



# Regional Freight Plan



MAY 2025

# Acknowledgments

*This plan is a result of the stakeholders' collaborative efforts to envision the future of the Columbus-Phenix City region, including contributions from community members, elected officials, MPO staff, and the planning team:*

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# Introduction

# Introduction

The Columbus-Phenix City Transportation Study (C-PCTS) MPO is located in the southeastern US on the border of Georgia and Alabama. With the Chattahoochee River running north-south between these two states, this region has a significant history of industrial uses and development.

Many large industrial activities can be found throughout the area, particularly in southern Columbus and Phenix City along the river, as well as western and northern Columbus along major highways. These industrial operations, including manufacturing, warehousing and distribution, and transportation, generate high demand for freight traffic and support a strong workforce. The region also plays a crucial role in supporting Fort Moore, a major army installation located directly south of Columbus and spanning across Muscogee and Chattahoochee Counties, extending into Russell County, Alabama.

# Freight Plan Purpose

The regional freight plan establishes a strategy for improving efficiency, reliability, and sustainability of the freight network and goods movement throughout the area. It integrates economic, environmental, safety, and community considerations to support the overall well-being and prosperity of the region. Specific objectives and purposes of a regional freight plan include:



## INFRASTRUCTURE INVESTMENT

To prioritize projects and investments needed to maintain, upgrade, or expand freight transportation infrastructure. By prioritizing infrastructure investments, the plan helps optimize the use of public and private resources to address current and future freight transportation needs.



## ENVIRONMENTAL AND COMMUNITY IMPACTS

To identify potential environmental impacts of freight investment and identify potential mitigation strategies.



## LONG-TERM PLANNING

The recommendations set forth in this Freight Plan support those of the 2050 Metropolitan Transportation Plan (MTP). Updated every five years, the MTP serves as a strategy for transportation investment and policy initiatives to guide all modes of transportation.



## STAKEHOLDER ENGAGEMENT

The development of a regional freight plan involves collaboration with stakeholders such as businesses, industry associations, transportation agencies, local governments, community organizations, and the public. Engaging stakeholders ensures that the plan reflects diverse perspectives and priorities, leading to more effective implementation and support.



## ECONOMIC DEVELOPMENT

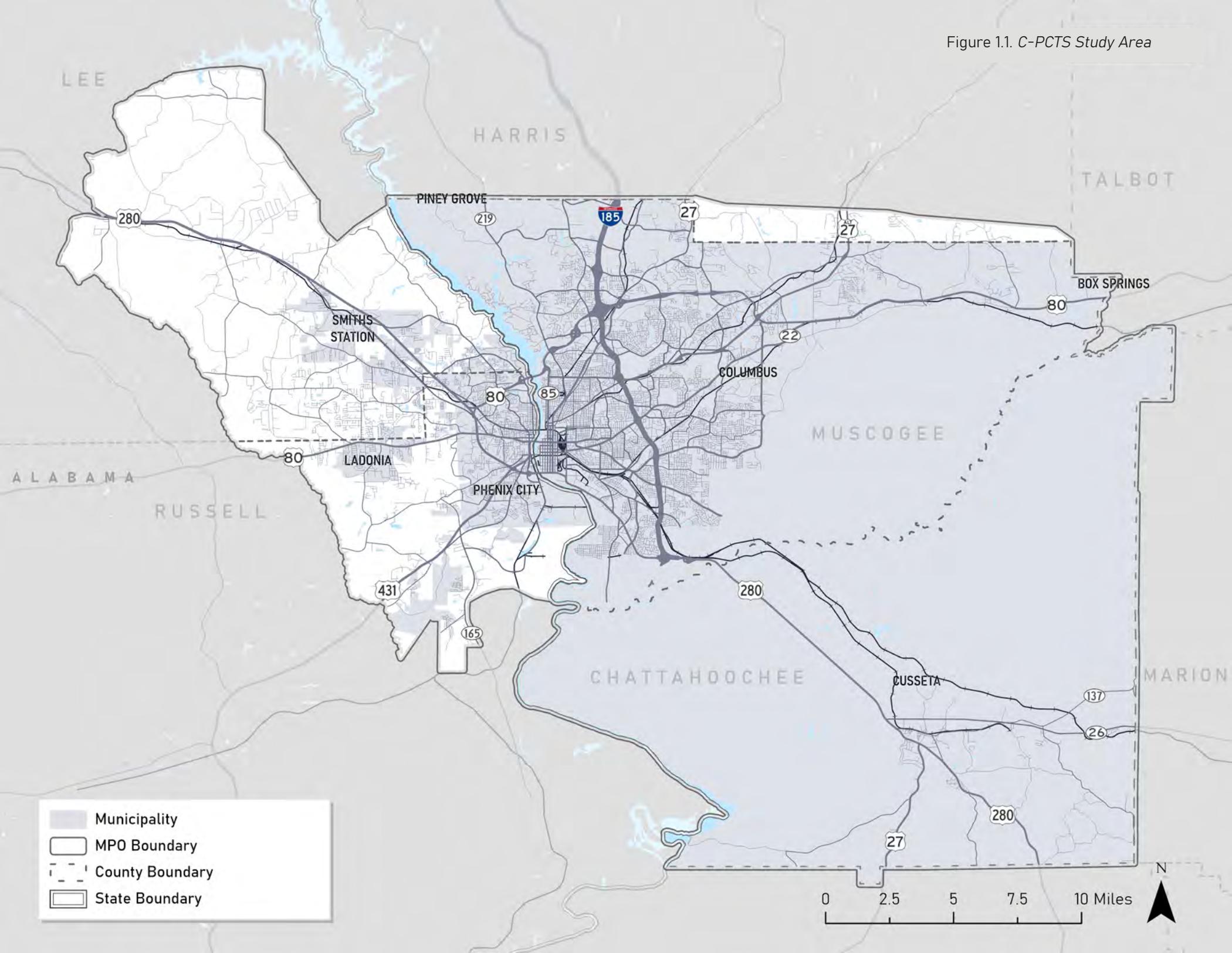
To support economic growth by improving the movement of goods to and from businesses, industries, and markets within the region. Efficient freight transportation infrastructure is essential for attracting businesses, creating jobs, and enhancing the competitiveness of local industries in regional, national, and global markets.

# Overview of the Columbus-Phenix City Transportation Study

The C-PCTS is one of sixteen Metropolitan Planning Organizations (MPO) in Georgia, and one of twelve in Alabama. An MPO is a federally designated body made up of representatives of local governments and transportation agencies, with authority and responsibility for transportation policy in metropolitan planning areas. Federal law requires an MPO for any urbanized area with at least 50,000 people.

The MPO is responsible for examining the current and future needs of the regional transportation system, programming and allocating federal funds to transportation projects and infrastructure investments and creating and coordinating policy that guides transportation planning in areas within its jurisdiction. Through collaboration and strategic planning, the C-PCTS is able to maintain critical transportation systems, support economic growth, and improve quality of life in the region.

Figure 1.1. C-PCTS Study Area



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# Outreach and Input

# Social Pinpoint Freight Component

The public input for the CPCTS study was received through the online public participation platform, Social Pinpoint. The interactive map activity for the study garnered feedback about concerns involving safety, roadways and intersections, bicycle and pedestrian needs, and freight conflicts in the study area. Columbus serves as a key transportation corridor and freight thoroughfare for the southeast. As a result, the online feedback featured concern about freight conflicts related to capacity, congestion, and bottlenecks.

Stakeholders identified three key issues impacting freight movement in Columbus, Georgia, with a primary focus on the need for enhanced bypass infrastructure and increased roadway capacity. Feedback indicated a high occurrence of congestion and bottlenecks in critical corridors, particularly within the urban core. Respondents emphasized that existing infrastructure is insufficient to support the growing freight demand and that improvements are necessary to maintain regional and interstate connectivity.

This feedback highlights the urgency of addressing both local and regional transportation needs to accommodate the expanding population and freight activity.

Another consistent theme from the comments was the need for additional bypass routes to divert heavy freight traffic from congested

urban areas. This would help alleviate congestion, reduce delays, and improve the overall efficiency of freight movement in and around Columbus. Stakeholders also expressed concern over the current capacity of major roadways, which are unable to handle increasing freight volumes without causing significant delays. The development of additional lanes and the widening of key corridors are seen as crucial steps in reducing bottlenecks and improving capacity for both freight and local traffic.

To support regional growth and enhance freight connectivity, feedback emphasized the importance of improving access to major freight corridors, such as I-185. Strengthening this connection is essential for maintaining the competitiveness of the region as a transportation hub. As the region continues to expand, infrastructure investments must not only address current challenges but also anticipate future growth to ensure the long-term viability of the freight network.

## KEY TAKEAWAYS

1. Identify potential bypass routes
2. Roadway capacity enhancements
3. Regional connectivity improvements

Figure 2.2. Freight-Related Social Pinpoint Comments

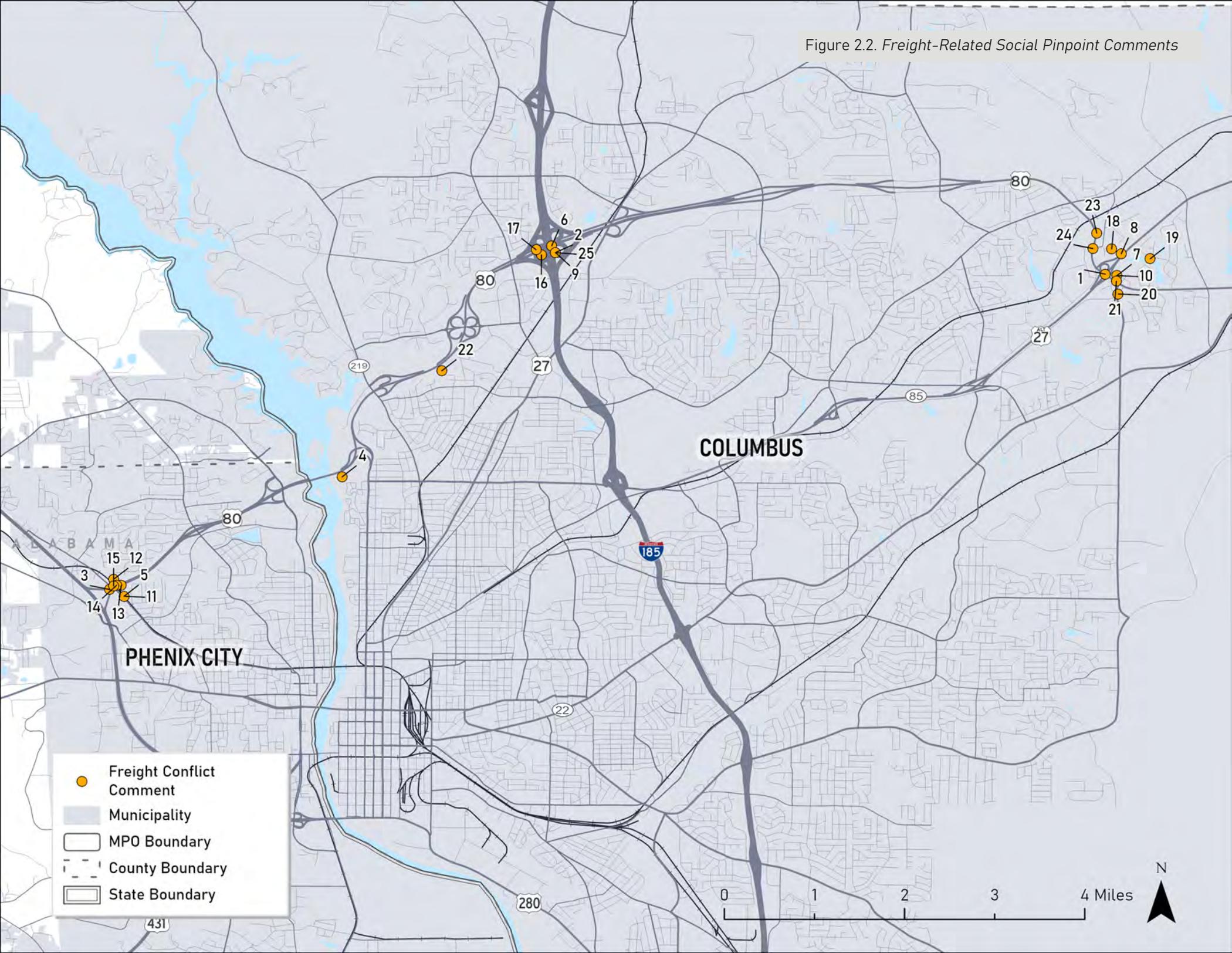


Table 2.1. Interactive Map Freight-Related Comments

Map ID	Concern	Comment
1	Bottleneck	Traffic has substantially increased in severity, most significantly in the past five years. Furthermore, greater development in the Midland area directly east of the termination of limited access has aggravated the traffic issue further. Some sort of bypass is necessary to address this bottleneck issue, considering the growth of this area combined with that of the Ports of Savannah and Brunswick.
2	Traffic congestion	Traffic has substantially increased in severity, most significantly in the past five years. The increased use of I-185 by manufacturing and distributions operations around the Atlanta area and in N. Alabama have aggravated the traffic issue further. Columbus must prepare to keep up with this growth. Bulking up the JR bypass and expanding it further is paramount to address this issue, considering the growth of these sectors as well as the expansion of Georgia ports.
3	Roadway capacity	Traffic has substantially increased in severity, most significantly in the past five years. Some sort of expansion of the bypass is necessary to address this bottleneck issue, considering the growth of this area combined with that of the Georgia ports which has caused an influx of traffic along this route going west further in to Alabama.
4	Roadway capacity	Expansion of the bridge is essential to combat the growing traffic problems along the Columbus and Phenix City bypass.
5	Roadway capacity	Expansion of existing roadway is needed to alleviate traffic, promote growth, and plan for the future of a growing area. Limited access is needed to promote this growth and connect existing population centers by a proper interstate.
6	Roadway capacity	Increasing traffic, population growth, and truck traffic requires an expansion of existing roadway. Infrastructure must be prepared in advance of existing population and traffic needs so the community can be adequately prepared for that future growth.
7	Bottleneck	The Midland area along this roadway is in substantial need of a bypass for truck traffic. This area has been booming in the growth of its businesses, population, and traffic so the infrastructure must keep up with existing and future demands.
8	Bottleneck	Traffic has substantially increased in severity, most significantly in the past five or six years. This creates a bottleneck situation for hours. A bypass is necessary to address this issue and the future growth of this area.
9	Roadway capacity	The traffic has increased significantly in the past few years in this area. This area has had tremendous growth and this has created additional traffic problems. The expansion of the Georgia ports has also added to the traffic problems. Increasing/ expanding the JR Allen bypass is a necessity to help with this issue, and continue growth in this area.
10	Bottleneck	A bypass for truck traffic is desperately needed for the Midland area. This area has grown tremendously and so has the traffic. Expansion of our roadways is needed to keep up with the growth and future expansion.
11	Safety	We desperately need an interstate to help people travel safely, relieve traffic issues, and plan for the growth that has occurred and is continuing to occur. We need to be able to connect people by building an interstate that meets current and future needs.
12	Bottleneck	Expansion of the bypass is needed here to alleviate the bottleneck issues from tremendous growth in this area. This will address current significant travel delays and the future growth for both business and residents.
13	Roadway capacity	Future traffic and growth issues require an expansion of existing roadway to interstate standards. The Chattahoochee Valley needs to get ahead of future growth to ensure we have adequate infrastructure to keep up with demands
14	Roadway capacity	We need interstate expansion along this route to promote growth, help solve traffic issues, and bring new economic opportunity to the area.
15	Roadway capacity	Interstate expansion is needed to help with traffic issues and promote growth for this area of the state.

Map ID	Concern	Comment
16	Roadway capacity	Expansion of existing roadway is needed to alleviate traffic concerns in addition to promoting growth in the area. The city must get ahead of future traffic and expansion concerns to ensure we have adequate infrastructure.
17	Roadway capacity	Expansion to interstate standards is needed to help alleviate traffic and ensure we have sufficient infrastructure to promote growth of the area.
18	Bottleneck	A bypass that meets interstate standards is needed for passing truck traffic to alleviate traffic and promote growth in the area.
19	Roadway capacity	Expansion of the existing roadway along with a bypass is needed to help traffic concerns in the Midland area. In addition, a bypass can help truck traffic better navigate this area.
20	Traffic congestion	extremely congested
21	Traffic congestion	The number of businesses located at this intersection has grown tremendously over the past years. The trucks that service and supply these businesses are a necessary hazard but when the additional volume of freight through traffic is considered, the number of freight trucks passing these neighborhoods is excessive.
22	Roadway capacity	Interstate 14!
23	Roadway capacity	The economic development in Midland has outpaced its road infrastructure, causing significant traffic delays. A truck bypass is needed to help balance the load on the roads, ensuring efficient transportation for both commercial and private vehicles. Heavy truck traffic is also negatively impacting the quality of life in Midland by increasing congestion and pollution. Establishing a bypass route would alleviate these issues, fostering a healthier and more efficient urban environment.
24	Traffic congestion	Increased truck traffic in Midland is contributing to noise pollution and road deterioration. A bypass would mitigate these issues, leading to a quieter, more pleasant environment for residents and a longer lifespan for local roads. The proposed Interstate 14 project could then link up to this bypass finally linking Columbus to the national grid. This would permit expansive economic development opportunities.
25	Traffic congestion	Expanding it will just induce more traffic, pollution, and noise. No, thanks.

# Input from Freight Stakeholders

Stakeholder input was essential in identifying key challenges and opportunities for improving freight movement in the Columbus region. Freight operators, local government representatives, and business leaders provided valuable feedback that highlights the main issues and possible solutions. Below are the key insights:

## ROADWAY CONSTRAINTS AND SAFETY ISSUES

Several freight operators expressed concerns about roadways that limit access for trucks. Ongoing construction projects on I-185, Williams Road, and Highway 27 have restricted truck routes, creating significant challenges for transporting materials. The limited access to roads for loaded trucks and the disruptions caused by construction have resulted in inefficiencies for businesses.

Additionally, the intersection of US 280 and US 27 is a safety concern, especially for tanker trucks. The downhill approach and flashing light signals create dangerous speed fluctuations, increasing the risk of accidents. Stakeholders suggested a survey of tanker truck traffic in the area and the need for a truck bypass around Columbus to improve safety.

## TRAFFIC CONGESTION

Congestion in certain areas continues to impact freight movement. The intersection of JR Allen Expressway and Second Avenue experiences frequent accidents, causing traffic to be rerouted through downtown Columbus. Improving this interchange would reduce congestion and increase safety.

Other areas, like 2nd Avenue and Veterans Parkway, also face truck-related congestion. There is a need for better truck routing strategies to avoid directing freight traffic through residential neighborhoods, where it creates community conflict.

## TRUCK PARKING AND STAGING AREAS

Truck parking shortages in industrial areas have been highlighted as a significant issue. Without designated staging areas, trucks often park on streets while waiting to load or unload, blocking traffic. Stakeholders have recommended the development of dedicated truck parking or staging areas to solve this problem and reduce congestion on major roads.

## AIR CARGO AND REGIONAL CONNECTIVITY

The Columbus Airport is working to expand its role in regional freight movement, particularly in air cargo. The airport is looking to improve its infrastructure, including expanding the runway, adding new buildings, and improving truck access to better serve industries like medical supply transport and high-tech goods. The airport's development plan also includes potential connections to nearby rail lines, which could enhance regional logistics.

## HIGHWAY EFFICIENCY AND INTERSTATE ACCESS

Highway efficiency remains a concern for freight operators, especially on outdated two-lane roads that are not suitable for heavy truck traffic. The US 80 crossing over the Chattahoochee River, with its sharp turns and low-speed limits, is particularly challenging. There is a strong need to upgrade key roads to interstate standards to improve safety and efficiency.

Another area for improvement is the road network around Midland, Georgia. The area's winding roads and heavy retail traffic create bottlenecks for trucks. A more direct route bypassing Midland would improve traffic flow and efficiency.

## POTENTIAL SOLUTIONS AND FUTURE ACTIONS

Stakeholders have recommended several solutions, including creating truck routes that bypass congested areas and upgrading roads to interstate standards. Expanding the J.R. Allen Parkway and Phenix City North Bypass to meet interstate standards is a priority, along with improving intersections like the US 280/80 and US 27/280 junctions to reduce safety risks.

Overall, the input from stakeholders highlights the importance of improving infrastructure to meet the growing demands of freight transportation. Upgrading roads, improving truck parking, and enhancing traffic flow will help create a safer and more efficient freight network in the Columbus area.

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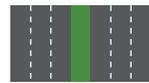
# Roadway and Bridge Characteristics

# Roadway Profile

**This section provides a comprehensive inventory of the current transportation infrastructure, including details on roadway classifications, bridge conditions, network conditions, and travel trends. This evaluation identifies existing bottlenecks, areas of congestion, and other issues that impact traffic flow and safety. These insights ensure the region can continue to provide safe, efficient, and well-maintained assets critical to the region's economic vitality and quality of life.**

Roads and bridges comprise the most fundamental elements of the region's transportation infrastructure. Even with significant investments in alternative modes by the year 2045, automobiles, trucks, and other highway-related modes will still constitute the core of all transportation facilities. The Columbus MPO roadway network characteristics recorded in this chapter are functional classification, number of travel lanes, and Annual Average Daily Traffic (AADT).

A roadway's Functional Classification (FC) provides information about the intended character by identifying the types of functions it designed to serve and the traffic volumes it can support. In consultation with the C-PCTS MPO, the Georgia Department of Transportation (GDOT) updates the road classifications as least every ten years.



**Interstate Highways** are high-capacity, high-speed roads designed for long-distance travel, with limited access points and no at-grade intersections,



**Principal Arterials** are major roads that facilitate high traffic volumes and connect key areas of a city with regional and interstate networks.



**Minor Arterials** provide essential links between neighborhoods and principal arterials, supporting moderate traffic volumes and balancing access with mobility.



**Major Collectors** gather traffic from local roads and direct it to arterial roads, managing moderate volumes and offering a mix of property access and mobility.



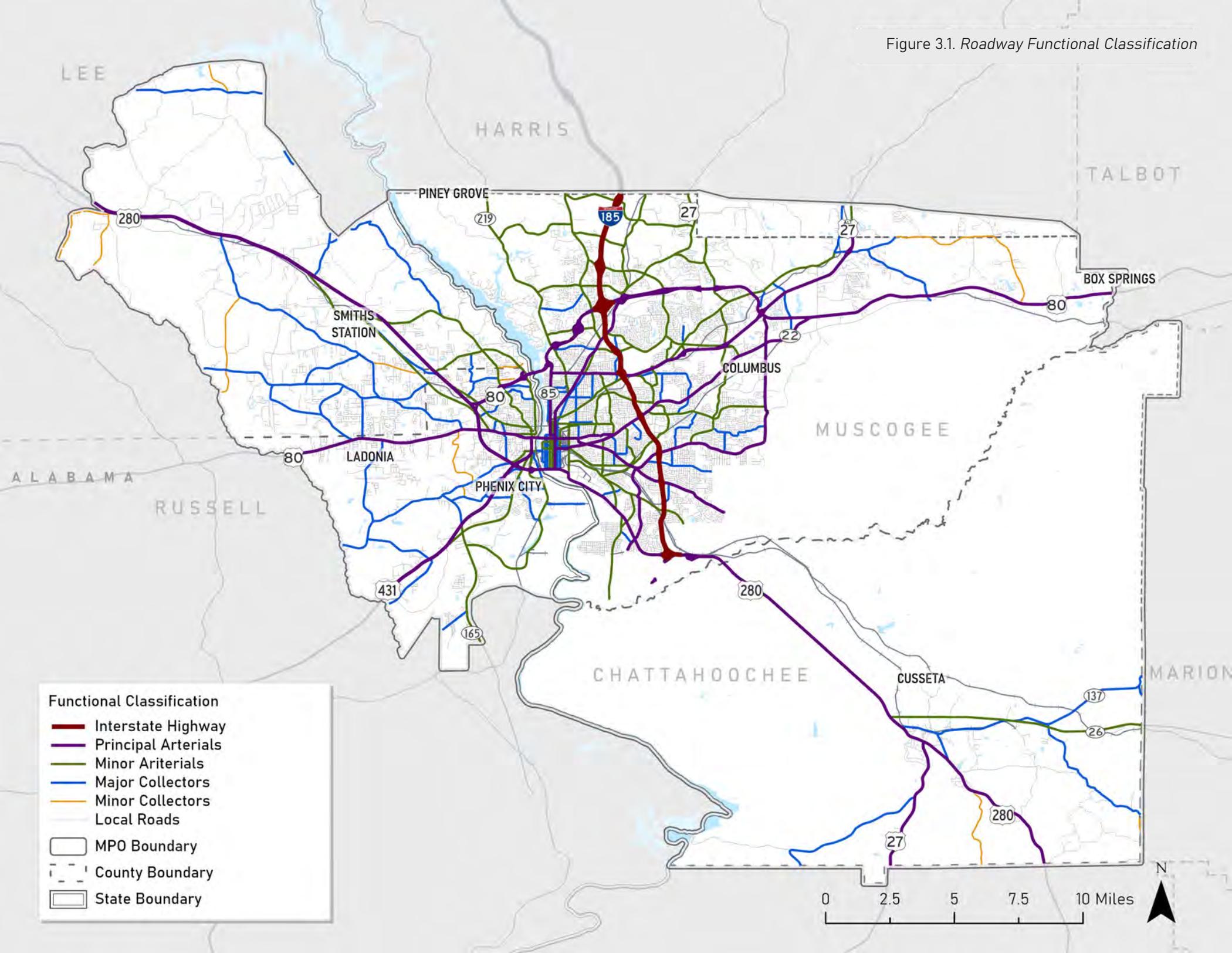
**Minor Collectors** connect local streets to major collectors, serving lower traffic volumes and providing access within neighborhoods and to smaller commercial zones.



**Local Roads** primarily serve residential and small commercial areas, focusing on providing access to individual properties and supporting local pedestrian and vehicular movement.

C-PCTS MPO benefits from the presence of I-185 and other 6-lane arterials, which greatly enhance regional connectivity and accessibility. This robust arterial roadway network not only facilitates the freight movements and commuting travels within the region but also supports commercial activities and opportunities such as distribution centers and logistics hubs.

Figure 3.1. Roadway Functional Classification



## NUMBER OF LANES

The number of lanes on a roadway is also a key feature of the MPO network, directly impacting the capacity of a roadway. The map below depicts the number of bi-directional through lanes on C-PCTS MPO roadways. These lanes allow vehicles to travel in both directions along the same stretch of road, typically separated by a centerline or median. As shown in Figure 3.2 on page 25, most roadways in the Columbus MPO region have two or three through lanes. Roads with more than four lanes are mainly interstate and major arterials. Further analysis reveals that roadways with only one through lane are mainly entry and exit ramps on highways.

