



ATLANTA REGIONAL COMMISSION



# ATLANTA REGIONAL FREIGHT MOBILITY PLAN UPDATE

FATF: Discussion of Performance,  
Measures and Preliminary Projects

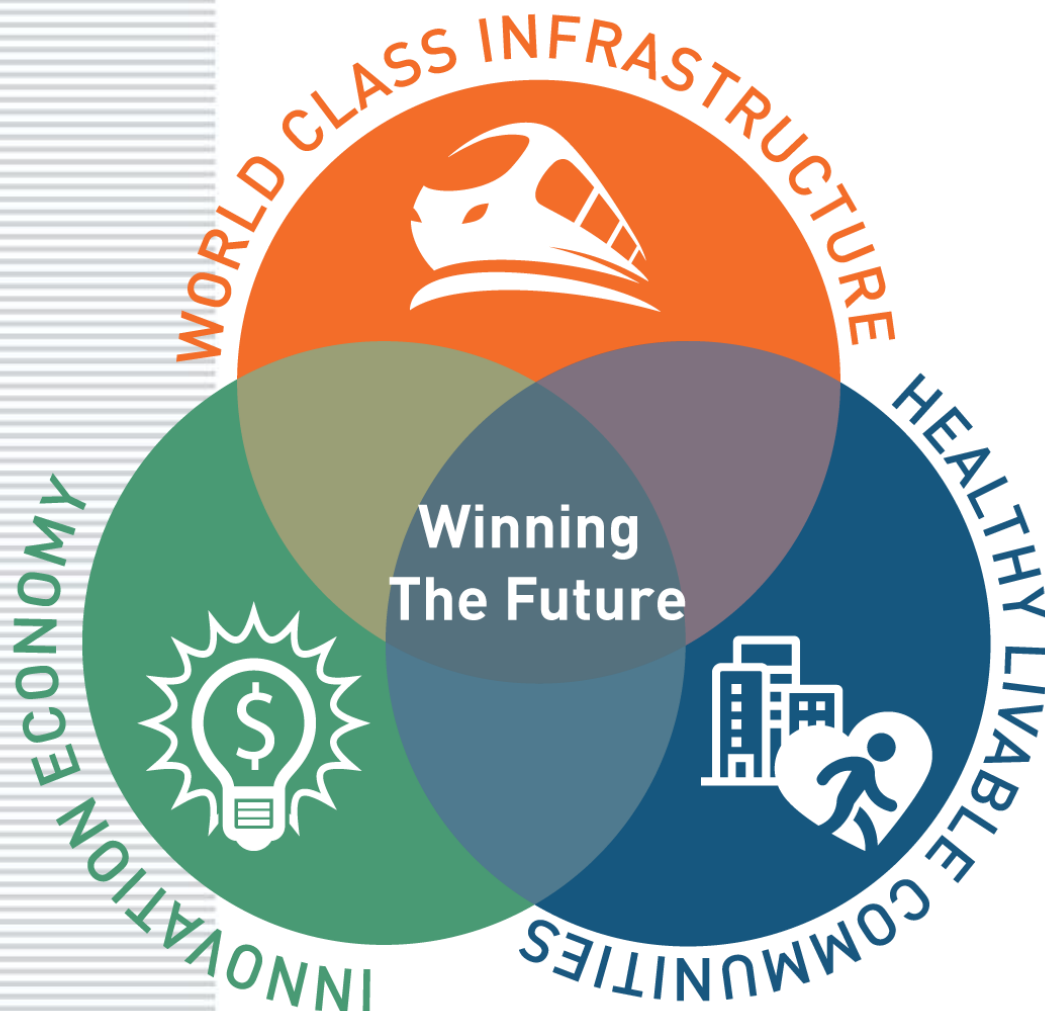
August 13, 2015

**PARSONS  
BRINCKERHOFF**

- Orientation
- Review: Vision & Goals
- Freight Performance Measures
- Freight Activity & Performance
- Freight Performance Improvement Initiatives
- Update: Outreach
- Next Steps



# ARC Vision & Goals: The Region's Plan



- **Region's Vision:** *Win the Future through world-class infrastructure, a competitive economy, and healthy, livable communities*
  - **Draft Freight Vision:** *Metropolitan Atlanta will win the future and remain the capital of the South by sustaining our stature through industry, trade, and cultural vitality, and serving the people by enhancing our role as a global hub for goods, services, and enterprise*
- ➡ 17 freight objectives serving the Region's 6 Goals (Handout)



# Freight Performance Measures

## **Purpose:**

- Establish indicators or metrics to assess the degree to which goals/objectives are being achieved, and over time how the performance of the freight system is changing

## **Selection Criteria:**

1. Availability of data
2. Relationship to the physical performance or economic value of freight movement
3. Linkage to goals and objectives
4. Emphasis on public sector action or investment
5. Ability to be predicted in plan horizon years
6. Comprehensible and understandable

# Commonly Used Performance Measures Relate to:

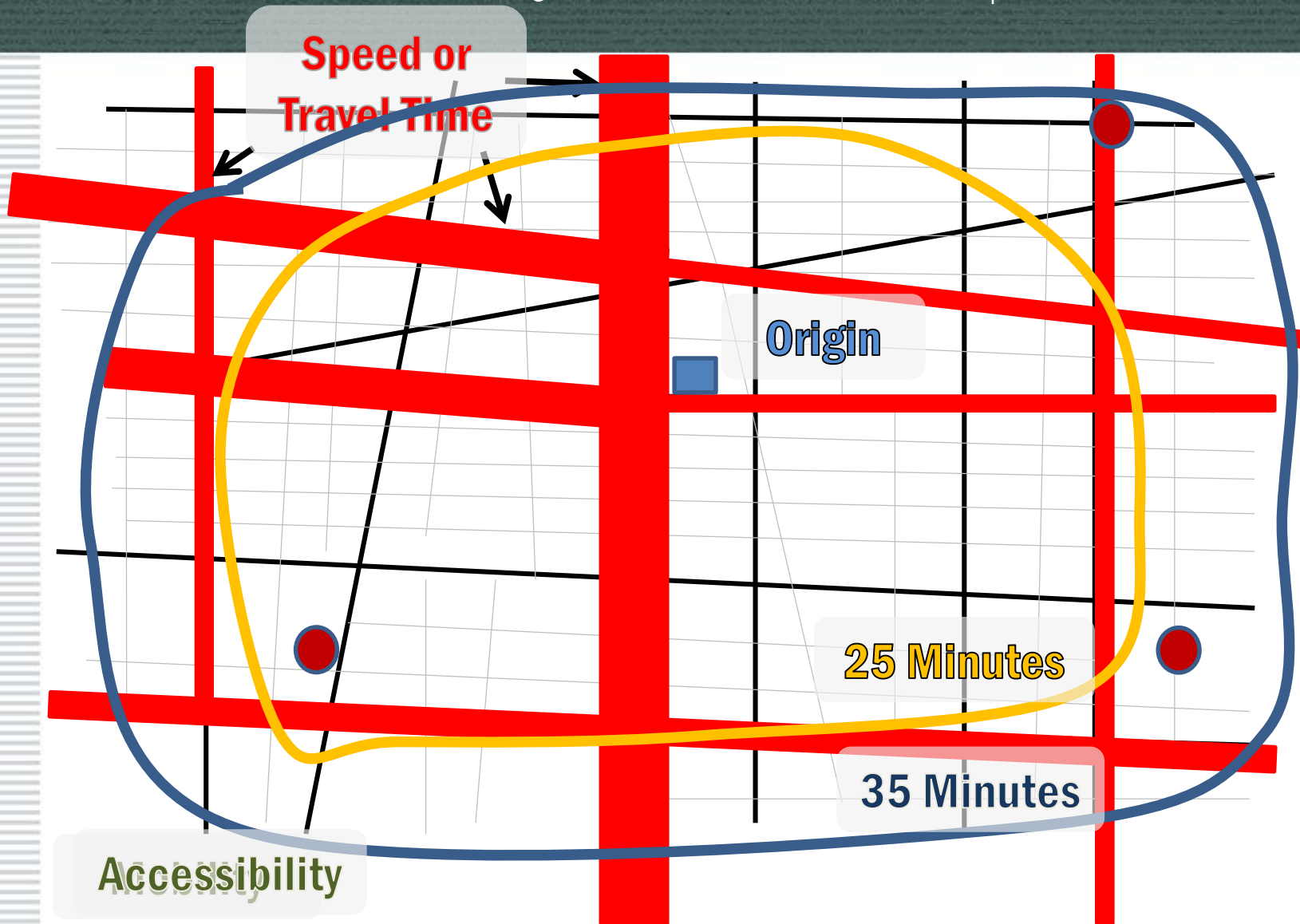
1. System use
2. Operating performance
3. Reliability
4. Accessibility
5. Safety
6. Environment

