
Louisiana Transportation Research Center

Final Report 607

**Institute for Trade and Transportation Studies
PHASE II Project Review**

by

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16. Abstract <p>The Institute for Trade and Transportation Studies (ITTS) serves as a regional organization of state departments of transportation in the Southeast. The Institute for Trade and Transportation Studies provides research data and expert opinions to its members concerning the effects of commercial freight movements on domestic and international activities, with reference to infrastructure and transportation needs, and safety implications. ITTS evolved from the Latin American Trade and Transportation Studies, funded by the member state departments of transportation and the federal government.</p> <p>This report highlights the work that ITTS, under the direction of its member states, undertook during the contract period. The work consisted of organizing and speaking at meetings, working with member states on the adoption of federal legislation, technical assistance, additional work on regional highway networks and analytical tools, training, and other duties as requested.</p> <p>All the materials presented here have been posted or can be accessed on the ITTSResearch.org website.</p>					
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PHASE II Project Review

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Louisiana Transportation Research Center

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July 2019

ABSTRACT

The Institute for Trade and Transportation Studies (ITTS) serves as a regional organization of state departments of transportation in the Southeast. The Institute for Trade and Transportation Studies provides research data and expert opinions to its members concerning the effects of commercial freight movements on domestic and international activities, with reference to infrastructure and transportation needs, and safety implications. ITTS evolved from the Latin American Trade and Transportation Studies, funded by the member state departments of transportation and the federal government.

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All the materials presented here have been posted or can be accessed on the ITTSResearch.org website.

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I wish to acknowledge the leadership provided by the member states, as the success of ITTS is dependent upon the contribution of the member states in outlining their common and regional needs.

I also want to thank the many individuals who assisted in and/or at the various ITTS Freight in the Southeast conferences, as well as other meetings.

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Finally, I would like to thank the following project managers who managed ITTS PHASE II: Thomas Bartkiewicz, Christopher “Matt” Johns, Laura Phillips, and Dawn Sholmire.

IMPLEMENTATION STATEMENT

As the ITTS work plan developed a series of tools, reports, and meetings to fulfill the member needs, the following will discuss the various aspects in more detail. (One of the benefits of regional tools and model development is that states can directly compare outcomes from different studies without the corresponding need to harmonize research inputs/outputs.)

SHIFT Model and Training

The SHIFT model could be used by state DOTs as an alternative to a statewide travel demand model, but also for multistate freight corridors. These capabilities were demonstrated by the five scenarios that were developed (with the corresponding training materials). The SHIFT model, with the corresponding trip tables, could also be used as a starting point for market research on passenger/truck origin-destination travels. The SHIFT model also has a regional highway model that could be used for evaluating multistate freight planning and policy needs. By having a common approach, various member states could directly compare modeling efforts, especially those that cross state boundaries. Training was provided both online and at the ITTS Freight in the Southeast Conference in 2017, and the materials are available on the ITTS website.

FEAT Models and Training

These models were developed for the member states to prepare materials for economic benefit cost studies. The models can be used both at the sketch planning level or as an input for a grant application. There were several training sessions held to assist member states in learning how to use the FEAT Models.

Data Integration and Training

Given the need to provide information on state freight plans, corridor studies, and executive briefings, the data integration work task provided a repository for freight information. There are training videos, as well as instructional working papers, that were developed to provide a way for a non-technical person to interact with the data.

Communications/Meetings

The Freight in the Southeast Conferences and the Peer Meetings provided a forum for the ITTS member states to engage on topics of interest. This, joined with the various conference calls and webinars, provided a forum for state DOTs to share about specific programs and experiences.

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INTRODUCTION

(This introduction was from the original contract for PHASE II of the ITTS contract. There were some changes regarding state participation from 2012-2017. The Texas Department of Transportation joined the Southern Association of State Highway Transportation Officials (SASHTO), while Missouri rejoined ITTS, having been a part of the LATTS 2 workplan.)

Freight transportation, with its potential demands upon the region's infrastructure, is becoming more important in regional planning efforts. For example, roughly one-third of all truck ton-miles in the Southeast are through traffic movements. This fact, and the need to develop strategic freight corridors that improve system mobility, are critical components to support the region's economic vitality. Current federal legislation directs states to develop freight plans. Assisting states in developing regional and freight corridor studies will provide additional aid for state and local transportation planners in considering the influence of freight traffic on their network.

The Southeastern Transportation Alliance was formed in 1996 for the purpose of undertaking the Latin America Trade and Transportation Study (LATTS). Members of the Alliance included Alabama, Arkansas, Florida, Georgia, Kentucky, Louisiana, Mississippi, North Carolina, South Carolina, Puerto Rico, Tennessee, Texas, Virginia, and West Virginia. The effort was funded through an FHWA pooled-fund study using State Planning and Research (SPR) funds. The premise of the study was the recognition that Latin America is poised for growth and this presents huge trade potential for southeastern states. Therefore, the purpose of LATTS was to estimate trade volumes with Latin America, evaluate infrastructure investments needed to support growth in international trade, and develop strategies to guide infrastructure investments. The overall goal was to help the Southeastern Transportation Alliance states develop their competitive advantages to capture trade opportunities and the associated economic benefits.

Following the completion of LATTS (PHASE I) in March 2001, the study was taken to the next level under the name LATTS II, which is a two-year analysis of the critical infrastructure needs identified in LATTS (PHASE I). In addition to the original (PHASE I) Alliance members, the States of Missouri and Oklahoma participated in LATTS II. At the conclusion of LATTS II, Missouri and Oklahoma dropped out of the Alliance as did Texas, leaving only SASHTO states as members. To continue the original study initiatives, the remaining Alliance states decided to form an independent entity entitled the Institute for Trade and Transportation Studies (ITTS).

In 2012, member states were polled concerning their interest in renewing ITTS beyond its current date. Eight states affirmed their commitment to continue funding ITTS for another five-year period. Missouri rejoined ITTS in 2013.

OBJECTIVE

The overarching goal of ITTS is to help the Southeastern Transportation Alliance states develop their competitive advantages to capture trade opportunities and the associated economic benefits. This “development” is accomplished through providing assistance regarding data, analysis, and policy/planning changes. ITTS, as an organization, seeks to work with member states to identify common research topics that can be directly applicable to member state work efforts.

SCOPE

As a multistate research effort, the report presented here summarizes the work performed at the direction of the member states. The initial scope of work (as prepared in 2012) consisted of, but was not be limited to, the following:

- Update the Latin America Trade and Transportation Study, but expand it to include all international trade.
- Organize and facilitate workshops attended by ITTS member states to review trade forecasts and freight flows, and to present and compare member state transportation plans to ensure proper coordination.
- Organize and sponsor an annual “Freight in the Southeast” conference to provide a continuing education and peer exchange opportunity for member states.
- Within budgetary allowances, provide support to member states such as speaking at member state conferences, offering expert advice, etc.
- Provide technical assistance in meeting the requirements of MAP-21 and subsequent FAST ACT, including but not limited to state freight plans and freight networks and identifying regional freight corridors. [MAP-21 has been superseded by Fixing America’s Surface Transportation Act (FAST Act).]

METHODOLOGY

As a multistate research effort, ITTS worked on many different research areas and with many different partners. The following provides a meta summary about the work methodologies used for the various work elements.

For the SHIFT and FEAT models, the methodology reports are included in their respective research programs.

The framework for organizing the Freight in the Southeast Conference was released as Working Paper 8 “A Planning Template for the Freight in the Southeast Conference”, based on lessons learned from planning the first conference in 2010.

For the data integration work, the published datasets were downloaded and converted into a structure that could be used by Tableau, a business intelligence software platform. The data sources are listed in Working Papers 7 “Summary of the Data Integration Work Program” and 21 “Executive Briefing Book”, and additional trading materials are posted online and in Working Paper 13, “Tableau Training Packet for Scott County, Missouri”.

For the other work items and conferences, the research need was identified by the states and ITTS focused on providing the requested information, using a variety of approaches as required by each work task. For example, the YouTube videos were recorded using freeconferencecall.com, and once edited, were posted online. The ITTS website was developed using Adobe Dreamweaver, while ITTS did purchase trade data from the World Institute for Strategic Economic Research (WISER), a trade data aggregator. (The ITTS YouTube Channel is <https://www.youtube.com/channel/UC8UHZzfMkZA5sLe8UPi7WjQ>)

The actual work items were selected by the ITTS member states during the Summer Meetings (which ended in 2016), and were revised, reviewed, etc., during the monthly conference calls. As such, ITTS workload reflected the changing nature of the needs of the member states as national freight policies were evolving, and states were adapting to both MAP-21 and FAST during this contract period. At the same time, states identified areas of interest that could be addressed by the ITTS, by suggesting related research topics or research needs, and directing how to address that research proposal, either through an informal piece, a working group, or a webinar/conference call.

DISCUSSION OF RESULTS

Network Development

The original LATTS network, consisting of highways, railroads, airports, and inland and coastal ports, represented a focused effort by the member states to examine the relationship of transportation within these specific corridors. There were two main work elements under this task: the Southern Highway Interactive Freight Traffic (SHIFT), and the Freight Economic Analytical Toolkit (FEAT). The SHIFT model was subcontracted to CDM Smith Inc. (November 30, 2012), while the FEAT model was subcontracted to Cambridge Systematics, Inc. August 1, 2016).

The Southern Highway Interactive Freight Traffic (SHIFT)

The SHIFT model, based on the original LATTS network approved by the states, had many objectives:

- The SHIFT model is a tool that provides ITTS member states with a common framework for doing freight studies.
- The SHIFT model is focused on ITTS member states.
- The SHIFT model builds upon the LATTS PHASE I study by updating the existing LATTS network developed in the early 2000s, and it is based on existing 2013, 2014, and 2015 National Highway Planning Network data to analyze freight movements on major freight corridors.
- The SHIFT model is GIS based to enhance compatibility with integrating with other planning databases (operating in TransCAD).
- The SHIFT model provides the ITTS member states with the ability to query and run reports on regional freight networks concerning truck flows.
- The SHIFT model is not a replacement for existing travel demand modeling or state freight plans, but is another tool for data analysis or calibration, especially for truck activity that is regional or national.

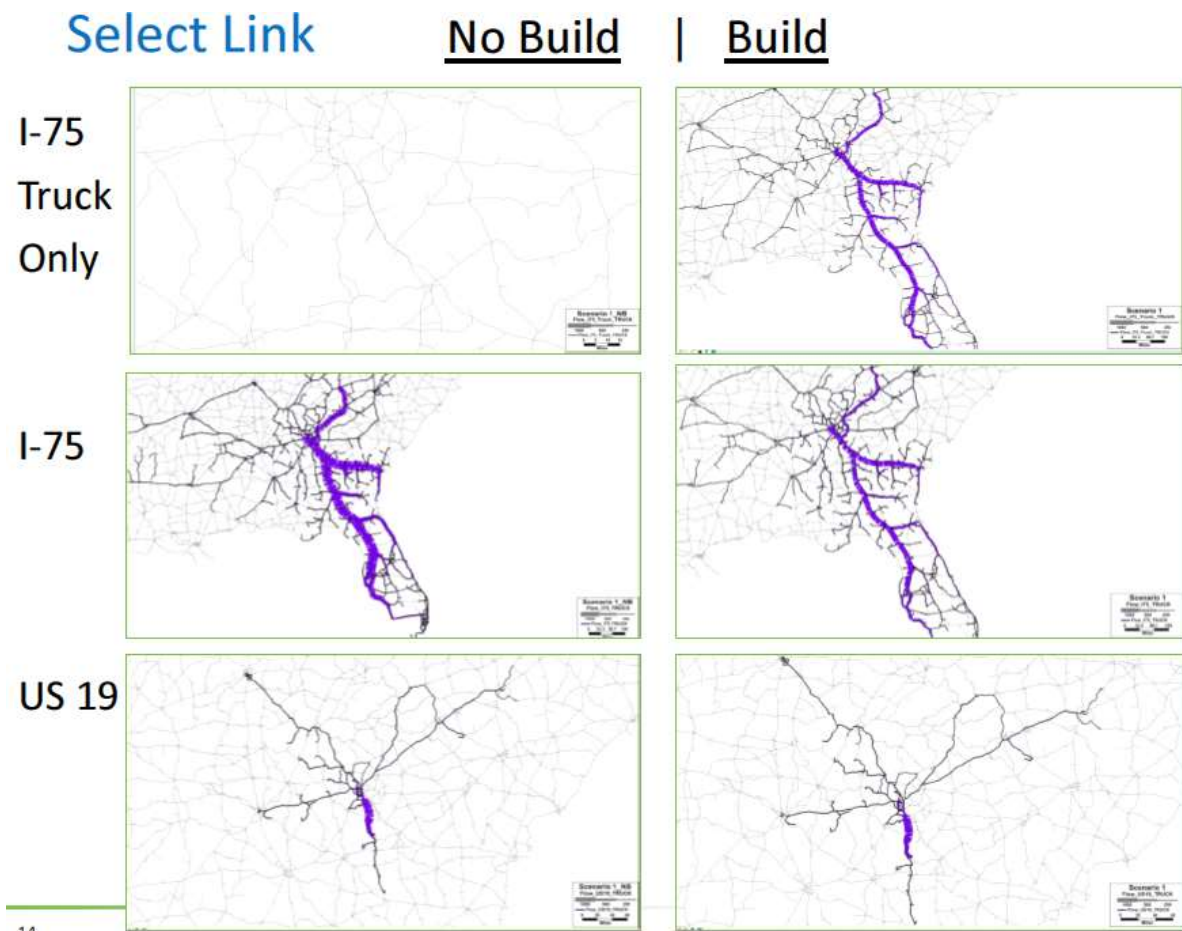
The SHIFT study area, shown in Figure 1, based on the network approved by the member states, allowed member states to do traffic analysis of both regional movements (interstate and intrastate). CDM Smith worked with the member states to receive their 2015 network, consisting of both the existing network (in 2015) and the committed 2040 network for the member states. Trip tables, based on passenger and truck flows from each Traffic Assignment Zone (TAZ) were assigned to the network.



Figure 1
LATTS phase 1 study area

After the model was developed in January 2016, the ITTS member states requested more training. Working at the direction of the member states, CDM Smith developed five different training scenarios based on scenarios planned by the ITTS member states. The scenarios are a truck only lane (Georgia), interstate expansion (Kentucky), flooding of interstate corridors (Louisiana), the New Madrid Earthquake (Arkansas), and a workzone along an entire interstate corridor (Missouri). A summary figure of each report is included to show the versatility of the SHIFT model training webinars and materials for each of the scenarios were also provided to the ITTS member states. (The training videos were posted.)

Georgia	I-75 Truck Only Lane
Purpose:	To review how model compares with state models (Calibration)
Scenario:	Northbound Truck only lane (2 lanes, no toll, access points at exit 201 <u>and</u> exit 218)
Limits:	I-75/I-475 on <i>north</i> side of metro Macon to I-75/I-285 in south metro Atlanta



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Figure 2
Georgia northbound truck only lane scenario

Kentucky I-69 Project

Purpose: To calibrate state models, as well as look at regional flows and comparison for traffic shifts

Scenario: Regional I-69 study

Limits: Task A. Upgrading the bridges over the Ohio River between Henderson, KY and Evansville, IN and upgrading US 41 and the Pennyryle Parkway to Interstate standards.

Task B. Also add I-69 in other states and run along with improvements in Task A.

Daily Volumes (Scenario 2A)

- Daily volume on parallel links
- Percent change between No Build and Build

Total Assigned Daily Flow – Scenario 2 A				
Link ID #	Name	No Build	Build – 2A	% Diff.
173407	I-57	38,508	37,970	-1.40%
194055	IL-1	4,661	4,648	-0.30%
195573	I-69/Pennyryle Pkwy	28,628	38,682	35.10%
191712	Green River Pkwy	14,120	13,286	-5.90%
60817	I-65	73,038	70,830	-3.00%



Figure 3
I-69 scenario

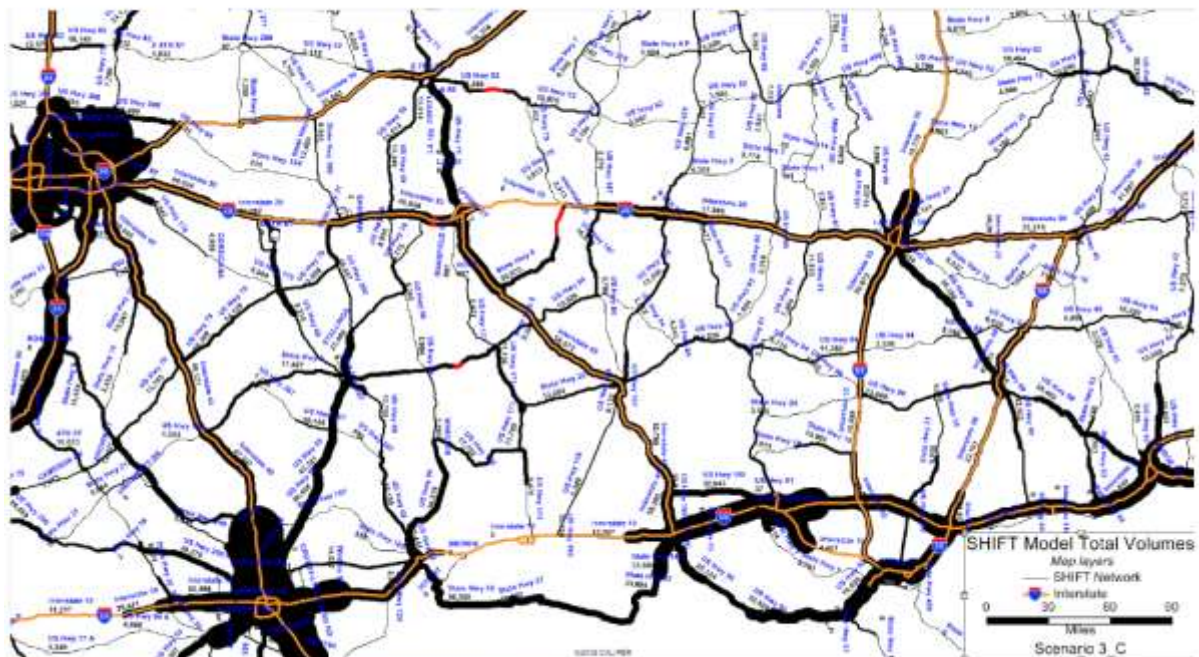
Louisiana I-10 Flooding Scenario

Purpose: To look at larger regional disruptions along the I-10 Corridor

Scenario: Closure of I-10 due to flooding

Limits: Task A. Closure of I-20 in vicinity of Bossier City
Task B. Closure of I-10 in vicinity of the Sabine River
Task C. Combination of Closures outlined in Tasks A and B

■ Build Daily Volume Flows (Scenario 3_C: I-20 & I-10 Closure)



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Figure 4
Louisiana flooding event

Arkansas Mississippi River-New Madrid Scenario

Purpose: To coordinate with regional state and Metropolitan Planning Organization (MPOs) to see how model outputs could be shared

Scenario: Closing the Mississippi River Bridge and other closures due to a New Madrid “event”