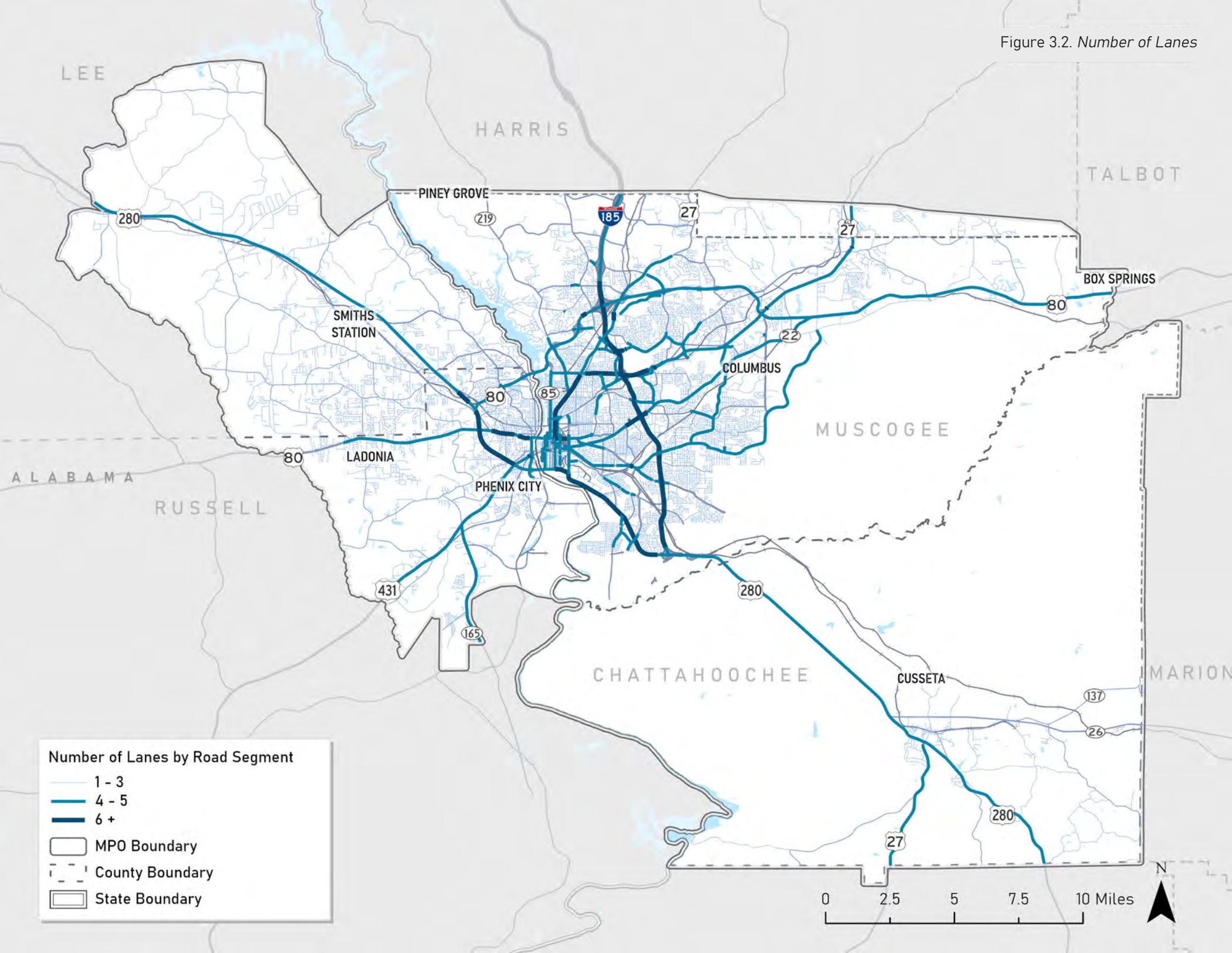
### ROADWAYS WITH 5+ LANES

GEORGIA	I-185
	US 280 (Victory Drive)
	US 80
	US 27 (Veterans Parkway)
	US 27 ALT (Manchester Expressway)
	SR 22 (Wynnton Road)
	Airport Thruway
	Buena Vista Road
	13th Street
	Talbotton Road
	Woodruff Road
ALABAMA	Whittlesey Boulevard
	University Avenue
	Miller Road
	US 80
	US 280
	US 431 (Martin Luther King Jr Parkway)
	SR 165
Broad Street/Broad Street Extension	
Summerville Road @ US 80	
13th Street/14th Street/Crawford Road	

## GRADE SEPARATED ROADWAYS

Grade separation utilizes a bridge or tunnel to separate traffic flows and increase roadway safety. Separated roadways existing throughout the region along or near the largest roadways, including I-185 and portions of US 80 and US 280 in both Columbus-Muscogee County and Alabama. Grade separated roadways can also be found near the Norfolk Southern railyard in Columbus, such as SR 22 (13th Street) and 11th Street.

Figure 3.2. Number of Lanes



# Signalization and ITS

Traffic signals are an effective intersection control method to accommodate high volume locations with a large interchange of traffic. Traffic signals also require routine maintenance and can be retimed and/or coordinated to improve operations within an area. There are 270 signals in the Columbus-Muscogee County, all of which are operated by Columbus Consolidated Government. All traffic signals within the City of Columbus are presented in Figure 7.4 on page 91. Traffic signals are primarily located within the midtown area and along major commercial corridors entering and exiting the midtown area. These roadways include SR 22 (Wynnnton Rd), US 27 (Veterans Parkway), and US 27 ALT (Manchester Expressway).

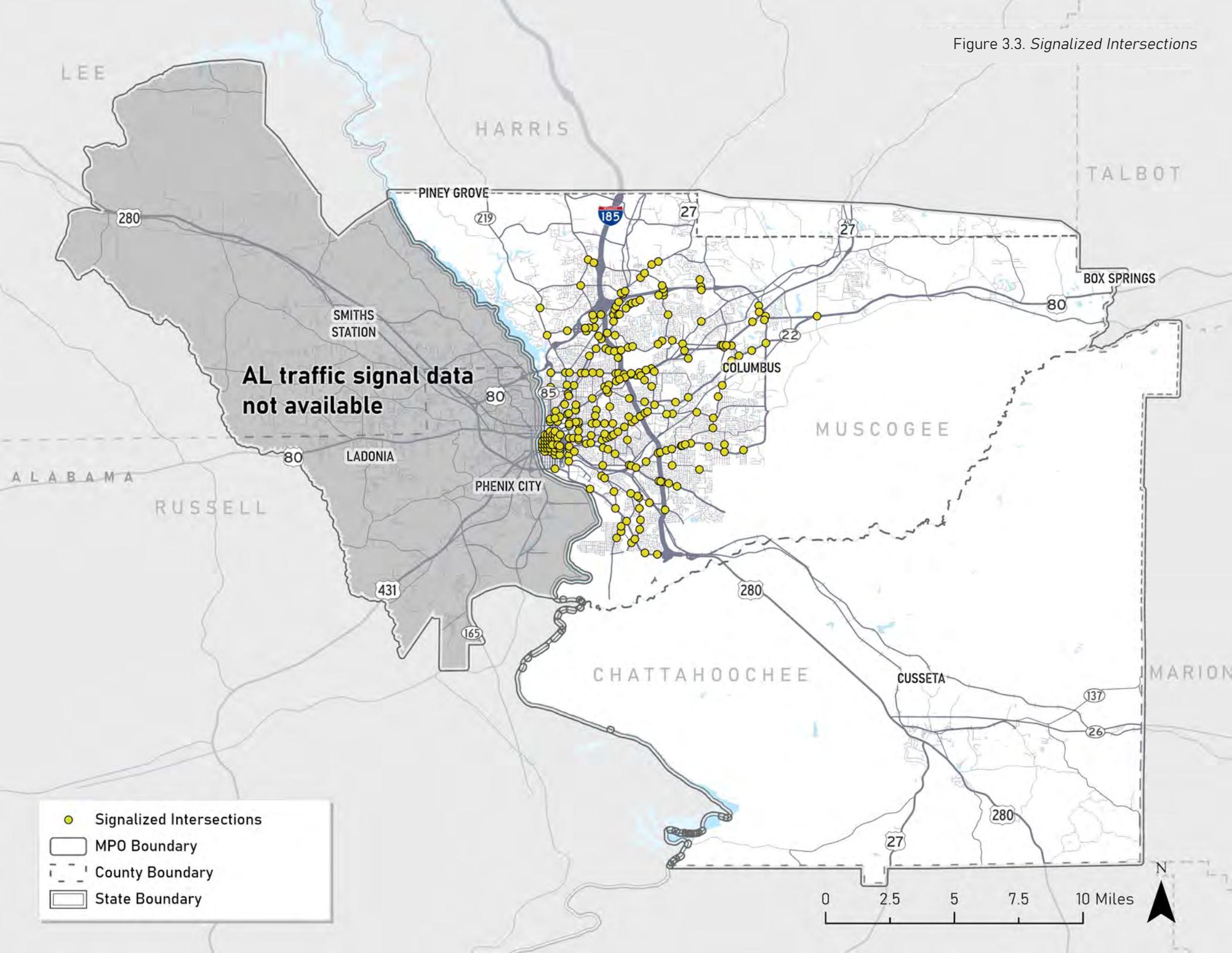
Information on signalized intersections was not available for Alabama, but signals are present on major corridors such as US 280, US 80, 14th Street, and Broad Street.

Intelligent Transportation Systems (ITS) and transportation technology enable infrastructure and vehicles

to communicate with each other and with central repositories such as traffic management centers, thereby achieving greater efficiency. In recent years, ITS and transportation technology have rapidly evolved into real-time data-driven systems, significantly advancing transportation safety and mobility. The transportation industry increasingly finds that addressing safety, capacity, and other modern transportation challenges can be effectively achieved by incorporating select ITS and transportation technologies.

Various ITS solutions, such as intelligent infrastructure, offer numerous benefits. For instance, they can reduce crashes through advanced driver warnings via Variable Message Signs (VMS), enhance mobility through smart or coordinated signal corridors, and reduce emissions by minimizing vehicle idling times.

Figure 3.3. Signalized Intersections



# Bridge Profile

**Bridges maintain connectivity across diverse geographical features like rivers, valleys, and key transportation routes. Regular assessment of their condition is needed to identify necessary maintenance and upgrades, ensuring the transportation network remains uninterrupted.**

The National Bridge Inventory (NBI) database was utilized to evaluate the condition of bridges in the Columbus-Phenix City region. According to the Pavement and Bridge Condition Performance Measures final rule, each bridge is assigned a condition rating of Good (G), Fair (F), or Poor (P). This rating is based on the lowest condition rating among the Deck, Superstructure, Substructure, or Culvert components from the most recent inspection. Bridges scoring 7 or higher are classified as Good, those scoring 4 or lower are deemed Poor, and those with scores of 5 or 6 are categorized as Fair.

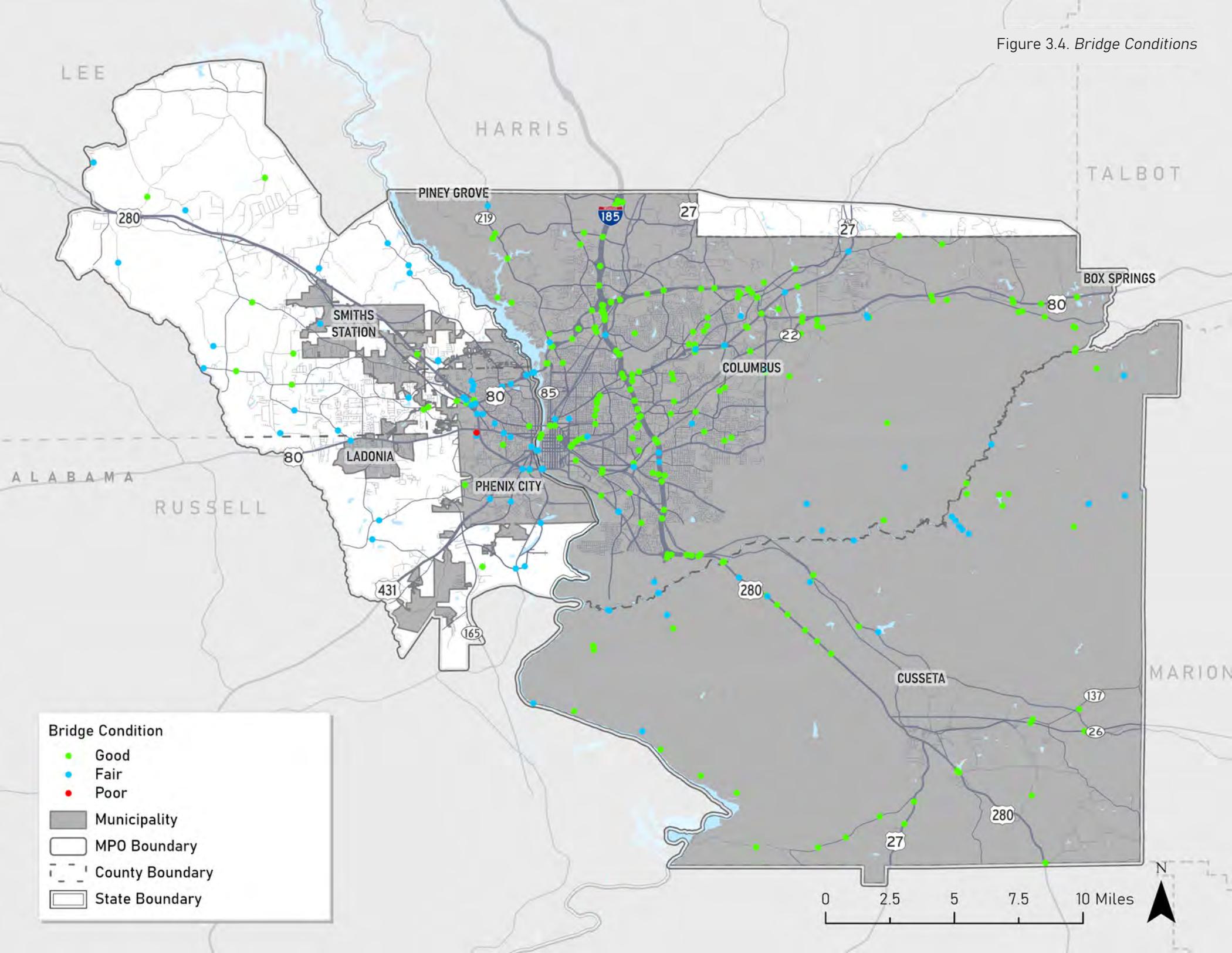
In the Columbus-Phenix City region, out of 586 bridges, only one is rated as Poor, located on 28th Avenue near US 80. There are 347 bridges rated as Fair, indicating a heightened vulnerability to risks such as structural damage from fast-moving floodwaters and impacts from debris. Additionally, tornadoes and severe storms can particularly damage older or less robust bridge structures.

Bridges in good condition are more capable of withstanding extreme weather events like floods, earthquakes, or hurricanes, without significant damage. This stability is essential not only

for emergency response but also for maintaining critical transportation routes during and after disasters. Well-maintained and robustly designed bridges are also better equipped to handle the increased stresses from climate change, including heavier loads due to more intense and frequent storms, extreme heat, rising temperatures affecting structural materials, and evolving flood risk profiles. After a disaster, a resilient transportation network featuring well-conditioned bridges can recover more swiftly, helping to restore normalcy and mitigate long-term socio-economic impacts.



Figure 3.4. Bridge Conditions



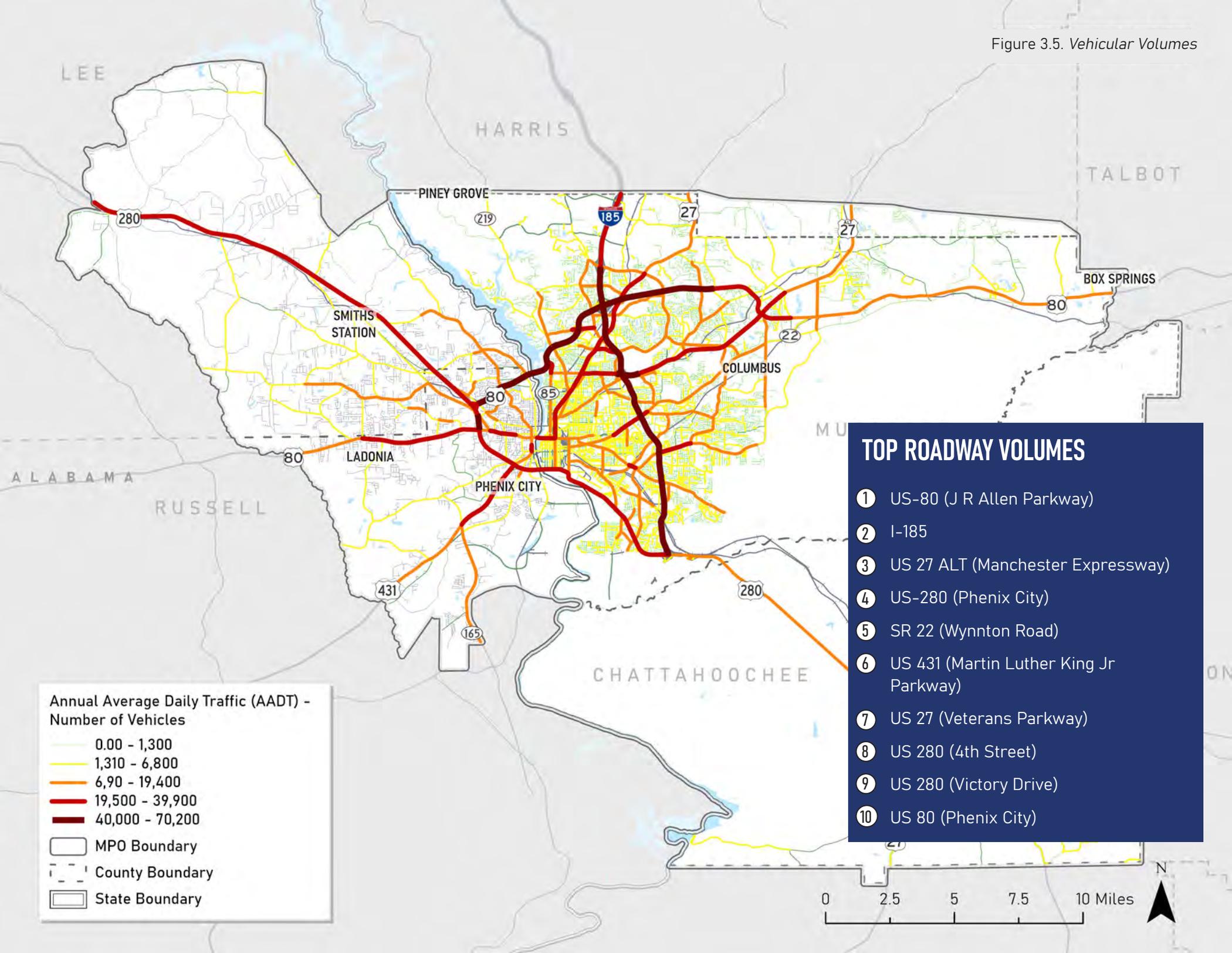
# Traffic Volumes

Traffic volumes along a roadway section provide context for regional and subregional travel patterns. Roads with higher volumes indicate they are expected to burden greater travel demands, and maintaining sufficient operations on these roads is vital to the health of the transportation network in an area. Annual Average Daily Traffic (AADT) volumes in the city provide a clear measure of traffic on different road segments, helping MPOs understand current travel demand. AADT data is crucial for assessing whether existing infrastructure can accommodate current and future traffic volumes, guiding in the planning of road widening, new road construction, or other capacity enhancements.

The roadway traffic volumes presented below are derived from two sources: ALDOT and GDOT. The distribution of vehicular volume corresponds with roadway classifications and number of lanes. Higher traffic volumes are observed on major arterials and highways, which feature advanced traffic management systems and controlled access points to ensure efficient traffic flow and safety.

As shown in Figure 3.5, US 80 and I-185 are the most heavily traveled roadways in the region with AADT ranging from 40,000 to 70,000 trips per day. US 280 through Alabama also carries a significant number of trips.

Figure 3.5. Vehicular Volumes

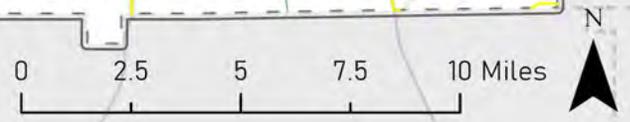


Annual Average Daily Traffic (AADT) -  
Number of Vehicles

- 0.00 - 1,300
- 1,310 - 6,800
- 6,90 - 19,400
- 19,500 - 39,900
- 40,000 - 70,200

□ MPO Boundary  
□ County Boundary  
□ State Boundary

- ### TOP ROADWAY VOLUMES
- 1 US-80 (J R Allen Parkway)
  - 2 I-185
  - 3 US 27 ALT (Manchester Expressway)
  - 4 US-280 (Phenix City)
  - 5 SR 22 (Wynnton Road)
  - 6 US 431 (Martin Luther King Jr Parkway)
  - 7 US 27 (Veterans Parkway)
  - 8 US 280 (4th Street)
  - 9 US 280 (Victory Drive)
  - 10 US 80 (Phenix City)



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# Existing and Projected Travel

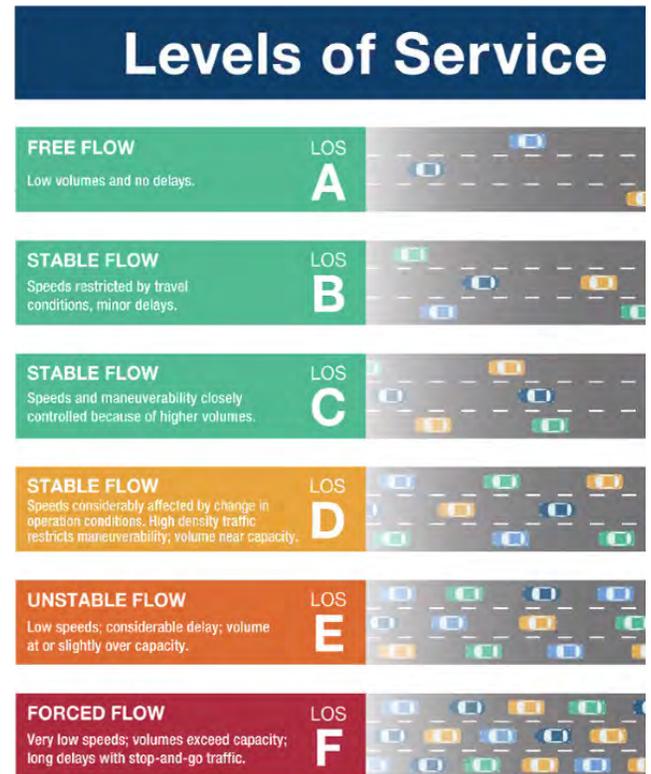
## LEVEL OF SERVICE ANALYSIS

Volume-to-capacity ratio is a key tool for identifying roadway segments that are operating at a deficient level of service. Level of Service (LOS) designations are letter grades “A” through “F”, which are similar to report card grades. As demonstrated in Figure 7.7, level of service “A” is considered the best and a free flow condition, with grades “E” and “F” indicating unsatisfactory operations. While “A” is the best level of service, transportation infrastructure investments are expensive and funding resources are constrained, which makes achieving LOS “A” on all facilities in a transportation network infeasible. Generally, an acceptable LOS is defined as “D” or better for urbanized areas.

LOS and delay are calculated for the average of all intersection approaches for traffic signal, roundabout, and all way stop control while for minor street stop control the metrics are determined by the single approach leg with the highest delay. Locations experiencing LOS E or F under existing conditions are identified as high priority locations for operational and capacity improvement projects.

A daily Level of Service is calculated by the daily traffic on a facility derived from the model and dividing that number by the daily capacity of the roadway. A daily Level of Service of less than 0.7 indicates that the roadways are operating at LOS C or better. LOS D has an operational value between 0.7 and 0.85; LOS E between 0.85 and 1.0 and LOS F is greater than 1.

Figure 3.6. Level of Service Grades



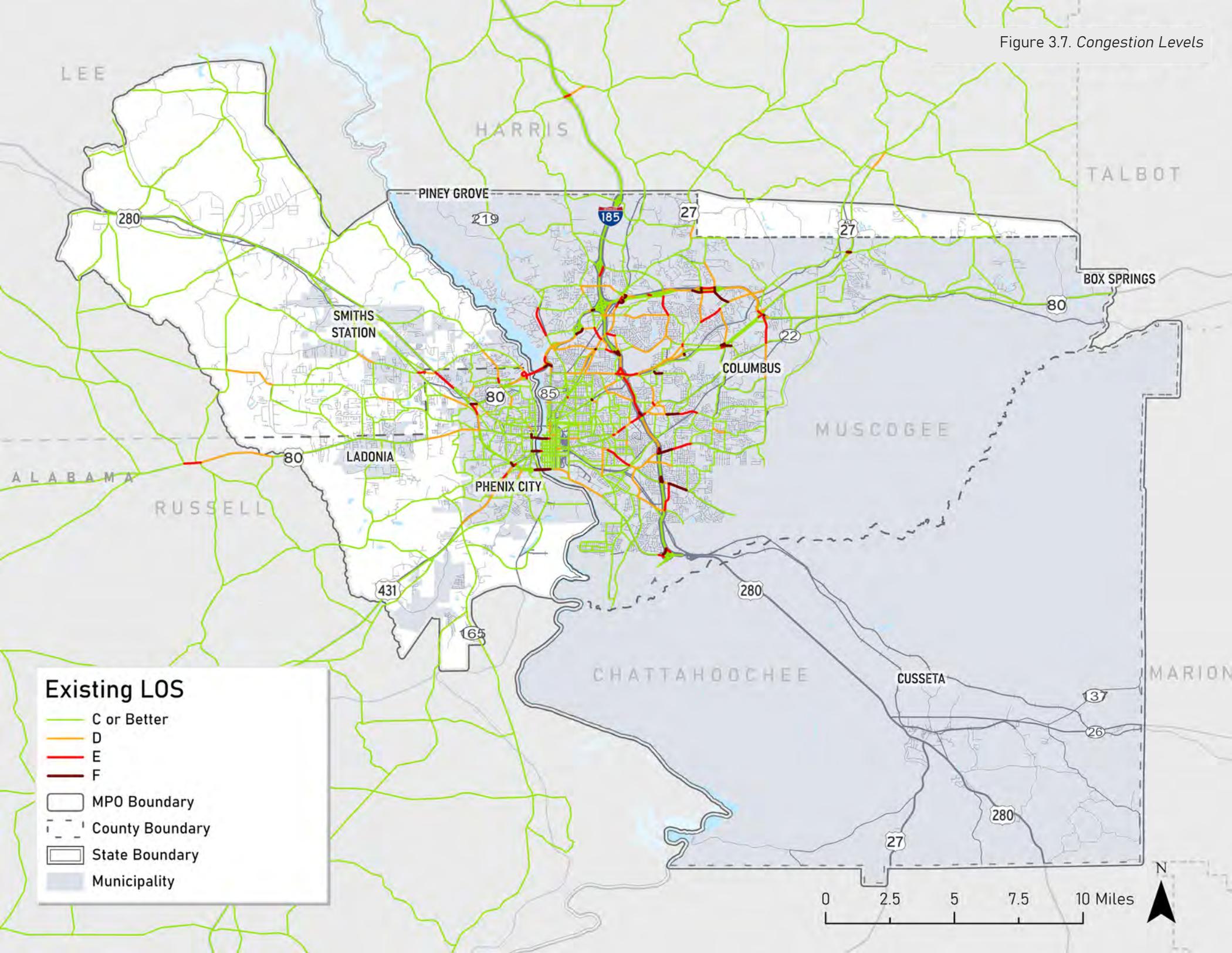
Source: Transportation for America)

## EXISTING CONGESTION

Existing congestion levels for 2020 were derived from the travel demand model developed by the Georgia Department of Transportation (GDOT). Figure 7.8 on page 35 shows the 2020 LOS throughout the MPO. The majority of roadways operate at LOS C or better, providing acceptable traffic conditions.

	<b>UNSTABLE FLOW</b> <small>Low speeds, considerable delay; volume at or slightly over capacity.</small> <b>LOS E</b> 	<b>FORCED FLOW</b> <small>Very low speeds; volumes exceed capacity; long delays with stop-and-go traffic.</small> <b>LOS F</b> 
<b>GEORGIA</b>	<ul style="list-style-type: none"> <li>▪ Segments of I-185</li> <li>▪ SR 22 (Macon Road)</li> <li>▪ SR 219 (River Road)</li> <li>▪ Buena Vista Road</li> <li>▪ Farr Road</li> <li>▪ Flat Rock Road</li> <li>▪ Warm Springs Road</li> <li>▪ Moon Road</li> </ul>	<ul style="list-style-type: none"> <li>▪ I-185 between US 27 ALT (Manchester Expressway) and SR 22 (Macon Road)</li> <li>▪ Segments of US 80 (Joe Allen Parkway)</li> <li>▪ Bridge crossings between Columbus and Phenix City</li> <li>▪ Areas at or near I-185 Interchanges:                             <ul style="list-style-type: none"> <li>» US 280 (Victory Drive)</li> <li>» SR 22 (Macon Road)</li> <li>» Buena Vista Road</li> <li>» Forrest Road</li> <li>» St. Mary's Road</li> <li>» Airport Thruway</li> </ul> </li> </ul>
<b>ALABAMA</b>	<ul style="list-style-type: none"> <li>▪ US 80 west of US 280</li> <li>▪ US 431 south of US 280</li> <li>▪ Opelika Road</li> <li>▪ Summerville Road</li> </ul>	<ul style="list-style-type: none"> <li>▪ US 280 entering Smiths Station</li> <li>▪ Near the intersections of:                             <ul style="list-style-type: none"> <li>▪ US 80 and US 280</li> <li>▪ US 280 and US 431</li> </ul> </li> </ul>

Figure 3.7. Congestion Levels



### Existing LOS

- C or Better
- D
- E
- F
- MPO Boundary
- - - County Boundary
- ▭ State Boundary
- Municipality

0 2.5 5 7.5 10 Miles



## PROJECTED (2050) CONGESTION

Projected levels of congestion were also derived from the GDOT travel demand model. Projected volumes are based on projected population and employment totals derived from various sources including local plans, Woods and Poole, and REMI. That said, it should be noted that these projected totals may not occur at the level included in the travel demand model. It is for that reason that these projections are re-evaluated every five years to continually provide an accurate forecasting process. The projected LOS, shown in Figure 8, illustrates the network performance expected in 2050.

