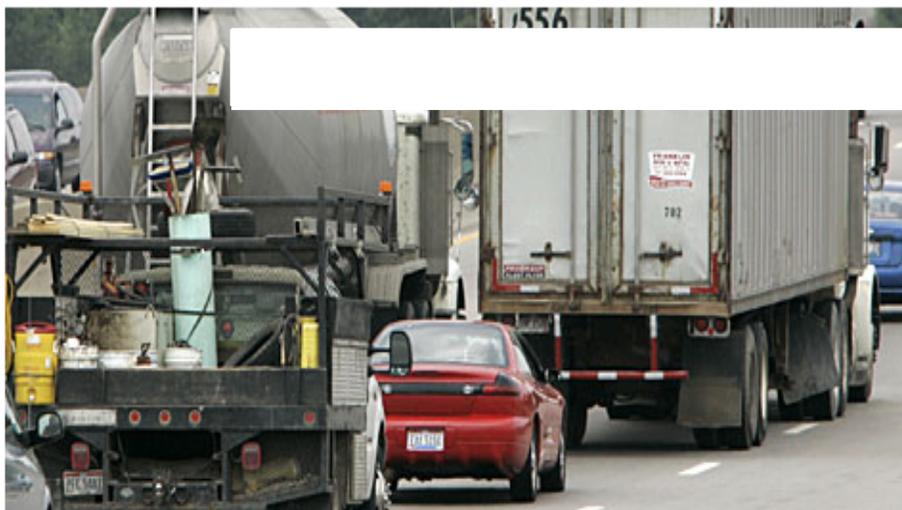


# Statewide Truck Lane Needs Identification Study

Georgia MPO Conference  
November 30, 2007

Tom McQueen, AICP

GDOT – Office of



Truckers argue that

because of slow-moving trucks and areas where trucks merge with cars.

By Al Behrman, AP

# States push for truck-only lanes

Updated 117d ago | Comments 63 | Recommend 16

E-mail

By James Hannah, Associated Press

DAYTON, Ohio — With truck traffic rising, at least nine states are considering proposals to separate big rigs from cars on interstate highways, hoping to reduce congestion, improve safety and increase commerce by moving goods faster.

The highways are heavily traveled and are being used increasingly to carry freight through big cities of the industrial booming communities in the Sun Belt



Enlarge

By Al Behrman, AP

Travel on highways has doubled since 1980, but the highway system has only grown by 3%.



# Study Overview

- Are truck-only lanes feasible in Georgia? Where?
- Study started April 2006
- Final Deliverables February 2008
  - Recommended List of Projects
  - Policy Guidebook



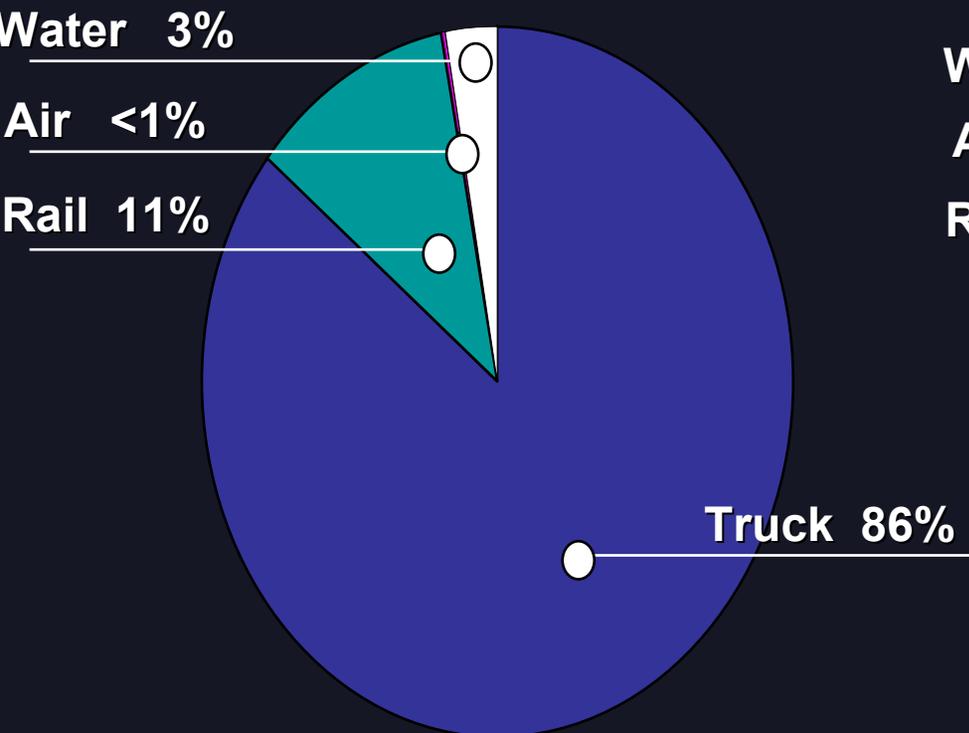
# Data Collection

- Existing Traffic Counts & New Truck Classification Counts
- Conduct Truck Origin/Destination Surveys
- Research Freight Flows
- Analyze Truck Crash Data
- Review Truck Parking Trends
- Create Infrastructure Database

