FACTORY SHOALS
Pedestrian Bridge Study

# Existing Conditions Report

December 2024

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# 1. INTRODUCTION

This Existing Conditions Report serves as a comprehensive analysis of the current state of the Study Area, focusing on safety, travel patterns, pedestrian needs, and environmental factors. It includes data on traffic volumes, pedestrian activity, transit ridership, and crash history, particularly highlighting areas where pedestrian and cyclist safety can be improved. The findings from this report will guide the development of alternative solutions, including the possibility of constructing a new pedestrian bridge or improving existing infrastructure. The goal is to create a safer, more accessible environment for all users, and enhance overall mobility and connectivity in the community.

## Project Overview

### Purpose of Study

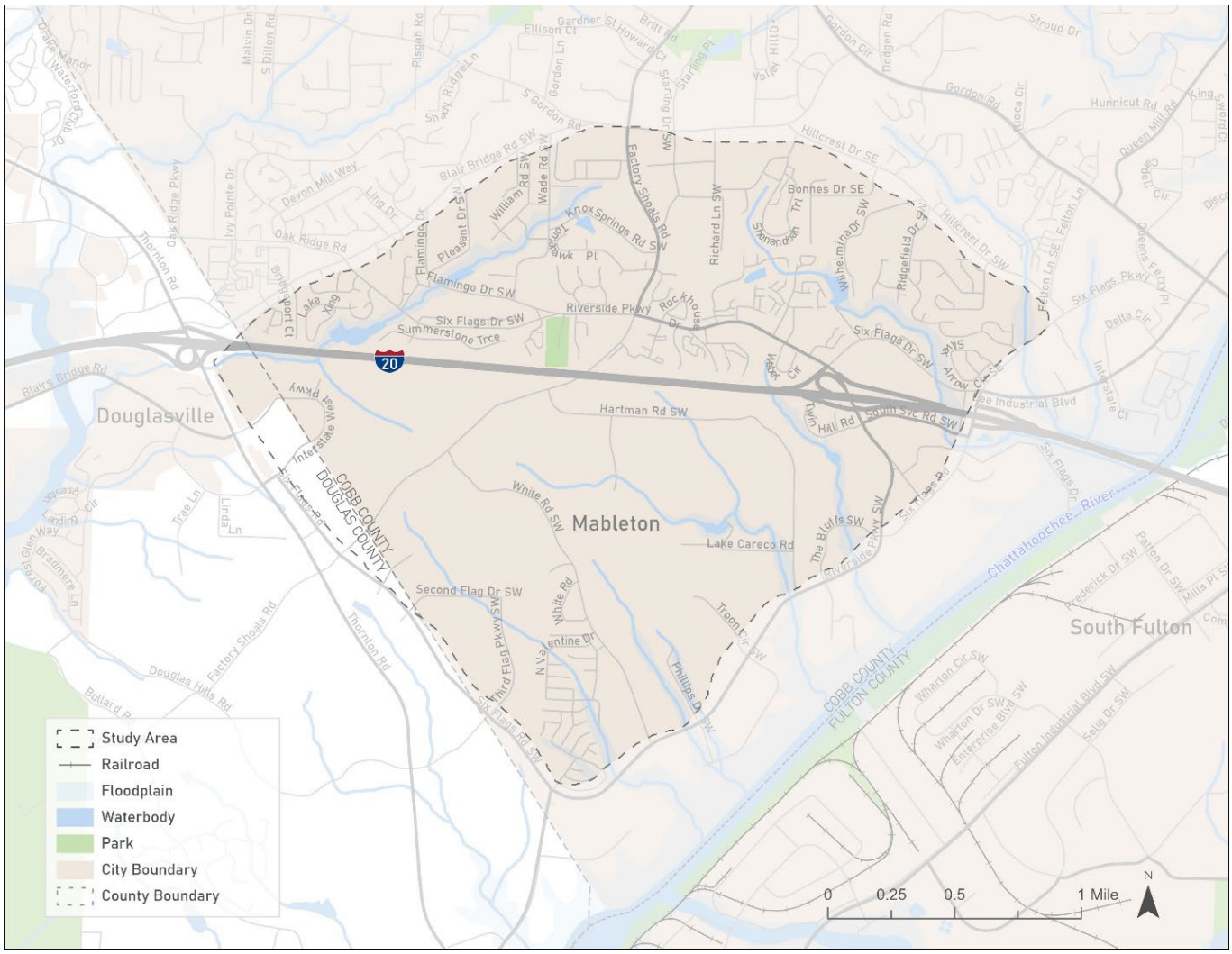
The Factory Shoals Pedestrian Bridge Study aims to assess the need for improved pedestrian safety and mobility across the existing Factory Shoals Road bridge over I-20. This study will evaluate the current infrastructure, pedestrian access, and transit connections within the study area, with a particular focus on ensuring equitable access for all community members. The project seeks to enhance connectivity for residents, employees, and transit users in the region by identifying key opportunities for improving pedestrian infrastructure and transit safety. By analyzing existing conditions such as crash data, pedestrian and vehicle traffic volumes, and transit ridership, the study will provide valuable insights into the best solutions for enhancing mobility in the area.

## Study Area

The Factory Shoals Pedestrian Bridge Study Area is located in Cobb County, Georgia, and covers a region that includes sections of Mableton and borders Douglasville to the west. The area is bisected by Interstate 20 (I-20), which runs east-west through the center of the study area. The primary focus of the study is along Factory Shoals Road, which crosses over I-20, serving as a key connection for residents and commuters.

