’s workforce to other transportation networks). Mr. Smith suggested that transit connectivity is difficult to define and is not a throughput or capacity issue. This may be a good spotlight topic for a future *Annual Report*.

Landside (i.e., road and rail) bottlenecks or chokepoints near ports were two additional suggestions. These are significant national and regional planning-related issues. Mr. Smith said that there would be significant issues of definition and consistency among ports in trying to develop these metrics, and ports

would likely be reluctant to acknowledge any chokepoints. He suggested that these issues could be addressed in the narrative of a future *Annual Report*.

Members had also suggested a proposed metric on the amount of Federal support agency resources allocated to a port to increase its efficiency (e.g., CBP staffing). Mr. Smith noted that this is a delicate issue, as ports have been asking for increased CBP staffing. He suggested that any discussion of this issue should be coordinated with CBP.

Finally, Mr. Smith noted that members had made several suggestions to use port-specific or regional indices to track port performance over time. He recommended that these suggestions be considered after BTS' preparation of its first *Annual Report* to Congress.

Mr. Smith finished his presentation with a slide showing metrics that could be readily derived using publicly accessible data sources for public container ports. These include:

- **Vessel size**
 - Number of Berths
 - Berth length
 - Channel depth
 - Number of Cranes
 - Crane type
 - Vessel count and size

- **Container yard**
 - Annual TEUs per tonnage
 - Total terminal acres

- **Landside**
 - On-dock rail capability
 - Number of Gates

DISCUSSION AND QUESTIONS

Dr. Shalaby, of the Pipeline and Hazardous Materials Safety Administration, stated that U.S. ports may experience an increase in exports of liquefied natural gas. She asked if the Working Group members had any interest in assessing pipeline activity at ports. Mr. Smith responded that pipeline infrastructure at ports does not change quickly. He stated that BTS could consider including information on pipeline infrastructure and activity in a future *Annual Report*, possibly as part of the port profiles.

Ms. Rayman said that truck parking capacity is a national issue. She would find it helpful to compile data about overnight and on-site parking capacity at each port. Mr. Smith responded that some ports have such parking available. BTS could consider including truck parking information in a future *Annual Report*, for example as part of the port profiles or as a spotlight topic.

Mr. Gray, of the Association of American Railroads, stated that most of the Working Group's suggested metrics related to container movement. He said that there is no public interest in providing information on private bulk terminal throughput and capacity. He asked why the Federal government needs to obtain performance data for these private terminals.

Ms. Aylward acknowledged Mr. Gray's concern and stated that the Working Group could consider making a recommendation to BTS about how to best address dry bulk throughput and capacity.

Dr. Schmitt, of BTS, stated that assessing dry bulk throughput and capacity is important to tell an overall story about port performance. He asked if anyone had submitted metric suggestions specifically related to bulk freight. Mr. Smith responded that none of the Working Group members had provided suggestions on dry bulk specifically. Mr. Smith added that it is possible to obtain information on the number of berths and berth length at bulk terminals. However, characteristics of bulk terminals vary widely, so obtaining national-level data or extrapolating terminal-level data to a broader scale could be difficult. Storage capacity for bulk freight is not easily derived, except that tank capacity can be identified for liquid bulk. Most or all metrics for dry bulk throughput and capacity would need to be at the port level, not at a terminal level.

Mr. Wilmsmeyer said that the volume of bulk movements via inland waterways is immense. He added that inland ports could provide data on the number of railcars handled.

Mr. Whalen, of the American Trucking Associations, observed that electronic tracking of trucks is becoming more widespread, so data on truck movements may be a possible data source for assessing port performance in the future. He said that some ports are currently collecting truck turn times, but they are not necessarily doing so consistently. He said that it would be of value to report on truck turn times for those ports that are already collecting the data. He added that proprietary issues could be minimized by using annual averages instead of monthly averages. Mr. Smith responded that the Working Group could include as part of its recommendations to BTS that performance measures be developed in the future as/when data becomes more readily available.

Dr. Wakeman said that the current discussion should focus on using currently available data to include in BTS' first *Annual Report* to Congress. The report should be viewed as an educational tool to call Congress' attention to important trends or issues affecting the port industry and freight movement through ports. He added that after the first report is completed, the Working Group could identify longer-term recommendations on other metrics or data sources to best describe port performance.

Ms. Aylward observed that there are metrics that are useful at a national level and there are others that are only useful for a port or terminal to use in assessing its own performance over time. There may be metrics that are very important for a port or terminal, but do not roll up to a national level.

Regarding the time that will be needed to collect consistent performance data from ports, Mr. Gray said that it took a long period of time—"months and years, not days and weeks"—to get the seven Class I railroads to standardize how they assess their performance and then to align their respective data collection systems.

Mr. Brubaker suggested that the Working Group provide information to Congress that is what the Working Group thinks Congress needs to know. The Working Group should not limit itself to addressing only what Congress asked for in the FAST Act legislation.