Limits: Task A. Close Memphis Mississippi River Bridges
Task B. Close all counties in New Madrid area including Arkansas (Mississippi and Crittenden), Missouri (Mississippi, New Madrid, Pemiscot, Dunklin and Stoddard), Tennessee (Shelby, Tipton, Lauderdale, Dryer, Lake), Kentucky (Fulton, Hickman, Carlisle, Ballard), and Mississippi (Desoto)

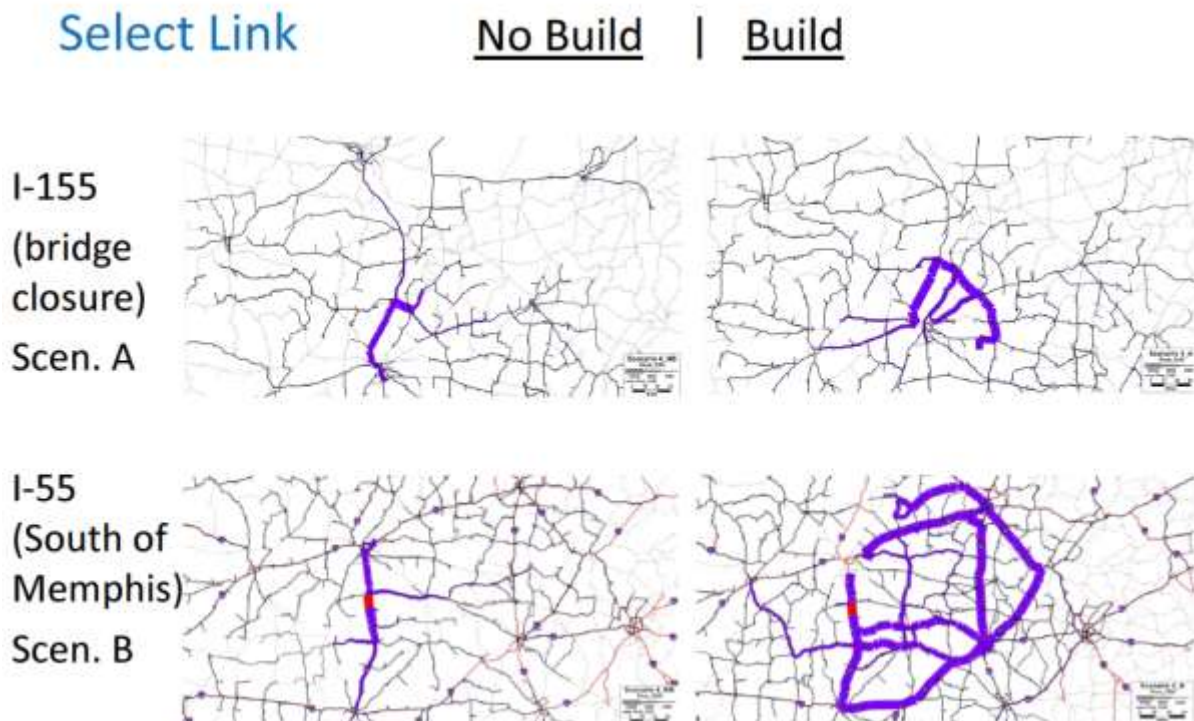


Figure 5
New Madrid scenario analysis

Missouri I-70 Work Zone Scenario

Purpose: See if the model could be used to consider work zone analysis for traffic movements

Scenario: Major rehabilitation of I-70 (speed drop to 50 mph, one lane per direction)

Limits: Run closure/reduced speed on three counties (Jackson, Boone, Saint Louis City), one county at a time.

Bandwidth Flow Maps – Scenario 5C Comparison

Build Scenario 5C (St. Louis City)

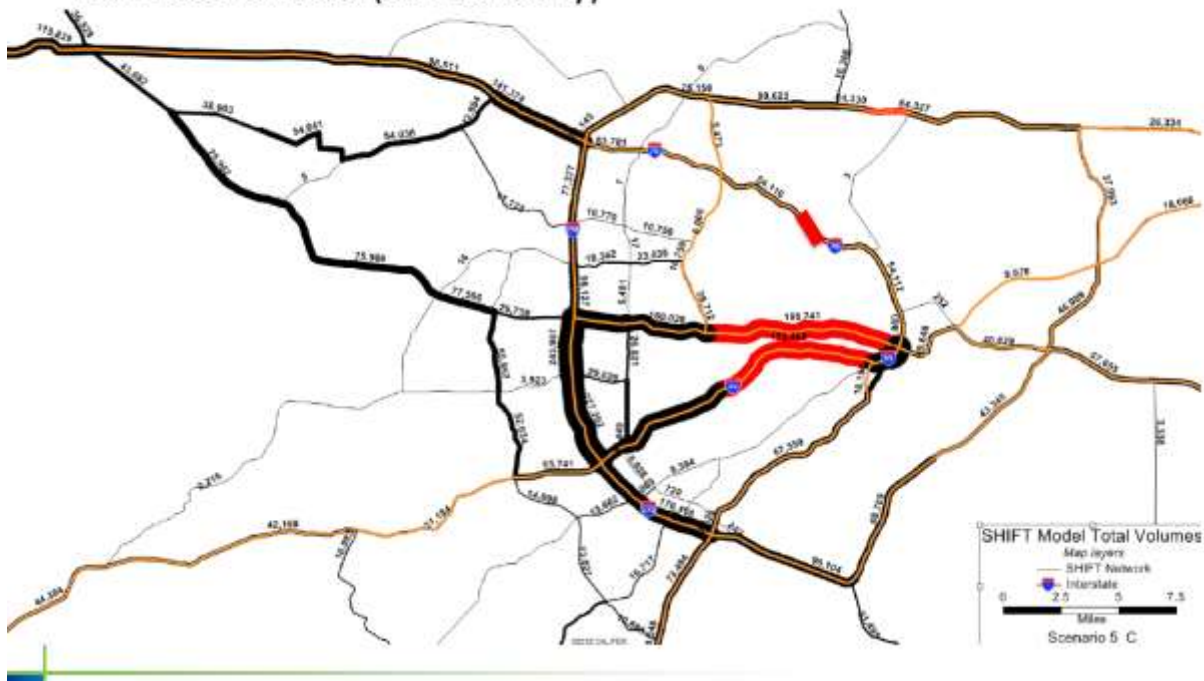


Figure 6
I-70 Interstate workzone scenario

Freight Economic Analytical Toolkit (FEAT)

The Institute for Trade and Transportation Studies (ITTS) commissioned the development of the Freight Economic Analytical Toolkit (FEAT) to allow ITTS to document and communicate the economic return of freight investments. The tool was developed using the state of practice economic methodologies with the ability to analyze a single project or a package of projects.

Transportation projects that result in changes to capacity network flow can be evaluated using the ITTS SHIFT model, a statewide travel demand model, or Metropolitan Planning Agency (MPO) travel demand model to estimate the transportation impacts. These projects are referred to as “on-model” projects and the tool for which this guide refers was developed to analyze the economic impacts of these “on-model” projects. Non-capacity or operational projects, as well as rail projects, are addressed in separate tools and user guides. The deliverables included a methodology report outlining the basis of benefit cost analysis, which was shared with the member states in 2016 via various conference calls.

Cambridge Systematics provided an “on-project module” as an Excel based tool divided into multiple tabs that are separated by task or “step.” The tool is organized into: informational tabs in orange, analysis step tabs in dark blue, GIS functions in purple, interim results tabs in red and summary final results in green. The model is linked to Impact Analysis for Planning model (IMPLAN) and Regional Economic Models, Inc. (REMI), economic databases, as well as the SHIFT model, to allow states to compare different transportation changes associated with freight investments. Training videos were also posted, based on different conference calls and training sessions.

FEAT Capacity Investment Model (On Model). The FEAT Capacity Investment Model features a systematic framework that uses output from a travel demand model for conducting customized economic analysis of changes in transportation network capacity including: new facilities, widening of existing facilities, closure of existing facilities.

FEAT works with the state’s existing travel demand models and economic models to allow users to conduct benefit cost and economic impact analysis of a single project or a program of projects in a matter of minutes. The tool automatically generates tables and reports of the findings for use in reports, presentations or grant applications.

- Step 1: Define parameters
Review standard parameters and ensure appropriate values

- Enter project name, select study region and simulation options and enter input file path names for saved results.
- **Step 2a or 2b: Enter results of travel demand modeling**
Collect and input Travel Demand Model (TDM) values in daily format if using an average daily model or for a time of day model.
 - **Step 2c: Annualized travel demand**
Annualizes the TDM inputs using data from Step 1 and either regional or peak TD inputs. All estimates reflect total annual amounts.
 - **Step 3a: Safety**
Estimated total crashes and the economic value of those crashes, by region.
 - **Step 3b: Emissions**
Calculates the change in emissions for autos and trucks in tons and then monetizes the change in emissions by region.
 - **Step 3c: User Costs**
Estimates user costs for business, commuter, leisure, and truck trips by region. User costs include fuel, vehicle operating costs (VOC), time savings, and delay. Benefit cost analysis (BCA): Users must enter in the annual capital and operations and maintenance costs for the project or group of projects and select the discount rate. Produces the net present value and benefit-cost ratio for the entire project or group of projects.
 - **Step 4: Auto Inputs**
Compiles all of the monetized auto inputs in preparation for the economic impact model runs.
 - **Step 5: Truck Inputs**
Compiles all the monetized truck inputs in preparation for the economic impact model runs.
 - **Step 6a: Economic impact model inputs**
Combined direct economic impact model inputs for auto and truck and allows users to run self-generating input file for the economic impact model.
 - **Step 6b: Economic Impact Result**
Users can copy and paste the exported REMI or IMPLAN results here.

FEAT Operation and Safety Model (OPS Model). Incorporating economic analysis into the planning process provides critical information for the transportation investment decision making process. The FEAT Operation and Safety (OPS) model features a systematic framework for conducting customized economic analysis of projects that generally cannot be evaluated using a travel demand model (TDM) but that can have impacts

on traffic delay and safety. The FEAT OPS model outputs calculates the project's benefits while also preparing the input sheets needed to conduct economic impact analysis using REMI or IMPLAN.

FEAT OPS model uses information on hours of congestion, level of delay and crash rates, and other related traffic information to estimate travel time and safety benefits for a specific or multiple projects. The analysis can be conducted using default values or user supplied data. The only data required by the tool is project type, project location (county or region) and the average annual daily traffic. Figure 7 shows the model evaluation steps.

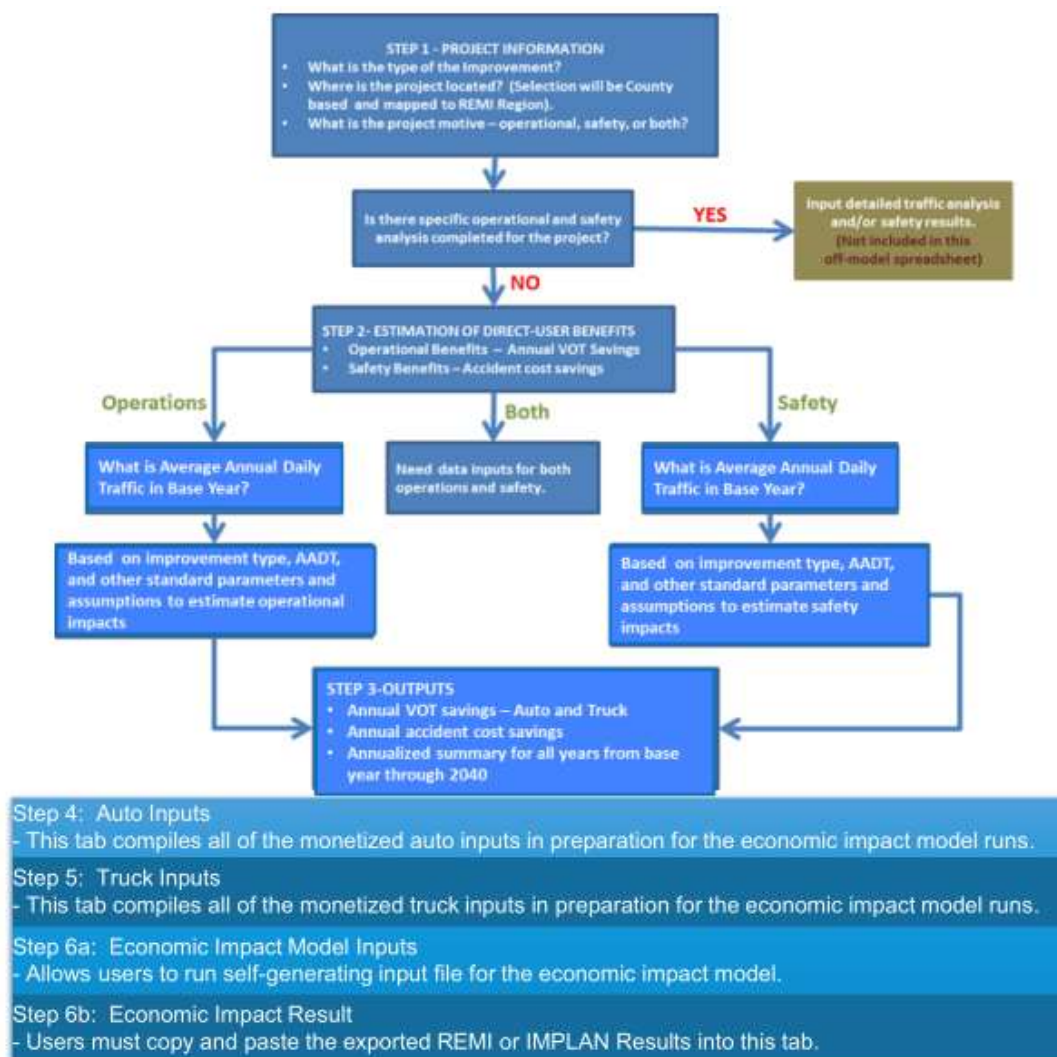


Figure 7
Process for calculating impacts of operational and safety projects

FEAT Rail Investment Model. The FEAT Rail Module evaluates the potential benefits arising from diversion of freight traffic from other modes as result of three project types: a new intermodal yard, a track upgrade to 286,000 pounds, and double-tracking a mainline.

The tool focuses on the potential highway user benefits arising from the diversion of freight from truck to rail and the reduction in freight costs accruing to shippers due to lower cost per ton mile of using rail compared to trucks. The model conducts benefits cost analysis based on: freight rate savings, congestion cost savings, highway emission benefits, highway safety benefits, and road maintenance cost savings. Figure 8 shows the model steps.

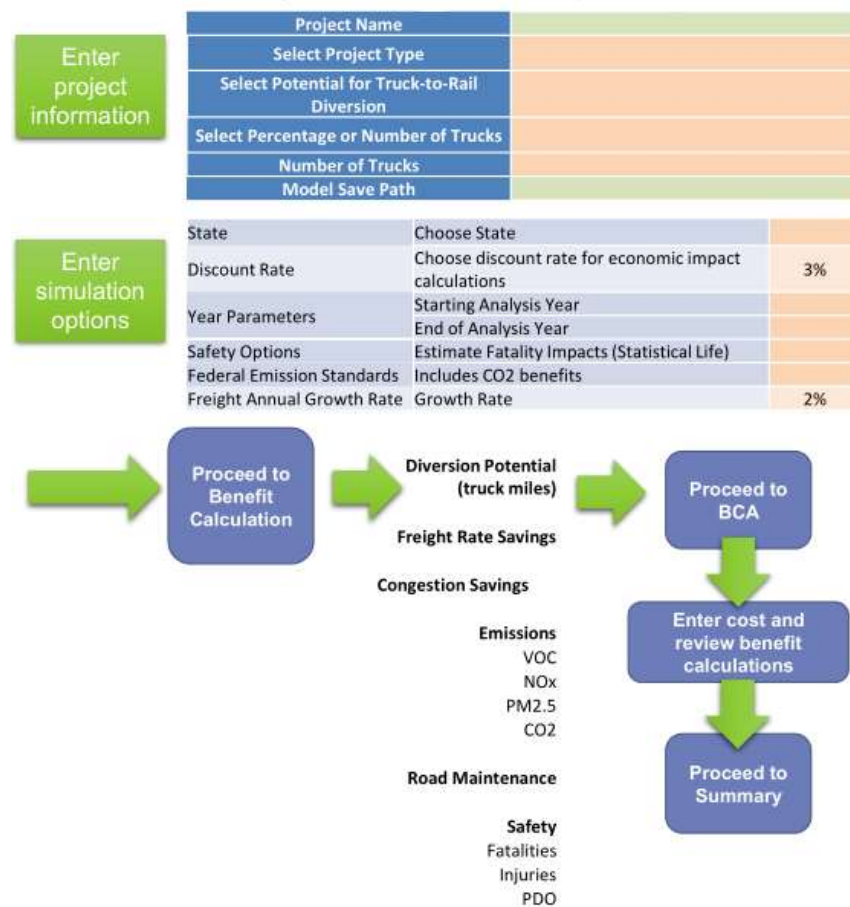


Figure 8
Overview of FEAT rail model steps

Data Development

The largest work element under this program focused on integrating various datasets into Tableau. While ITTS owns a Tableau license, the member states voted to purchase a Tableau Desktop license for each member state who requested a license. There were many different work elements here, some tied to specific Working Papers, others posted online or in other publications.

Data Integration Work Effort

The effort was outlined in Working Paper 7, “Summary of the Data Integration Work Program.” The project’s goal was to develop interactive Tableau workbooks for various databases commonly used for freight analysis and planning efforts. With the use of Tableau, the states would be able to access data without additional processing, while using Tableau’s visual attributes to create customizable worksheets. The states also wanted training to access the assembled workbooks.

The report discussed the databases integrated into Tableau and the data structure of each Tableau workbook with some thoughts on how to use the database. The report assumes the reader possesses a limited familiarity with Tableau, but it is recommended that the user first become familiar with Tableau by working with some of the smaller workbooks developed in this work program, such as the US Army Corps of Engineers (USACE) State-to-State waterway commodity flow data or U.S. Census population by county.

The work goal was to answer three broad questions: (1) What are the trends shaping my region? (2) What are our future needs? (3) How will we address investment in freight facilities? When reviewing the workbooks, these worksheets/workbooks could be used to define trends shaping the demand for freight transportation, ranging from population to economic/industrial activities, and freight traffic patterns. Using the same state (e.g., Missouri) listed in the appendix materials the reader could see elements that would be included in a state or corridor freight study. Figure 9 shows a summary of the various databases from the Tableau integration work effort.

Dataset	Name
Focus	Flow or Geography on Network
Developed from	A brief introduction explaining how the data was collected
Source	Federal Agency responsible for collecting/publishing the information
Website	Access to the Data
Modal elements	What modes, if any, are discussed in the database
Geography	The geographic detail
Time periods	1997-2045
Industry/Commodity Code	Describes the shipment/industry
Update	Next update cycle
Strength	What the database does well
Weakness	What to consider when developing the database
Appropriate Use	Thoughts on areas where the information is most useful
Key Tables	Highlighting some of the key worksheets for each file
Caveats	A reminder that not all databases are perfect, either from a data collection, processing, or for some other attribute one should consider when accessing the data set.

Figure 9
Metadata chart on databases prepared for WP 7 and 21

The report outlined how to access the workbooks and discussions on freight research and data sources. Training videos were also posted, based on two different training sessions conducted via webinar, but other training videos were added later.