Many roadways in Columbus-Muscogee County show more deficiencies in 2050 LOS than in 2020. In addition to the currently congested roadways, the following roadways are anticipated to operate in congested conditions in 2050:

- 13th Street
- 54th Street
- SR 22 (Wynnton Road)
- Edgewood Road
- Miller Road

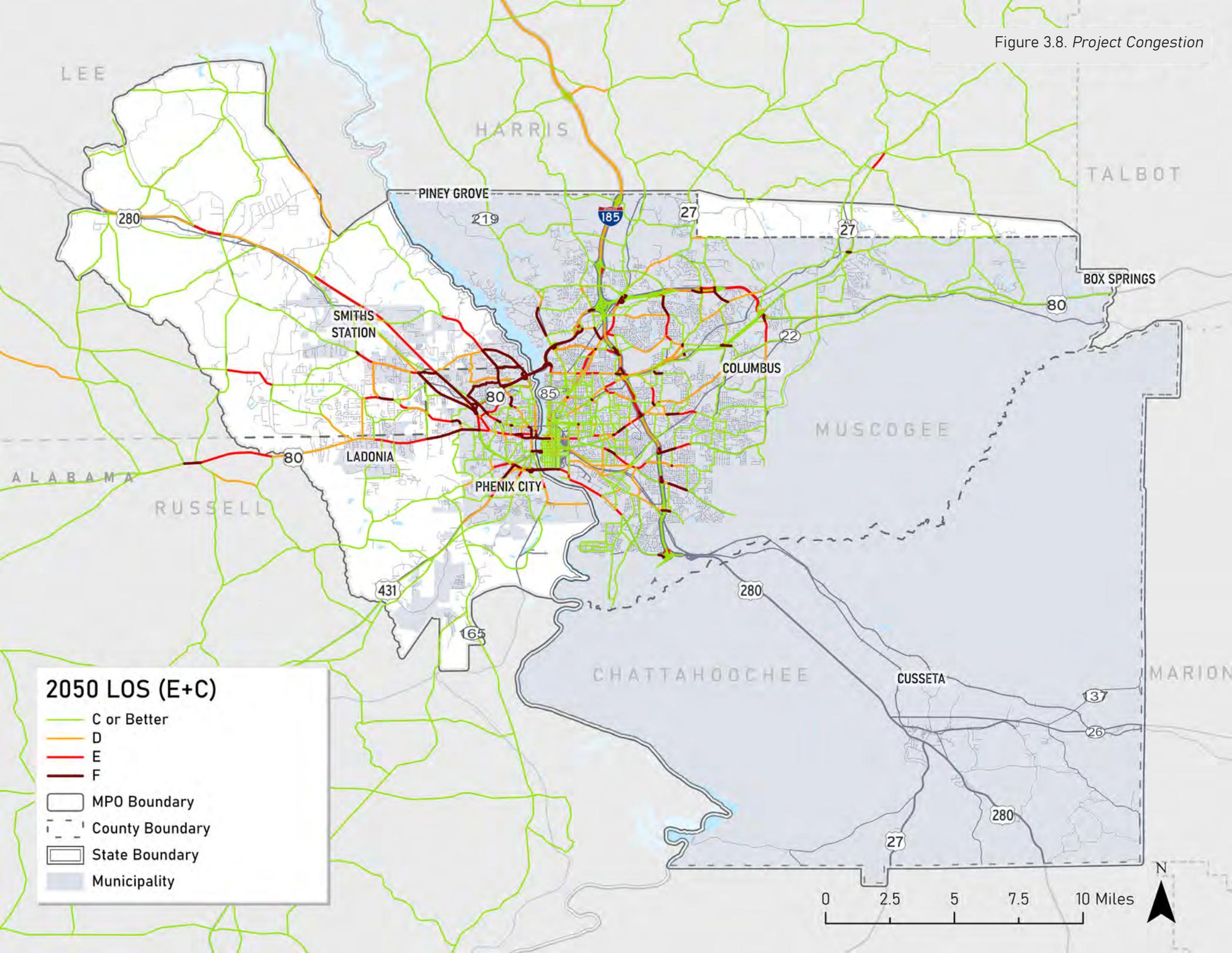
Given the high number of projected growth, the most significant deficiencies are projected in Russell and Lee counties. In fact, most of the arterial network is projected to operate at LOS F or LOS E. All of the currently congested roadways are projected to operate under more congested conditions. In addition, these roadways are projected to operate at congested conditions in 2050:

- Riverchase Road
- 13th Street
- 14th Street
- Crawford Road
- 5th Avenue
- Broad Street
- Railroad Street
- Sandfort Road
- Seale Road
- Brickyard Road

It should be noted that local officials in the Alabama communities within the C-PCTS MPO have expressed that the growth projected in the travel demand model is far more than they anticipate locally.

In order to mitigate the existing and projected congestion throughout the region, a universe of projects has been identified and is provided in Chapter 14 of this MTP. These projects are also prioritized and, based on cost estimates, programmed in the MTP work program through 2050.

Figure 3.8. Project Congestion



### 2050 LOS (E+C)

- C or Better
- D
- E
- F
- MPO Boundary
- - - County Boundary
- ▭ State Boundary
- ▭ Municipality

0 2.5 5 7.5 10 Miles

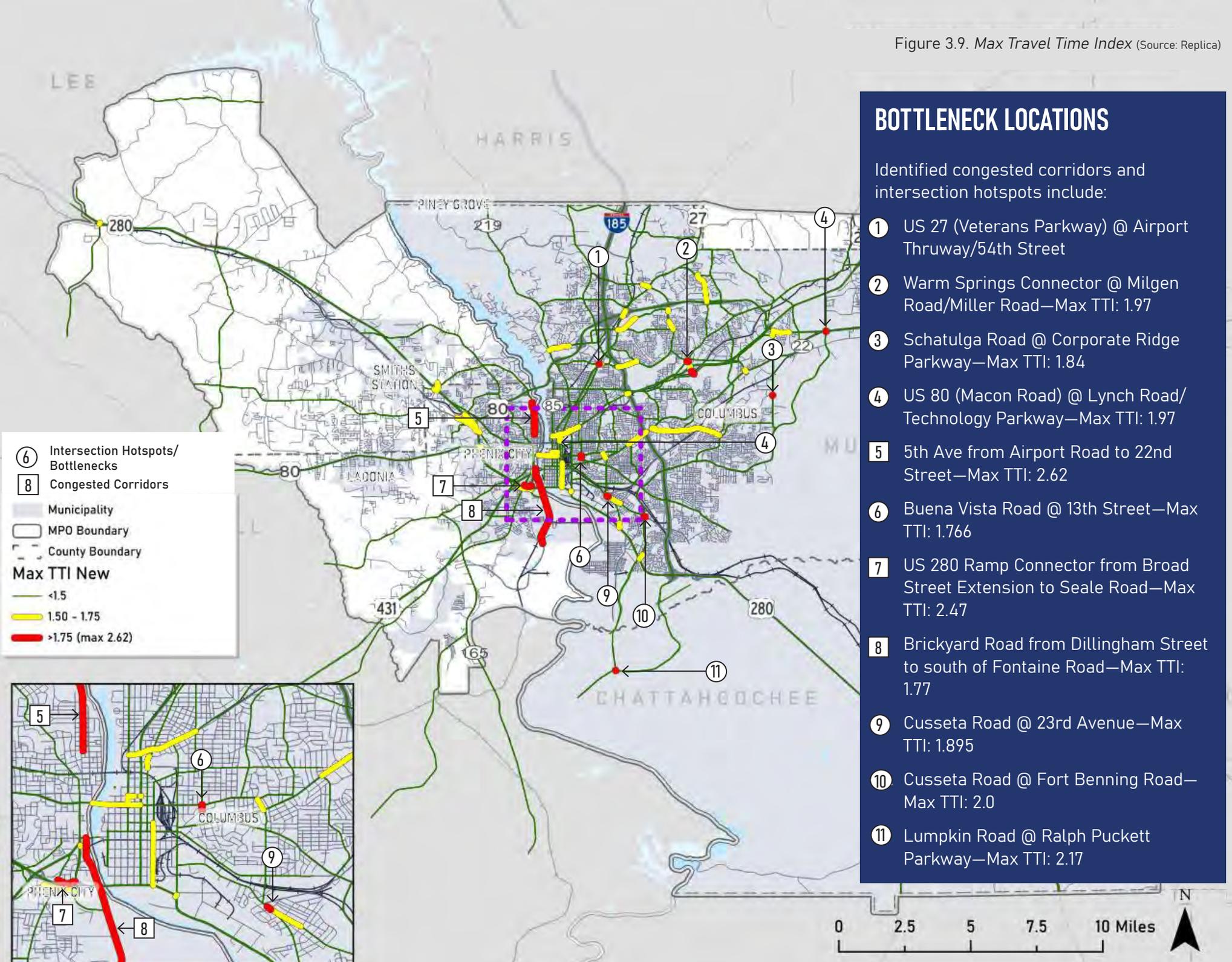


## EXISTING CONGESTION AND BOTTLENECKS: TRAVEL TIME INDEX (TTI)

Travel Time Index (TTI) is a measure of congestion that is easier to comprehend than traditional measures such as Level of Service (LOS) or total delay which is also included below. TTI is the ratio of the average travel time during the peak period to the time required to make the same trip at free-flow speeds. For example, if the TTI is 2.0, a 20-minute trip at free flow speeds would take 40 minutes during the peak period.

Quarter-hourly speed data from Replica were used to calculate TTI. Replica's speed data set is vehicle probe-based travel time data set (meaning it uses GPS data from phones in cars to identify vehicle location) acquired by Replica from a variety of sources. Locations along major roads with peak hour TTI greater than two can be considered to be bottlenecks. In addition, other locations with TTI lower than 2 still experience some degree of congestion and are candidates for potential projects where the regional freight network (p 50) overlaps with bottlenecks.

Figure 3.9. Max Travel Time Index (Source: Replica)



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# Travel Patterns and Trends

## AM PEAK

The highest density of AM peak hour trip origins is concentrated in the urban centers, particularly in Columbus. Compared to Alabama State, regions in Georgia generate more trips per square mile during AM rush hours, especially the communities on both sides of I-85 and US 27. **The destinations in those periods are concentrated in the center of Columbus with a distinctly higher trip density, reflecting its role as a major employment and activity center.** The high-density areas (Columbus and parts of Phenix City) require robust transportation infrastructure to handle the high volume of morning peak hour trips. This includes efficient public transit systems, road maintenance, and even expansion to reduce congestion. Alternative modes of transportation such as carpooling are also supposed to be potential solutions for midtown areas.

## PM PEAK

In PM peak hours, trip origins are located quite the same as the AM peak due to consistent commuter patterns and land use distribution. Similarly, the destinations also align with the AM peak origins where are most likely residential areas.

While traffic is often located in the same areas across the region, trips during PM peak hours show less traffic in some locations. This can be seen in Phenix City along Knowles Road and Opelika Road. Traffic in Columbus-Muscogee County is lower along Lynch Rd between US 80 (Macon Road) and US 27 ALT (Manchester Expressway) and along 39th Street during PM peak hours than AM peak hours. Many of these slight differences can be seen around schools, potentially due to more variation in PM pickup times than AM drop off times.

Figure 3.10. AM Peak Hour Trip Origins (Source: Replica, 2023)

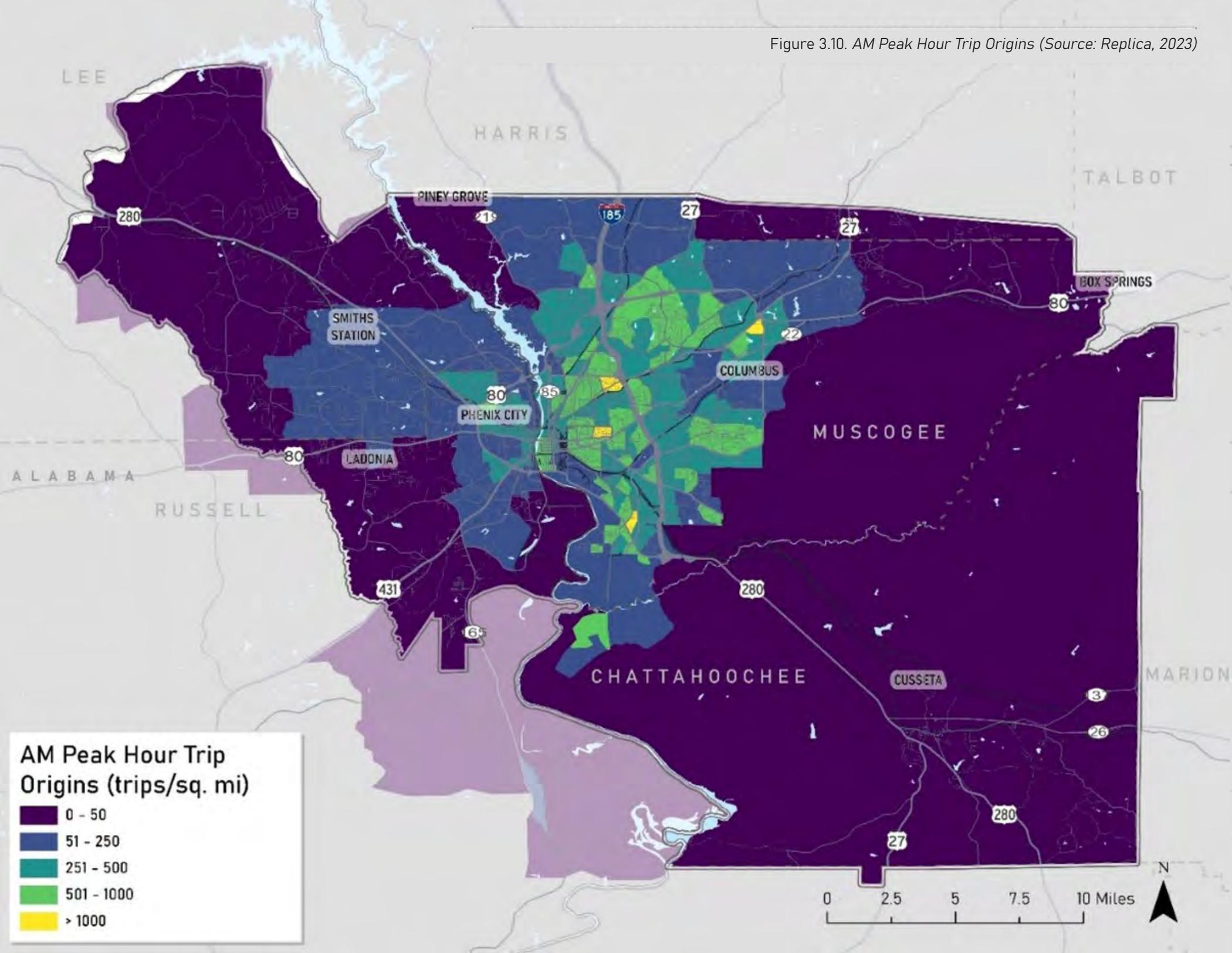


Figure 3.11. AM Peak Hour Trip Destinations (Source: Replica, 2023)

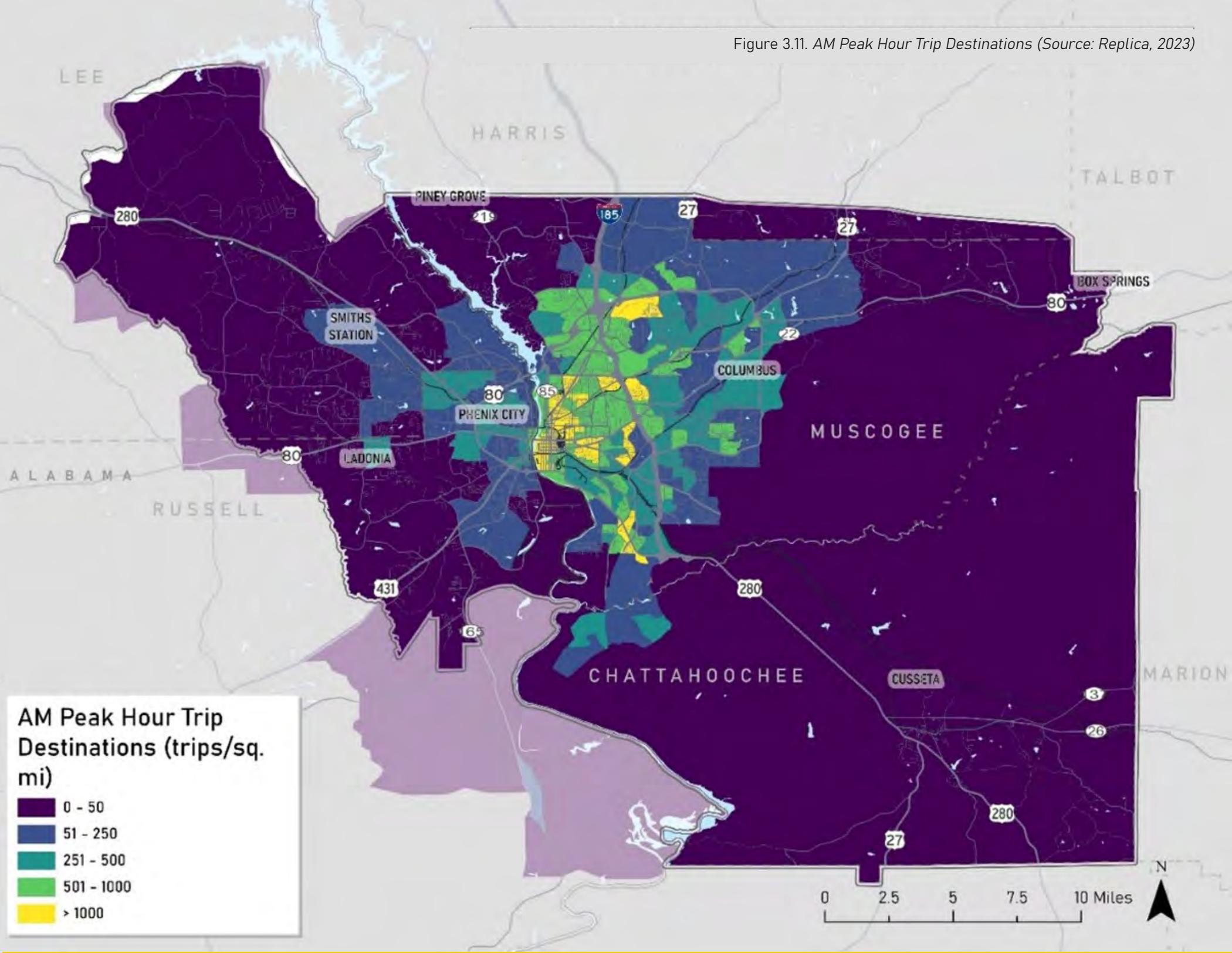
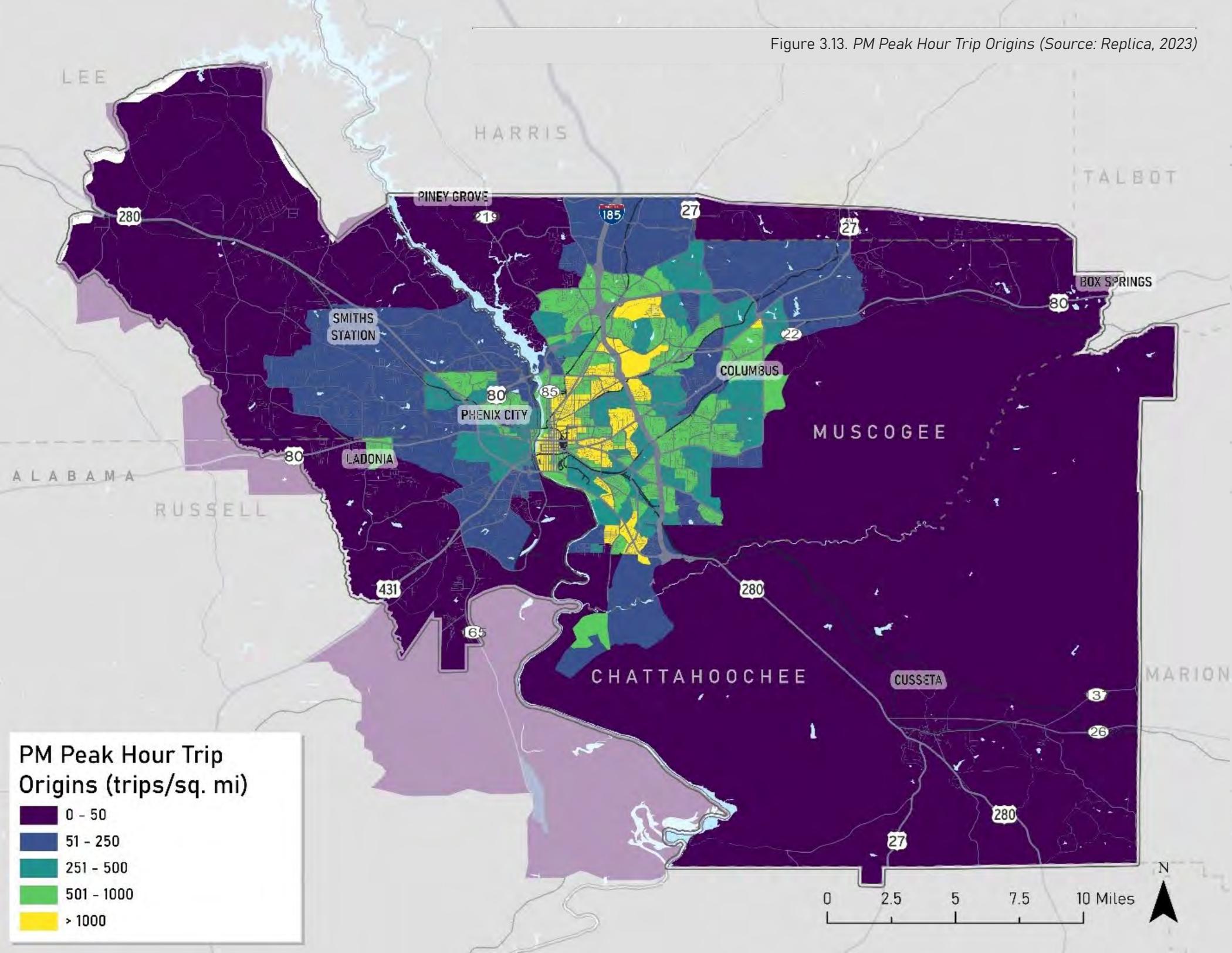


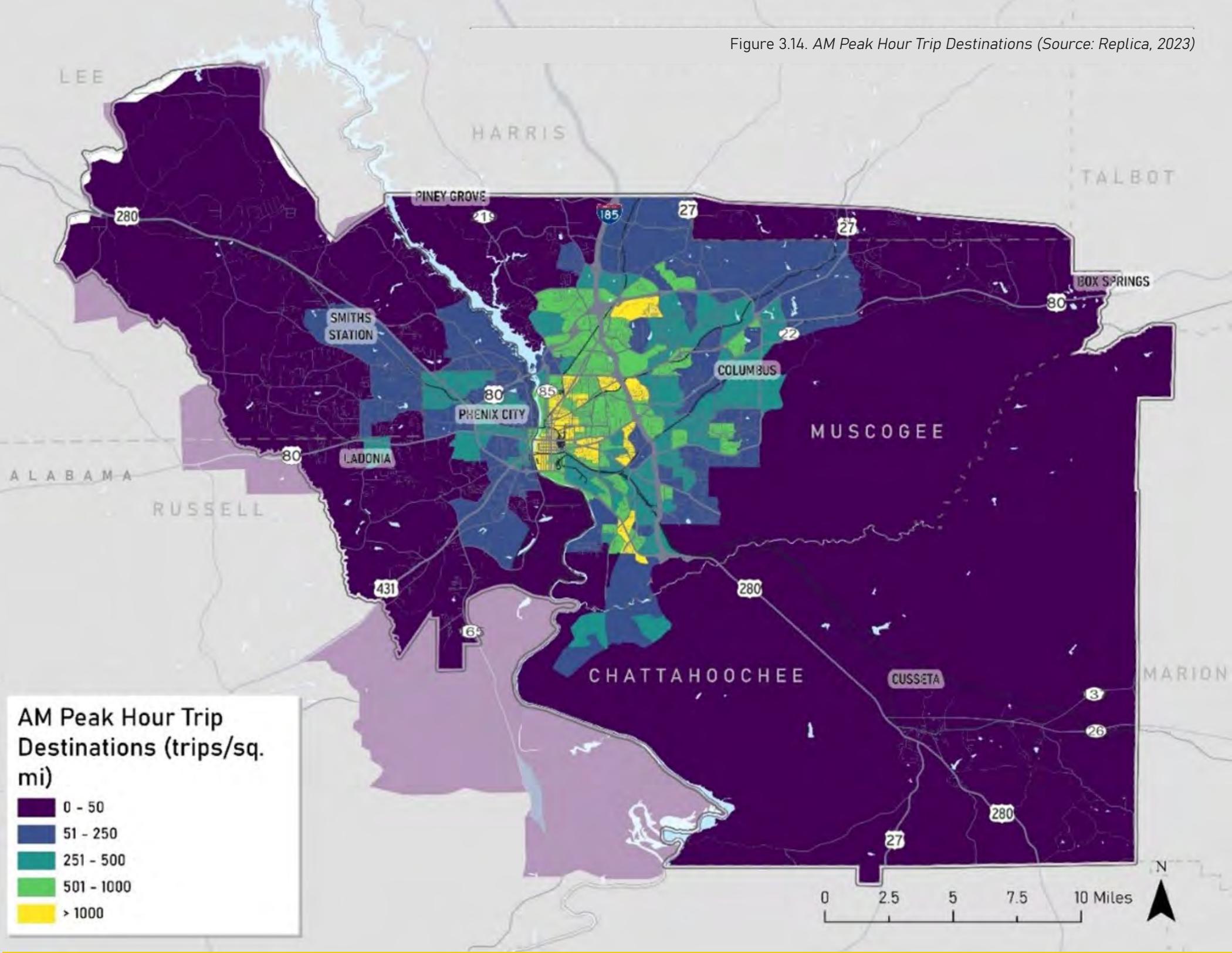
Figure 3.13. PM Peak Hour Trip Origins (Source: Replica, 2023)



**PM Peak Hour Trip Origins (trips/sq. mi)**

- 0 - 50
- 51 - 250
- 251 - 500
- 501 - 1000
- > 1000

Figure 3.14. AM Peak Hour Trip Destinations (Source: Replica, 2023)



# Safety Analysis

This section describes the safety analysis that was conducted using GDOT Numetric crash data from 2018-2022. The analysis focused on crashes involving automobiles, pedestrians, bicycles, and commercial vehicles to provide a deeper understanding of the location and characteristics of crash occurrences. In addition, fatal and serious injury crashes, known as KSI crashes, were highlighted to provide insight into where these dangerous crashes are occurring. This analysis provides insight into important areas of investment to reduce the number of crashes and KSI crashes.

## AUTO CRASHES

Between 2018-2022 there were 48,823 total crashes across the Columbus-Phenix City MPO. The density of auto crashes is concentrated in areas like Downtown Columbus, particularly along busy roadways like 13th Street. Crashes are also concentrated along I-185 near intersections with other major roadways and along US 280 near the intersection of US 80.

Fatal and serious injury crashes occurred across the MPO, with the greatest number of these crashes on major roadways such as US 280, US 80, and US 431 in Alabama and along US 27 (Veterans Parkway), I-185, and US 80/SR 22 (Macon Road) in Georgia. These are roadways with high traffic volumes and traffic speeds present on these roadways.