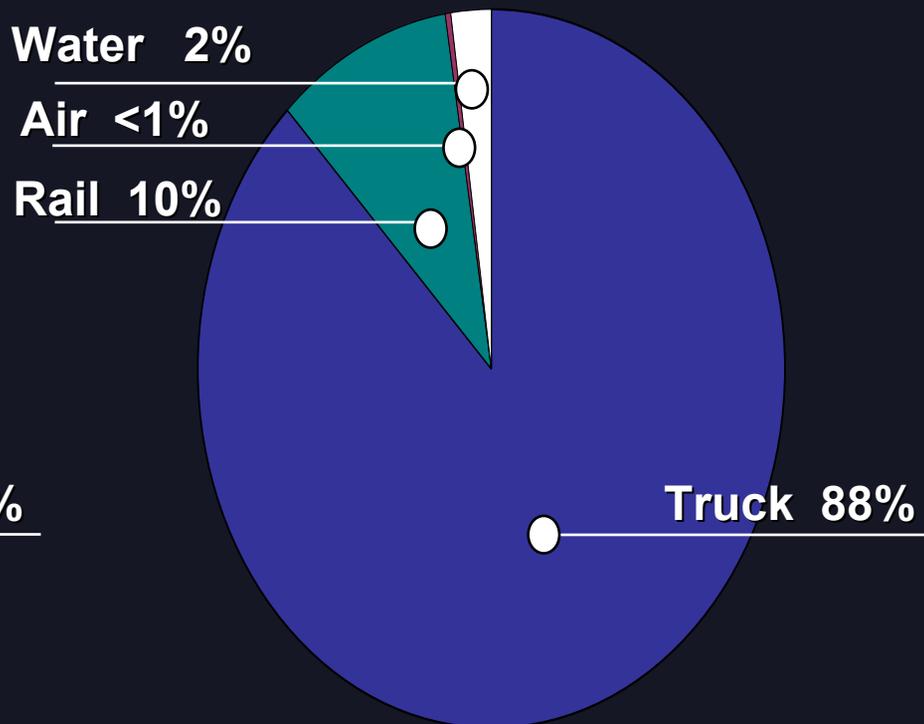


# Mode Split in Georgia *by Weight*

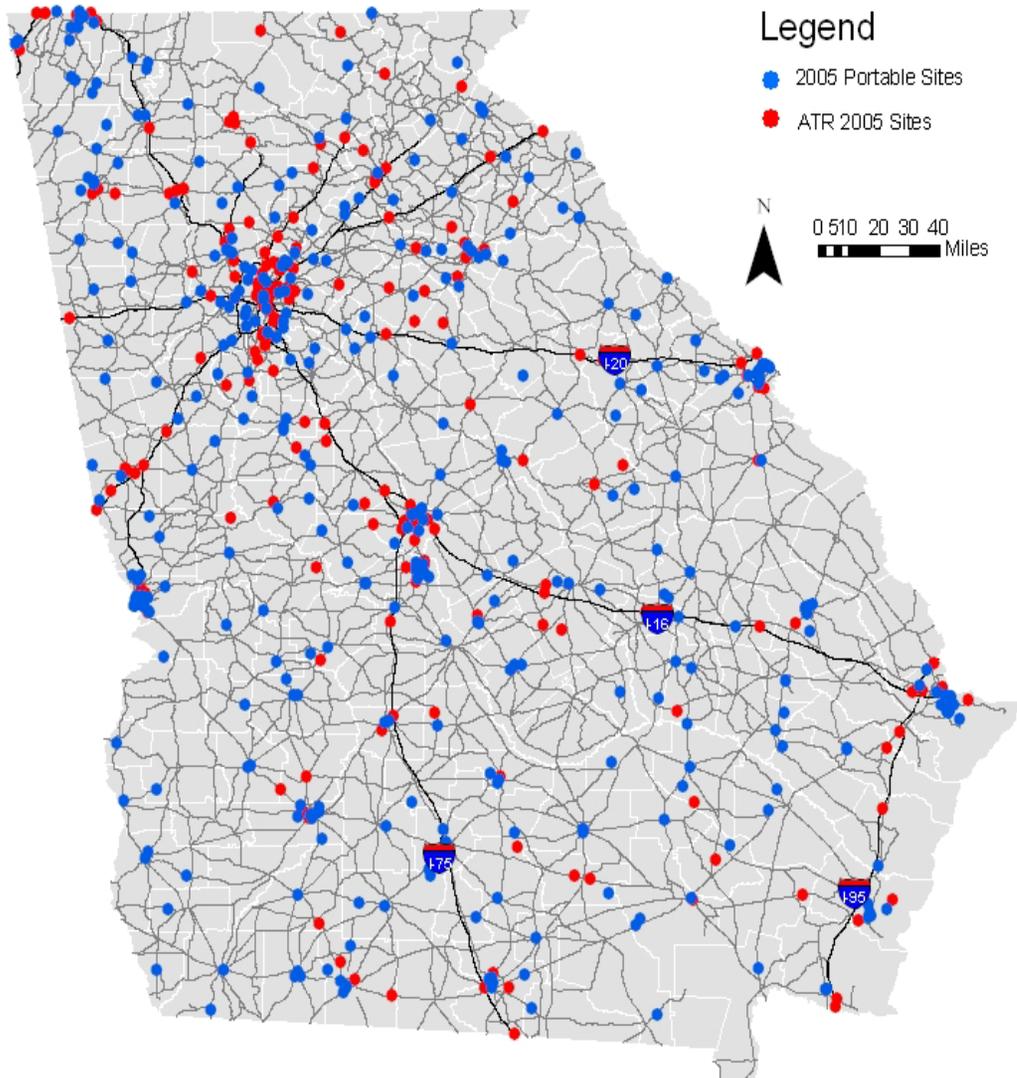
## Year 2004



## Year 2035



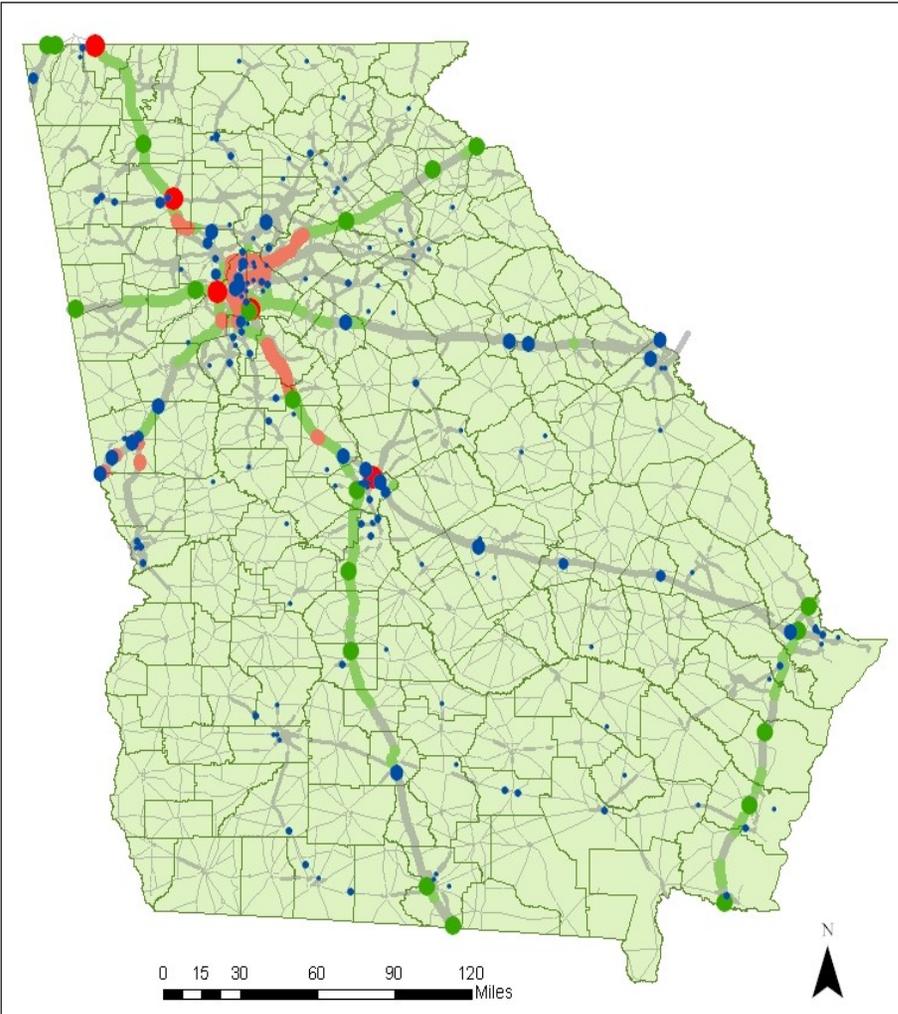
# 2005 GDOT Class Count Locations



“ATR” =  
Automatic Traffic  
Recorder

# 2005 GDOT Class Counts - Statewide

# 2005 GDOT Class Counts - Atlanta Area



### 2005 ATR and Portable Class Count Locations

- < 1k TPD
- 1k-2.5k TPD
- 2.5k-5k TPD
- 5k-10k TPD
- 10k-20k TPD
- > 20k TPD

### Statewide Model Truck ADT

- < 1k TPD
- 1k-2.5k TPD
- 2.5k-5k TPD
- 5k-10k TPD
- 10k-20k TPD
- > 20k TPD

*TPD = Trucks per Day*

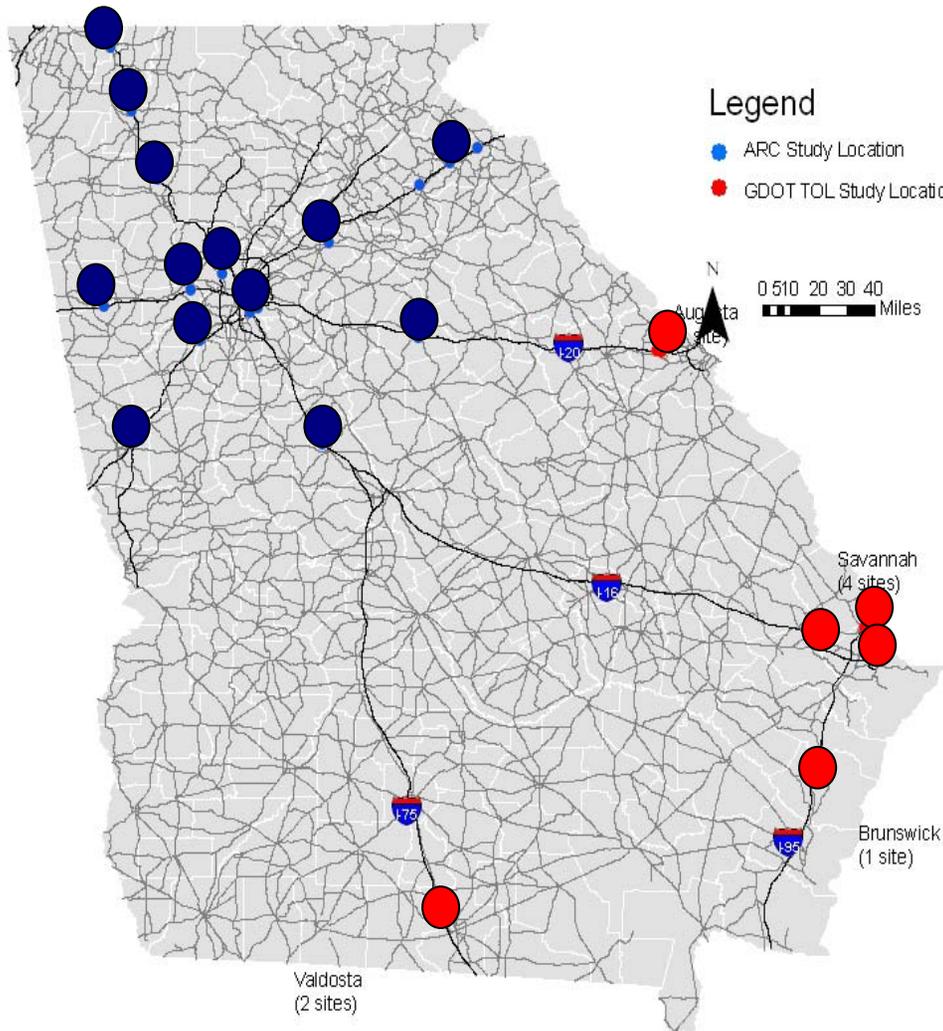
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- < 1k TPD
- 1k-2.5k TPD
- 2.5k-5k TPD
- 5k-10k TPD
- 10k-20k TPD
- > 20k TPD

## Origin-Destination Survey Sites



# Origin-Destination Survey

- 5,600 truckers surveyed
  - Weigh Stations
  - Truck Stops
  - Intermodal Facilities
  - Ports

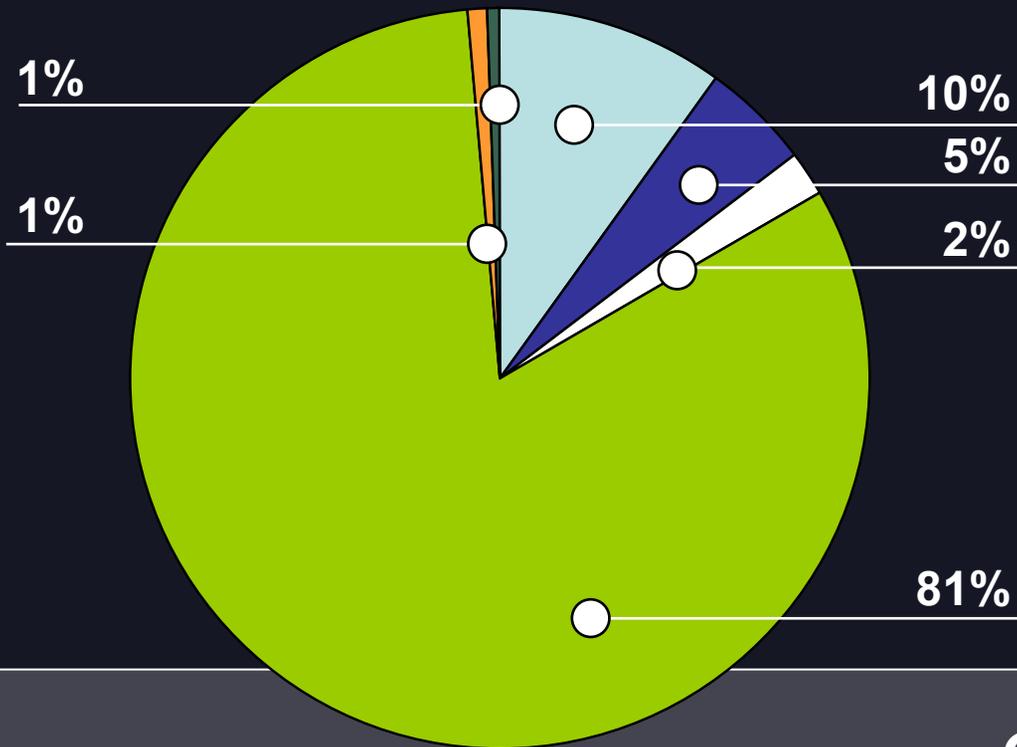
GDOT - Office of Planning



# Savannah Truck Characteristics

## Number of Axles

I-16 (Westbound)



Number of Axles

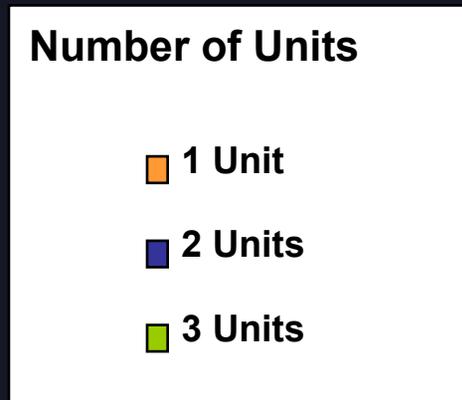
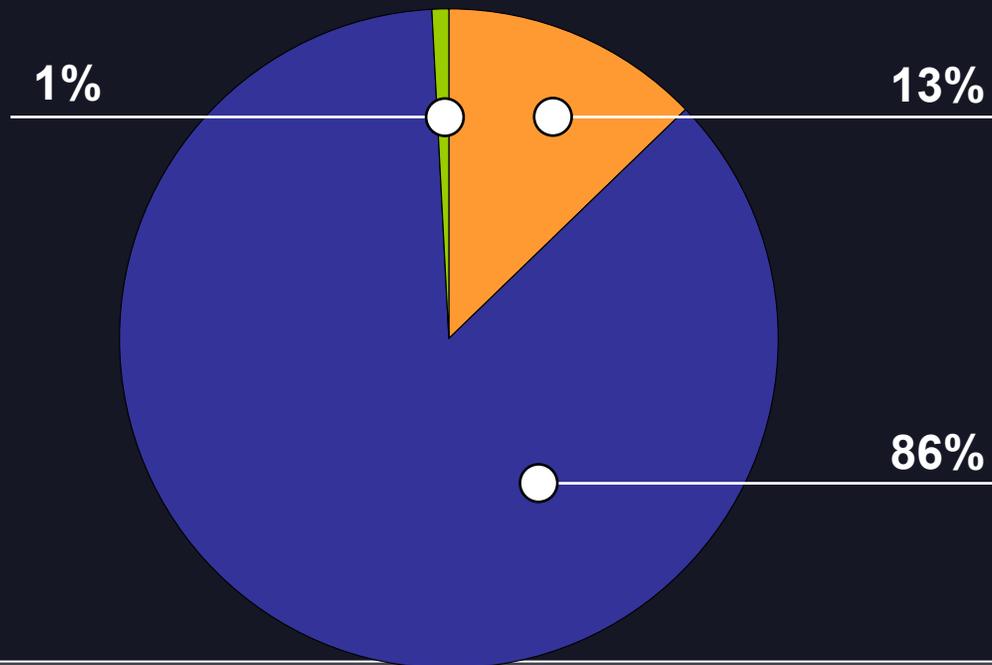
- 2 Axles
- 3 Axles
- 4 Axles
- 5 Axles
- 6 Axles
- 7 Axles



# Savannah Truck Characteristics

## Number of Units

I-16 (Westbound)

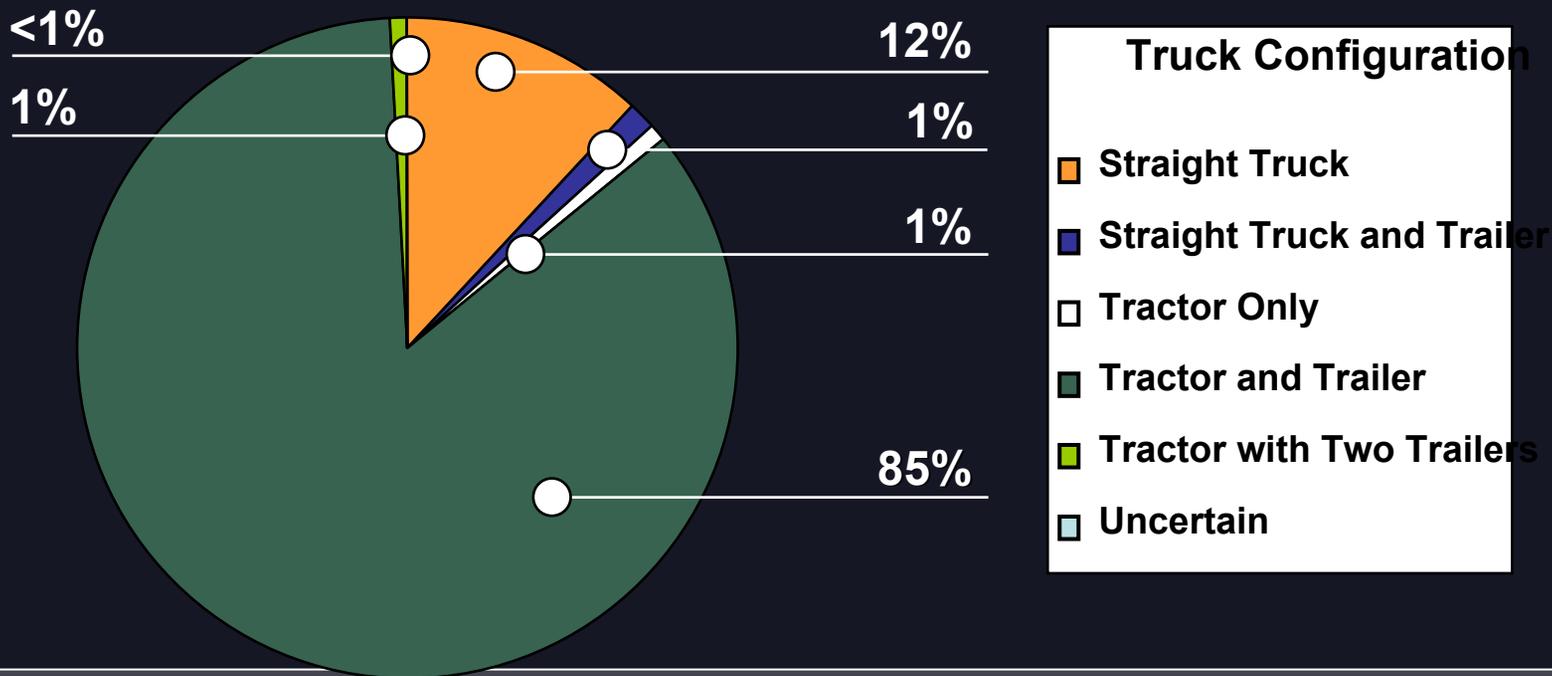




# Savannah Truck Characteristics

## Truck Configuration

I-16 (Westbound)