The following databases were incorporated into Tableau:

- FHWA Freight Analysis Framework
- Surface Transportation Board Public Railway Bill
- CDM SHIFT model Trip Tables
- USACE State-to-State Waterway Flows
- U.S. Census County Business Patterns
- Bureau of Economic Analysis State Gross Domestic Product
- US Census Population Estimates

Trade Data Work Effort

Other data works included preparing international trade data for the various states, sourced from WISER Trade and converted into PowerPoint and freight brochures. (Figure 10). (ITTS purchased WISER data on an annual basis, ending in the summer of 2017 as the ITTS contract was ending. WISER was selected to provide trade data not available in other formats by the U.S. government.) The states voted to stop updating the statistics listed on the webpage (<http://ittsresearch.org/Latts2-State-Summaries.html>), so the work ceased in 2013. There is a video on how the report was developed and how to evaluate trade data posted on the ITTS YouTube Channel. The trade data work was reintroduced with the development of the Working Paper 21 “Executive Briefing Book”, which included information on State of Origin or Destination, Metropolitan Statistical Area exports, and trade through the region’s gateways (ocean and airports).



Figure 10
Louisiana export brochure

Data Work Applications

Working Paper 13 – “Tableau Training Packet for Scott County, Missouri” (June 2018). The study’s purpose is to identify, using the Tableau data work effort, the following as a reference tool for ITTS member states to conduct their own studies regarding:

- How is my economy performing?
- What are my largest freight related businesses?
- What are the main trade corridors for the region (by mode, by commodity, and by market)?

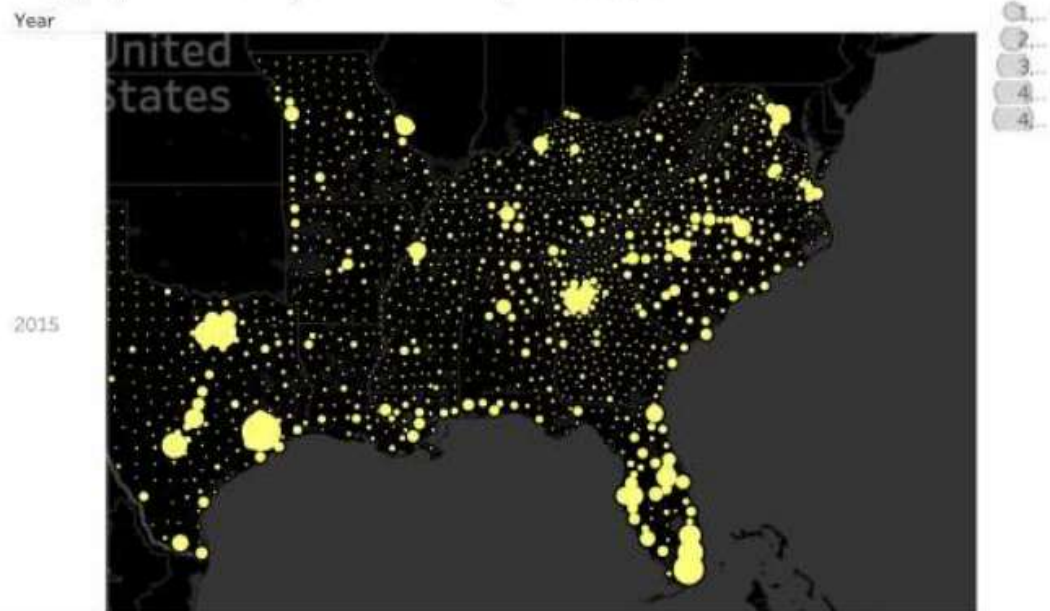
This report is not intended to replace or supersede work performed by other reports but was developed as a training tool for assist ITTS member states in understanding how to use the material in the data integration work effort Working Paper 7 “Summary of the Data Integration Work Program.” By focusing on a single county, which is the lowest level of geography used by the various databases in the Tableau work effort, one could understand the corresponding relationships between the other databases regarding geography and defining a market study area. The Working Paper is also part of Working Paper 20 “The Potential for Domestic Waterways to Handle Non-Traditional Cargos” providing an example of how to use the available data to examine market patterns for a specific geography.

Working Paper 21 – “Executive Briefing Book” (June 2018). This briefing “book” was prepared to provide a quick overview of economic and transportation related information for the use by state departments of transportation in their research and communication efforts. The report also incorporates many of the Tableau work elements to allow state DOTs flexibility in modifying workbooks for their specialized research needs. The additional worksheets added to the Executive Briefing, as well as additional resources to examine trade activities, were included in the report. (Figure 11 shows one prepared dashboard, but dashboards were created for each Tableau workbook and pdfs of the dashboards are posted on the ITTS website.)

There are briefing books ITTS prepared from the various Tableau workbooks:

- Freight Economy and Gross Domestic Product,
- MSA (Metropolitan Statistical Area) Exports,
- Population,
- Regional Gateways, and
- Trade.

City-population map Based on Population, 2015



Top Counties ranked Ranked by 2015 population

Ctyname & Sname (Combin..	Year				
	2000	2005	2010	2014	2015
Grand Total	95,728,344	102,716,809	109,513,889	114,408,077	115,730,618
Harris County, TX	3,401,139	3,681,829	4,092,459	4,447,577	4,538,028
Miami-Dade County, FL	2,253,793	2,385,872	2,496,435	2,668,903	2,693,117
Dallas County, TX	2,216,808	2,250,830	2,368,139	2,519,625	2,553,385
Tarrant County, TX	1,449,290	1,612,048	1,809,034	1,946,346	1,982,498
Bexar County, TX	1,393,035	1,529,270	1,714,773	1,860,274	1,897,753
Broward County, FL	1,622,974	1,746,896	1,748,066	1,869,679	1,896,425
Palm Beach County, FL	1,131,189	1,278,380	1,320,134	1,398,518	1,422,789
Hillsborough County, FL	998,994	1,143,154	1,229,226	1,318,325	1,349,050
Orange County, FL	896,123	1,053,341	1,145,956	1,256,495	1,288,126
Travis County, TX	811,776	891,266	1,024,266	1,150,996	1,176,558
Fairfax County, VA	969,987	1,019,490	1,081,726	1,139,045	1,142,234
Mecklenburg County, NC	695,348	798,701	919,628	1,011,928	1,034,070
Wake County, NC	627,906	746,048	900,993	999,271	1,024,198
Fulton County, GA	815,579	818,737	920,581	996,463	1,010,562
St. Louis County, MO	1,016,202	1,004,109	998,954	1,002,188	1,003,362
Pinellas County, FL	921,500	929,426	916,542	938,144	949,827
Shelby County, TN	897,466	913,201	927,644	938,405	938,069
Collin County, TX	491,272	647,187	782,341	886,052	914,127
Duval County, FL	778,896	828,988	864,263	899,353	913,010
Gwinnett County, GA	588,133	710,978	805,321	877,726	895,823

Figure 11
Sample dashboard based on population data

Communications, Training, and Education

There are many different tasks, namely the producing of working papers, conference calls, and training opportunities for member states.

Working Papers

ITTS published several working papers (works mentioned earlier were not discussed here, but the whole list of working papers is posted in the Appendix.):

Working Paper 1 – “International Maritime Trade Benefits the Nation’s Economy” (August 2013). International traffic through a maritime port accounted for 11% of the nation’s 2012 GDP. For states without coastal port facilities, the estimated economic share of maritime trade was lower than the national average (Figure 12). For most inland states, international trade through a port accounted for 5% to 10% of their economies, except for Mountain West where the range was 1% to 4%. As trade grows, so too does the importance of ports to handle this trade, creating jobs in port areas.



Figure 12
State GDP estimated share from maritime trade

Growth in ports also requires strong inland market connections to ensure that U.S. goods are competitively priced in world markets. This supports/creates jobs for many different industries and modes throughout the nation, just not in port areas.

The true contribution may be higher since the nature of international shipments and global supply chains may negatively skew the value of maritime trade to these states. International trade will remain a critical and growing component of the U.S. economy, as highlighted by the National Export Initiative <https://ustr.gov/nei> and the push for more trade agreements. Improving trade throughout the nation's maritime system and its linkages to inland markets can provide economic opportunities to U.S. firms. However, as with most infrastructure in the United States, this “highway on-ramp” to global prosperity is in need of attention, as “potholes” can disrupt our transportation system and the economy. The nation's infrastructure requires constant and secure funding, not only for ports and their associated dredging and infrastructure needs, but also for the corridors that link ports with inland markets.

Working Paper 2 – “Current Trade Trends Between the ITTS Member States and Cuba” (October 2016). The paper provided a brief introduction to trade activity between the ITTS member states and Cuba. The report included appendix tables highlighting trade flows by customs district, by state of origin and commodity. For most states, trade with Cuba was not a sizable part of their trade activity at the time the report was published. Figure 13 compares state export trade with Cuba.



Figure 13
Top state exports to Cuba

Working Paper 3 – “Thoughts on the Challenges Associated with Public Sector Planning for Truck Parking Facilities” (December 2016). Truck parking remains a problem for many reasons:

- Public and private parking spaces, trucking companies, and various shippers/receivers view the truck parking solution as someone else’s problem, or a cost they are unwilling to bear.
- The trucking companies, in their rush to reduce costs, are not necessarily willing to pay for parking, nor do shippers want trucks parking on their facilities, unless the truck is actively handling cargo.
- Truck parking demand tends to fall into either parking to satisfy “just in time” services, normal loading/delivering cargo, or for some unscheduled or mandated rest period, thus parking time can range from minutes to hours, and by location, which complicates planning decisions.
- Private rest stop operators are adding more trucking capacity, but truckers may not want to use these facilities, nor are these facilities located where trucks “need” parking, such as along the urban fringe areas or at an urban core.
- Trucking firms view public roadway rest stops as a “free resource,” but with limited publicly available parking spaces, trucks choose to park illegally, parking along a roadside or at some other property. This decision often puts the truck driver (and cargo) at risk, while increasing risks to other roadway users and damaging the physical roadway. The public sector, given limited budgets, faces a dilemma of maintaining parking facilities, while considering truck parking needs as one method to improve highway safety and reduce maintenance costs where illegal parking occurs.

Ultimately, truck parking remains a private sector decision, but one that depends upon public sector participation. There remains no “one size fits all” solution, but truck parking planning in the public sector should address the following:

- Understand the available supply of both public and private truck stop parking spaces and cargo origin/destinations.
- Identify the geographical area of the study to understand how to serve trucks in a region.
- Encourage public and private sector areas of collaboration, which may include new technologies or data sharing.

The recorded webinar for the member states (held July 2016) was posted online (<http://ittsresearch.org/adobe/parking/truck%20parking%20conference%20call.mp3>) Figure

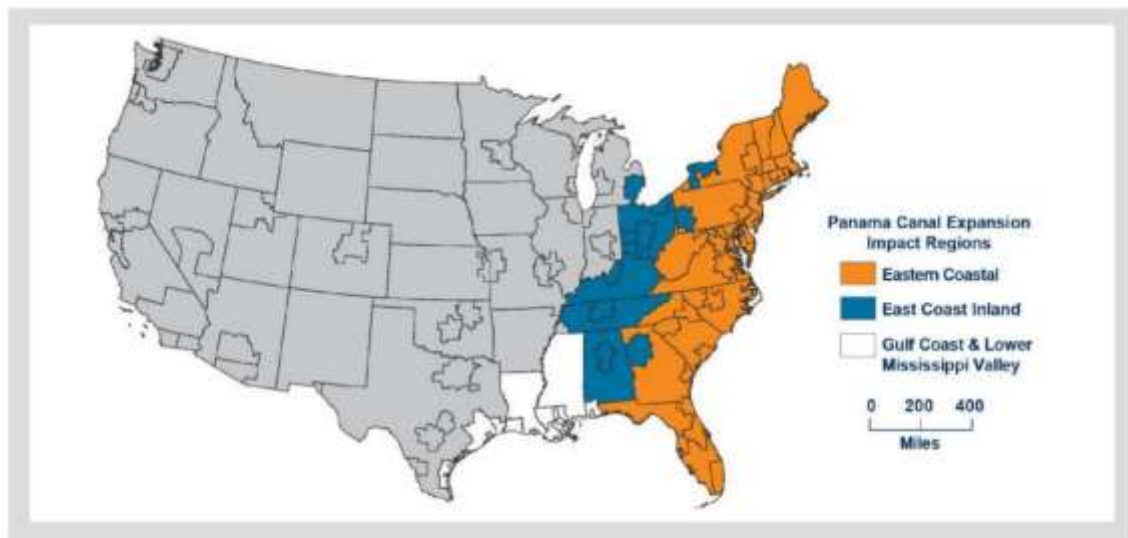
14, from the Working Paper, identifies some of the ways different groups influence truck parking decisions.

<i>A Comparison of How Firms Can Influence the Truck Parking Decision</i>					
<i>Principal Agent</i>	Truck Company/Driver	Origin/Receiver	Infrastructure/Parking Provider	Regulator (Highway Patrol)	Other Public Entities ²⁰
<i>Key Objective</i>	Manage Operational Costs and reduce under-utilized miles (empty or non-revenue producing trips)	Manage inventories with logistical solutions	Provide parking for safety reasons (public) or for profit (private)	Improve traffic safety	Community Safety
<i>Potential Areas of Control</i>	The truck route, equipment, in-transit parking decisions	Time of pick-up/delivery	Build and Maintain parking, Signage, Driver notifications concerning parking slots	Safety inspections, citation authority, operational allowances, time	Land use, truck routes, restricting truck operations
<i>What they don't control</i>	The truck destination, last mile parking, zoning issues, truck operational bans	Smaller sites -Near site parking (larger sites normally provide some parking areas or could provide space)	Demand for parking by location or time	Hours of Pick-up/Delivery	Shippers need to receive cargo

Figure 14
Generalized truck parking matrix from the working paper 3

Working Paper 4 – “The Immediate Aftermath of the Panama Canal Expansion on the Southeastern United States” (December 2016). With much fanfare, the long expected third set of locks officially opened in June 2016, with the passage of China Ocean Shipping Company’s aptly named “Panama.” The expanded Panama Canal should benefit trade with the Southeastern United States in the future. However, the Panama Canal has not seen the immediate boom in shipping that was anticipated when the project was first approved in 2006. Part of the reason is that while carriers have already shifted some trade from the West Coast to Suez Canal services, worldwide trade has not grown as strongly as anticipated, and such large infrastructure patterns take time for ship chains to fully adjust to these new systems. It is anticipated that between 2015 and 2020, carriers will travel the Canal with larger vessels heading to/from the Southeast, from both Asia and Latin America, but the forecasted boom to the Eastern U.S. will continued to be shaped both by world markets and

shipper's anticipated service needs. Figure 15 estimated where the expanded Panama Canal would influence regional competitiveness regarding U.S.-Asian trade.



Source: Parsons Brinckerhoff, Panama Canal Expansion Study, June 2012

Figure 15
Map showing expected Panama Canal Expansion competitiveness

Working Paper 6 – “Industry Significance of 3D Printing to Transportation Logistics, Traffic Activities, Planning and Asset Management” (August 2017). This commissioned paper, written by William D. Ankner, and Robert L. James, discussed the changing landscape of advanced manufacturing because of the emerging 3D printing, or Additive Manufacturing, processes.

Some of the key takeaways are: The timing of a widespread mass production of 3D impacts is uncertain but accelerating. The application of the technology to industrial parts—using metals as well as polymers — has shifted 3D printing from the theoretical into the practical in high-tech fields like aerospace and automotive production. The potential cost savings across the entire supply chain, in the range of 50%-90%, is key for slow moving and customized products. Many experts view these changes as having major systems-wide and distribution-wide mass production effects between 2022 and 2027. Additive Manufacturing (AM) technology can create an increasingly diversified array of products, eliminate key segments of the supply chain, cluster production and delivery at the consumer's doorstep. It is part of a digitization of data and processes that have fueled ecommerce, advanced robotics and helped direct the internet of things. Like the above, its disruptive and explosive elements need to be articulated and applied in transportation and infrastructure planning and

operations. State transportation departments should identify 3D processes, products, and parts usage that can be employed to improve operations, as well as infrastructure maintenance and delivery. A presentation webinar with the authors was held in December 2016. The PowerPoint and audio are posted at the <http://ittsresearch.org/state-reports.html>.

Working Paper 9 – “A Planning Template for a Freight Advisory Council Meeting” (September 2017). The following report contains a template for a half day “Private Sector Freight Planning” session for the public sector. In 2008, DOTD organized a freight symposium in partnership with Louisiana Economic Development. The joint focus was to understand how transportation and economic development must operate together to promote Louisiana businesses. While not a part of a traditional freight advisory council, the blended content sought to outline basic freight transportation issues while also capturing how transportation contributes to the broader decisions facing private sector operations.

Working Paper 20 – “The Potential for Domestic Waterways to Handle Non-Traditional Cargos” (July 2018). Some of this is covered in Working Paper 10 “Peer Meeting at Smart Rivers” and the data integration work (WP 7 “Summary of the Data Integration Work Program” and 13 “Tableau Training Packet for Scott County, Missouri”), but the working paper discusses the role of waterways in the ITTS region as well as some thoughts on how to attract more cargos to use waterways as a modal alternative. After discussing some of the key agents needed to make the service work, the author discussed some institutional considerations about the potential for container on barge services in the ITTS region.

Conference Calls

ITTS held a monthly conference call (second Monday of every month), as well as special meetings as requested by member states. Webinars were organized around presentations on work by member states, data programs or ongoing projects (posted on either YouTube or with the working paper report). After the passage of both MAP-21 and the FAST Act, ITTS organized conference calls for the member states, which included working with both AASHTO and FHWA, to ensure the states had the information they required in adopting provisions related to freight shipments. A list of conference calls and webinars are listed in the Appendix.

Specific Work for Member States

ITTs also performed work for member states. For most states, this involved traveling to the specific state to meet with DOT staff and/or make conference presentations. ITTS also completed work for specific member states such as:

- Participating in Freight Advisory Council Meetings
- Working on legislative materials (submitted materials to FHWA, and prepared legislative materials for West Virginia, Mississippi, Missouri, and Louisiana.)
- Prepared research reports on trade with Cuba for DOTD Executive Staff
- Organizing Port of Bienville tour for MDOT and DOTD Staff
- Reviewing Freight/Rail Plans for Louisiana and Mississippi
- Assisted DOTD in preparing materials related to maritime ports and navigation channels
- Attending M70 meeting in Cincinnati at request of Kentucky Transportation Cabinet
- Added a state-based word cloud for Missouri (Figure 16) and updated the state webpage portal (<http://www.ittsresearch.org/Latts2-State-Summaries.html>)

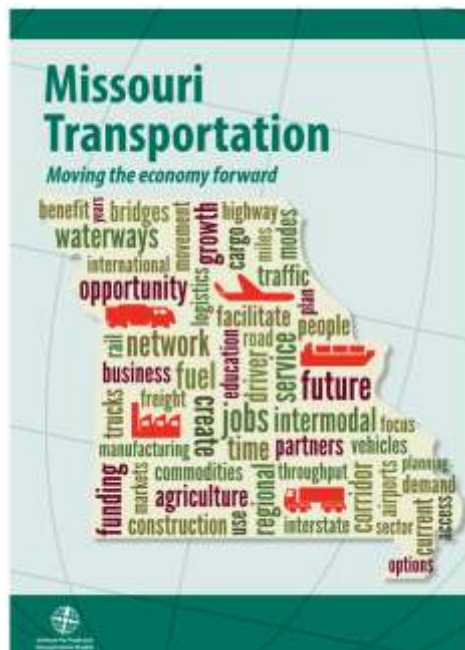


Figure 16
Missouri word cloud

ITTS Newsletters

ITTS published a newsletter that was not only sent to the member states, but to people who have joined the ITTS mailing list or attended ITTS conferences. (ITTS does not buy or sell mailing lists.) A list of newsletters, highlighting the main articles, is included in the Appendix.

