

**Advisory Committee on Supply Chain Competitiveness
Freight Policy and Movement Subcommittee Recommendation Paper
Improving U.S. Supply Chain Competitiveness through Freight Policy**

1. Recommendation

The Subcommittee recommends that the Advisory Committee approve and forward the following to the Secretary of Commerce for distribution to the Administration and appropriate Federal agencies:

- Make strategic investments in the U.S. freight transportation system to improve the competitiveness of U.S. supply chains;
- Use supply chain performance measures to inform U.S. freight transportation policy and target strategic investments in the freight transportation system;
- Use travel time, travel time reliability and cost as the key measures of supply chain performance;
- Provide analytical methods and tools to cost-effectively measure end-to-end supply chain performance – single mode or multimodal - and identify critical bottlenecks for improvement;
- Apply supply chain performance measures at:
 - Industry level
 - Metropolitan level
 - State and multijurisdictional level
 - National level
 - North American level
- Disseminate supply chain performance information routinely to supply chain stakeholders.

2. Background

The Freight Subcommittee's objective is to promote investments in the freight transportation system that will improve the performance of U.S. supply chains and make U.S. business and industry more competitive in domestic commerce and international trade.

The U.S. DOT and its state and city DOT partners look at the freight transportation system and think about its performance in terms of network and corridor capacity, infrastructure condition, and safety.

U.S. business and industry look at the U.S. freight transportation system and think about its performance in terms of shipments along their supply chains.

The Subcommittee considered how the supply chain perspective of U.S. business and industry—as freight shippers, receivers and carriers of freight—can inform the U.S. DOT's perspective and help inform federal, state and local freight transportation policy and investment decisions.

Specifically, the Subcommittee has considered which supply chain performance measures and metrics can best describe supply chain performance and help identify critical freight bottlenecks, gaps in supply chain continuity and connectivity and unnecessary transportation costs.

3. Findings: Use of Supply Chain Performance Measures in Public Policy and Investment Decisions

In October 2012, Commerce's Advisory Committee on Supply Chain Competitiveness (ACSCC) considered ways to measure supply chain competitiveness and performance. Four transportation performance factors—travel time, travel time reliability (defined in terms of variability in travel times), transportation cost and safety—were identified as key factors in assessing a supply chain's ability to serve domestic and global competitively. A fifth factor, shipment risk, was considered but tabled for future consideration.

A working group of the Subcommittee mapped representative supply chains and identified the types of freight transportation system links (e.g., highways, rail lines, waterways) and nodes (e.g., freight transfer points such as ports, terminals and distribution centers) that were common to all supply chains.

The working group determined that data on travel time, cost and safety were used by business and industry to assess supply chain performance, were reasonably available through public and private sources, and could be acquired and tabulated to measure end-to-end supply chain performance.

With support from the I-95 Corridor Coalition and the Federal Highway Administration's Office of Freight Management and Operations, the Subcommittee then oversaw pilot studies of representative supply chains in five different industries:

- Retail – Target® consumer goods
 - From Ports of Los Angeles/Long Beach via Chicago to New York
- Autos – General Motors auto parts
 - From suppliers to auto assembly plant in Tennessee
- Food – Perdue processed chicken
 - From DelMarVa region to Mid-Atlantic markets
- Agriculture – Soybean exports
 - From Illinois farms to Louisiana export port
- Electronics – Panasonic electronics
 - Between manufacturing and assembly facilities in San Diego and Tijuana

The objective of the case studies was to determine if it was feasible and practical to assemble information on travel time, travel time reliability, transportation cost and safety to measure the performance of actual supply chains. The Subcommittee determined that it was feasible and practicable to do so.

The Subcommittee notes that Transport Canada has already developed and applied similar measures to assess the performance of the Canadian supply chains linking Canada's west coast ports to Toronto and Montreal and is now developing measures for the routes serving its east coast import and export routes. At a recent Transportation Research Board workshop, Transport Canada officials reported that their Fluidity Indicator is being used to identify freight system bottlenecks for improvement. The Indicator is also being used by shippers and carriers to benchmark the performance of their individual supply chains.

In February 2014, at the North American Leaders' Summit, the North American Heads of State committed to the development of a North American transportation plan, beginning with a North American freight plan. Coordination and collaboration among the United States, Mexico, and Canada on measuring supply chain performance would contribute to the advancement and realization of the freight plan.

Based on these findings, we believe that it is both feasible and desirable to measure the performance of U.S. supply chains and for policymakers to use this information to shape public freight transportation policies and prioritize transportation improvements. The recommendations are intended to support the important work of the Federal Government, State departments of transportation, local agencies, and others, contributing to an effective national freight network.

We believe that this will improve the performance of U.S. supply chains and make U.S. business and industry more competitive in domestic commerce and international trade.