ALDOT Statewide Freight Plan

Freight Advisory Committee Meeting
June 25, 2015 – 1:30 PM
Presentation Agenda

- Welcome and Introductions
- Freight Planning Purpose and Guidance
- Statewide Modeling Effort Overview
- Topics/Questions for FAC Input and Discussion
- Next Steps
Overview of Freight Plan

- **Purpose**
  - Align Alabama’s freight policy with MAP-21 and related guidance
  - Provide guidance to MPOs on performance monitoring

- **The 2016 Alabama Statewide Freight Plan will identify:**
  - Alabama Statewide Freight Network and methodology
  - Motor freight movement characteristics
  - Deficiencies on Freight Network (congestion, safety, other)
  - MAP-21 and Title VI consistency and compliance
  - Goals and performance measures specific to motor freight

- **Previous Efforts**
  - 2010 Alabama Statewide Freight Study and Action Plan
  - 2013 Alabama Rail Plan and Rail Directory
MAP-21 Interim Guidance for Statewide Freight Plans

- Identify significant freight system trends, needs, and issues

- Describe freight policies, strategies, and performance measures that will guide freight-related transportation investment decisions

- Describe how the plan will improve ability to meet national freight goals

- Show evidence of consideration of innovative technologies and operational strategies

- Consider improvements required on routes where heavy vehicle travel is projected to substantially deteriorate roadways condition

- Inventory facilities with freight mobility issues and describe strategies to address those freight mobility issues
Draft Mission and Vision Statements

**Mission**
- To promote the efficient and safe movement of goods in a manner that increases economic competitiveness and promotes environmental responsibility throughout the State of Alabama

**Vision**
- The State of Alabama desires a safe, robust freight transportation system that supports the economic vitality of the State’s residents and businesses, provides increased transportation mobility and accessibility, and facilitates the efficient, integrated and safe movement of goods throughout the state
FAC Role and Expectations

- Small but key group of freight transportation stakeholders
  - Direct knowledge of/connections with all freight modes
  - Represent users/shippers and policymakers from public and private sectors

- Guide study direction

- Assist in assessing existing conditions and developing feasible plan

- Role is advisory
  - Advise on freight-related issues, priorities, and funding
  - Provide forum for discussion of freight-related decisions
  - Communicate and coordinate regional priorities to all parties
  - Promote exchange of information between public and private sectors
  - Participate in development of 2016 Alabama Statewide Freight Plan

- Materials distributed on study webpage
Peer Review

- Reviewed Statewide Freight Plans
- Interviewed key DOT staff
- Adjacent states
  - Florida Mobility and Trade Plan (FMTP), FDOT
  - Georgia Statewide Freight and Logistics Plan, GDOT
  - Mississippi Statewide Freight Plan, MDOT
  - Tennessee Statewide Multimodal Freight Plan, TDOT
## Summary Flow Characteristics

### Origin/Destination

<table>
<thead>
<tr>
<th></th>
<th>2012</th>
<th>2040</th>
<th>Ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td>Freight Flow in Alabama</td>
<td>515,498.56</td>
<td>823,272.27</td>
<td>159.70%</td>
</tr>
<tr>
<td>Domestic</td>
<td>466,272.59</td>
<td>688,869.39</td>
<td>147.74%</td>
</tr>
<tr>
<td>Imported</td>
<td>26,114.10</td>
<td>77,802.57</td>
<td>297.93%</td>
</tr>
<tr>
<td>Exported</td>
<td>23,111.88</td>
<td>56,600.30</td>
<td>244.90%</td>
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</table>

### Mode

<table>
<thead>
<tr>
<th>Mode</th>
<th>Volume 2012</th>
<th>Ratio</th>
<th>Volume 2040</th>
<th>Ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td>Truck</td>
<td>49,792.9789</td>
<td>41.17%</td>
<td>77,763.6444</td>
<td>54.18%</td>
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<tr>
<td>Rail</td>
<td>37,043.7328</td>
<td>30.63%</td>
<td>26,850.4950</td>
<td>18.71%</td>
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### State

<table>
<thead>
<tr>
<th>Destinations</th>
<th>Volume (2012)</th>
<th>Volume (2040)</th>
<th>Ratio</th>
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<tbody>
<tr>
<td>Georgia</td>
<td>15,709.9349</td>
<td>31,554.7766</td>
<td>200.86%</td>
</tr>
<tr>
<td>Mississippi</td>
<td>11,783.1483</td>
<td>19,881.8175</td>
<td>168.73%</td>
</tr>
<tr>
<td>Tennessee</td>
<td>8,843.4208</td>
<td>19,020.6944</td>
<td>215.08%</td>
</tr>
<tr>
<td>Illinois</td>
<td>3,019.7194</td>
<td>17,252.7589</td>
<td>571.34%</td>
</tr>
<tr>
<td>Florida</td>
<td>7,419.2324</td>
<td>13,214.9230</td>
<td>178.12%</td>
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</table>