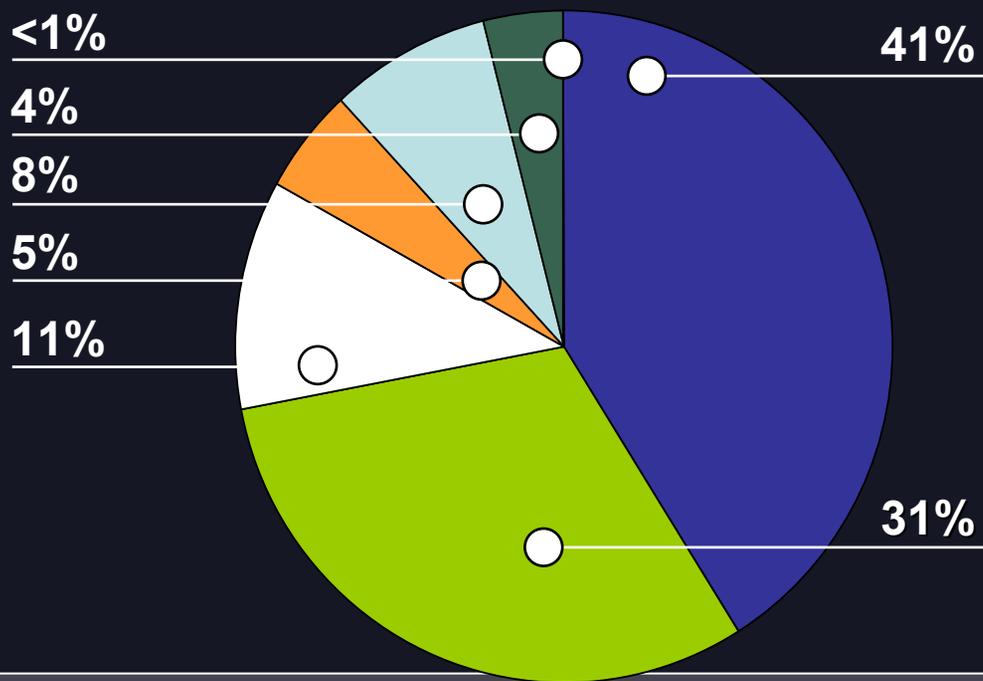




# Savannah Truck Characteristics

## Frequency of Travel

### I-16 (Westbound)

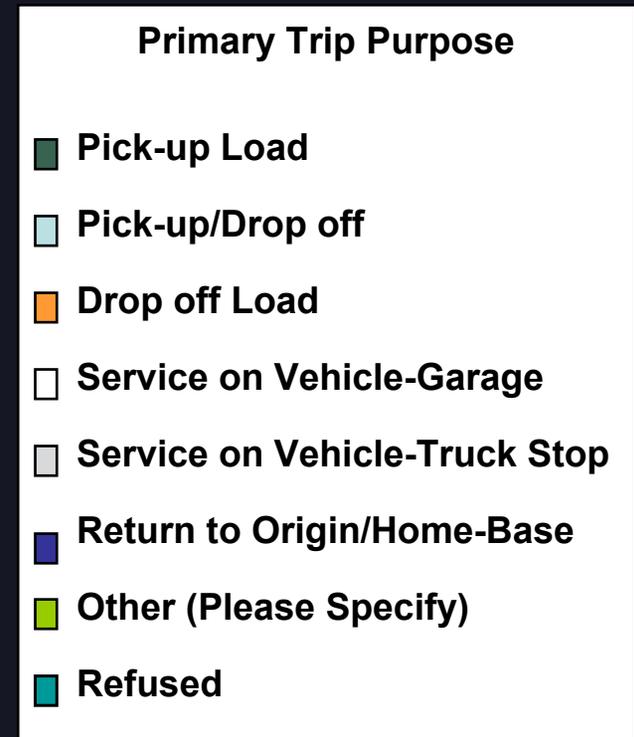
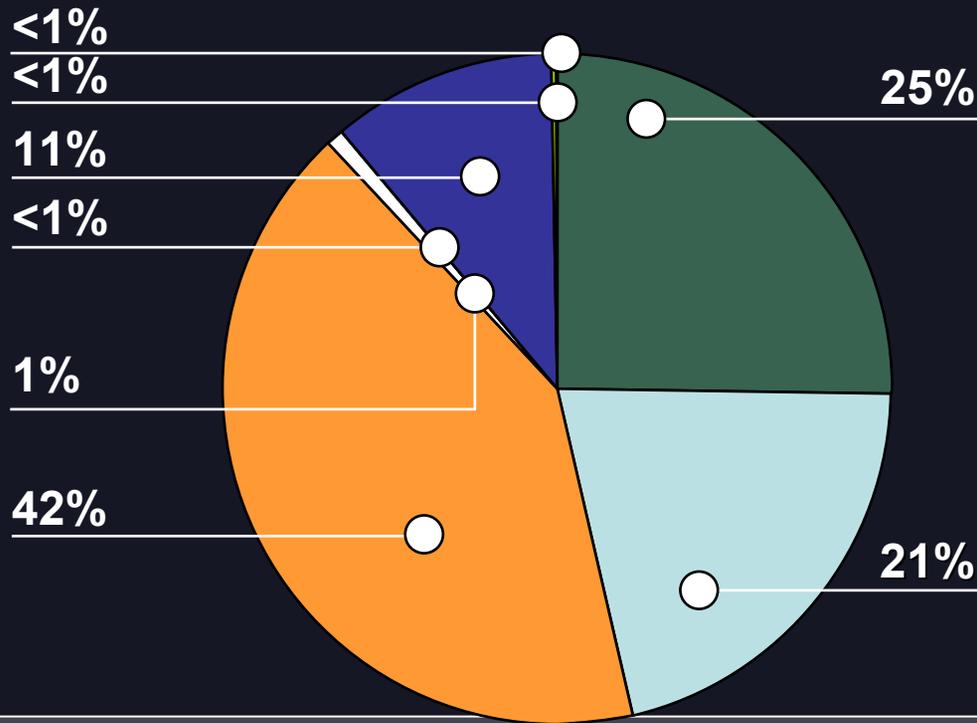




# Savannah Truck Characteristics

## Primary Trip Purpose

### I-16 (Westbound)

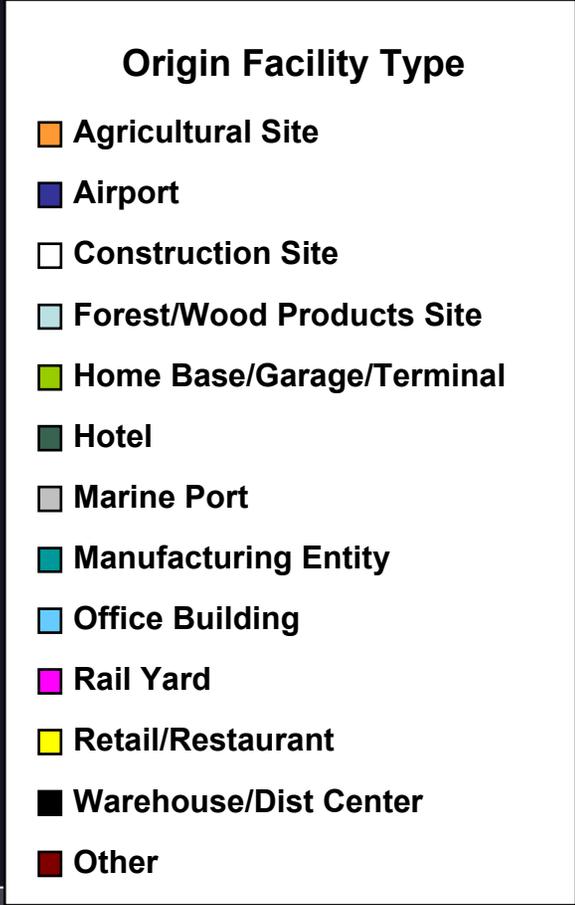
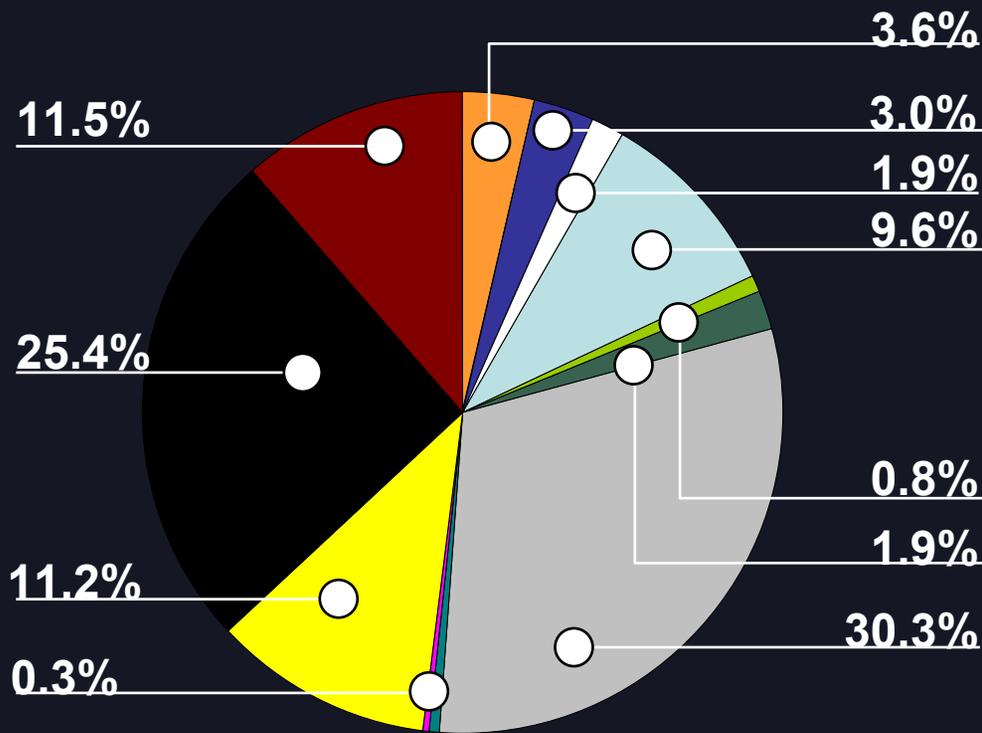




# Savannah Truck Characteristics

## Origin Facility Type

I-16 (Westbound)

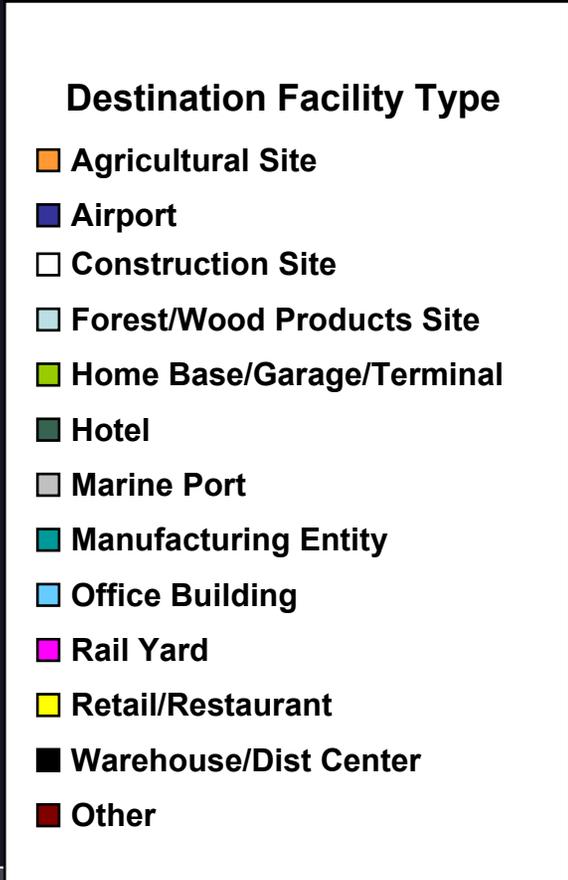
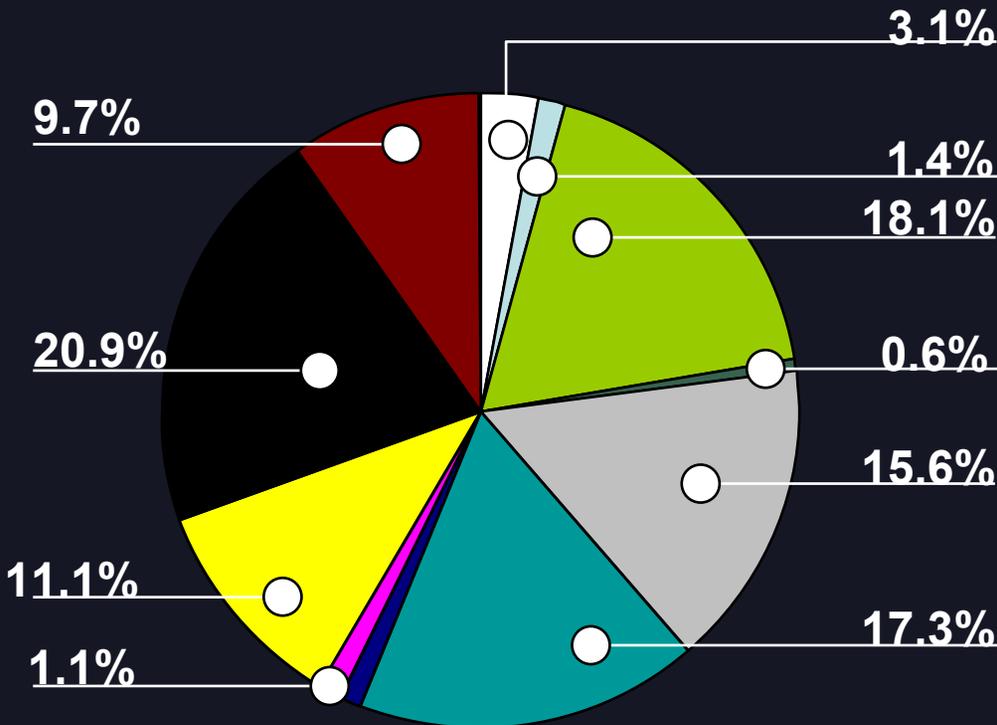




# Savannah Truck Characteristics

## Destination Facility Type

I-16 (Westbound)

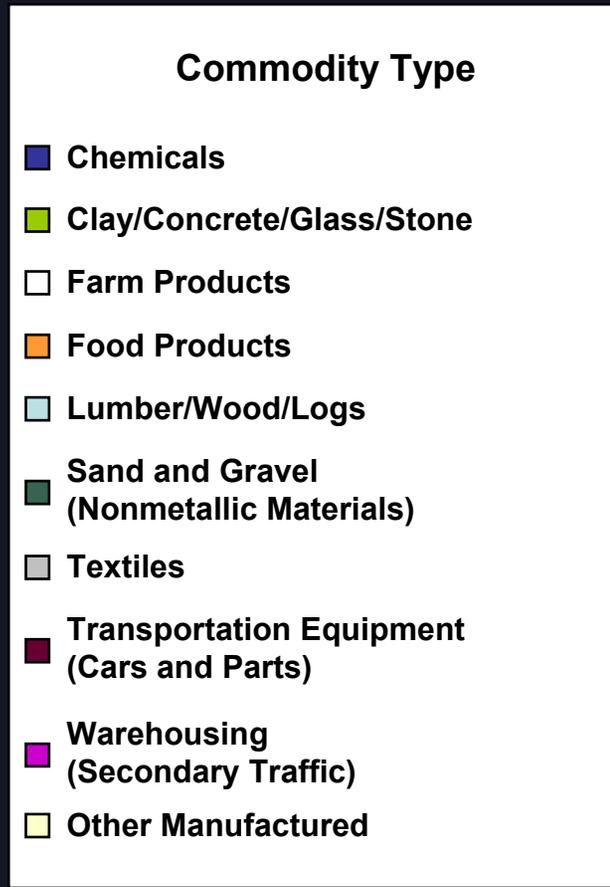
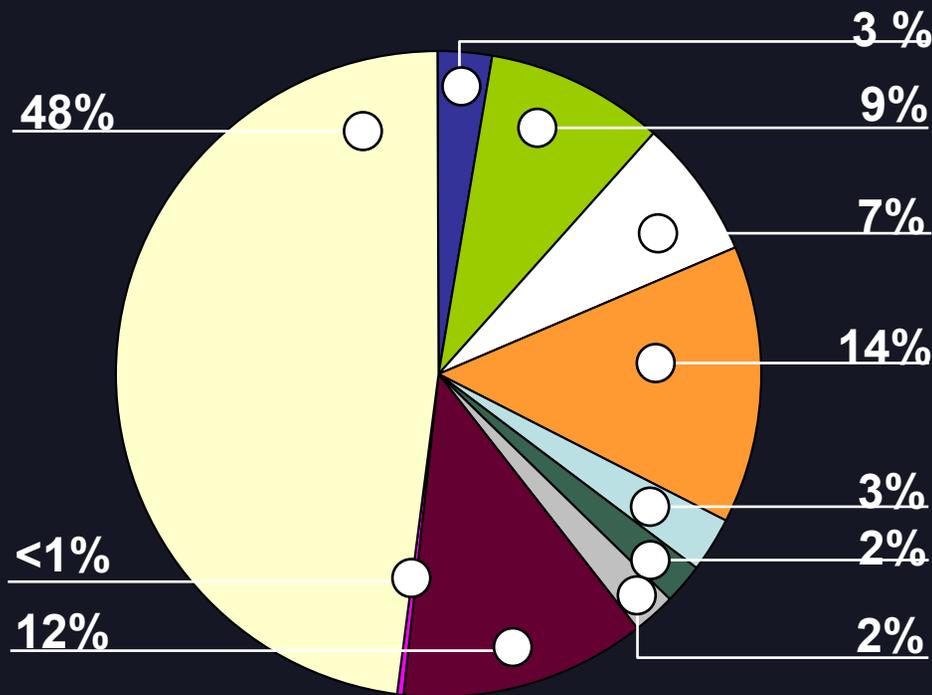