Other Related Items

- At the request of ITTS member states who are also members of the I-95 Corridor Coalition, ITTS engaged in ongoing discussions with the group. These included working on two I-95 Capstone review panels (several ITTS members were involved), and ITTS was both interviewed and provided review comments on the Federal Highway Administration's Freight Fluidity paper that was prepared by the I-95 Corridor Coalition.
- At the request of Kentucky and Missouri, who are also members of the MidAmerica Freight Coalition, in addition to ongoing working discussions, ITTS also partnered on the 2013 Freight in the Southeast Conference, and policy and planning discussions related to truck parking and freight planning.
- ITTS also submitted comments on FHWA, Docket FHWA-2013-0050, on February 19, 2014 concerning the Primary Freight Network. The comments were reviewed and discussed with ITTS member states prior to posting. The comments are included in the Appendix, but the docket can be accessed at <https://www.regulations.gov/document?D=FHWA-2013-0050-0138>.

Training

Recognizing that the various states have diverse levels of expertise, experience or staffing levels - training remained a critical part of making the ITTS materials available to the member states.

ITTS provided training related to the Data Integration, FEAT, and SHIFT models. Both SHIFT and FEAT training modules were conducted during the 2017 Freight in the Southeast Conference. All training materials are available online on the YouTube Channel (<https://www.youtube.com/channel/UC8UHZzfMkZA5sLe8UPi7WjQ/videos>.)

ITTS notified states about various scheduled webinars that may have been of interest to member states, in addition to the webinars, which where are available on the ITTS YouTube Channel.

Meetings

Freight in the Southeast Conference

Since 2010, ITTS has organized an annual Freight in the Southeast Conference. The Conference location and hosting has been shared across the region: St. Louis, Missouri (2018); Savannah, Georgia (2017); New Orleans, Louisiana (2016); Biloxi, Mississippi (2015); Tampa, Florida (2014); and Louisville, Kentucky (2013). The conference summaries have been posted online as working papers, and the presentations are posted on each conference's website while the agendas are posted in the Appendix.

The meetings were largely funded by conference registrations and sponsorships, while travel costs for member states were reimbursed by the pooled fund.

Finally, Working Paper 8 "Planning Template for the Freight in the Southeastern Conference" (September 2017) was the basic planning document for each "Freight in the Southeast" conference. Each conference was different, based on the various goals established by the member states, but the Working Paper outlined conference planning elements and timelines.

ITTS Project Review Meetings

The Project Review meetings occurred in the summer to set the work plan for the upcoming fiscal year, the states' voted to stop the Summer Meeting in 2016. The agendas to the following meetings are listed in the Appendix.

Table 1
ITTS project review meetings

2013	Washington, DC (FHWA-AASHTO Freight Partnership V)
2014	Atlanta, Georgia
2015	Little Rock, Arkansas
2016	Kansas City, Missouri

Peer Meetings

ITTS also organized three peer meetings for the ITTS member states. These meetings were approved by vote by the member states and provided additional opportunities for the ITTS member states to discuss specific ITTS work tasks as related to a specific work topic. The agendas to these meetings are posted in the Appendix.

Autonomous Trucks (Baltimore, Maryland 2016). This meeting, held in prior to the I-95 Corridor Coalition's *Connected and Automated Vehicles Conference: What States Need to Know*, discussed the emerging technologies related to trucks, such as truck platooning and autonomous trucks. The meeting summary was published as Working Paper 11, and the agenda is posted in the Appendix. (The information on the I-95 Conference is posted here <http://i95coalition.org/2016/03/16/connected-and-automated-vehicles-conference-what-states-need-to-know/>.)

Freight Data (Irvine, California, 2017). This meeting, held after the Transportation Research Board's (TRB) Innovations in Freight Data Workshop, focused on the Data Integration work plan and training on using the Tableau software. The meeting summary was published as Working Paper 12, and the agenda is posted in the Appendix. (The TRB Innovations in Freight Data Workshop materials can be accessed at <http://www.cvent.com/events/innovations-in-freight-data-workshop/custom-18-b5bdf9d69f294e21885cb4fb0020df02.aspx>.)

Domestic Waterways (Pittsburgh, Pennsylvania, 2017). This meeting, held after the Smart Rivers Conference, focused on domestic waterways and economic development issues. An update on the Container on Barge/Over-Dimensional research project was also discussed. The meeting summary was posted as Working Paper 10. (For information on Smart Rivers, please visit <https://www.pianc.org/smartrivers.php>.)

For all meetings, ITTS provided funds for members to travel to the peer meeting, while also providing conference call services (audio and video) for members unable to attend.

Meetings for ITTS Member States

These were meetings that ITTS was requested to participate in by a member state. ITTS attended/ spoke at the following events:

- Louisiana Transportation Research Council conference
- Louisiana Freight Advisory Council meetings
- Mississippi Freight Advisory Committee meetings
- West Virginia planning conferences
- Arkansas planning conferences
- Kentucky - 35th Annual KY Transportation Conference
- Mississippi State Senate Chambers on inland waterways

- FHWA sponsored megaregions meetings in Atlanta and Memphis
- ITTS State Freight Discussion Group at SASHTO 2014

Meetings with Other Groups

- ITTS participated in AASHTO Meetings, where ITTS spoke or participated with various Freight Related subcommittees. ITTS also organized, with its member states, many conference calls with AASHTO on MAP-21 and the National Freight Strategic Network.
- ITTS participated in FHWA and the Bureau of Transportation Statistics on the future of the Freight Analysis Framework, as well as in conferences related to the Commodity Flow Survey. ITTS also assisted BTS in peer reviewing materials with member states before they were released.
- ITTS attended Transportation Research Board annual meetings and committees, including speaking at several annual meetings and reviewing submitted papers.
- Regarding other groups, ITTS has worked with Inland Rivers Ports and Terminals (IRPT) and the American Association of Port Authorities (AAPA) on topics related to evaluating the economics of port infrastructure and Water Resource Development Act.
- ITTS worked with the Mississippi Intermodal Council Board, the Regional Planning Center, the New Orleans World Trade Center and other regional groups.
- ITTS continued to work with the United States Corps of Engineers, regarding both policy/planning activities, as well as with the National Data Center in New Orleans.
- ITTS attended FHWA meetings in the New Orleans to discuss freight activities and freight policy.
- ITTS sponsored the Logistics, Trade and Transportation Symposium in Mississippi (at the request of MDOT).
- ITTS also moderated a working session at “The 4th Annual Manufacturing Summit” at Mississippi State.
- Attended Regional Planning Commission Freight Meetings, New Orleans Board of Trade functions, New Orleans World Trade Center Functions, and other professional freight meetings in the New Orleans area.

CONCLUSIONS

When examining the ITTS work program, there were many diverse work elements and the following conclusion reflects the diversity of work performed. Over the contract period there was a shift in the importance of freight transportation infrastructure as federal policy put more emphasis on freight needs. With the passage of MAP-21 (2012) and the FAST Act (2015), states were first recommended and then required to have State Freight Plans. During the same time, ITTS assisted the state members in understanding the Primary National Freight Network, discussing with each state the network attributes and submitting a letter to Federal Highway Administration. (See the Appendix for a copy of the submitted comments.) Federal policy also became more multimodal, as more “freight” projects became eligible for funding. As such, the information needs for state planners became critical over the study period. This was accomplished through the development of tools/models/data, preparing requested working papers, and meetings/conferences.

When the ITTS contract was approved, the LATTS network appeared to be a component of a regional freight strategy, but the network needed to be updated and enhanced with additional data/models.

ITTS subcontracted out two projects to be developed for the member states. The first, the SHIFT model, was an extension of the initial Latin American Trade and Transportation Study, PHASE 1 (LATTS). LATTS focused on a regional network of ports, highways, airports, railroads, and other key facilities that were regionally important for the goods movement industry. This network was enhanced by the SHIFT model when updated the network data was supplemented with a Travel Demand Model and added and Existing and Committed network for states to perform scenario planning. The SHIFT model allows the member states to conduct multiregional travel demand modeling at a sketch planning level. Such a model, when combined with regional corridor studies, could provide a useful tool in examining traffic patterns that cross state lines.

The second tool, the FEAT model, was envisioned to help states regarding economic analysis regarding work on competitive grants or to do benefit cost studies for various projects. Like the SHIFT model, various states used different economic models (such as IMPLAN or REMI) which resulted in additional work to make tailored models for each state to use. The FEAT modules provide some insights into economic assessments, either tied to a Travel Demand model (On model), a standalone project (OPS model), or for considering highway–rail mode shift (Rail model).

The member states voted to create a data integration work plan tied to the Tableau data program, focusing on publicly available data. Through ITTS, each state received a Tableau Desktop license, so they could manipulate the findings, however, the databases can also be accessed in Tableau Reader, providing flexibility about how to use/share the workbooks. The work resulted in several different Working Papers highlighting the development and use of the various databases (Working Papers 7 “Summary of the Data Integration Work Program”, Working Paper 13 “Tableau Training Packet for Scott County, Missouri”, Working Paper 21 “Executive Briefing Book”) and underscored the need for states to understand the data source and its uses. It also emphasized the need for training to address the limited time states may have to learn new tools.

This question of training and getting states “up to speed on freight” resulted in examining alternative means to engage the ITTS member states through many different formats, including several webinars for the ITTS member states, which in some cases were conducted by the states themselves, and a peer meeting on data in conjunction with the “Innovations in Freight Data Workshop” in 2017.

In all cases, the question centered around, “what this new tool means for a state DOT planner in their work?” This need to understand and be able to duplicate the results required many training sessions for all models, which were captured as training videos and writing training materials. The member states have different approaches when conducting planning, economic and analytical studies, so how to make these tools applicable to planners was very challenging.

Yet there was also basic research conducted for the ITTS member states. Originally, these needs focused on international trade activities, as there was a growing interest on promoting exports for state-based job creation. This led to the development of the state export brochures, based on the “State Trade and Transportation Portals” developed for each member state on the ITTS Website, as well as Working Paper 1 “International Maritime Trade Benefits the Nation’s Economy.” There was one working paper discussing the short-term cargo shift after the Panama Canal expansion and a second working paper on southeastern trade with Cuba (Working Paper 2 “Current Trade Trends Between the ITTS Member States and Cuba” and Working Paper 4 “The Immediate Aftermath of the Panama Canal Expansion on the Southeastern United States”).

Over the past two years, there was a renewed interest in exports and trade, resulting in the development of additional data integration work specifically on trade data for the ITTS member states in the Working Paper 21 “Executive Briefing Book”. The working paper included many dashboards and summary reports for states to examine international trade flows through their

regional gateways and trade moving into or from the state. Many dashboards are posted on the ITTS website.

There were specific state needs which generated other working papers. For example, Working Paper 3 “Thoughts on the Challenges Associated with Public Sector Planning for Truck Parking Facilities” addressed the needs that the states concerning who is really responsible for what element of truck parking. The study concluded that truck parking remains a private sector decision, but one that depends upon public sector participation. The public and private sectors should look at ways to work together in finding and managing space that satisfies the short and long-term parking needs truckers need.

ITTS also commissioned Working Paper 6 “Industry Significance of 3D Printing to Transportation Logistics, Traffic Activities, Planning and Asset Management.” The paper addressed not only implications of 3D printing on supply chains, but also infrastructure project delivery and inventory management for state departments of transportation.

Regarding autonomous trucks, the states requested ITTS to organize another Peer Meeting in connection with the I-95 Corridor Coalition. Working Paper 11 “Peer Meeting - Connected Trucks” did not necessarily answer the “What” question, but provided a good review of the current state of “What information is needed at a state level to handle these vehicles.”

Regarding domestic waterways, two working papers (Working Paper 10 “Peer Meeting Focusing on Domestic Ports and Waterways” and Working Paper 20 “The Potential for Domestic Waterways to Handle Non-Traditional Cargos”) and additional presentations indicated that state DOTs should focus on assisting domestic waterway development, but should not ignore the market factors that share mode share shift and freight patterns.

Finally, addressing multimodal freight solutions has remained an ongoing concern for the ITTS member states. For example, ITTS organized a Peer Meeting in conjunction with the Smart Rivers conference in 2017, which discussed many aspects of domestic waterway systems and economic development (Working Paper 10 “Peer Meeting Focusing on Domestic Ports and Waterways”). Also, Working Paper 13 “Tableau Training Packet for Scott County, Missouri” was written to assist state planners in being able to understand how to use the data integration work to examine modal options and markets.

In many ways, concluding the work of ITTS highlights that state DOTs have emerging needs to understand freight in many different areas but that these do not necessarily have the same

priority at each state. Drowning in a sea of distractions and urgency, it can be difficult for states to understand what information is important concerning the latest evolutions in goods movement. Having a regional group such as ITTS provided two benefits: one being internal to the group, and the other serving as an external extension. Internally, the working forum provided by ITTS allowed the members a freedom to communicate their needs and desires among their peers, which added to the value of the meetings and conference calls. Externally, ITTS provided a forum for the member states to request additional meetings, information, webinars with various groups, such as the Federal Highway Administration which allowed the member states better access to FHWA staff, while also allowing FHWA staff to directly discuss freight related policies with the member states.

The ability of ITTS to represent a group of states to gather and share knowledge and experiences in a way that may be more difficult for a member state alone generated benefits to the member states. This and the Freight in the Southeast Conference highlighted the need of the ITTS member states to further collaborate in a way specifically tailored to the region's unique role concerning goods movement.

RECOMMENDATIONS

Given the changing nature of freight logistics, technologies, system resiliency, etc., the area of goods movement research should remain an import research area for state departments of transportation. The continued focus of freight investment, first in the Moving Ahead for Progress in the 21st Century Act (MAP-21) and now the Fixing America's Surface Transportation (FAST) Act signifies that federal interest in freight will only increase in the future. There will remain ongoing needs to integrate freight data and analytical tools with other DOT operations/programs, in addition to grant applications, asset management and economic development.

Working with the member states on updating the LATTS network for the SHIFT model highlighted the need to work better with not only with the member states, but also with FHWA and other federal groups regarding the alignment of the primary freight network from a regional perspective. There remains a need to understand what the main traffic activities are within a region, which could be modelled through the SHIFT model, or examined alternative multistate projects through various benefit cost analysis scenarios developed by the FEAT model or doing market analysis through the Data Integration project. Each of those tasks, while developed as separate tools, could be combined to provide a view of a region's freight activity for planning and program purposes.

Yet simply providing the tools is not enough. The member states needed additional training to understand what was included in each work element. Given the increased pressure placed upon state DOT staff to produce information in a timely manner, such training is critical, for not only understanding what was done, but also to be able to communicate the work program conclusions to others with some degree of confidence. This focus on transferrable tools was evident in the training for the SHIFT, FEAT, and Data Integration work elements, that states were at different levels regarding the use of various analytical and data programs, so the application of these tools by the ITTS members did vary. This resulted in the work tasks also having a strong training component, supplemented by materials and videos.

Finally, there is a need for state DOT staff to engage one another, sharing information, studies, and work efforts. But there exists a role for a regional group, such as ITTS, to assist member states in understanding freight planning/ policy efforts, provide a partnership for DOT staff to engage with other states, and conduct independent research as directed by the member states. The monthly ITTS conference call, peer meetings and the ITTS Freight in the Southeast Conference, provided a forum for state DOT employees to tailor research and agendas that suited their needs, creating more value for the members.

ACRONYMS, ABBREVIATIONS, AND SYMBOLS

3D	Three Dimensional
AAPA	American Association of Port Authorities
AASHTO	American Association of State Highway and Transportation Officials
AM	Additive Manufacturing
BTS	Bureau of Transportation Statistics
CAFTA-DR	Dominican Republic-Central American Free Trade Agreement
COF	Container on Barge/Overdimensional Freight
DOT	Department of Transportation
DOTD	Department of Transportation and Development
FAST	Fixing America's Surface Transportation Act
FEAT	Freight Economic Analytical Toolkit
FHWA	Federal Highway Administration
FSEC	Freight in the Southeast Conference
IMPLAN	Impact Analysis for Planning (IMPLAN)
IRPT	Inland Rivers, Ports, and Terminals Inc.
ITTS	Institute for Trade and Transportation Studies
LATTS	Latin American Trade and Transportation Study
LTRC	Louisiana Transportation Research Center
MAP-21	Moving Ahead for Progress in the 21 st Century
MPO	Metropolitan Planning Agency
NAFTA	North American Free Trade Agreement
NCFRP	National Cooperative Freight Research Program
REMI	Regional Economic Models, Inc. (REMI)),
SASHTO	Southern Association of State Highway and Transportation Officials
SHIFT	Southern Highway Interactive Freight Traffic
SPR	State Planning and Research Program
TAZ	Traffic Assignment Zone
TRB	Transportation Research Board
TWIC	Transportation Security Administration Transportation Worker Identification Card
USACE	U.S. Army Corps of Engineers
VIUS	Vehicle Inventory and Use Survey
WP	Working Paper

REFERENCES

Due to the diversity of the ITTS work effort, a single reference page would provide limited benefit, but each working paper possesses a reference section.

APPENDIX

Working Papers Prepared by ITTS

All working papers are posted on <http://www.ittsresearch.org/state-reports.html>.

2013

- 1 - “International Maritime Trade Benefits the Nation’s Economy”

2016

- 2 - “Current Trade Trends Between the ITTS Member States and Cuba”
- 3 - “Thoughts on the Challenges Associated with Public Sector Planning for Truck Parking Facilities”
- 4 - “The Immediate Aftermath of the Panama Canal Expansion on the Southeastern United States”

2017

- 5 - “Freight in the Southeast Conference Summary, 2017” Savannah
- 6 - “Industry Significance of 3D Printing to Transportation Logistics, Traffic Activities, Planning and Asset Management”
- 7 - “Summary of the Data Integration Work Program”
- 8 - “A Planning Template for the Freight in the Southeastern Conference”
- 9 - “A Planning Template for a Freight Advisory Council Meeting”
- 10 - “Peer Meeting Focusing on Domestic Ports and Waterways”

2018

- 11 - “Peer Meeting - Connected Trucks”
- 12 - “ITTS Peer Meeting on Freight Data”
- 13 - “Tableau Training Packet for Scott County, Missouri”
- 14 - “2014 Freight in the Southeast Conference Summary (Tampa Florida)”
- 15 - “2013 Freight in the Southeast Conference Summary” (Louisville, Kentucky)
- 16 - “2015 Freight in the Southeast Conference Summary (Biloxi, Mississippi)”
- 17 - “2012 Freight in the Southeast Conference Summary (Norfolk, Virginia)
- 18 - “2016 Freight in the Southeast Conference Summary” (New Orleans, Louisiana)
- 19 - “2018 Freight in the Southeast Conference Summary” (St. Louis, Missouri)”
- 20 - “The Potential for Domestic Waterways to Handle Non-Traditional Cargos”
- 21 - “Executive Briefing Book”

ITTS Newsletters

The newsletters are posted online but are listed in reverse chronological order.