### Commodity

<table>
<thead>
<tr>
<th>Commodity</th>
<th>Volume (2012)</th>
<th>Volume (2040)</th>
<th>Ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cereal Grains</td>
<td>6,445.8691</td>
<td>12,605.3338</td>
<td>195.56%</td>
</tr>
<tr>
<td>Logs</td>
<td>1,106.5095</td>
<td>10,994.1732</td>
<td>993.59%</td>
</tr>
<tr>
<td>Coal</td>
<td>19,089.3006</td>
<td>10,721.4486</td>
<td>56.16%</td>
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**Statewide Modeling Effort Overview**

**Data Collection**
- Census Data
  - Employment data by NAICS code will be obtained for all counties
- FAF data
  - Divided into FAF zones
- Roadway data
  - Interstates, US Highways, State Highways

**Processing**
- Disaggregation
  - The disaggregation will be based on NAICS employment related to the specific commodity moved
- Disaggregate FAF data
  - States that border Alabama will be disaggregated to counties, Alabama will be disaggregated to census tracts
- Develop Voyager Network
  - A Voyager network will be developed that contains all Interstates, US Highways for Alabama and neighboring states and all state highways within Alabama

**External Trips (Includes International)**
- External Traffic
  - All pass through flows will be developed using FAF zone or county in neighboring states
- External Traffic
  - The External Traffic will be assigned to the network

**Internal Trips**
- Internal Traffic
  - All internal flows will be developed using disaggregated data to the census tract level
- Internal Traffic
  - The Internal Traffic will be assigned to the network
Sample Report Mapping

Analysis for Future Year Truck Traffic

Legend
- Green: High Trucks per Lane
- Red: High VC Ratio
ALDOT Freight Planning Website

www.dot.state.al.us ➔ Bureaus drop-down box on lower right ➔
“Transportation Planning and Modal Programs”

Welcome to Transportation Planning and Modal Programs

Robert J. Jilly, P.E.
Bureau Chief, Transportation Planning and Modal Programs
Phone: 334-693-6496
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The Bureau of Transportation Planning and Modal Programs is operated in cooperation with the Federal Highway Administration through state-matched federal funds allocated by the Federal Aid Highway Acts.

The Transportation Planning Engineer directs activities of this bureau. Cooperation, assistance, and advice in the performance of certain activities, and the preparation and presentation of data for the Federal Highway Administration and the Alabama Department of Transportation are received from representatives of the local Atlanta, and Washington offices of the Federal Highway Administration.

NEW!

Click Here ➔ 2016 Alabama Statewide Freight Plan

We invite comment on the draft 2016 Alabama Statewide Freight Plan and development process. Please provide name, agency if any, mailing address, email address, and contact phone number.

Please visit the Freight Planning site listed on the right-hand panel
Freight Network Mapping

One of the stated objectives of MAP-21 is to improve the condition and performance of the national freight network and support investment in freight-related surface transportation projects. This will be achieved through a number of freight planning efforts such as development of a national primary freight network, a national freight strategic plan, state freight plans, and state freight advisory committees. This will be augmented by an Alabama Statewide Primary Freight Network and this supporting website repository of Alabama mapping and modal and intermodal freight data resources. This site will be home to the 2015 Alabama Statewide Freight Plan all other maps developed as part of this statewide freight planning effort.

The purpose of these maps is to illustrate corridors that are critical to the movement of freight in Alabama. The first two maps display the Primary Freight Network, as approved by FHWA, including additions requested by ALDOT. A third map expands the Primary Freight Network to what ALDOT would recommend for Alabama. The next set of maps are known as freight flow maps; they provide a picture of road network usage in terms of truck traffic. They also give the viewer an idea of how commodities move in and out of Alabama by various modes.

The final three maps show the multimodal freight network. The off-the-road network has over 1,500 miles of inland water corridors for barge movement, four Class I railroads, and over 200 registered airfields. Goods that move by any of those methods can be placed on the road network at any point via intermodal facilities, manufacturing facility, or similar. This map is intended to display points at which freight moves on and off the road network.

Metropolitan Planning Section
June 2015

- Draft 2016 National Primary Freight Network
- Draft 2016 Alabama National Freight Network
- Draft 2016 Alabama Primary Freight Network
- National Motor Carrier Freight Flow To/From Alabama FAF3.4 2012
- Draft 2016 Alabama Freight Flow
- Draft 2016 Alabama Known Freight Generators
- Draft 2016 Alabama Known Intermodal Connectors
- Draft 2016 Direct Rail and Barge Access
Topics/ Questions for FAC Input

- Which portions of the roadway network:
  - Are most important to freight movement?
  - Experience freight related congestion or delay?
  - Are problematic for truck movements?
  - Are most in need of maintenance (pavement, restriping, etc.)?

- Where are there specific bridges or overpasses that present obstacles to truck and/or rail operations?

- Are there any anticipated changes in your primary commodity types or volumes?

- Are there any anticipated changes in your use of intermodal facilities?

- What kinds of technologies are anticipated to assist with freight movement and logistics?

- What types of real time information do you use for tracking freight?

- Do you schedule logistics to take advantage of off-peak hours?
Next Steps

- Identify Statewide Freight Network
- Develop performance measures
- Identify freight projects and prioritize