# Savannah Truck Characteristics

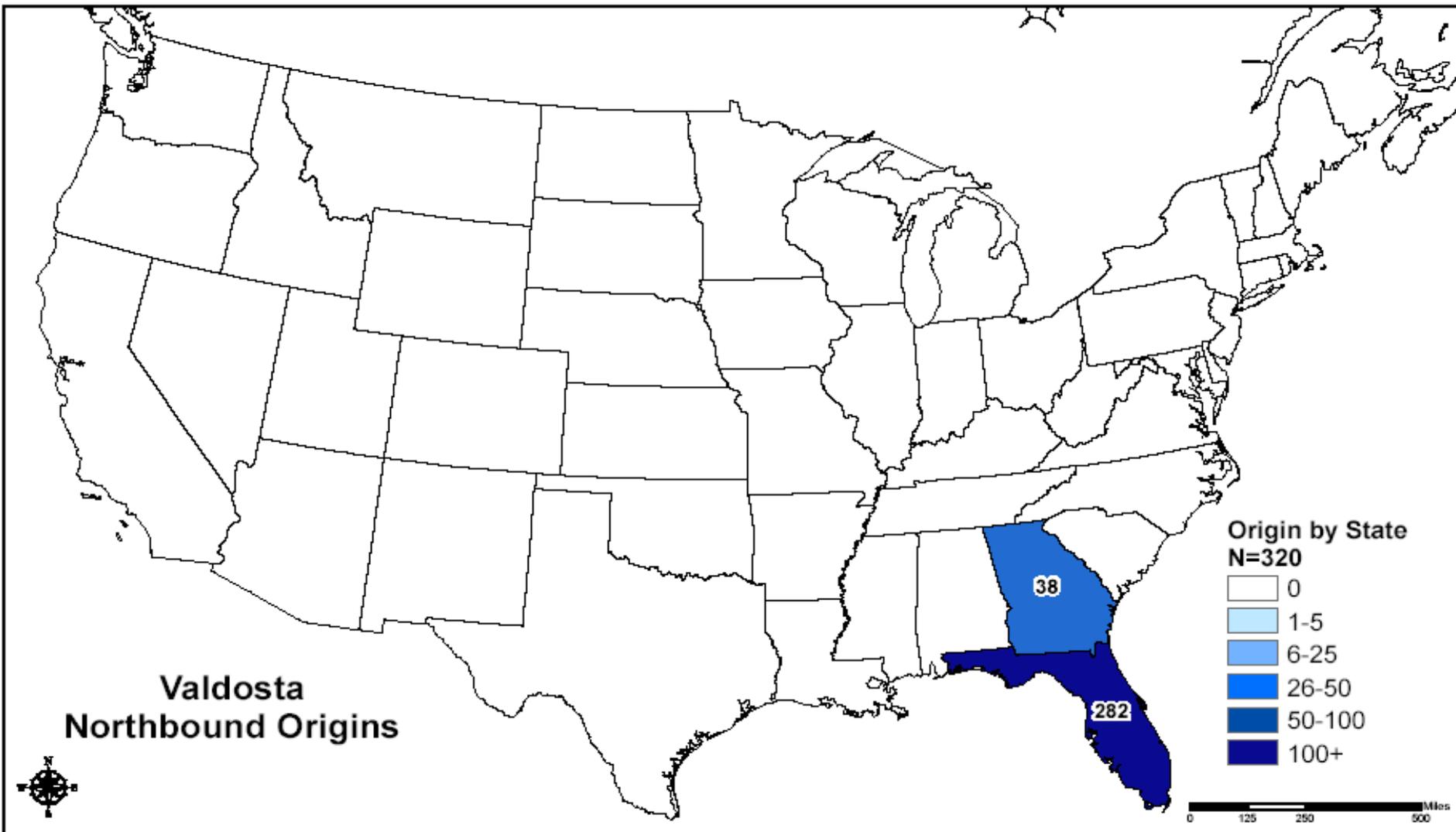
## Commodity Type

### I-16 (Westbound)





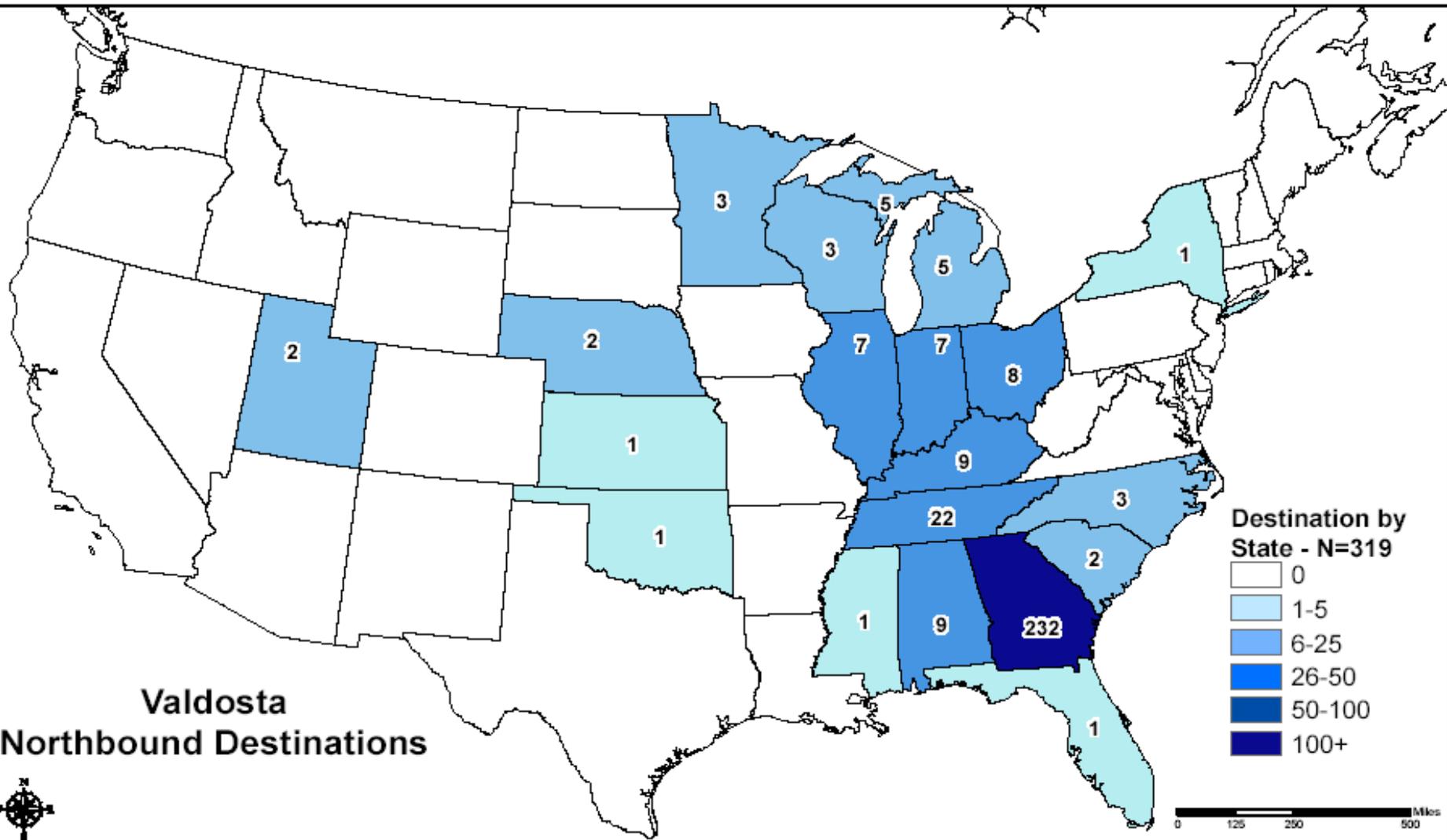
# Valdosta Northbound Origins

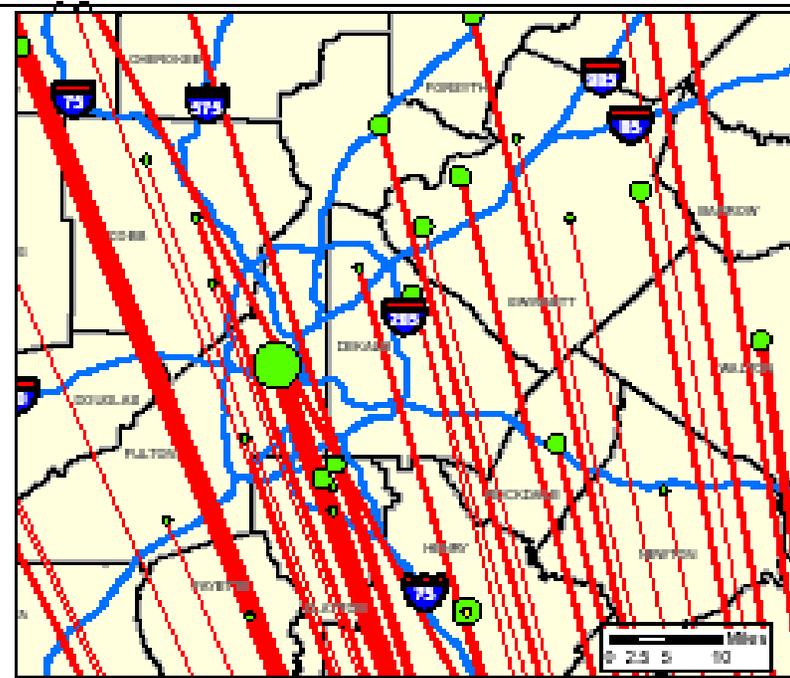
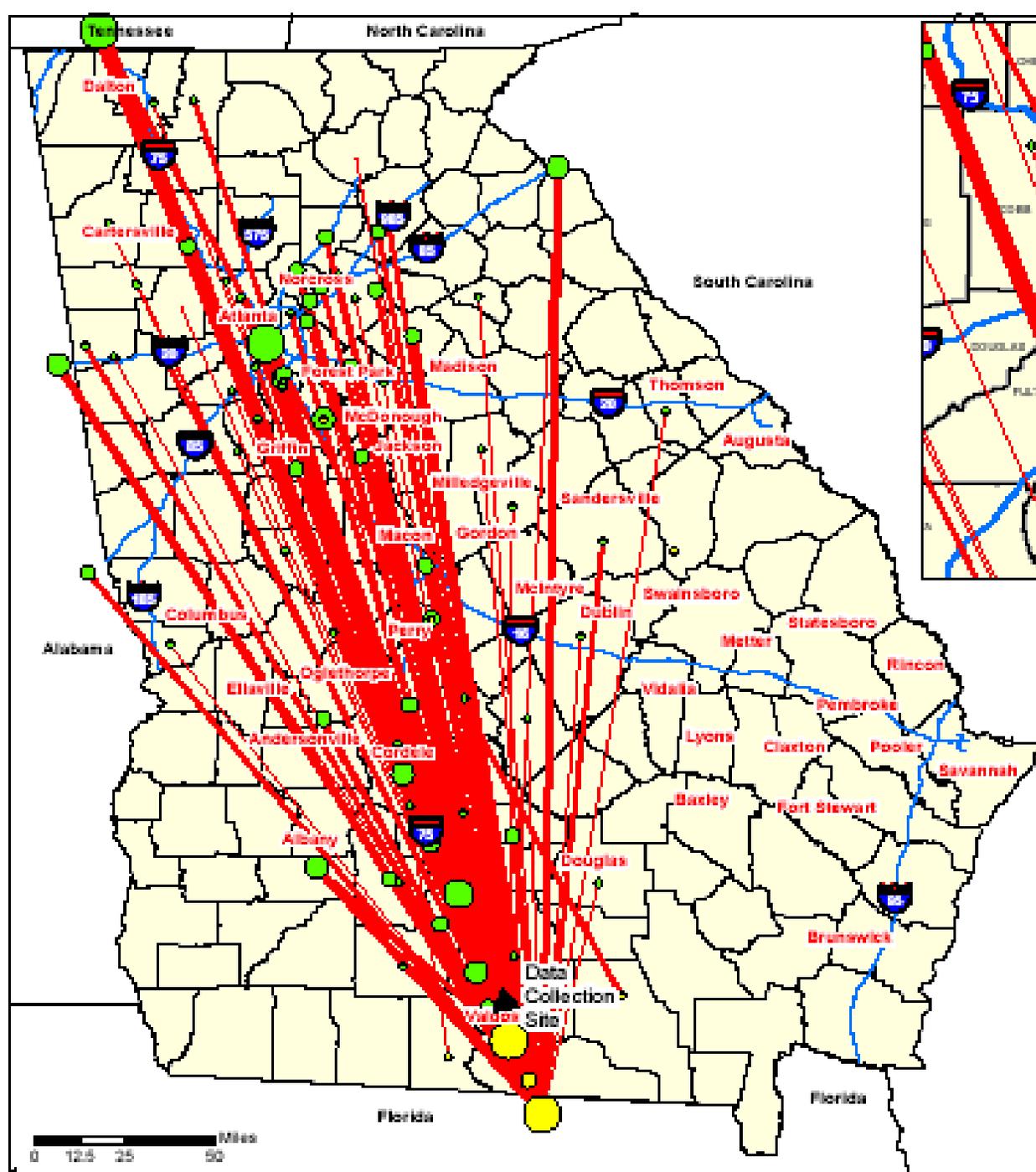




