What’s Happening Here….
Identified Megaregions and MPO Boundaries
Today’s Presentation- Improving Partnerships and Collaboration

- Megaregions
- Lessons Learned from Megaregions Workshops
- National Economic Partnerships
- Transportation Planning Capacity Building Program
- Open Discussion
Dispelling Myths---or not?

- Can we even say Megaregions?!?
- What’s the difference between Megaregions and National Economic Partnerships?
- Where did we hold workshops and why
- Where can folks find additional information....
- **Sharing Information** is critical; maybe this has not been done enough- until now (Providing forums for discussion)
- **Incorporating the 4C’s** of Megaregions (Communication, Consultation, Cooperation and Commitment)
- How do we better **connect-collaborate** across public and private sectors
  - Involving the Private Sector in the Decision-Making Process
  - Using Freight Advisory Councils
  - Working Across Jurisdictional Silos
- **Data Sharing** Across Agencies
Driving Factors: E-Commerce
Driving Factors: E-Commerce, Airports, and Ports
Driving Factors: Forecasted Truck Volume Growth

Source: Freight Analysis Framework version 4 (average annual daily truck traffic)
<table>
<thead>
<tr>
<th>Region Name</th>
<th>Planned Action</th>
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<tbody>
<tr>
<td>I-10 Corridor Coalition</td>
<td>I-10 Freight Corridor Plan (Western States)</td>
<td>Harmonize State Freight Plans Across Jurisdictional Borders</td>
</tr>
<tr>
<td></td>
<td>I-10 Freight Corridor Plan (all 8 states)</td>
<td>Improve Operational Flow from Ports of LA/Long Beach to Houston and beyond</td>
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<tr>
<td></td>
<td>Corridor-Based Operational and Goods Movement Study</td>
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<tr>
<td>Mid-Atlantic</td>
<td>Freight Plan</td>
<td>Harmonize State Freight Plans Across Jurisdictional Boundaries</td>
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<td>Connected and Automated Vehicles Plan</td>
<td>Plan for Impact of C/AV on Fed Aid Highway System</td>
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<td>Freight Plan</td>
<td>Harmonize State Freight Plans Across Jurisdictional Boundaries</td>
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## Megaregion Workshops: Actions and Outcomes

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<tbody>
<tr>
<td>Northeast</td>
<td>Freight Plan</td>
<td>Harmonize State Freight Plans Across Jurisdictional Borders</td>
</tr>
<tr>
<td></td>
<td>Enhancing Economic Development through Addressing Congested Bottlenecks</td>
<td>Improve Passenger and Freight Flow by addressing key bottlenecks across the region</td>
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<tr>
<td>Midwest Chicago</td>
<td>Freight Plan Governance Structure for Consolidating Funding for Major Initiatives (similar to CREATE)</td>
<td>Harmonize State Freight Plans Across Jurisdictional Boundaries</td>
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<tr>
<td></td>
<td>Incentivize States to Plan Across Jurisdictional Boundaries</td>
<td></td>
</tr>
<tr>
<td>Piedmont</td>
<td>Freight Plan</td>
<td>Harmonize State Freight Plans Across Jurisdictional Boundaries</td>
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<tr>
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<td>Improve Jurisdictional Coordination through engaged dialogue/forums- with lead MPO (Atlanta Regional Commission)</td>
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<th>Anticipated Outcome</th>
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<tr>
<td>Great Lakes/Columbus</td>
<td>Freight Plan</td>
<td>Harmonize Planning Efforts More Effectively Across Jurisdictional Borders</td>
</tr>
<tr>
<td></td>
<td>Truck Parking Concerns</td>
<td>Improve Passenger and Freight Flow by addressing key bottlenecks across the region</td>
</tr>
<tr>
<td></td>
<td>Prepare for Emerging Technologies (Hyperloop, etc.)</td>
<td></td>
</tr>
<tr>
<td>Greater Texas and Beyond</td>
<td>Freight Plan Governance Structure for Consolidating Funding for Major Initiatives (similar to CREATE)</td>
<td>Harmonize State Freight Plans Across Jurisdictional Boundaries</td>
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<td>Governance Structure for Consolidating Funding for Major Initiatives (similar to CREATE)</td>
<td>Incentivize States to Plan Across Jurisdictional Boundaries</td>
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<tr>
<td>Central Plains/Heartland</td>
<td>Freight Plan</td>
<td>Harmonize State Freight Plans Across Jurisdictional Boundaries</td>
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Megaregions Workshop Feedback