The boundaries of the study area encompass residential neighborhoods, commercial zones, and natural features, including floodplains and waterbodies such as streams and creeks that feed into the Chattahoochee River to the southeast. The area includes important transportation infrastructure, with key roads like Riverside Parkway and Six Flags Drive, as well as access to parks and recreational spaces. Additionally, the presence of CobbLinc transit routes highlights the importance of transit connections within the study area.

*Figure 1-1. Study Area*




## Geographical Boundaries

Factory Shoals Pedestrian Bridge Study Area is geographically defined by several key boundaries:

- North: The boundary extends to Mableton Parkway and South Gordon Road, covering residential neighborhoods in Mableton.
- South: The southern limit reaches the Chattahoochee River and Thornton Road, encompassing natural areas and parts of the industrial zone south of I-20.
- East: The boundary runs along Six Flags Road and Factory Shoals Road, including portions of commercial and residential developments, as well as access points to I-20.
- West: The western boundary includes Douglasville, near the intersection of Blair Bridge Road and I-20, marking the transition between Cobb County and Douglas County.

# Review of Relevant Plans

Examine relevant past studies to understand historical challenges and solutions.

## Cobb Forward Comprehensive Transportation Plan 2050 (2022)

The 2022 Cobb Forward Comprehensive Transportation Plan (CTP) focuses on improving the county's transportation infrastructure, addressing existing deficiencies, and preparing for future growth. Its goals include enhancing safety, incorporating innovative technologies, supporting equitable access to mobility options, and promoting cost-effective investments in transportation.

Key objectives include improving roadway safety, particularly in high-traffic and accident-prone areas, and expanding multimodal transportation options such as transit, biking, and walking paths. The plan also emphasizes equitable access to transportation for underserved communities, integrating land use with transportation planning to support efficient connectivity between residential, commercial, and recreational areas. The overarching goals and strategies include:

- Health & Safety Improvements: Ensuring safe transportation infrastructure, especially for high-risk areas with frequent accidents or heavy traffic.
- Innovative Technology: Incorporating advanced technologies to improve traffic management and efficiency.
- Equitable Access: Providing transportation options that serve all communities, including low-income and underserved populations, ensuring all have equal access to transportation systems.
- Multimodal Enhancements: Addressing the needs for diverse transportation methods such as roadways, transit, walking, and cycling. There is a focus on connecting key areas like commercial hubs and residential neighborhoods.
- Cost-Effective Solutions: Investing in projects that maximize return on investment and ensure the longevity and efficiency of transportation networks.
- Land Use Integration: Ensuring transportation projects align with land use and urban design goals, supporting connectivity and accessibility between residential, commercial, and recreational areas.

## Six Flags Special Service District Market Analysis (2020)

The Six Flags Special Service District Market Analysis focuses on evaluating the economic potential and growth prospects within the designated area surrounding Six Flags Over Georgia. The analysis provides insights into commercial and residential development trends, including historical data on rental rates, net absorption, and real estate deliveries. It identifies the demand for housing and commercial spaces within the district, driven by the presence of the amusement park and related businesses.

The report also explores zoning regulations and the potential for future development that could enhance economic activity in the district. It highlights the opportunities for both residential and commercial real estate growth, supported by infrastructure improvements and strategic land use planning. The goal is to create a balanced, sustainable community that leverages the district's unique location while addressing market needs for retail, housing, and entertainment.

## Cobb County Comprehensive Plan 2040, 2024 Update (2024)

The 2018 Comprehensive Plan 2040 for Cobb County provides a long-term framework for managing growth and development in the county while preserving quality of life. The plan addresses critical areas such as land use, transportation, housing, and economic development, aiming to balance development with the preservation of natural and historic resources. It emphasizes the importance of coordinating infrastructure improvements with projected population growth, ensuring that the county remains a desirable place to live, work, and invest.

The plan also highlights strategies for redevelopment and revitalization, particularly in underperforming commercial and residential areas. With a focus on enhancing community character, promoting sustainable land use, and encouraging public engagement, the 2040 Comprehensive Plan aims to create a cohesive vision for the county's future that accommodates growth while preserving its unique character.

## Cobb County Parks Comprehensive Master Plan (2018)

The 2018 Cobb County Parks Comprehensive Master Plan outlines a strategic vision for the future of Cobb County's parks and recreational facilities over the next decade. The plan evaluates current parks and programs, recommends improvements, and addresses staffing and operational challenges. It highlights the county's 84 park properties, covering over 5,700 acres, and identifies the need for expanding green spaces, trails, and recreational programming as the population grows.

Public engagement was a significant aspect of the planning process, with nearly 3,300 residents providing input. Key findings include a strong demand for more trails, parks, and passive recreational spaces, as well as the need for enhanced maintenance and upgrades to existing facilities. The plan also focuses on future funding needs, suggesting options such as SPLOST and increasing user fees to ensure sustainable growth and improved services for the county's expanding population.

## South Cobb Implementation Strategy 2017 Update (2017)

The 2017 South Cobb Implementation Strategy Update builds on the goals set in the original 2012 strategy, focusing on revitalizing key areas in South Cobb. The update outlines ongoing efforts in the Six Flags/Riverside, Mableton, and River Line areas, with the primary objective of fostering economic development, improving infrastructure, and enhancing community aesthetics.

One of the major successes highlighted in the update is the creation of the Six Flags Special Service District (SSD), which has generated revenue for key infrastructure improvements and redevelopment efforts. Significant projects include the removal of blighted properties, like the demolition of the Magnolia Crossing Apartments, and the improvement of major interchanges along I-20, which are vital for improving accessibility and encouraging further development. Additionally, the update recognizes WellStar Cobb Hospital as a fourth major redevelopment node, focusing on creating a medical and commercial hub that can further economic growth in the area. The strategy emphasizes a continued focus on enhancing the quality of life in South Cobb, supporting both residential growth and commercial opportunities through infrastructure investments and beautification projects.