# Competitive Economy: Goal & Freight Measures

*Build the region as a globally recognized hub of innovation and prosperity*

- Accessibility measure – Percent of designated freight hubs and key origin/destination locations within travel time contours (see next for description)
- Mobility measure – Speeds on designated strategic freight network (see next for description)
- Ton-miles and tons by value transported for trucks, rail and air cargo

# Mobility, Accessibility - & Productivity



*Ensure a comprehensive transportation network, incorporating regional transit and 21<sup>st</sup> Century technology*

- Level of investment in TIP on regional truck route system
- Accessibility measure
- Mobility measure
- Highway reliability on regional truck route system (TTI and/or PTI)
- Number of truck/auto crashes
- Number of highway/rail crossing crashes
- Subjective assessment on implementation of connected vehicle technologies



# Region Goals & Freight Measures

*Develop a highly educated and skilled workforce, able to meet the needs of 21<sup>st</sup> Century employers*

- Number of logistics-related jobs (employment data and/or REMI modeling)

*Develop additional walkable, vibrant centers that support people of all ages and abilities*

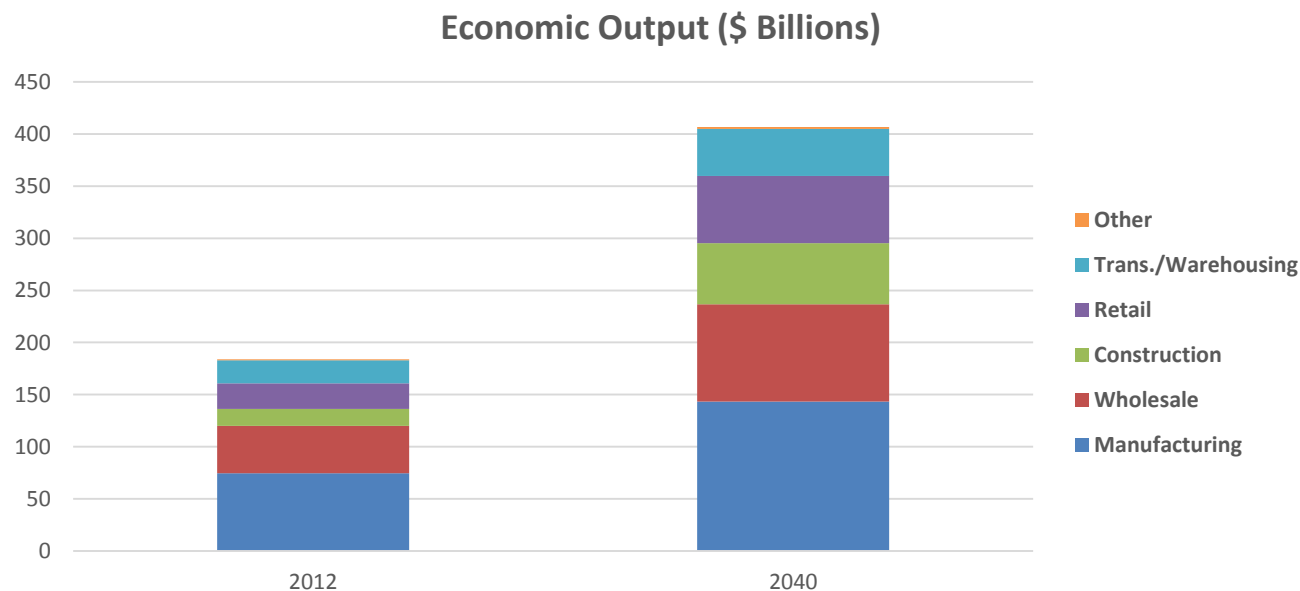
- Percent of LCI program studies and projects considering freight movement

*Promote health, arts, and other aspects of a high quality of life*

- Estimated freight-related NOx and PM2.5 emissions

# Freight in the Region's Economy

- Output from freight dependent industries is 38% of the total regional economy
- Forecast to grow from \$184 billion in 2012 to \$407 billion in 2040



# Freight in the Region's Employment Base

- 31% of regional jobs are freight dependent
- Freight dependent jobs are forecast to grow from 900,000 in 2012 to 1.3 million in 2040



Source: REMI for ARC

- Tonnages show key partners:

## To Atlanta

- Chicago
- Houston
- Savannah\*

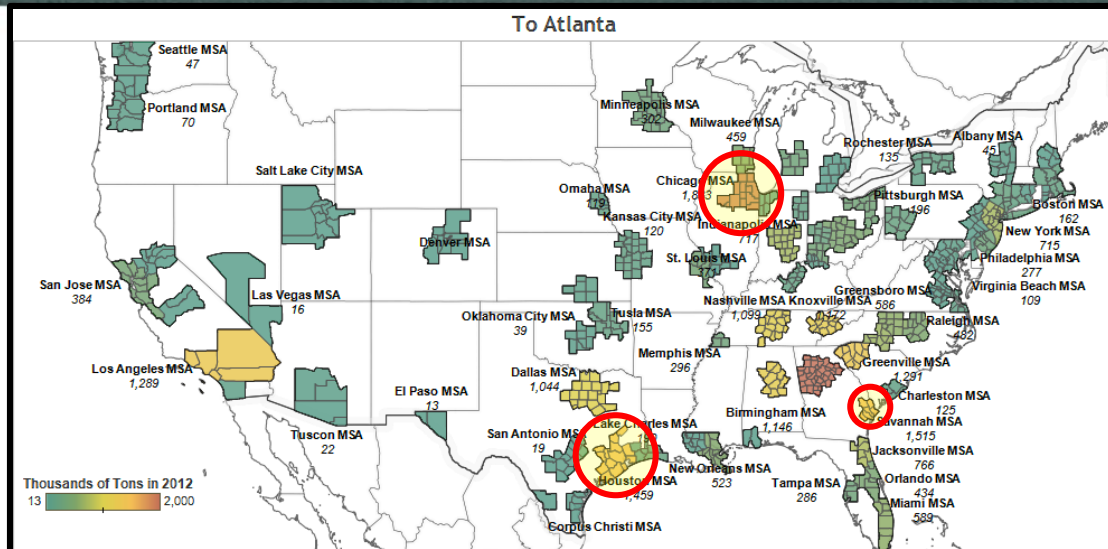
## From Atlanta

- Birmingham
- Chicago
- Greenville

Source: Commodity Flow Survey 2012

\*NB: CFS does *not* survey imports

Thousands of Tons in 2012





- Trading values show additional partners:

