

# 2024 Atlanta Regional Freight Mobility Plan

Atlanta Regional Commission / Freight Advisory Task Force



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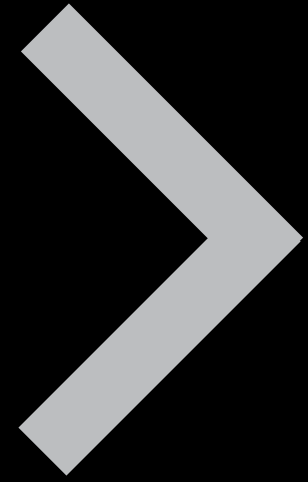
Jon Tuley, KH

05/04/2023



# AGENDA

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- Project Overview (Recap)
- Inventory of Freight Infrastructure
- E-Commerce Growth and Impacts Analysis
- RITIS O/D Analysis
- Revised and New Freight Cluster Areas
- Draft Goals, and Objectives
- Next Steps

# Project Overview (Recap)



- Strategic plan to identify intermodal freight needs in the 20-county region
  - Leverage regional freight planning over the last 20 years
  - Align with state freight and logistics efforts
- Maximize freight funding opportunities associated with Infrastructure Investments and Jobs Act (IIJA)
- Develop tailored, localized tools and products to support plan implementation

## Key Freight Considerations

- Increasing congestion on Georgia's intermodal freight network
- Community impacts of industrial and freight-oriented development
- Growth in e-commerce and associated freight impacts
- Urban goods delivery and complex curbside management needs
- Deployment of new technologies with associated infrastructure needs
- Ability to connect a trained workforce to freight employment opportunities
- System risk and resiliency

# Project Task Structure

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# Stakeholder Engagement

## ATLANTA REGION ENGAGEMENT CHALLENGES



### TIME

Freight partners are time-limited because they are operating at peak capacity, often understaffed

### REACH



Communities and partners never-before involved in freight movement are now at the heart of freight operations because of COVID-19

### ACCESS



Much of the private freight industry operates behind closed doors with a key contact required for access





***Inventory of Freight  
Infrastructure***

# → Highway Infrastructure

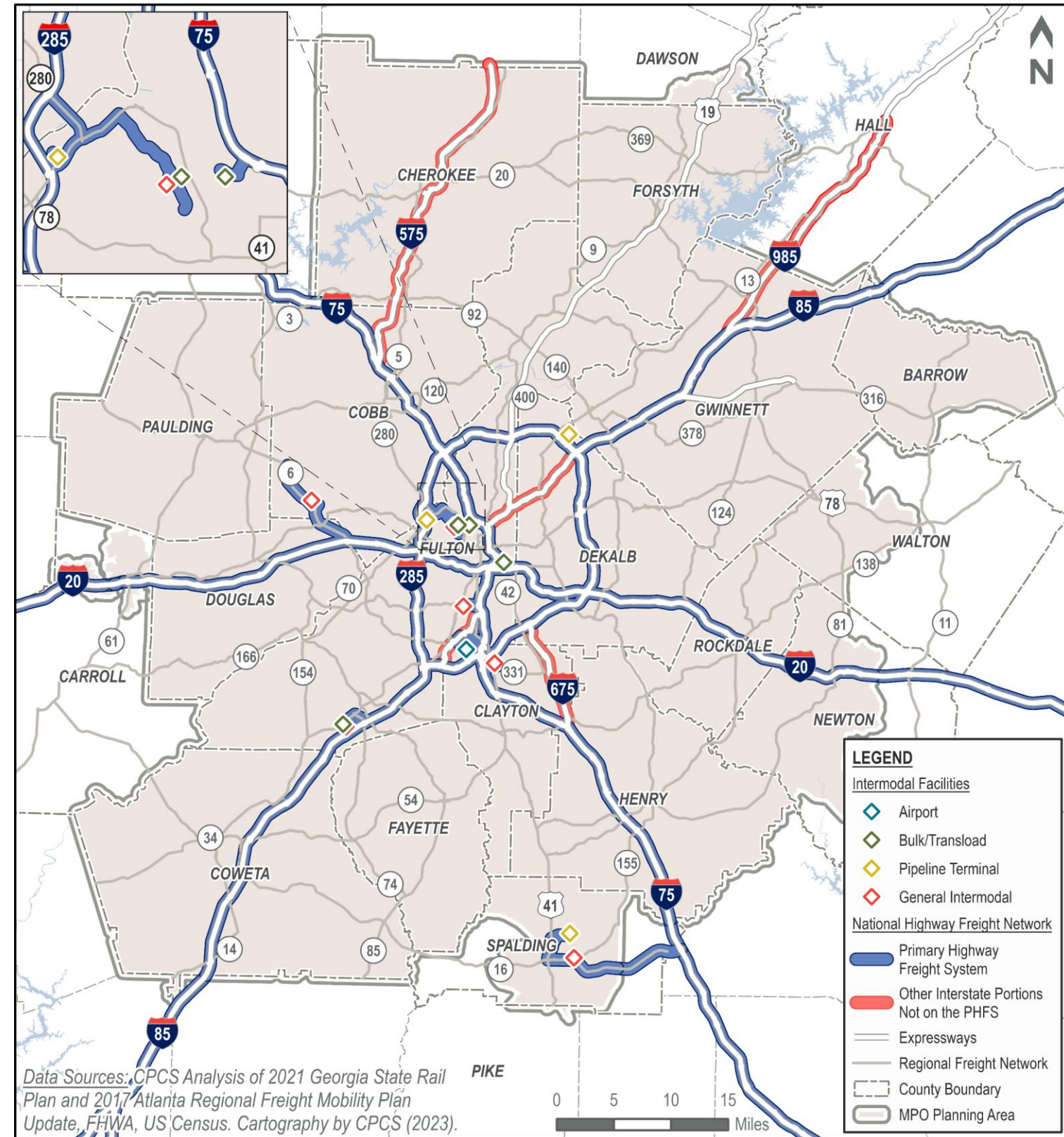
## National Highway Freight Network

Designated by the Federal Highway Administration (FHWA) to allocate federal resources to maintain and enhance the US highway freight system.

**651.8**

Primary Highway Freight System (PHFS) Miles

PHFS network present the most critical highway portions of the U.S. freight transportation system determined by measurable and objective national data.



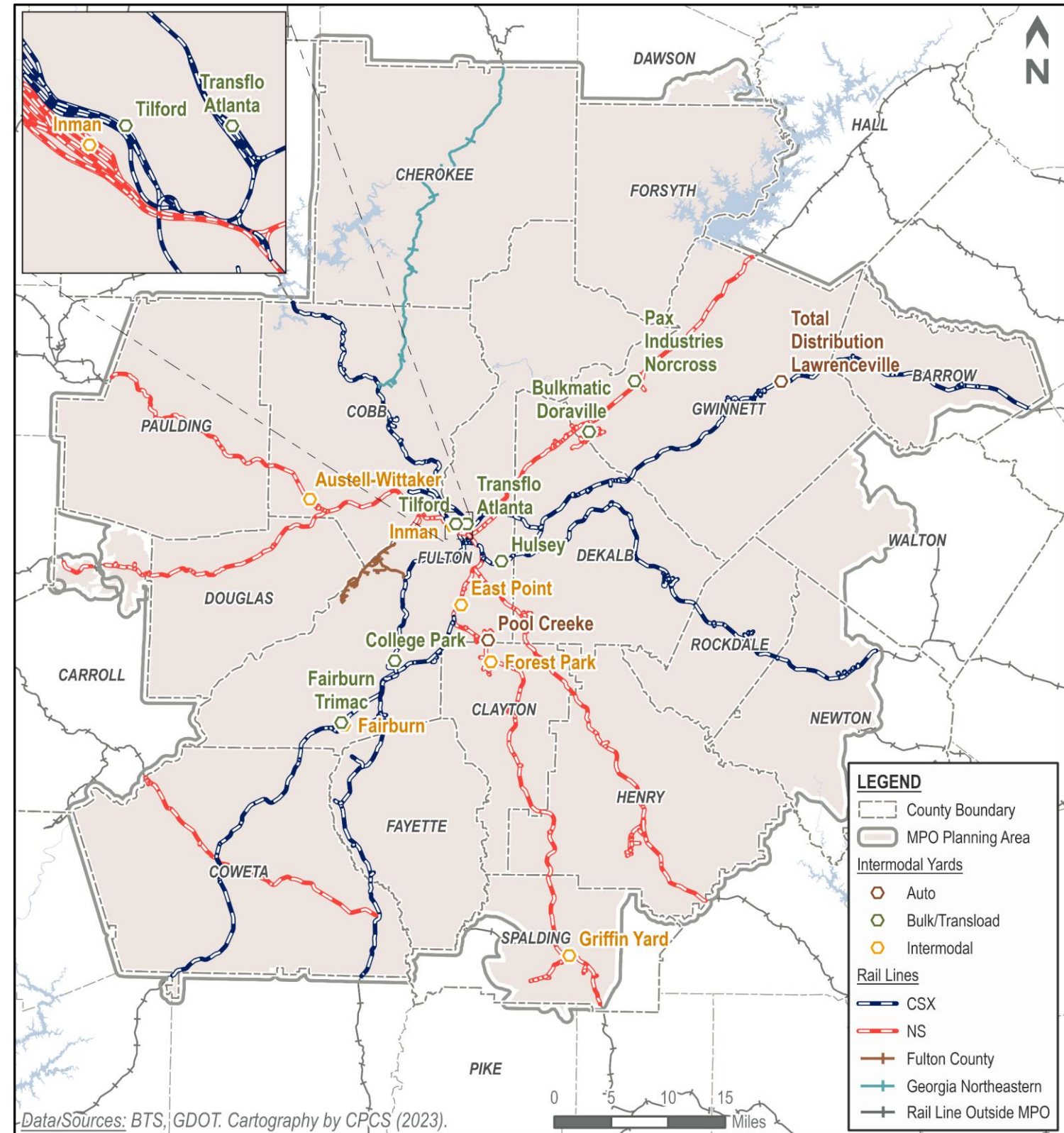


# → Rail Infrastructure

## Regional Freight Railyards

### 3 Intermodal yards

- NS Whitaker Yard: Over 500,000 container lifts per year, making it among the largest in the region. Six new gantry cranes announced in 2023 that will double throughput.
- NS Inman Yard: Located in NW Atlanta, it serves the Norfolk Southern Crescent Corridor and has over 300,000 lifts per year.
- CSX Fairburn Yard: Underwent expansion in 2018 that increased capacity by hundreds of thousands of lifts per year.
- CSX Hulsey Facility: Ceased operations in 2019 but reopened in 2020 to focus on bulk commodities.



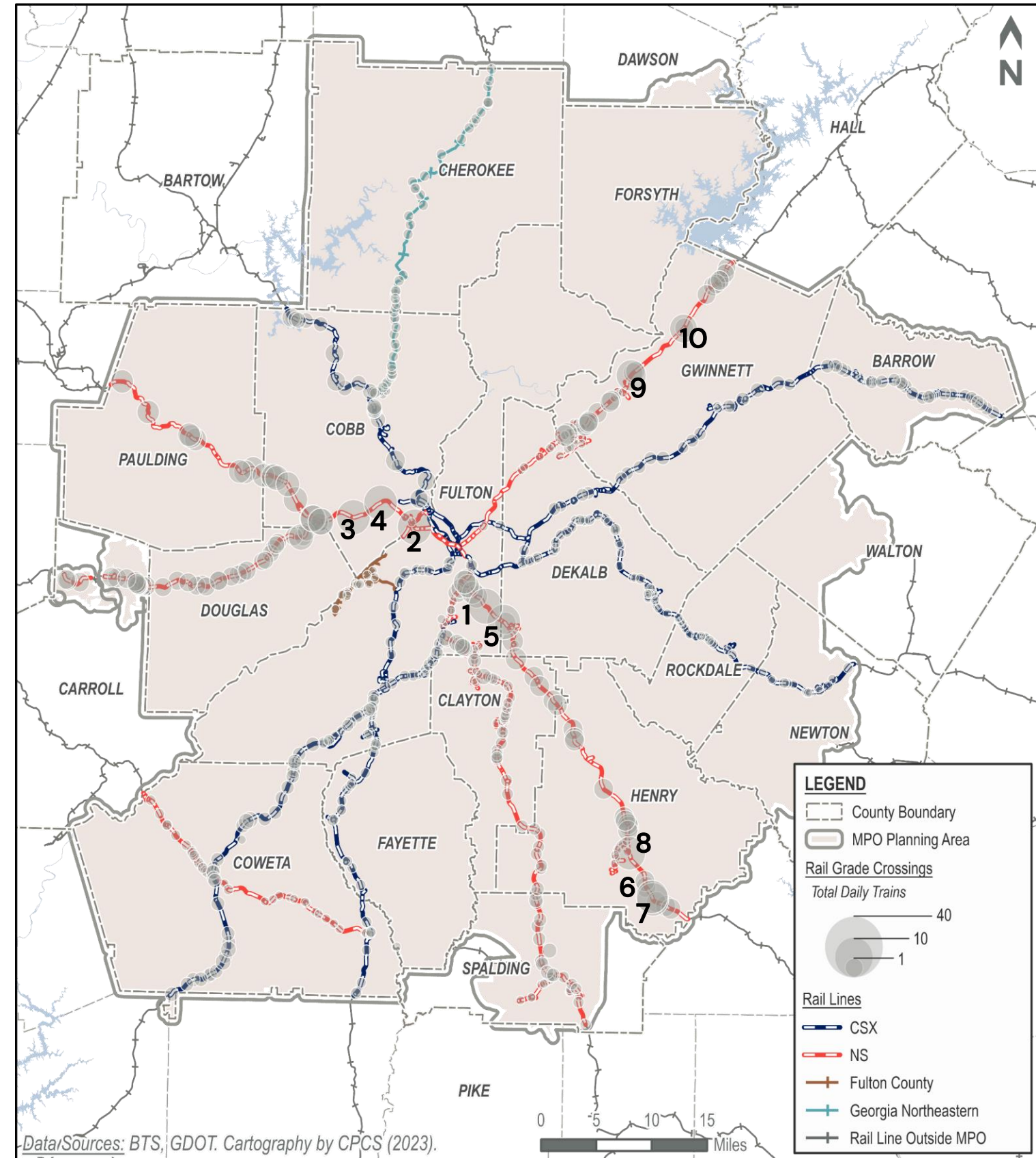


# ➔ Rail Infrastructure

- *At-Grade Rail Crossings*
  - 824 at-grade rail crossings in the region, of which 637 traverse public roads

Busiest Public At-Grade Rail Crossings, 2019

Rank	Railroad	Street	Location	2019 AADT	Estimated Daily Trains
1	NS	Sawtell Ave	Atlanta, Fulton County	7,403	41
2	NS	Parrott Ave	Atlanta, Fulton County	2,355	41
3	N.S.	Church Street	Mableton, Cobb County	2,355	40
4	N.S.	Nickajack Road	Mableton, Cobb County	2,355	40
5	N.S.	Fayetteville Road	Constitution, Fulton County	1,036	40
6	NS	Peeksville Road	Locust Grove, Henry County	11,286	37
7	N.S.	N Jackson Street	Locust Grove, Henry County	1,682	37
8	N.S.	Kings Mill Road	McDonough, Henry County	1,682	37
9	N.S.	Main Street	Duluth, Gwinnett County	2,355	34
10	NS	Buford Dam Road	Suwanee, Gwinnett County	31,487	30



# → Air Cargo Facilities

- *Hartsfield-Jackson Atlanta International Airport (ATL)*

95.8%

Of all GA air cargo volume

11th

Busiest cargo airport in the U.S.