(<http://www.ittsresearch.org/newsletters.html>)

2018

- Vol. 10. Issue 3 June 2018. Update on Freight in the Southeast Conference at FreightWeekStL and other work tasks.
- Vol. 10. Issue 2 April 2018. Update on FreightWeek St. Louis, discussion on “Working Paper 11 on Connected Trucks”, the SHIFT and FEAT models, as well as a discussion Florida DOT's backhaul study.
- Vol. 10. Issue 1 January 2018. Announcement of the 2018 Freight in the Southeast Conference

2017

- Vol. 9. Issue 7 November 2017. Working Paper 10 “Peer Meeting Focusing on Domestic Ports and Waterways,” The Lambert's Lagniappe is about the responding to weather events, which has been an ongoing topic in the aftermath of this year's hurricanes.
- Vol. 9. Issue 6 September 2017: Working Paper 7 “Summary of the Data Integration Work Program” and Working Paper 10 “Peer Meeting Focusing on Domestic Ports and Waterways”. The Lambert's Lagniappe is about the “Answerer.” and some short write-ups on other Working Paper 9 “A Planning Template for a Freight Advisory Council Meeting” and Working Paper 8 “A Planning Template for the Freight in the Southeastern Conference”).
- Vol. 9. Issue 5 August 2017: Working Paper 6 “Industry Significance of 3D Printing to Transportation Logistics, Traffic Activities, Planning and Asset Management,” ITTS Training videos, and an editorial on the solar eclipse.
- Vol. 9. Issue 4 June/July 2017: Working Paper 5 “Freight in the Southeast Conference Summary, 2017” and thoughts on getting lost without a GPS.
- Vol. 9. Issue 3 May 2017: A short newsletter highlighting NAFTA trade flows, as well as thoughts on the future of transportation.
- Vol. 9. Issue 2 March 2017: The newsletter discussed how most of the work of late has centered on the ITTS “Freight in the Southeast” Conference, and training for projects like the Southern Highway Interactive Freight Traffic (SHIFT) and the Freight Economic Analytical Toolkit (FEAT). The Lambert's Lagniappe discussed some thoughts on the pleasure of driving an autonomous car.

- Vol. 9. Issue 1 January 2017: Update on the Freight in the Southeast Conference, Summary of Working Paper 4 “The Immediate Aftermath of the Panama Canal Expansion on the Southeastern United States” and Working Paper 3 “Thoughts on the Challenges Associated with Public Sector Planning for Truck Parking Facilities.”

2016

- Vol. 8. Fourth Quarter. Articles included a discussion on the U.S.-Cuba Trade, introducing Judy Toups as the Administrative Assistant, and the announcement of the 2017 Freight in the Southeast Conference.
- Vol. 8. Issue 1. May 2016: Update on the ITTS Freight in the Southeast Conference, trade with Cuba, What is “Transportation Services Index”, and an editorial on system disruptions.

2015

- Vol. 7. Issue 3. December 2015: The TransPacific Partnering Agreement, Temperature Controlled Cargos, Truck Guidebooks, and the ITTS 2016 Conference.
- Vol. 7. Issue 2. February 2015: Trade with the CAFTA-DR, The Vehicle Inventory and Use Survey, as well as the Missouri State Freight Plan.

2014

- Vol. 6. Issue 6. December 2014: The 2012 Commodity Flow Survey has been released, Lambert's Lagniappe - “The Future Will Arrive,” Applications are available for I-95 Corridor Coalition Freight Academy, Top Truck Bottlenecks in the Southeast, 2013, Trade Profile - US-Cuba
- Vol. 6. Issue 5. November 2014: Florida's Automated Vehicle Summit, Update on State Webpage - Trade Data, Lambert's Lagniappe, “Spider Webs and Networks,” What is “OmniChannel Distribution,” Trade Profile -”U.S. Russia Embargo.”
- Vol. 6. Issue 4. August 2014: Lambert's Lagniappe, “Fixing Potholes,” The Importance of Water Transportation in the ITTS Region, What is “Cargo Dimensions,” Trade Profile -”What is An International Shipper.”
- Vol. 6. Issue 3. April 2014: ITTS Freight Conference Summary, What is “DOT-111 Tank Car,” Lambert's Lagniappe “Highway Safety,” Trade Profile - NAFTA, 20 years later, PIANC annual meeting.
- Vol. 6. Issue 2. February 2014: ITTS Freight Conference Agenda, Lambert's Lagniappe “Groundhog's Day,” What is “US-flagged Carrier,” State Trade Statics for 2013, Update on the ITTS Conference and the upcoming National Highway Institute course.

- Vol. 6. Issue 1. January 2014: ITTS Freight Conference Agenda, Lambert's Lagniappe "A Planet Money T-Shirt," What is Commodity Flow Survey, Cotton Exports by state and other updates.

2013

- Vol. 5. Issue 7. November 2013: Missouri Joins ITTS, Announcing the ITTS 2014 Freight in the Southeast Conference, What is "Vessel Sharing Agreements," Toy Imports, Lambert's Lagniappe - Christmas Singularity.
- Vol. 5. Issue 6. September 2013: Airports and Waterways in the Southeast, What is "Maritime Pilots," Mexican Reshoring, Lambert's Lagniappe - Alice in Wonderland and Performance Measures.
- Vol. 5. Issue 5. August 2013: Role of International Maritime Trade to the U.S. Economy, Trade Profile - Coffee, What Is "Ton Miles," Lambert's Lagniappe (Drunks and Statistics!).
- Vol. 5. Issue 4. June 2013: Trade Profile - the Levant, Lambert's Lagniappe (Family Vacation?), What is "Dwell Time," Manufacturing in the Southeast.
- Vol. 5. Issue 3. April 2013: Conference Summary, Trade Profile - Exports from Southeast States through Maritime Ports, Lambert's Lagniappe (Girl Scout cookies), What is "Location Quotient."
- Vol. 5. Issue 2. March 2013: Updating state export and gateway PowerPoint slides, Trade Profile - Exports from Southeast States, Lambert's Lagniappe (Scuffy the Tugboat and Freight Rivers), Georgia State Rail Plan, What is "Force Majeure."
- Vol. 5. Issue 1. January 2013: Trade Profile - Cut Flowers, Lambert's Lagniappe (New Year's Resolutions), Florida DOT is recognized for work on freight issues, TWIC Cards.

2012

- Vol. 4. Issue 7. December 2012: Coal Exports, What is "National Economic Development Estimates," Trade Profile: Mississippi River Exports.

ITTS Presentations

The following list of presentations were made in many different formats, often at the request of the member states. They are listed in reverse chronological order and are also posted online: <http://www.ittsresearch.org/ITTS-Presentations.html>. The presentations ITTS made at various Freight in the Southeast conferences are posted with the other conference materials.

Presentation on the Mode Shift to Waterways (September 2017)

The following speech was presented at the Smart Rivers Conference in Pittsburgh. The work is related to the research on containerized cargos/over dimensional loads moving along the nation's waterways.

Presentation on the 2017 Arkansas Transportation Planning Conference (April 2017)

The presentation provided some thoughts on the future of multistate freight, as well as an update on some of the work that ITTS has done for the member states, including the SHIFT, FEAT and Tableau work elements.

Presentation on the Panama Canal and its Implications for Mississippi (October 2016)

Joining a panel about the current Panama Canal expansion on its immediate effect on Mississippi Trade at the 2016 Mississippi Transportation Institute meeting, the discussion outlined the fact the firms are still adopting to the third lock, and it will be some time for shipping patterns to adjust.

Presentation on the Promoting Inland Ports for Economic Development (October 2016)

At the Mississippi Water Resources Association 2016 Educational Conference, the ITTS Executive Director provided a few thoughts on promoting inland navigation ports. Some of the statistics cited in this report were from the US Army Corps of Engineers Navigation Data Center.

Presentation on Freight Planning and ITTS Work Plan at WV Planning Conference (September 2016)

The speech outlined a few thoughts on the changing nature of freight, the evolution of federal interest in freight planning, some thoughts on freight planning, and how the current ITTS work plan seeks to address some of these planning needs for the member states.

Thoughts on Regional Freight Data Programs (August 2015)

This speech was made as part of the *Freight Movement session* at the Second Annual Florida Transportation Data Symposium. The speech discussed understanding the various details in a data set, including how the data is collected, by whom, and other details concerning the usefulness of the data set. (Some of these thoughts are also echoed through the posted ITTS webinar on understanding data research needs “ITTS export brochure trade and transportation data”.) The presentation finished with some thoughts on how regional activities should be linked to examining freight traffic.

Regional Prioritization of Freight Networks (February 2015)

The speech was prepared for the FHWA Talking Freight Series. This webinar discussed freight movement patterns within large-scale metropolitan areas and between adjacent or nearby metropolitan regions and assessed infrastructure investment needs to address freight movement needs within and between those metropolitan areas. The presentation talked about the integration of freight movements and their implications for freight planning.

https://www.fhwa.dot.gov/planning/freight_planning/talking_freight/february_2015/index.cfm

Connecting the Panama Canal with Missouri (January 2015)

A speech at the 2015 Missouri Conference on Transportation, hosted by the Missouri Chamber of Commerce, largely outlined the Panama Canal project, Missouri's relationship to global markets, and finally how an expanded Canal may benefit the region if carriers and shippers see the Canal as a viable option for their global supply chains.

Presentation on the Institutional Thoughts on Improving Marine Highways (January 2015)

This presentation was part of TRB Session 577, where the role domestic shipping could play in the U.S. transportation system was considered. The presentation focused on the institutional side of the equation, namely that we need to consider domestic shipping as an alternative for future transportation improvements, while many institutional barriers exist at the moment. If interested in the topic, one should also refer to the National Cooperative Freight Research Program (NCFRP) report 32 – “Integrating MTS Commerce Data with Multimodal Freight Transportation Performance Measures to Support MTS Maintenance Investment Decision Making”.

Presentation on Linking Inland Ports to Global Markets (October 2014)

This presentation for The United States Conference of Mayors Metro Ports and Exports Summit in Little Rock touched on understanding that global trends do influence local transportation

decisions. However, both the public and private sectors should work jointly to support expanding trade through better understanding and prioritizing infrastructure investment needs.

Presentation on SASHTO on Regional Freight Corridors (August 2014)

The presentation was part of the session “Mapping out a National Freight Network: MAP-21 Freight Provisions.” Robin Romeo (DOTD) moderated the session which included Rich Biter (FDOT), Tom McQueen (GaDOT), and Randy Guillot (Southeastern Motor Freight First Vice Chairman, American Trucking Association). The comments focused on the importance of freight corridors to the Southeast, including the role between federal and state agencies concerning prioritizing corridor investment.

Presentation on Freight Planning and Performance Measures (May 2014)

This speech was presented at the Arkansas Transportation Research Committee Meeting and Engineering Conference in Little Rock. The presentation outlined what freight shipments are, followed by a few slides on the importance of freight to Arkansas (referring to statistics on the Arkansas website <http://www.ittsresearch.org/arprofile.html>). Afterwards, the speech outlined a few thoughts on what a freight plan is and led a discussion regarding determining performance measures for national freight movements. The speech closed by discussing some of the challenges facing data users in conducting transportation studies.

Presentation on Freight and Economic Development, West Virginia Regional Planning & Development Councils (May 2014)

A discussion on the importance of freight to the West Virginia economy, including comments on changing supply chains, transportation assets and some thoughts on engaging economic development with transportation. The presentation used many of the statistics posted on the West Virginia (<http://www.ittsresearch.org/wvprofile.html>).

Presentation on Urban Freight at the KYOVA Interstate Planning Commission (May 2014)

This was an introduction to urban freight planning and logistics. The general outline was that urban freight involves different types of modes and vehicles, which complicates the research area beyond simply looking at a finite study framework. These movements were linked to broad supply chains, which led to discussions around potential partnerships with the private sector. After discussing some of the federal guidance on freight planning, the presentation outlined thoughts on a broad, introductory freight plan template.

Presentation at the Logistics, Trade, and Transportation Symposium 2014 Theme: Southeastern Opportunities and Challenges (February 2014)

As a sponsoring organization, the author participated in the symposium at the University of Southern Mississippi's Gulf Park Campus. The presentation followed the usual discussion concerning why transportation is important, how it supports economic development, and why focusing on transportation investment remains a critical component of the region's future.

Presentation at the National Lt. Governors Meeting (November 2013)

The speech outlined the work on expanding the Panama Canal and discussed inbound containerized traffic patterns along with changing retail logistics activities.

Presentation at the America's Dream Conference (October 2013)

Outlining the difference between distinct types of freight movement in an urban setting, the speech discussed different strategies associated with improving urban freight movement.

Presentation at the AASHTO Annual Meeting on Regional Freight Planning (October 2013)

Using various slides from the ITTS member states, the presentation discussed the gaps between state planning and national planning that outlined how states could work together to close some of these regional planning gaps.

Presentation at the Mississippi River Economy Summit in Memphis on the Mississippi River's Link to Global Trade and Economic Development (October 2013)

Starting on the lower river, the speech outlined cargo connectivity between international trade and inland markets, as well as discussed thoughts on economic development challenges in addressing business growth along the Mississippi River.

Presentation at the Gulf Intercoastal Canal Association Meeting in New Orleans on the Economics of Waterway Closures (August 2013)

The speech discussed the need to have better data and tools before an event occurs, which would make the analysis more useful in evaluating system responses.

Presentation at the AASHTO-FHWA Freight Partnership meeting on Freight Data and MAP-21 (August 2013)

On a panel with Bill Gardner from Minnesota and Ernie Perry from MidAmerica Freight Coalition, the presentation focused on defining freight planning and how it communicated to various stakeholders considering MAP-21 freight provisions.

Presentation at the Arkansas State Highway and Transportation Department Transportation Research Committee Meeting (May 2013)

There were two presentations: one at the breakout session and the other at the general session. They should be considered as two parts of the same presentation on the need to look at infrastructure and freight planning in Arkansas.

Presentation on Commodity Flows for the Inland River Ports and Terminals (IRPT) Annual Meeting (March 2013)

Using the premise that waterways are engaged in support of the transportation of energy (energy used for electricity (coal), transportation (petroleum) or food (soybeans, corn and ethanol)), the speech discussed trends in these industries and expressed thought on global markets over the next thirty years. Finally, the talk outlined how waterways can remain viable for supporting exports for these cargos.

Presentation on Trends in Transportation for the Delta Regional Authority's Delta Leadership Institute (February 2013)

Focusing on trends on economics, globalization and transportation, the discussion outlined how to leverage local investments to potentially support economic growth.

Presentation on the Possible Implication of the Panama Canal Expansion on the Mississippi River (February 2013)

The presentation, sponsored by the New Orleans Board of Trade, discussed the Panama Canal. The other speakers were Gary LaGrange, Port of New Orleans, and John Hyatt of the Irwin Brown Company. The speech discussed the following questions: Why expand the canal? What is the importance of trade to Louisiana? Does the Canal change North American traffic markets? What can the region do to prepare the region to attract more cargo?

Presentation on Prioritizing Region Freight Networks (Feb 2013)

Speaking at the LTRC Conference, the presentation outlined the importance of considering the “why” of freight movement, as well as answering the question - what is a freight corridor? Some thoughts on how MAP-21 encourages more consideration of freight issues, was followed by a discussion on the regional integration of the states that highlights how planning for freight should not be done in isolation.

Presentation on Waterway Benefit Cost Analysis and Its Thoughts on Broader Multimodal Studies (January 2013)

This presentation was presented at “TRB Session 522: Benefit Cost Analysis for Freight Projects: Moving Theory into Practice.” The presentation focused on USACE BCA and contributed thoughts on multimodal analysis, based on previous experiences at the USACE.

Presentation on Waterways for the Kentuckians for Better Transportation (January 2013)

This presentation discussed trends in worldwide global domestic waterway usage, waterways and supply chains, inland waterways in Kentucky, and offered thoughts on positioning waterways to be more competitive in the future.

ITTS Training Videos

These videos, posted on the ITTS YouTube Channel, are categorized by topic into separate Channels <https://www.youtube.com/channel/UC8UHZzfMkZA5sLe8UPi7WjQ>.) These videos were largely screen captures created during a webinar/conference calls with the ITTS member states. The videos are unedited, and are presented “as is,” to provide both a document concerning the work performed but also a resource for others wanting to use the various tools.