- Communicate the “Why”- having the public understand data, etc.
- Collaborate with new potential stakeholders to offset the “great disruption”
- Collaboration on Big Data and Heavy Hauling Permits
- Great Lakes Truck Parking Study
- Truck Driver Workforce Development Plans
- Increased intercity public/private transportation (high speed rail, buses, etc.)
- Great Lakes or National Road Weather Information System for Improving Highway Freight Movement
Megaregions Workshop Feedback

- Address Economic Competitiveness, Systems Thinking, and Disruptive Technology

- Providing Additional Federal Planning Funding

- Working with Universities and Community Colleges to improve courses related to C/AV, freight, and other workforce development

- Creative reuse/repurposing of already existing data

- Enhanced Broadband/internet infrastructure throughout the region – especially in rural America

- Automated vehicle predictions/dates may prove to be way off- we need to prepare for the future now

- Promote learning and development in local schools
Megaregions Workshop Feedback

• Commit funding to smart infrastructure and collaborate efficiently across state lines
• Consolidate a public message of WHY this is important

• Gas Tax
• Integrate freight into planning, civil engineering, curriculum, etc.
• Keep the conversation moving forward and expanding partners involved

• Remove legislative restrictions to being innovative
• Discuss how DOTs and MPOs use information about private investment to make public investment decisions
Megaregions Workshop Feedback

- Start a Megaregion working group
- Move ahead on CV and AV
- Freight Rules
- DOTs are in the best position to lead
- Carbon tax
- Reimagine the role/responsibility of private sector in directly covering costs of smart infrastructure
- Affordability for smart mobility
- Create an association and brand for Great Lakes mobility
- Truck specific roads and lanes
Communicating the Value of Coordination: Piedmont Megaregion Spotlight

The Piedmont Region is the fastest growing national economic network in the United States in terms of population. Because of this combined with dispersed development patterns, the region is facing challenges with increased traffic congestion and inadequate infrastructure in and around major cities. In addition to highway congestion, other issues faced by this region include lack of coordination in planning for railways linking cities and conflicts over shared natural resources such as water among the states. Increased coordination could make more efficient use of resources and improve both passenger and freight movement as well as safety.

Piedmont Region
National Economic Network

Air Pollutants
Nonattainment Areas within Piedmont Region: 2018
(2010 Population in Thousands Living within Area)

<table>
<thead>
<tr>
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<tbody>
<tr>
<td>AL</td>
<td>Troy</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>TN</td>
<td>Johnson City-</td>
<td>15</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Kingsport-Bristol</td>
<td></td>
<td></td>
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</tbody>
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Urban and Rural Population by State: 2010

<table>
<thead>
<tr>
<th>State</th>
<th>Total Population</th>
<th>Rural Population</th>
<th>Urban Population</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alabama</td>
<td>4,779,736</td>
<td>1,957,932</td>
<td>2,821,804</td>
</tr>
<tr>
<td>Georgia</td>
<td>9,687,653</td>
<td>2,415,562</td>
<td>7,272,091</td>
</tr>
<tr>
<td>North Carolina</td>
<td>9,535,483</td>
<td>3,233,727</td>
<td>6,301,756</td>
</tr>
<tr>
<td>South Carolina</td>
<td>4,623,364</td>
<td>1,557,555</td>
<td>3,066,809</td>
</tr>
<tr>
<td>Tennessee</td>
<td>6,346,105</td>
<td>2,132,640</td>
<td>4,213,465</td>
</tr>
<tr>
<td>Piedmont Region</td>
<td>70,856,713</td>
<td>11,297,576</td>
<td>59,559,137</td>
</tr>
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Population
Current and Projected Population for the U.S. and Piedmont Region States: 2010-2040