38th

Busiest cargo airport in the world

650,000  
tons

Freight volume processed in 2022

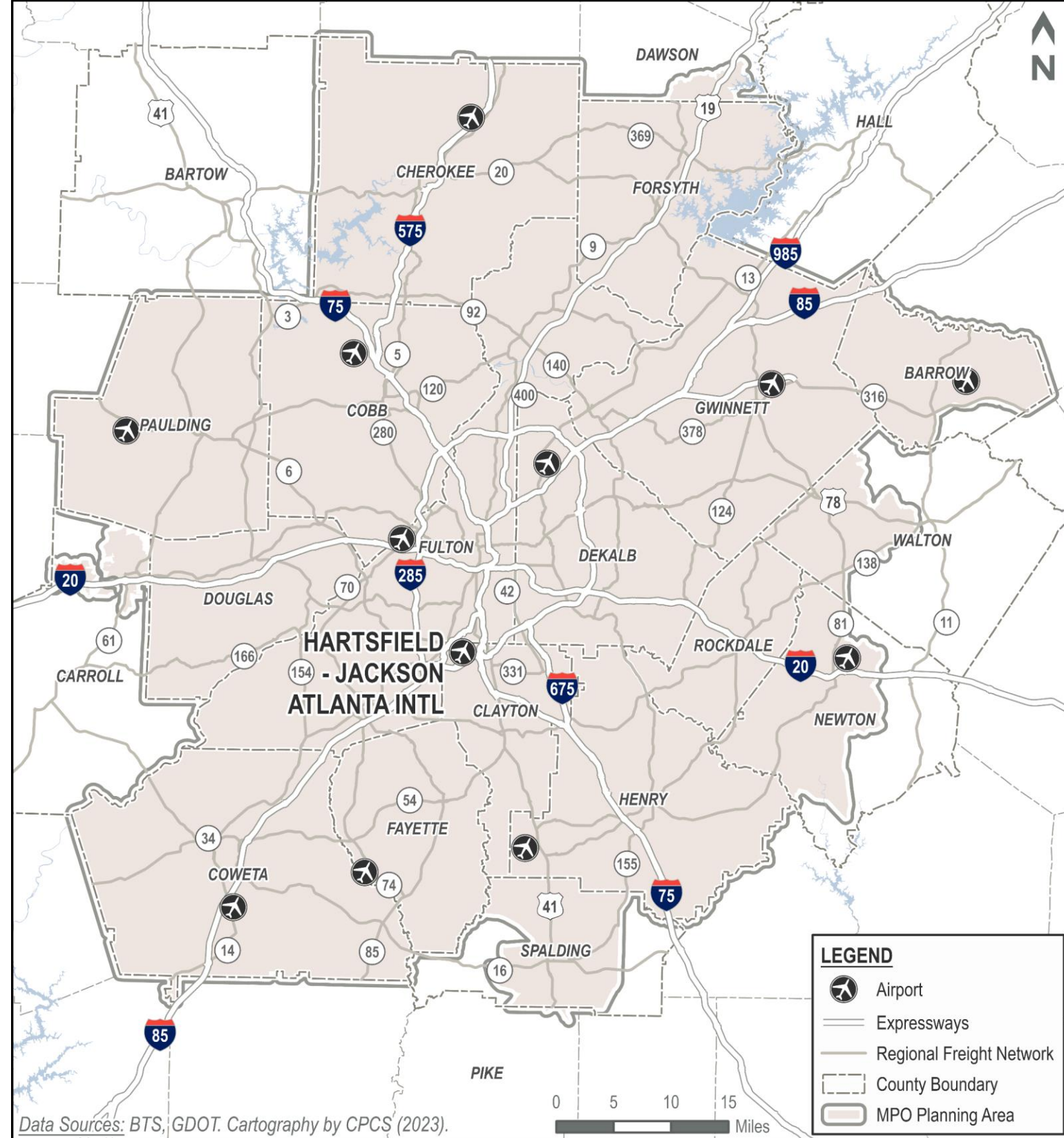
1.4 million  
tons

Cargo volume forecasted in 2035



Source: T-100 Market Data. Bureau of Transportation Statistics. 2022.

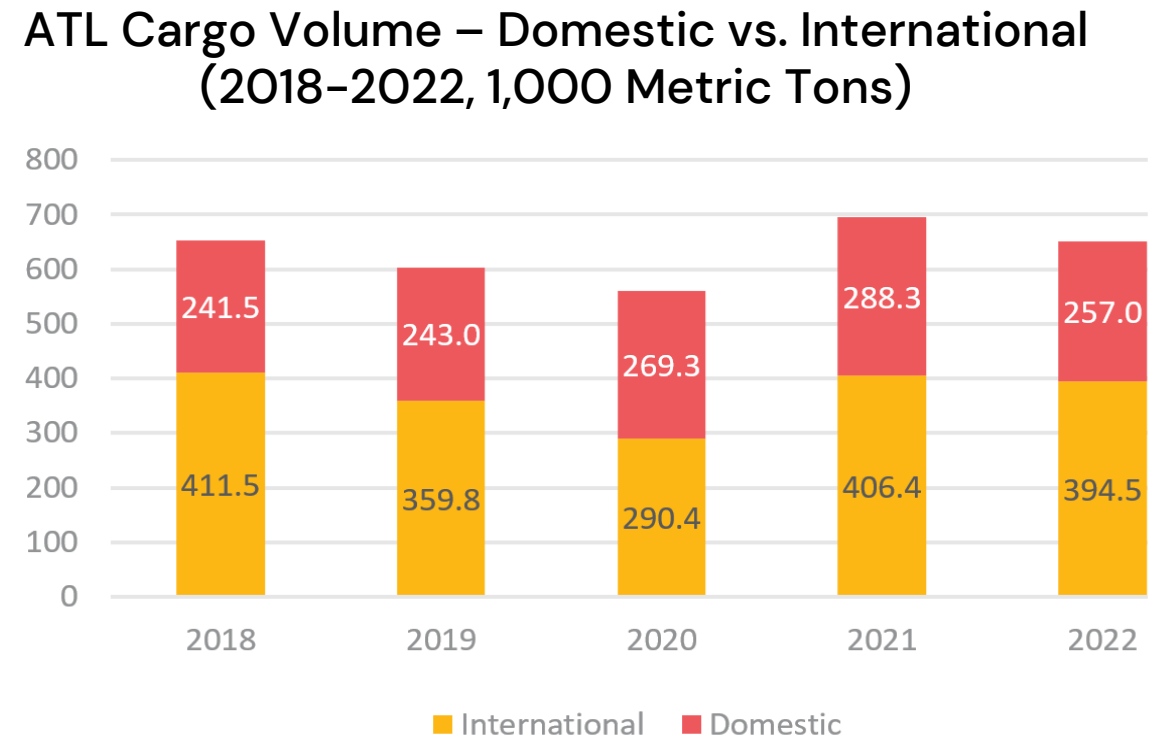
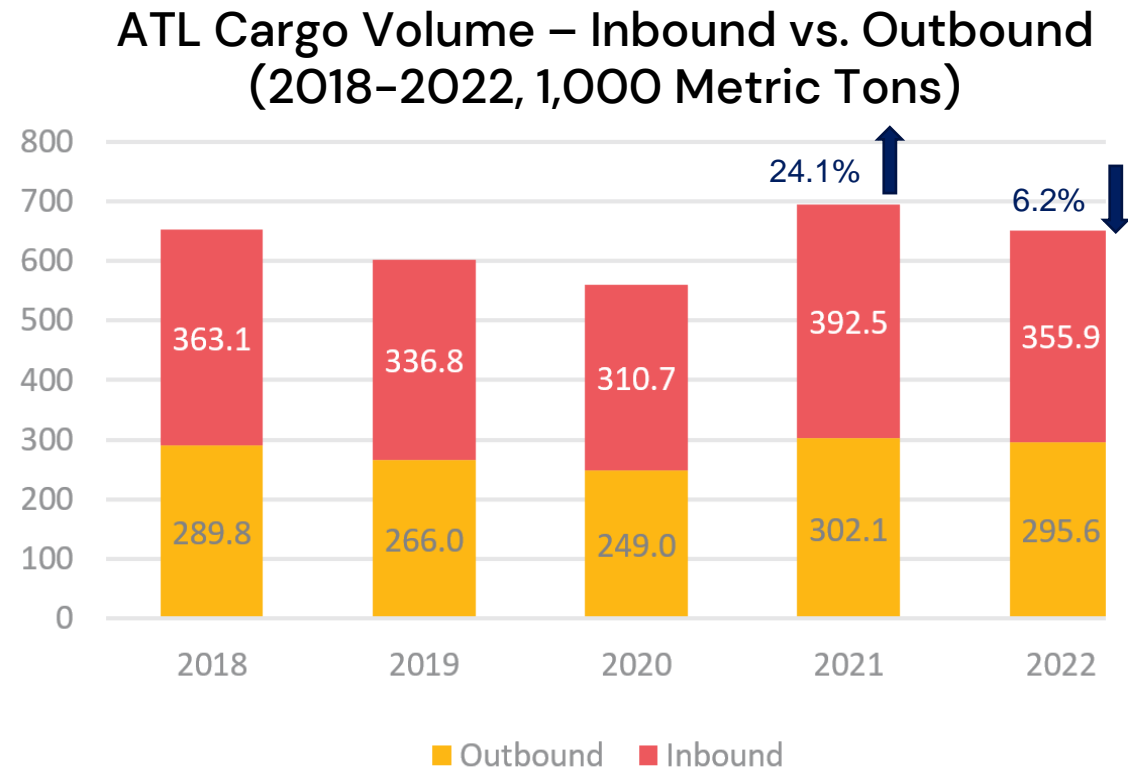
Hartsfield-Jackson Atlanta International Airport Year-to-Date Freight Data





# → Air Cargo Facilities

- *Hartsfield-Jackson Atlanta International Airport (ATL)*



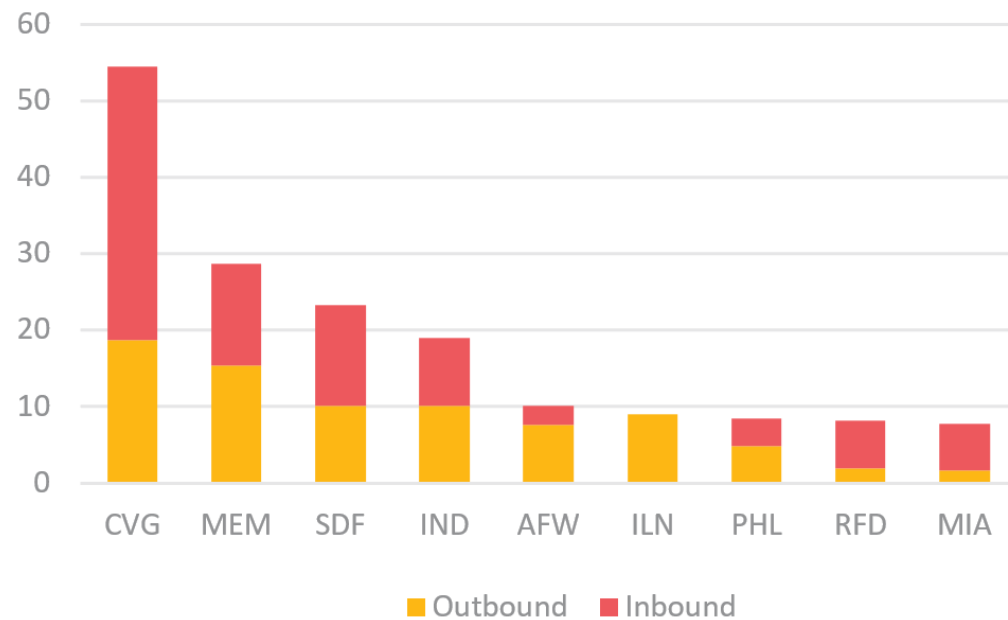
Source: CPCS analysis of Hartsfield-Jackson Atlanta International Airport Year-To-Date Freight Data



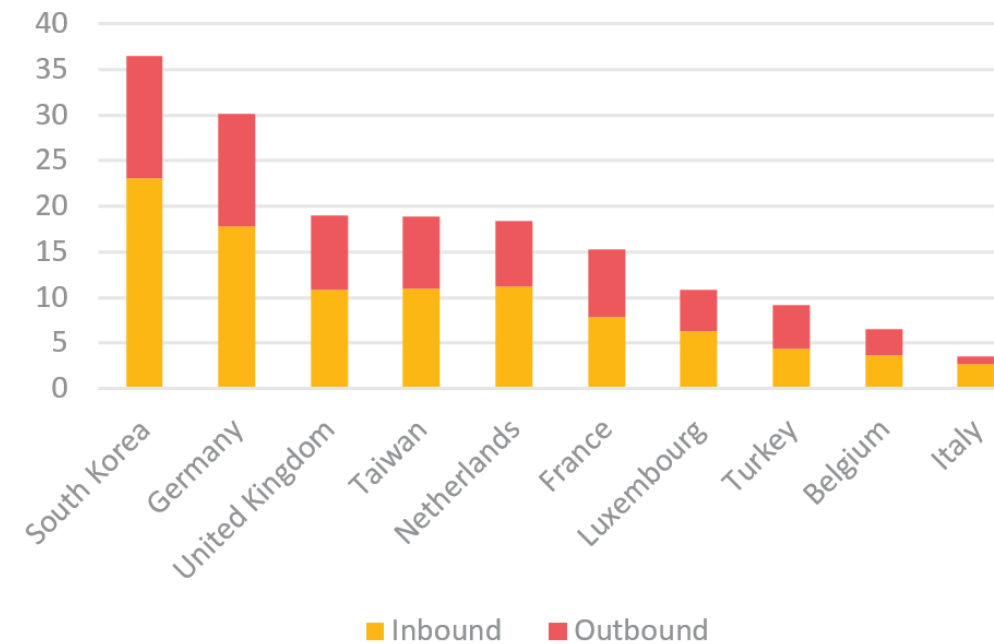
# → Air Cargo Facilities

- *Hartsfield–Jackson Atlanta International Airport (ATL)*

ATL's Top Domestic Trade Partners by Volume (2022, 1,000 Metric Tons)



ATL's Top International Trade Partners by Volume (2022, 1,000 Metric Tons)