## To Atlanta

- New York
- Chicago
- Los Angeles
- Savannah\*

## From Atlanta

- Miami
- Birmingham
- Chicago
- Greenville

Source: Commodity Flow Survey 2012

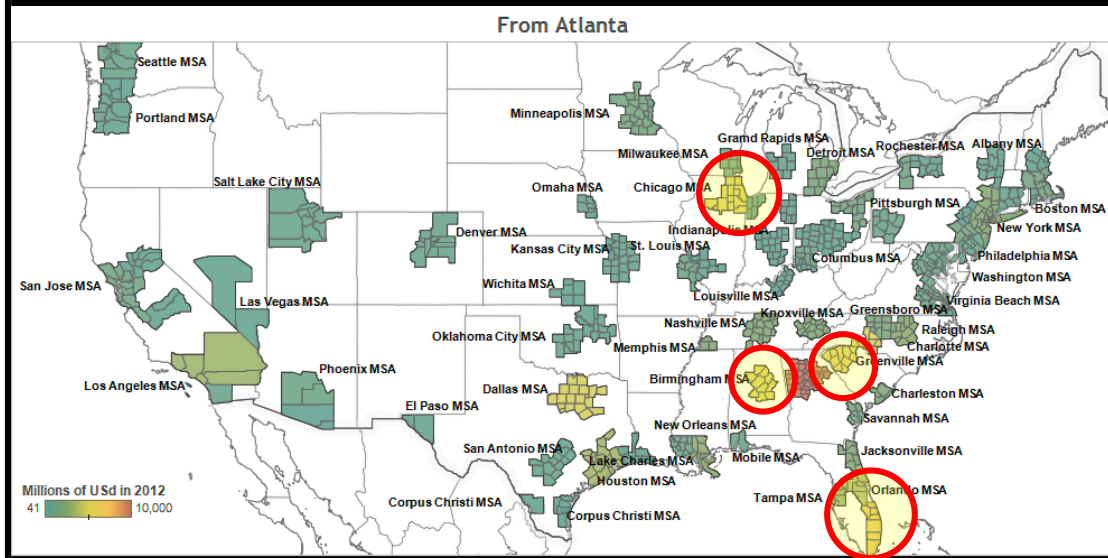
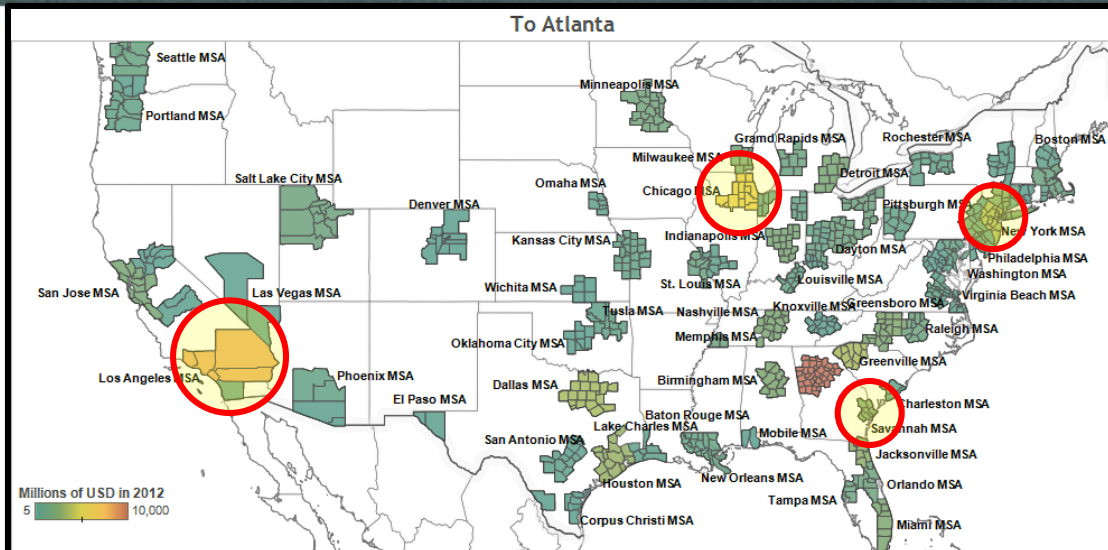
\*NB: CFS does *not* survey imports

Millions of USD in 2012

41



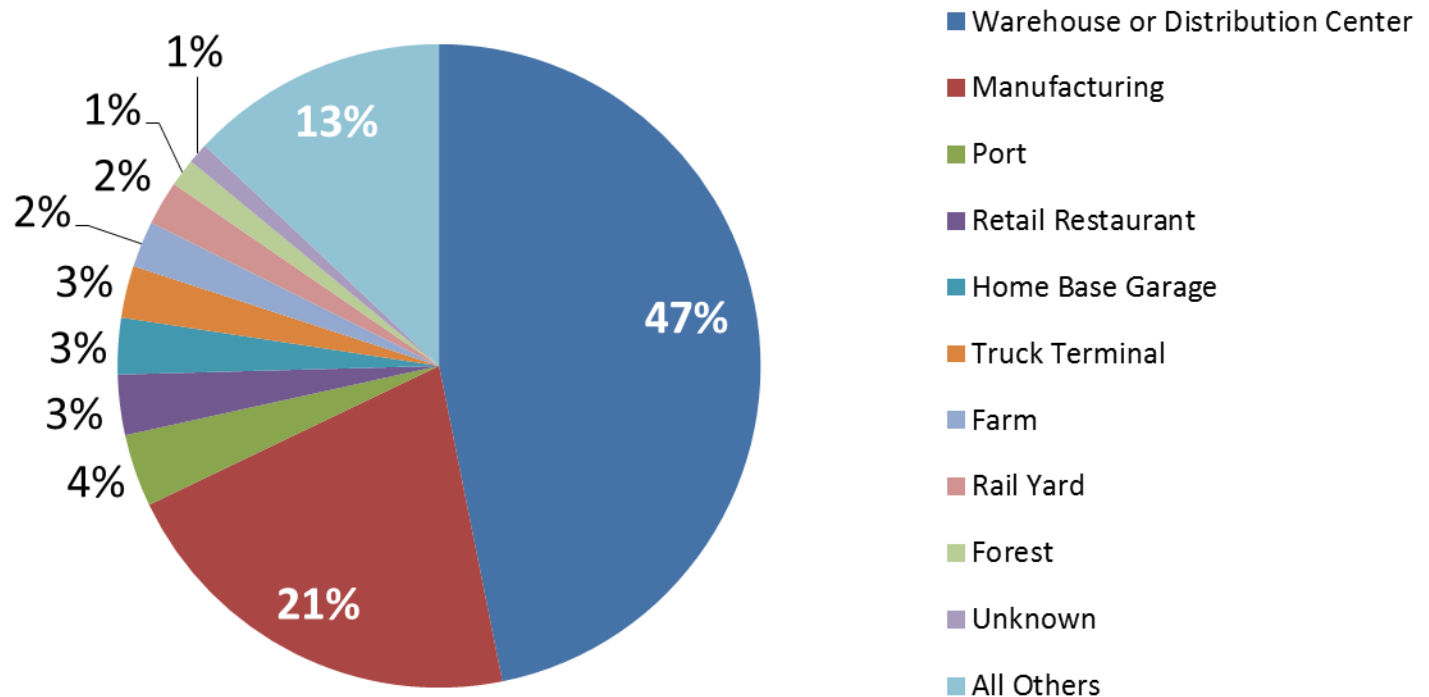
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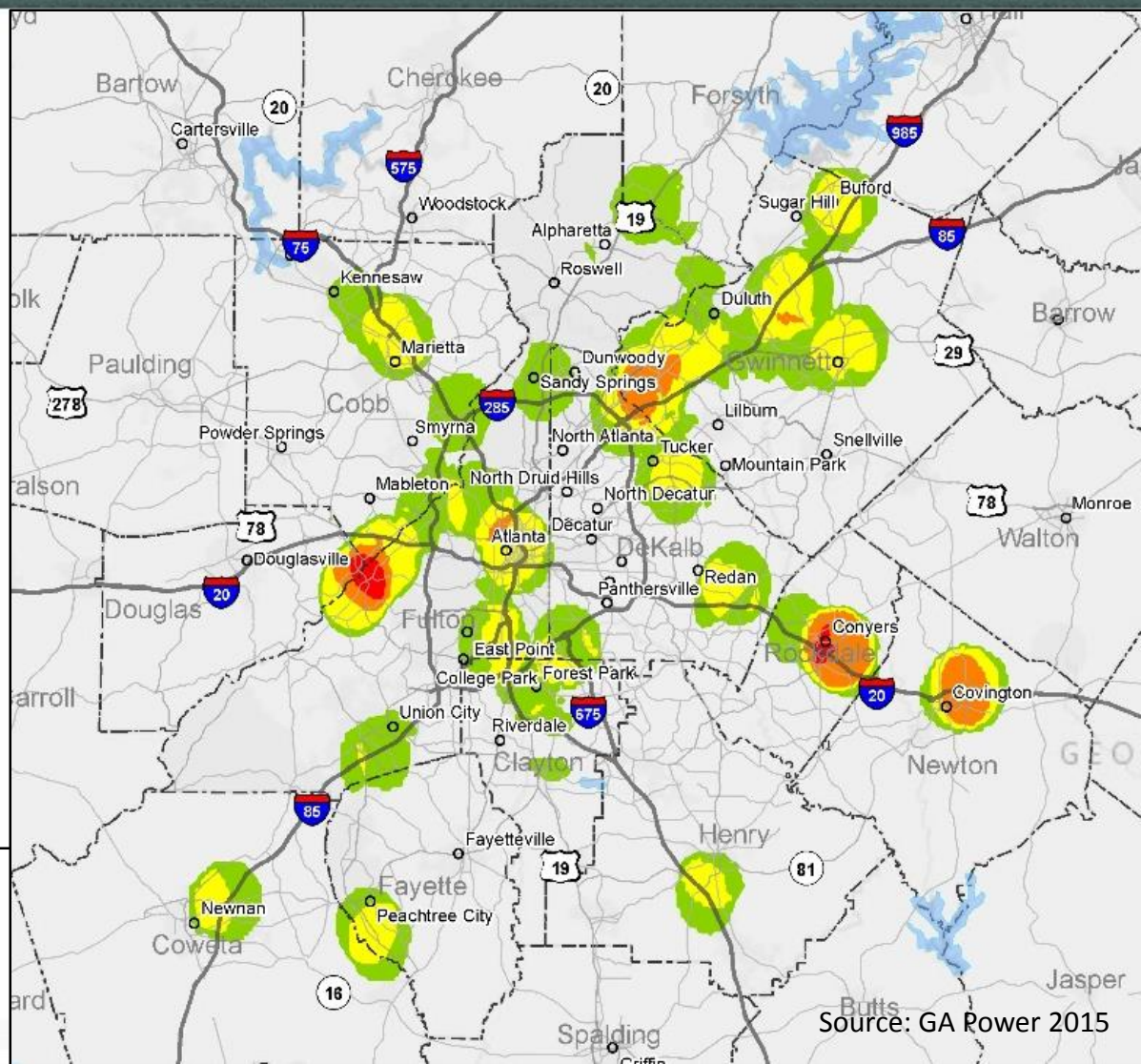
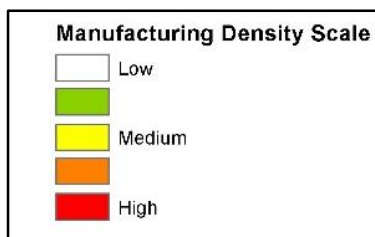
# Where are the Trucks Going?

