



U.S. Department of Transportation  
**Federal Highway Administration**

**TRB**

Transportation Research Board

## National Freight Research, Methods and Tools to Understand Freight Transportation

Please join the Federal Highway Administration (FHWA) for presentations and facilitated discussions on tools to address the current and upcoming freight transportation needs across the country. The purpose of the session is to help advance the state of freight transportation practices by disseminating and receiving stakeholder's feedback on the latest available national resources on freight research, datasets, tools, and plans. The session will focus on learning from FAST Act-compliant State freight plans and the latest freight research, data, and available tools that FHWA has developed.

**Wednesday, January 15, 2019 from 8 AM to 12 PM EST**  
**Lectern Sessions 1681 and 1725**

### Topics Include:

- Review & Analysis of State Freight Plans
- Freight Transportation Performance Management
- Quick Response Freight Methods Update
- National Highway Freight Network StoryMap Tool
- Freight Fluidity Supply Chain Monitoring Program
- Updated Visualization Tool for the Freight Analysis Framework (FAF)
- Truck Parking Data & Planning
- Converting FAF Commodity Tonnage into Truck
- Freight Truck Estimates from FAF Network Assignment
- Special Small Area Tabulation of Commodity Flow Survey 2012
- National Freight Model
- Future Freight & Logistics Survey

This session is sponsored by:  
AT015, AT025, AT045, AT055, and AT060

### For more information, contact:

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More information on the FHWA Office of Freight Management and Operations can be found at:  
<https://ops.fhwa.dot.gov/freight/index.cfm>

# National Freight Research, Methods, and Tools to Understand Freight Transportation

TRB 2020 | Wednesday, January 15<sup>th</sup> | 8am-12pm EST

## Part 1: Freight Methods and Measures Lectern Session 1681

### Review and Analysis of State Freight Plans

State Departments of Transportation have begun implementing their required State Freight Plans, tying together data and tools for a state transportation program. This session provides a comprehensive understanding of the plans' approaches to data and analysis.

For more information, contact Tiffany Julien ([tiffany.julien@dot.gov](mailto:tiffany.julien@dot.gov))

### Freight Transportation Performance Management (TPM)

States and Metropolitan Planning Organizations are implementing TPM, including assessing freight movements and bottlenecks. This session will give an overview of the progress of freight performance measures, including discussion on performance management principles within freight planning and programming.

For more information, contact Jeff Purdy ([jeffrey.purdy@dot.gov](mailto:jeffrey.purdy@dot.gov))

### Quick Response Freight Methods (QRFM) Update

This third update to this reference report provides a detailed look at the framework, methodology, and concepts in freight forecasting. This session highlights how this document can be leveraged to support freight transportation programs.

For more information, contact Birat Pandey ([birat.pandey@dot.gov](mailto:birat.pandey@dot.gov))

### National Highway Freight Network (NHFN) StoryMap Tool

This GIS tool creates an updated NHFN dataset that incorporates Highway Performance Management System data attributes. This tool will become the primary source of information about the NHFN.

For more information, contact Chandra Bondzie ([chandra.bondzie@dot.gov](mailto:chandra.bondzie@dot.gov))

### FHWA Freight Fluidity Supply Chain Monitoring Program

The Freight Fluidity Program is a monitoring system that captures key performance indicators of freight transportation. The Program combines supply chain staging patterns with quarterly performance metrics to capture travel time data and market prices. It supports high-level and granular analysis across the industry.

For more information, contact Chandra Bondzie ([chandra.bondzie@dot.gov](mailto:chandra.bondzie@dot.gov))

### Updated Visualization Tool, Freight Analysis Framework (FAF)

This effort creates new Tableau dashboards from the Bureau of Transportation Statistics (BTS) to create high-level summaries on the national freight network.

For more information, contact Chester Ford ([chester.ford@dot.gov](mailto:chester.ford@dot.gov))

## Part 2: Freight Research, Data, and Tools Lectern Session 1725

### Truck Parking Data & Planning

The Jason's Law Surveys are part of a USDOT-wide effort to advance safer truck parking. This session will give an overview of initiatives for truck parking, examples of state and local efforts, and innovative solutions.

For more information, contact Jeff Purdy ([jeffrey.purdy@dot.gov](mailto:jeffrey.purdy@dot.gov))

### Converting FAF Commodity Tonnage into Truck

In addition to the weight of commodity by Origin and Destination (OD) pairs, FAF provides estimates of truck traffic volume on the nation's highway network. This requires translation of OD commodity tonnage transported into the OD flow of the number of trucks needed to transport these commodities. This project develops parameters needed for this translation.

For more information, contact Birat Pandey ([birat.pandey@dot.gov](mailto:birat.pandey@dot.gov))

### Freight Truck Estimates from FAF Assignment

This project proves an assignment model capable of estimating freight truck flows based on FAF data. It is designed to enhance national freight data, supporting the strategic allocation of resources at the national level, and complementing regional and State freight transportation decision-making processes.

For more information, Birat Pandey ([birat.pandey@dot.gov](mailto:birat.pandey@dot.gov))

### Special Small Area Tabulation

This project highlights the pilot tabulation from BTS and the Census Bureau using the 2012 Commodity Flow Survey (CFS) that differentiates the levels of geographic detail based on distance.

For more information, contact Chester Ford ([chester.ford@dot.gov](mailto:chester.ford@dot.gov))

### National Freight Model (NFM)

This presentation provides an overview of the EAR program to develop behavior-based National Freight Demand Modeling. This NFM combines macroeconomic sensitivity with behavioral models.

For more information, contact Vidya Mysore ([vidya.mysore@dot.gov](mailto:vidya.mysore@dot.gov))

### Future Freight and Logistics

This project focuses on advancing national freight data collection practices, devising methods to address gaps in the national freight data portfolio, focusing on tracking shipments and truck movements by exploring communication technologies.

For more information, contact Birat Pandey ([birat.pandey@dot.gov](mailto:birat.pandey@dot.gov))



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