### Six Flags Livable Centers Initiative Study (2012)

The 2012 Six Flags Livable Centers Initiative (LCI) Implementation Guidebook outlines a comprehensive strategy for redeveloping and revitalizing the Six Flags area in Cobb County. The guidebook focuses on key elements such as land use, transportation, and economic development to create a more livable, sustainable community. It highlights opportunities for mixed-use development, including a proposed town center along Six Flags Drive, with residential, commercial, and office spaces to create a vibrant live-work-play environment.

Additionally, the guidebook identifies critical infrastructure improvements, such as the completion of sidewalk networks and enhancements to pedestrian safety, which are essential for fostering walkability in the area. The report also calls for greater investment in public transportation and proposes the establishment of a local community trolley service. Economic development strategies target attracting new businesses, improving housing options, and enhancing the area's industrial and hospitality sectors, particularly near the Six Flags Over Georgia amusement park. Overall, the guidebook emphasizes community engagement, public safety, and collaboration between stakeholders to achieve long-term success in the region's revitalization efforts.

## MSPLOST

The Cobb County Mobility Special Purpose Local Option Sales Tax (MSPLOST) provides transit investment across the County to increase connectivity and benefit the community. The MSPLOST tax collection will be voted on by Cobb County voters for approval in November 2024.

Specific projects near the Factory Shoals Road bridge over I-20 in Mableton fall under the broader transportation improvements outlined in the MSPLOST. Notably, projects include expanding local transit routes, introducing new Bus Rapid Transit (BRT) and Arterial Rapid Transit (ART) routes, and increasing connectivity to key areas, such as MARTA stations and activity centers. Additionally, pedestrian and bike facilities are slated for improvement to enhance access and safety in areas around the expanded transit system.

# 2. EXISTING CONDITIONS

## Bridge Condition

The Factory Shoals Road bridge (GDOT Structure 067-0135-0), located over I-20, serves as a crucial north-south connection within the study area. Constructed in 1963, this bridge has a total length of 44 feet and a width of 31.2 feet, with a curb-to-curb width of 26.2 feet and 1.9-foot curb/sidewalk facilities on each side of the roadway. The bridge was inspected on September 6, 2023, and is currently evaluated based on the National Bridge Inspection Standards (NBIS).

The condition of the bridge is summarized as follows:

- Deck Condition: Rated as 6 (Satisfactory), indicating that the deck is in reasonable condition with only minor deterioration.
- Superstructure: Rated as 7 (Good condition), meaning the primary supporting elements of the bridge (such as beams or girders) are in good shape with minor defects.
- Substructure: Rated as 7 (Good condition), indicating that the supports below the bridge, such as piers and abutments, are in solid structural condition with only minor wear.
- Bridge Railings: Rated as 0, meaning the railings do not meet currently acceptable standards and are in need of updates to ensure safety compliance.
- Transitions: Rated as 0, also indicating that the bridge transitions, which connect the bridge to the roadway, do not meet current safety standards.
- Horizontal and Vertical Clearance: Rated as 5, which indicates a marginal clearance that could pose limitations for certain vehicles.

Despite its satisfactory condition in most structural areas, the bridge railings and transitions require attention, as they do not meet modern safety standards, potentially posing risks to users. This is particularly important given the age of the structure and its vital role in regional transportation.

The bridge lacks dedicated bicycle or pedestrian facilities, with only narrow 1.9-foot curbs functioning as sidewalks, which do not accommodate safe multimodal usage.

## Transportation Network

The roadway network within Factory Shoals Road Pedestrian Bridge study area forms the backbone of transportation infrastructure, fostering economic development, enhancing quality of life, and facilitating the movement of goods and people within the region and beyond. This section provides an overview of the current roadway network, including details on lane configuration, functional classification, existing traffic volumes, and bridge conditions throughout the study area.

# Land Use and Study Area Overview

The land use within the Factory Shoals Pedestrian Bridge study area along Riverside Parkway and Factory Shoals Road is characterized by a mix of commercial, residential, and industrial developments, reflecting the diverse economic and urban functions of the region. South of I-20, the land use is primarily commercial and industrial, dominated by large-scale warehousing and distribution centers. This area supports a range of logistics and industrial activities, which benefit from the close proximity to I-20, a major transportation corridor that facilitates efficient freight movement and access to regional markets.

North of I-20, the land use shifts significantly towards residential development, with suburban-style housing forming the dominant land use type. This area features lower-density housing, designed to accommodate families and individuals, and is serviced by local roads that connect to nearby commercial hubs and community facilities. The broader study area reflects a suburban land use intensity, with a mix of housing, commercial spaces, and industrial operations spread across the landscape. The proximity of residential areas to commercial and industrial zones creates a need for improved infrastructure, including the proposed pedestrian bridge, to ensure safe and efficient movement between these distinct land uses.

This diverse land use mix demonstrates the need for integrated transportation solutions that accommodate the needs of both industrial operations and the residential community.

## Programmed Projects

Programmed capacity projects are key indicators for forecasting future traffic growth, as they can significantly influence travel demand patterns. To assess the potential impacts, a review of the GDOT GeoPI database and the Atlanta Regional Commission's (ARC) Transportation Improvement Program (TIP) was conducted. This review focused on identifying projects that could alter traffic volumes or patterns in and around the study area. However, no relevant projects were identified that are expected to directly affect traffic flows in the vicinity of the pedestrian bridge study area.