- Manufacturing and warehouses facilities are most common truck trip ends

**Distribution of Trip Ends from Statewide O-D Survey**



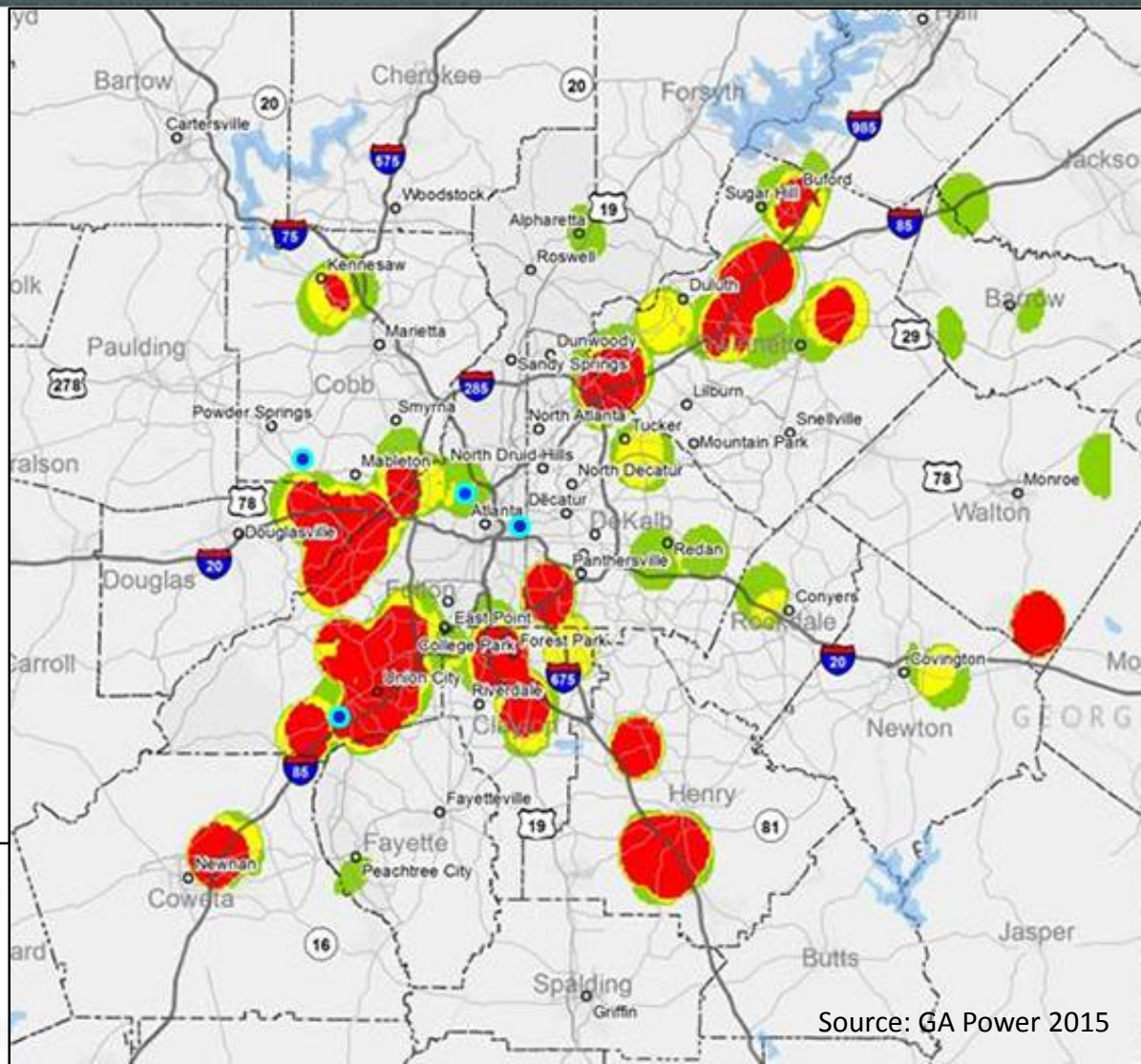
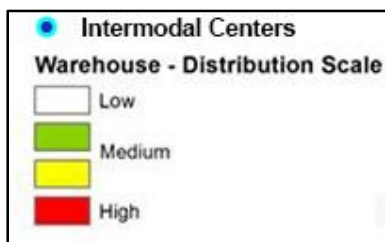
- Manufacturing activity clusters around interstates
- Key locations include:
  - Fulton Ind. Blvd.
  - Along I-20 east of Atlanta
  - I-85 between I-285 and I-985



