The Role of Freight Transportation in Economic Competitiveness

December 10–11, 2014
The Keck Center of the National Academies
Washington, D.C.

Supported by
University Transportation Centers
Office of the Secretary, U.S. Department of Transportation

The subject of the 8th University Transportation Centers Spotlight Conference is The Role of Freight Transportation in Economic Competitiveness. This topic speaks to one of the leading challenges facing the United States and other countries around the world. Particular emphasis will be given to the identification and implementation of effective strategies and research and data needs to promote economic competitiveness in the freight transportation sector.

The conference will bring together representatives of federal, state, and local government agencies, universities, and industry and will facilitate synergies among these diverse groups to understand and address issues regarding the freight transportation sector’s role in economic competitiveness, to spotlight recently completed and ongoing research in this area by university transportation centers and others, and to identify gaps in current research and related activities.

Abstracts are invited for posters presenting basic or applied research or case studies of practice. Abstracts that are accepted for presentation will be included in conference materials and posted online. Posters will be presented at an informal gathering in the afternoon of the first day of the conference.

Topics of interest include the following:

The Role of Freight Supply Chains in Economic Competitiveness

- Freight performance measures and how they are integrated into transportation planning
- Innovative freight data collection methods for performance measures, modeling, and planning
- Private supply-chain trends and related effects on freight flows by mode and region
- Climate adaptation and extreme weather and its effects on agricultural supply chains
- Impacts of changes in fuel prices on the freight supply chain in 5 to 10 years and in the long term
- Limiting factors, current needs, and best practices to enhance economic competitiveness for each of the primary modes of transportation: motor carrier, rail, and waterway
- Potential changes in foreign and U.S. trade policy and their effects on freight supply chains in the United States
- Impacts of deteriorating infrastructure on freight movement in the United States: costs (direct and indirect) and recommended strategies for rehabilitation and replacement
- Educational and workforce needs of the U.S. supply-chain industry and potential remedies
- Current research needs of the U.S. supply-chain industry and the best manner in which to further develop a supply-chain research program
Changing Energy Markets and Effects on the Freight Transportation System

- The types, intensities, and duration of domestic and international transportation demands exhibited by shale oil and gas developments
- Changes in the coal market and implications for domestic and international freight demand
- Wind turbine manufacturing and distribution trends and transportation implications
- The impacts of energy developments on existing transportation systems, including capacity issues, pinch points, competition with other freight demand, pricing trends, and more
- Competition among transportation modes—pipeline, rail, barge, ship, or motor carrier—and trade-offs between flexibility and cost in energy freight modal choice
- Trends in freight infrastructure construction associated with changing energy markets
- Transportation safety issues and implications for transportation operations, regulation, and energy production levels
- How to incorporate energy developments into state and local transportation planning processes
- Approaches to project or anticipate future energy freight demand
- Energy trade policy developments and implications for freight infrastructure

Freight Transportation System Resiliency and Its Role in Economic Competitiveness

- Lessons learned from past extreme weather events
- Modal and spatial shifts of freight during disasters
- The role of state and local departments of transportation in disaster preparedness
- Innovative strategies for protecting and distributing fuel supplies during extreme events
- Transportation security and its ability to prevent catastrophic events
- Comparisons of the effects on the freight transportation system of different types of major events

Submitting an Abstract


If your abstract is accepted, you will be informed in late August 2014. All presenters are expected to register for and attend the conference.