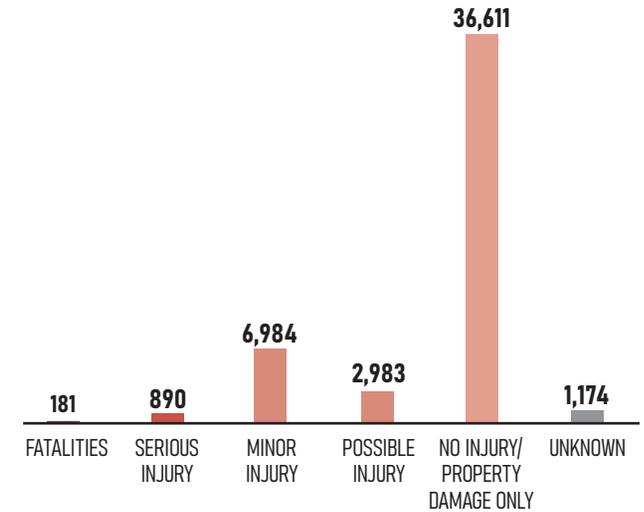


Figure 3.15. Auto Crashes by Severity

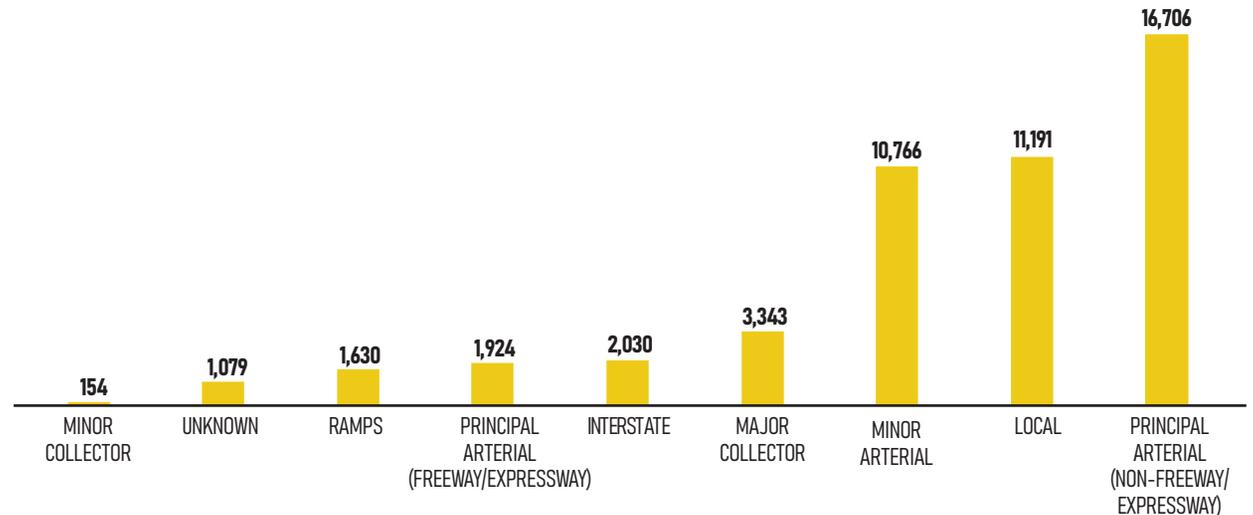
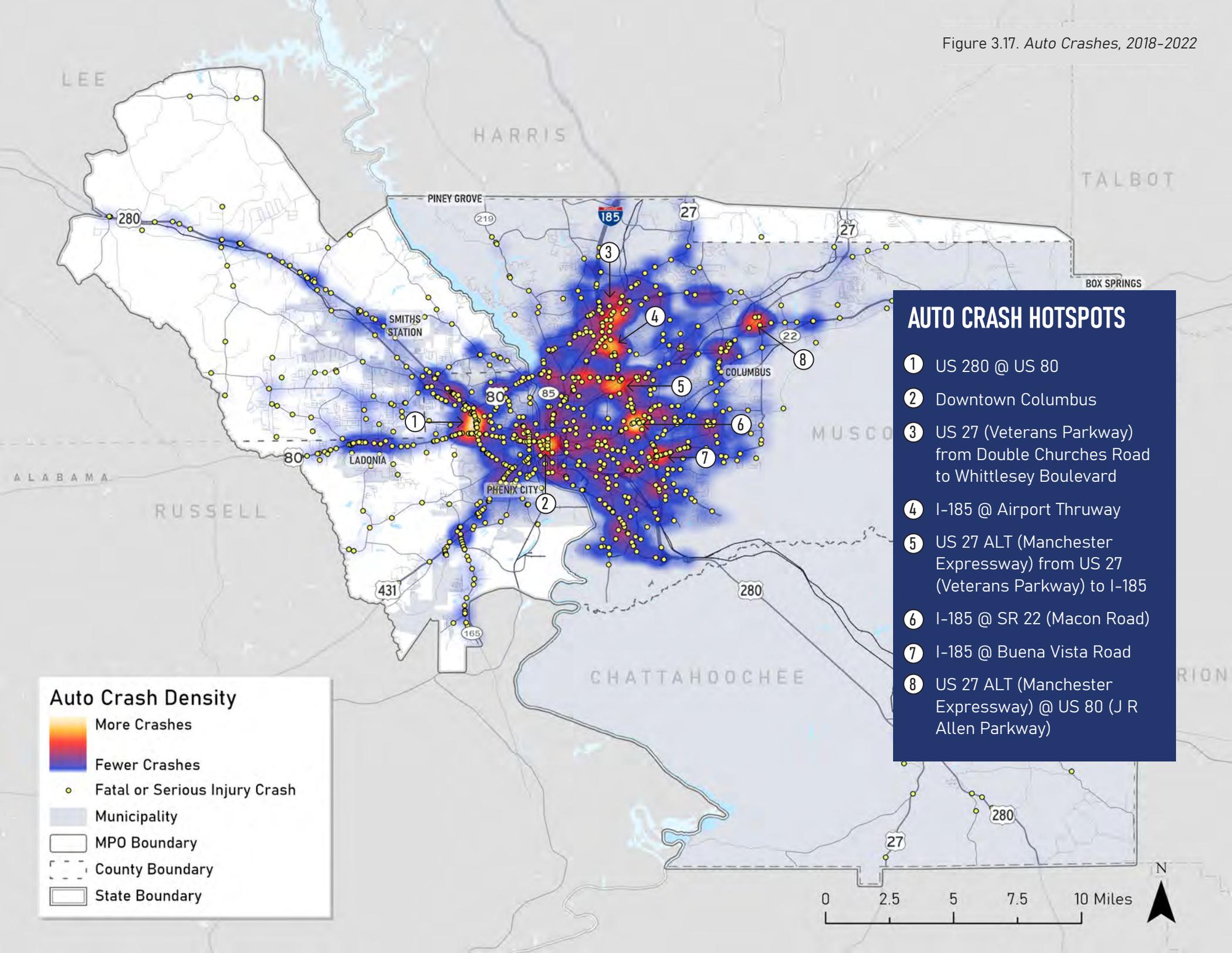


Figure 3.16. Auto Crashes by Functional Classification

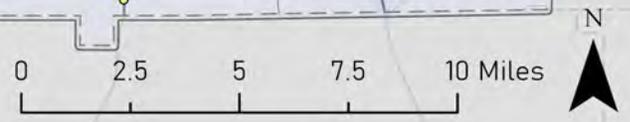
Figure 3.17. Auto Crashes, 2018-2022



### Auto Crash Density

-  More Crashes
-  Fewer Crashes
-  Fatal or Serious Injury Crash
-  Municipality
-  MPO Boundary
-  County Boundary
-  State Boundary

- ### AUTO CRASH HOTSPOTS
- 1 US 280 @ US 80
  - 2 Downtown Columbus
  - 3 US 27 (Veterans Parkway) from Double Churches Road to Whittlesey Boulevard
  - 4 I-185 @ Airport Thruway
  - 5 US 27 ALT (Manchester Expressway) from US 27 (Veterans Parkway) to I-185
  - 6 I-185 @ SR 22 (Macon Road)
  - 7 I-185 @ Buena Vista Road
  - 8 US 27 ALT (Manchester Expressway) @ US 80 (J R Allen Parkway)



## COMMERCIAL VEHICLE CRASHES

There were 2,223 commercial vehicle crashes from 2018-2022. Similar to auto crashes, crashes involving commercial vehicles and large trucks are concentrated in Downtown Columbus and along or at the intersections of major roadways. Areas with particularly high concentrations of commercial vehicle crashes are US-280 at the intersections of US-80 and along US-80 at the intersection with US-27. As truck routes are typically centered along these types of major roadways, it is not unexpected that crash density is highest on these roads, especially when coupled with typically high speeds. Fatal and serious injury crashes also occurred along major roadways, such as I-185, GA-85, and US-280.

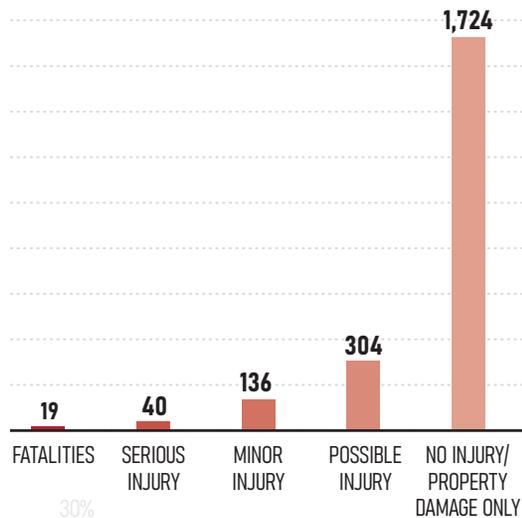
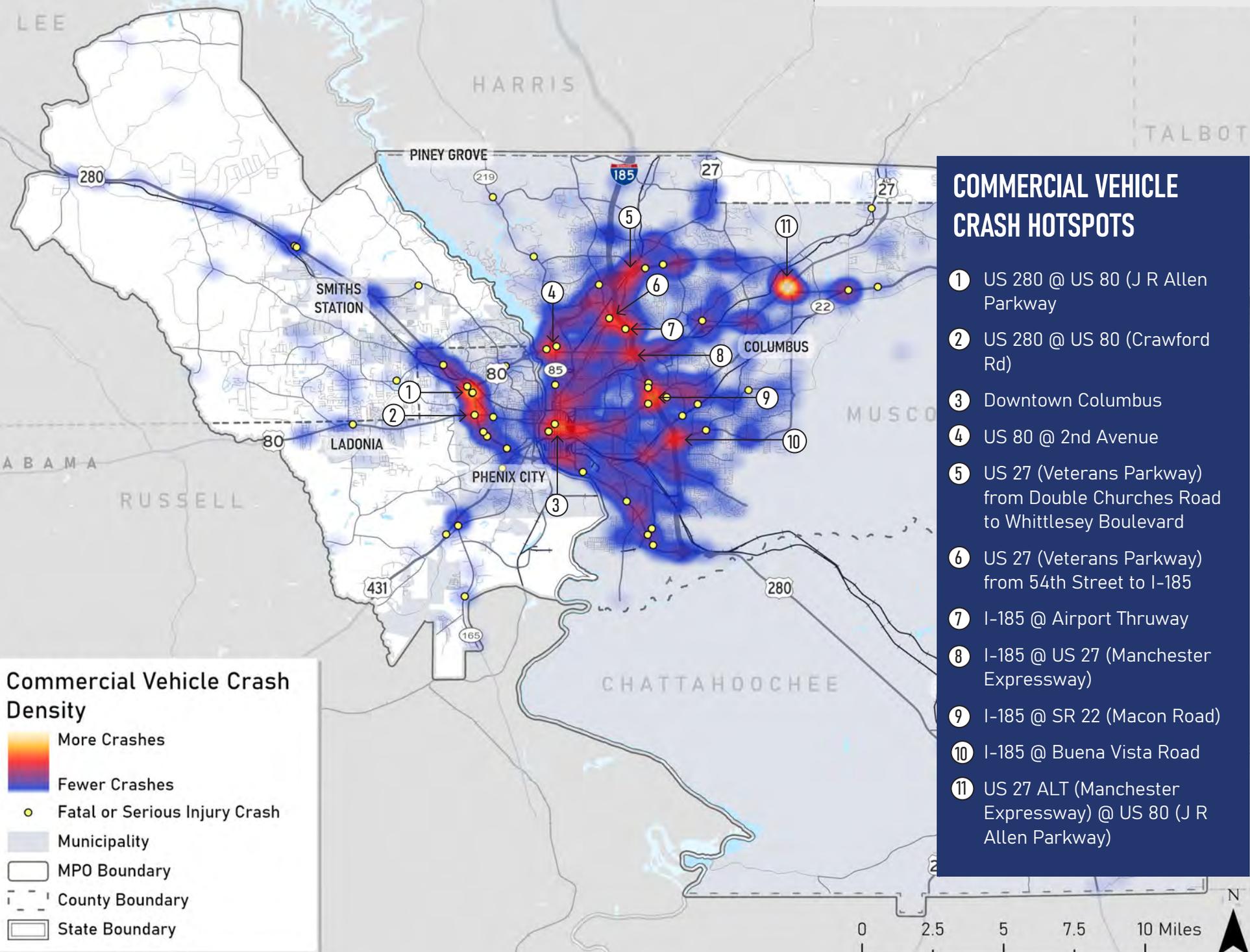


Figure 3.18. Commercial Vehicle Crashes by Severity

Figure 3.19. Commercial Vehicle Crashes



# Rail Crossing Safety

The Grade Crossing Accident Prediction System (GXAPS) is based on an analytical computer model (APS2020) maintained by the Federal Railroad Administration (FRA). The model estimates the average predicted rate of accidents (accidents/year) at public highway-rail intersections. Model inputs include crossing operational and physical attributes as well as the past five years of accident data.

GXAPS predicted rates for crossings within the Columbus-Phenix City region are presented in Figure 8-4. Locations with a higher predicted number of crashes can be identified for further study and potential safety improvements.

The following lists show crossings with the highest predicted accident score in Georgia and Alabama, as well as their predicted rate of accidents.

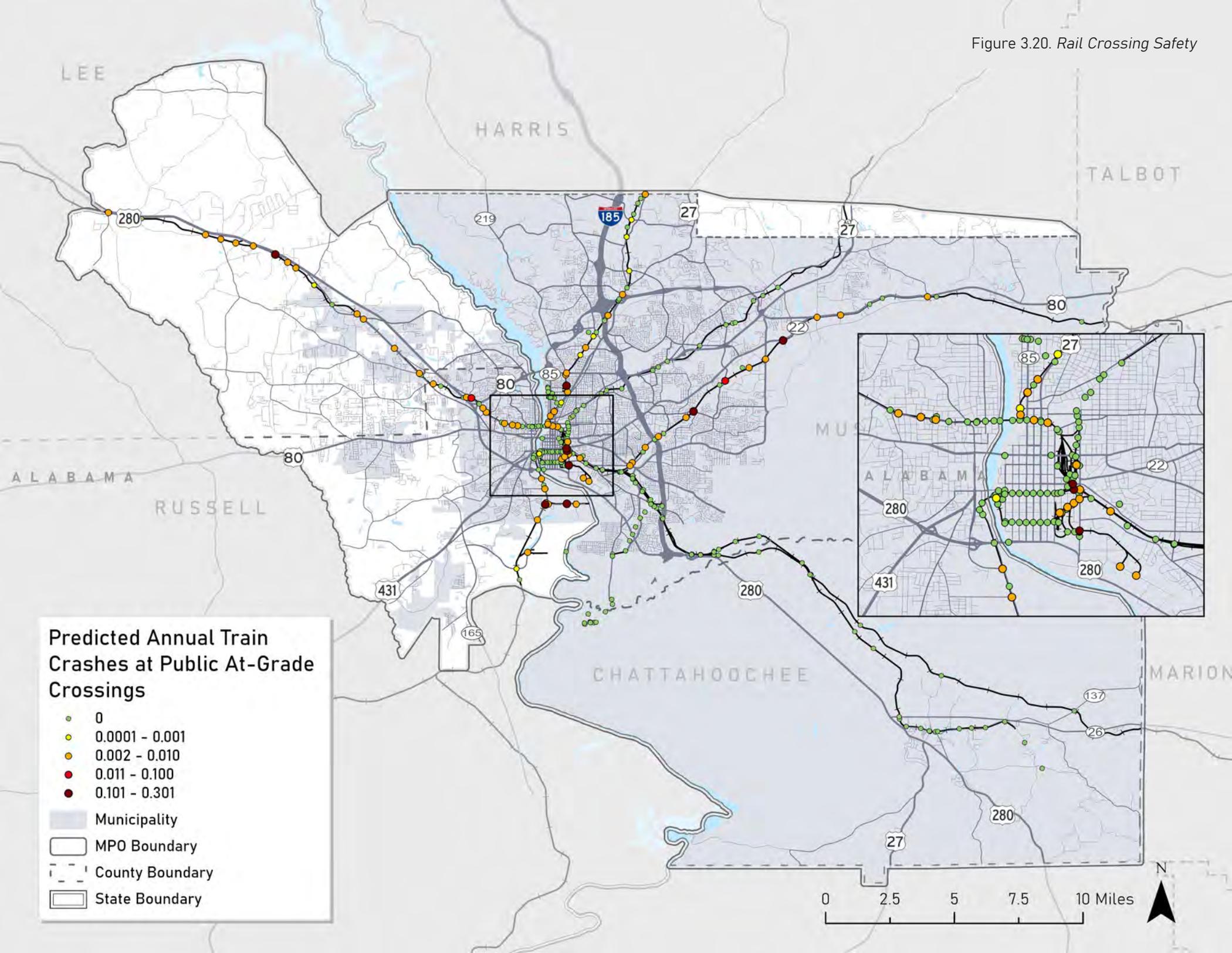
## GEORGIA

- 9th Avenue at Norfolk Southern Railroad- 0.301
- Apex Road at Norfolk Southern Railroad - 0.169
- Chattsworth Road at Norfolk Southern Railroad- 0.168
- 10th Avenue at Great Southwestern Railroad- 0.163
- Forrest Drive at Norfolk Southern Railroad - 0.162
- 10th Street at Norfolk Southern Railroad- 0.157
- Woodruff Farm Road at Norfolk Southern Railroad- 0.011
- Buena Vista Road at Norfolk Southern Railroad- 0.007

## ALABAMA

- Brickyard Road at Columbus & Chattahoochee Railroad- 0.174
- State Docks Road at Columbus & Chattahoochee Railroad- 0.164
- CR 249 at Norfolk Southern Railroad- 0.158
- Railroad Street at Norfolk Southern Railroad- 0.013
- Lee Road at Norfolk Southern Railroad- 0.008
- Stadium Drive at Norfolk Southern Railroad- 0.007
- Lakewood Drive at Norfolk Southern Railroad- 0.007
- Allen Road at Norfolk Southern Railroad- 0.007

Figure 3.20. Rail Crossing Safety



### Predicted Annual Train Crashes at Public At-Grade Crossings

- 0
- 0.0001 - 0.001
- 0.002 - 0.010
- 0.011 - 0.100
- 0.101 - 0.301

- Municipality
- MPO Boundary
- - - County Boundary
- ▭ State Boundary

0 2.5 5 7.5 10 Miles



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04

# Regional Freight Profile

# Freight Profile

## A freight profile plays a pivotal role in transportation planning, economic development, and infrastructure management.

It provides a detailed analysis of freight movement within a specific region, pinpointing key trends, challenges, and opportunities. In the Columbus-Phenix City region, the freight network is crucial to the economic framework, underpinning a variety of industries and contributing significantly to the area's economic health. The freight infrastructure in this region supports essential sectors such as manufacturing, retail, and logistics, which are integral to both local and regional economic growth. The comprehensive insights from a freight profile enable stakeholders to understand and optimize the movement of goods, prioritize infrastructure investments, support economic development, ensure safety and reliability, promote sustainability, and inform holistic transportation planning and policymaking.

## DESIGNATED FREIGHT ROUTES

The Columbus-Phenix City region relies on a network of designated freight routes to efficiently manage the transportation of goods, supporting economic growth and regional connectivity. These routes are critical for the economic vitality of the area, ensuring the smooth movement of freight and supporting various industries. The primary designated freight routes include major highways and interstates, which connect local businesses to regional, national, and international markets. These routes are continuously developed and maintained to meet the demands of freight transportation, ensuring the region's competitiveness in the global market.

Recognized Freight Networks are primarily focused on supporting economic activities by facilitating the efficient movement of goods and materials. These networks enable businesses to transport products to markets and consumers effectively, incorporating highways, railways, ports, and intermodal facilities.

In the Columbus-Phenix City region, the freight routes include:

- 1. FHWA National Highway Freight Network**—A system of highways identified to support the efficient movement of goods throughout the United States, enhancing economic competitiveness and facilitating interstate commerce.
- 2. Statewide Designated Freight Corridors** - Building off the NHFN, this network includes interstates and highways most critical to freight movement in the state.
- 3. STRAHNET Facilities**—The Strategic Highway Network (STRAHNET) is the Department of Defense's (DoD's) strategic defense network for domestic operations. STRAHNET facilities consist of roads deemed necessary for emergency mobilization and peacetime movement of commodities to support U.S. military operations. STRAHNET facilities include: US 280, US 80, US 431, I-185, and US 27 Alt (from I-185 to US 80).
- 4. Thru Truck Routes**—Thru trucks not making a pickup, delivery, or having specific business within Columbus, GA, must travel only on designated thru truck routes. These routes are established with weight and length restrictions controlled by the Georgia Department of Transportation (Sec. 20-9.48.)
- 5. Local Truck Routes**—Commercial trucks and other vehicles making trips, pickups, deliveries, or drop-offs within Columbus must travel on designated local truck routes. Local truck traffic making pickups and drop-offs is authorized to use the thru truck routes.

## NATIONAL HIGHWAY FREIGHT NETWORK (NHFN)

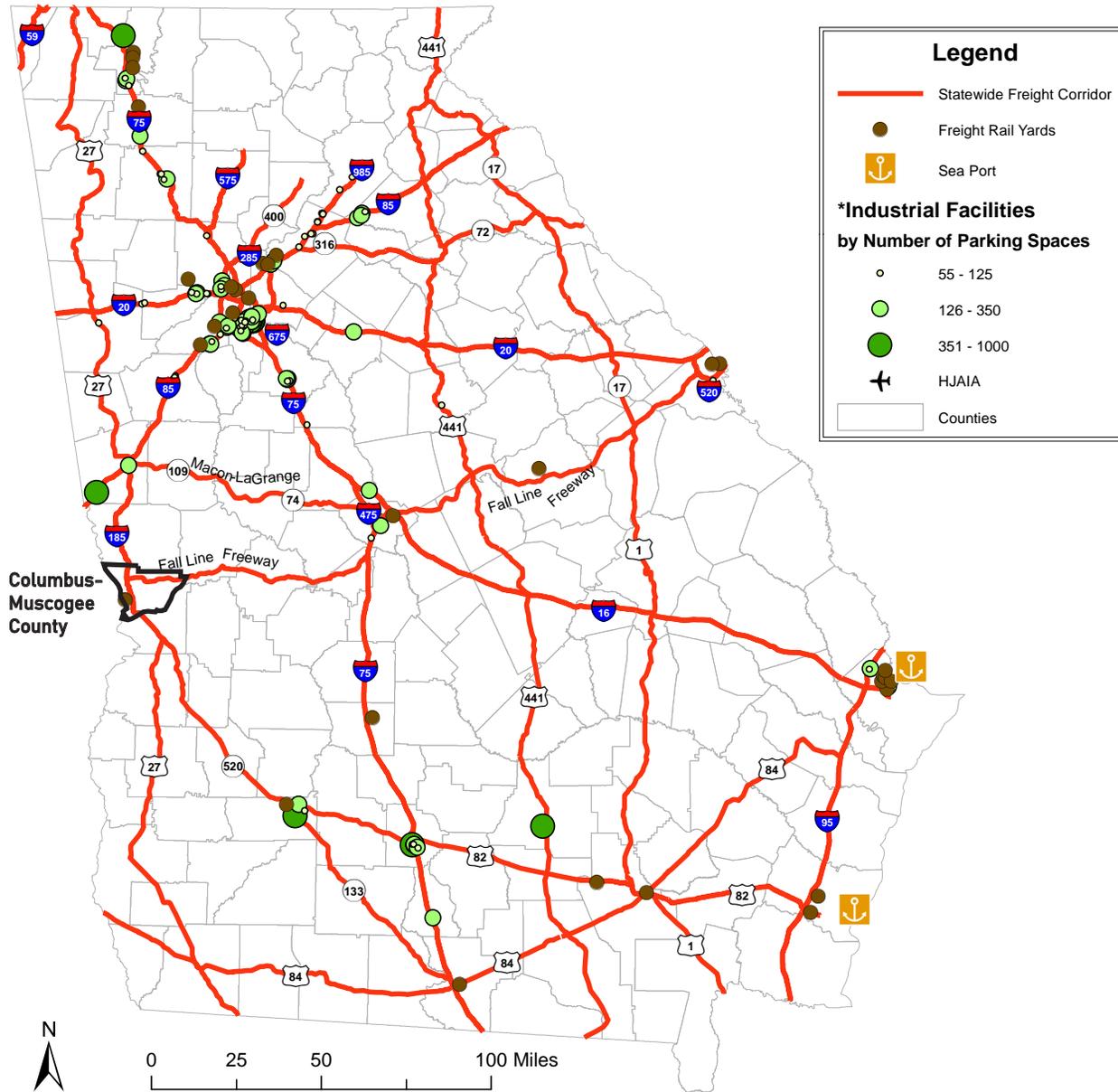
Figure 4.1. *The National Highway Freight Network (NHFN)*



The National Highway Freight Network (NHFN) represents roadway facilities where FHWA strategically focuses Federal resources and policies toward improved national freight mobility. Influencing the region, I-185 (and nearby I-85) are included in the NHFN. As such, improvements to I-185 are eligible for funding from the National Highway Freight Program and the Nationally Significant Freight and Highway Projects competitive grant program (commonly called INFRA).

# GEORGIA'S STATEWIDE DESIGNATED FREIGHT CORRIDORS

Figure 4.2. Georgia's Statewide Designated Freight Corridors



Georgia's statewide freight corridor network plays a substantial role in freight and goods movements in the Columbus region. I-185 and US 80 are included on this network and are vital to the regional economy. In addition, there is a Norfolk Southern rail yard on the west side of I-185 off of Andrews Road.