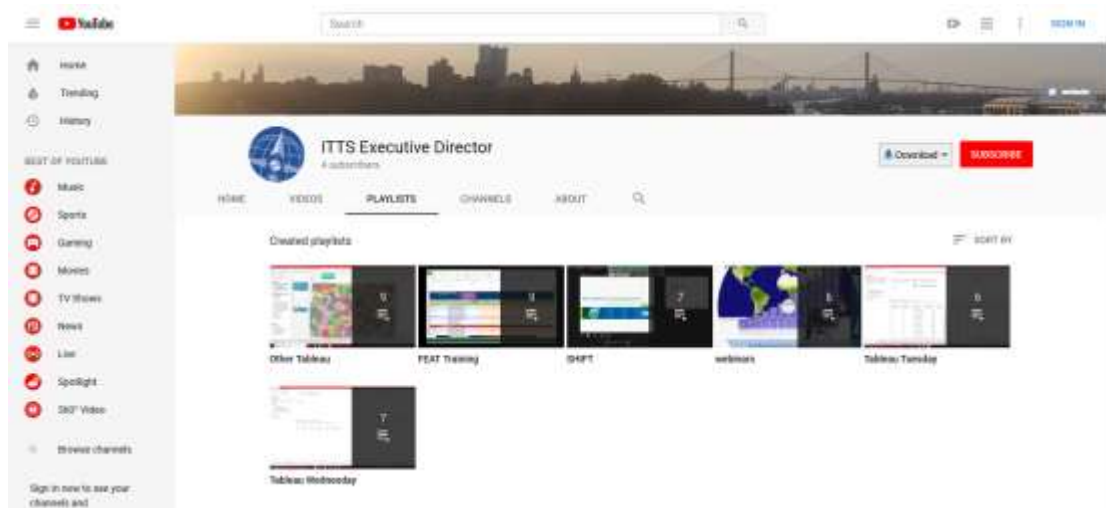


Figure 17

List of playlists for ITTS videos based on training and webinars

Other Tableau Videos

These videos were not part of the larger training sessions that occurred in July 2017. For those sessions, please refer to the Tableau Tuesday and Tableau Wednesday playlists. The first video, on how to manipulate the dashboards, was related to Working Paper 21 “Executive Briefing Book”, while the training session in Irvine is part of Working Paper 12 “ITTS Peer Meeting on Freight Data.” The other tableau videos were posted prior to the July training sessions.

https://www.youtube.com/watch?v=b160vcfPp6Y&list=PLOW_SBz3YFIw7wXff0PHbeDLunBnFZkVY

Table 2
List of “Other Tableau Videos”

Video Title	Duration (Link embedded here)
How to manipulate dashboards for briefing book (WP 21)	<u>9:06</u>
Discussion on data and research	<u>5:15</u>
Step 1 metadata for FAF database	<u>37:56</u>
Step 2 explaining the FAF worksheets	<u>21:16</u>
Step 3 exporting pdf changing filters	<u>32:27</u>
Editing Irvine training session Tuesday afternoon (WP 12)	<u>1:11:45</u>
Step 5 Capture 01	<u>5:36</u>
Create percentage tables	<u>4:36</u>
Step 6 introduction to maps	<u>4:36</u>
Introduction to Tableau reader	<u>5:08</u>
Tableau reader for Corps state to state database	<u>6:36</u>

Tableau Tuesday/Wednesday Training Videos

These are the unscripted, unedited training offered to the ITTS states in July 2017, and are tied to the Data Integration work effort. This training was conducted on Tuesday and Wednesday. Both sessions cover the same material, but in a different order based on feedback from the states. This is largely in relation to Working Paper 7 “Summary of the Data Integration Work Program” although the same databases were used to develop Working Paper 13 “Tableau Training Packet for Scott County, Missouri” and Working Paper 21 “Executive Briefing Book”.

https://www.youtube.com/watch?v=eMNLWJ33PiE&list=PLOW_SBz3YFIz89OhuX5lTQKiyTy7VZ4pL

Table 3
List of videos on “Tableau Tuesday Training”

Video Title	Duration (Link embedded here)
Tableau Training: Tuesday corps state to state part	<u>46:38</u>
Training: Tuesday state to state part 2	<u>48:42</u>
Tableau Training: Tuesday corps state to state data part 3	<u>40:19</u>
Tableau Training: Tuesday cbp database discussion	<u>24:41</u>
Tableau Training: Tuesday FAF part 1	<u>49:23</u>
Tableau Training: Tuesday FAF part 2	<u>31:01</u>

Table 4
List of videos on “Tableau Wednesday Training”

Video Title	Duration (Link embedded here)
Tableau Training: Wednesday session 1 creating NFL database introduction to tableau day 2	<u>41:20</u>
Tableau Training: Wednesday session 2 FAF training part1a	<u>48:30</u>
Tableau Training: Wednesday session 3 faf second part:	<u>44:03</u>
Tableau Training: Wednesday session 4 state to state corps database	<u>25:40</u>
Tableau Training: Wednesday session 5 cbp part 1	<u>27:53</u>
Tableau Training: Wednesday session 5 cbp part 2	<u>21:54</u>
Tableau Training: Wednesday session 5 cbp part 3	<u>14:38</u>

List of SHIFT Videos

These videos were based on training sessions conducted for the ITTS member states on various aspects of the SHIFT model. As these videos are unedited, they are presented as another resource in addition to the training manuals developed for the ITTS states.

https://www.youtube.com/watch?v=HesfZDM5SRE&list=PLOW_SBz3YFIxm7ooyQ75P-53VMqskTIF7

Table 5
Videos related to the SHIFT model

Video Title	Duration (Link embedded here)
SHIFT training at freight in southeast conference	<u>4:05:16</u>
SHIFT model methodology and LA Scenario	<u>59:44</u>
SHIFT model Training Webinar Oct 13, 2016	<u>1:45:30</u>
SHIFT Training - 3rd session- at the Southeast Conference 2017	<u>1:35:16</u>
SHIFT Training - 2nd Part- the Freight in the Southeast Conference 2017	<u>1:09:22</u>
Video recording of LA Scenario	<u>1:27:46</u>
SHIFT Training -1st Part- the Freight in the Southeast Conference 2017	<u>18:44</u>

List of FEAT Videos

These videos were based on training sessions conducted for the ITTS member states on various aspects of the FEAT model. As these videos are unedited, they are presented as another resource in addition to the training manuals developed for the ITTS states.

https://www.youtube.com/watch?v=0lNv5iWdVKg&list=PLOW_SBz3YFIyCKY-2yIZLSiwXBtpH5PdA

Table 6
List of videos on FEAT training

Video Title	Duration (Link embedded here)
FEAT training Tuesday morning	1:27:15
FEAT training Thursday session	1:47:00
FEAT methodology webinar-Dec 2016	1:34:07
How to input the SHIFT or other TDM models into FEAT	32:19
ITTS FEAT OPS training tool	38:41
The FEAT On-Model elements - 2017 presentations	1:29:33
Discussion on the FEAT Rail model-2017	36:15
FEAT model discussion January 2018	1:33:22
FEAT final training March 2018	1:38:49

List of Webinar Videos

These videos were based on general topics requested by the ITTS member states or related to specific work programs.

https://www.youtube.com/watch?v=6T7ISS4by7o&list=PLOW_SBz3YFIztN-7IKsPu796z1F4grJD_

Table 7
List of webinar videos

Video Title	Duration (Link embedded here)
ITTS export brochure trade and transportation data	<u>1:04:29</u>
Louisiana supply chain transportation council webinar Drew Ratcliff June 2018	<u>50:21</u>
Florida DOT - presentation on Weigh in Motion estimating for truck weights	<u>27:16</u>
Future of freight data discussion	<u>1:19:06</u>
Florida DOT- Bluetooth deployment test - Webinar for ITTS Member states	<u>1:06:42</u>
Linking HERE Data to Kentucky Transportation Networks, Daniel Hulker	<u>1:13:32</u>

ITTS Conference Calls and Webinars

Table 8
Record of conference calls and webinars

DATE	TOPIC	CALL TYPE
2013		
1/11/13	MAP-21	Conference
2/22/13	MAP-21	Conference
3/4/13	MAP-21	Conference
4/25/13	MAP-21	Conference
6/27/13	AASHTO MAP-21 Freight Implementation Team	Conference
Unable to access calendar items related to the gap between 2013-2015.		
2014		
4/1/2015	WISER data	Conference
4/2/2015	Freight in the Southeast Conference	Conference
2015		
06/03/15	Truck parking project meeting	Conference
06/17/15	Truck parking project meeting	Conference
07/24/15	Truck parking project meeting	Conference
07/30/15	Wisertrade - international trade data	Webinar
08/24/15	Linking HERE data to Kentucky transportation networks	Webinar https://youtu.be/gQTGvbbGiGc
09/08/15	Freight data	Conference
10/05/15	Freight notes	Conference

Table 8
Record of conference calls and webinars

DATE	TOPIC	CALL TYPE
11/05/15	Bluetooth technologies for state corridor modeling	Webinar https://youtu.be/qhblKBpEPhk
11/17/15	HERE/NPMRDS discussion with FHWA	Conference
12/04/15	FEAT model	Conference
12/17/15	FAST freight provisions	Conference
12/18/15	Joel Schofer on freight data	Webinar https://youtu.be/7n6FDV_cPWI
12/29/15	AASHTO SCOP Policy Committee Freight Task Force Discussion	Conference
2016		
01/22/16	National freight strategic plan	Conference
01/29/16	State response to FAST	Conference
02/01/16	FEAT model	Webinar
02/05/16	FHWA Office of Highway Policy Information on current work programs	Webinar
02/12/16	LED and ITTS Freight in the Southeast Conference	Conference
02/17/16	Dr. Joseph Schofer, Associate Dean, McCormick School, Northwestern	Webinar
02/19/16	ITTS Freight in the Southeast Conference Planning Committee	Conference
02/22/16	SHIFT model	Conference

Table 8
Record of conference calls and webinars

DATE	TOPIC	CALL TYPE
03/10/16	41K freight network shapefiles and attributes	Conference
03/24/16	Critical Commodity Conference planning	Conference
04/05/16	Rural freight corridor analysis	Conference
04/07/16	Freight performance measures	Conference
05/23/16	FHWA Office of Highway Policy Information on current work programs	Conference
06/06/16	Data workplan elements	Conference
06/10/16	FEAT model	Conference
06/24/16	FEAT model	Webinar
06/30/16	SHIFT model training	Conference
07/06/16	FEAT model discussion on initial SOW	Conference
07/14/16	SOW Review for FEAT model	Conference
07/19/16	SOW proposed for shift model training	Conference
07/19/16	ITTS newsletter review	Conference
07/26/16	Truck parking	Conference http://ittsresearch.org/adobe/parking/truck%20parking%20conference%20call.mp3
07/28/16	AASHTO	Conference
08/04/16	Data model	Conference
09/08/16	SHIFT model	Conference
09/09/16	Data model	Conference
09/13/16	SHIFT model	Conference

Table 8
Record of conference calls and webinars

DATE	TOPIC	CALL TYPE
09/15/16	FEAT model - SOW update	Conference
09/26/16	Data integration - state dashboard	Conference
10/13/16	SHIFT model training update	Conference
10/04/18	Data model	Conference
11/04/16	FAF4 Tableau	Conference
11/06/16	ITTS Freight in the SE Conference	Conference
12/01/16	FEAT methodology	Conference
12/14/16	Accessing data and FAF	Conference
12/21/16	3D Printing paper	Webinar http://ittsresearch.org/adobe/3dprint/3d%20printing%20webinar-dec%2021%20edited.mp3
2017		
01/02/17	Access to Tableau published workbooks	Conference
03/02/17	SHIFT model closeout	Conference
03/07/17	FEAT model peer meeting	Conference
03/16/17	Innovations in Freight Data Workshop - May 17-18 - Irvine, CA	Conference
03/20/17	Data task force	Conference
03/28/17	Irvine meeting update	Conference
03/28/17	Container on Barge – Oversize freight COF Study	Conference

Table 8
Record of conference calls and webinars

DATE	TOPIC	CALL TYPE
04/07/17	FEAT model	Conference
	Florida Bluetooth Technology	Webinar https://youtu.be/qhblKBpEPhk
05/11/17	Irvine Peer Meeting	Conference
06/01/17	COF SOW	Conference
06/08/17	Freight plans and the approval process	Webinar
06/20/17	Tableau/COF	Conference
06/22/17	Data integration	Conference
07/07/17	Talking HPMS	Conference
07/17/17	Freight Analysis Framework	Conference
07/20/17	FAF/Update of Corps datasets	Conference
07/25/17	Tableau training	Conference/Meeting (Training Video Sessions)
07/26/17	Tableau training	Conference/Meeting (Training Video Sessions)
08/01/17	FEAT training - First Session	Conference
08/01/17	Containerized & Oversized Freight Literature Review	Conference
08/03/17	FEAT training - second session	Conference
08/04/17	ITTS data training - close-out discussion	Conference
08/21/17	Containerized & Oversized Freight Review	Conference
08/30/17	FEAT model update - final work steps	Conference
09/04/17	Close-out data integration	Conference

Table 8
Record of conference calls and webinars

DATE	TOPIC	CALL TYPE
10/20/17	FEAT benefit cost analysis	Conference
10/27/17	Container on Barge - Oversize Study	Conference
11/15/17	2018 ITTS Freight in the Southeast Conference	Conference
11/28/17	COF Study	Conference
12/07/17	FEAT model update	Conference
12/27/17	Executive briefing peer group	Conference
2018		
01/05/18	Executive briefing peer group	Conference
02/01/18	FEAT model review	Conference
02/01/18	2018 ITTS SE Conference peer group	Conference
02/05/18	2018 ITTS SE Conference - St. Louis - Sessions/Schedule	Conference
02/08/18	COF	Conference
02/09/18	2018 ITTS SE Conference - St. Louis - Peer Group	Conference
02/14/18	FEAT model - peer Group	Conference
02/19/18	2018 ITTS SE Conference - St. Louis - Sessions/Schedule	Conference
03/08/18	2018 ITTS SE Conference - St. Louis - Marketing Discussion	Conference

Table 8
Record of conference calls and webinars

DATE	TOPIC	CALL TYPE
03/12/18	Florida DOT Weigh in Motion study	Webinar https://youtu.be/0ChnpOMRhI4
03/13/18	FEAT model follow-up	Conference
03/16/18	FEAT model - final training session	Conference
03/26/18	2018 ITTS SE Conference - St. Louis	Conference
04/05/18	2018 ITTS SE Conference - St. Louis	Conference
04/17/18	2018 ITTS SE Conference - St. Louis - 5/22 working breakfast session discussion	Conference
04/20/18	Discussion of executive briefing draft	Conference
05/03/18	2018 ITTS SE Conference - St. Louis - Moderators	Conference
05/15/18	2018 ITTS SE Conference - St. Louis - Interrupted Supply Chains Panel	Conference
05/31/18	2018 ITTS SE Conference - St. Louis - Close-out Discussion	Conference
06/18/18	2018 ITTS SE Conference - St. Louis - Close-out Discussion	Conference
06/19/18	ITTS executive briefing	Conference
06/28/18	The interrupted supply chain - Drew Ratcliff	Webinar https://youtu.be/WrPi00nAFV8

ITTS Meeting Agendas

ITTS organized many meetings and conferences for the ITTS member states. There was the Freight in the Southeast Conference, as well as Summer Meetings and Peer Meetings. These meetings were generally hosted by an ITTS member state, or in collaboration with another group, which allowed the ITTS states to leverage their limited travel funds. Each state was invited to participate, with invitational travel being covered by ITTS for member states to attend these various meetings.

ITTS Conferences

ITTS, with a local host state and planning committee, organized an annual conference. The conference was open to all participants but focused primarily on the needs of public freight planners to better understand emerging freight transportation patterns. Information on the ITTS Freight in the Southeast Conferences are at http://ittsresearch.org/itts_conferences.html.

Table 9
Dates, location and website for ITTS “Freight in the Southeast Conferences”

Date	Location	Web page address
March 12-14, 2013	Louisville, Kentucky	http://midamericafreight.org/events/2013am/
March 3-6, 2014	Tampa, Florida	http://ittsresearch.org/ITTS_2014_conference.html
March 16-19, 2015	Biloxi, Mississippi	http://ittsresearch.org/ITTS_2015_conference.html
April 11-12, 2016	New Orleans, Louisiana	http://ittsresearch.org/ITTS_2016_conference.html
February 15-17, 2017	Savannah, Georgia	http://ittsresearch.org/ITTS_2017_conference.html
May 21-23, 2018	Saint Louis, Missouri	http://ittsresearch.org/ITTS_2018_conference.html

2013-Louisville, Kentucky.



Conference Agenda

Monday, March 11th

2:00pm-6:00pm State and MPO Workshop Session

- [Freight Planning, Performance, and Analysis](#)
Jack Wells, US Department of Transportation

Tuesday, March 12th

2:00pm-3:30pm Paths to Prosperity: Why Freight Corridors?
Moderated by Teresa Adams, University of Wisconsin-Madison

- [Paths to Prosperity: Why Freight Corridors](#)
Ernie Perry, University of Wisconsin-Madison
- [Connecting the U.S. to the World: Seizing the Canadian Opportunity](#)
Roy Norton, Canadian Consulate
- [The Importance of the Mississippi River](#)
Brett Bourgeois, New Orleans Board of Trade
- [Paths to Prosperity: Michigan's International Corridors](#)
Larry Karnes, Michigan Department of Transportation

4:00pm-5:30pm The Economic Outlook—Global Directions and Implications for Transportation
Moderated by Marsha Fiol, Virginia Department of Transportation

- [Transportation's Role in Kentucky's Economic Development](#)
Janet M. Kelly, University of Louisville
- [Economic Outlook and Trends in Logistics](#)
Roz Wilson, Delcan
- [Logistics and Distribution Index](#)
Sunderesh Heragu, University of Louisville

Wednesday, March 13th

- 8:00am-9:30am MAP-21 and the Washington Perspective
Moderated by Bernadette Dupont, Federal Highway Administration, Kentucky Division Office
- [Implementing the Freight Provisions of MAP-21](#)
Jack Wells, US Department of Transportation
 - [MAP-21 Reauthorization](#)
Leo Penne, American Association of State Highway and Transportation Officials
 - [MAP-21: Policy into Practice](#)
Sheldon Johnson, Northwest Regional Planning Commission
- 10:00am-11:30am Integrating State, Regional, Local, and Private Sector Freight Planning
Moderated by Keith Damron, Kentucky Transportation Cabinet
- [Georgia's Statewide Freight & Logistics Plan](#)
Tom McQueen, Georgia Department of Transportation
 - [Minnesota Statewide Freight Planning](#)
John Tompkins, Minnesota Department of Transportation
 - [Creating and Using Freight Plans](#)
Robyn Bancroft, Ohio-Kentucky-Indiana Metropolitan Planning Organization
 - [Public Ports and Multimodal Freight](#)
Ed Riney, Owensboro Riverport Authority
- 12:00pm-1:00pm [Luncheon Keynote](#)
Jim Bruce, UPS Corporate Public Affairs
- 1:00pm-2:30pm Agricultural Trade: Biofuels and Exports
Moderated by Patrick Donovan, Rahall Appalachian Transportation Institute
- [Bio-Fuels: Trends and Impacts on Agricultural Transportation](#)
Mark Berndt, Olsson Associates
 - [Agricultural Trade: Export Markets and Biofuels](#)
Scott Sigman, Illinois Soybean Association
 - [Role of U.S. Agricultural Trade](#)
Michael Reed, University of Kentucky

Freight Corridors: Collaboration, Development, and Impacts
Moderated by Ernie Perry, University of Wisconsin-Madison

- [Multi-Jurisdictional Corridors: I-70 Dedicated Truck Lanes Case Study](#)
Keith Bucklew, CDM Smith
- [Working with Local Government: RUMA](#)
Lloyd MacAdam, Ohio Department of Transportation
- [FHWA Corridors and Gateway Concept](#)
Paula Dowell, Cambridge Systematics

Getting Local Goods to Global Markets and Creating Supply Chains that Work

- [Brown-Forman Corporation Global Logistics](#)
Sherree Hockensmith, Brown-Forman Corporation
- [Waterways: Working for America](#)
Norb Whitlock, Rivertrends, LLC

3:00pm-4:30pm

Trends in Warehousing and Site Development: Business Clusters and Industrial Co-
location

Moderated by Dennis Decker, Louisiana Department of Transportation and
Development

- [Location, Location, Logistics](#)
Libby Ogard, Prime Focus
- [Columbus Region Logistics Council: Enabling Vision, Collaboration & Execution](#)
Jeff Zimmerman, Columbia Region Logistics Council
- [Evolving Global, Port and Logistics Factors and Trends](#)
Franc Pigna, Aegir Port Property Advisors

Designing for Freight: Corridor Development

Moderated by Ernie Perry, University of Wisconsin-Madison

- [Norfolk Southern Governmental Relations: Public Private Partnerships](#)
Darrell Wilson, Norfolk Southern
- [FHWA's Border and Interstate Team](#)
David Franklin, Federal Highway Administration
- [Experiences, Perspectives, and Issues of the Freight Corridor and Gateway Development Process](#)
Charlie Smith, Hanson Professional Services

From the Trucking Industry: What Agencies Should Know About Policy, Operations
and the Future

Moderated by Jamie Fiepke, Kentucky Motor Transport Association

- [Transportation Trends](#)
Jamie Fiepke, Kentucky Motor Transport Association

Thursday, March 14th

8:00am-9:30am

Understanding the Automotive Industry and the Role of Transportation

Moderated by Bruce Lambert, Institute for Trade and Transportation Studies

- [The Auto Industry in the Southeast](#)
Bruce Lambert, Institute for Trade and Transportation Studies
- [Autofacts Industry Update](#)
Brandon Mason, PwC
- [Automotive Industry Distribution](#)
Tom McQueen, Georgia Department of Transportation

From Understanding to Action—Making Freight Corridors Work for Our Economy

Moderated by Lynn Soporowski, Kentucky Transportation Cabinet

- [The Impact and Value of Manufacturing in Kentucky](#)
Greg Higdon, Kentucky Association of Manufacturers
- [Freight Corridors and Gateways: Some Very Random Thoughts](#)
Mark Burton, University of Tennessee
- [Making Freight Corridors Work: The Economics of Freight Corridors](#)
Steve Fitzroy, Economic Development Research Group, Inc.