## Developments of Regional Impact

The Georgia Regional Transportation Authority (GRTA) maintains a database of Developments of Regional Impact (DRI) within the 13 county GRTA jurisdiction, which includes Cobb County. This database was reviewed to determine if any upcoming DRIs that could influence traffic patterns in the study area could be identified. After review, no major planned developments that would significantly increase traffic volumes or alter existing travel demand in the short term.

## Intersection Control Summary

The intersection control along Factory Shoals Road incorporates a variety of traffic management methods tailored to specific traffic volumes and road configurations. This approach ensures optimal traffic flow and safety across the different intersections in the area.

**Traffic Signals**: Traffic signals are implemented at high-traffic intersections, such as the junctions of Factory Shoals Road with Thornton Road / SR 6 and Riverside Parkway. These signals manage higher volumes of traffic, particularly during peak travel times. Given the commercial and industrial activity near these intersections, signalized control helps regulate the flow of both personal and freight traffic, reducing the risk of accidents and improving overall road safety. The signalized control also aids pedestrian crossings, which is crucial given the mixed land use in the area.

**Multiway Stop Control**: A multiway stop is used at the intersection of Factory Shoals Road and Six Flags Road, where moderate traffic volumes necessitate a higher level of control than a simple stop sign but do not require a full traffic signal. The multiway stop ensures that vehicles from all directions have an opportunity to proceed in a controlled manner, preventing conflicts and reducing delays in moderate-traffic conditions.

**Minor Street Stop Control**: At all other intersections along Factory Shoals Road, a minor street stop control is employed. In these areas, Factory Shoals Road operates as the major street, with priority given to traffic moving along it. Vehicles entering from minor streets must stop and yield to the traffic on Factory Shoals Road. This type of control is effective in areas with lower traffic volumes and helps maintain traffic flow on the main road while ensuring safety for vehicles entering from side streets.

The use of varied intersection control methods along Factory Shoals Road reflects the differing needs of the corridor, balancing the need for efficient traffic movement with safety considerations, particularly at busy commercial intersections and in proximity to residential areas. Future improvements, such as pedestrian infrastructure enhancements or additional signalized intersections, is necessary as the area continues to grow and develop.

## Roadway Characteristics by Segment

Factory Shoals Road exhibits a range of roadway characteristics, which vary across different segments based on the surrounding land uses, traffic demands, and functional classification. The road is designed to accommodate both local access and through traffic, with different configurations and controls tailored to the specific needs of each section.

### Thorton Road / SR 6 to Six Flags Road

In this section, Factory Shoals Road is a two-way, two-lane undivided roadway with a posted speed limit of 40 MPH. The Georgia Department of Transportation (GDOT) classifies the road as a Local Road. Cobb County Department of Transportation classifies this as a "Major Road" from Riverside Parkway to the County Line and an "Arterial" north of Riverside Parkway. The roadway features 11-foot-wide through lanes, with a sidewalk with curb and gutter on the east side of the road and a paved shoulder without curb on the west side. The shoulder provides continuous access to the Beaver Creek Biscuit Company and Barbecue parking lot. Utility poles are present on both sides of the roadway. Key turn lanes include:

- Southbound right turn lane at Thornton Road / SR 6
- Northbound right turn lane at Six Flags Road

### Six Flags Road to Atlanta Distribution Center South Driveway

Factory Shoals Road remains a two-way, two-lane undivided roadway with a posted speed limit of 40 MPH. GDOT classifies the road as a Local Road. The roadway features 11-foot-wide through lanes and has a rural section, with utility poles along both sides of the roadway. No pedestrian or bicycle facilities are present, and no turn lanes are present along this segment. This section is actively under construction.

### Atlanta Distribution Center South Driveway to Lansky Weber Road

Factory Shoals Road retains its two-lane, two-way roadway configuration with a posted speed limit of 40 MPH, but transitions into a primarily urban section. GDOT classifies the road as a Local Road. The roadway features 11-foot-wide through lanes, curb and gutter, intermittent sidewalks on both sides, and utility poles present along both sides of the roadway. Guardrail is present outside of the sidewalk along the east side of the roadway from Atlanta Distribution Center South Driveway to Bob White Road. This section of the roadway provides access to a large number of warehousing facilities along this section both directly and via Bob White Road/Hartman Road. Turn lanes along this section include:

- A southbound right turn lane at Atlanta Distribution Center south driveway
- Left and right turn lanes in both directions at FedEx driveway
- A southbound right turn lane at Amazon Warehouse south driveway
- Left turn lanes in both directions as well as a southbound right turn lane at Bob White Road
- Northbound left and southbound right turn lanes at 7501 Factory Shoals Road south driveway
- A southbound right turn lane at 7501 Factory Shoals Road north driveway
- Left and right turn lanes in both directions at Destiny World Church south driveway
- Northbound left and southbound right turn lanes at Destiny World Church north driveway
- A southbound left turn lane at Hartman Road

### Lansky Weber Road to North of I-20

The segment from Lansky Weber Road to north of I-20 is also a two-way, two-lane undivided roadway with a posted speed limit of 40 MPH and 11-foot-wide through lanes. GDOT classifies the road as a Local Road. This section includes a concrete bridge over I-20. The bridge lacks pedestrian and bicycle facilities. Raised barriers are present along the outside of travel lanes along the bridge, resulting in conditions where pedestrians are forced to walk in the travel lanes. Fencing is present outside of the raised barrier.