Source: GA Power 2015



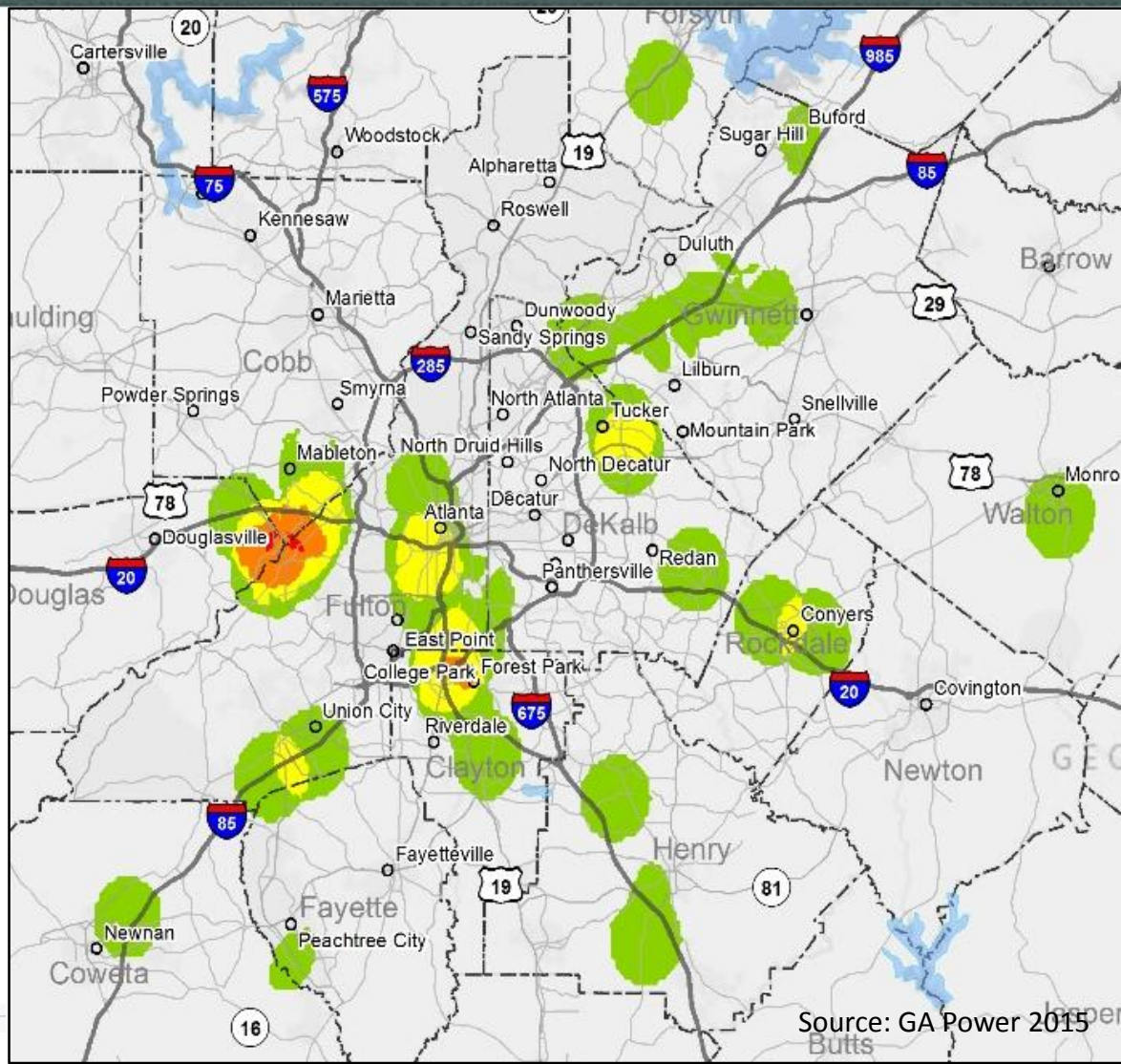
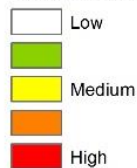
- Warehouse activity clusters
  - Southern part of region
  - Southwestern part of region
  - I-85 between I-285 and I-985





- Vacant industrial buildings located in:
  - FIB corridor
  - Midtown West
  - Aerotropolis region