2014-Tampa Florida.

Conference Agenda

FREIGHT IN THE SOUTHEAST

Moving Our Region's Business



MONDAY, MARCH 3, 2014

8:00 am - 5:00 pm **National Highway Institute Course - "Fundamentals of Freight Data"**

Speakers:

Joe Bryan, Parsons & Brinkerhoff

Paul Bingham, CDM Smith

6:00 pm

Stakeholder Roundtable Dinner

Opening Speaker: Doug Callaway

Keynote Speaker: Alice Ancona, Global Outreach: Florida Chamber of Commerce, Director of Global Outreach

TUESDAY, MARCH 4, 2014

7:00 am **Tour of Publix Distribution Centers and CSX Intermodal Rail Terminal
(open to all participants)**

12:00 pm **Boxed Lunch**

1:00 pm **Opening Session**

Rich Biter, Florida Department of Transportation

Bruce Lambert, ITTS, Executive Director

1:30 pm

The State of the Economy

Moderator: Marsha Fiol, VDOT

Speakers:

Tony Carvajal, Florida Chamber of Commerce, Executive Vice President

Chris Oakley, Jacksonville Branch of the Federal Reserve Bank of Atlanta,
Vice President and Regional Executive

Ken Roberts, World Cities, President/CEO

4:00 pm

**Foreign Trade Zones, Foreign Direct Investments, Site Selection and
Industrial Properties**

Moderator: Casey Wells, Kentucky Transportation Cabinet

Speakers:

Jorge Suarez, Miami Free Zone, Leasing and Marketing Manager

Bob Ledoux, Florida East Coast Railway, Senior Vice President

Mark Bontrager, Space Florida, Vice President

6:30 pm - 9:00 pm **Peer Exchange for State DOT Employees (by invitation only)**

WEDNESDAY, MARCH 5, 2014

8:00 am - 9:00 am **Update on Federal Transportation Policy**

Moderator: Rich Biter, FDOT, Assistant Secretary, Intermodal Systems
Development

Speakers:

Keynote: Greg Nadeau, FHWA, Deputy Administrator

State Perspective: Matthew Ubben, Floridians for Better Transportation

Continued

Conference Agenda

WEDNESDAY, MARCH 5, 2014 – continued

- 9:15 am - 10:00 am** **Role of Public Private Partnerships in Freight and Logistics**
Moderator: Trung Trinh, Mississippi Department of Transportation
Speakers:
Donna F. Davis, Co-Director, Center for Supply Chain Management & Sustainability, University of South Florida
Lee A. Weintraub, Becker and Poliakoff
-
- 10:30 am** **Performance Metrics and Managing Transportation Systems**
Moderator: Jessie Jones, Arkansas State Highway and Transportation
Speakers:
George F. Isiminger, P.E., Senior Director of Planning, Engineering and Environmental Affairs Port Manatee
Joe Bryan, Parsons & Brinkerhoff
Pat Thomas, UPS, VP Public Affairs and American Trucking Association, Second Vice Chairman
-
- 12:00 pm** **Lunch**
Speaker: Stu Rogel, Tampa Bay Partnership, President & CEO
-
- 1:30 pm** **CONCURRENT SESSIONS**
- Track 1- The Autonomous Supply Chain**
Moderator: Tom McQueen, Georgia Department of Transportation
Speakers:
Josh Switkes, Peloton Technology, Inc., Founder & CEO
Kristine Williams, University of South Florida CUTR, Director of Planning and Corridor Management Research
- Track 2- Ports and International Trade**
Moderator: Matt Johns, Louisiana Department of Transportation and Development
Speakers:
Bill Johnson, Port of Miami, Port Director
Rich Higgins, Transportation, Bealls, Divisional Vice President
Dr. Fran Bohnsack, Marad, Director South Atlantic Gateway
-
- 3:30 pm - 5:30 pm** **Reception and Waterside Tour of Port Tampa Bay**
Speaker:
Ram Kancharla, Port Tampa Bay

THURSDAY, MARCH 6, 2014

- 8:00 am - 10:00 am** **Tampa Airport Tour**

Conference Agenda

FREIGHT IN THE SOUTHEAST

Moving Our Region's Business



MONDAY, MARCH 16

ALL EVENTS ON MONDAY WILL BE HELD AT THE SHERATON FOUR POINTS

1:00 pm - 3:00 pm	The economics of multimodal freight corridors Bruce Lambert, ITTS
3:00 pm - 5:00 pm	The Corps of Engineers approach to navigation planning Patrick Donovan, US Army Corps of Engineers
6:00 pm	Welcome Reception Sponsored by the Mississippi World Trade Center and Waggoner Engineering with a beer tasting from Crooked Letter Brewery and a cigar tasting with the Cigar Shop.



TUESDAY, MARCH 17

SHERATON

7:00 am	Assemble for Tour of Ingalls Shipbuilding in Pascagoula (Sheraton) All other events are at the Biloxi Visitors Center Due to security concerns, the Tour is not open to any new registrations at this time. If you registered and did not get a confirmation concerning the tour, please contact Bruce Lambert at bruce@ittsresearch.org .
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BILOXI VISITOR'S CENTER

11:30 am - 12:45 pm	Mississippi Freight Advisory Council meeting/ luncheon Trung Trinh, Mississippi DOT Box Lunches will be provided for all attendees at the Biloxi Visitor's Center
1:00 pm - 1:30 pm	Opening Remarks Melinda McGrath, Executive Director, Mississippi DOT Vincent Creel, City of Biloxi
1:30 pm - 3:00 pm	Trends in Freight Movement Mary Ann Moon, MS Engineering and Development, Moderator Vann Cunningham, Burlington North Santa Fe Railroad Stuart McAvoy, UPS Customer Solutions
3:30 pm - 5:00 pm	Inland Waterways and Container on Barge operations Robby Burt, Mississippi DOT, Moderator Jim Murphey, Maritime Administration Bruce Lambert, Institute for Trade and Transportation Studies Bryan Hunt, SeaCor AMH

****There is no formal event on March 17th. I have made reservations at the Half Shell Oyster House.**

Continued

Conference Agenda

WEDNESDAY, MARCH 18

BILOXI VISITOR'S CENTER

8:00 am - 9:30 am

Where is the Economy Heading?

Ed Hutchinson, Florida DOT, Moderator

Michael Kearney, J.P. Morgan

Paula Dowell, PhD, Cambridge Systematics

Pete Walley, Bureau of Long-Range Economic Development Planning,
State of Mississippi

10:00 am - 11:30 pm

CONCURRENT SESSIONS

Track 1- Advanced Manufacturing

Tom McQueen, Georgia DOT, Moderator

Robert Thompson, Interim Director, Mississippi Polymer Institute

Ashley Edwards, Hancock County Port and Harbor Commission

Track 2- Performance Measures for Transportation Agencies

Cheryl Ball, Missouri DOT, Moderator

Jeff Short, American Transportation Research Institute

Chris Smith, American Association of State Highway and
Transportation Officials

Ed Strocko, Federal Highway Administration

12:00 pm Lunch

1:30 pm - 3:30 pm

CONCURRENT SESSIONS

Track 1- The Future of Trucking

Daryl Fields, Mid-America Regional Council, Moderator

Lee Wagoner, Boyd Brother's Trucking

Chris Flanigan, Federal Motor Carrier Safety Administration

Ed Hutchinson, Florida DOT

Track 2- Prioritizing Freight Investment

Ed Lee, Florida DOT

Carolyn Mays, Texas DOT

Tom McQueen, Georgia DOT

Lynn Soporowski, Kentucky Transportation Cabinet

WEDNESDAY, MARCH 18 – continued

3:30 pm - 5:00 pm

CONCURRENT SESSIONS

Track 1- The Future of the Federal Aid Program

Virginia Porta, Arkansas Highway and Transportation Department

Joeng Lee, American Association of State Highway and Transportation Officials

Elaine Nettle, Coalition for America's Gateways and Trade Corridors

Hal Miller, Mississippi Trucking Association

Jeff Ely, Mississippi DOT

Track 2- Trends in International Business and Trade

Phil Jones, Louisiana Department of Transportation and Development,

John Hyatt, Irwin Brown

Jimmy Baldwin, Southern Sales of Louisiana

Bill Kraus, Page & Jones, Inc.

Glenn Ferreri, Mississippi U.S. Export Assistance Center

THURSDAY, MARCH 19

BILOXI VISITORS CENTER

8:00 am - 9:30 am

Discussion on Freight Data for local and state analysis

Ed Strocko, Federal Highway Administration

Justin Carlson, Army Corp of Engineers

Ron Duych, Bureau of Transportation Statistics

Micheal Sprung, Bureau of Transportation Statistics

10:00 am - 12:00 am

Using Freight Data to communicate to stakeholders

Elaine G. Wilkinson, Gulf Regional Planning Commission

Bruce Lambert, ITTS

12:00pm - 2:00 pm

ITTS Working luncheon (ITTS Member States - Mary Mahone's)

Conference Agenda

MONDAY, APRIL 11

8:00 - 8:15	Welcome: Dr. Shawn Wilson, Secretary Louisiana Department of Transportation and Development
8:15 - 9:30 a.m.	Discussion on fixing America's surface transportation (fast) freight provisions Caitlin Hughes Rayman, FHWA Freight Management and Operations Office
10:00 - 11:00 a.m.	Freight performance measures for the public sector Jessie Jones, Arkansas State Highway and Transportation Department, moderator Karen S. Miller, Missouri Department of Transportation Lauren LeJeune, Florida Department of Transportation Cheryl Ball, Missouri Department of Transportation
11:00 - 11:45 a.m.	Lighting Round - Quick presentations on performance measures (open to all attendees) Bruce Lambert - Port Performance Metrics Bruce Lambert - Traffic Simulations Jeff Short - ATRI Jan Skouby - Help Tom McQueen/ MaryGrace Parker - Supply Chain Performance Measures)
12:00 - 1:30 p.m.	Working Lunch: national freight data programs at the U.S. Department of Transportation Michael Sprung, Bureau of Transportation Statistics Ronald Duych, Bureau of Transportation Statistics
1:45 - 5:30 p.m.	From Ship to Cup - a tour of the coffee shipments and value added activities (due to space limitations, this event is closed. You can be put on a waiting list.) Sponsored by the Port of New Orleans
5:45 - 7:00 p.m.	Transportation Research Board Intermodal Freight Transport Committee (AT045) (open to all attendees) Room Rex B For more about the committee, visit here Stuart Mcavoy, UPS
5:45 - 7:00 p.m.	Transportation Research Board Committee on Agricultural Transportation (AT030) (open to all attendees) Room Rex A For more about the committee, visit here Dr. Lynn Kennedy, LSU Agricultural Economics and Agribusiness "Implications on an Avulsion of the Mississippi River on Agricultural Trade"
6:30 p.m.	Stakeholder roundtable dinner (by invitation only) Pascal's Manale Restaurant



FREIGHT IN THE SOUTHEAST

Moving Our Region's Business



TUESDAY, APRIL 12

- 8:00 - 8:10 a.m.** **Welcome**
Bruce Lambert
-
- 8:10 - 9:35 a.m.** **Changing World Markets: Logistics and changing supply patterns, market changes (Cuba, Panama Canal, etc.), impact of megaships on infrastructure and supply chain.**
Tom McQueen, Georgia Department of Transportation, Moderator
Gary Adams, Wal-Mart Stores, Inc.
Ricardo Sanchez, Economic Commission for Latin America and the Caribbean
Adrienne Slack, New Orleans Federal Reserve Bank
-
- 10:00 - 11:30 a.m.** **Changing Domestic Delivery: Changes in manufacturing (3D printing) and delivery (drones, autonomous delivery, etc.), and supply chain management (routes, operations, etc).**
Trung Trinh, Mississippi Department of Transportation, Moderator
Chris Popjoy, Stolthaven Terminals
Robert Landry, Port of New Orleans
Charlie Covert, VP of UPS Customer Solutions
-
- 12:00 - 1:15 p.m.** **Lunch Keynote Speaker**
Dr. Eric Kalivoda, Deputy Secretary, Louisiana Department of Transportation and Development
-
- 1:30 - 3:00 p.m.** **Site Development: Freight plans and infrastructure (especially in urban environments), value added economic development, governmental assistance to private freight and freight-generating firms.**
Virginia Porta, Arkansas State Highway and Transportation Department, Moderator
Cheryl Gardener, Advance
Arlen Cochran, NASA Michoud
Louis Rodriquez, TCI Packaging
-
- 3:30 - 5:00 p.m.** **Planning for Urban Freight Mobility: Connecting the system intelligently (intermodal connectors, projects, operations), freight generator access to ports and terminals, implementation success stories.**
Laura Phillips: Louisiana Department of Transportation, Moderator
Karen Parsons, New Orleans Regional Planning Commission
John Orr, Atlanta Regional Commission
Randy Guillot, Triple G Express
David Chandler, Center for Neighborhood Technology

The FHWA-AASHTO SHRP2 meeting on Wednesday April 13 has been cancelled.

Conference Agenda

WEDNESDAY, FEBRUARY 15 (BY INVITATION ONLY)

8:00 a.m.-12:00 p.m.	Training (SHIFT Model Tableview)
12:00-1:00 p.m.	Lunch on your own
1:00-4:00 p.m.	FEAT Training
4:00-5:00 p.m.	ITTS Midyear Working Meeting
7:00-9:00 p.m.	ITTS Peer Exchange - (Meet in the Hotel Lobby at 6:40 p.m.)

THURSDAY, FEBRUARY 16 (OPEN TO ALL)

8:00-8:30 a.m.	Welcome Remarks Bruce Lambert, ITTS Tom McQueen, Georgia Department of Transportation
8:30-9:30 a.m.	Where is the Southeast Going in 20 years? Chris Oakley, Federal Reserve Bank Tom McQueen, (moderator)

10:00 a.m.-12:00 p.m.	Connecting Hinterlands through Rail Investment Charles H.W. Edwards, N.C. Department of Transportation Mike Peters, Genesee & Wyoming Railroad Services, Inc. Rob Girardot, CSX Robert "Ed" Lee, Florida DOT (moderator)
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Certification
Maintenance

12:00-1:00 p.m.	Lunch
1:00-2:00 p.m.	Biomass in the Southeast Ryan S. Adolphson, The University of Georgia Bill Johnson, Georgia Port Authority Virginia Parra, Arkansas State Highway and Transportation Department (moderator)



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THURSDAY, FEBRUARY 16 - continued

2:30-3:30 p.m.	Modal Shifts and Supply Chains Brad Pikel, Atlantic Intracoastal Waterway Association Libby Ogard, Prime Focus LLC Laura Phillips, Louisiana Department of Transportation and Development (moderator)
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4:00-5:30 p.m.	Future of Southeastern Experts Rhett Mills, UJ Powers Mary Waters, Georgia Department of Economic Development John Young, American Association of Port Authorities Erik Johnson, Virginia Department of Transportation (moderator)
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FRIDAY, FEBRUARY 17 (BY INVITATION ONLY)

8:00-10:00 a.m.	Update from DOT/AAASHTO Partners Darrin Timothy, USDOT - Update on Economic Analysis Vince Mantero, Update on State Freight Plan FAST Act Approval process Kathryn Dwyer, AAASHTO update
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10:00 a.m.-12:00 p.m.	States discuss freight planning efforts
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12:00-1:00 p.m.	Lunch
1:00-3:00 p.m.	Informal working meeting on future of trade, planning needs

Co-Host:



Gold Sponsor:



Silver Sponsors:



2018-St. Louis Missouri.

This Freight in the Southeast Conference was part of the much larger Inland Marine Expo held during FreightWeek St. Louis. ITTS organized many of the educational. There was also a state only ITTS meeting Monday afternoon, May 21.

Tuesday, May 22

Breakfast: ITTS FAST Act, State of Freight Plans, Performance Measures

Brad McMahon, Federal Highway Administration, Moderator

Trung Trinh, Mississippi Department of Transportation

Virginia Porta, Arkansas Department of Transportation

Holly Cohen, Florida Department of Transportation

Jeff Purdy, Federal Highway Administration

The Interrupted Supply Chain

Bruce Lambert, Institute for Trade and Transportation Studies, Moderator

Drew Ratcliff, Capital Region Planning Commission

Tom McQueen, Georgia Department of Transportation

Craig Philip, Vanderbilt University / Deb Calhoun, Waterways Council Inc.

First and Last Mile: Shortline Railroad and Terminal Connections

Holly Cohen, Florida Department of Transportation, Moderator

Dave Geraci, Genessee and Wyoming

Mike McCarthy, Terminal Railroad Association of St. Louis

Unlocking the Mysteries of Corporate Site Selection

Virginia Porta, Arkansas Department of Transportation, Moderator

Eli Falls, Norfolk Southern

David Cox, City of Hazelwood

Steve Johnson, Missouri Partnership

Return on Investment in Ports by Missouri Taxpayers

Randall Withers, Louisiana Department of Transportation and Development, Moderator

Paula Dowell, Cambridge Systematics

Bryan Ross, Missouri Department of Transportation

Wednesday, May 23

FHWA/Marad/USACE Breakfast

Chris Collins, Louisiana Department of Transportation and Development, Moderator
Jeff Purdy, Federal Highway Administration
Branden Criman, Maritime Administration
Andrew Schimpf, US Army Corps of Engineers

Container on Barge

Lynn Soporowski, Kentucky Transportation Cabinet, Moderator
Bruce Lambert, Institute for Trade and Transportation Studies
Bobby Landry, Port of New Orleans
Dennis Wilmsmeyer, America's Central Port

General Session: Agricultural Trends for Transportation

Cheryl Ball, Missouri Department of Transportation, Moderator
Mike Steenhoek, Executive Director, Soy Transportation Coalition

Update on the U.S. Economy

Trung Trinh, Mississippi Department of Transportation, Moderator
Charles Gascon, Federal Reserve Bank of St. Louis

Autonomous Trucks

Tom Blair, Missouri Department of Transportation, Moderator
Alain L. Kornhauser, Princeton University
Steve Schmith, Deloitte

Truck Parking

Bruce Lambert, Institute for Trade and Transportation Studies, Moderator
MaryGrace Parker, I-95 Corridor Coalition
Tom McQueen, Georgia Department of Transportation
Steve Vujic, Acres Truck Parking
Ann L. Schneider
Scott Grenerth, Truck Specialized Parking Services

ITTS Peer Meetings

2016-Peer Meeting on Connected/Autonomous Trucks, Working Paper 11.



Autonomous Truck Peer Meeting, June 2016 | 5

Meeting Overview/Agenda

The ITTS member states voted to have a pre-meeting on Autonomous trucks in conjunction with the I-95 Corridor Coalition's *Connected and Automated Vehicles Conference: What States Need to Know* on June 21-22, 2016.¹

Purpose of the meeting is to assess how State DOTs within the ITTS Region are considering connected/autonomous trucks in their current planning/operational programs.