### North of I-20 to Riverside Parkway

North of I-20, Factory Shoals Road transitions from a two-lane undivided roadway near Whisper Trail to a four-lane undivided roadway as it approaches Riverside Parkway. GDOT classifies the road as a Local Road. The roadway features 11-foot-wide through lanes. While the roadway section is primarily urban with curb and gutter, it has some rural sections with fore slopes. Sidewalks are intermittently present along both sides of the roadway. Utility poles are present along both sides of the roadway. Turn lanes in this section include:

- Southbound right turn lane at Cobb County Fire Station Driveway
- Left and right turn lanes in both directions at Riverside Parkway

**Riverside Parkway to South Gordon Road**

Between Riverside Parkway and South Gordon Road, Factory Shoals Road expands into a four-lane undivided roadway with a posted speed limit of 40 MPH. GDOT classifies the road as a Minor Arterial. The roadway features 11-foot-wide through lanes and has an urban section with curb, gutter, and sidewalks along both sides of the facility. Utility poles continue to be present along both sides. The roadway provides access to multiple residential driveways along this segment. Turn lanes in this section include:

- Southbound right turn lane at Wade Farn Road
- Northbound left turn lane at South Gordon Road

In addition, Jones Mill Road, Sumac Drive, and Charmant Place are two-way, two-lane undivided roadways with posted speed limits of 25 mph. GDOT classifies the roadways as Local Roads.

## Lane Configuration and Traffic Conditions

The number of lanes on a roadway is directly related to its traffic conditions, determining how many vehicles can travel on the road at any given time. Through lanes are specifically designated for continuous traffic flow and exclude turn lanes, auxiliary lanes, and collector-distributor lanes.

Figure 2-1 illustrates the distribution of lanes across the network, highlighting the variation from smaller local roads to larger arterials and interstates. As shown, the majority of roads in the Study Area have 1 to 3 through lanes, with some major roadways having more lanes:

- I-20 and a segment of Thornton Road: These key regional roadways have 6 or more lanes, with I-20 serving as the main artery of the study area.
- Factory Shoals Road, Riverside Parkway SW, and a portion of Thornton Road: These roads have 4 to 5 bi-directional lanes, facilitating both local and regional traffic.

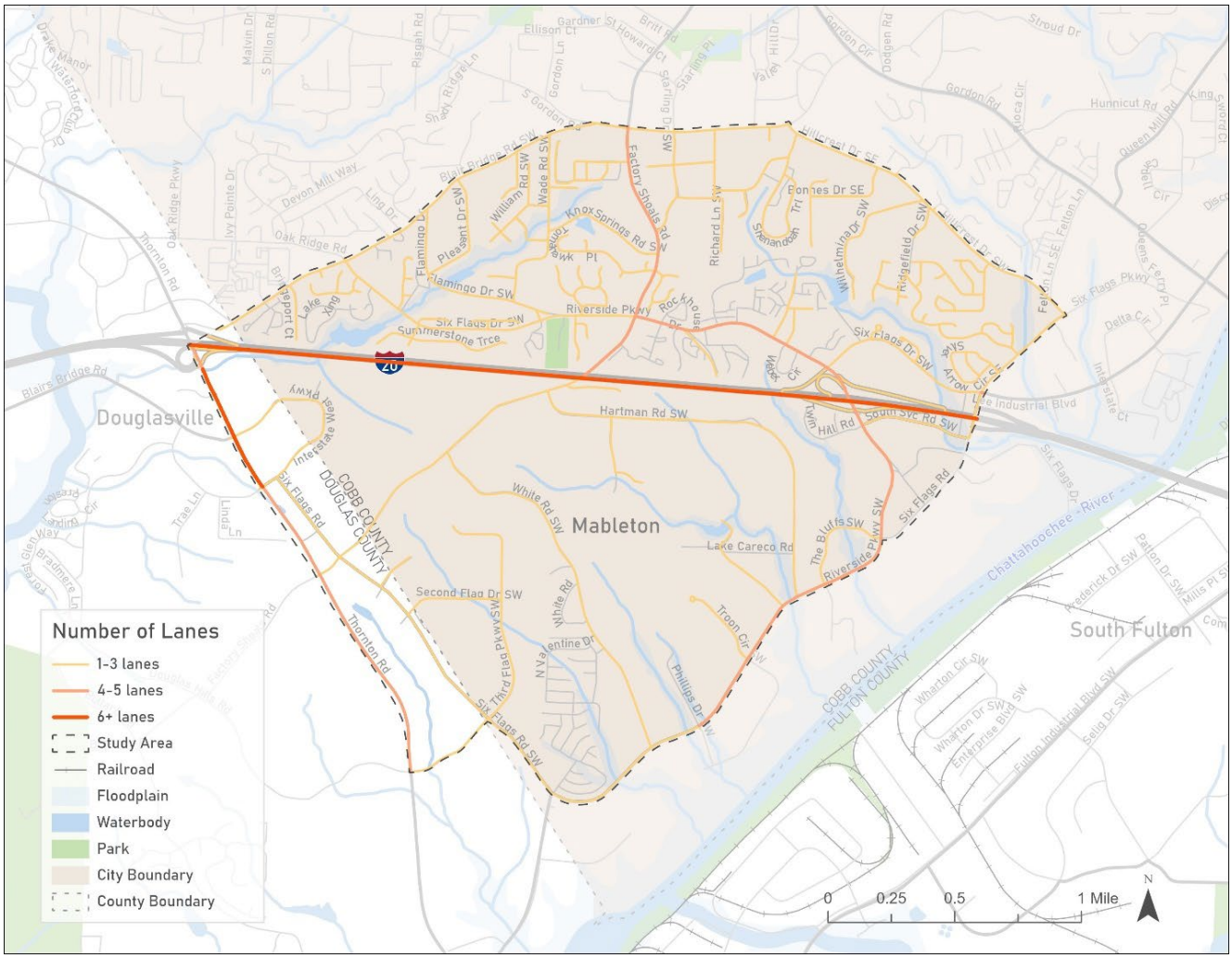
The major regional roadways, I-20 and parts of Thornton Road, have 6 or more lanes, making them critical to the area's traffic capacity. These roads serve as key arteries for regional and local traffic, allowing large volumes of vehicles to pass through efficiently. The presence of these multiple lanes is designed to accommodate high volumes of traffic, particularly during rush hours, making these roads essential to the movement of both personal and commercial vehicles.