# Valdosta

## Northbound Destinations





## Statewide Truck Lanes Needs Identification Study

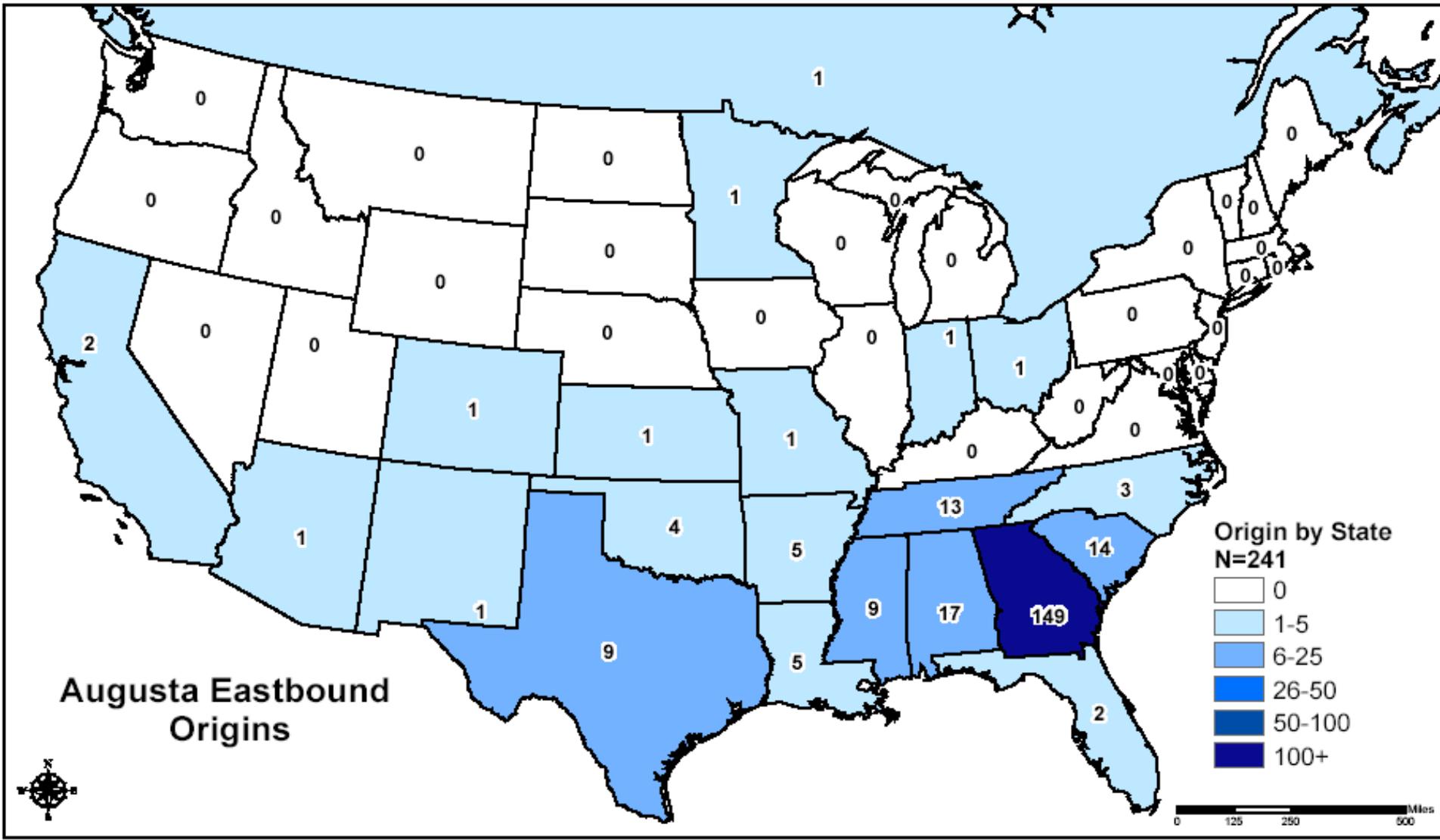
### Valdosta NorthBound Origins and Destinations

<b>Total O/D Routes</b> N=309	<b>Valdosta NB Cities</b>
— 1	• • 1
— 2 - 4	• • 2 - 5
— 5 - 7	• • 6 - 10
— 8 - 14	• • 11 - 20
— 15 +	• • 21 - 100
— Expressway	



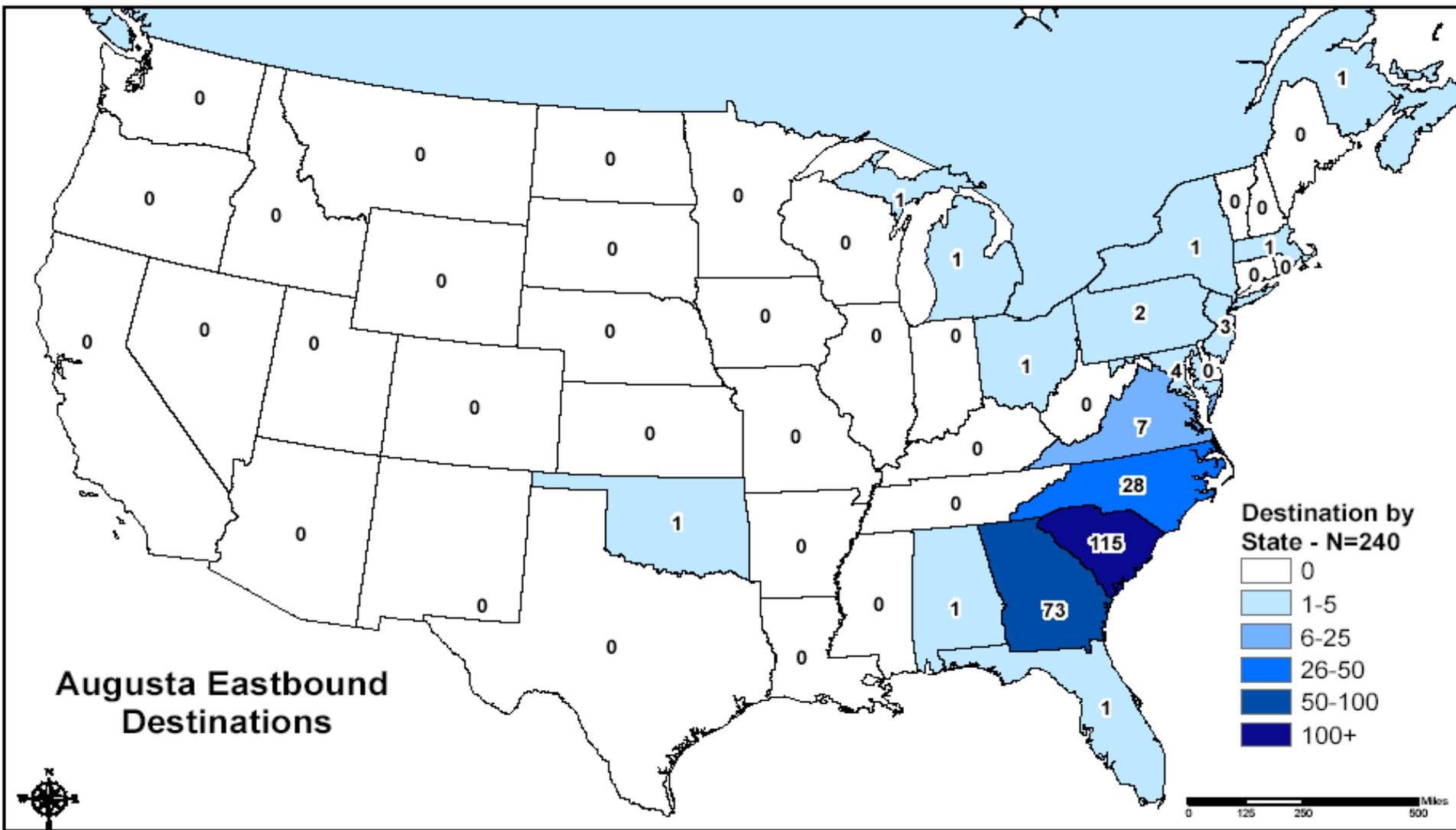


# Augusta Eastbound Origins





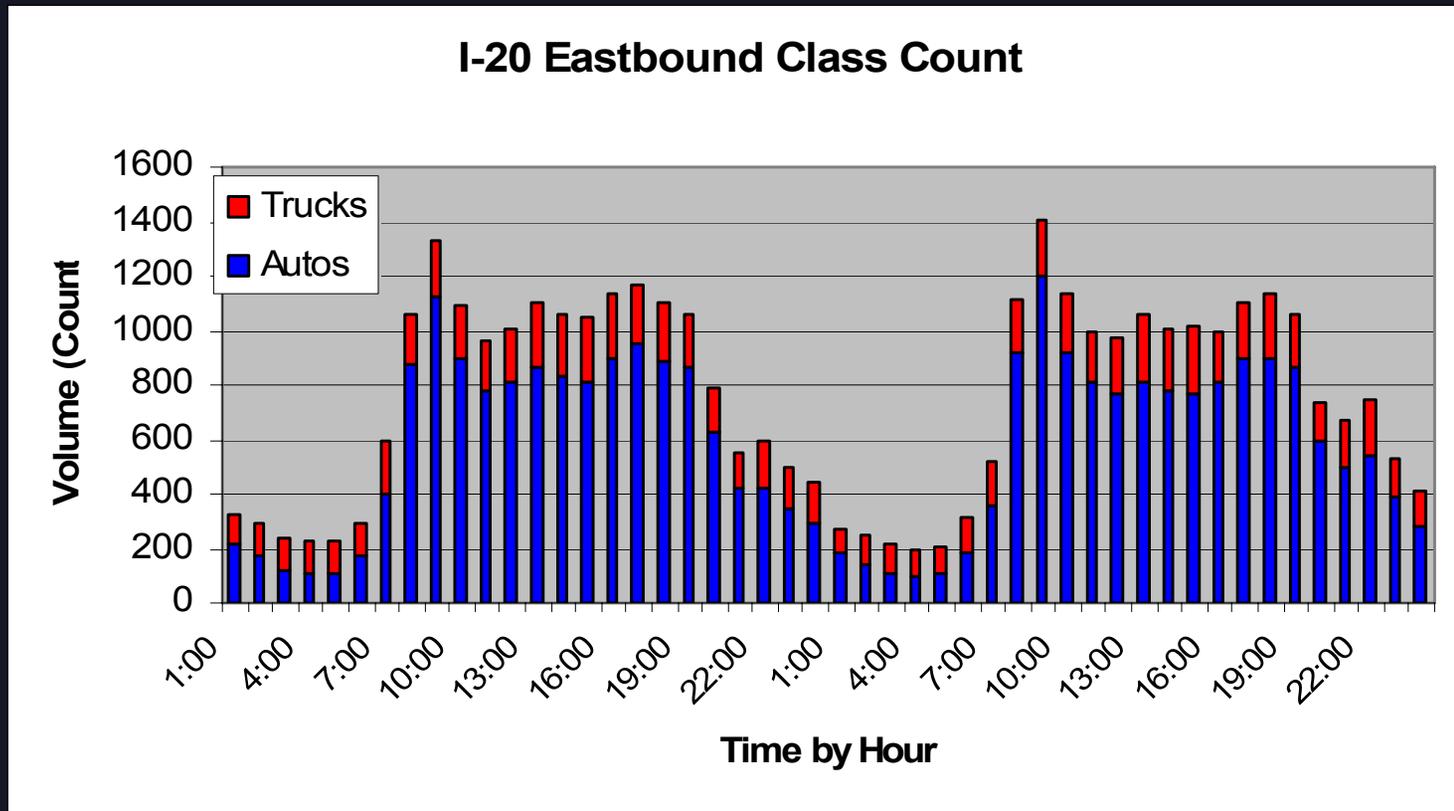
# Augusta Eastbound Destinations





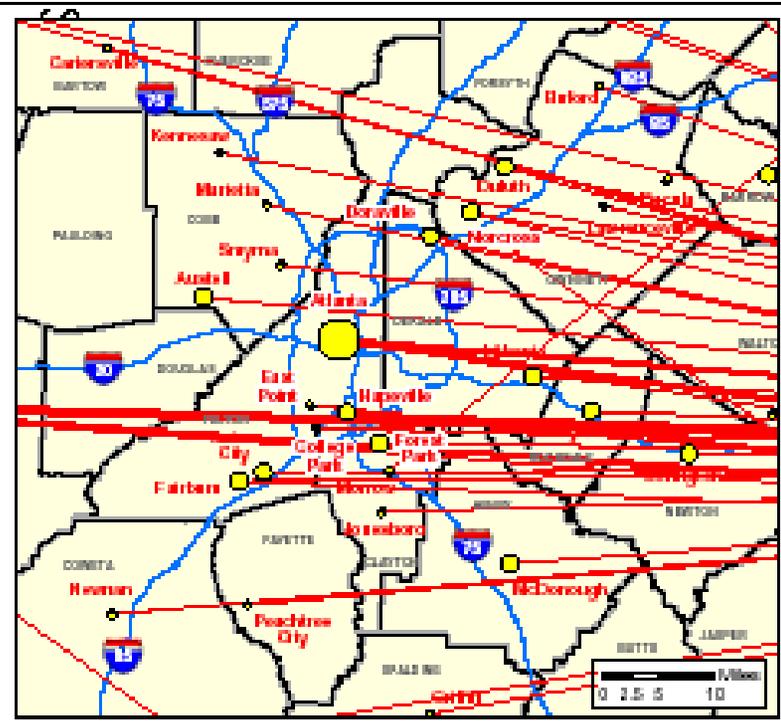
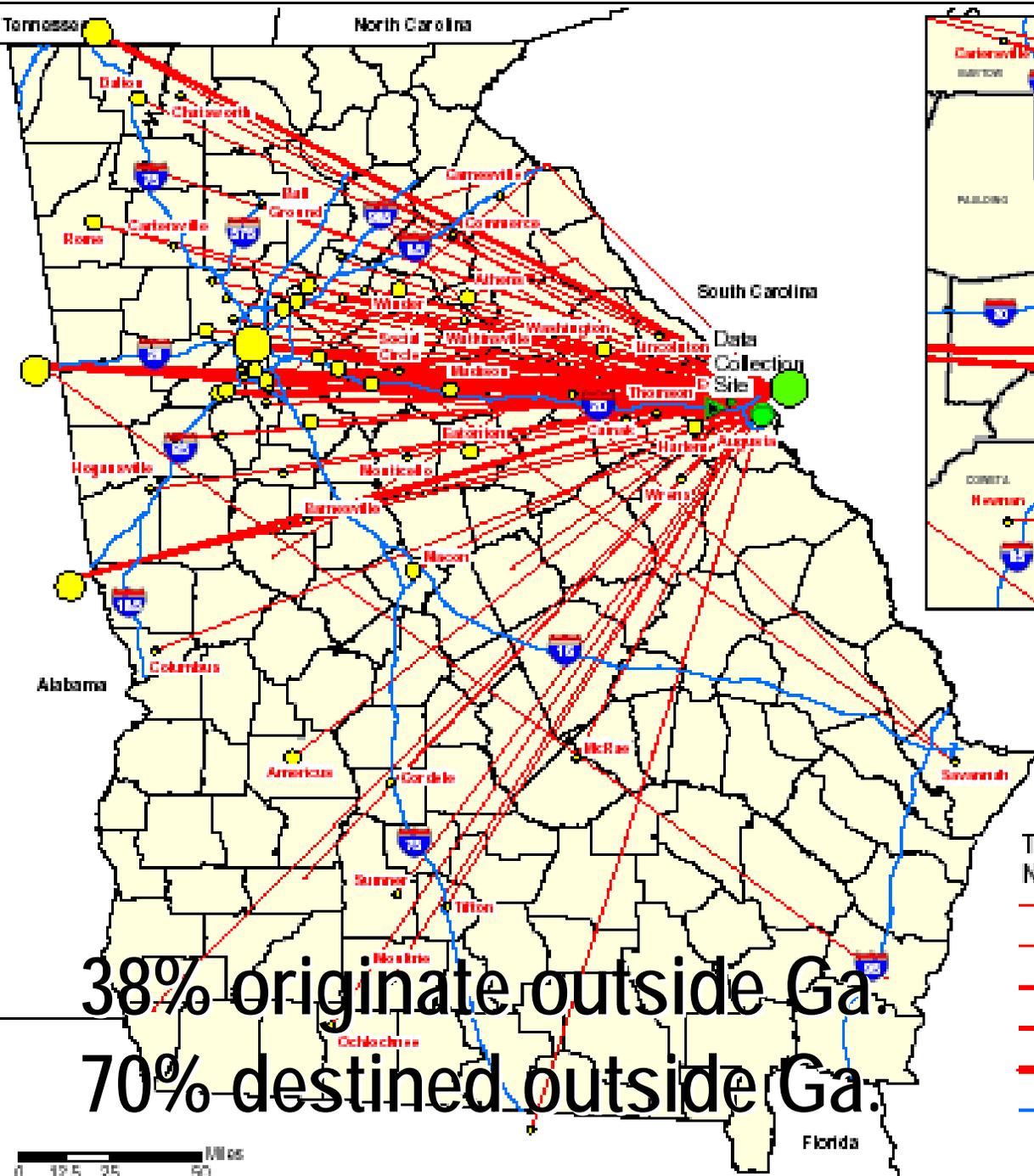
# Augusta Truck Data Collection