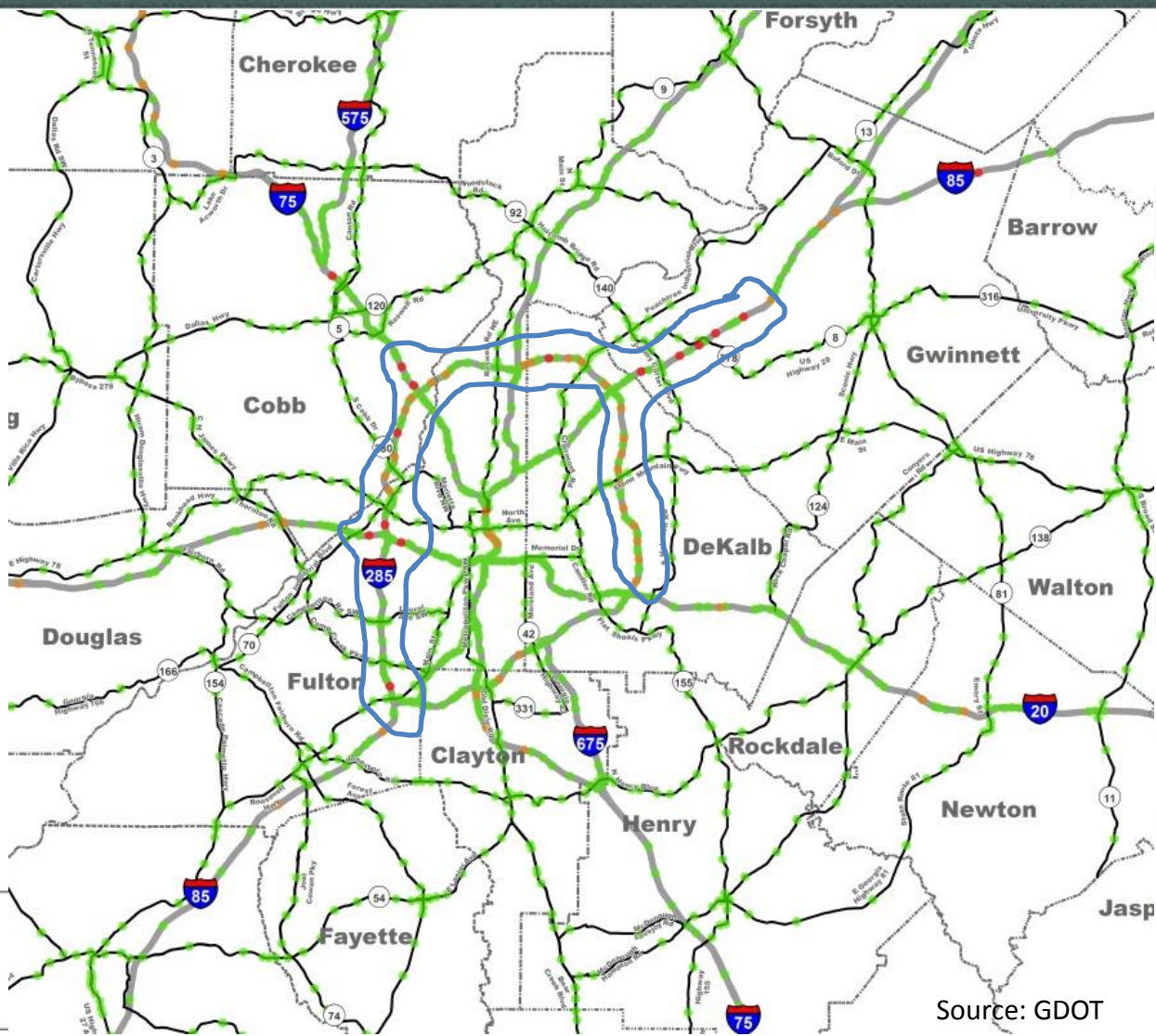
### Vacant Industrial Density Scale



Source: GA Power 2015

Source: ARC

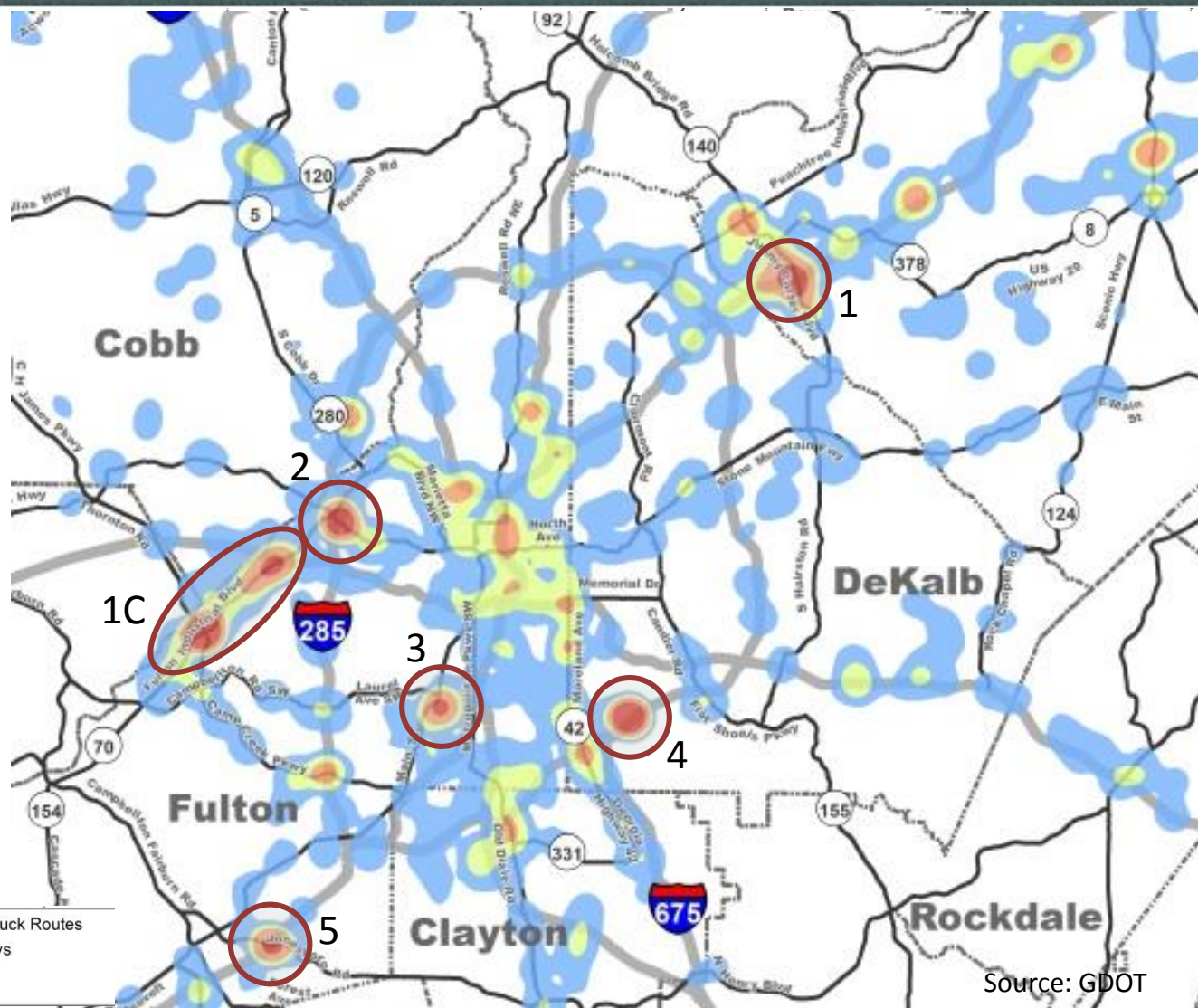




Source: GDOT

# Truck Crash Incidence: Non-Interstates

1. Jimmy Carter Boulevard/SR 140 @ I-85
2. Donald Lee Hollowell Parkway @ I-285
3. Langford Parkway/SR 166 @ Main Street
4. Bouldercrest @ I-285
5. Jonesboro Road @ I-85
1. (Corridor) Fulton Industrial Boulevard between I-20 and Camp Creek Parkway/SR 6





## Counties

### Legend

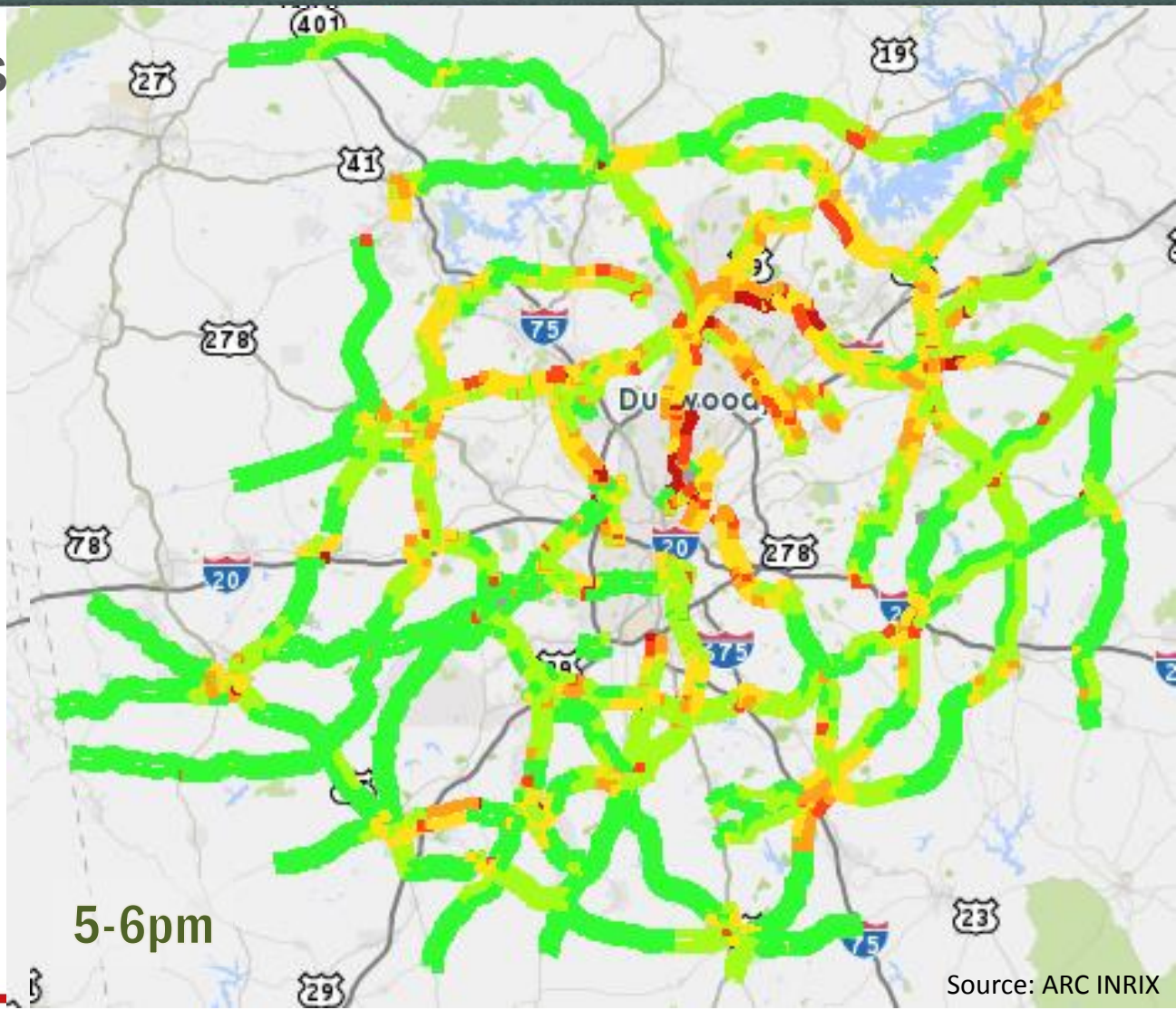
Source: ARC INRIX



# Performance – Lost Time: Truck Route Travel Time Index\*

- East-west routes between north Cobb, Fulton, and DeKalb counties have some of the highest travel time indices