Source: CPCS analysis of BTS T-100 Market Data



# *E-Commerce Growth and Impacts Analysis*

# → National Trends

## Online Retail Spending, Q3 2022

Consistent upward trajectory since 2010

**15%**

Share of total retail sales

**200%**

Growth since 2010

Persistent trend of rising online sales since COVID-19

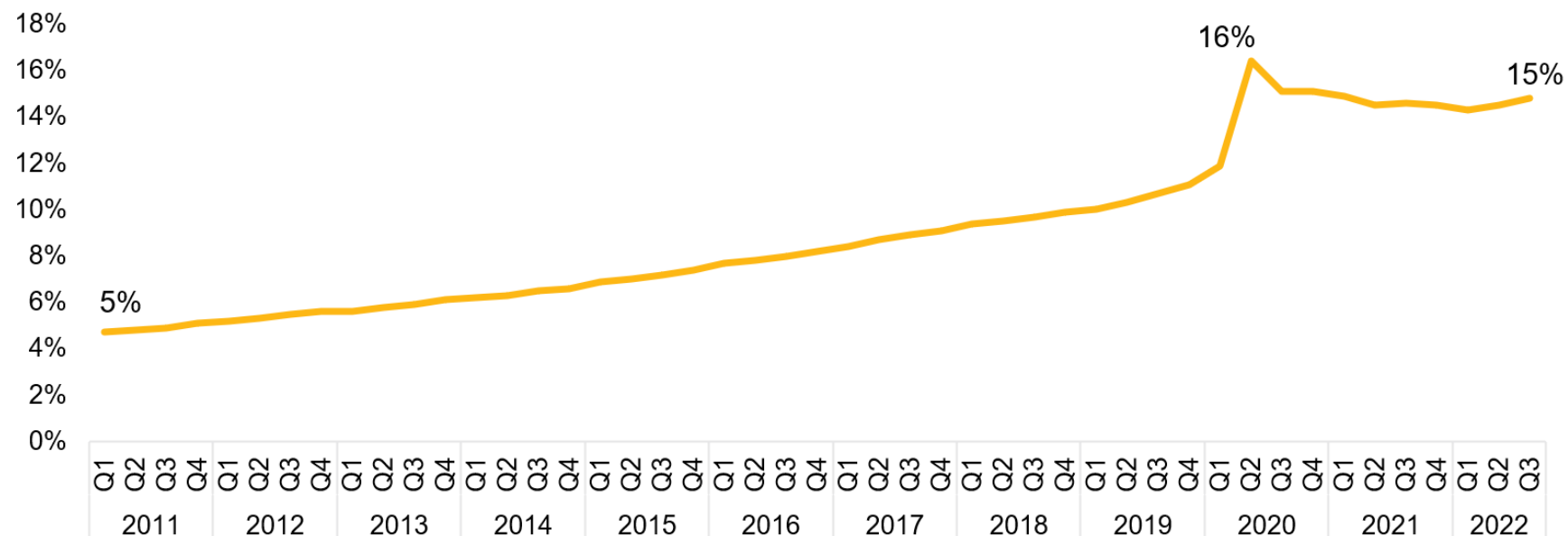
**32%**

Increase from Q1 2020

**45%**

Increase from Q1 2019

## US Quarterly E-Commerce Sales as a Percent of Total Retail Sales



Source: CPCS analysis of Federal Reserve Bank of St. Louis data, 2023.



# → Regional Trends

## Online Retail Spending

**\$20.5** billion

2022 consumer spend  
(region)

**25%**

Share of all retail  
spending

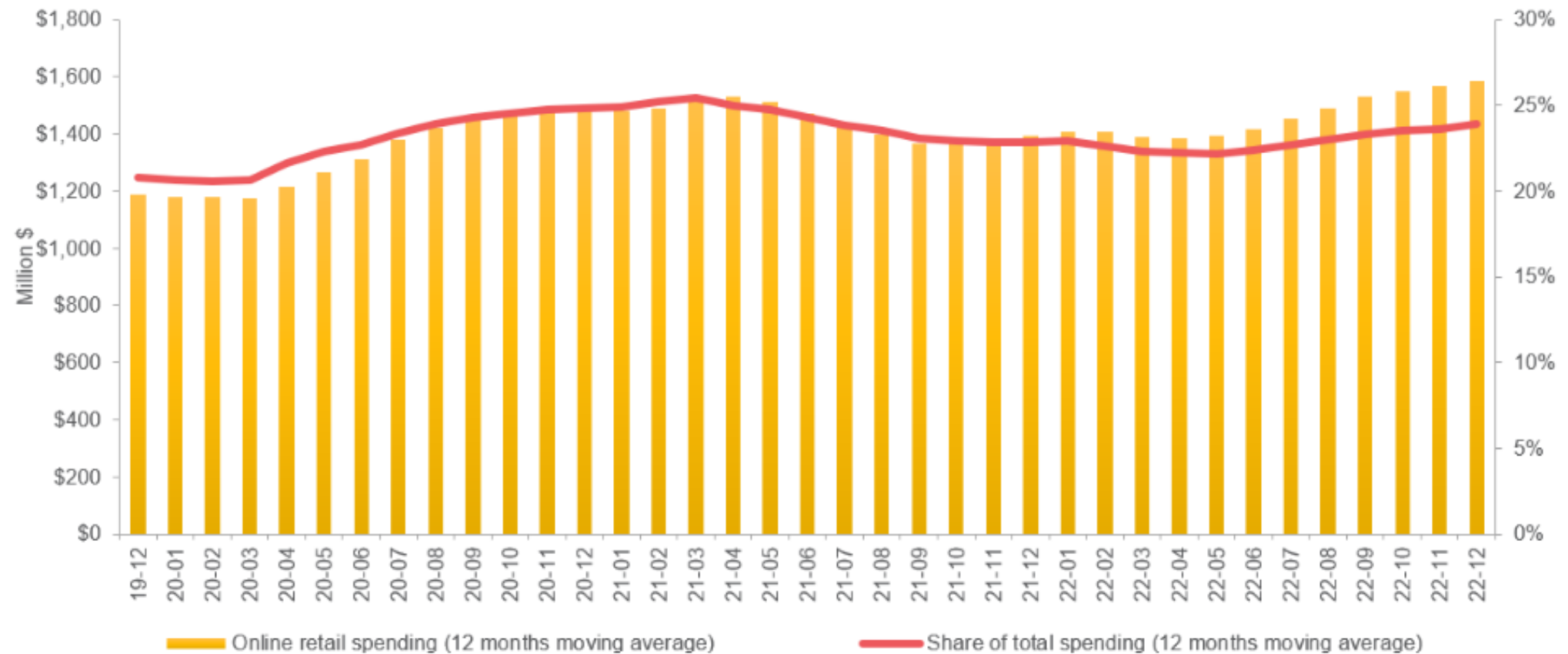
**44%**

Growth since 2019 (region)

**39%**

Growth since 2019 (GA)

Online Retail Spending Trend – Atlanta 20-County Region



# → Regional Trends

## Annual Online Retail Spending

**\$8,000**

Spent per household (region)

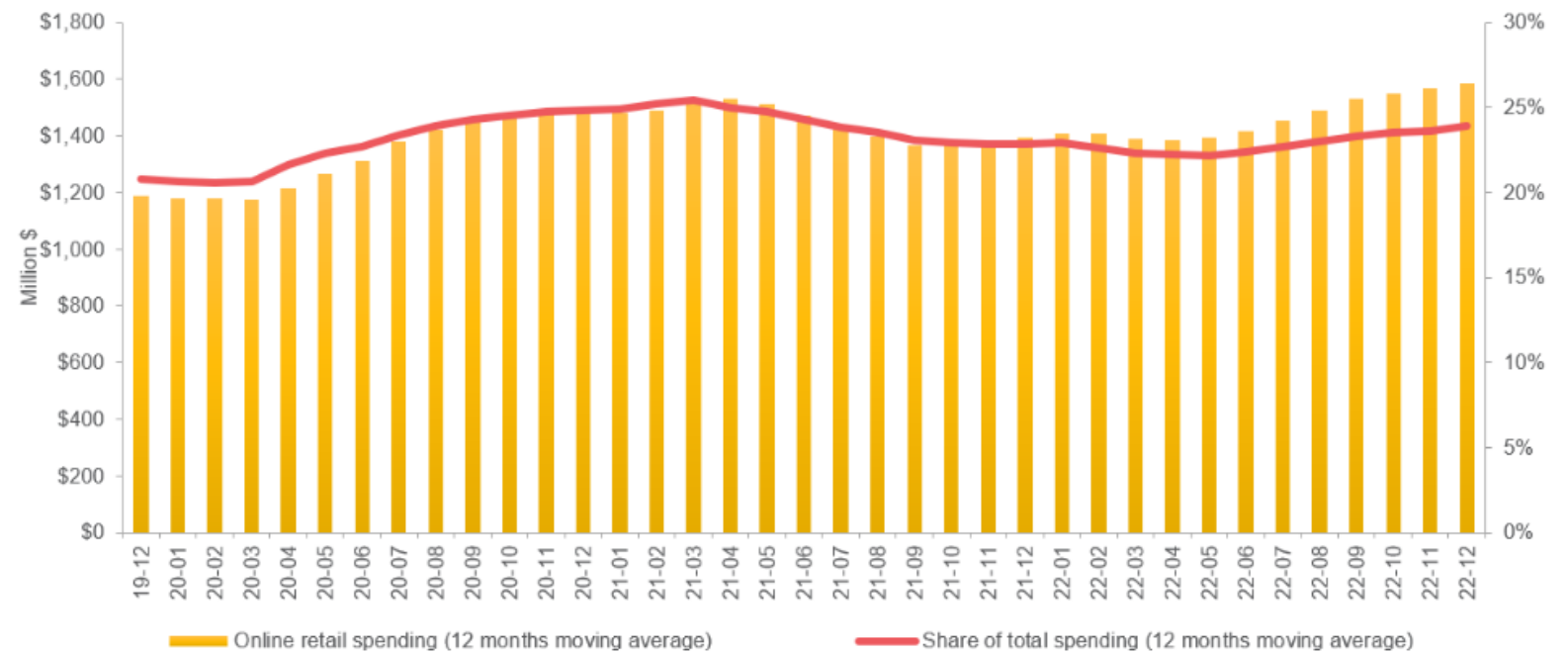
**\$6,800**

Spent per household (GA)

**\$7,500**

Spent per household (national)

Online Retail Spending Trend – Atlanta 20-County Region



Data Source: CPCS analysis of Replica data, 2023

**Online retail spending per household in Atlanta is higher than the state and national averages.**

# Workforce Impacts of E-Commerce

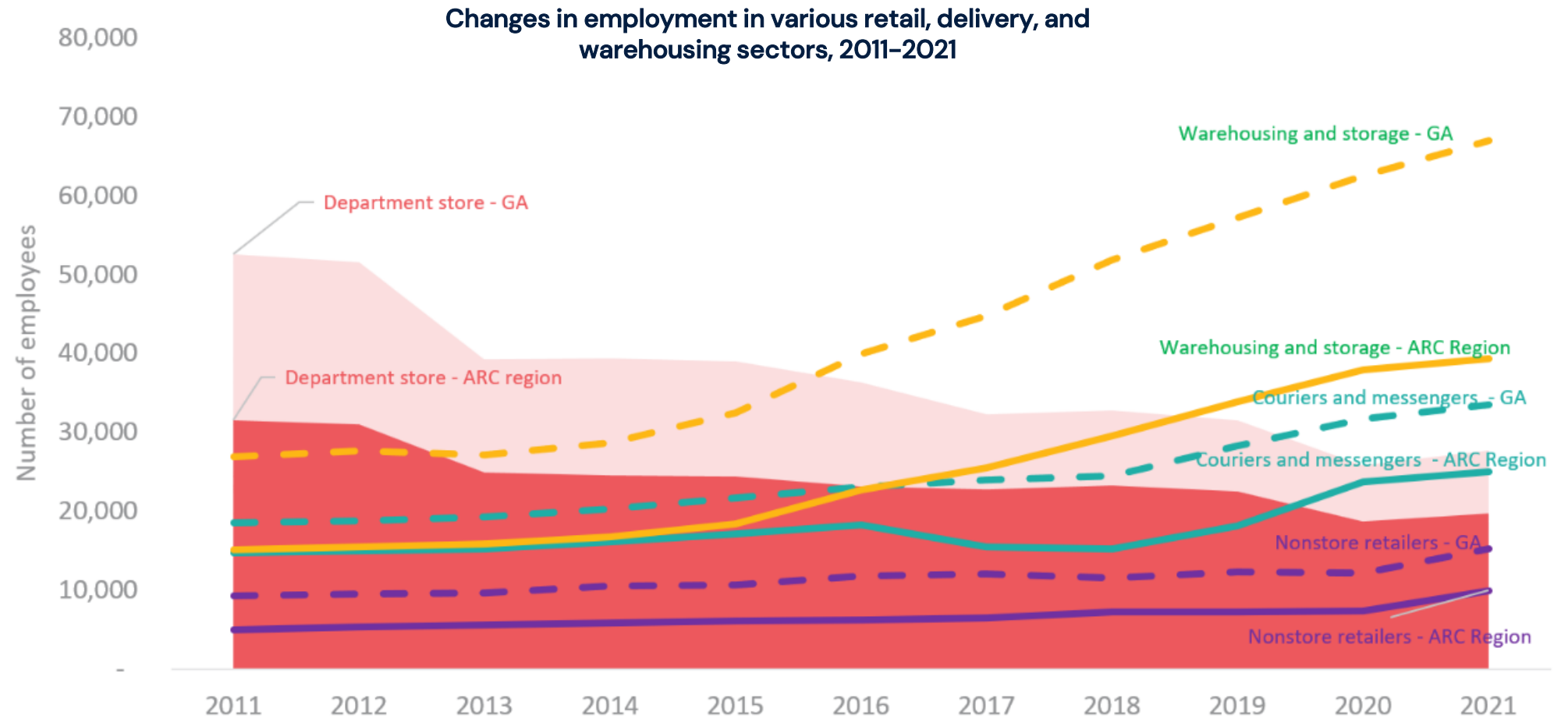
## Non-store retail industry

**98.5%**

2011-2021 increase (region)

**64%**

2011-2021 increase (GA)



Data Source: CPCS analysis of Bureau of Labor Statistics data, 2023



# Workforce Impacts of E-Commerce

## Couriers and messengers workforce

**70%**

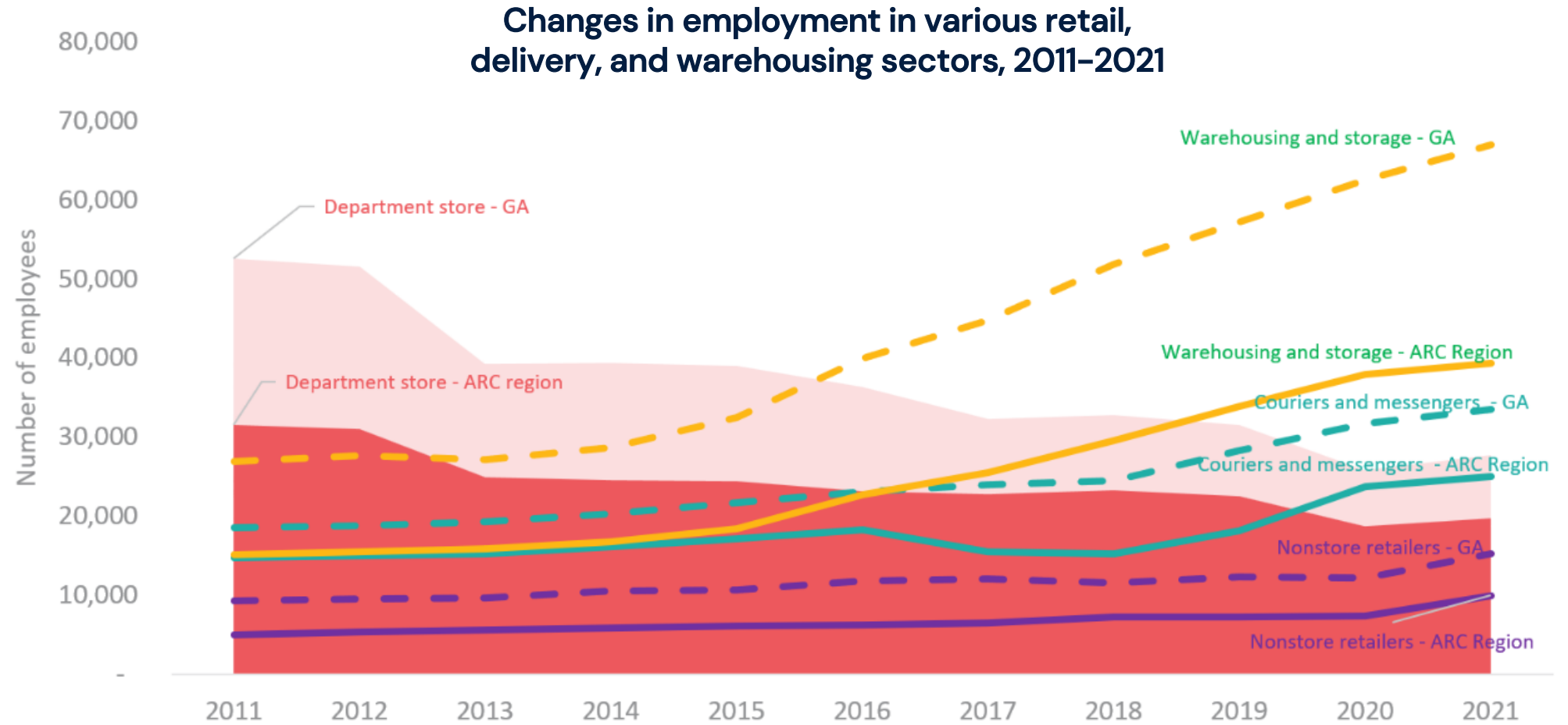
2011-2021 increase (region)