<table>
<thead>
<tr>
<th>Geography Name</th>
<th>2010 Total Population</th>
<th>2020 Total Population</th>
<th>2030 Total Population</th>
<th>2040 Total Population</th>
</tr>
</thead>
<tbody>
<tr>
<td>United States</td>
<td>308,755,558</td>
<td>333,556,646</td>
<td>366,028,510</td>
<td>385,082,556</td>
</tr>
<tr>
<td>Alabama</td>
<td>6,779,716</td>
<td>6,911,806</td>
<td>5,983,599</td>
<td>5,128,561</td>
</tr>
<tr>
<td>Georgia</td>
<td>9,687,653</td>
<td>10,716,537</td>
<td>11,863,775</td>
<td>12,808,692</td>
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<td>North Carolina</td>
<td>9,535,483</td>
<td>10,525,624</td>
<td>11,605,573</td>
<td>12,524,753</td>
</tr>
<tr>
<td>South Carolina</td>
<td>4,623,364</td>
<td>5,154,774</td>
<td>5,730,003</td>
<td>6,253,488</td>
</tr>
<tr>
<td>Tennessee</td>
<td>6,346,105</td>
<td>6,839,046</td>
<td>7,362,847</td>
<td>7,750,137</td>
</tr>
<tr>
<td>Piedmont Region</td>
<td>14,974,341</td>
<td>18,187,188</td>
<td>21,633,817</td>
<td>24,473,831</td>
</tr>
</tbody>
</table>

Gross Domestic Product
GDP - Region in Comparison to US Total: 2016 ($ Millions)

- Piedmont Region: $11,000,275

- US Total: $18,911,391

GDP - By State: 2016 (Billions of Current Dollars)
Communicating the Value of Coordination: Piedmont Megaregion Spotlight
Communicating the Value of Coordination: Piedmont Megaregion Spotlight

Piedmont Region
National Economic Network
Summary of Status by Mode

TRUCKING
- Estimates have found that trucking corridors will see high increases in traffic volume by 2040. Locations of truck trip origins and destinations can help identify areas that will experience freight traffic increase. While most of the areas where truck trips begin and end have small residential populations, nearby residential areas may experience negative externalities from increased trucking in their communities.

RAILROADS
- Many railroads are operating underutilized and not at full capacity, while truck volume on the interstates is increasing. This is an opportunity that can be incentivized by the federal government.

AIRPORTS
- Airports are complex global gateways to and from the Piedmont Atlantic Region. Planners must focus on airports as a critical aspect of national and international freight movement.

SEAPORTS
- Investment in ports can improve employment and jobs. Discussion around investment must occur with policymakers and citizens. The Panama Canal expansion can present many opportunities for economic improvement through new connections to global markets.

WAREHOUSING
- Growth in warehousing is expected to increase in the coming decades. Many companies prefer to rent or lease warehousing properties because the industry changes rapidly. This is a flexible supply chain that changes around every 6 months, requiring a policy framework which can adjust to rapid changes.

Safety
- Fatalities between 2011 and 2015 by State

Congestion
- Annual Highway Congestion Cost per Auto Commuter (2014 Dollars)

The region is experiencing tremendous population growth, driven primarily by domestic migration.

The low cost of living and the high quality of life in the region are two of the reasons for a high rate of projected population growth, between now and 2010.

This national economic network is growing quickly with auto-oriented development patterns.

Atlanta is the Southeast’s largest metropolitan area and home to the nation’s busiest airport and some of the world traffic congestion. Charlotte is the second largest metropolitan area in the Piedmont Region after Atlanta and the only other city in the region with a rail transit system. The I-85 Corridor Coalition estimates that, without capacity improvements, urban Interstate delays will increase by 34 percent and delay across all Federal aid systems will increase by almost 30 percent in 2040.

IFMV growth to keep pace with population growth, the region would still require new highway lanes and maintains today’s ratio of travel demand to available roadway space.

In the Atlanta-Birmingham corridor (268), 46 percent of the highway operates at over 75 percent design capacity in the peak hour. The northern half of the corridor is more congested. This same figure is 54 percent in the Atlanta-Charlotte corridor (261).

Freight traffic relies heavily on rail and roadway connectivity, which is challenged by an aging infrastructure that has expanded more slowly than freight volumes have increased.