Figure 4.3. Strategic Highway Network (STRAHNET)

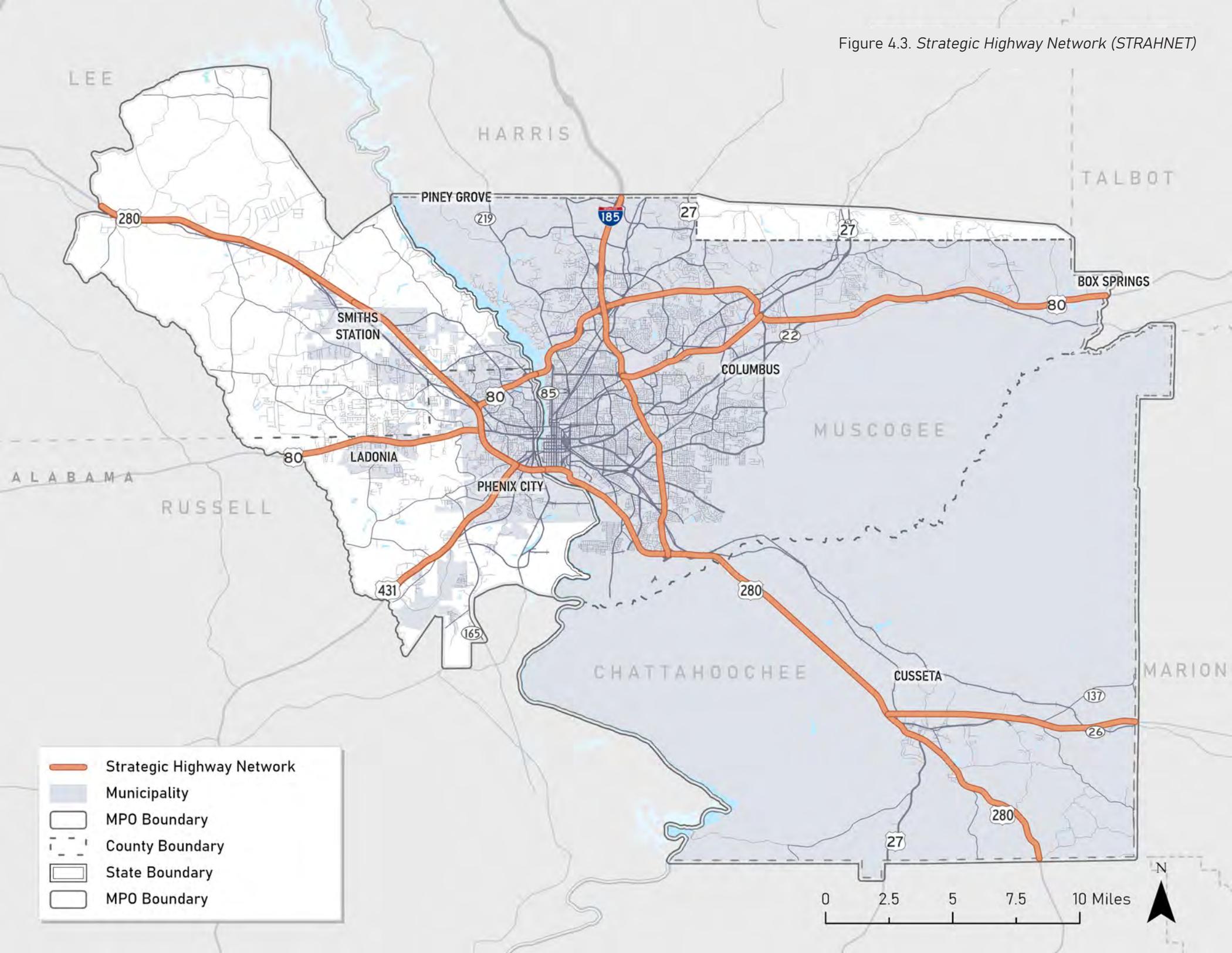
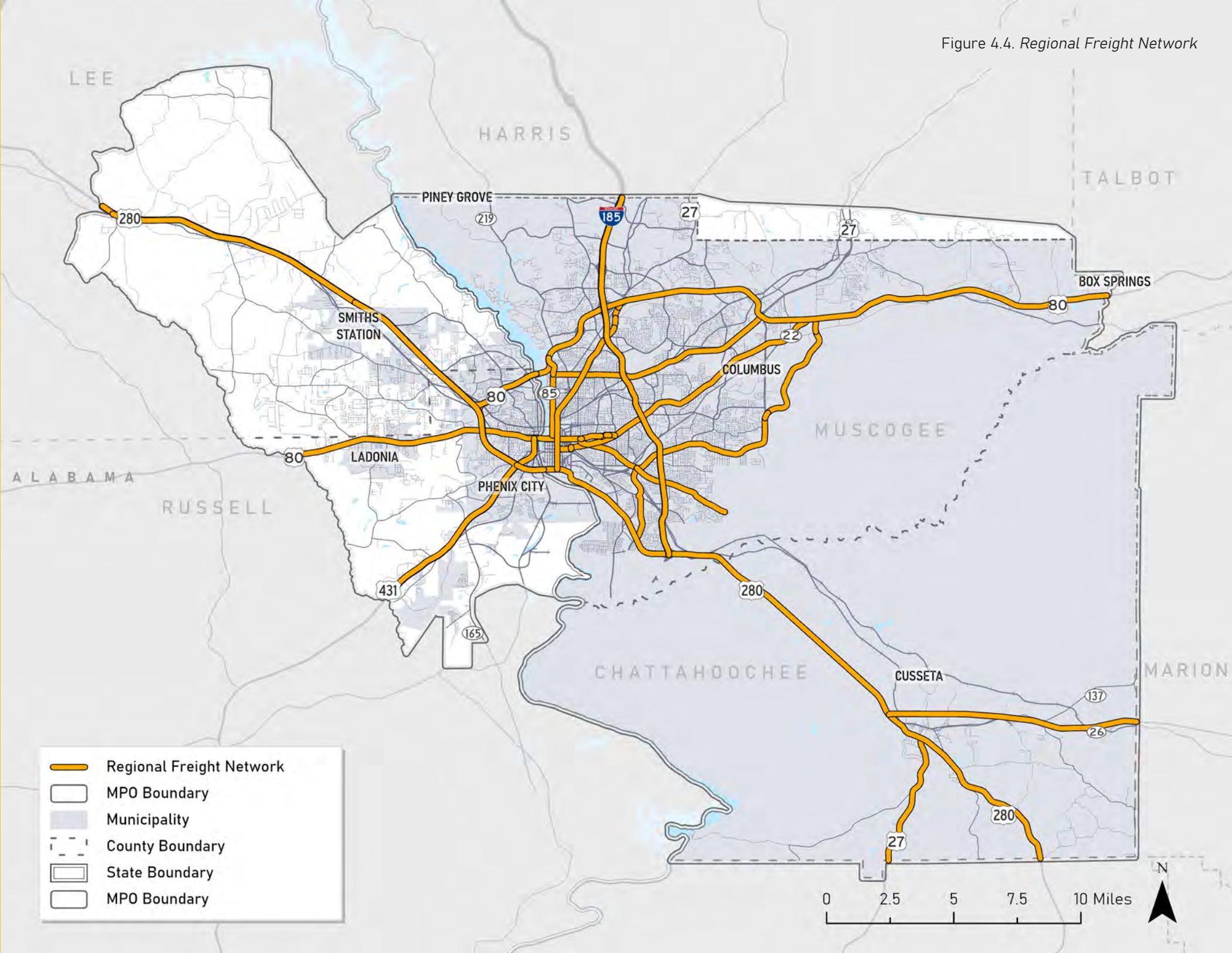


Figure 4.4. Regional Freight Network



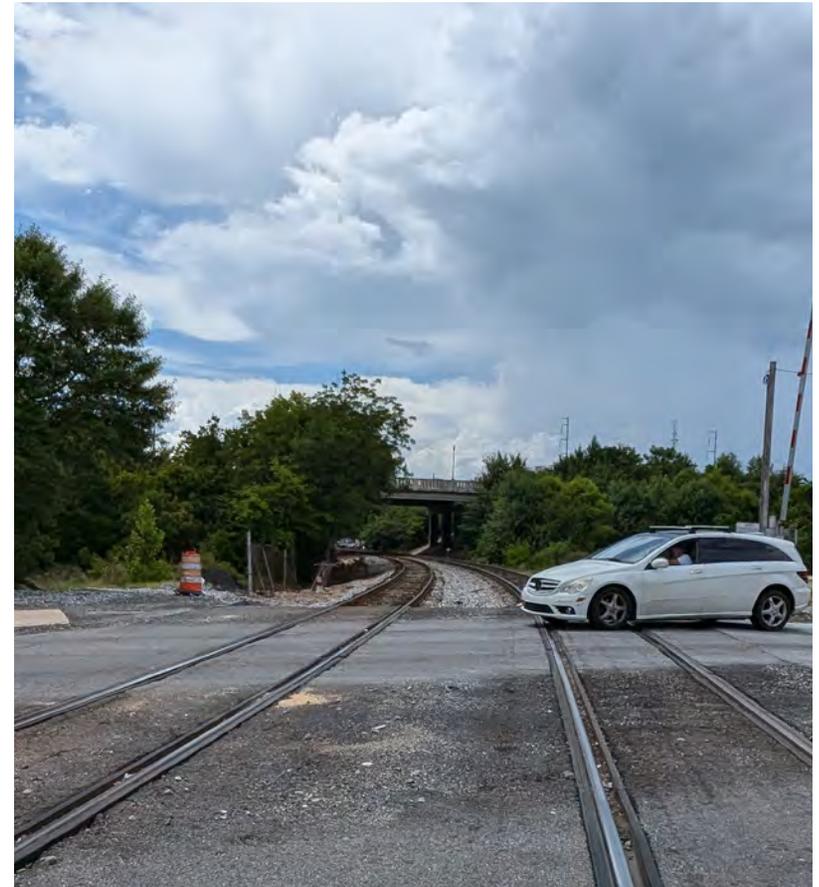
# Rail Infrastructure

**Columbus benefits from a robust rail infrastructure, with services provided by Norfolk Southern and CSX. Rail access is crucial for heavy industries and those requiring bulk transportation of materials, offering a cost-effective and reliable mode of transport.**

Norfolk Southern and CSX are the two primary Class I railroads operating in the Columbus-Phenix City region, facilitating the movement of goods across the Southeast and beyond. These railroads connect Columbus to major markets in the Mid-Atlantic, Northeast, and Midwest, ensuring efficient freight movement essential for local industries, particularly manufacturing and distribution centers. The Columbus & Chattahoochee Railroad, a short line, provides critical links between local businesses and the larger Class I rail networks. Short lines support regional freight, enabling efficient local distribution and access to national and international markets.

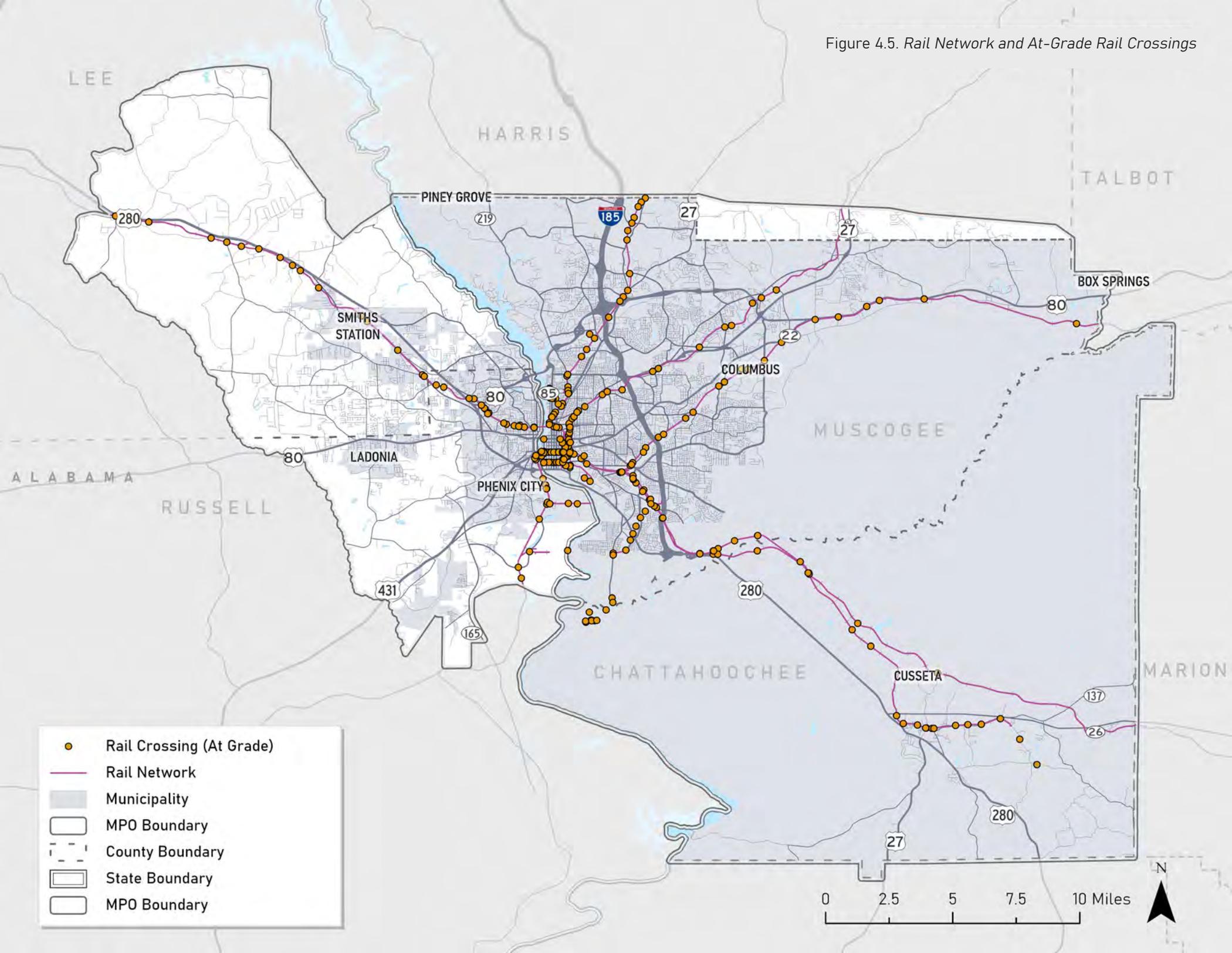
There is currently no passenger rail service in the region. Plans are in development for high-speed rail services, which would further enhance connectivity and reduce travel times between key economic hubs, including Columbus.

There are 308 at-grade and 45 grade-separated crossings in the region. These crossings are distributed across various rail lines operated by major carriers such as Norfolk Southern and CSX, as well as the Columbus & Chattahoochee Railroad short line. These crossings also necessitate significant safety measures and infrastructure maintenance to ensure smooth and secure operations for both rail and vehicular traffic



At-grade rail crossing

Figure 4.5. Rail Network and At-Grade Rail Crossings

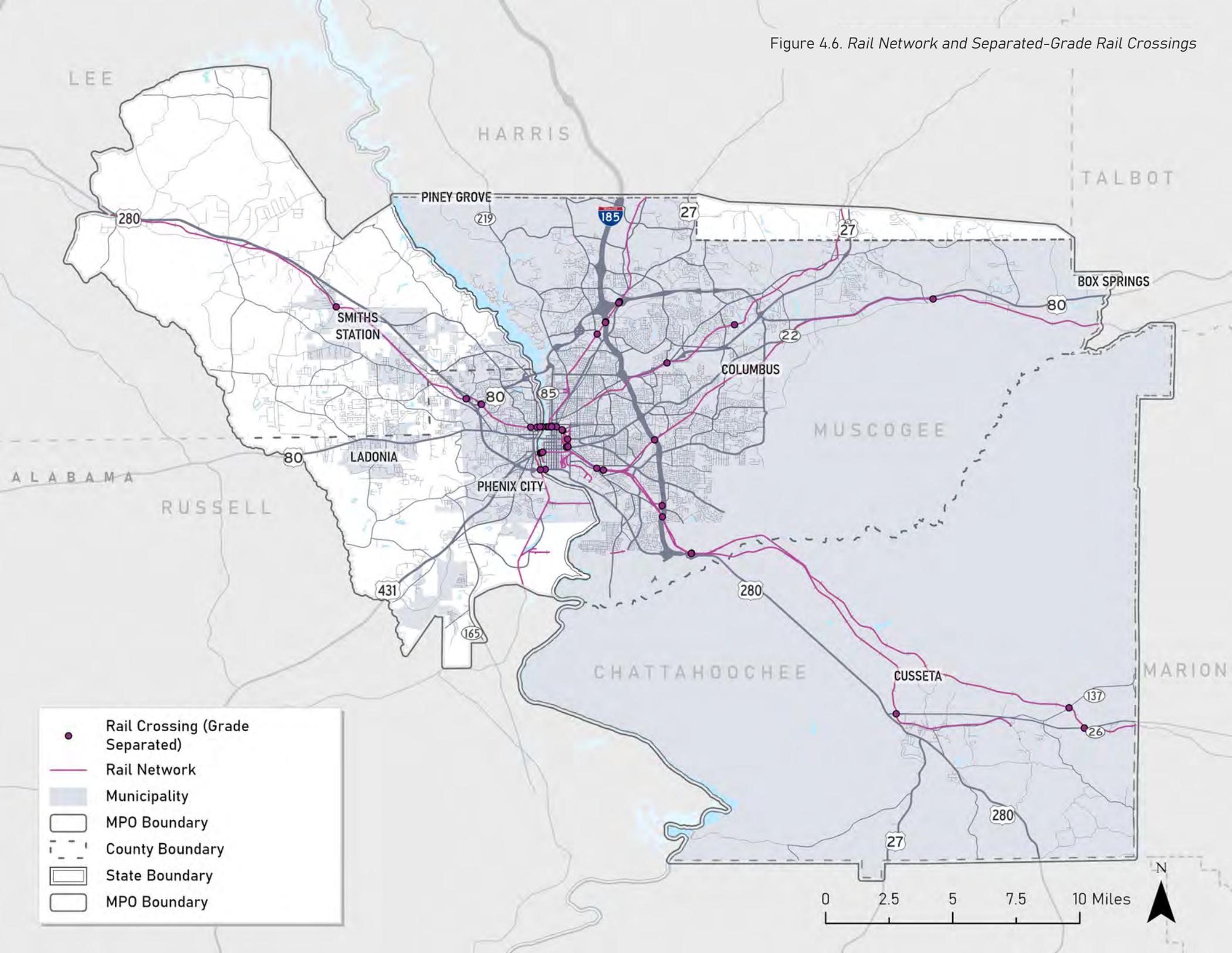


- Rail Crossing (At Grade)
- Rail Network
- Municipality
- MPO Boundary
- - - County Boundary
- ▭ State Boundary
- ▭ MPO Boundary

0 2.5 5 7.5 10 Miles



Figure 4.6. Rail Network and Separated-Grade Rail Crossings



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05

# Regional Freight and Goods Movement

# Economic and Industrial Profile

## INTRODUCTION

The C-PCTS has 99,880 total workers. The industries with the largest employment in the area are health care and social assistance, accommodation and food services, and retail trade, each employing more than 10% of the total workforce. Target industries for Columbus GA include aerospace, automotive, C4C semiconductors, defense, financial services, food production, information security, robotics, and shared services.

In 2022 manufacturing, transportation, and warehousing made up about 9.6% of employment in the MPO, with 9,587 total employees. Top freight-related employers in the area are shown in Table 5.1.

Table 5.1. *Top Freight-Related Employers*

Company	Industry/Products	Employees
Pratt & Whitney	Aerospace Manufacturing and Overhaul	1,850
AlaTrade Foods	Poultry processing	650
Aludyne	Iron Casting, Machining, Assembly of Automotive Parts	565
Kysor-Warren	Assembly of refrigerated cases	470
Hostess Brands	Food Production	450
Path-Tech	Medical Kit Assembly	397
Panasonic	Lithium Battery Production	200
Vectorply	Fabric Manufacturing	175
Eastman Kodak	Printing Plate Production	170
Goldens' Foundry	Iron Casting, Machining, Assembly of Automotive Parts	170
Buffalo Rock Pepsi	Food Distribution	150
Johns Manville	Insulation Manufacturing	137
Refresco	Food Manufacturing	120

# Commodity Flow Analysis

## METHODOLOGY

The following section details the process for converting existing and projected freight movements to truck and rail car counts to understand commodity flow in the region. This provides an understanding for the way goods will be moved in the future and where infrastructure improvements may be needed to support existing and projected goods movement.

## VOLUME/FREIGHT DATA SOURCE

Transearch data was used to determine existing commodity flows by tonnage for trips originating and ending in the MPO area, based on the year 2020. This dataset, provided by S&P Global, provides information on outbound, inbound, intra and through shipments for specific geographies, as well as volumes along certain corridors. Details related to tonnage, value, and units of shipments are also available for a number of commodity types.

The existing tonnage within each general commodity type was aggregated to apply Transearch data to the Freight Analysis Framework (FAF5). The percentage of trips was then calculated based on the aggregated commodity types. The same process was used for rail flows, resulting in a determined growth rate by mode and by commodity that could be used to project 2050 flows.

## MODAL SPLIT

The next step in the analysis involved splitting overall freight movements into truck volume and rail volume. FAF5 was used to calculate the existing and future tonnage by truck and by rail. Volumes in tonnage were then converted to truck and rail car trips. Existing and future scenarios were compared to determine a growth rate. Projected additional freight trips were assumed to be distributed throughout the roadway network based on existing freight volumes.

## SUMMARY OF FINDINGS

Overall, there were 776,794 trips handling about 21.1 million tons of goods in 2020. Projections for the year 2050 show an estimated 2,061,313 trips and nearly 54 million tons of goods moving across the region. Ultimately, this determined the growth in freight traffic across specific corridors throughout the MPO. These should be prioritized for freight-related improvements, as they are projected to carry the greatest amount of future freight traffic.

Overall, the greatest growth for transporting commodities throughout the MPO is seen along I-185, US-80, and US 280.

The following tables present information from FAF and GDOT on the annual trips and annual tonnage moving into and out of the region for 2020.

Top 2020 inbound commodities:

- Mining
- Chemical
- Stone
- Petroleum

Top 2020 outbound commodities:

- Mining
- Petroleum
- Wood

Table 5.2. 2020 Commodity Flows

	2020			
	Truck		Rail	
	Annual Trips	Annual Tonnage	Annual Trips	Annual Tonnage
<b>Total</b>	752,592	18,062,197	24,202	2,323,401
<b>Agriculture</b>	2,761	66,264	690	66,264
<b>Mining</b>	439,499	10,547,968	13,648	1,310,182
<b>Food</b>	23,286	558,856	484	46,467
<b>Textile</b>	4,113	98,720	9	848
<b>Wood</b>	44,655	1,071,722	693	66,555
<b>Paper</b>	18,631	447,150	778	74,651
<b>Chemical</b>	45,058	1,081,385	2,143	205,715
<b>Petroleum</b>	57,751	1,386,019	3,213	308,488
<b>Rubber</b>	2,831	67,950	68	6,551
<b>Stone</b>	36,595	878,272	2,105	202,087
<b>Primary Metal</b>	5,324	127,766	40	3,825
<b>Fabricated Metal</b>	3,227	77,449	8	743
<b>Machinery</b>	11,107	266,568	287	27,575
<b>Instruments</b>	939	22,540	9	864
<b>Wastes</b>	25,800	619,211	3	296
<b>Misc.</b>	0	0	0	0
<b>Bulk, Secondary, Intermodal Warehouse</b>	31,015	744,349	24	2,283

Based on the determined growth rate, projections of annual trips and tonnage for each commodity by truck and rail in the year 2050 are shown in the following table.

Top 2050 inbound commodities:

- Mining
- Bulk, Secondary, Intermodal Warehouse
- Chemical
- Petroleum

Top 2050 outbound commodities:

- Mining
- Bulk, Secondary, Intermodal Warehouse
- Stone
- Petroleum

Table 5.3. 2050 Projected Commodity Flows

	2050			
	Truck		Rail	
	Annual Trips	Annual Tonnage	Annual Trips	Annual Tonnage
<b>Total</b>	1,998,487	47,963,676	62,827	6,031,380
<b>Agriculture</b>	60,848	1,460,346	954	91,604
<b>Mining</b>	896,531	21,516,746	29,970	2,877,114
<b>Food</b>	65,509	1,572,227	1,394	133,789
<b>Textile</b>	7,114	170,742	16	1,523
<b>Wood</b>	40,163	963,902	619	59,441
<b>Paper</b>	59,863	1,436,719	2,833	271,988
<b>Chemical</b>	122,841	2,948,179	5,871	563,598
<b>Petroleum</b>	195,651	4,695,621	10,593	1,016,942
<b>Rubber</b>	6,558	157,387	171	16,406
<b>Stone</b>	112,988	2,711,701	9,014	865,355
<b>Primary Metal</b>	18,253	438,077	135	12,949
<b>Fabricated Metal</b>	7,947	190,729	20	1,873
<b>Machinery</b>	43,604	1,046,495	971	93,212
<b>Instruments</b>	3,462	83,096	44	4,239
<b>Wastes</b>	67,595	1,622,273	8	782
<b>Misc.</b>	0	0	0	0
<b>Bulk, Secondary, Intermodal Warehouse</b>	289,559	6,949,427	214	20,557

## MODAL SPLIT

The modal split shows that the majority of commodities are transported to and from the C-PCTS region by truck.

Over 20% of trips originating in the MPO are transporting paper, petroleum, or stone. Fewer trips ending in the MPO are made by rail, with the highest percentage being 16%, designated for chemicals.

Table 5.4. *Modal Split*

	Origin Trips		Destination Trips	
	Truck	Rail	Truck	Rail
<b>Agriculture</b>	99.3%	0.7%	88.7%	11.3%
<b>Mining</b>	91.2%	8.8%	86.5%	13.5%
<b>Food</b>	93.6%	6.4%	90.8%	9.2%
<b>Textile</b>	99.8%	0.2%	98.6%	1.4%
<b>Wood</b>	93.9%	6.1%	94.4%	5.6%
<b>Paper</b>	77.8%	22.2%	87.2%	12.8%
<b>Chemical</b>	89.1%	10.9%	83.8%	16.2%
<b>Petroleum</b>	78.6%	21.4%	85.5%	14.5%
<b>Rubber</b>	97.9%	2.1%	89.4%	10.6%
<b>Stone</b>	66.5%	33.5%	87.3%	12.7%
<b>Primary Metal</b>	96.4%	3.6%	97.7%	2.3%
<b>Fabricated Metal</b>	99.6%	0.4%	98.6%	1.4%
<b>Machinery</b>	95.5%	4.5%	86.6%	13.4%
<b>Instruments</b>	93.2%	6.8%	98.2%	1.8%
<b>Wastes</b>	99.9%	0.1%	100.0%	0.0%
<b>Misc.</b>	0.0%	0.0%	0.0%	0.0%
<b>Bulk, Secondary, Intermodal Warehouse</b>	99.8%	0.2%	99.5%	0.5%

## GROWTH

The total growth for both truck and rail transportation in the region is projected at about a 1.6% for each. An increase is seen in all commodities except wood, which is projected to decrease by less than 1%. The greatest growth is seen in trucks transporting agricultural goods. The greatest growth in rail is seen in bulk, secondary, and intermodal warehouse goods.

Table 5.5. 2020 to 2050 Growth

	Truck	Rail
<b>Total</b>	1.66%	1.60%
<b>Agriculture</b>	21.04%	0.38%
<b>Mining</b>	1.04%	1.20%
<b>Food</b>	1.81%	1.88%
<b>Textile</b>	0.73%	0.80%
<b>Wood</b>	-0.10%	-0.11%
<b>Paper</b>	2.21%	2.64%
<b>Chemical</b>	1.73%	1.74%
<b>Petroleum</b>	2.39%	2.30%
<b>Rubber</b>	1.32%	1.50%
<b>Stone</b>	2.09%	3.28%
<b>Primary Metal</b>	2.43%	2.39%
<b>Fabricated Metal</b>	1.46%	1.52%
<b>Machinery</b>	2.93%	2.38%
<b>Instruments</b>	2.69%	3.90%
<b>Wastes</b>	1.62%	1.64%
<b>Misc.</b>	0%	0%
<b>Bulk, Secondary, Intermodal Warehouse</b>	8.34%	8.00%

## COMMODITY FLOW DISTRIBUTION

The following maps highlight the distribution of existing commodity flows, projected commodity flows, and growth between 2024 and 2050 for across the roadway network. The projected distribution of these flow for 2050 was determined by applying the determined growth to existing truck traffic volumes.

The highest growth in commodity flow is seen along US 80, US 280, and I-185, as well as segments of US 27 ALT. As these roadways will support a growing amount of freight and goods movement in the region, these should be prioritized for improvements where possible.