**75%**

Metro Atlanta couriers and messengers workforce share of GA

**27%**

Higher than department store employment (region)



Data Source: CPCS analysis of Bureau of Labor Statistics data, 2023

# Workforce Impacts of E-Commerce

## Warehousing and storage sector

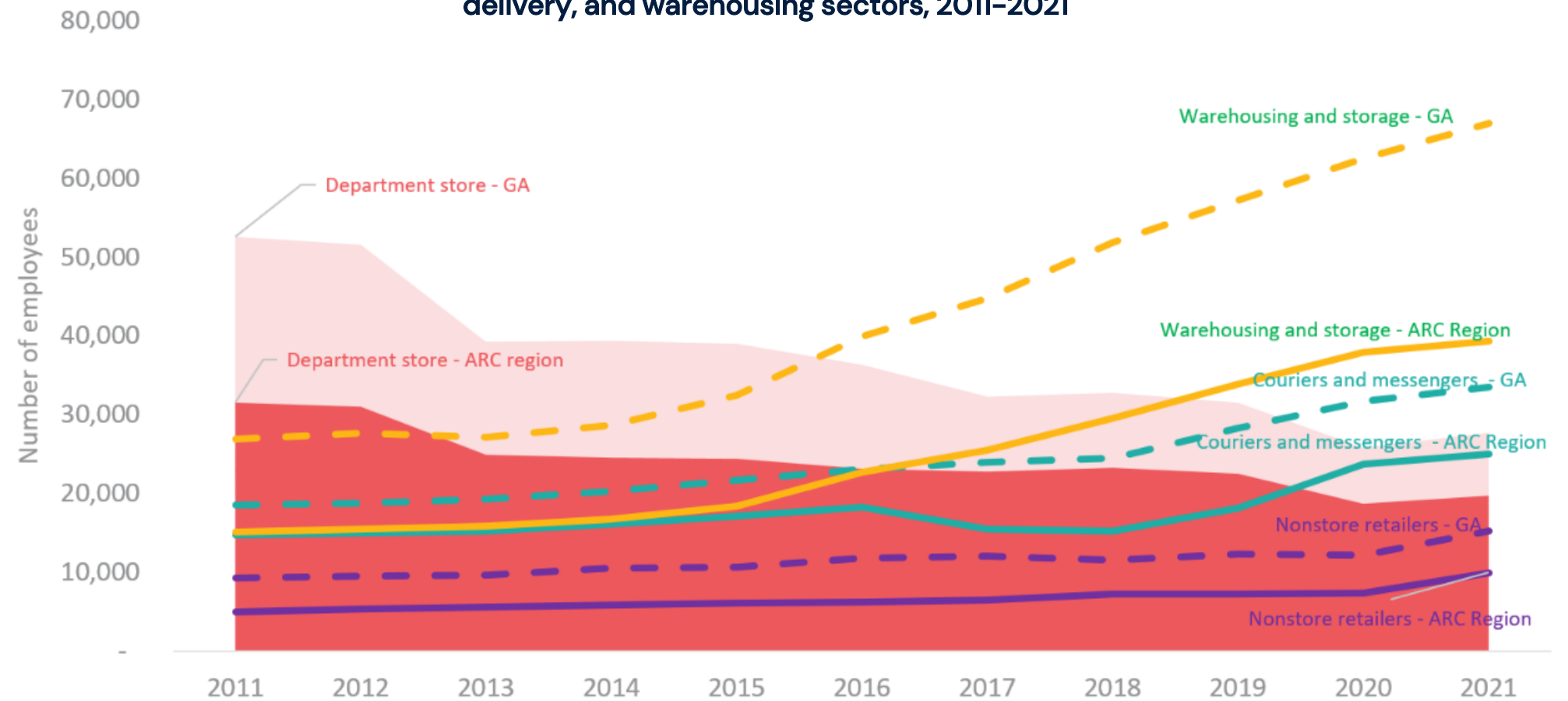
**161%**

2011-2021 increase (region)

**149%**

2011-2021 increase (GA)

Changes in employment in various retail, delivery, and warehousing sectors, 2011-2021



Data Source: CPCS analysis of Bureau of Labor Statistics data, 2023

# Workforce Impacts of E-Commerce

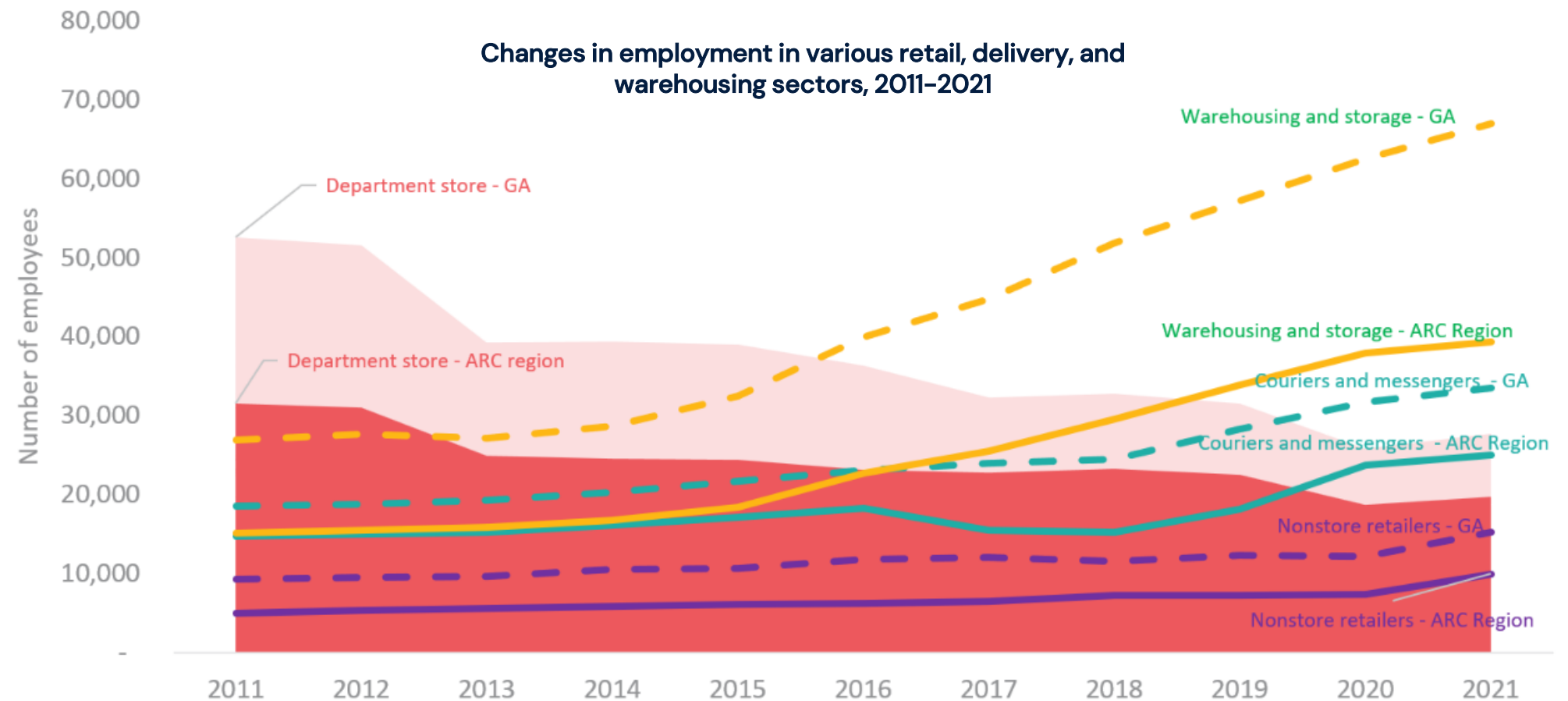
## Department store employment

**-37%**

2011-2021 decrease (region)

**-47%**

2011-2021 decrease (GA)



Data Source: CPCS analysis of Bureau of Labor Statistics data, 2023

Note the ARC region here refers to the 20 counties in the Atlanta metropolitan area



***RITIS OD Analysis to  
Support Freight Cluster  
Development***





# Truck Trips Origins

## Data

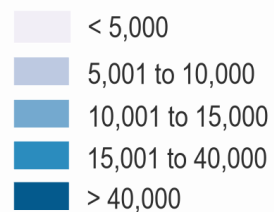
- RITIS Probe Data Analytics
- 2019 (Feb, Aug, Oct) weekdays trips
- Attributes: Origin/destination locations, trip begin/end date/time, vehicle type, etc.

## Analysis:

- Filter for medium and heavy-duty vehicle trips
- Overlay with existing freight cluster boundaries

### LEGEND

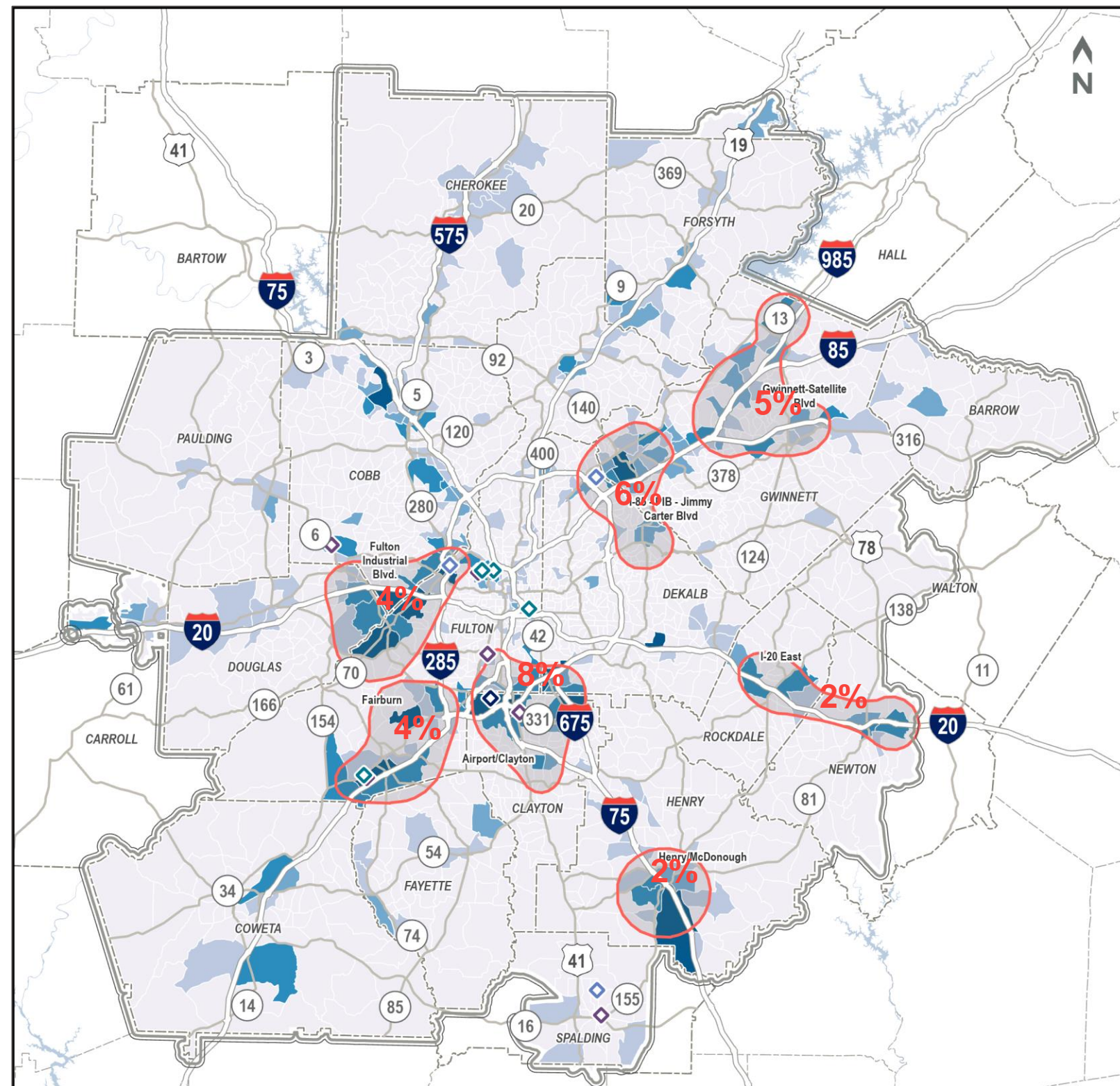
#### Heavy/Medium Duty Trucks: Origin



#### Intermodal Facilities

- ◆ Airport
- ◆ Bulk/Transload
- ◆ General Intermodal
- ◆ Pipeline Terminal

- ▭ Freight Clusters
- Expressways
- Regional Freight Network
- ▭ MPO Planning Area
- ▭ County Boundary