Factory Shoals Road, Riverside Parkway SW, and another segment of Thornton Road feature 4 to 5 lanes, balancing local access and regional connectivity. These roads handle significant traffic volumes, but they are designed more for facilitating access within the study area and nearby regions. They support a mix of traffic, including freight, commercial, and residential vehicles, contributing to the local economic and community mobility needs.

Smaller roadways, particularly ramps connecting to I-20, typically have 1 through lane, reflecting their function as entry and exit points rather than continuous traffic flow routes. These lanes play a supportive role in regulating access to larger highways, managing merging traffic while minimizing congestion on the primary roadways.

Further analysis indicates that roadways with only 1 through lane mainly consist of I-20 entry and exit ramps. The number of lanes on a roadway is closely related to its functional classification, where major arterials and interstate highways typically have more lanes to accommodate higher traffic volumes.

*Figure 2-1. Number of Lanes on Roadways*




## Functional Classification of Roadways

Each roadway in the Study Area is classified according to its intended function within the transportation system. The three basic roadway functional classifications are arterials, collectors, and local roads, with arterials and collectors further divided into "Major" and "Minor" categories. The functional classification system helps to define the role of each roadway in supporting traffic flow, access, and mobility for residents and businesses in the area.

**Arterials**: These are the primary traffic corridors that connect urban areas and facilitate long-distance travel. Arterials are divided into:

**Interstates and Major Arterials**: Roads like I-20 and SR 6 (Thornton Road) are high-capacity routes that play a crucial role in regional and metropolitan connectivity. These roads typically have multiple lanes, controlled access points, and are designed to handle heavy traffic volumes, including freight and

commuter traffic. In the Study Area, I-20 serves as the main interstate, with access points at Exit 44 (Thornton Road) and Exit 46 (Riverside Parkway).

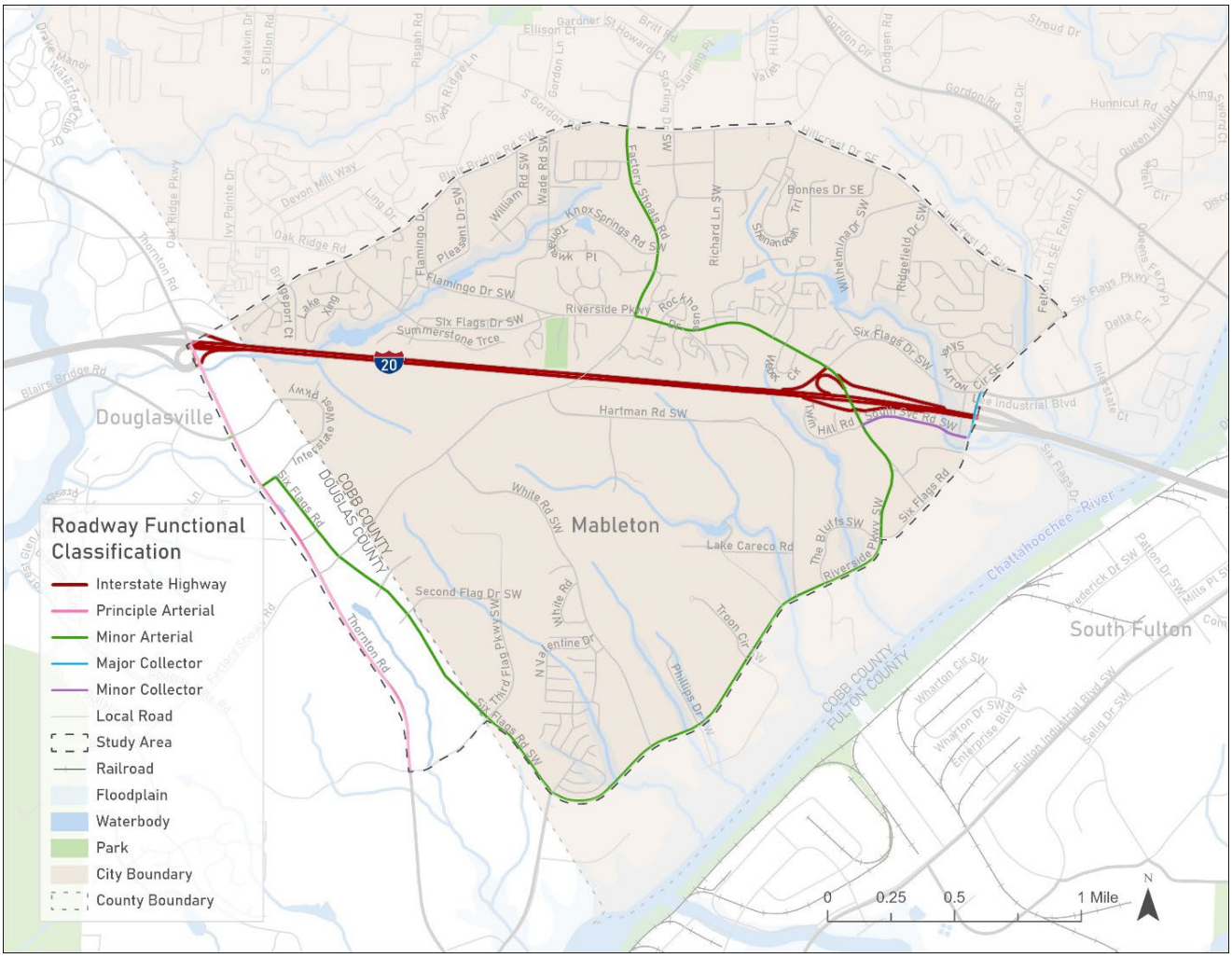
**Minor Arterials**: Roads like Riverside Parkway and Factory Shoals Road (from Riverside Parkway to South Gordon Road) serve as secondary routes. These roads are important for local connectivity, providing access to major arterials and supporting shorter trips within the study area.