- 23% of vehicles are trucks
  - 19% in the peak hour
- 13% of trucks carry food products



- 31% of trucks are

GDOT - Office of  
Planning



## Statewide Truck Lanes Needs Identification Study Augusta Eastbound Origins and Destinations

Total O/D Routes  
N=211

- 1
- 2 - 4
- 5 - 7
- 8 - 14
- 15+
- Expressway

Augusta EB Cities

Orig	Dest	
▼	●	1
●	●	2 - 5
●	●	6 - 10
●	●	11 - 20
●	●	21 - 100

**38% originate outside Ga.**  
**70% destined outside Ga.**

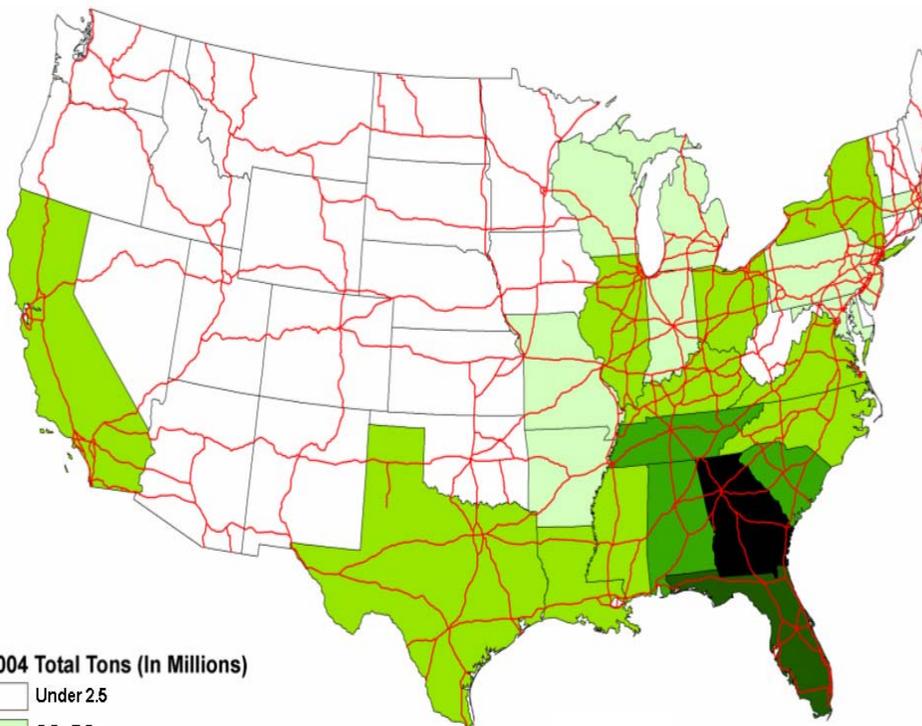
0 12.5 25 50 Miles



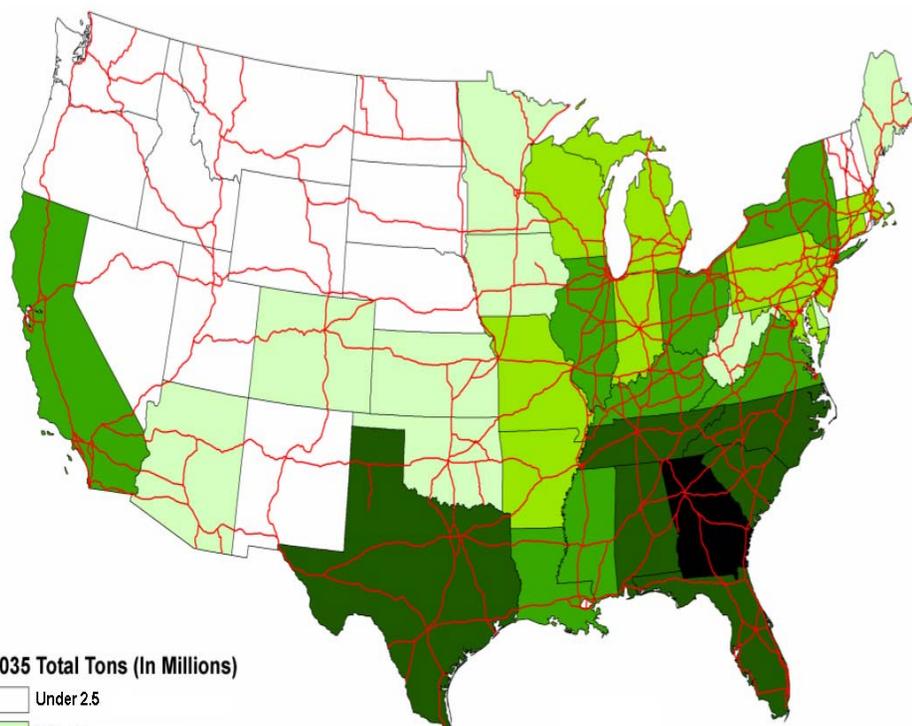


# Georgia's U.S. Trading Partners

## 2004 Annual Freight Tonnage

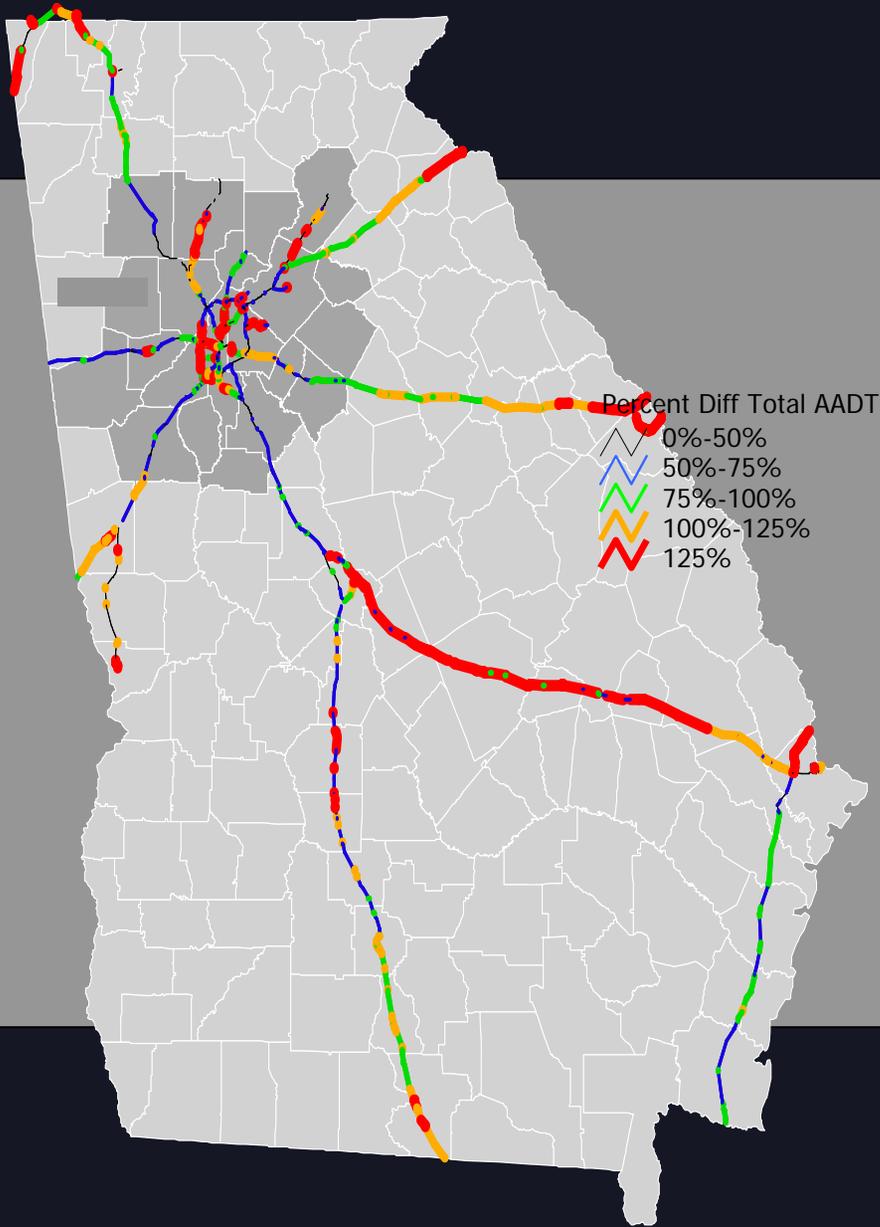


## 2035 Annual Freight Tonnage

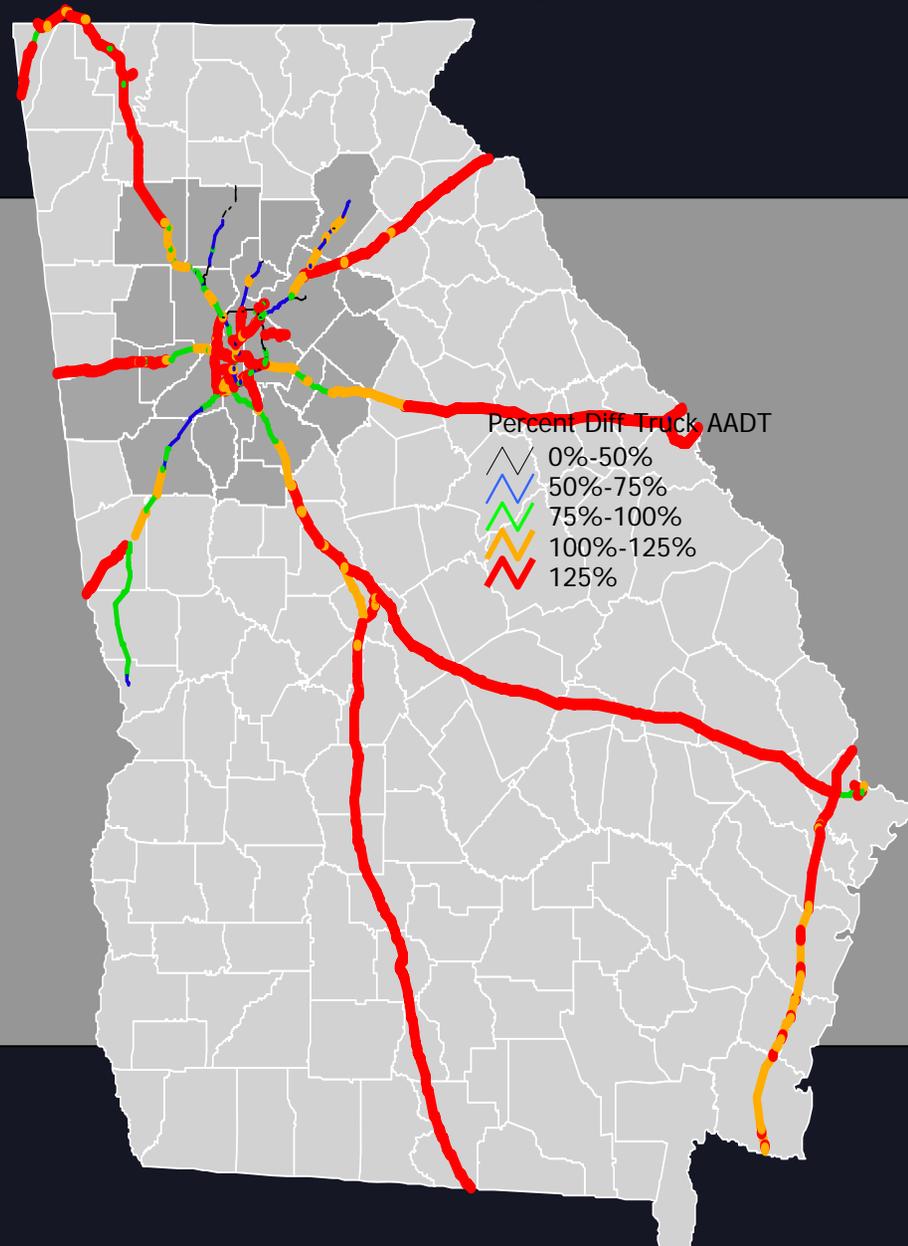


# Percent Change from 2004-2035:

## All Traffic

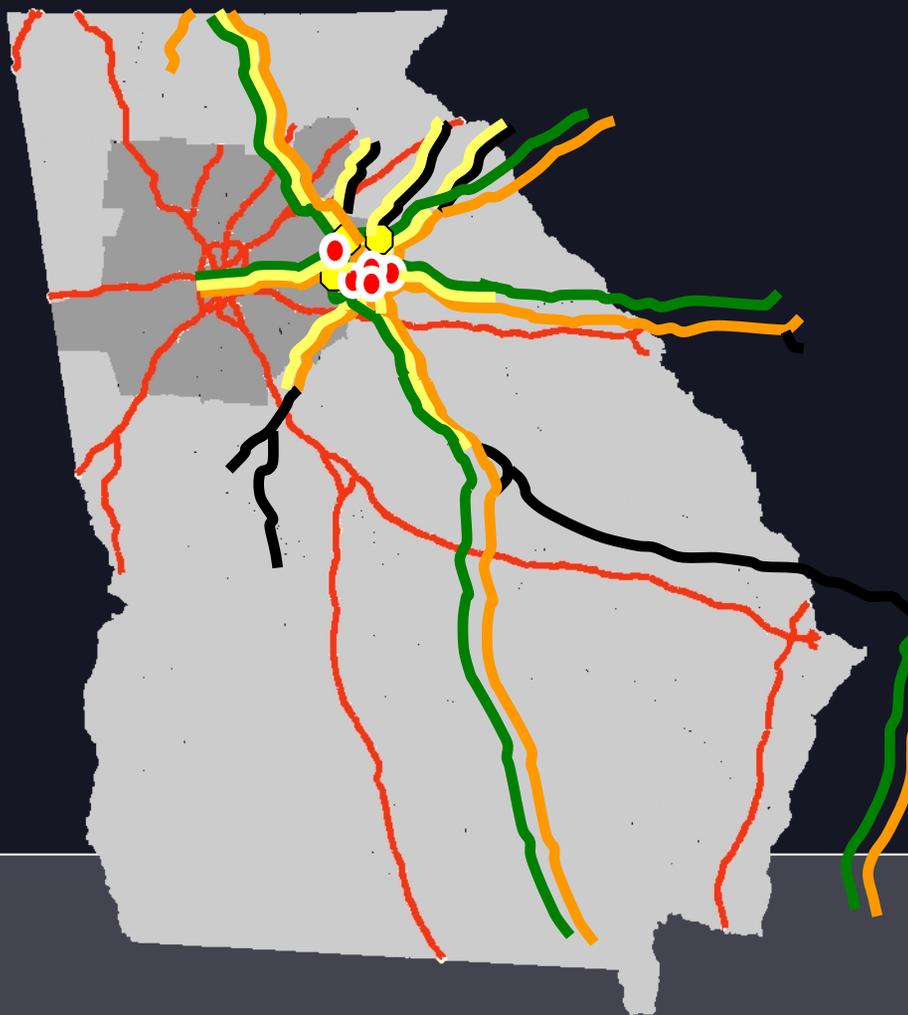


## Trucks





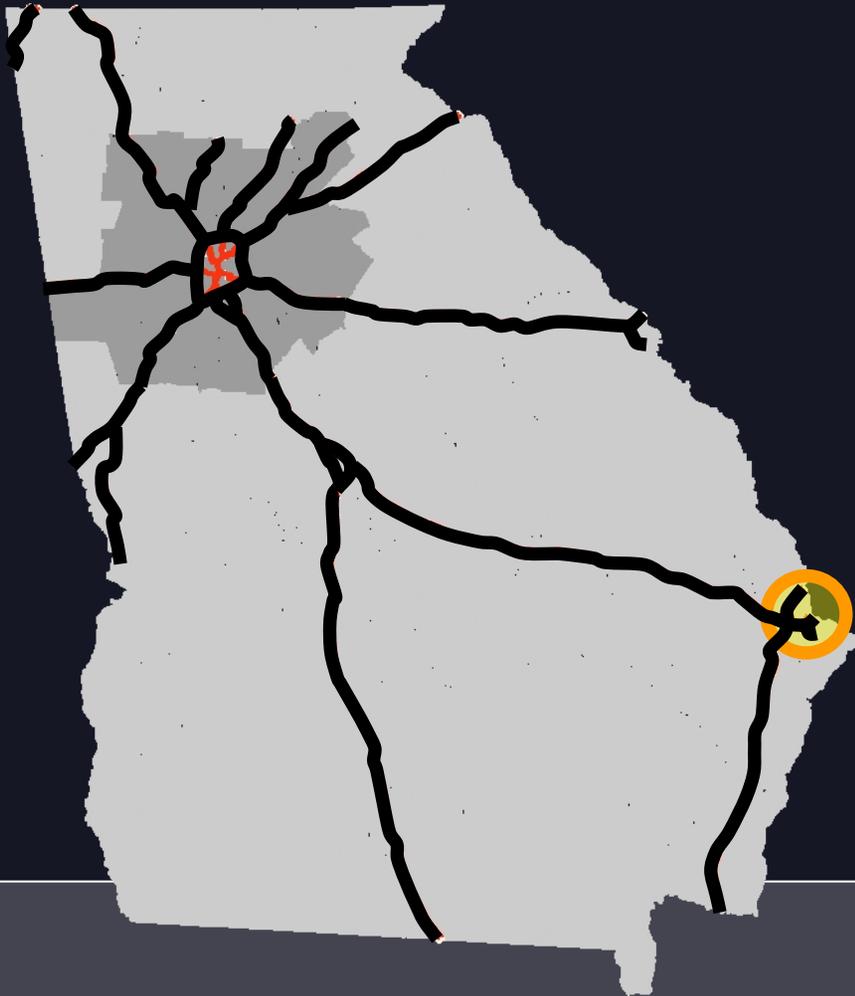