# Truck Trips Destinations

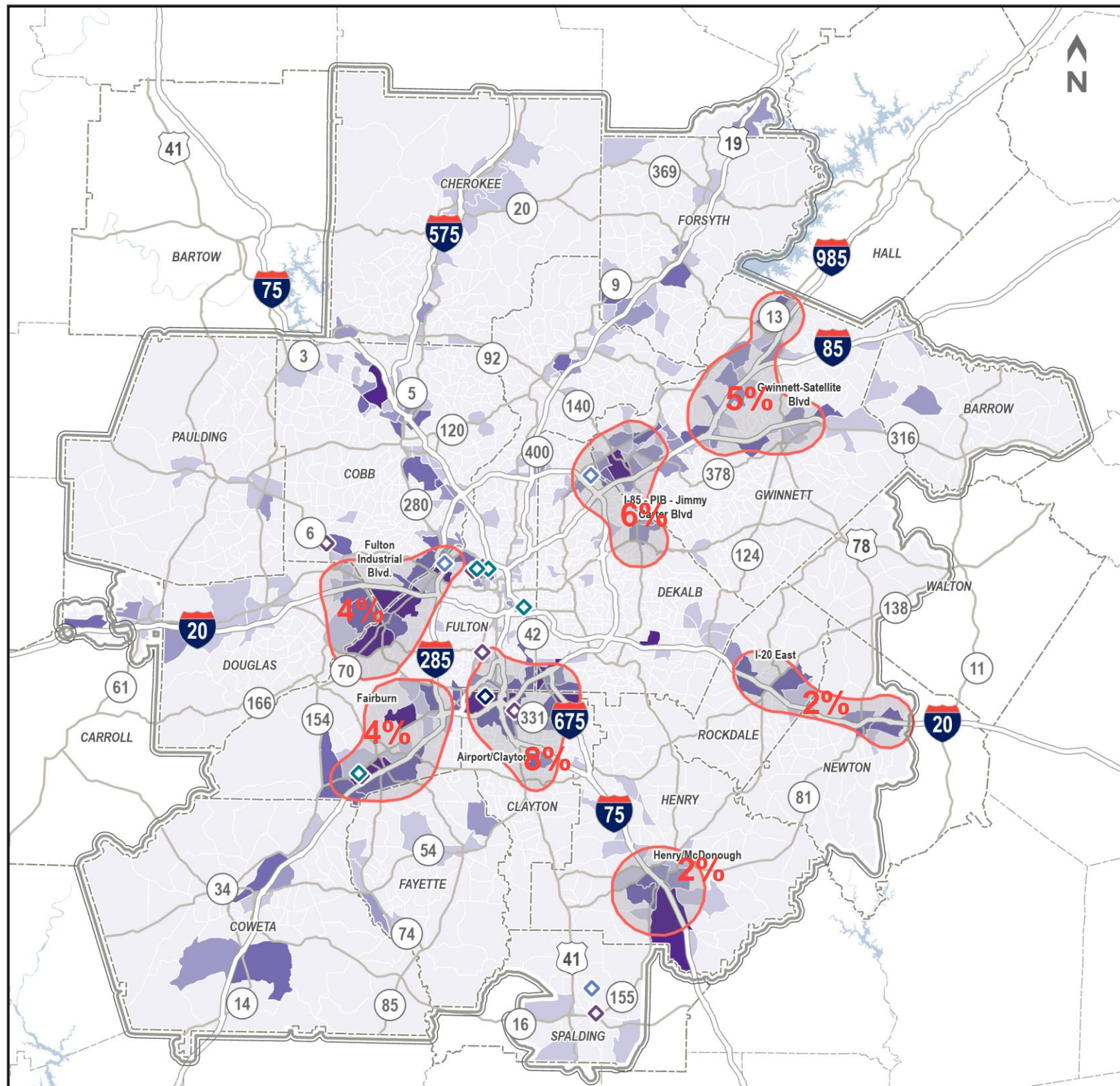
## Data

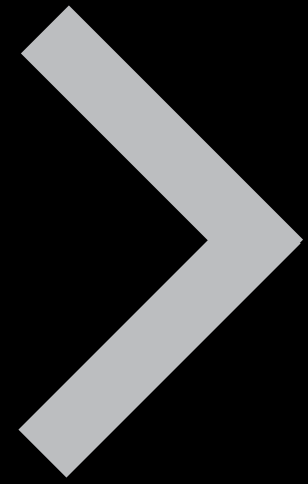
- RITIS Probe Data Analytics
- 2019 (Feb, Aug, Oct) weekdays trips
- Attributes: Origin/destination locations, trip begin/end date/time, vehicle type, etc.

## Analysis:

- Filter for medium and heavy-duty vehicle trips
- Overlay with existing freight cluster boundaries

LEGEND	
<u>Heavy/Medium Duty Trucks: Destination</u>	<u>Intermodal Facilities</u>
< 5,000	Airport
5,001 to 10,000	Bulk/Transload
10,001 to 15,000	General Intermodal
15,001 to 40,000	Pipeline Terminal
> 40,000	Freight Clusters
	Expressways
	Regional Freight Network
	MPO Planning Area
	County Boundary





# Revised and New Freight Cluster Areas



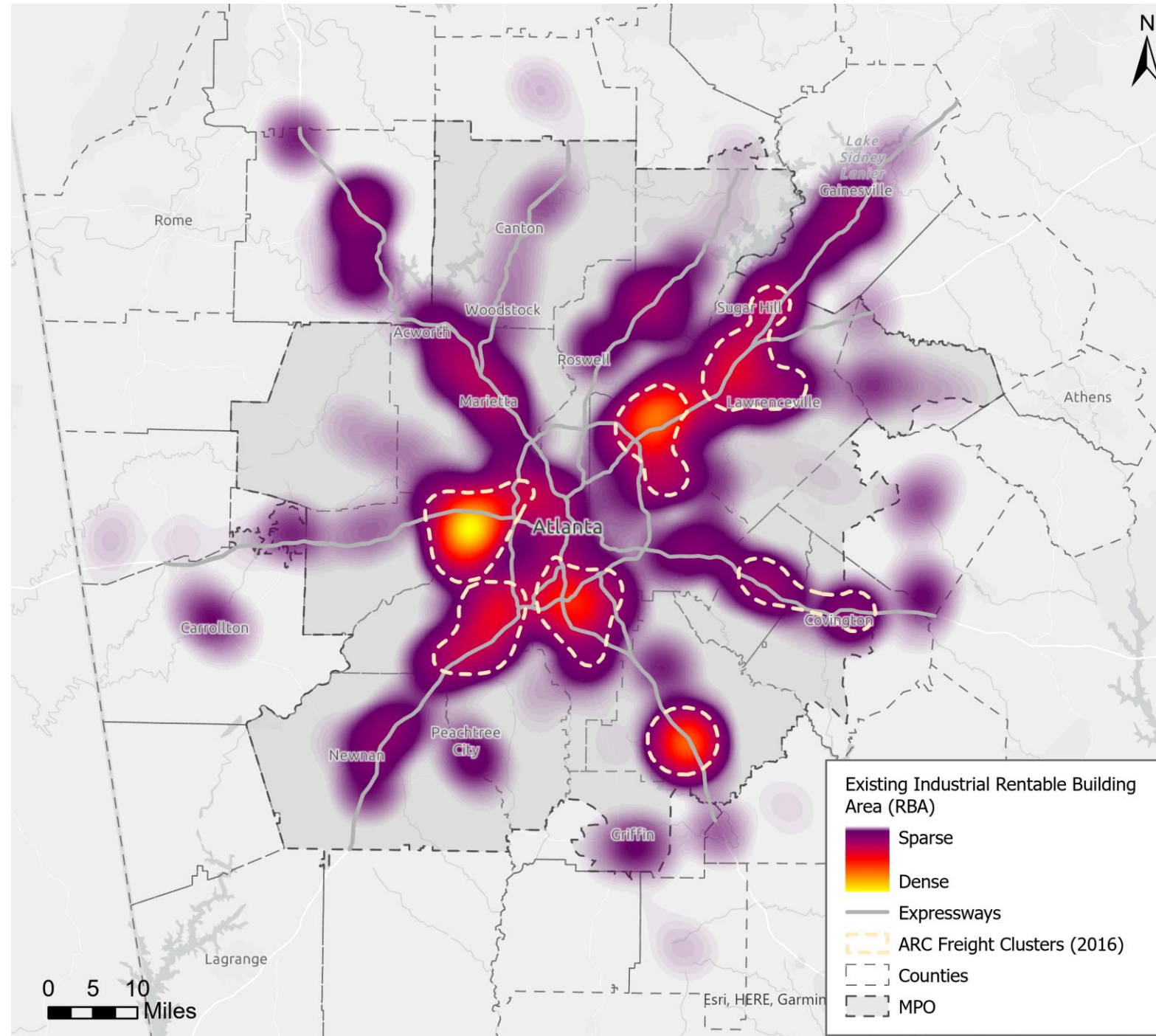
# Preliminary findings as of 2022

## Existing Industrial

MPO Properties: **14,880**  
MPO Rentable Building Area (RBA): **717.4M SF**  
Max MPO RBA: **2.8M SF**  
Min MPO RBA: **240 SF**

MPO+ Properties: **18,114**  
MPO+ Rentable Building Area (RBA): **846.2M SF**  
Max MPO+ RBA: **2.8M SF**  
Min MPO+ RBA: **240 SF**

MPO+ is ARC MPO boundary plus some areas that border MPO boundary

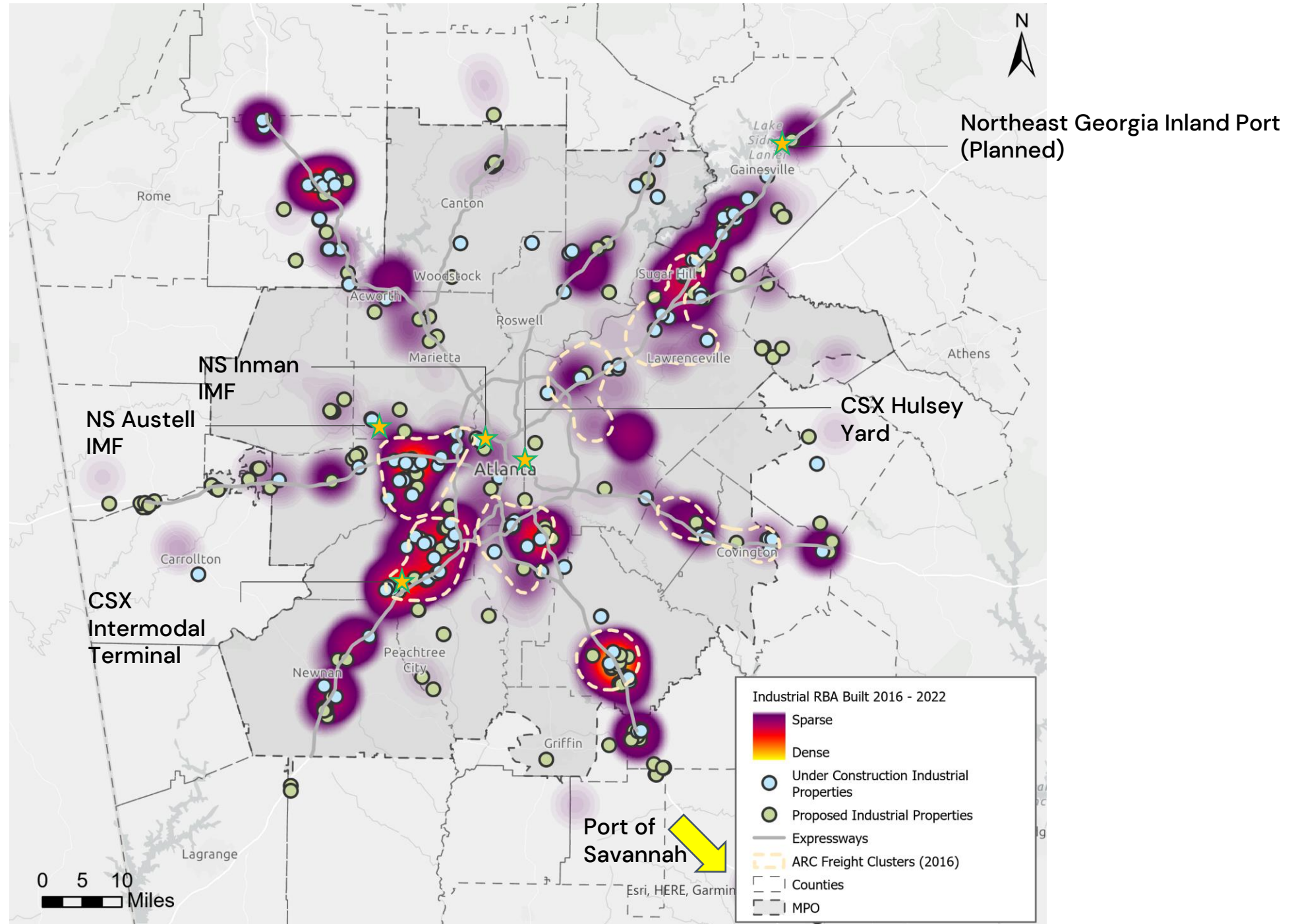


Source: CoStar, Kimley-Horn



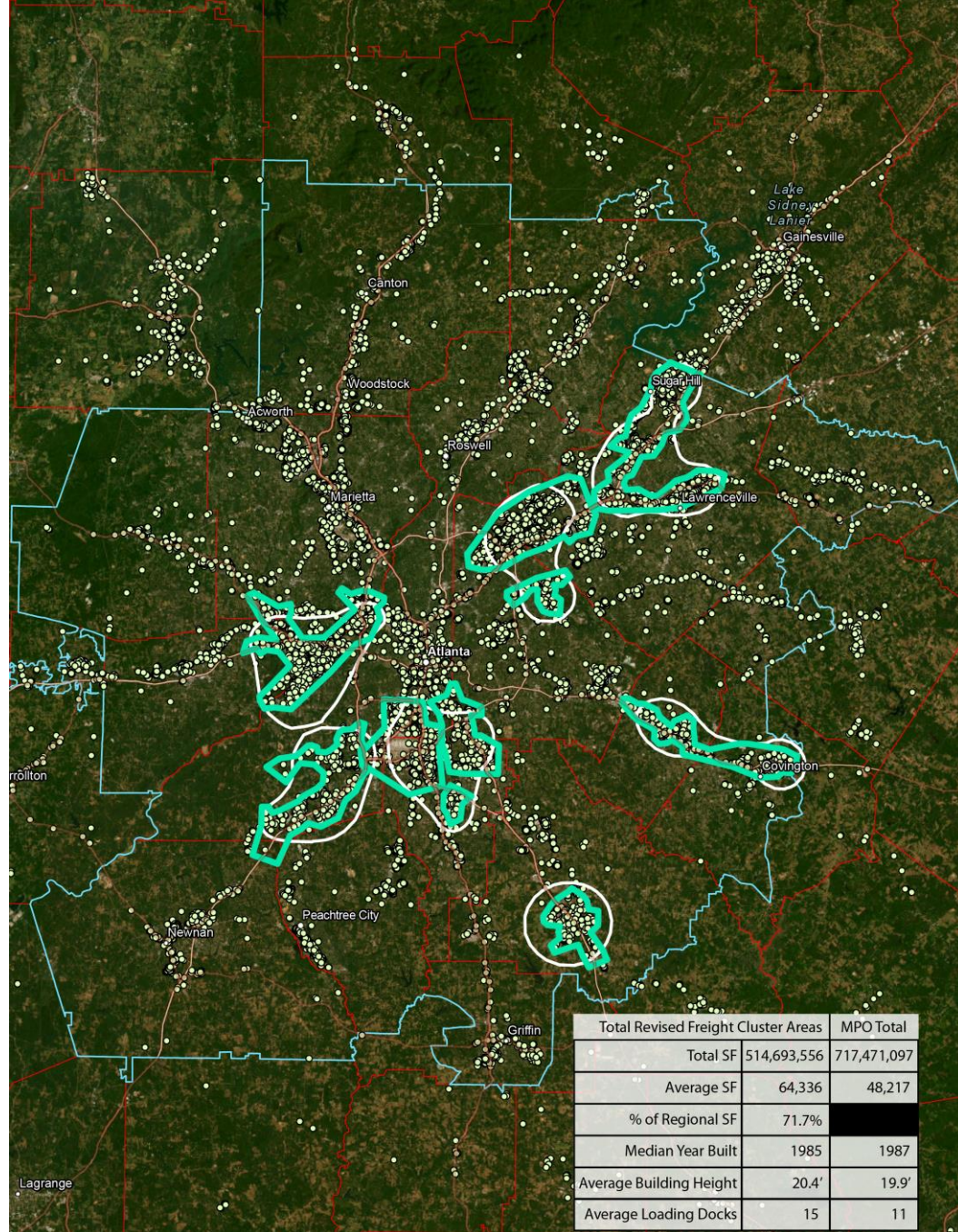
# Preliminary findings as of 2022

**Industrial Properties Built from 2016 – 2022 + Under Construction and Proposed developments + Existing “Generators”**





# Revised Freight Cluster Areas



Revisions considered:

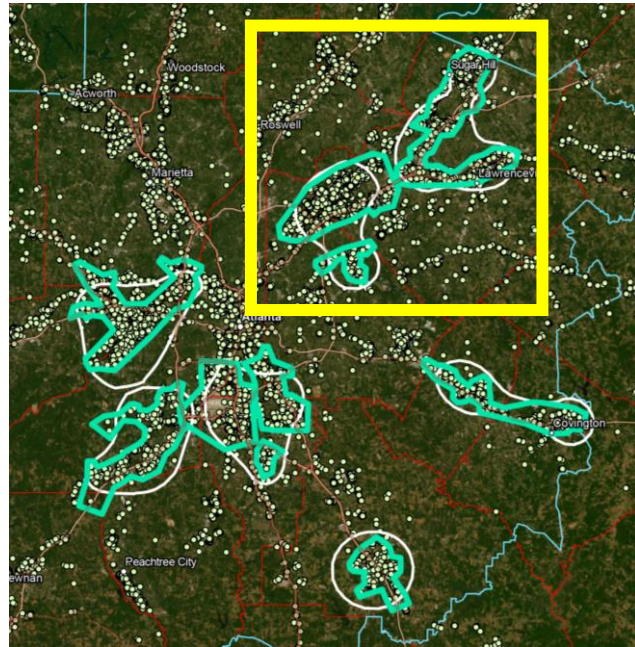
- Location of existing, recently built, and planned warehouse and distribution development
- Existing land use within and around each area
- Local plans and policies
- Origin and destination data

Revisions include:

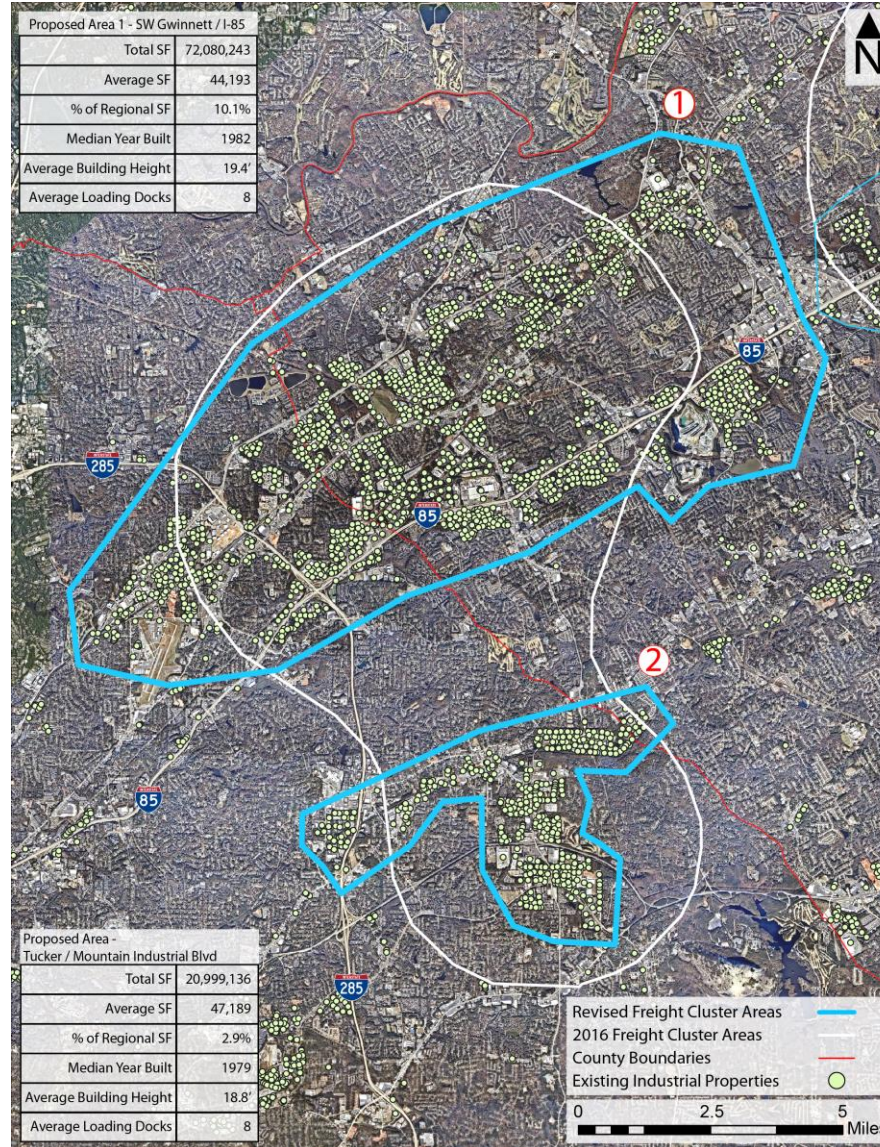
- 10 areas (formerly 7)
- Expanded or reduced areas
- Splitting of some areas into two or three new areas
- Key roadways providing access to each area
- Intermodal facilities



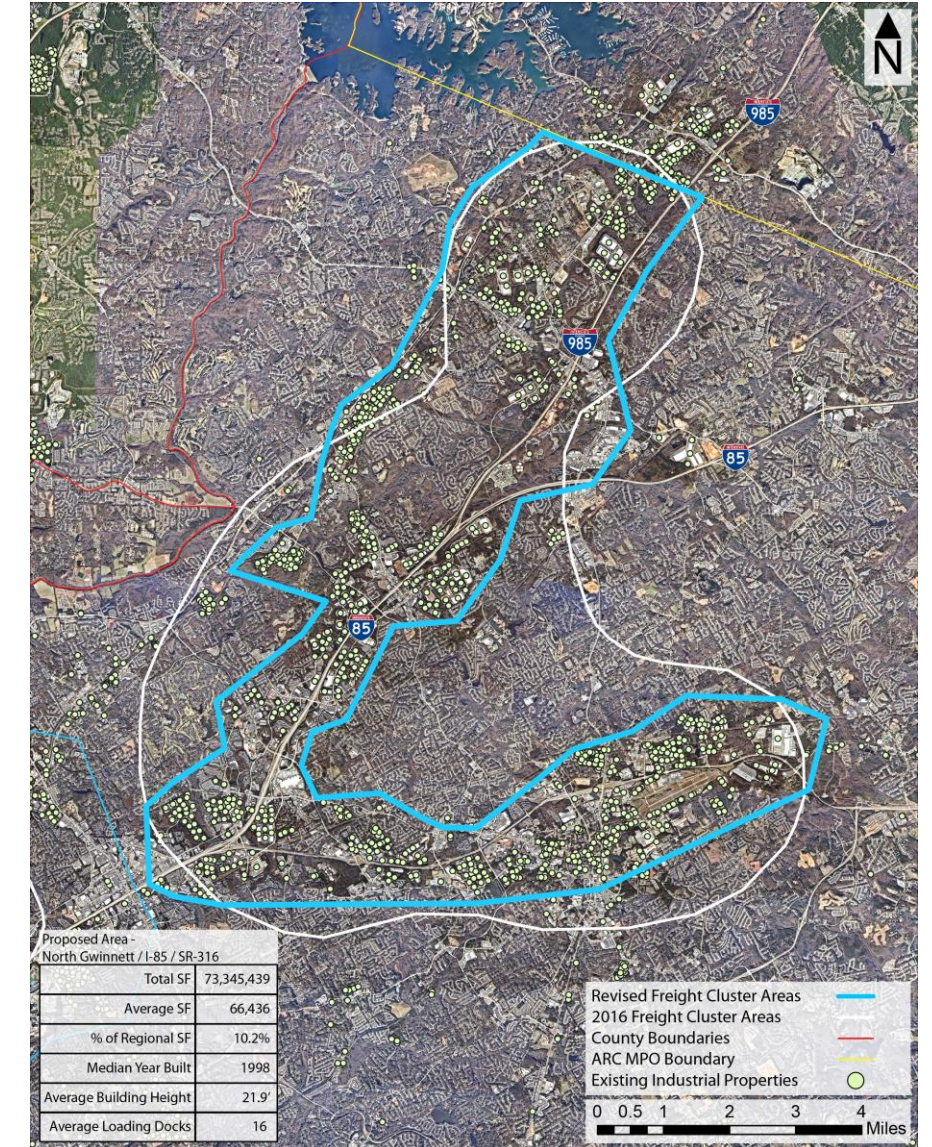
# Revised Freight Cluster Areas



## North Gwinnett/I-85



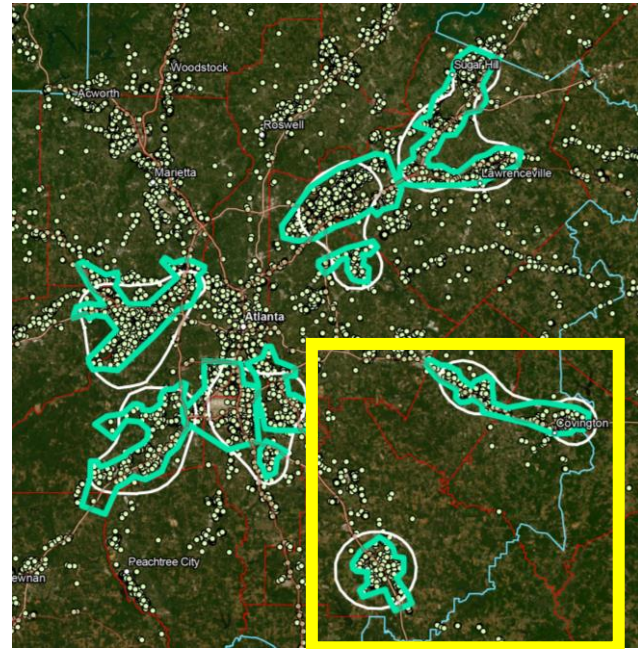
## SW Gwinnett/I-85 and Tucker/MIB



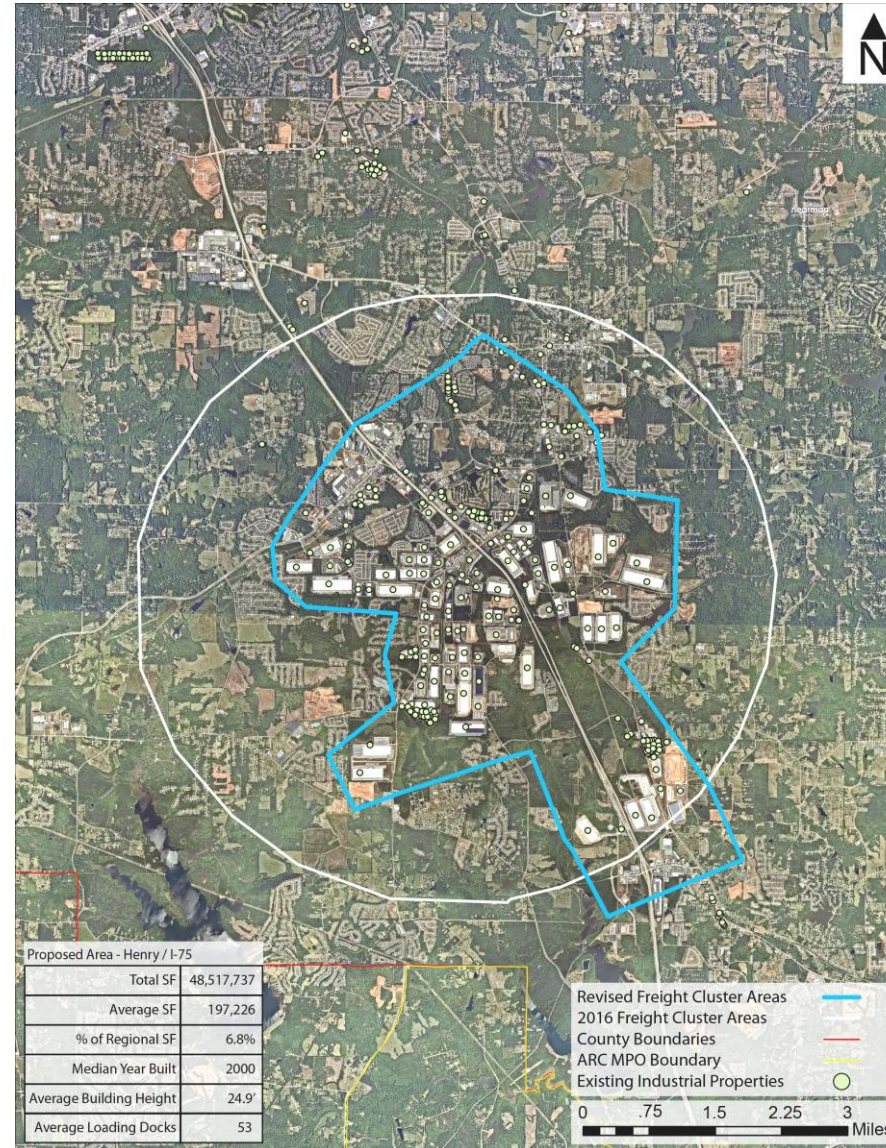
- Three areas
- Gwinnett and DeKalb Counties
- Freight heavy areas along I-85, SR 316, and northwest I-285