Figure 5.1. Commodity Flow

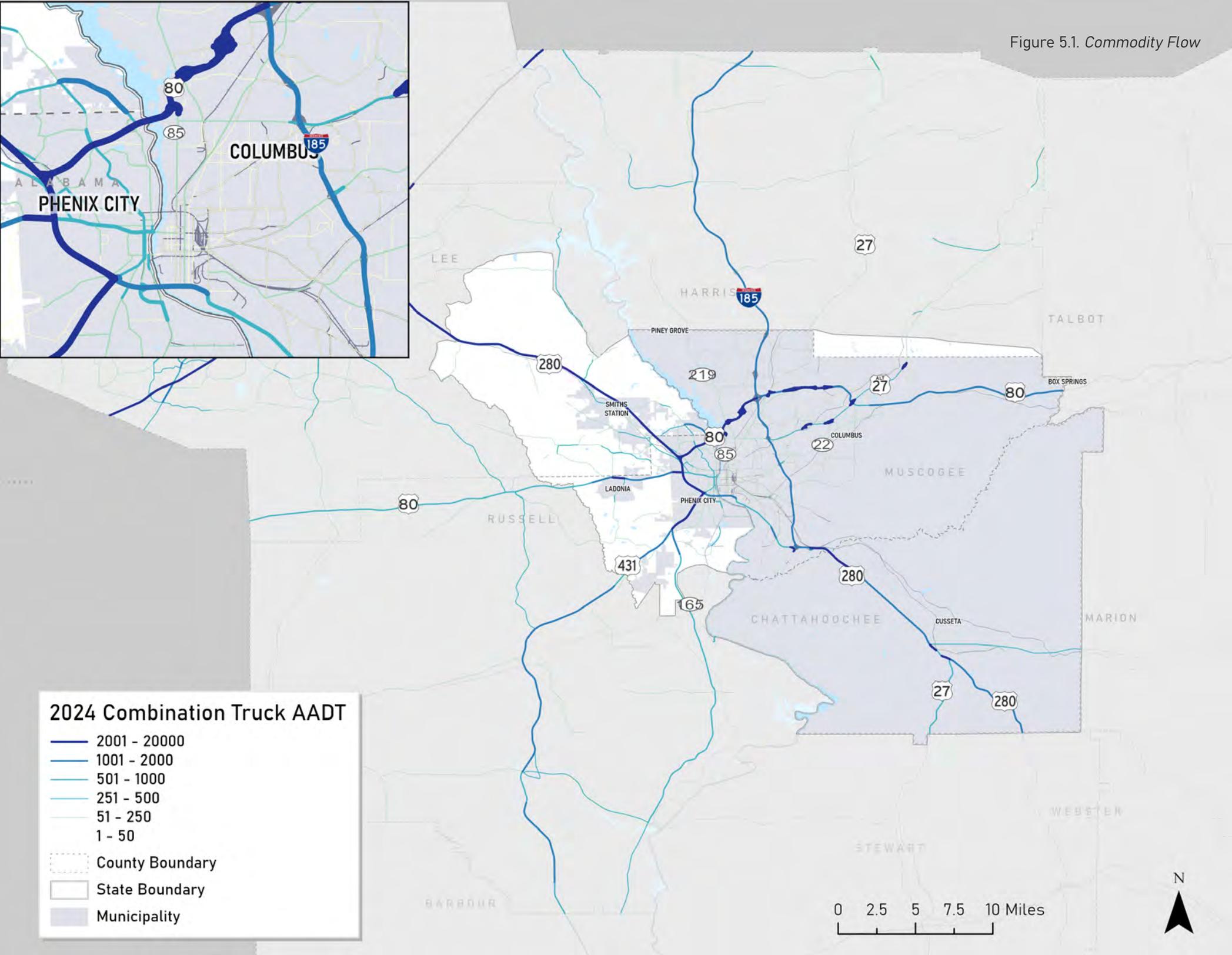


Figure 5.2. 2050 Commodity Flow

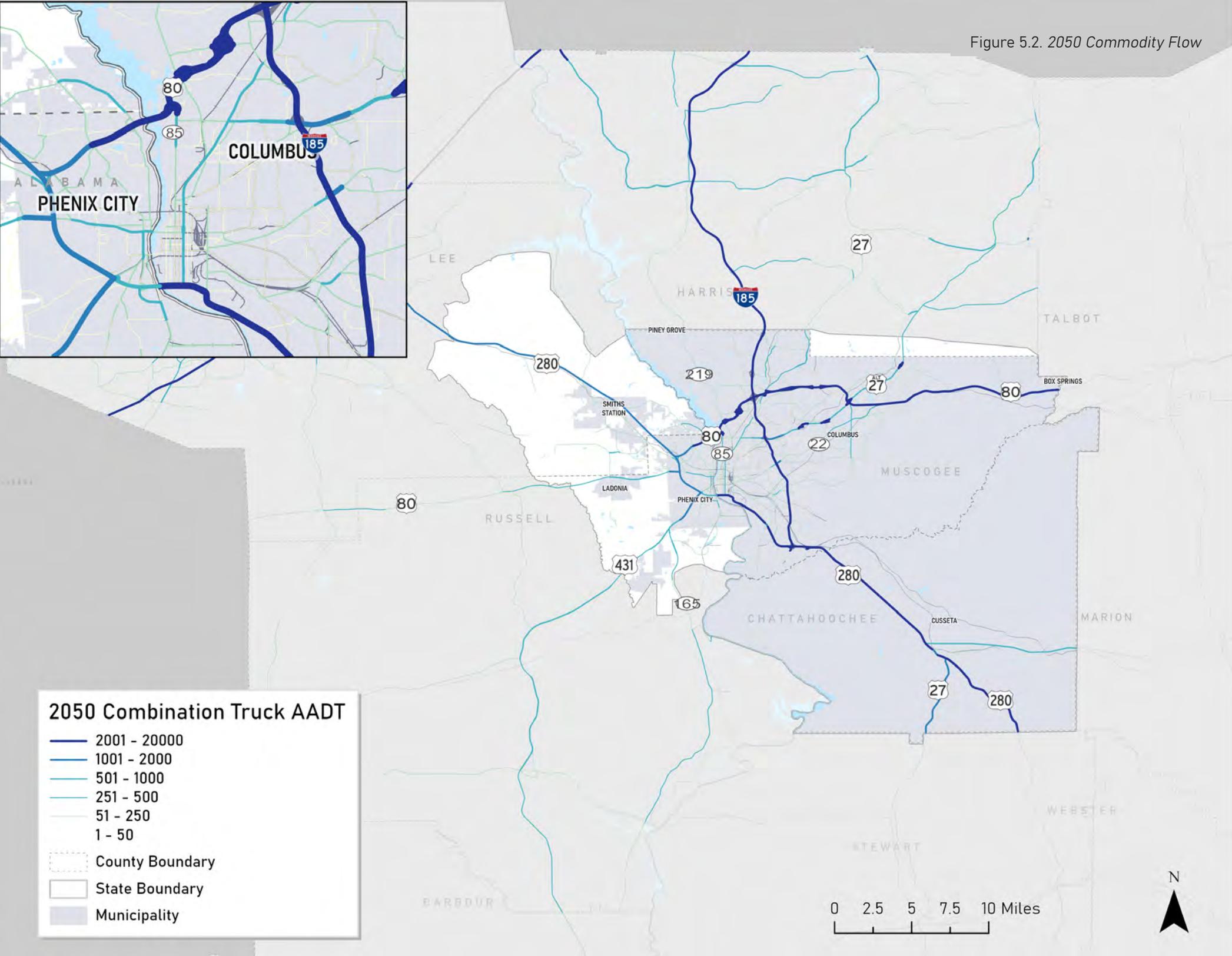
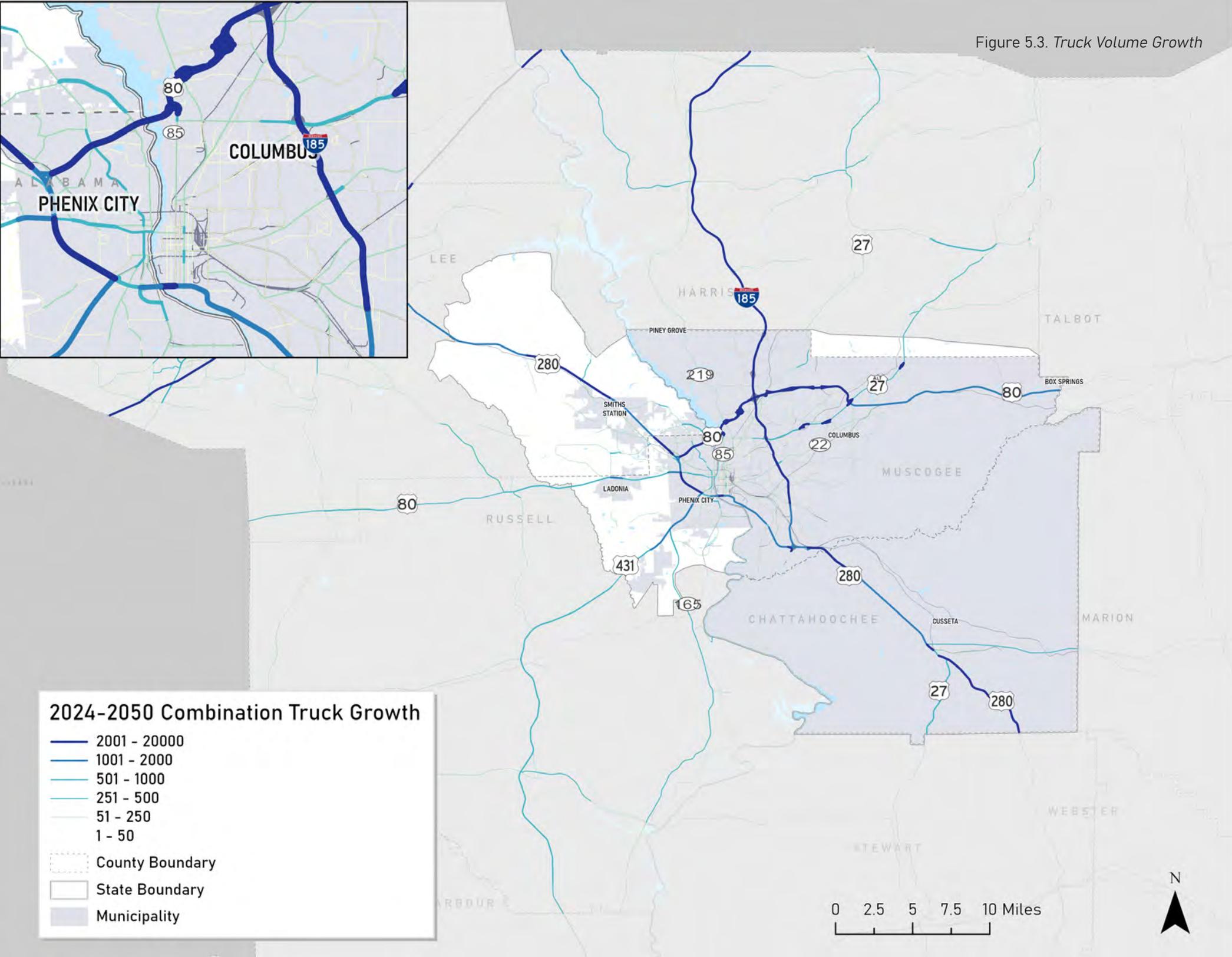


Figure 5.3. Truck Volume Growth



06

# Truck Parking

# Local Zoning and Ordinance Review

## RELEVANT ZONING CODES

### COLUMBUS-MUSCOGEE COUNTY

Columbus-Muscogee County has established three zoning designations that facilitate freight related activity in the region: Technical (TECH), Light Manufacturing/Industrial (LMI), and Planned Industrial/Manufacturing Development (PID). There are currently no zoning overlays related to freight parking.

### PHENIX CITY

Phenix City's zoning designations that facilitate freight are General Manufacturing (M-1), Heavy Manufacturing (M-2), and Highway Corridor Overlay (C-O). Phenix City also requires the establishment of off street loading space for all industrial plants or factories, freight terminals, and related uses.

## MUNICIPAL CODE REVIEW

**Table 6.1 Municipal Code Review**

Source: MuniCode

ARTICLE	SECTION	LANGUAGE	SOURCE	ANALYSIS	LINK
Chapter 20 - TRAFFIC	Sec. 20-6.6 - Loading or unloading; time of free parking	Between the hours from nine o'clock a.m. to six o'clock p.m., the operator of a vehicle while engaged in loading or unloading freight, express, parcel post mail, merchandise or other materials may occupy with such vehicle any parking space continuously for the period of 30 minutes, without the necessity of depositing any coin in such meter.	Columbus-Muscogee County	A truck related to industrial and commercial uses may occupy a parking space for up to 30 minutes without paying the parking meter.	<a href="https://library.municode.com/ga/columbus/codes/code_of_ordinances?nodeId=PTIICOR_CH20TR_ARTXVIPAME_S20-16.6LOUNTIFRPA">https://library.municode.com/ga/columbus/codes/code_of_ordinances?nodeId=PTIICOR_CH20TR_ARTXVIPAME_S20-16.6LOUNTIFRPA</a>

ARTICLE	SECTION	LANGUAGE	SOURCE	ANALYSIS	LINK
Chapter 78 - TRAFFIC AND VEHICLES	Sec. 78-11 - Parking of oversize and commercial vehicles	(b)No person shall stop, park, or leave standing any oversize or commercial vehicle on any street, dedicated or undedicated, or alley within the municipality for a period longer than one hour. This section shall not apply to trucks and trailers used for conveying the necessary tools and materials to premises where labor using the tools and materials is to be performed during the actual time of parking such trucks or trailers.(c)No person shall stop or park any oversized commercial vehicle on any commercial lot not designated as a commercial truck stop area. This section shall not apply to trucks and trailer used for conveying the necessary tools or material to premises where work is being performed.(d)It shall be unlawful for a person to stop, park or stand or caused to be stopped, parked and stand any commercial vehicle in a residential district. This section shall not apply to trucks and trailers used for conveying the necessary tools and materials to premises where labor using the tools and materials is to be performed during the actual time of parking such trucks or trailers.	Phenix City	No commercial vehicles shall be parked or idled in any street or alley for more than an hour unless it is carrying tools and materials for an ongoing job. Unless a truck is being used for an ongoing job, trucks are not permitted to park in commercial lots that are not designated for oversized commercial vehicles. Commercial vehicles are prohibited in residential districts, unless they are carrying materials for an ongoing job.	<a href="https://library.municode.com/al/phenix_city/codes/code_of_ordinances?nodeId=PTIICOOR_CH78TRVE_ARTIINGE_S78-11PAOVCOVE">https://library.municode.com/al/phenix_city/codes/code_of_ordinances?nodeId=PTIICOOR_CH78TRVE_ARTIINGE_S78-11PAOVCOVE</a>
Chapter 78 - TRAFFIC AND VEHICLES	Sec 78-13 - Obstructing driveways and/or alleys prohibited.	(b)It shall be unlawful for any person to park or place any wagon, truck, or vehicle used for the transportation of goods, wares, or merchandise in any public alley within the city limits so as to obstruct or prohibit the passage of other vehicles through said alley. (c)It shall be unlawful for any person to park and leave unattended near any private or public driveway, any passenger vehicle in the city so as to prohibit ingress and egress through said driveway.(d)It shall be unlawful for any person to place any truck, wagon or vehicle used for the transportation of goods, wares or merchandise near any private or public driveway in the city so as to prohibit ingress and egress of the same.	Phenix City	Trucks and commercial vehicles are prohibited from parking in alleyways and along driveways in any manner that obstructs access to the aforementioned areas.	<a href="https://library.municode.com/al/phenix_city/codes/code_of_ordinances?nodeId=PTIICOOR_CH78TRVE_ARTIINGE_S78-13OBDRALPR">https://library.municode.com/al/phenix_city/codes/code_of_ordinances?nodeId=PTIICOOR_CH78TRVE_ARTIINGE_S78-13OBDRALPR</a>

# Available Facilities

The shortage of truck parking in the C-PCTS region is a growing safety issue. As e-commerce and freight traffic continue to increase, the demand for truck parking in the consistently exceeds the available supply. This shortage is particularly challenging given the area's role as a logistics hub. Truck parking is critical for drivers to comply with hours-of-service regulations, which require rest breaks. Lack of secure parking forces drivers to park in unsafe locations like road shoulders or exit ramps, increasing the risk of accidents. These practices also damage infrastructure, raising maintenance costs for local authorities. The following section outlines current available parking, as well as unauthorized parking occurring in the area.

## PUBLIC PARKING FACILITIES

Table 6.2 and Figure 6.1 outline the current non-reserved truck parking facilities, as well as their approximate capacity. Most of the truck parking is located in Columbus. Expanding truck parking in the Columbus-Phenix City MPO would mitigate safety risks, ease congestion, lower operational costs, and support local economic growth. However, the high cost of land in urban areas, especially around freight hubs, makes it difficult to develop new facilities. Addressing this issue will require collaboration between public and private sectors, with shared parking solutions proving effective in other regions facing similar shortages.

## PRIVATE PARKING FACILITIES

In addition to public truck parking facilities, private facilities can provide opportunities for secured truck parking at a fee. While

specific locations are kept private for safety reasons, businesses offering private parking facilities are limited in the region.

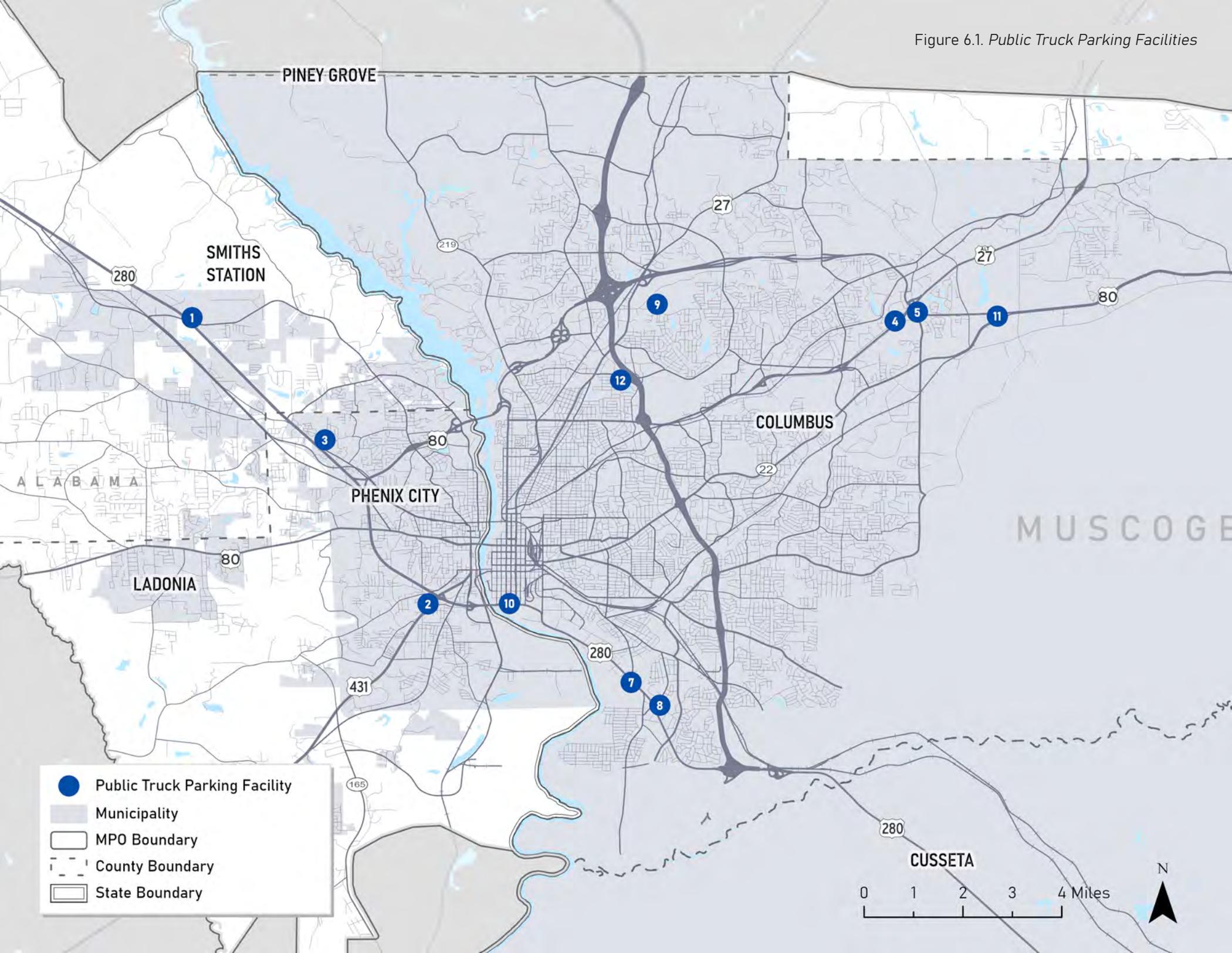
## UNAUTHORIZED PARKING

Discussions with stakeholders revealed specific locations where unauthorized truck parking has been frequently observed. This includes the Walmart Supercenter on Old Buena Vista Rd, as well as public right-of-way along Technology Pkwy and Warm Springs Rd.

**Table 6.2 Public Parking Facility Locations**

ID	Name	Location	City	Approx. Spaces	Overnight Parking
1	Love's Travel Stop #774	747 Lee Rd 248	Smiths Station, AL	50	Yes
2	Griggs Inc (Citgo)	410 Martin Luther King Jr Pkwy	Phenix City, AL	25	Yes
3	Walmart Supercenter	3700 Hwy 280/431 N	Phenix City, AL	10	Yes
4	Walmart Supercenter	6475 Gateway Road	Columbus, GA	12	Yes
5	Circle K	6900 Beaver Run Rd	Columbus, GA	5	No
6	Walmart Supercenter	2801 Airport Thruway	Columbus, GA	10	Yes
7	Spectrum #17 (Amoco)	3274 Victory Dr	Columbus, GA	2	No
8	Walmart Supercenter	3515 Victory Dr	Columbus, Ga	6	Yes
9	Walmart Supercenter	5448 Whittlesey Blvd Ste B	Columbus, GA	10	Yes
10	Spectrum	215 4th St	Columbus, GA	2	No
11	Chevron - Midland	8050 Beaver Run Rd	Midland, GA	20	Yes
12	Spectrum #8 (Amoco)	2536 Airport Thruway	Columbus, GA	2	Yes

Figure 6.1. Public Truck Parking Facilities



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# Land Use

# Columbus-Muscogee County

The three primary land use types that generate truck traffic are industrial, commercial/retail, and public/institutional. Freight-related land uses in the Columbus-Phenix City region are concentrated in Columbus, Georgia and Phenix City, Alabama, which serve as key freight hubs due to their strategic location along major transportation corridors. Data on freight infrastructure is primarily available from these two jurisdictions, as they represent the main areas of freight activity in the region.



## INDUSTRIAL

Columbus has a robust industrial base along Industrial Park East, Macon Road, and Miller Road. This region supports manufacturing, logistics, and warehousing activities. These industrial land uses are supported by the city's proximity to I-185 and US 80, making it an attractive location for freight-driven businesses. Columbus' industrial areas also benefit from close access to rail lines and connections to the Port of Savannah.



## COMMERCIAL/RETAIL

Commercial and retail land uses are concentrated along major thoroughfares like Veterans Parkway, Macon Road, and JR Allen Parkway. These corridors feature a mix of big-box stores, shopping malls, strip centers, and service-oriented businesses. There is a lot of commercial and retail development clustered along Veterans Pkwy, hosting large retailers like Walmart, Lowe's, and Target, alongside numerous smaller shops and restaurants. The commercial sector along these corridors serves both local residents and visitors, and it is a crucial hub for freight deliveries and distribution.

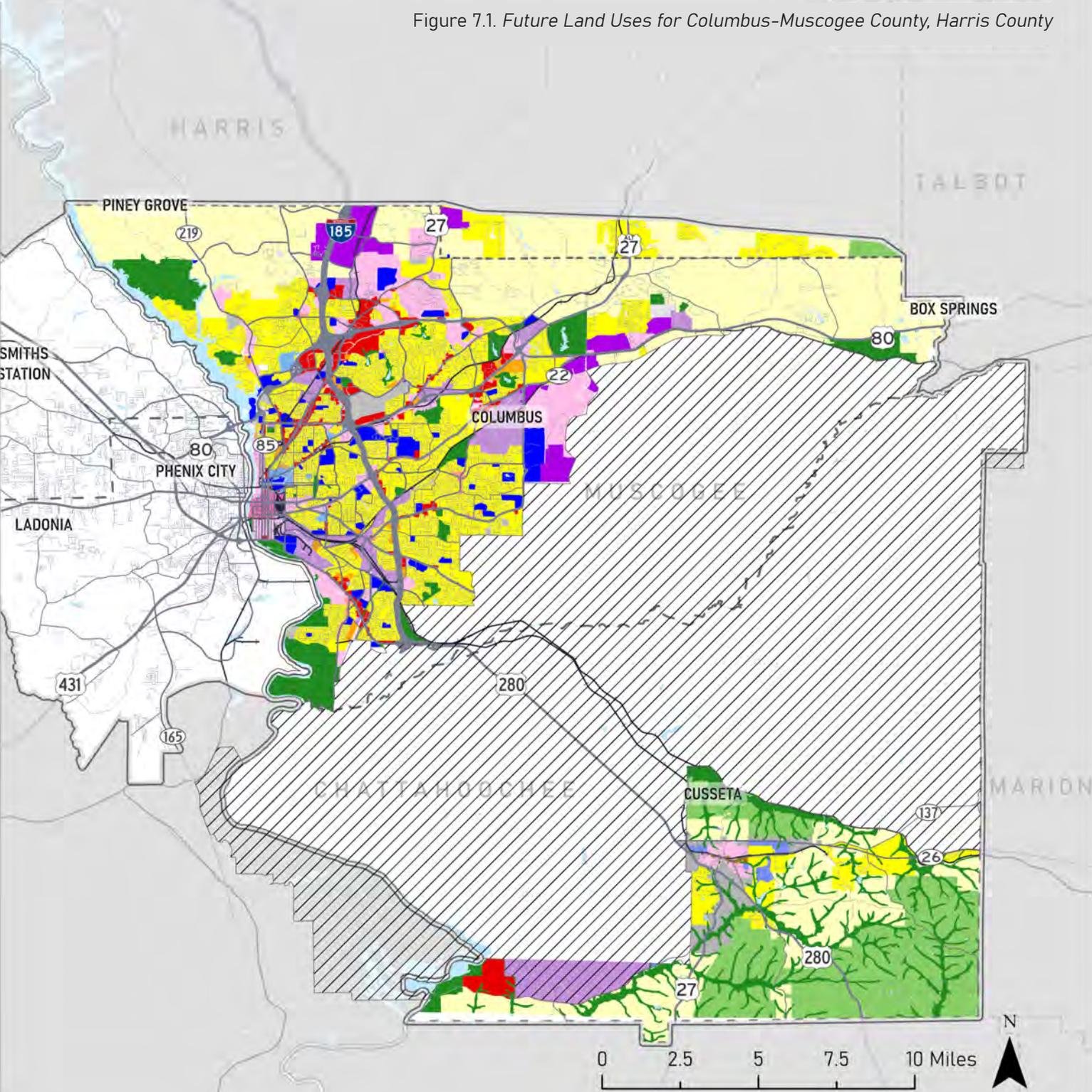


## PUBLIC/INSTITUTIONAL

Public and institutional land uses in Columbus are spread across the city but are especially concentrated in the Uptown district, that is characterized by a concentration of government buildings, parks, and cultural facilities. The Columbus Metropolitan Airport is a key institutional land use that supports and freight air traffic. Columbus State University and the Muscogee County School District are other major institutional uses, contributing to the area's educational and employment landscape.

Figure 7.1. Future Land Uses for Columbus-Muscogee County, Harris County

-  Fort Moore
  
- Columbus-Muscogee County**
-  Transportation/Communication/Utility
-  Parks/Recreation/Conservation
-  Light Manufacturing/Industrial
-  Heavy Manufacturing/Industrial
-  Neighborhood Commercial
-  General Commercial
-  Office/Professional; Office/Professional
-  Public/Institutional; Public/Institutional
-  Rural Residential
-  Single Family Residential; Single Family Residential
-  Multi Family Residential
-  Mixed Use
-  High Density Mixed Use
-  Vacant/Undeveloped
  
- Harris County**
-  Agricultural
-  Industrial
-  Public
-  Developing Suburban Area/Rural Residential
-  Suburban Area Built Out/Established Residence
  
- Chattahoochee County**
-  Agriculture
-  Conservation Area/State Park
-  In-Town Cusseta
-  Fort Benning Commercial
-  Rural Residential
-  Residential
-  Fort Benning
-  Major Highway Corridor
-  Cusseta Corridor
-  Other, Special



# Phenix City



## COMMERCIAL/RETAIL

Commercial and retail land uses are primarily located along US 280, US 431, and near the Phenix City North Bypass. A combination of regional shopping centers, local businesses, and retail strip malls are clustered along these corridors. Key commercial areas include the Peachtree Mall and various shopping centers along US 280, which serve both local residents and people traveling through the area. The commercial corridors in Phenix City also accommodate freight activity for deliveries to large retail outlets and restaurants.



## INDUSTRIAL

Phenix City's industrial areas are primarily located along US 280 and the Phenix City North Bypass. These areas include manufacturing facilities, warehouses, and distribution centers. The city's industrial base is supported by its proximity to major transportation routes, including I-185 and the US 431 Bypass, as well as its access to rail and river transport.



## INSTITUTIONAL

Phenix City's public and institutional land uses include government buildings, schools, and healthcare facilities. Healthcare facilities like East Alabama Medical Center provide essential services for region. The city's transportation network connects key institutional areas to the broader regional network, facilitating both local and freight movement.