Megaregions Highlight: Interstate 10 Corridor Coalition

More than 1700 miles (LA to Houston)

Seven Cities:
Los Angeles, Tucson, Phoenix,
Las Cruces, El Paso, San Antonio, Houston
I-10 Western Connected Freight Corridor Pooled Fund Study

- Funded through FHWA Transportation Pooled Fund program, combining transportation planning funds from all four states.
Charter Signed: June 2, 2016
Vision for I-10 Corridor Coalition

- Truck Platooning
- Connected Vehicles
- WIM sensors
- Automated Truck Parking lots

Result:
- Safer and more efficient travel-Commercial/Personal
- Goods can reach their destination quickly at lower cost
- Economic growth in Western Region
National Economic Partnerships

Purpose
• To fund National Economic Partnerships that will implement innovative approaches to multi-jurisdictional coordination and regional planning

Eligibility
• Consortia of state DOTs and MPOs

Successful awards will, among other things...
• Showcase innovative coordination among stakeholders across broad but related geographic area
• Resolve or improve complex transportation issue(s)
• Highlight transformational transportation planning approaches that can be shared nationally
National Economic Partnerships

• A collection of urban centers and their surrounding rural areas, connected by existing economic, social, and infrastructure relationships

• Serves as incubator of innovation, driving vital parts of U.S. economy that benefit surrounding regions and rural areas

• Builds on FHWA Megaregions Workshop effort intended to start conversation on multi-jurisdictional coordination and collaboration
National Economic Partnerships

Scope

• Approximately $2M budgeted
• Likely 4–6 pilots ranging from $10–250k
• 20% non-federal share required; 50% non-federal share preferred
  o In-kind contributions such as staffing can count toward match requirement.
Applicants encouraged to draft proposals for efforts that will do one of the following:

- Integrate multi-jurisdictional coordination and planning into agency practices and procedures
- Deploy a multi-jurisdictional analysis or study to address freight, safety, economic development or other related area(s)
- Deploy multi-jurisdictional coordination and planning solutions from an existing regional activity
- Deploy an innovative solution, approach or tool to address multi-jurisdictional issues
Phase 1, Letters of Interest: FHWA Review

Evaluation based upon: Technical merit & Importance to FHWA programs & funding availability

Eleven technical merit criteria:

1. Ability to complete proposed work with available resources in defined timeframe
2. Demonstrated organizational commitment
3. Broad scope of transportation planning partners willing to work across jurisdictional silos to accomplish specific goal or outcome within designated timeframe
4. Willingness to share information & results that add to existing body of work supporting multi-jurisdictional coordination/planning
Phase 1, Letters of Interest: FHWA Review

5. Project is application-oriented; can be implemented; not theoretical research
6. Solid work plan with detailed technical approach
7. Project provides case studies/lessons learned for sharing
8. Lead agency has technical capacity and demonstrated resources (funding & staff) to do project within designated timeframe
9. Lead agency demonstrates ability to effectively lead partners toward project goal within designated timeframe
10. Demonstrated non-Federal match available at time of award
11. Demonstrated collaborative approaches and partnerships

FHWA review will result in: Invitation to submit full proposal OR deferral
Deliverables/Expectations if selected

• Final approved work plan describing
  o Work phases
  o Budget
  o Work products
  o Timing
• Regular progress reporting and milestone check-ins
• 12- to 18-month baseline period of performance for each award
• Award recipients to make all materials available to FHWA for review, publication, and/or reference
Letters of Interest Received: National Economic Partnerships
Megaregions and National Economic Partnerships Team

• Brandon Buckner
• James Garland
• Brian Gardner
• Harlan Miller
• Spencer Stevens
• Supin Yoder
Presentation Credits and Content

• FHWA Megaregions Workshop Series (www.fhwa.dot.gov/planning/megaregions)

• FHWA National Economic Partnerships (www.fhwa.dot.gov/planning/megaregions/partnerships)

• Georgia Tech Center for Quality Growth and Regional Development- Megaregion Maps, Materials, Data, and References

• Nelson and Rae Article in National Geographic Magazine on Commuter Sheds and Economic Opportunity (2016)

• FHWA Capacity Building Program (www.planning.dot.gov)
Thank You

James Garland
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