# Study Predictions (Year 2035 Conditions)



- Average Daily Truck Traffic >30,000 vehicles
- Congested Conditions – Level of Service “E” or “F”
- Major “Through-Travel” Movements
- Major Truck Generators
- Freight Movement “Bottlenecks”



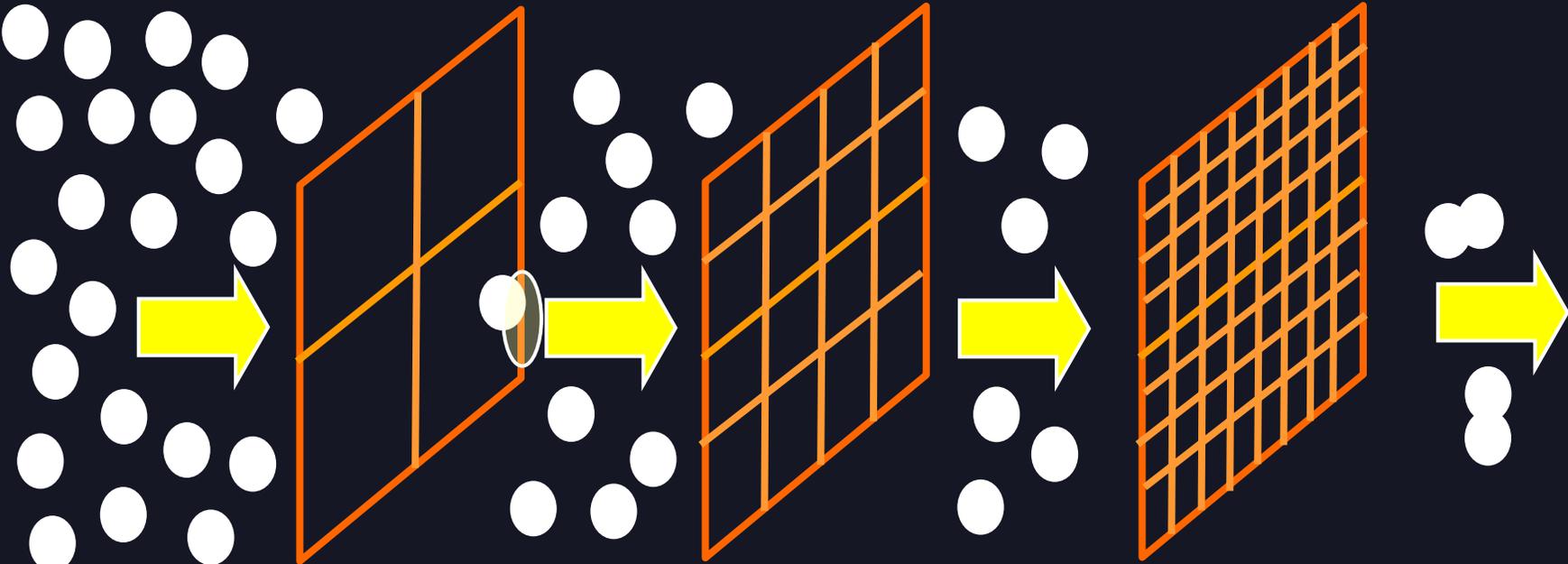
# Phase 1: Initial Results



- Truck Only Lanes appear to have merit on I-75 between Chattanooga & Macon
- Truck Only Lanes appear to have merit on select Interstates in metro Atlanta
- Truck Only Lanes appear to have merit in Chatham County/Savannah area



# Summary of Study Process



Georgia's  
Transportation  
Network

Phase 1:  
Initial Results

*Corridor* -  
Level Results

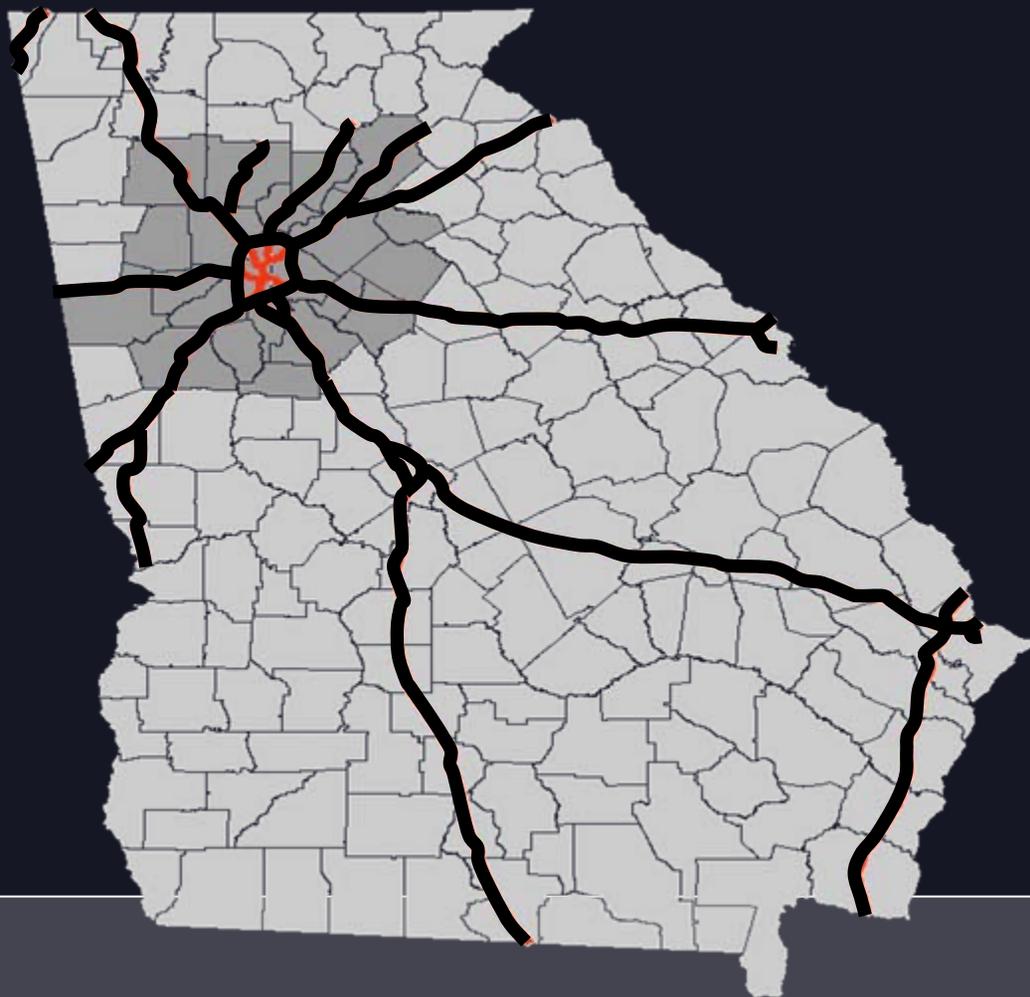
*System*-Level  
Results

**STUDY RECOMMENDATIONS**

**GDOT - Office of  
Planning**



# Phase 2: Corridor-Level Analysis



GDOT - Office of  
Planning

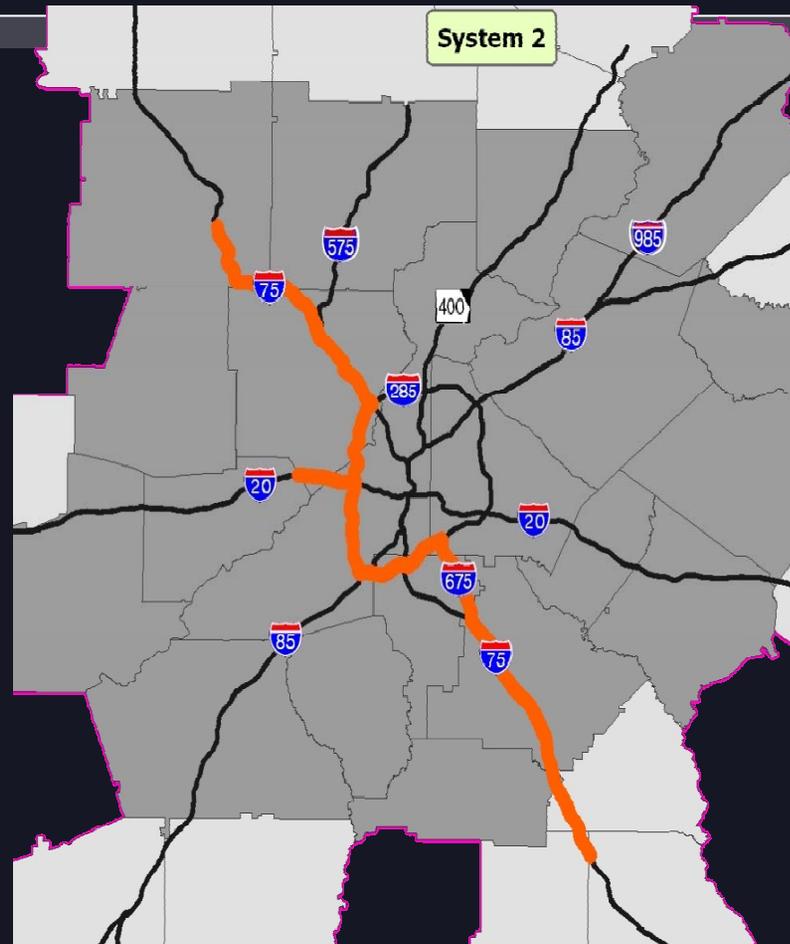
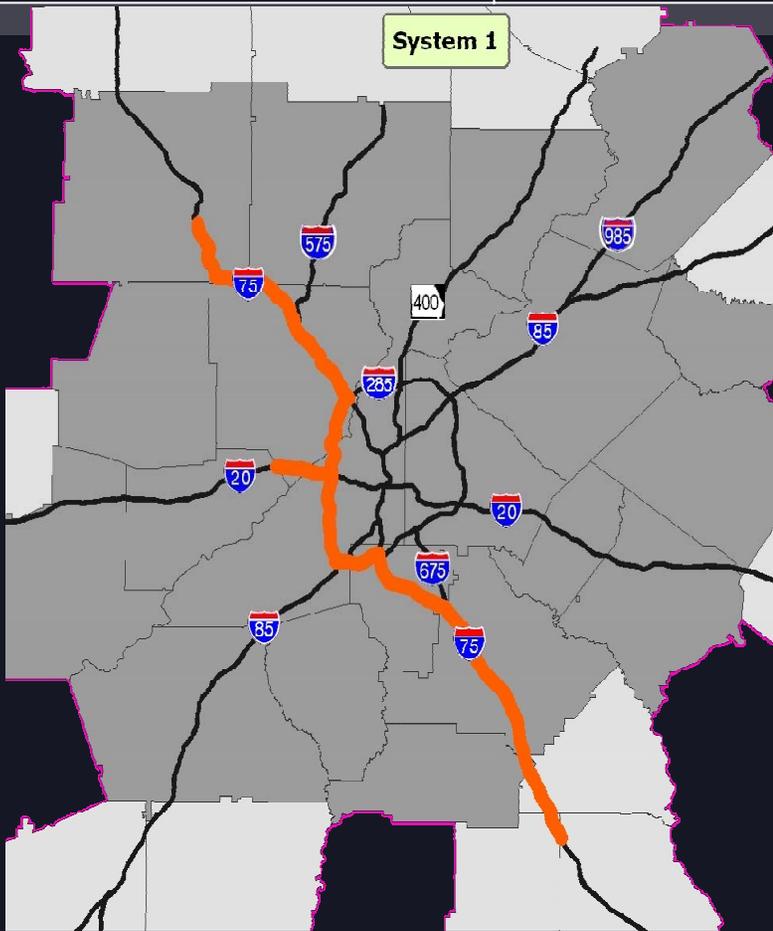