Agenda	2:00-2:15	Introductions: Bruce Lambert
	2:15-3:00	Industry Presentations Lee Wagner, Western Express: Topic: how one firm looks at changing technologies and fleet adoption Ross Froat – (Technology and Maintenance Council) and American Trucking Association)
	3:00-3:30	State Response
	3:30-3:45	Break
	4:00-5:00	Open discussion on how states are viewing emerging technologies (Moderated by Bruce Lambert)

¹ <http://i95coalition.org/projects/connected-and-automated-vehicles/>

2017-Peer Meeting on Freight Data Peer, Working Paper 12.



Appendix:

ITTS Peer Meeting Attendees / Agenda

Present:	Travis Brooks (Arkansas DOT), Chris Collins (LA DOTD), Thomas Hill (Florida DOT), Bruce Lambert (ITTS), Tom McQueen (Georgia DOT), Lynn Soporowski (Kentucky Transportation Cabinet), Casey Wells (Kentucky Transportation Cabinet), Joel Worrell (Florida DOT), Hong Zhang (LA DOTD)
On Call:	Cheryl Ball (Missouri DOT), Laura Phillips (LA DOTD), Virginia Porta (Arkansas DOT), Trung Trinh (Mississippi DOT)

May 16th- May 19th, 2017 Irvine California

Local Time	Session	Objective	Led	Time-Eastern	Time-Central
Tuesday May 16th – Irvine Cove Room (Upper Level of Beckman Center)					
Breakfast provided as part of TRB Conference Registration					
8:00-8:30	Status of Freight Data	Overview of Data for Planning Efforts	Bruce Lambert	11:00-11:30	10:00-10:30
8:30-10:00	Data and States Session #1	Discussion on Using Freight Data for Planning/Project/Policy Discussions	Virginia Porta	11:30-1:00	10:30-12:00
10:00-12:00	State Only Meeting	Discuss ITTS Workplan Elements	Member States	1:00-3:00	12:00-2:00
12:00-1:00	Lunch	Provided as part of TRB Conference Registration			
1:00-1:15	FEAT Status	Report by Cambridge Systematics	Paula Dowell	4:00-4:30	3:00-3:30
1:30-3:00	Data and States Session #2	Discussion on Data focus on State Freight Plans under FAST	Bruce	4:30-6:00	3:30-5:00
3:00-5:00	Tableau Training	Tableau Training	Bruce	6:00-8:00	5:00-7:00
Wednesday 17th – Thursday 18th Refer to TRB Agenda					

Friday, May 19th – Emerald Bay Room (Upper Level of Beckman Center)					
Breakfast is on your own					
8:00-8:30	Meeting Recap	Discussion on Meeting Notes, etc.	Bruce	11:00-11:30	10:00-10:30
8:30-9:00	State Only Meeting	Discuss ITTS Workplan Elements	Member States	11:30-12:00	10:30-11:00
9:00-12:00	Tableau Training	Review Data Work, Provide Training	Bruce	12:00-3:00	11:00-2:00
Lunch is own your own					

Peer Meeting Focusing on Domestic Ports and Waterways, Working Paper 10.

Peer Meeting Agenda

The ITTS member states voted to hold a joint meeting on waterways in conjunction with the Smart Rivers Conference. The session is part of a larger work effort to perform a literature review of the potential for container on barge and other cargo moving on the nation's domestic waterway system. The focus of the Peer Meeting was to discuss how various elements of maritime activity could influence the potential modal shift to waterways.

The Agenda:

Thursday, September 21		
1:00-2:15	Inland Ports: A European Perspective	Michael Fastenbauer, Head of Development & Innovation, viadonau - Austrian Waterway Management Company, Vienna, Austria
2:15-3:00	Thoughts on Institutional Issues Related to Waterway Projects	Kathy Griffin, Chief of Pittsburgh District US Army Corps of Engineers (USACE), Operations and Regulations Division
3:15-4:00	What is Needed for Domestic Ports and Waterways to be Successful?	Mark Carr, Channel Design Group Jim McCarville, Former Executive Director, Port of Pittsburgh Commission
4:00-5:00	How Can We Secure Funding for Domestic Waterway Projects?	Geoff Bowman, Van Scoyoc Associates Tim Pickering, Office of Ports & Waterways Planning, Maritime Administration, U.S. Department of Transportation
Friday, September 22		
9:30-10:00	Relationship of Rural Economic Development to Inland Ports and Terminals	Cheryl B. Garner, President and CEO, Advance Economic Development Solutions Sara Walfoort, Freight Planning Manager, Southwest Planning Commission

ITTS Work Plan Meetings

2013-Washington DC.

bruce lambert

From: bruce lambert <bruce@ittsresearch.org>
Sent: Thursday, June 13, 2013 7:04 AM
To: 'Alan.meadors@ahd.ar.gov'; 'alicia.waldrop@dot.state.fl.us'; 'April.Renard@LA.GOV'; 'bill.r.murray@wv.gov'; 'Bob.Romig@dot.state.fl.us'; 'christopher.johns@la.gov'; 'Christopher.T.Fleming@wv.gov'; 'Cliff.McKinney@arkansashighways.com'; 'coarr@mdot.state.ms.us'; 'Connie.Mitchell@dot.state.fl.us'; 'Dan.Broussard@LA.GOV'; 'dennis.decker@la.gov'; 'Elwood.C.Penn@wv.gov'; 'Eric.Kalivoda@LA.GOV'; 'Erik.Johnson@VDOT.Virginia.gov'; 'James.D.York@wv.gov'; 'jely@mdot.ms.gov'; 'JS.Gillespie@VDOT.Virginia.gov'; 'juan.flores@dot.state.fl.us'; 'Keith.Damron@ky.gov'; 'Lynn.Soporowski@ky.gov'; 'Marsha.Fiol@vdot.virginia.gov'; 'Meredith.Dahlrose@dot.state.fl.us'; 'leo.boles@la.gov'; 'phil.jones@la.gov'; 'RBurt@mdot.state.ms.us'; 'Richard.biter@dot.state.fl.us'; 'Robert.Lee@dot.state.fl.us'; 'Robin.Romeo@LA.GOV'; 'Sharon.Balfour@LA.GOV'; 'Steve.Ross@ky.gov'; 'Tery.Bratcher@dot.state.fl.us'; 'tMcQueen@dot.ga.gov'; 'ttrinh@mdot.ms.gov'; 'robin.grier@vdot.va.gov'; Wells, Casey (KYTC) (Casey.Wells@ky.gov); Jones, Jessie (Jessie.Jones@arkansashighways.com)
Cc: Harold "Skip" Paul (harold.paul@la.gov); Jamie.Setze@dot.gov; bruce@ittsresearch.org; Caitlin.Rayman@dot.gov; lpenne@aashto.org; Smith, Christopher (CSmith@aashto.org); Ed.Strocko@dot.gov; Crystal.Jones@dot.gov; bruce@ittsresearch.org; Brown, Lloyd (lbrown@aashto.org)
Subject: ITTS Summer meeting-tentative agenda-please respond
Importance: High

ITTS Summer meeting working agenda

Remember, ITTS starts on Tuesday, July 30 at 8:30: book your travel plans accordingly...

I would like a rough idea concerning who is attending from what state...and each state making a presentation during the morning session will help prepare us for the afternoon discussions.

Here are the action items I need from each state:

- Who is attending
- Does the agenda work for you
- Do you want the luncheon session as laid out or another topic/format/etc.
- Dinner or reception plans on Monday or Tuesday night

A. Here is my working draft agenda for the ITTS summer meeting.

Each state has 20 minutes for a PowerPoint/roundtable discussion. The format is to educate, engage, and identify regional needs, etc. We can share handouts, materials etc., prior to the meeting.

8:30 9:00 Discussion on freight planning and MAP-21 (FHWA Speaker invited)
9:00 10:00 Group 1: Arkansas, Mississippi, Louisiana
10:00 10:15 Break
10:15 10:55 Group 2: Georgia, Florida
11:00 12:00 Group 3: West Virginia, Kentucky, Virginia

12:00 1:30 *Working lunch - communicating the value of freight projects (IF THERE IS NO OBJECTIONS FROM THE STATES, I am encouraging each of the States to invite in their DC Staff to join in a discussion with AASHTO,*

as well as some Senate/House staffers to talk about what they are looking for when communicating the value of "freight" in their day to day activities.)

1:30	3:30	Discuss the LATTTS Primary Network, data integration, modeling, data release, etc.
3:30	4:00	Break
	4:00	4:30 Other MAP-21 provisions (FAC, freight planning, etc.)
4:30	5:30	ITTS Workplan and materials for the ITTS Board of Directors Meeting

- B. Here is my working template for each state to address during their session (I am assuming that everyone will have a lot to say, but this is just a rough idea to get you started)
1. What is the status of your freight plan – last done, elements, etc.
 2. Is it multimodal, and if not, where is the status of the other plans (rail, water, air, etc.)
 3. What are your most important corridors or freight facilities - are they aligned with the LATTTS network (I have received some comments from Lynn and Tom about this, which I am forwarding on to CDMSmith)
 4. Do you have a Freight Advisory Council group- how is it structured and used
 5. Do you have performance measures related to freight
 6. What is your primary databases for freight research
 7. Freight studies done to date- not necessarily aligned with freight plan but may be smaller or regional studies
 8. Who does your primary freight research
 9. What are major topics/needs/research areas regarding freight that are important to your state
 10. Update on travel demand modeling efforts being integrated to freight movements
- C. As in the past, I can either arrange for an informal dinner the night before or do you want to do something on Tuesday evening (reception, dinner, etc.)?
- D. If you are not registered Vender, please register now so that we can handle your reimbursements in a timely manner. I can send you the information in a separate email if needed.

Bruce

Institute for Trade and Transportation Studies (ITTS)
<http://www.ittsresearch.org>
 540-455-9882

2014-Atlanta Georgia.

August 13, 2014

Ms. Connie Boudreaux
Louisiana Department of Transportation and Development
Office of Planning & Programming
P.O. Box 94245
Baton Rouge, LA 70804-9245

Re: ITTS Summer Meeting in Atlanta Georgia, August 7th

Dear Ms. Boudreaux:

Every summer, ITTS organizes a one day meeting to discuss its work plan. The meeting is limited to states who are actively participating in ITTS activities, and only discusses related work tasks for ITTS in the upcoming year.

The meeting was held at the Georgia Department of Transportation, Room 401. Atlanta was chosen based on its air accessibility, although several people stayed over the next day because of flight schedules or to attend a Friday morning meeting with FHWA on monitoring real time traffic for truck routing decisions.

Regarding meals and expenses, with the assistance of Georgia DOT, ITTS negotiated a very favorable rate, which included breakfast, at the hotel adjacent to the GDOT building. As GDOT is served by the MARTA line, transportation was fairly easy also. Breakfast was included in the hotel rate, while lunch was catered on the 7th.

Agenda:

9-9:30	A Year in Review: ITTS
9:30-10	Chris Smith - AASHTO And Freight Policy
10-12	Freight actions by DOT's
12-1	Catered Lunch
1-2	FHWA conference call
2-4	ITTS Work plan for next year

Warmest Regards,



Bruce Lambert
Executive Director

Institute for Trade and Transportation Studies
10 Veterans Blvd.
New Orleans, LA 70124
www.ittsresearch.org

2015-Little Rock.



Work Plan Meeting

June 24-26, 2015

Arkansas State Highway and Transportation Department
Public Transportation Training Room
10324 Interstate 30
Little Rock, AR 72209

AGENDA

- **Wednesday June 24**

- Breakfast included with Crowne Plaza room rate
- 12PM-1PM Lunch Provided
- 1PM-5PM Tableau and Big Data
- 6PM Dinner Provided

- **Thursday June 25**

- Breakfast included with Crowne Plaza room rate
- 8AM-10AM 2016 Work Plan
- 10AM-12PM 2016 Work Plan
- 12PM-1PM Lunch Provided
- 1PM-3PM 2016 Work Plan
- 3PM-5PM Freight Advisory Councils
- Dinner on your own

- **Friday June 26**

- Breakfast included with Crowne Plaza room rate
- 8AM-10AM Southeast Freight Corridors
- 10AM-12PM Southeast Freight Corridors
- Lunch on your own

2016-Kansas City.



Work Plan Meeting June 13-14, 2016 Kansas City, Missouri Agenda

June 13, Monday

Location: Various (locations listed below). Shuttle pick-up at Hotel Phillips at 8AM.

- | | |
|---------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 8:00AM-3:00PM | Tour BNSF Logistics Park, Short Line Railroad Training Center (Edgerton, KS), and Port of Kansas City (Kansas City MO). Lunch provided. |
| 3:00PM-5:00PM | Meeting (Port of Kansas City, 300 Wyandotte Street, Suite 100, Kansas City, MO)
3:00-3:20 Bruce Lambert: 2015-16 Work Plan status report & lessons learned
3:20-4:00 2015-16 Work Plan Task Partners: Lessons learned (states only)
4:00-5:00 ITTS contract renewal (states only) |
| 5:00PM | Shuttle to Hotel Phillips |

June 14, Tuesday

Location: Port of Kansas of City (300 Wyandotte Street, Suite 100, Kansas City, MO) Shuttle pick-up from Hotel Phillips at 8AM.

- | | |
|---------------|------------------------------------------------------------------------------------------------------------------------------------------|
| 8:00AM-Noon | ITTS Work Plan: 2016-17 tasks. |
| Noon-1:00PM | Lunch provided. Presentation (invited FHWA to speak on the FAST Act) |
| 1:00PM-3:00PM | ITTS Work Plan: Finalize 2016-17 tasks |
| 3:00PM-5:00PM | Freight Plans and Key Multistate Corridors (if the 2016-17 Work Plan has not been finalized, this time will be used for that discussion) |
| 5:00 PM | Shuttle to Hotel Phillips |

Revised 6/7/2016

Submission to FHWA on Designation of Primary Freight Network

Here is the copy of the letter submitted for FHWA Docket, FHWA-2013-0050-0138.

February 17, 2014

10 Veterans Blvd.
New Orleans, LA 70437

Dear Sir or Madam,

Thank you for allowing the opportunity to provide comments on the Designation of the Primary Freight Network (Docket Number FHWA-2013-0050-0001) as announced in the Federal Register notice on November 19, 2013. Identifying the critical freight corridors in the United States remains a laudable goal. USDOT's leadership in providing a preliminary network should be applauded, not only for the network itself, but for stating the challenges in prioritizing a network based on the complexity of domestic and intermodal freight movements on a diverse multimodal system.

The Institute for Trade and Transportation Studies consists of nine member states (Arkansas, Florida, Georgia, Kentucky, Louisiana, Mississippi, Missouri, West Virginia and Virginia). While I serve as the Executive Director, my comments should not supersede any of the member state's specific submissions. The following comments are more general, but hopefully they will be helpful in discussing the future of any national freight network discussions.

There exist obvious gaps and omissions in the freight primary network. Some of these could be attributed to the quality of the national databases used, which were not collected and developed for these detailed planning exercises. For example, some datasets are collected at a very specific segment level while other sets are modelled over a fairly large geography, leading to some potential "disconnects" along the network. I agree with FHWA that the eight criteria, while technically robust, actually limit the flexibility necessary to develop a credible national network, as a focus on segment level attributes depends upon both the quality of the data and ignores the variability of traffic activity along a corridor, especially if the criteria are set fairly high. As such, any work to improve the quality of federal freight datasets, as well as their potential release so state and local agencies, should be encouraged.

Furthermore, requesting specific route deletions and additions without the knowledge of a specific policy goal limits the ability of any analytical approach to prioritize such networks. FHWA identified the network by simply counting where the largest truck flows exist. This is not necessarily a bad approach, just one that did not address the underpinning components of truck movements and their relative importance within national corridors. The limitation was demonstrated by FHWA having to "smooth" out some of the gaps within designated corridors that were included in the larger 41,000 mile network. In contrast, the Latin American Trade and Transportation Network, developed by the Southeastern States examined regional flows and determined that network based on a set of criteria developed by

member states. The criteria involved all interstate highways, NHS Freeways that served multistate and are of a scale that were significant, selected NHS Non-freeways, ISTEA/TEA-21 High Priority Corridors and NHS Connectors. (See the attached pdf file from the LATTIS Study, Appendix C-4.)

Part of this criticism of the primary national freight network could have been avoided if the methodology had focused on addressing general freight movements and not an aggressive data driven approach, as outlined by the various criteria, to reach the 27,000 mile statutory limit. From a national perspective, no one would argue that a national network should focus on corridors (and the discussion on centerline versus corridors was adequately addressed in the methodology guidance). By using corridors, planners would have allowed greater flexibility along a Primary Freight Route to improve intermodal and urban connectors. Also, this approach of developing a static network precludes identifying not only significant connector issues or where emerging truck corridors are operating, but also where redundant routes may be used or expanded to provide congestion mitigation. However, other than the 3,000 of critical rural freight corridors, there exists little flexibility to expand the network to address these shortfalls.

The determination of a national freight network should be more descriptive concerning expected outcomes (prioritize investment, operations, performance measures, etc.) or if these will be separate programs from current federal guidance. This may allow more certainty in understanding how these programs will provide assistance to states to support national freight movements, for it remains unclear how a state may use this network beyond its inclusion in the State's state freight plans. There may be concerns that developing a freight primary network will not lead to any new activities, but become a constraint to state and local planners. For example, other national "freight" networks/programs exist, such as the National Network (authorized by the Surface Transportation Assistance Act of 1982 (P.L. 97-424)), so this national freight network may not necessarily have to address all freight mobility issues, just those that meet a specific federal goal concerning, as examples, urban mobility, global trade, linkages to intermodal facilities, military installations, etc. A criteria based on partnership among states and FHWA thus would be more meaningful if focusing one or two areas of improving freight mobility, although there will always remain challenges regarding balancing investment between equity and efficiency. However, if the network is aggressively expanded, there may be little benefit to designating a freight primary network if all the Interstate Routes or even a significant portion of the National Highway System meet these criteria beyond existing "freight" eligible projects.

States are now encouraged to develop freight plans, and many regional and national studies have been developed to discuss freight movements, so the use of the NFPN by states will remain uneven. While some States and Metropolitan Planning Organizations have little freight "research", others have extensively worked on freight issues, and the resulting networks may not be aligned with their existing planning efforts. For example, corridors have been studied along coastal areas (I-10), between major domestic regions (such as the I-95 Corridor Coalition) or even within regions (such as the MidAmerica Freight Coalition or the Latin American Trade and Transportation Study). Regional collaborative approaches should be encouraged in future national freight planning activities and be considered when planning a national freight priority network. The current network, driven without these state

inputs, may only serve to confuse what are the primary freight corridors at the state and regional level.

In summary, highlighting the critical freight movements in the United States represents an important undertaking. A national freight network remains a critical component in meeting other MAP-21 goals, such as developing a national freight policy, a freight condition and performance report, and tools and data to prioritize freight investment. However, the 27,000 network limit only constrains the discussion, as the focus devolves to designation and not improving efficiency. Previous corridor approaches (such as used in the LATTS study) may provide more guidance in structuring national networks through a partnership of federal and state involvement. An alternative approach may focus on a few corridors, and examine integrating these corridors with other specific MAP-21 programs and goals, although this lies beyond the current guidance. Despite these comments, the development of a national network, focusing on efficiency, should remain at the forefront of any future discussions on freight mobility and planning in the future.

Sincerely,

A handwritten signature in dark ink, appearing to read "Bruce Lambert", with a stylized, cursive script.

Bruce Lambert
Executive Director

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