\* Travel time index is ratio of average travel time to free flow time

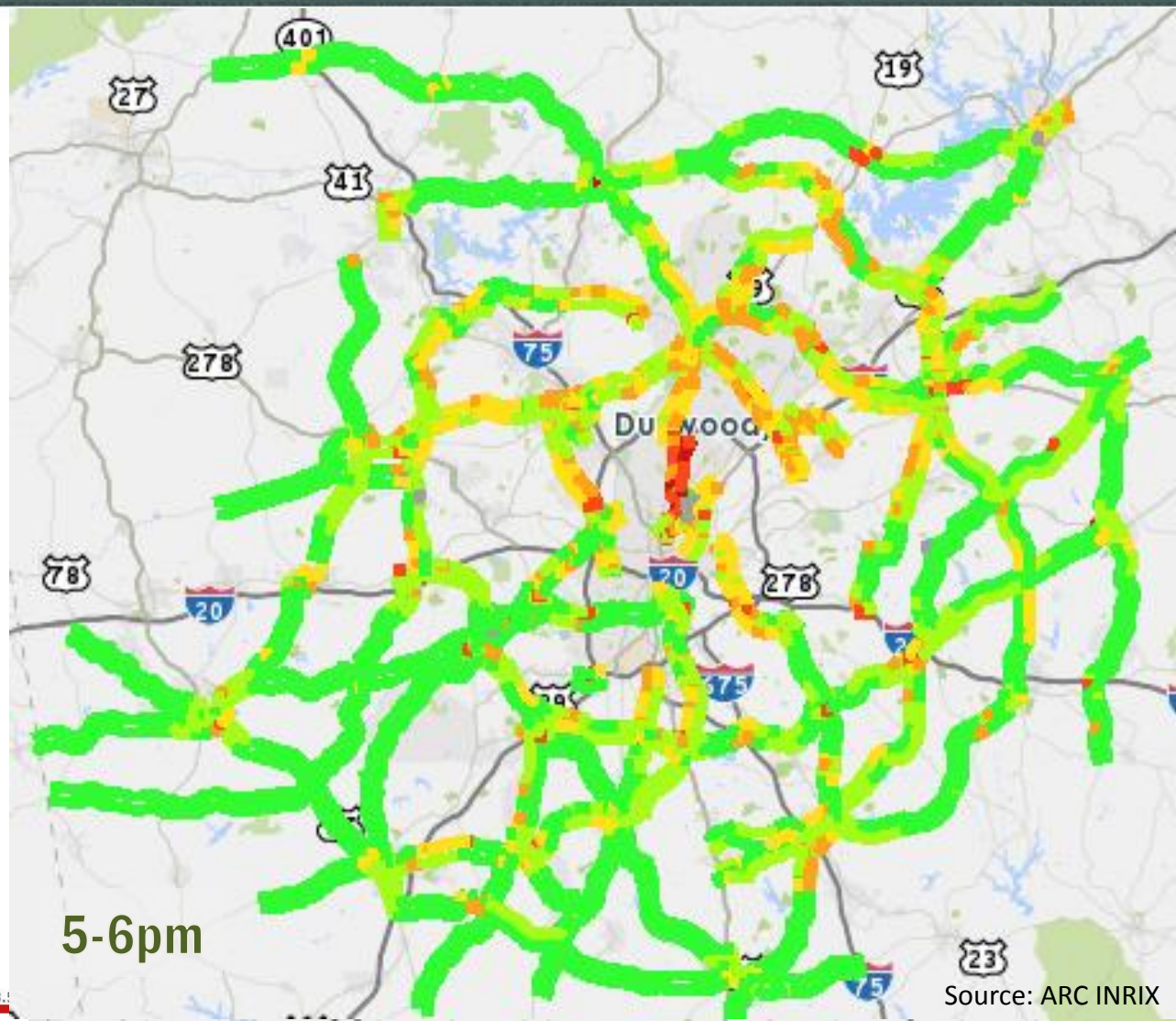




# Performance - Reliability: Truck Route 95% Buffer Index\*

- Similarly, east-west routes between north Cobb, Fulton, and DeKalb counties have some of the highest buffer indices

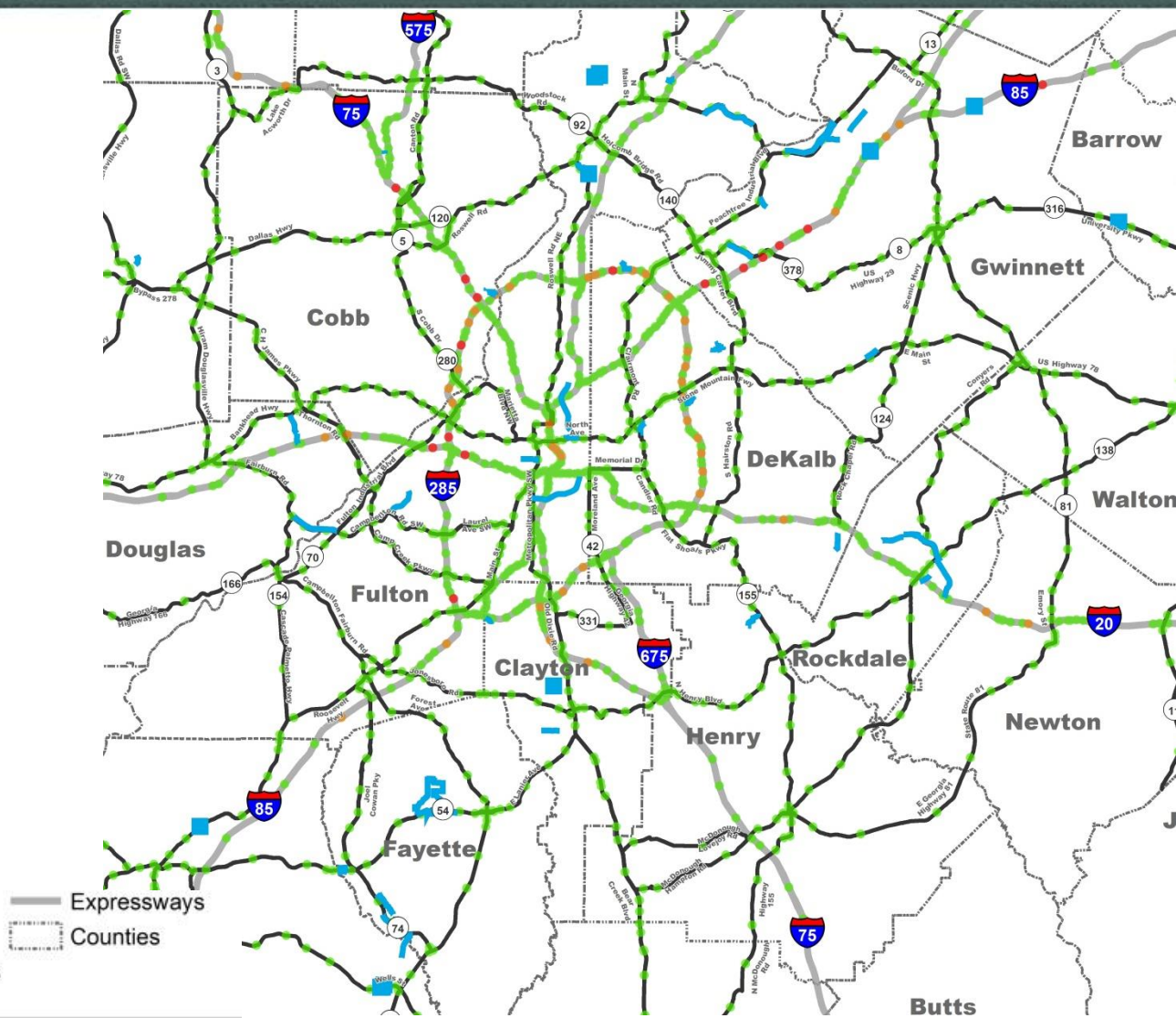
\* Buffer is time added for 95% reliability, calculated as (95<sup>th</sup> Percentile Travel Time – Avg. Travel Time)/Avg. Travel Time





# Programmed Projects

- List of existing TIP projects from ARC (As of April 27 2015)
- Some (not all) are freight related by design or location