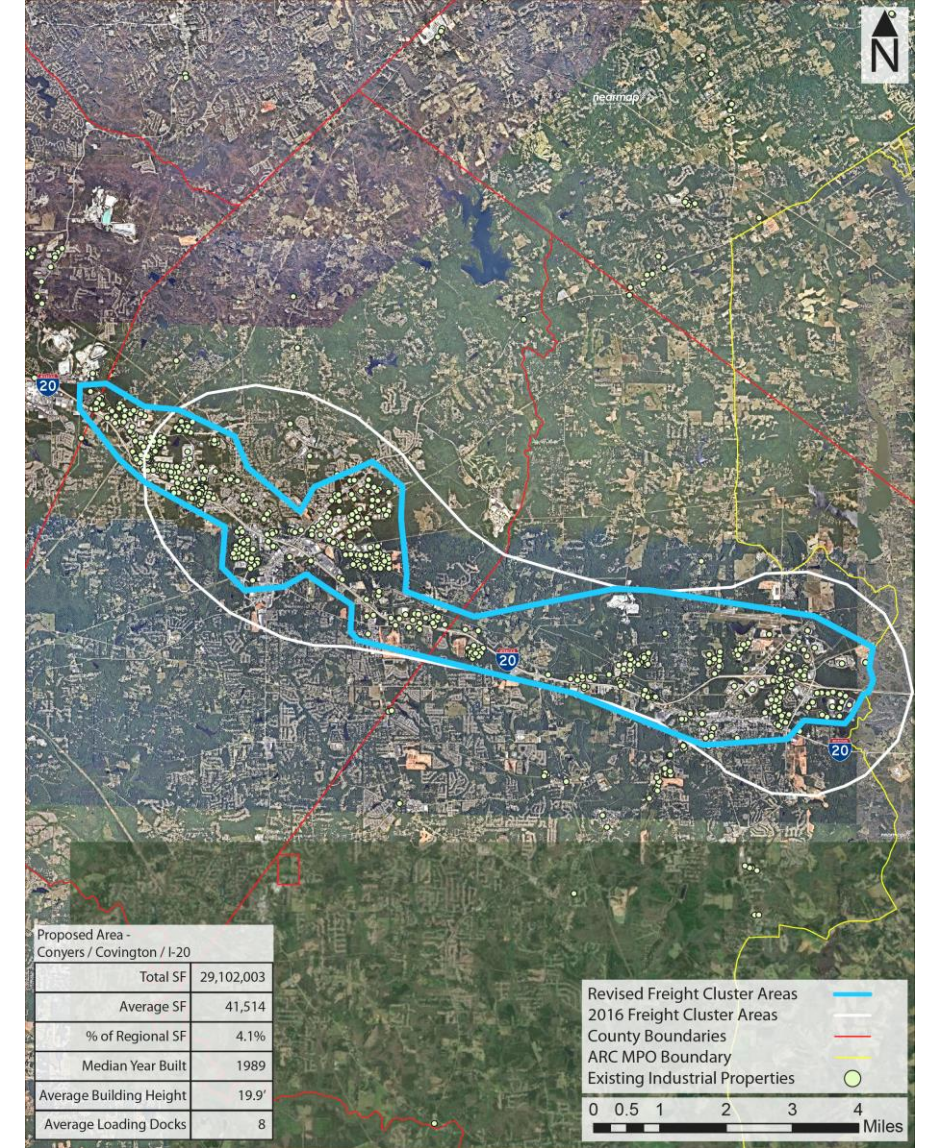
# Revised Freight Cluster Areas



## Henry/I-75



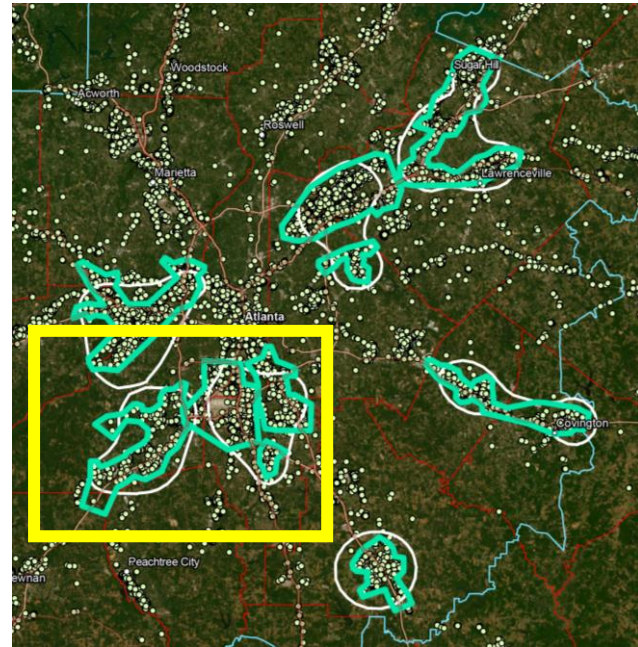
## Conyers/Covington/I-20



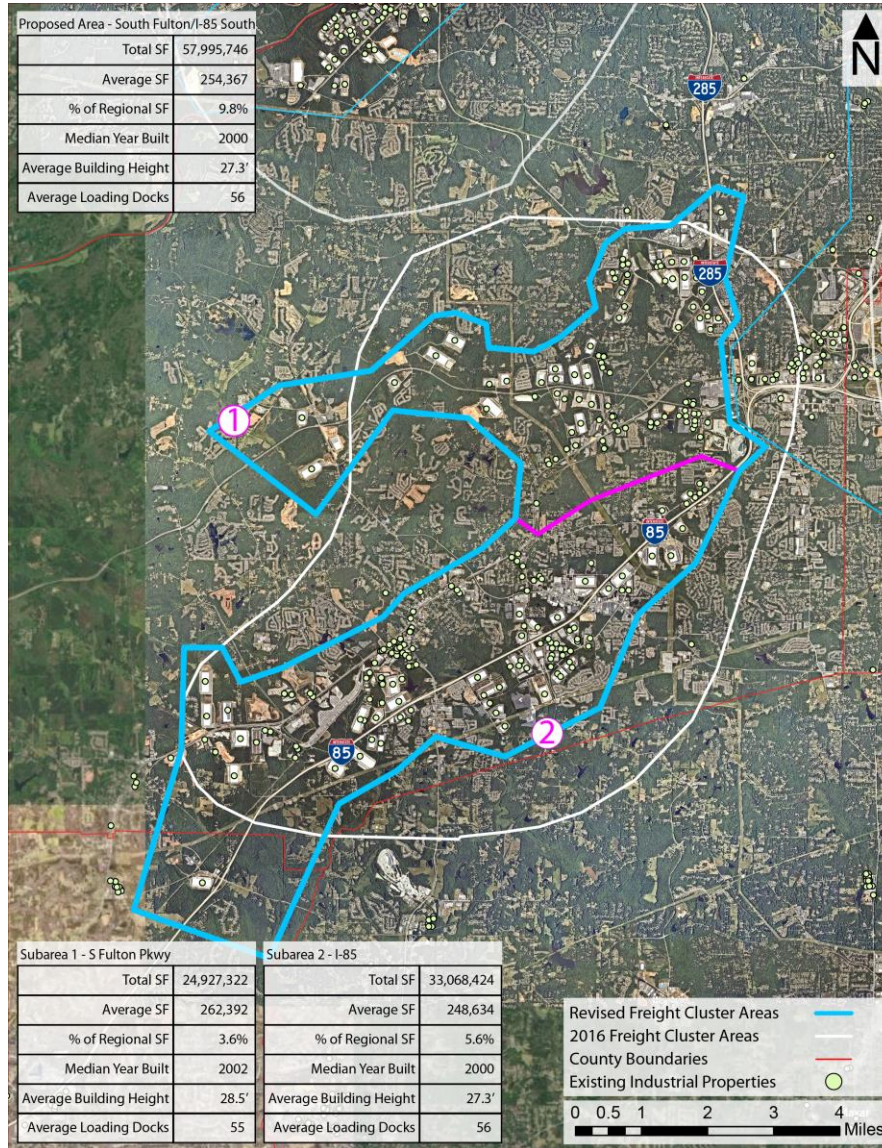
- Two areas
- Henry, Newtown, and Rockdale Counties
- Freight heavy areas along I-75 south and I-20 east



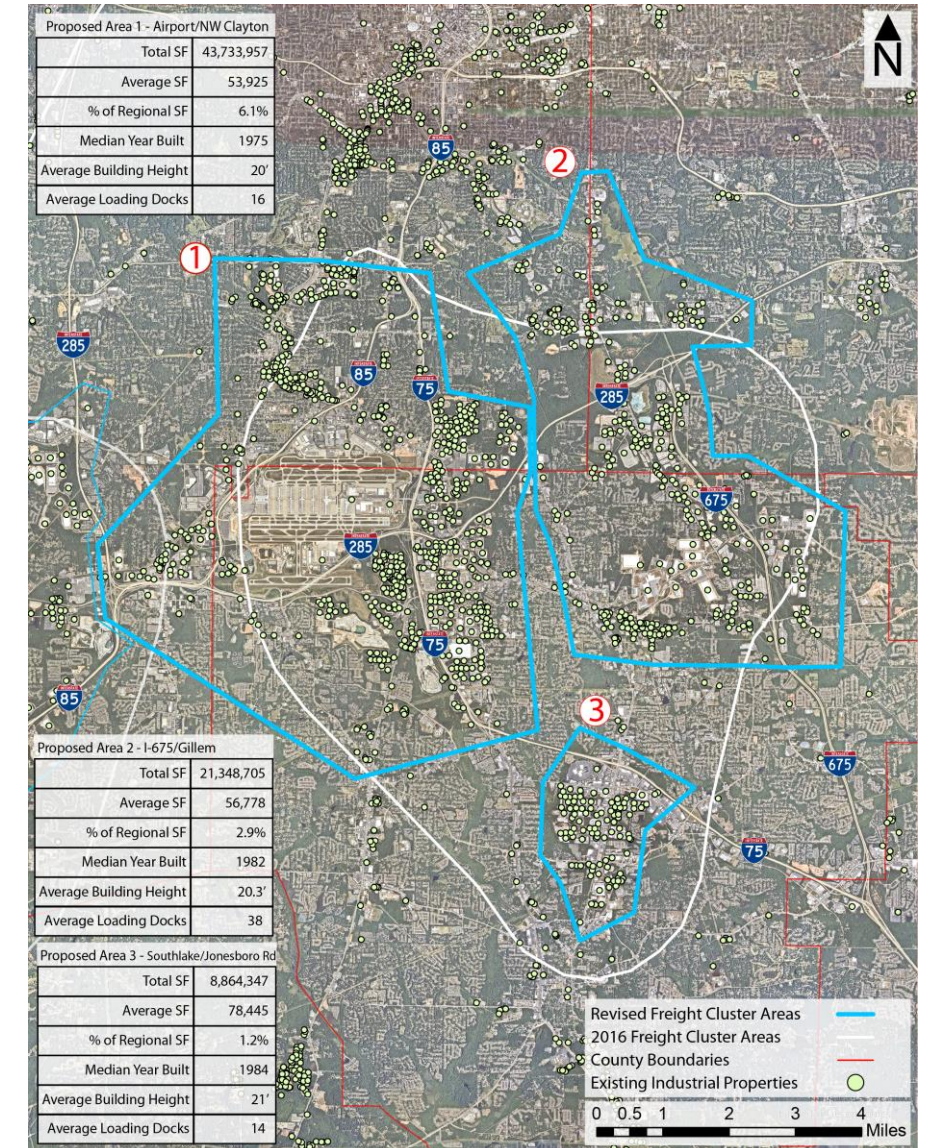
# Revised Freight Cluster Areas



## South Fulton/I-85



## Airport/NW Clayton

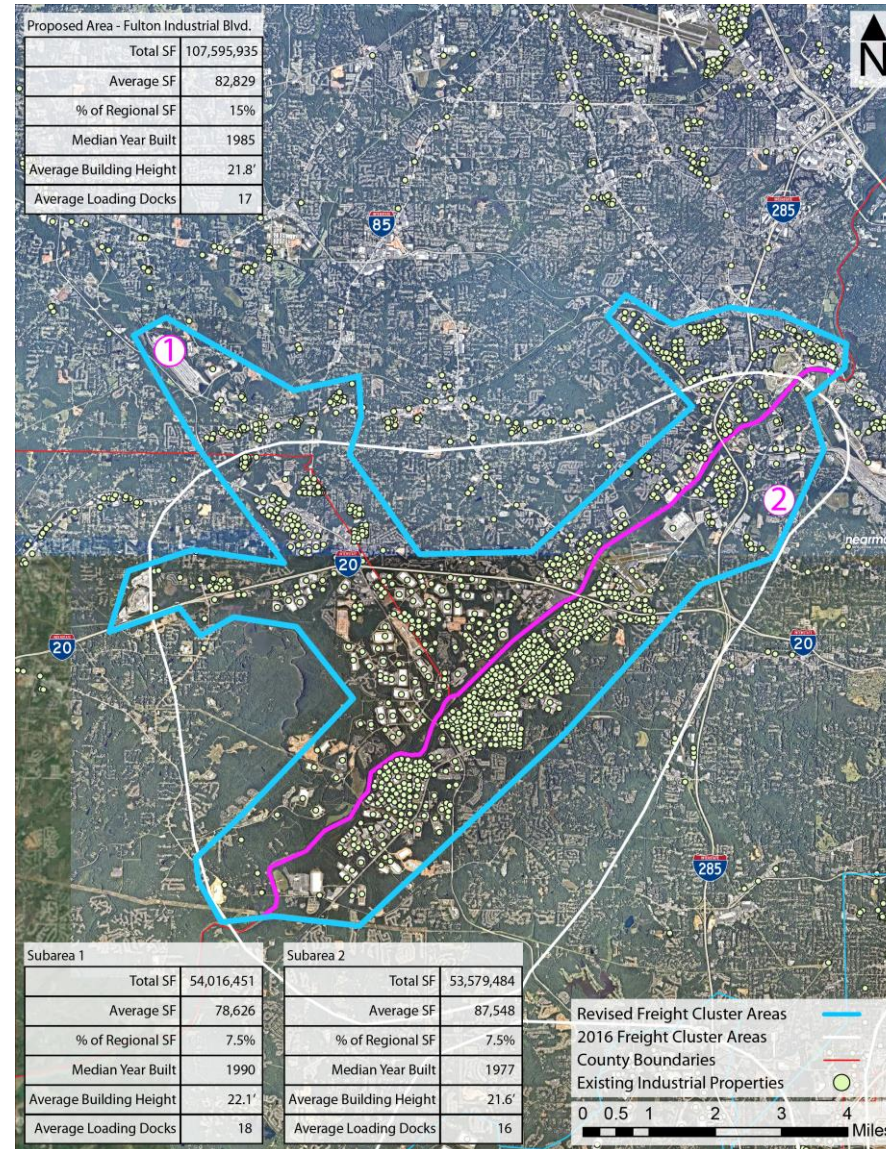
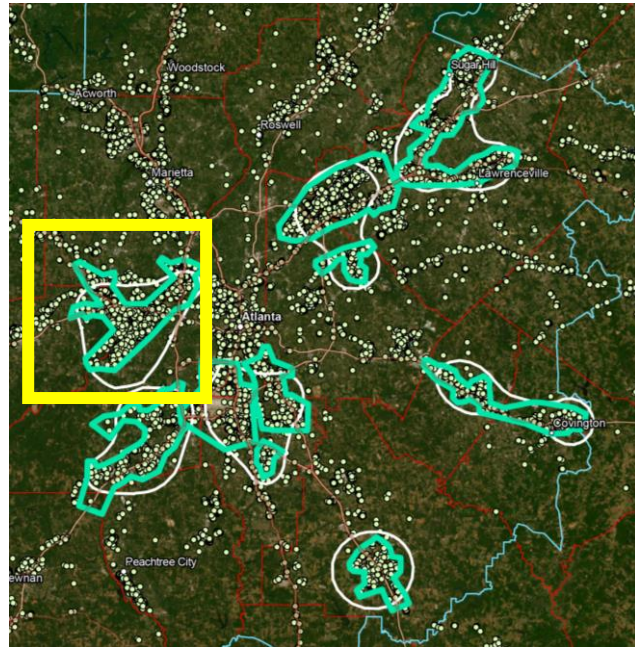


- Four areas
- Clayton, DeKalb, Fulton, and Coweta Counties
- Freight heavy areas along South Fulton Parkway, I-85 south, and I-75 south



