ACEEE Policy Brief
American Council for an Energy-Efficient Economy

# Freight System Efficiency

## April 2014

### *ACEEE Recommendations*

In reauthorizing federal transportation programs, Congress should:

- Broaden the National Freight Policy to include all freight modes
- Expand required freight performance measures and targets to include modal balance, resiliency, and energy efficiency
- Ensure adequate support for innovation and application of new technologies in the freight sector
- Reinstate and fund the Vehicle Inventory and Use Survey

### *The Issue*

The movement of freight has enormous importance to the U.S. economy but poses major challenges. The freight system needs to function efficiently and with minimal adverse impacts. Freight transportation accounts for a growing percentage of U.S. petroleum use, and by 2030 is projected to consume 4 million barrels per day, or 30% of all petroleum used for transportation. DOT and EPA fuel efficiency and greenhouse gas emissions standards for heavy-duty vehicles will bring substantial fuel savings in the coming years. However the United States must expand freight options and make the freight system work more efficiently to achieve further reductions in oil consumption, consumer energy costs, and greenhouse gas emissions.

### *Summary*

The current federal transportation funding law, MAP-21, sets out a National Freight Policy (NFP) with goals that include improving the efficiency of freight transport and reducing its environmental and community impacts. The NFP defines a National Freight Network and calls on the DOT, in consultation with states, to develop a National Freight Strategic Plan within three years of enactment, i.e., by July 2015. In principle, such planning tools could provide a framework for investment, integration, and coordination of the freight system. However the NFP focuses almost exclusively on the highway system and considers only a subset of the issues crucial to the future of freight transport in the United States.

The next authorization of federal transportation programs, due in the fall of 2014, should include a more comprehensive set of freight provisions addressing the following issues.

*Multimodal freight system.* In order to achieve balance, reliability, efficiency, and sustainability in our freight system, the next bill should aim for a comprehensive multimodal system, including robust rail and waterborne freight networks. This system should provide more than one transport option along major freight corridors. In particular, the National Freight Network, currently dedicated to the efficient movement of freight on highways, should include the full range of modes for surface freight transportation.

*Performance measures and targets.* MAP-21 appropriately calls for measures to evaluate system performance and prioritize infrastructure investments. The sole measure it requires for freight, however, concerns freight movement on the Interstate Highway System. The next transportation bill should require freight performance measures and targets in several other areas, including modal balance, resiliency, and energy efficiency. For example, a performance target might specify that freight corridors more than 400

miles long provide more than one viable mode to move goods. Such a target would help establish a multimodal system offering flexibility and the possibility of major energy savings. A more comprehensive set of performance measures is all the more important in view of the fact that MAP-21 authorizes the Secretary to increase the federal funding share for projects that contribute to the efficient movement of freight, as demonstrated in part by their meeting freight targets established under the law.

*Intelligent freight transportation.* Among the goals of the NFP is "to use advanced technology to improve the safety and efficiency of the national freight network." MAP-21 also contains other references to the need for innovation and the deployment of intelligent transportation systems. However some of the most significant applications of information technology in the freight sector are not within the scope of the current law. The next transportation bill should spur progress in logistics and supply chain efficiency, including the use of real-time feedback and the sharing of services and facilities across private-sector users.

*Commercial vehicle data.* MAP-21 directs DOT to consider improvements to existing freight flow data collection. Since the discontinuation of the Vehicle Inventory and Use Survey (VIUS) following the 2002 survey, we have been without an up-to-date profile of commercial vehicles on U.S. highways and their patterns of usage. This lack makes infrastructure planning and energy policy for these vehicles difficult. The next transportation bill should reinstate and fund the VIUS or a similar survey.

The 21st century calls for new approaches to freight planning. Federal support is key to the development of a connected system that anticipates and takes advantage of information and communications technology. This 21st century system should optimize freight investments with respect to economic, energy, and environmental goals by considering the full range of solutions. The next transportation bill offers an opportunity to map out a future course for federal involvement in these areas.

**ACEEE contacts**

Therese Langer
tlanger@aceee.org

Shruti Vaidyanathan
svaidyanathan@aceee.org