**Collectors**: These roads gather traffic from local streets and funnel it into the arterial system. They serve both residential and industrial areas, balancing mobility and access. In the Study Area, collector roads likely support the movement of traffic between local neighborhoods and larger, busier roadways such as Riverside Parkway and Thornton Road.

**Local Streets**: These streets primarily serve neighborhoods and provide direct access to residential areas, developments, and businesses. Handling lower traffic volumes, local streets prioritize access over mobility, making them critical for internal neighborhood circulation rather than long-distance travel.

Overall, the functional classification of roadways in the Study Area, as shown in Figure 2-2, follows GDOT's guidelines, with I-20 and SR 6 / Thornton Road acting as principal arterials, while Riverside Parkway and Factory Shoals Road function as minor arterials. This classification framework helps manage traffic efficiently, supporting both regional and local transportation needs.

*Figure 2-2. Roadways Functional Classification*




## Traffic Data Collection

Traffic count data was collected on Thursday, August 8th, 2024; Friday, August 9th, 2024; and Saturday, August 10th, 2024, as part of the analysis for the Factory Shoals pedestrian bridge study area. The traffic count program comprised several data collection methods to assess vehicular, heavy vehicle, pedestrian, and bicycle activity:

Intersection Turning Movement Count (TMC): This included vehicle, bicycle, pedestrian, and heavy vehicle counts recorded over 12-hour periods (7:00 AM to 7:00 PM) on August 8th and August 10th.

Pedestrian Counts: Pedestrian counts were recorded over 16-hour periods (6:00 AM to 10:00 PM) on August 8th, August 9th, and August 10th.

Average Daily Traffic (ADT) Counts: Vehicular classification, including single-unit (S.U.) and combination (COMB.) heavy vehicles, was recorded over 24-hour periods on August 8th and August 10th.

Traffic Count Locations:

**24-HR ADT Count Locations** (August 8th and 10th, 2024)

- Factory Shoals Road, south of Riverside Parkway

**16-HR Pedestrian Count Locations** (August 8th, 9th, and 10th, 2024)

- Factory Shoals Road, at I-20 Overpass Bridge
- Factory Shoals Road, north of Bob White Road
- Bob White Road, east of Factory Shoals Road

**12-HR TMC Locations** (August 8th and 10th, 2024)

- Factory Shoals Road at Riverside Parkway

**Factory Shoals Road, south of Riverside Parkway**:

On Thursday, the 24-hour ADT count recorded 14,428 vehicles, with 1,499 single-unit trucks and 987 combination trucks. The total volume of heavy vehicles was 512.

On Saturday, the traffic volume decreased to 8,402 vehicles, with 535 single-unit trucks and 324 combination trucks, reflecting a significant drop in both total and heavy vehicle traffic on the weekend.

**Factory Shoals Road, at I-20 Overpass Bridge**:

Pedestrian and bicycle counts were recorded over 16-hour periods. On Thursday, 43 pedestrians and 37 cyclists were observed. On Friday, this increased to 52 pedestrians and 48 cyclists, while on Saturday, the numbers dropped significantly to 20 pedestrians and 19 cyclists.

**Factory Shoals Road, north of Bob White Road**:

Similar patterns were observed, with pedestrian and bicycle traffic peaking on Thursday at 42 pedestrians and 37 cyclists, and tapering off by Saturday, with only 19 pedestrians and 17 cyclists.

**Bob White Road, east of Factory Shoals Road**:

This location saw much lower pedestrian and bicycle activity, with a maximum of 14 pedestrians on Friday and fewer than 7 cyclists on any given day.

The traffic data reveals clear patterns of higher weekday traffic volumes and active mode use, particularly on Thursday and Friday, with notable declines over the weekend, especially in heavy vehicle and pedestrian activity. This information is vital for understanding traffic behavior in the area and will inform future infrastructure and safety improvements for both vehicles and active modes of transportation.

Collected traffic count data is summarized in Table 2-1.

*Table 2-1. Traffic Counts, August 2024*

| Location | Day | Period | Volume | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | Vehicular | Heavy Vehicle | | | Active Mode | | |
| | | | | Total | S.U. | COMB. | Total | Pedestrian | Bicycle |
| Factory Shoals Road, south of Riverside Parkway | Thursday | 24-HR | 14428 | 1499 | 987 | 512 | - | - | - |
| Factory Shoals Road, south of Riverside Parkway | Saturday | 24-HR | 8402 | 535 | 324 | 211 | - | - | - |
| Factory Shoals Road, at I-20 Overpass Bridge | Thursday | 16-HR | - | - | - | - | 43 | 37 | 6 |
| Factory Shoals Road, at I-20 Overpass Bridge | Friday | 16-HR | - | - | - | - | 52 | 48 | 4 |
| Factory Shoals Road, at I-20 Overpass Bridge | Saturday | 16-HR | - | - | - | - | 20 | 19 | 1 |
| Factory Shoals Road, north of Bob White Road | Thursday | 16-HR | - | - | - | - | 42 | 37 | 5 |
| Factory Shoals Road, north of Bob White Road | Friday | 16-HR | - | - | - | - | 39 | 35 | 4 |
| Factory Shoals Road, north of Bob White Road | Saturday | 16-HR | - | - | - | - | 19 | 17 | 2 |
| Bob White Road, east of Factory Shoals Road | Thursday | 16-HR | - | - | - | - | 6 | 6 | 0 |
| Bob White Road, east of Factory Shoals Road | Friday | 16-HR | - | - | - | - | 14 | 11 | 3 |
| Bob White Road, east of Factory Shoals Road | Saturday | 16-HR | - | - | - | - | 7 | 7 | 0 |