# Corridor-Level Analysis

Segment	Safety and Security	Congestion and Mobility	Benefits and Cost	Low Environmental Impacts	Overall
I-75 North (Atl. to Bartow Co.)	√	√	√		√
I-75 North ( Bartow Co to TN.)					
I-85 North		√	√		√
I-20 East					
I-675				√	
I-75 South (Atl. to Henry Co.)	√	√	√		√
I-75 South (Butts Co. to I-475)				√	
I-85 South				√	
I-20 West		√	√		√
I-285 on the West Side	√	√			√
I-285 on North & East Sides	√	√			√



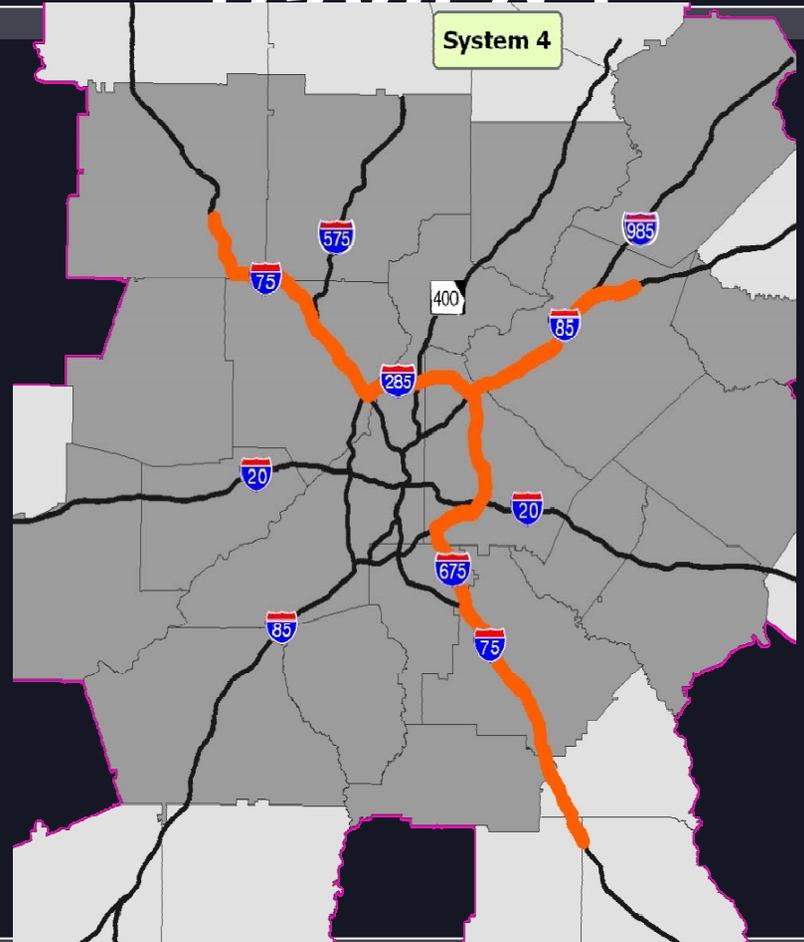
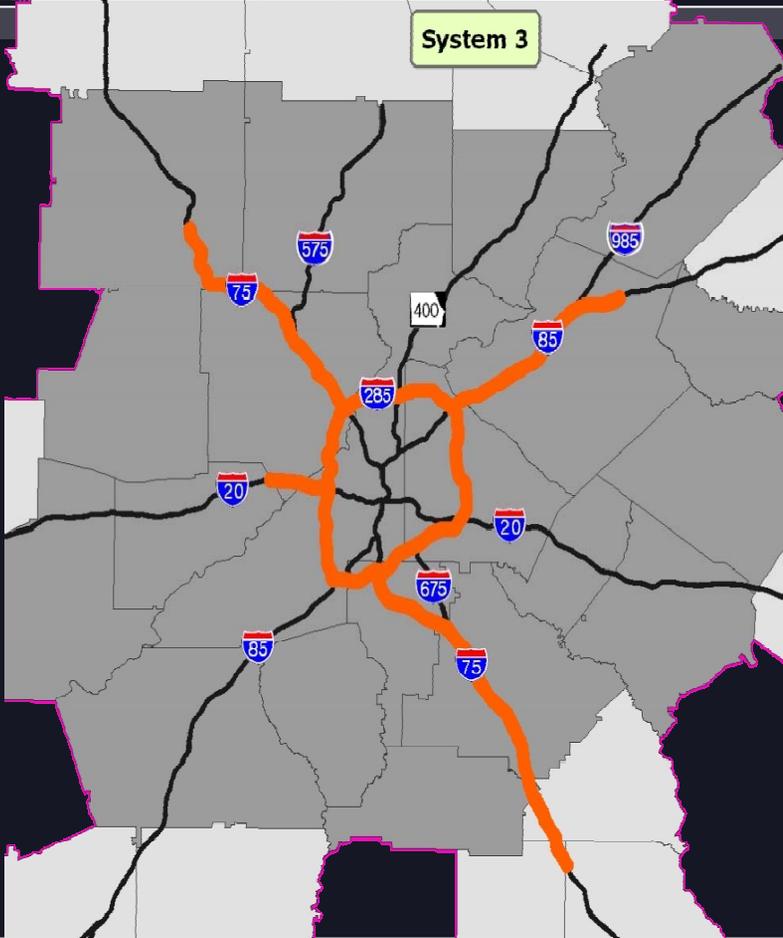
# System-Level Alternatives





# System-Level Alternatives

(cont'd)

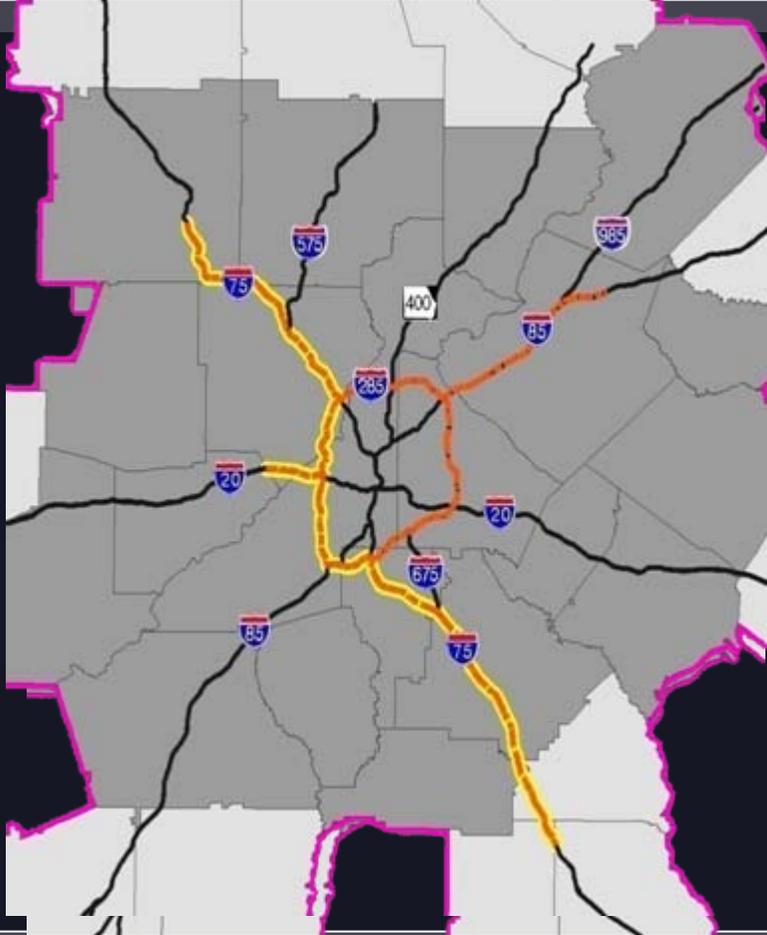




# System-Level Analysis

Corridor	Safety and Security	Congestion and Mobility	Benefits and Cost	Environmental	Overall
System 1		√	√	√	√
System 2		√	√	√	
System 3	√	√	√		√
System 4	√		√		

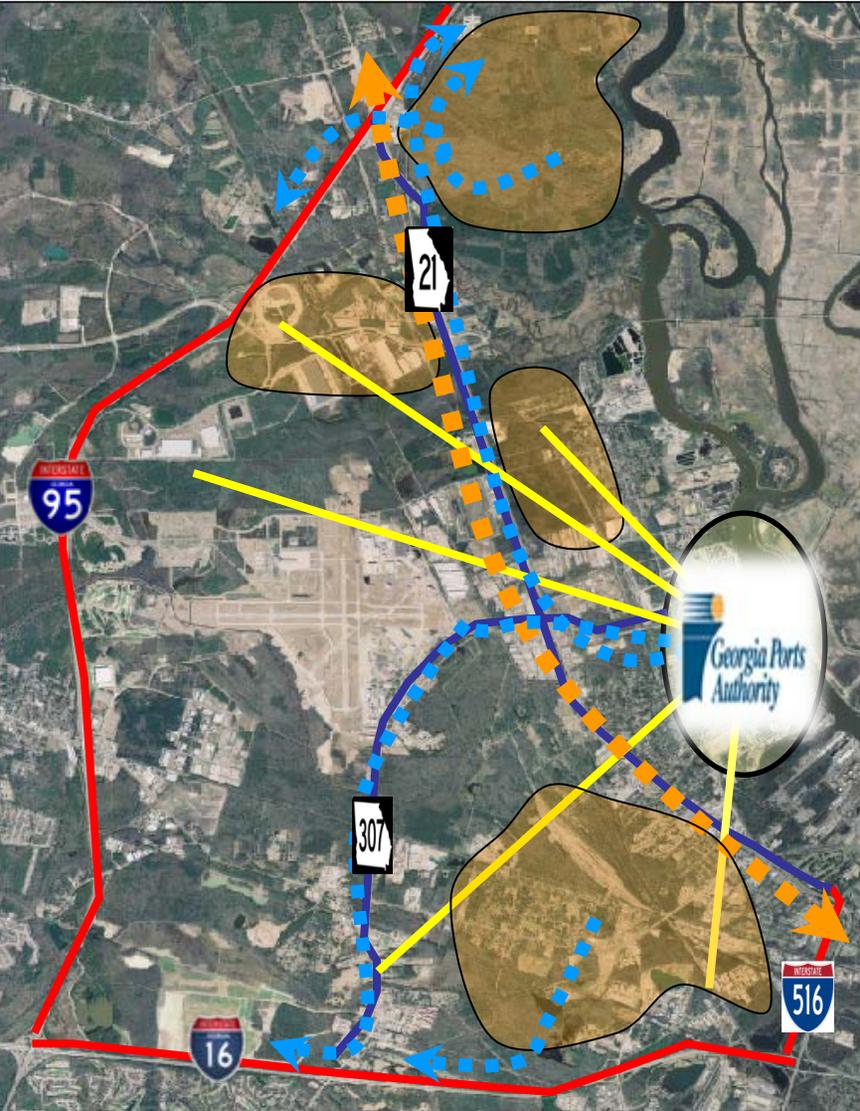
# Study's Final Recommendations (for metro Atlanta)



Study recommends truck-only lanes on I-75 northwest, I-85 northeast, I-75 southeast, I-20 west, and all of I-285. A **logical first phase** would include I-75 northwest, I-285 on the west side, and I-75 southeast.



# Savannah Subarea



- Focus on area bounded by I-95; I-16; I-516 & Savannah River
- Issues to address:
  - Existing and Planned Development
  - Local truck movements in/out of Georgia Ports Authority's Garden City Terminal (drayage trips)
  - Truck movements to & from Interstates
  - Increasing commuter traffic from points north



# Savannah Subarea

- Explosive growth at the Port of Savannah
  - New warehouse & distribution centers
- Current & future traffic and land use patterns?
  - Opportunities to improve truck movements between the Port, warehouse/distribution centers, and the Interstate system
- Potential improvements
  - operational upgrades (accel/decel lanes, turn lanes)
  - intersection improvements (improve turning radii, signal timing)
  - capacity projects (truck-only lanes/routes)



# Statewide Truck Lane Needs Identification Study

## Next Steps

- Develop conceptual layouts of a truck-lane system
  - Lane configurations
  - Implementation ? (i.e. constructability, cost, benefits & economics)
- Complete a policy guidebook (Emergency access? Enforcement? Ingress/Egress points? Etc?)
- Study completion = Spring 2007



# Additional Information

[www.gatrucklanestudy.com](http://www.gatrucklanestudy.com)

Thank You.

Questions?