Mr. Pavlak said that when recommending performance measures, the Working Group should remain cognizant of legislative history and should stick closely to its Congressional mandate. Mr. Smith responded that Congress has asked for measures of port throughput and capacity. He said that capacity metrics are difficult to develop due to several factors, as elaborated in the July meeting. The Working Group may need to identify proxies for capacity (e.g., number of berths and berth length) at least in the short-term, but these could be built upon or expanded in future years.

Mr. Ferris said that because the Working Group has a strict timeline to meet in submitting its recommendations to BTS, it would not be wise to expand the Working Group's charge beyond what is called for in FAST Act Section 6018. He then asked why private data sources were being considered as sources for the *Annual Report*. Mr. Smith responded that his presentation simply communicated what had been previously suggested by members of the Working Group.

Mr. Mabry, of the Maritime Transportation System National Advisory Committee, asked if the Working Group had flexibility to recommend units of time for measuring port throughput. Mr. Smith responded that there is nothing in the FAST Act that specifies what unit of time should be used. He added that he did not think that monthly measurement and reporting would be feasible.

Mr. Mabry stated that he was unsure about whether the Working Group should only recommend metrics for activities or processes that are under the control of ports. He suggested that if a metric relates to the overall performance of the freight system, even if it is outside ports' control, the Working Group should consider it.

Mr. LaMarre said that the performance measures being discussed do not consider the effects of competition on port throughput and utilization. For example, there are public subsidies (e.g., for dredging or infrastructure improvements) that can affect the competitive balance among ports and modes. These types of issues would not be adequately reflected at least in the set of metrics discussed during the meeting.

Ms. Rayman said that the Working Group should not focus only on the largest and fastest ports. She said that ports may be meaningful in many different ways: for example, because they handle specialized commodities, have regional economic significance, or provide backup capacity. The different ways that ports are meaningful would not be adequately reflected at least in the set of metrics discussed during the meeting.

LUNCH BREAK

The meeting was recessed for lunch.

BREAKOUT DISCUSSIONS AND REPORT-OUTS

After lunch, the Working Group members divided into three breakout groups to discuss the port lists and proposed methodology used to generate the lists, as well as possible throughput and capacity metrics.

Dr. Yoh, Dr. Mitchell, and Dr. Wakeman facilitated each of the breakout sessions. Following these breakouts, the Working Group reconvened for a report-out session. During this report-out, the facilitators provided a summary of themes surfacing from each of the breakouts. Observations and themes discussed during the report-outs included the following:¹

Lists of Ports by TEUs, Tonnage, and Dry Bulk

- It is reasonable to use WCSC data to generate the three port lists, as this represents a readily accessible, publicly available, and nationally consistent data source.
- BTS should consider looking at where the “natural data breaks” are when generating the port lists. It should consider expanding the port lists beyond the top 25 called for in FAST Act Section 6018. The data breaks may show, for example, that there are statistically insignificant differences between a port listed as number 25 and a port listed as number 26. Additionally, BTS should be clear in the *Annual Report* that the ordering of ports on the three lists is subject to flux as data is updated over time.
- National consistency is a nuanced issue. Even within the top 25 port lists by TEU, tonnage, and dry bulk, there are wide variations across ports in terms of their geographies, commodities carried, equipment used, and so on. It may be impossible to develop a set of metrics that equally apply to all ports on these lists. Developing a set of metrics with reasonable consistency, along with documentation of metrics that may not be relevant for a particular port, is a better aim.

Measures of Port Throughput

- There was general agreement that annual TEUs are an appropriate throughput metric for container ports.
- Annual container counts may need to be studied in more depth, because these require additional conversion from TEUs to the number of actual containers. (Most containers in current use are 40-feet long and count as two TEUs.)
- Moving empty containers is a productivity issue, because effort to move a container is expended regardless of whether it is full or empty. Therefore, throughput metrics for container ports need to take empty containers into account. However, because there is no cargo movement associated with empty containers, and empty containers are not included in WCSC data, these will not factor into generating the lists of ports by TEU, tonnage, and dry bulk.
- It may be worth considering collecting the value of domestic cargo moved through ports, but doing so may require additional analysis. However some Working Group members expressed uncertainty on the relevance of domestic cargo value to port performance.
- Rail throughput metrics are worth further consideration.

¹ The observations and themes presented do not necessarily reflect a consensus view of the Working Group as a whole or a consensus view of any particular breakout group.