Figure 7.2. Phenix City Land Use Plan

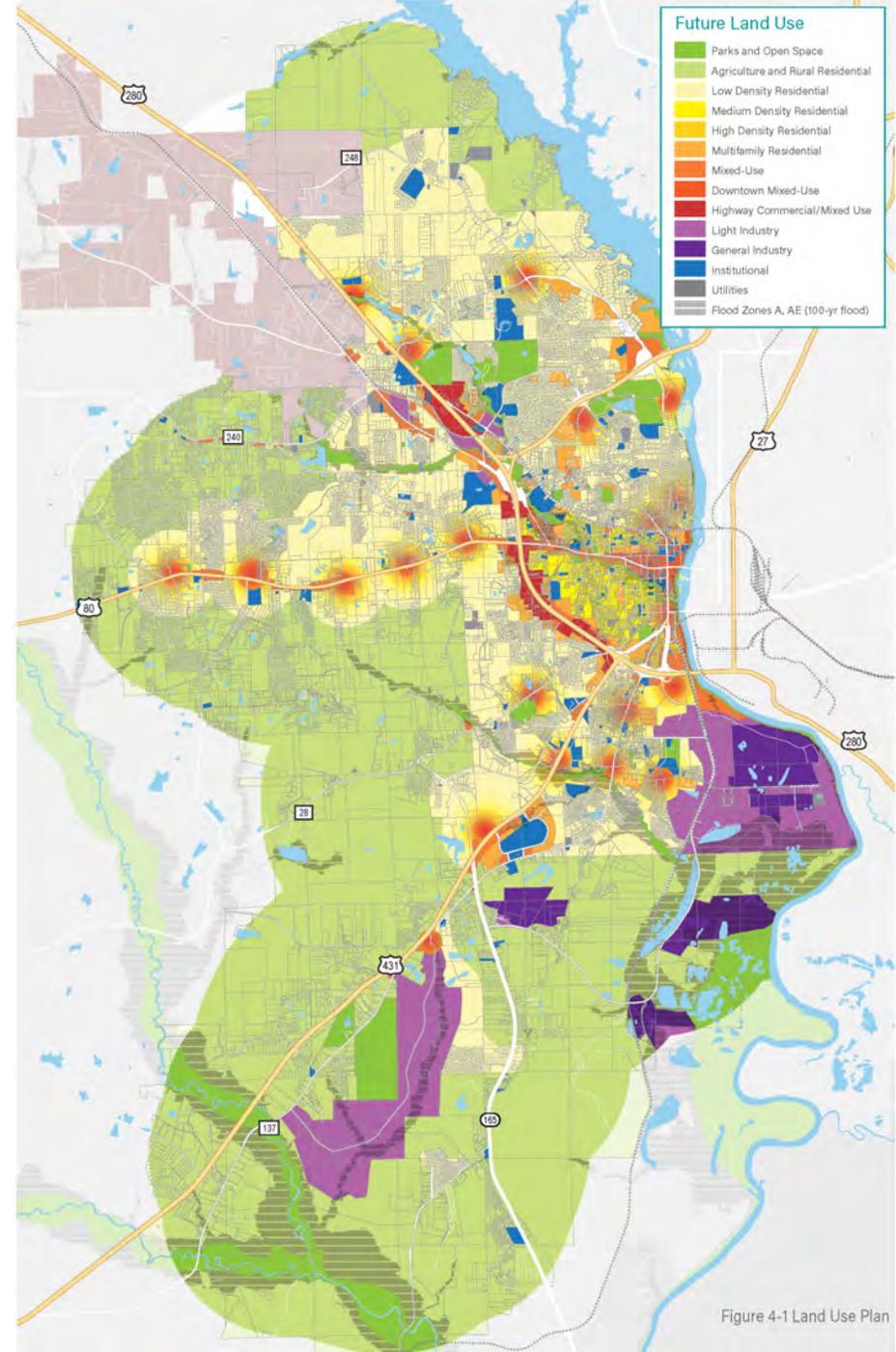


Figure 4-1 Land Use Plan

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# Needs Analysis and Recommendations

# Roadway Freight Needs Analysis

**The purpose of this section is to identify the proposed improvements within the 2050 MTP that are most beneficial to freight mobility based on the analysis within this document. This is done by comparing projects along freight routes to freight-related conditions and needs throughout the region.**

## INTRODUCTION

The identified criteria utilized in this section highlight existing conditions that contribute to freight inefficiencies within the network. By strategically implementing recommended freight projects, benefits can be maximized in order to provide the greatest benefit to the goods movement and unrelated traffic that may be impacted by freight traffic in the region.

The primary elements considered are:

- Intersection Delay
- Overall Bottlenecks
- Truck Traffic
- Freight Safety



## FREIGHT DELAY

Analysis of truck delay was performed using Travel Time Index, which measures congestion by comparing travel times during peak hours to free-flow conditions. Many of the corridors and intersections with the greatest delay, shown in red in the following map, are found off of the freight network, limiting the number of freight projects identified at these locations. The freight projects at locations with the greatest delay are found at the US 280 at General Colin Powell Pkwy Ramp, Buena Vista Rd at 13th St, US 80 at US 27, and US 80 at US 280.



## TRUCK TRAFFIC

In order to derive truck traffic volumes, Replica database was used to examine truck travel patterns and truck volumes. Daily freight volumes are presented in the following map.

As expected, truck volumes are highest along freight routes that provide regional connections throughout the MPO. The highest volumes are seen on US 80 and US 280, coinciding with a number of identified freight projects in both Georgia and Alabama. US 431 in southern Phenix City also sees significant freight traffic. These projects are planned to improve freight movement along these high traffic road segments.



## BOTTLENECKS

Bottleneck locations were identified and ranked in this analysis to understand areas with the most significant traffic disruption. Many of these bottlenecks can be found in Downtown Columbus and along freight routes, particularly US 80 and I-185. Freight projects along US 80, Buena Vista Rd, US 27, and Brennan Rd were identified at top bottleneck locations, thus will provide improvement to these areas of disruption.



## FREIGHT SAFETY

Roadways with high crash density and one or more fatal or serious injury (KSI) crashes represent areas with significant safety needs.

Areas of high crash density are often seen along major roadways, such as US 80 and I-185. KSI crashes are seen throughout the MPO, occurring at locations with high traffic volumes, such as US 80, complicated turning movements, such as major intersections, and difficult roadway geometry, such as curves along rural roadways.

Freight projects identified in locations with a high safety need include those along US 80 in Alabama and Georgia, interchanges and exit ramps along US 80, Buena Vista Road, and SR 26 in Cusseta.

Figure 8.1. Freight Delay

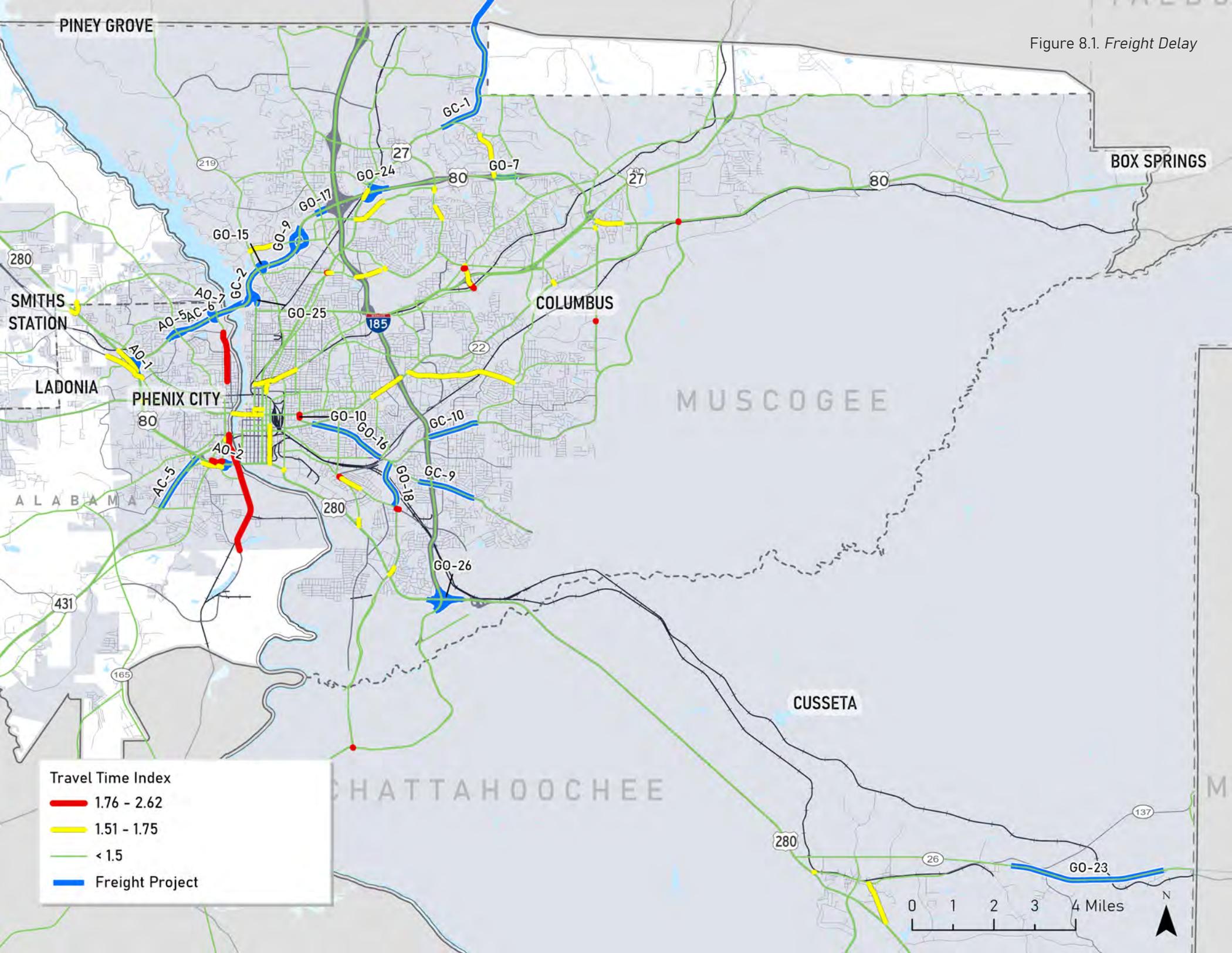


Figure 8.2. Truck Traffic

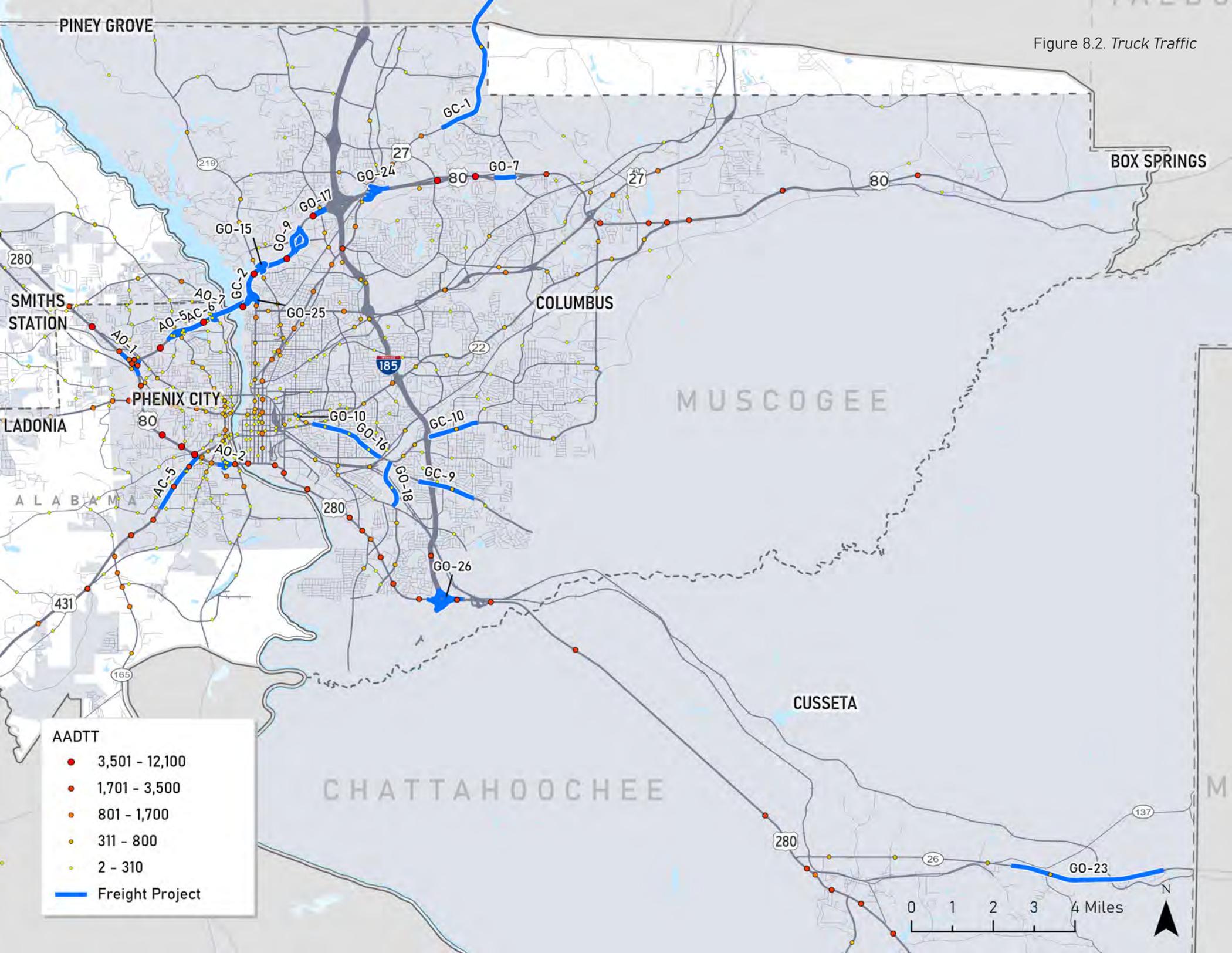


Figure 8.3. Bottlenecks

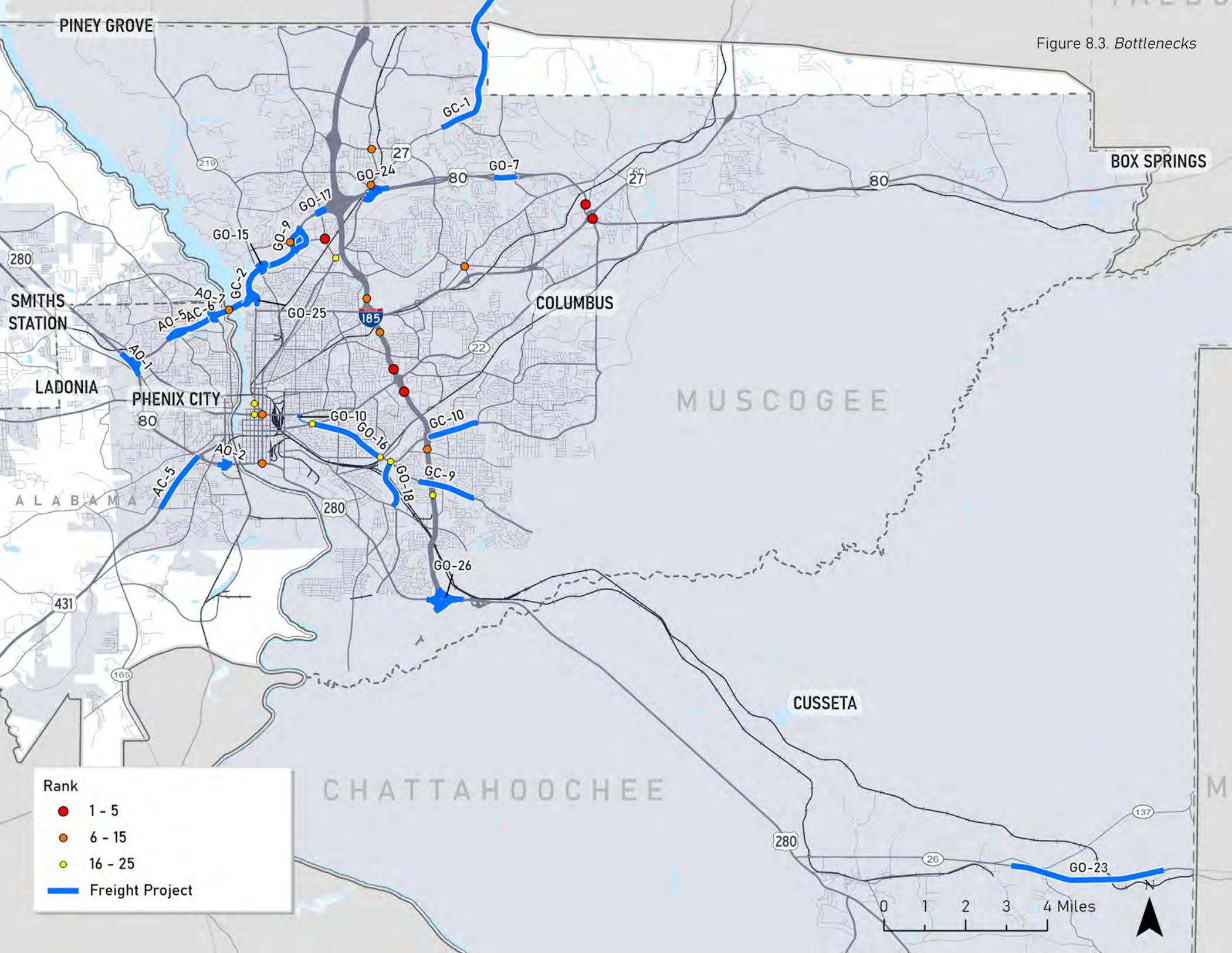
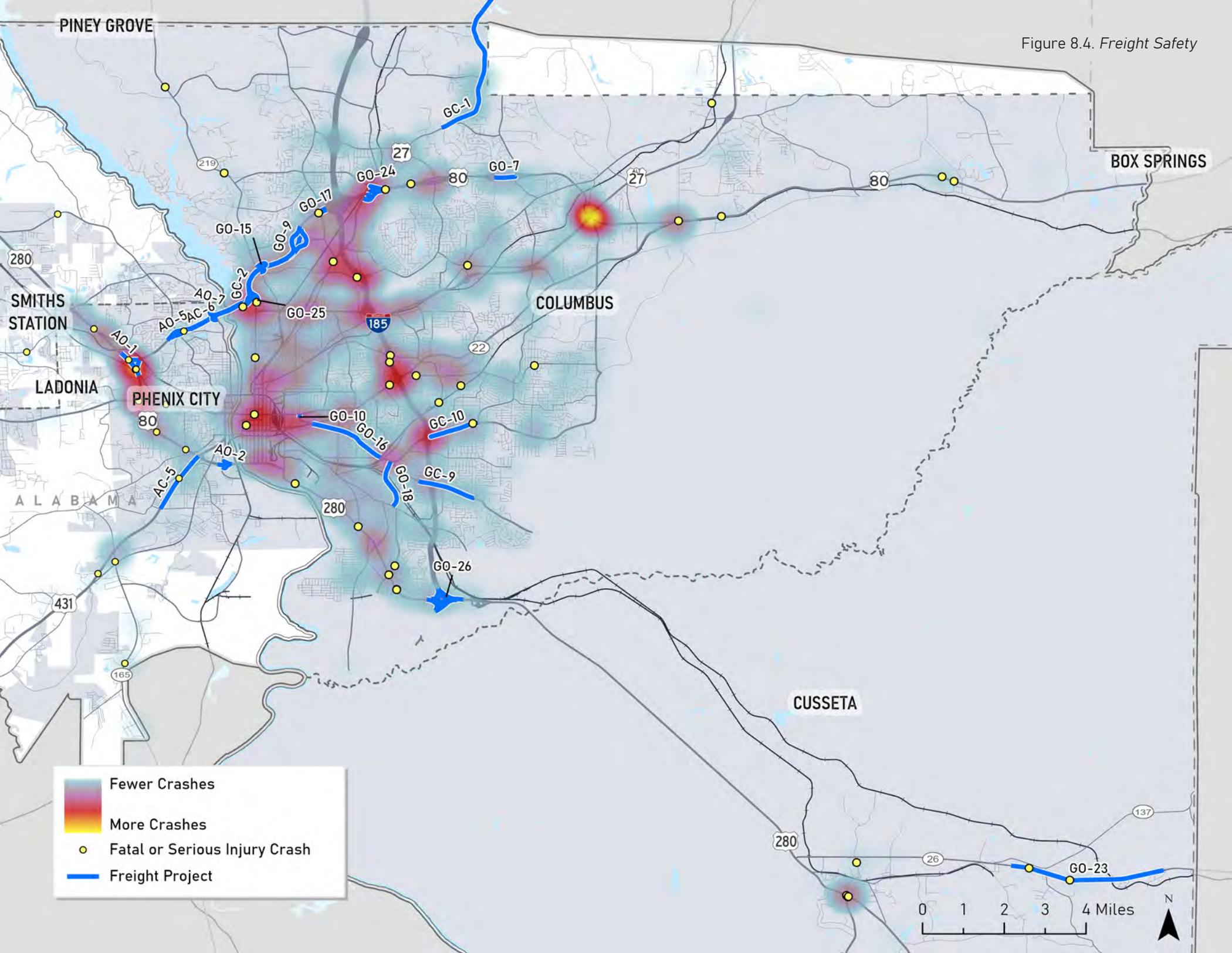


Figure 8.4. Freight Safety



## CUMULATIVE ANALYSIS RESULTS

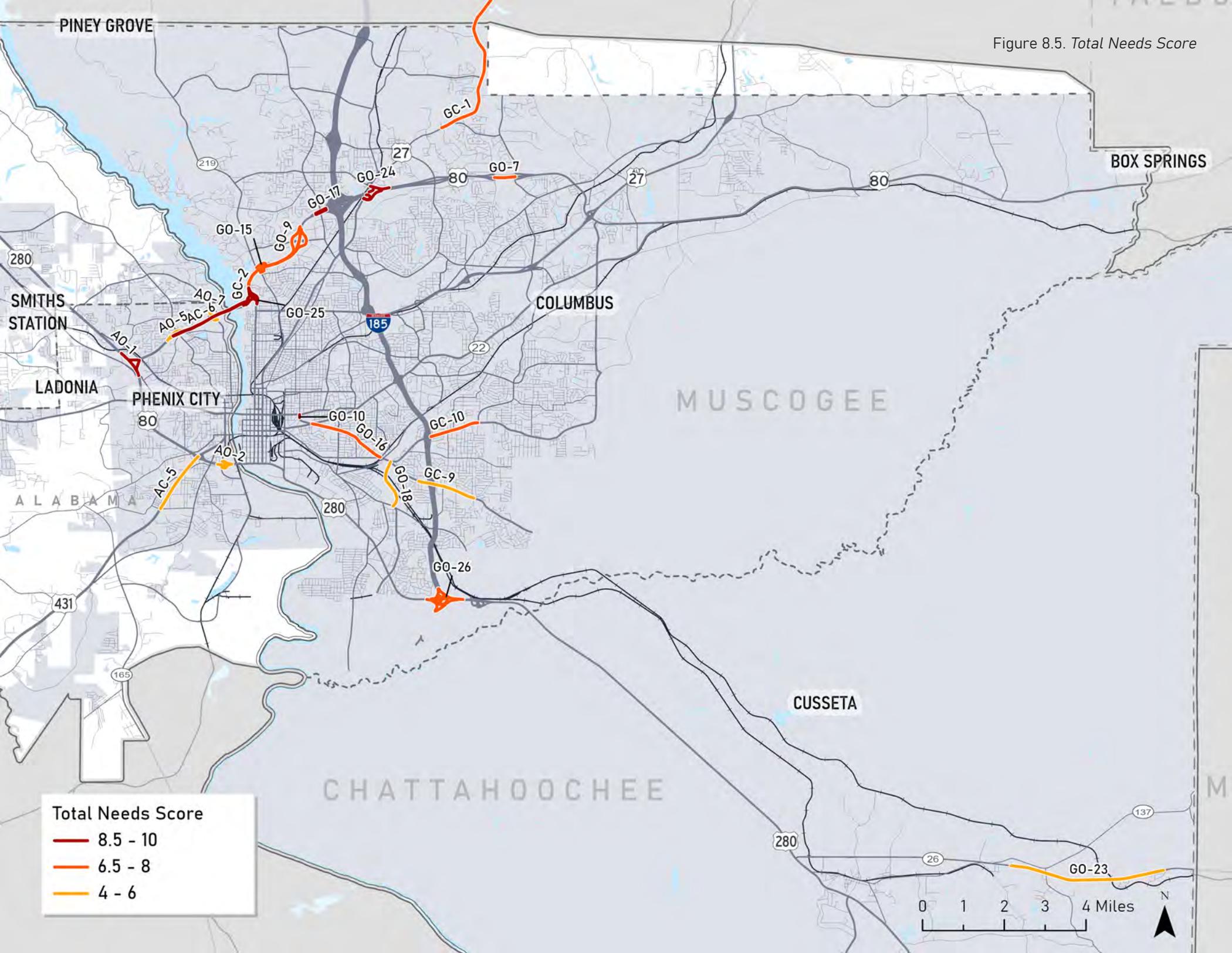
In order to understand the overall benefit provided by each project, the needs analysis included scoring based on each element described above. Each project received a score representing the need at its location in relation to intersection delay, bottlenecks, truck traffic, and safety conditions. A higher score represents a greater need for improvements at the location. Scores were then summed to create a total needs score, which can be compared between projects to understand the overall benefit that each could provide upon implementation. Projects with the highest needs score represent those that can have the greatest positive impact on freight movement.

The following map and table show the total needs score for each freight project across the MPO. Six projects with the highest needs score are found along US 80 between US 280 and Moon Rd. These projects serve freight in both Alabama and Georgia and will create improvements along a crucial regional connection. It should also be noted that this segment of US 80 has been identified as the corridor for the proposed I-14 extension into Georgia from Texas.

Table 8.1. Needs Analysis Scoring

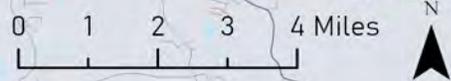
ID	Project Name	Delay Score	AADTT Score	Bottleneck Score	Safety Score	Total Score
AC-6	US 80 Widening from 4 to 6 lanes from Summerville Road to GA 22 Connector	1	3	3	3	10
GO-24	US 80 at US 27 Ramp Improvements	2	3	2	3	10
GO-25	US 80 at GA 22 Ramp Improvements	1	3	2.5	3	9.5
GO-10	Buena Vista Road at 13th Street Improvements	3	3	1.5	2	9.5
AO-1	New Interchange at US 80 and US 280	2	1	3	3	9
GO-17	US 80 at I-185 Ramp Improvements	1	2	3	2.5	8.5
GC-10	CR 2228 / Buena Vista Road Widening from 4 to 6 lanes between Lyndon Circle to Floyd Road	1	3	1.5	2.5	8
GO-9	US 80 at Bradley Park Dr Ramp Improvements	1	3	2	2	8
GO-7	JR Allen (US 80) Intersection Improvements at Schomberg Road	1	2	3	2	8
GC-1	SR 1 / US 27-Veterans Parkway Widening to 4 lanes between Turnberry Lane to SR 315	1	3	1.5	1.5	7
GO-16	Buena Vista Road Corridor Improvements from Wynnton Road to Andrews Road	1	3	1	2	7
GC-2	US 80 Widening from 4 to 6 lanes from GA 22 Connector to Bradley Park Drive	1	1	3	2	7
GO-15	US 80 at River Rd Ramp Improvements	1	2	2	2	7
GO-26	US 27 at Lindsey Creek Pkwy Ramp Improvements	1	1	3	2	7
GO-18	Brennan Road Complete Streets between Buena Vista Road to Cusseta Road	1	3	1	1.5	6.5
GC-9	St. Mary's Road Widening from 2 to 4 lanes from Robin Road to Northstar Drive	1	2	1.5	2	6.5
AC-5	US 431 Widening from 4 to 6 lanes from 5th Street to US 280	1	1	2.5	2	6.5
AO-2	US 280 at General Colin Powell Pkwy Ramp Improvements	3	1	1	1	6
GO-23	Passing Lanes on SR 26 from SR 1/SR 520 to Marion County at 2 Locations	1	1	1.5	2.5	6
AO-5	US 80 at SR 61 Ramp/Summerville Rd Improvements	1	1	1	2	5
AO-7	US 80 at River Chase Dr Ramp Improvements	1	1	1	1	4

Figure 8.5. Total Needs Score



**Total Needs Score**

- 8.5 - 10
- 6.5 - 8
- 4 - 6



## COMPARISON OF COST FEASIBLE WORK PROGRAM TO FREIGHT NEEDS

The following table compares freight needs and scoring with programmed projects from the 2050 MTP, including year of expenditure (YOE) and total project cost.