# Revised Freight Cluster Areas

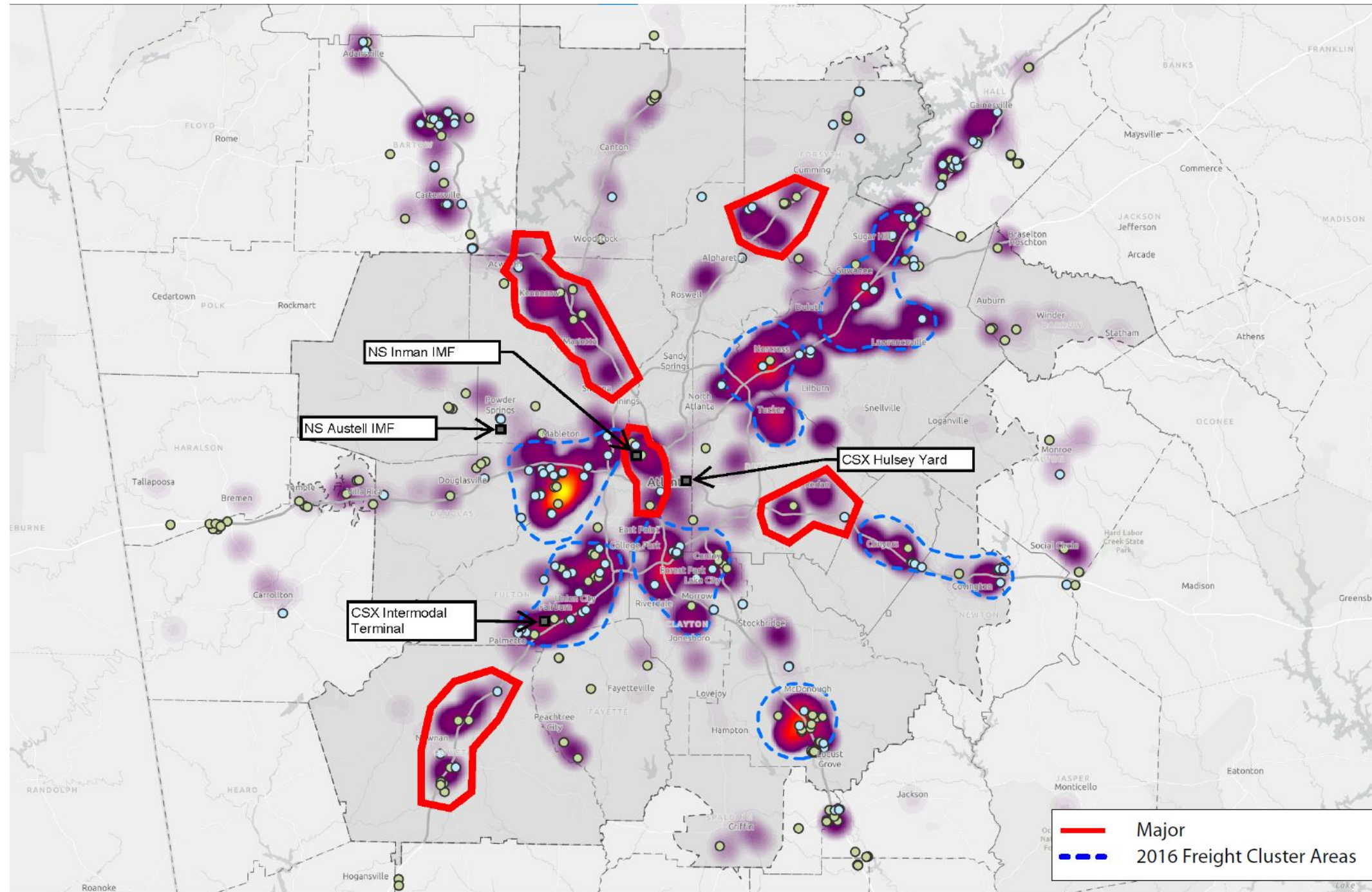
## Fulton Industrial Blvd/S. Cobb



- One area
- Cobb, Douglas, and Fulton Counties
- Freight heavy areas along I-285 west, I-20 west, and Fulton Industrial Boulevard



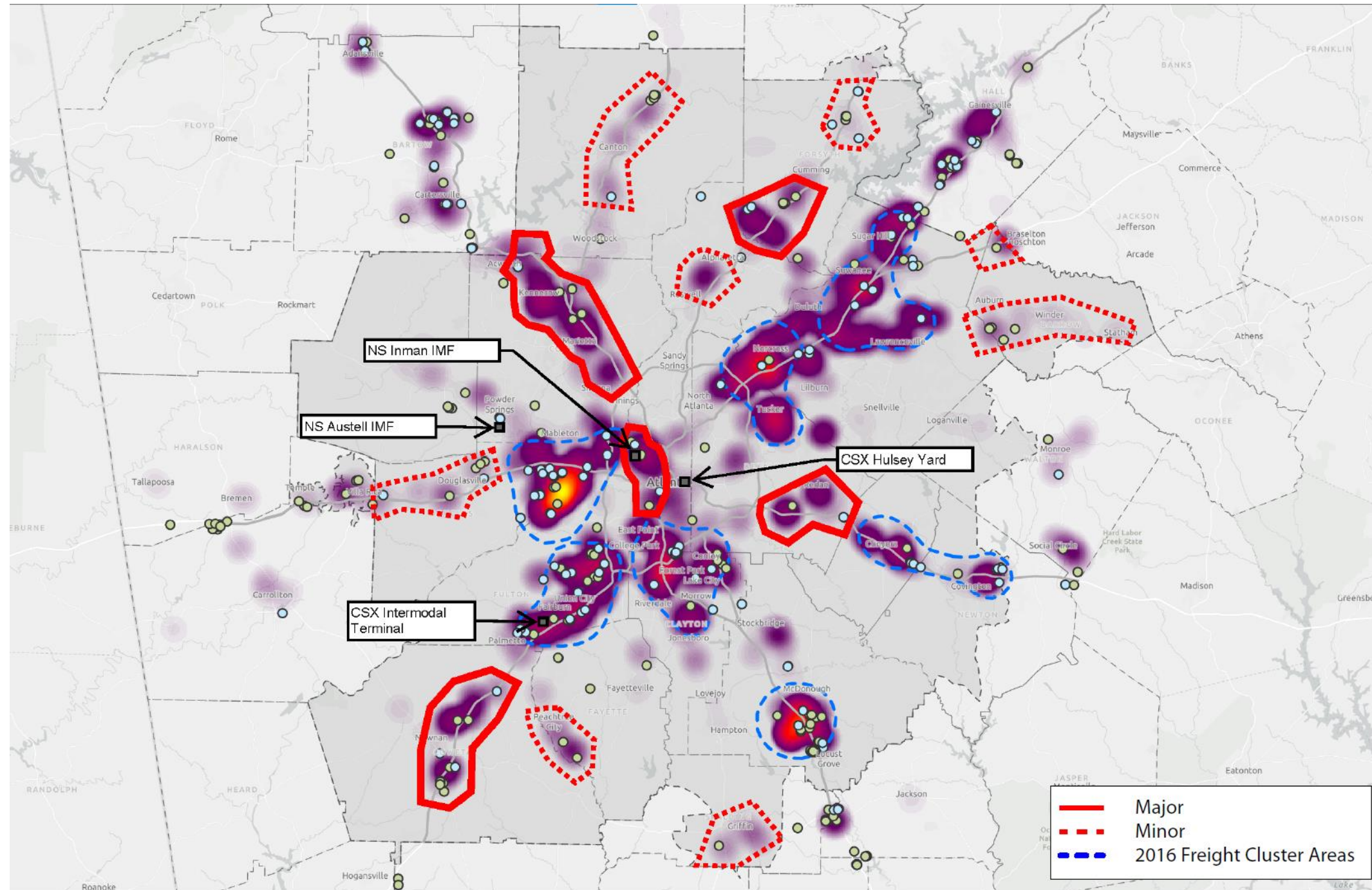
# Additional Freight Cluster Areas



- Five areas with moderate to substantial cluster of existing or proposed warehouse/distribution
- Northwest Atlanta
- Cobb / I-75 north
- North Fulton/South Forsyth
- Southeast DeKalb/ I-20
- Coweta / I-75 South
- Cobb, Douglas, and Fulton Counties



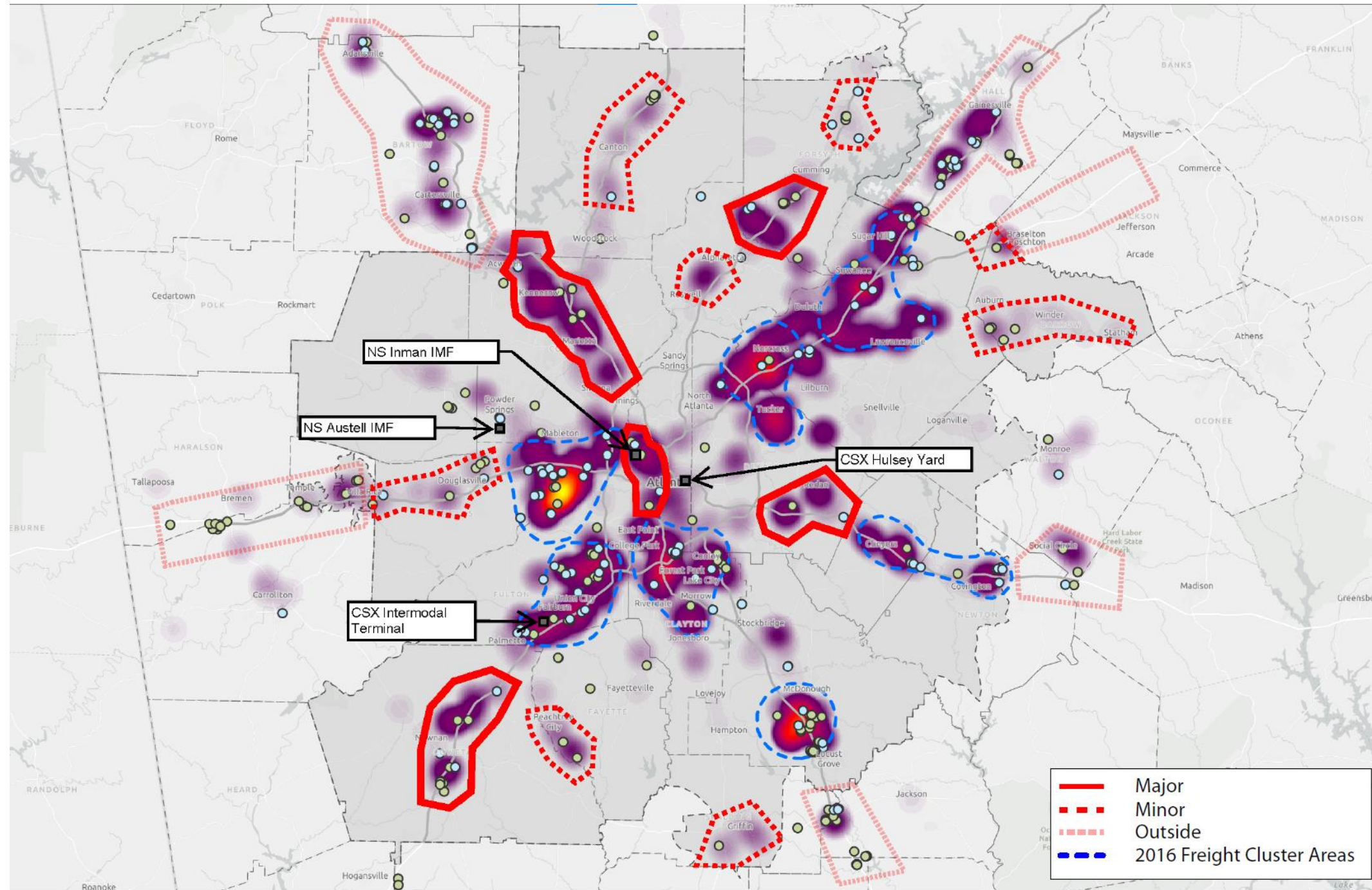
# Additional Freight Cluster Areas



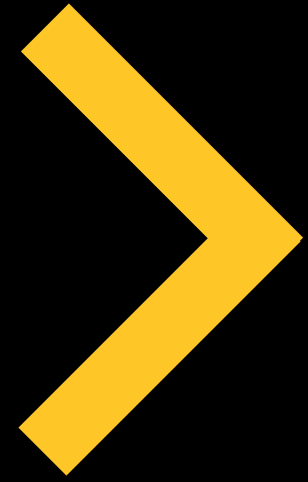
- Eight areas with light to moderate cluster of existing warehouse/distribution
- Cherokee/I-575
- North Fulton/GA 400
- Forsyth/GA 400
- Barrow/I-85/SR 316
- Spalding/Griffin
- Peachtree City
- Douglas County



# Additional Freight Cluster Areas



- Outside of MPO and study area
- Six areas with moderate to heavy cluster of existing or planned warehouse/distribution
- Explain interconnectedness of freight areas
- Identify key origins or destinations
- Highlight directionality of development



***DRAFT GOALS AND  
OBJECTIVES***

# Draft Goals and Objectives

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**SAFETY**



**OPERATIONS**



**ECONOMY**



**SUSTAINABILITY/  
RESILIENCY**



**QUALITY OF  
LIFE**



**INTEGRATED  
PLANNING**

# Draft Goals and Objectives

**SAFETY:** *Improve the safety and security of the regional freight system and its users*

- Safety of all road users who interact with freight
- Safety and security of freight operators while on the road and parked



**OPERATIONS:** *Enhance the operations of the freight network*

- Performance around key metrics including travel time, travel time reliability, and network connectivity
- Leveraging and enhancing intermodal connectors to improve system operations
- Improving travel efficiency from trip beginning to end





# Draft Goals and Objectives

**ECONOMY:** *Acknowledge and support key industries and their positive impact on the regional economy*

- Strengthening the capabilities of the regional freight industry
- Understanding of the importance of freight by the public and decision makers



**SUSTAINABILITY/RESILIENCY:** *Create a more sustainable and resilient network that incorporates innovative tools and technologies*

- Investment in freight infrastructure to ensure a resilient, sustainable system
- Use of technology and other innovation to streamline system performance and enhance environmental sustainability



# Draft Goals and Objectives

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**QUALITY OF LIFE:** *Leverage freight to enhance the quality of life for all people in the metro Atlanta region*

- Access to equitable employment opportunities for all individuals and communities from diverse backgrounds through improved transportation options
- Reinforcement of fair and equitable treatment of all communities relative to the siting of new industrial developments
- Thoughtful integration of freight activity in urban areas
- Convenient, expeditious, and reliable goods delivery





# Draft Goals and Objectives

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## INTEGRATED PLANNING:

*Ensure the consideration of freight in broader transportation and land use planning processes*

- Consideration of freight and industrial developments within the larger community and their impacts
- Acknowledgment of the need for housing within a reasonable commute time of industrial employment areas and development of policy to facilitate its creation
- Encouragement of meaningful discussion and collaboration between public and private sector entities
- Creation of local government guidance and tools to support integration of freight with the local planning process



# Contact Information

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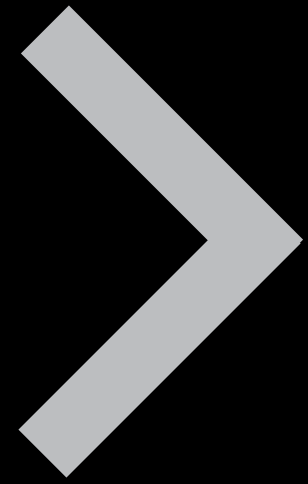
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