Measures of Port Capacity

- Design capacity is the appropriate focus of a container yard capacity metric. This adequately answers the critical question of how many containers a port can hold. More granular metrics such as container yard ground slots and stacking heights vary widely from port to port (and terminal to terminal). Therefore, it may be difficult to extract any national value from this more granular information.
- Both authorized channel depth and current channel depth should be taken into consideration when developing port capacity metrics. Over the longer-term, there may need to be additional considerations of how varying depths within a channel—or channel widths—affect throughput and capacity.
- Controlling depth (i.e., the minimum depth within a channel) limits the types of vessels that can travel into and out of a port, as well as where they can travel. Controlling depth could be explored in more depth as part of a spotlight topic in a future *Annual Report*.
- Chassis availability/capacity is important and worth considering as a performance measure in the long term, but it is not clear how to develop nationally consistent data to assess this. This could be explored as part of a spotlight topic in a future *Annual Report*.
- Truck parking capacity is worth further consideration as a future metric.
- There was a minority perspective that it would not be feasible for BTS to compile nationally consistent data on port capacity or utilization (which is calculated using capacity as the denominator). This is because capacity is not a static value; it is derived from a series of linked processes.

Other Measures

- Many of the suggested measures of port activity may be important for benchmarking the performance of individual ports, but they may not generate data that is of national utility.
- The suggested metric of annual terminal gate moves is most useful for container ports. There needs to be a consistent methodology for generating data for this metric. Some Working Group members expressed an opinion that annual terminal gate moves is more properly understood as an input to a metric and not a metric in and of itself.
- At this point in time, some individual ports may have data on truck turn times, but this data is not consistently recorded or compiled from port to port.
- There was a general consensus that metrics assessing terminal utilization are “derived,” meaning that they would need to be calculated on the basis of terminal yard utilization, yard capacity/utilization over time, and operating maximum capacity. As such these metrics probably do not need to be reported on an annual basis. Some Working Group members believed that port utilization metrics would not be effective ways to assess port performance and should be removed from consideration at least in the first *Annual Report*.

Annual Reports/Other Considerations

- At least for the first *Annual Report*, performance metrics should be limited to those that assess performance issues that are within a port’s control. For example, vessel on-time performance may be relevant for productivity. Issues such as weather or carrier delays may affect the ability of a vessel to arrive on time, but in general vessel on-time performance is outside of a port’s control. This particular issue could be discussed as part of a spotlight topic in future reports.

- The first *Annual Report* should include data for the latest year available; rolling or long-term averages should be considered for subsequent reports.
- The Working Group needs to focus on identifying metrics that will make a difference in the performance of the supply chain.
- When discussing possible data sources to develop performance metrics, the Working Group should distinguish between data that is available in the public domain and data that is nationally consistent.
- Some Working Group members suggested that the movement of hazardous materials through ports is an important consideration affecting throughput/capacity, but that the Working Group may not be the right venue for addressing this issue.
- Some Working Group members believed that the group should continue to meet after submitting its initial recommendations in December 2016 to BTS.
- An additional metric that could be considered is air draft/vessel clearance under bridges.

PUBLIC COMMENTS

Mr. Chambers, of BTS, updated the group on the public comments received as of the meeting time.

Commenters included:

- Transportation Trade Division, AFL-CIO

Mr. Chambers then opened the floor for public comment.

Mr. Crowley, of the National Association of Waterfront Employers, thanked BTS for the opportunity to speak. Mr. Crowley stated that the FAST Act requires that the Working Group include representation of marine terminal operators. He expressed disappointment that he did not see anyone on the Working Group who solely represents the interests of the marine terminal operators.

Mr. Friedman, of the Agricultural Transportation Coalition, asked why the Working Group membership does not include representatives of exporters, ocean carriers, terminal operators, freight forwarders, or customs brokers. He also mentioned the need for the Working Group to include representatives of the railroad and the trucking industries (both long-haul and short-haul). Mr. Friedman noted that the reliability of the U.S. freight transportation system and the cost of using this system have direct impacts on the competitiveness of U.S. exports.

Ms. Hu acknowledged that the Working Group does not include representatives from every possible port stakeholders. She noted that all Working Group meetings are open to the public and that there is an ongoing opportunity for anyone to submit comments to BTS by emailing portstatistics@dot.gov.

Ms. Aylward noted that many Working Group members have made the same observations as Mr. Crowley and Mr. Friedman in regards to the Working Group membership. She suggested that the Working Group do what it can to ensure that diverse perspectives are brought to the table.

RECAP AND NEXT STEPS

Ms. Yackley asked Working Group members to review the draft work plan and provide comments. The draft work plan will be posted in the *Federal Register* prior to the group's next meeting on October 21 so that

the plan can be approved by the Working Group during that meeting. The *Federal Register* notice will also announce the fourth Working Group meeting on November 18. The Working Group will discuss preliminary recommendations to BTS in the October 21 meeting.

Ms. Yackley thanked everyone for their participation and adjourned the meeting.

ADJOURNMENT

The meeting adjourned at 3:30 PM.

I hereby certify that, to the best of my knowledge, the foregoing minutes are accurate and complete.

Rebecca Yackley
Vice-Chair, Port Performance Freight Statistics Working Group
Saint Lawrence Seaway Development Corporation

These minutes will be formally considered by the Working Group at its next meeting, and any corrections or notations will be incorporated in the minutes of that meeting.