## Truck Counts

- Less than 10k
- 10k to 20k
- More than 20k

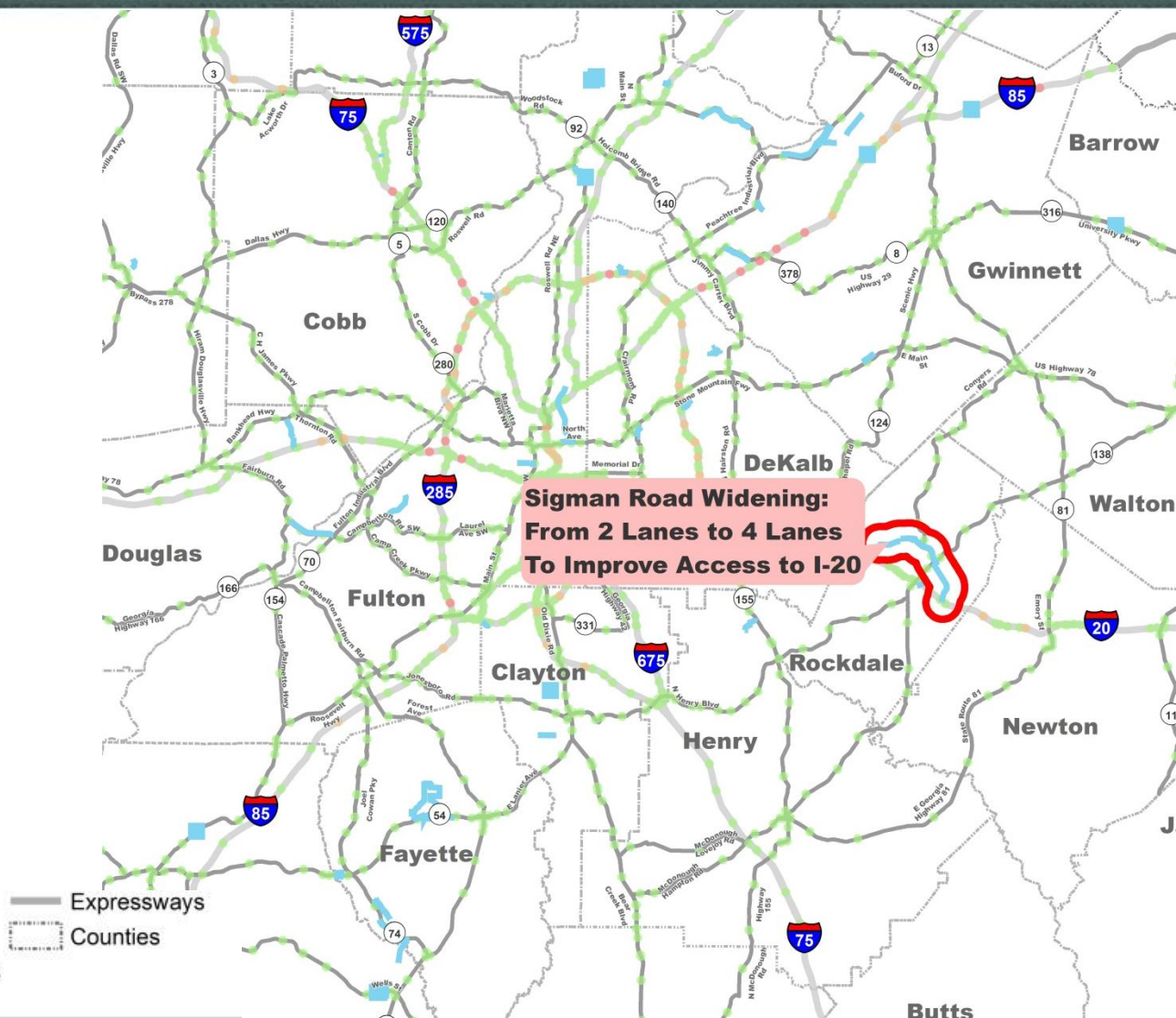
## Existing TIP Points

- Existing TIP Lines
- Regional Truck Routes

## Expressways

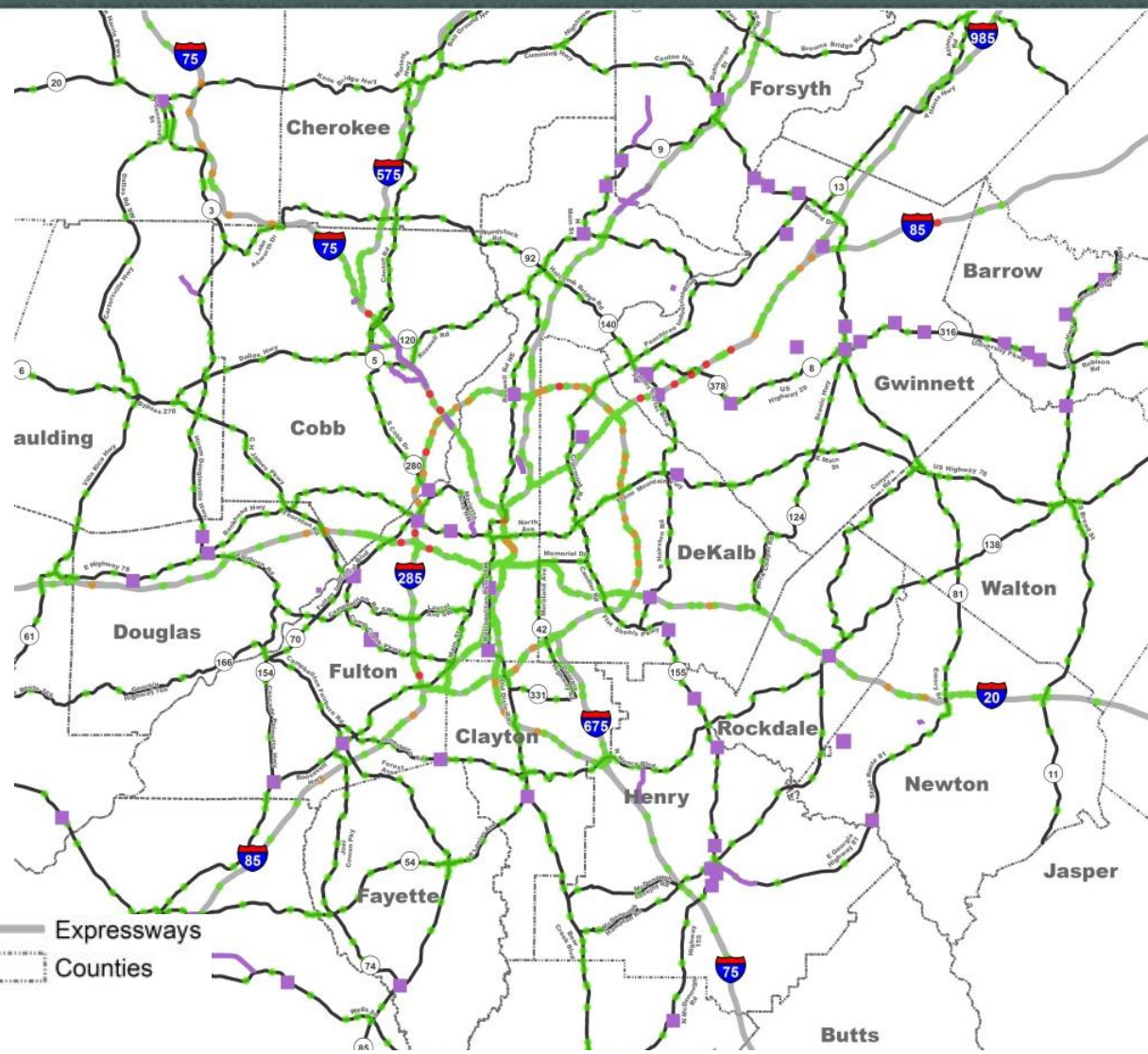
- Counties

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- Projects identified by ARC in the ASTRoMaP study
- Freight Related Projects from 2015 TIP Solicitation



## Truck Counts

- Less than 10k
- 10k to 20k
- More than 20k

- Potential Projects Points
- Potential Projects Lines
- Regional Truck Routes

- Expressways
- Counties



- Projects identified by ARC in the ASTRoMaP study
- Freight Related Projects from 2015 TIP Solicitation



# Stakeholder Engagement Outreach Targets



# Stakeholder Engagement Activities

- Created an online questionnaire in June 2015 for ARC's TCC
  - Focused on city and county transportation staff
  - Feedback on freight-specific issues in local communities
  - 27 Respondents
- Conducting stakeholder interviews
- Holding bi-monthly FATF meetings
- Presenting to ARC Committees (TCC, TAQC)



# Questionnaire Results Summary: Freight Issues

- Truck traffic, congestion, and safety
- Railroad safety
- Roadway capacity and geometric design
- Freight traffic through neighborhoods/local streets
- Land use and infrastructure



# Questionnaire Results: Freight Investments

- Fund and construct new interchanges
- Roadway widening and operational improvements
- Grade separation
- Truck-only lanes



- One-on-one interviews with key freight stakeholders
  - Representatives from public sector agencies and private sector companies
  - Completed 8 interviews to date
- Inform stakeholders of the status of the project
- Identify freight needs and challenges in the metropolitan Atlanta region
- Gather important information for the freight plan update



- Need more efficient freight movement throughout the state
- Address issues of public safety, access, and mobility
- Alleviate congestion and unclog bottlenecks
- Increase understanding of the economic impact of the freight industry

# Stakeholder Engagement Next Steps

- Complete remaining stakeholder interviews
- Continue outreach at ARC and standing community committee meetings as needed
- Create materials for use in ongoing ARC outreach initiatives
- Incorporate feedback and input from stakeholder engagement activities into the Freight Plan update

# Project Next Steps

- Freight trends, opportunities and needs (performance) analysis
- Project criteria and prioritization
- Continued stakeholder engagement





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