As shown, many of the more critical improvements for freight mobility are in the fiscally constrained MTP work program. It should be noted that MTP capacity projects were not programmed due to an overall shortfall of available funding currently available from ALDOT. Coordination with ALDOT is underway to program funds for these projects.

Table 8.2. Needs Analysis Scoring

ID	Project Name	Total Score	PE YOE	ROW YOE	UTL YOE	CST YOE	Total Project Cost*
AC-6	US 80 Widening from 4 to 6 lanes from Summerville Road to GA 22 Connector	10	-	-	-	-	\$19,224,490
GO-24	US 80 at US 27 Ramp Improvements	10	2026	2028	2044	2044	\$80,531,801
GO-25	US 80 at GA 22 Ramp Improvements	9.5	2025	2027	2034	2034	\$62,434,852
GO-10	Buena Vista Road at 13th Street Improvements	9.5	2026	2027	2044	2044	\$6,382,362
AO-1	New Interchange at US 80 and US 280	9	-	-	-	-	\$52,024,188
GO-17	US 80 at I-185 Ramp Improvements	8.5	2025	2027	2034	2034	\$62,434,852
GC-10	CR 2228 / Buena Vista Road Widening from 4 to 6 lanes between Lyndon Circle to Floyd Road	8	2025	2027	2034	2034	\$14,180,462
GO-9	US 80 at Bradley Park Dr Ramp Improvements	8	ASP	ASP	ASP	ASP	\$52,024,188
GO-7	JR Allen (US 80) Intersection Improvements at Schomberg Road	8	2026	2028	-	2029	\$12,550,072
GC-1	SR 1 / US 27-Veterans Parkway Widening to 4 lanes between Turnberry Lane to SR 315	7	-	-	-	2025	\$33,669,348
GO-16	Buena Vista Road Corridor Improvements from Wynnton Road to Andrews Road	7	2025	2025	-	2027	\$10,700,000
GC-2	US 80 Widening from 4 to 6 lanes from GA 22 Connector to Bradley Park Drive	7	2027	2029	2034	2034	\$53,696,557
GO-15	US 80 at River Rd Ramp Improvements	7	2025	2027	2034	2034	\$62,434,852
GO-26	US 27 at Lindsey Creek Pkwy Ramp Improvements	7	2026	2028	2044	2044	\$80,531,801
GO-18	Brennan Road Complete Streets between Buena Vista Road to Cusseta Road	6.5	2025	2025	-	2027	\$9,200,000
GC-9	St. Mary's Road Widening from 2 to 4 lanes from Robin Road to Northstar Drive	6.5	2025	2027	2034	2044	\$33,570,147
AC-5	US 431 Widening from 4 to 6 lanes from 5th Street to US 280	6.5	-	-	-	-	\$17,176,632
AO-2	US 280 at General Colin Powell Pkwy Ramp Improvements	6	-	-	-	-	\$25,024,188
GO-23	Passing Lanes on SR 26 from SR 1/SR 520 to Marion County at 2 Locations	6	2031	2033	-	2035	\$8,807,219
AO-5	US 80 at SR 61 Ramp/Summerville Rd Improvements	5	-	-	-	-	\$52,024,188
AO-7	US 80 at River Chase Dr Ramp Improvements	4	-	-	-	-	\$3,620,257

\*Inflated for Program Year

# Roadway Recommendations

## KEY FINDINGS FROM COMMODITY FLOW ANALYSIS

The commodity flow analysis identified key roadways that are projected to experience significant increases in freight traffic carrying goods throughout the region. The greatest growth is seen along US 80, US 280, and I-185, as well as segments of US 27 ALT. In order to support growth on these roadways, freight-related improvement projects should be prioritized along these corridors where possible to ensure efficient movement of freight and goods across the region.

## ROADWAY RECOMMENDATIONS

In addition to the identified capacity and operational improvement projects, additional actions that

are recommended to maximize improvements to the freight network are described below.

### INVESTIGATE THE POTENTIAL FOR INFRA AND RAISE GRANTS FOR US 80 CORRIDOR

While the Bipartisan Infrastructure Law is set to expire after 2025, many of its existing programs are anticipated to be carried forward in some form. Two relevant discretionary funds are the Infrastructure for Rebuilding America (INFRA) and Better Utilizing Investments to Leverage Development (BUILD) Grant Programs. Given the current and projected freight volumes along the US 80 Corridor, these programs should be investigated to fund a portion of the \$513M worth of needs along the corridor throughout the C-PCTS MPO area. It should be noted, that \$334M of funding for US 80 projects are currently

in the 2050 MTP cost feasible work program for improvements in the Georgia segments of the corridor. Furthermore, none of the \$126.9M of needed improvements to the Alabama portions are in the cost feasible plan due to funding constraints. The infusion of these federal funds would create the potential for all of the US 80 identified in the plan to be implemented over the 25-year timeframe of the MTP. The infusion of federal funds for this corridor would also promote the extension of the proposed I-14 Corridor through the C-PCTS MPO region.



## PROMOTE I-14 PROJECT

An issue that was raised during the MTP development process was the recognition of the I-14 initiative. Based on documentation sent to the project team, the inclusion aligns with the significant support from key stakeholders, including the C-PCTS MPO, Columbus-Muscogee, Phenix City, Russell County, GDOT, and ALDOT through various Letters of Concurrence and Resolutions. The alignment through the C-PCTS MPO would generally follow the US 80 corridor through the region with a connection at some point west of US 280 in Alabama. Congress has officially designated the route through the MPO coverage area, per Pub. L. No. 117-58.

Given its absence of mention in the statewide transportation plans for both GDOT and ALDOT, the I-14 initiative is viewed as more of an aspirational initiative, however, the C-PCTS MPO does support the following policy initiatives regarding I-14:

- Continue to monitor and support activities of GDOT and ALDOT to further the development of I-14 within their respective states and the C-PCTS MPO region.
- Promote the development of the proposed projects along US 80 and its interchanges to conform to FHWA interstate standards.



# Policy Needs and Recommendations

The following sections describes specific policy recommendations that can be implemented to improve freight functioning throughout the C-PCTS MPO. These recommendations were developed based on the identified needs in the area.

## TRUCK PARKING

Truck parking is an important element to maintaining a healthy economy and supporting nearby industries. Furthermore, there is a national shortage of truck parking. Based on the truck parking analysis (provided in Section 6), there is an overall shortage of parking in the C-PCTS MPO region as well. The primary document utilized to inform this Plan for truck parking guidelines was the FHWA Truck Parking Development Handbook.

Per the Handbook, there are four questions that need answered to identify ideal sites for truck parking. These questions, along with the answers that apply to the C-PCTS MPO are provided below in Table 8.3.

The primary considerations for siting truck parking facilities areas follows:

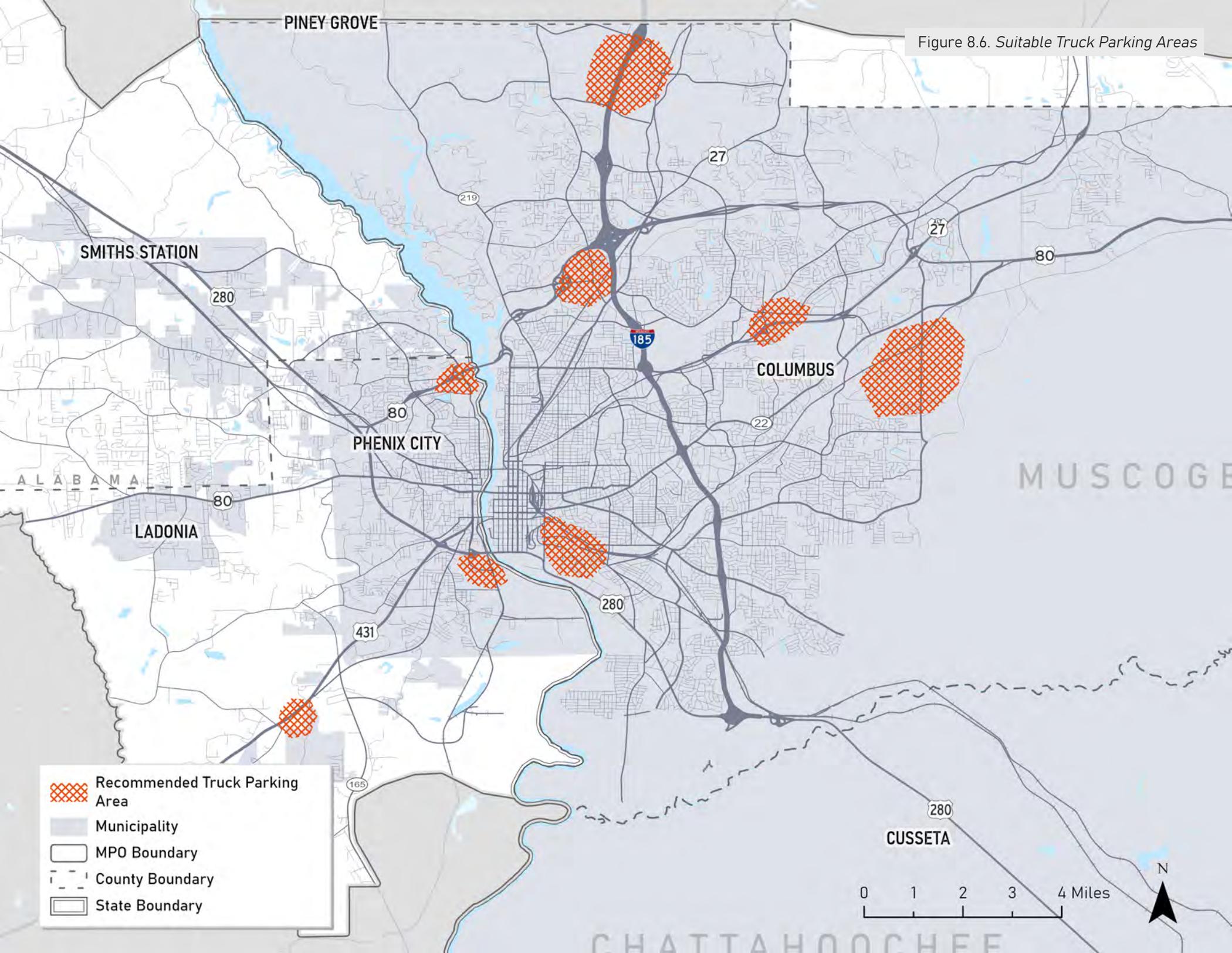
- Avoid sites near residential land uses, schools, and other community amenities where people may be exposed to air, noise, and light pollution. Site design and buffering can be used to further mitigate these issues.
- Prioritize locations near major highways with suitable access to reduce traffic impacts and increase trucking efficiency.
- Evaluate how siting choices will positively or negatively impact the equitable distribution of transportation externalities in your community.
- Co-locate with existing industrial developments to better serve the freight industry and reduce community impacts.
- Choose sites with sufficient space and utilities for restrooms and trash service.
- Consider how truck traffic may impact on other critical transportation services, such as ambulances or firetrucks.

Based on these considerations, Figure 8.6 shows the areas of the C-PCTS MPO most suitable for truck parking.

Table 8.3. Answers to Questions for Truck Parking Siting

Question	Answer
Where are the existing land uses that attract truck traffic? For example, an industrial park or a port.	Columbus-Muscogee County <ul style="list-style-type: none"> <li>· Fort Moore</li> <li>· US 27</li> <li>· Martin Luther King Jr Blvd</li> <li>· Fortson Rd</li> <li>· Morris Rd</li> </ul> Phenix City <ul style="list-style-type: none"> <li>· US 80</li> <li>· US 280</li> <li>· Us 431</li> <li>· South of Downtown along the river</li> <li>· Downing Dr</li> </ul>
Which highways in your community carry the highest levels of truck traffic?	<ul style="list-style-type: none"> <li>· US 80</li> <li>· US 280</li> <li>· US 431</li> </ul>
Where are existing truck parking facilities near or over capacity? Consider that drivers will easily find and utilize new capacity near places they already search for parking.	<ul style="list-style-type: none"> <li>· Along US 280</li> <li>· Along US 80</li> <li>· Intersection of US 80 and US 27 ALT</li> <li>· Large commercial centers near I-185</li> </ul>
Where are commercial and industrial developments expected to occur?	Columbus-Muscogee County <ul style="list-style-type: none"> <li>· I-185</li> <li>· I-185</li> <li>· SR 85</li> <li>· SR 22</li> <li>· US 280</li> </ul> Phenix City <ul style="list-style-type: none"> <li>· Downtown</li> <li>· South of Downtown along the river</li> <li>· US 431</li> <li>· US 80</li> <li>· US 280</li> <li>· Downing Drive</li> <li>· Brickyard Road</li> </ul>

Figure 8.6. Suitable Truck Parking Areas



- Recommended Truck Parking Area
- Municipality
- MPO Boundary
- County Boundary
- State Boundary

0 1 2 3 4 Miles



## INDUSTRIAL DEVELOPMENT

There are several publications that provide guidance on industrial development. The primary document utilized to inform this Plan was the Will County (IL) Community-Friendly Freight Mobility Plan Appendix I: Community Freight Development Best Practices and Checklist. While some of the best practices within the document are more suitable for more urbanized areas, the following guidelines are applicable to the C-PCTS MPO region:

### SITE LOCATION

Industrially efficient locations are those that:

- Provide efficient access to multiple modes of freight transportation
- Create clustering opportunities for

manufacturing, logistics, and distribution facilities to serve each other

- Include sufficient contiguous, available land to meet the demand for future industrial and freight generating uses
- Maximize existing infrastructure capacity or logical expansion capacity
- Provide convenient access to the necessary workforce

### DESIGN GUIDELINES

Create industrial design guidelines for site planning, lighting, signage, parking, landscaping, and architecture, such as:

- Using scale appropriate guidelines for developments. Existing requirements for smaller buildings and developments do not translate or may not apply to large freight scale

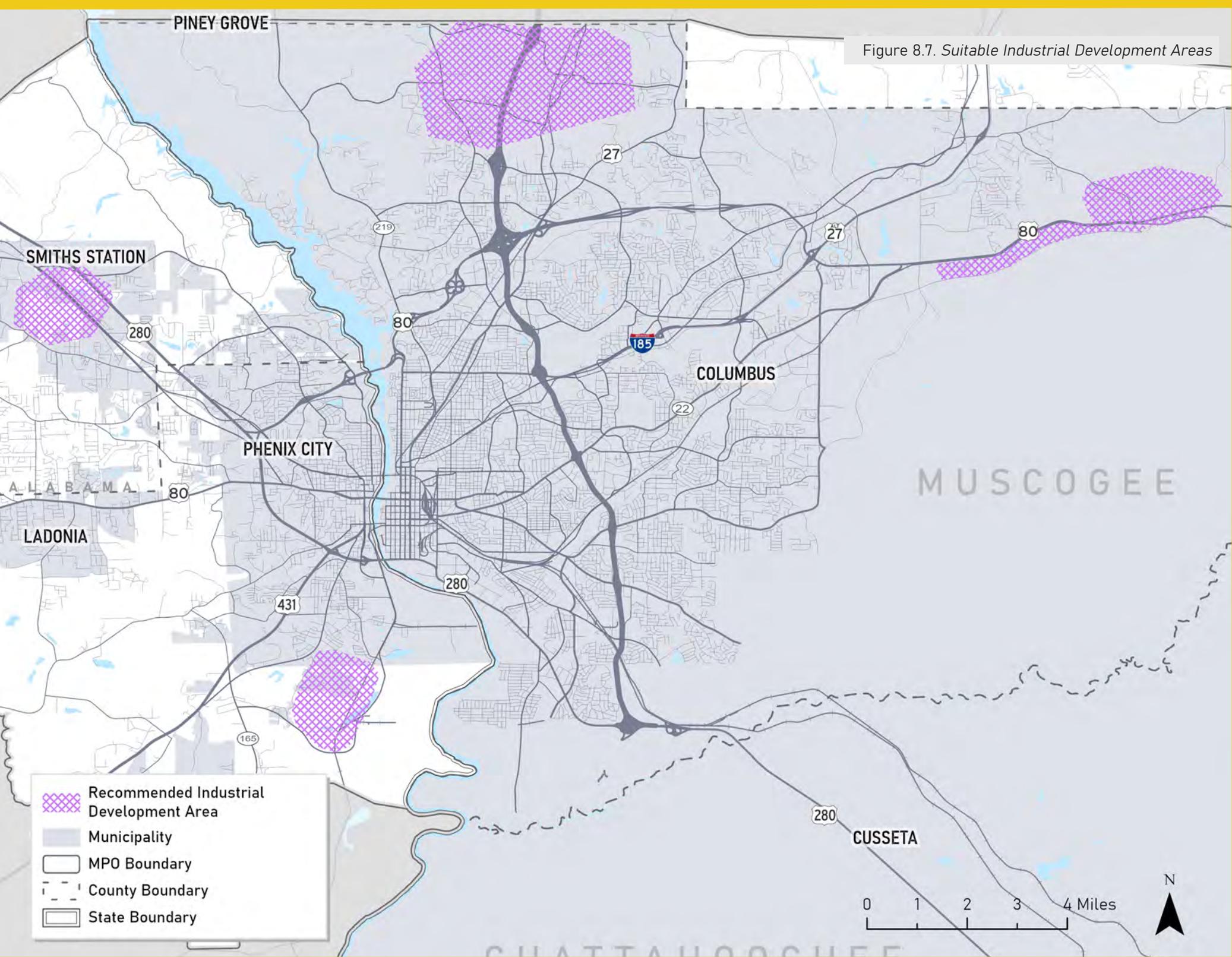
developments or intermodal facilities

- Updating land use codes to establish parking guidelines for freight uses by industry standards for the appropriate uses
- Determining appropriate location and orientation of buildings, loading docks, trailer parking, service drives and truck use areas in relation to adjacent uses
- Mitigate potential conflicts with nearby residential uses by:
  - » Preparing buffering, screening and separation guidelines
  - » Identifying significant noise, vibration, traffic, air or light impacts

Based on these guidelines, Figure 8.7 shows the areas that represent potential sites for new industrial development:

- US 280 near Smiths Station – Large tracts of developable land, minimal potential conflicts with residential uses, and access to US 80.
- Brickyard Road – Access to US 431 and rail, large tracts, minimal residences, and located near existing industrial land uses along the river.
- US-185 between Williams Rd and Smith Rd – Large tracts of undeveloped land located near I-185 and existing industrial uses with minimal residences.
- US 80 Corridor north of Fort Moore – Large tracts of undeveloped land along US 80 connection. Some rural residences need to be considered in this location.

Figure 8.7. Suitable Industrial Development Areas



## RAIL CROSSING SAFETY AND ACCESS

Based on the analysis within, the following actions are recommended to promote safety and minimize future delay at key railroad crossings in the C-PCTS MPO area.

Section 130 is a program administered by GDOT and ALDOT to fund railway crossing safety improvements throughout the state. Based on the safety risks identified by FRA (in Section 3) the C-PCTS MPO and local officials in Georgia should coordinate with GDOT to investigate the potential for Section 130 improvements at the following locations:

- 9th Avenue at Norfolk Southern Railroad
- Apex Road at Norfolk Southern Railroad
- Chattsworth Road at Norfolk Southern Railroad
- 10th Avenue at Great Southwestern Railroad
- Forrest Drive at Norfolk

Southern Railroad

- 10th Street at Norfolk Southern Railroad

In Alabama, the C-PCTS MPO and local officials should coordinate with ALDOT to investigate the potential for Section 130 improvements at the following locations:

- Brickyard Road at Columbus & Chattahoochee Railroad
- State Docks Road at Columbus & Chattahoochee Railroad
- CR 249 at Norfolk Southern Railroad

In order to minimize delays at key intersections, the C-PCTS MPO should coordinate with the GDOT Rail Division and FRA to monitor the level of rail traffic in the region. As rail volumes increase, C-PCTS MPO should consider the use of federal funds, such as the FRA Rail Crossing Elimination program, for the following crossings, which experience greater than 10,000 AADT:

- Buena Vista Rd - Norfolk Souther Railroad

- 2nd Ave - Norfolk Southern
- US 27 at 9th St - Norfolk Southern Railroad
- SR 85 (Manchester Expy) - Norfolk Souther Railroad
- Woodruff Farm Rd - Norfolk Southern Railroad
- SR 219 (River Rd) - Norfolk Southern Railroad
- US 27 at 6th St - Columbus & Chattahoochee Railroad
- Andrews Rd - Norfolk Southern Railroad
- Andrews Rd - Georgia Southwestern Railroad
- Shatulga Rd - Norfolk Southern Railroad
- Forrest Rd - Norfolk Southern Railroad

## OTHER MTP FREIGHT POLICY

To enhance freight movement and reduce congestion, the C-PCTS MPO recognizes the importance of effective freight policies that streamline goods movement within the region.

## KEY POLICY RECOMMENDATIONS FOR FREIGHT:

### *Optimize Freight Corridor and Bottleneck Reduction*

- » Policy Recommendation: Identify and prioritize improvements on key freight corridors to alleviate congestion at critical bottlenecks.
- » Intended Outcomes: Increase lane capacity on major highways and improve access to intermodal freight facilities.
- » Lead Agency: C-PCTS MPO

- » MPO Role: Prioritize projects that promote freight mobility.
- » Local Municipalities Role: Implement roadway improvements as identified.
- » Other Stakeholders Role: Freight companies for input on improvements.

### *Monitor the Needs for Freight Lanes*

- » Policy Recommendation: Collaborate with the ALDOT, GDOT, and local governments to monitor conditions and the need for dedicated freight lanes and supporting infrastructure.
- » Intended Outcomes: Implement dedicated truck lanes on high-volume routes when necessary.
- » Lead Agency: C-PCTS MPO
- » MPO Role: Lead collaborative planning initiatives.
- » Local Municipalities Role: Integrate freight lane

designs into local plans.

- » Other Stakeholders Role: Fort Moore, Industry stakeholders for insights.

### *Expand and Enhance Freight Rail Infrastructure*

- » Policy Recommendation: Enhance rail facilities to support increased freight movement and alleviate road congestion.
- » Intended Outcomes: Construct new intermodal facilities and rail spurs to key industrial areas.
- » Lead Agency: Railroad operators/Georgia Ports Authority.
- » MPO Role: Monitor freight trends in the region and coordinate with GDOT on needs.
- » Local Municipalities Role: Zone for rail expansion.
- » Other Stakeholders: Rail companies for collaboration.

### *Smart Freight Systems*

- » Policy Recommendation: Promote technology-driven solutions for real-time management of freight flows.
- » Intended Outcomes: Use of connected vehicle systems to provide real-time congestion and parking information.
- » Lead Agency: GDOT, ALDOT
- » MPO Role: Coordinate with GDOT and ALDOT for freight initiatives.
- » Local Municipalities Role: Support tech integration.
- » Other Stakeholders: Freight logistics providers.

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09

# Regional and Statewide Policy Relevance

# Relevance to Regional and Statewide Policy

Another important consideration when developing this regional freight plan is considering related C-PCTS MPO and GDOT policy documents. For this plan, the following studies most relevant to the Regional Freight Plan recommendations are as follows:

- C-PCTS MPO 2050 Metropolitan Transportation Plan
- GDOT Statewide Freight Plan

## **COLUMBUS-PHENIX CITY TRANSPORTATION STUDY MPO 2050 METROPOLITAN TRANSPORTATION PLAN**

The Metropolitan Transportation Plan (MTP) is developed by CPCTS every five years to provide a comprehensive framework for transportation planning and investment in the Columbus-Phenix City region.

The plan establishes a long term vision for the transportation network and presents recommendations for capacity, operational, and maintenance improvements across the region's roadway network. Freight-related elements, such as the

freight network and commercial vehicle traffic, were analyzed during this planning process, and many recommendations were determined to improve freight movement and safety. This freight plan builds on those recommendations with additional analysis. Table 9.1 highlights the overlap between the identified MTP goals and those stemming from the Regional Freight Plan.

Table 9.1. 2050 MTP Goals

MTP GOAL	REGIONAL FREIGHT PLAN RELEVANCE
Support the economic vitality of the metropolitan area, especially by enabling global competitiveness, productivity, and efficiency;	Improvements to efficiency of freight and goods movement in the area work to support economic vitality, competitiveness, productivity, and efficiency.
Increase the safety of the transportation system for motorized and non-motorized users	Safety was a critical factor in identifying needs and prioritizing freight-related projects.
Increase the security of the transportation system for motorized and non-motorized users	The Plan primarily focused on specific motorized travel given its focus on goods movement.
Increase accessibility and mobility of people and freight	The Freight Plan recommends specific improvements to increase accessibility and mobility of freight throughout the region.
Protect and enhance the environment, promote energy conservation, improve the quality of life, and promote consistency between transportation improvements and State and local planned growth and economic development patterns	In addition to recommended projects to improve freight mobility, the Plan also contains recommendations to enhance livability and mitigate impacts on residential neighborhoods.
Enhance the integration and connectivity of the transportation system, across and between modes, for people and freight	With respect to the overall transportation network, the Plan primarily concentrated on integration and connectivity of transportation modes specific to freight.
Promote efficient system management and operation	Recommendations made in the Freight Plan emphasize improvements to increase efficient operations at key locations across the MPO.
Emphasize the preservation of the existing transportation system	While the Freight Plan does not specifically call out maintenance needs, it is addressed in the MTP.
Improve the resiliency and reliability of the transportation system and reduce or mitigate stormwater impacts of surface transportation	While the Freight Plan does not specifically highlight resilience and environmental factors, capacity and operational project recommendations stem from the MTP analysis that included these factors.
Enhance travel and tourism	While the Freight Plan does not identify improvements for tourism-related travel, improvements in freight efficiency can have positive indirect impacts to personal travel in the region.

## GDOT STATEWIDE FREIGHT PLAN

Updated in 2023, this plan works to identify and prioritize freight investments across the state that meet current and future needs for the freight system that is critical to Georgia's economic growth. The plan also establishes goals and addresses challenges within the state-wide freight network. Key Performance Measures utilized to track success of investment include safety, reliability, speed, cost, and risk.

The following table provides a comparison of state-wide freight goals identified by GDOT with the goals identified in this regional plan:

Table 9.2. Georgia Freight Plan Goals

GDOT FREIGHT PLAN GOAL	REGIONAL FREIGHT PLAN GOAL
Modernize freight infrastructure and operations	The freight plan highlights specific improvements to modernize infrastructure and operations throughout the region.
Support efforts to reduce the cost and time of food delivery and to increase the resilience of supply changes	Recommendations aimed at improving efficiency of the freight network aid in reducing the cost and time of overall goods movement.
Maintain and improve freight infrastructure for safety and performance	This plan provides analysis and specific recommendations for infrastructure improvements that aim to improve safety and performance across the freight network.
Expand use of existing and new data and technologies to support freight and logistics	The Freight Plan was developed using best practices that utilize existing and new data and processes.
Evaluate options for improved connectivity and increased capacity within current revenue streams based on return- on- investment analysis	Freight-related improvement projects were developed during the MTP process using revenue streams to determine costs and feasibility.
Support site development and Georgia Port Authority (GPA) identified rail intermodal "inland ports"	As the C-PCTS MPO is not located near inland ports, this statewide goal is not addressed in the Freight Plan.
Support growth in manufacturing, agriculture, and distribution	The efficient freight infrastructure that this plan promotes is critical for growth in these industries, including job creation, attracting businesses, and maintaining competitiveness of local industries across all markets.
Improve safety and security of commercial vehicle and freight movements	Safety analysis performed in this plan highlights specific needs that worked to inform recommendations for improvements related to safety and security of freight traffic.
Advance freight through environmental stewardship, equitable policies, and responsible development	The related MTP analysis highlights equity and environmental needs, providing specific strategies to strengthen the equitability and resiliency of infrastructure improvements.