## Motorized Vehicle Traffic

### AADT

Traffic Volumes (measured as Annual Average Daily Traffic) are shown in Figure 2-3. Traffic volumes along a roadway section are essential for identifying traffic congestion and projecting future traffic patterns, enabling the understanding of current travel demand and assessment of whether existing road capacity can accommodate current and future needs. Meanwhile, current traffic volumes provide insights into future travel demand roads are to broaden, further aiding in infrastructure development, safety analysis, and environmental impact evaluation.

Traffic volumes in the study area generally align with the functional classification of roadways. Major arterials and highways, such as I-20 and Thornton Road (SR 6), handle the highest traffic volumes due to their role in facilitating regional and long-distance travel. These roads are equipped with advanced traffic management systems and controlled access points, designed to manage large traffic volumes and ensure efficient flow.

I-20 carries the highest traffic volumes in the study area, with AADT values exceeding 20,000 vehicles per day. This is expected, as I-20 serves as a key interstate corridor for both commuter and freight traffic.

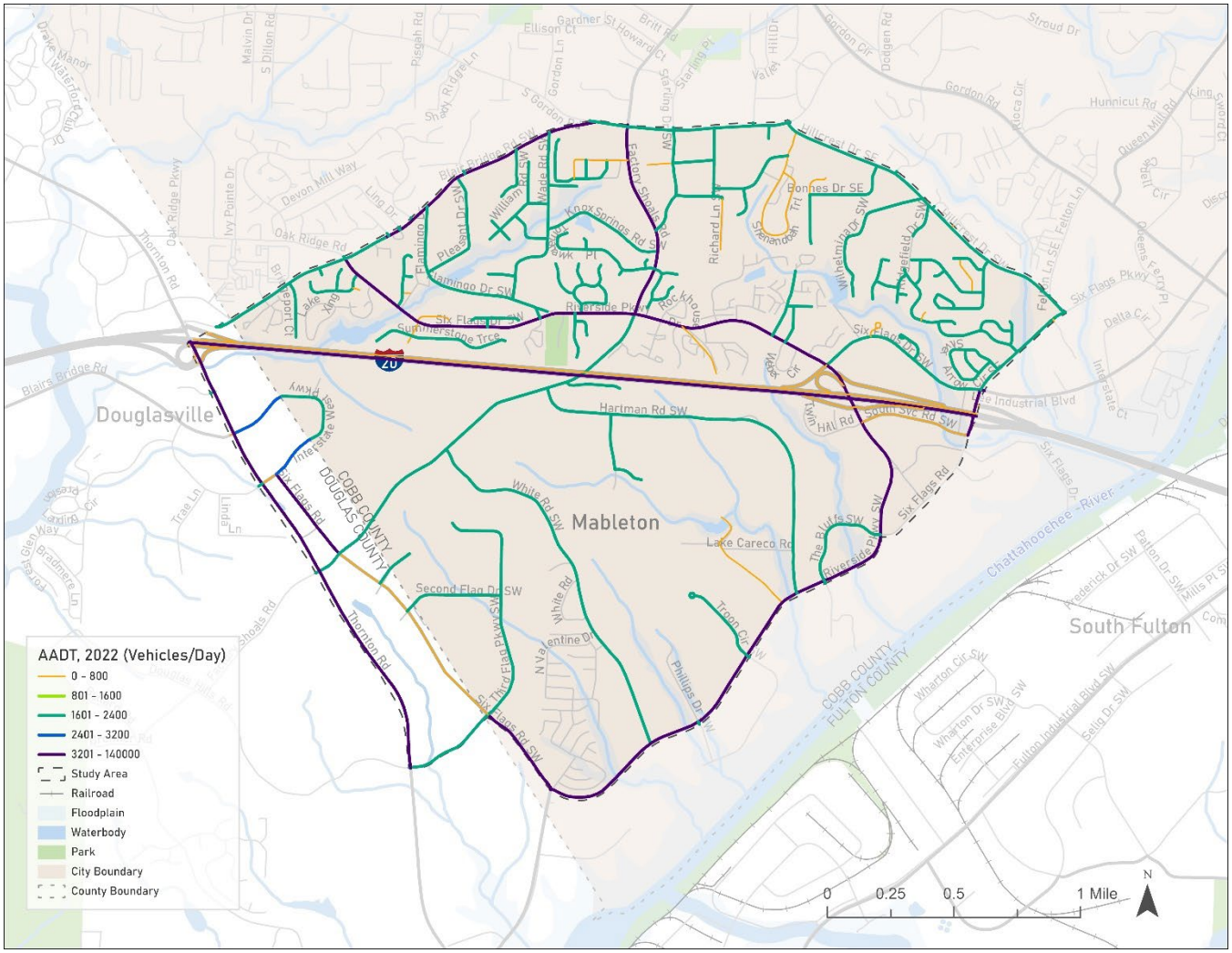
Roads connecting to I-20, such as Thornton Road, also experience significant traffic volumes of 10,000 vehicles per day or more, reflecting their role as major access routes to the interstate.

Non-interstate arterials and collectors, including Factory Shoals Road, Riverside Parkway, and Six Flags Road, also experience relatively high traffic volumes. These roads serve both local and regional traffic, with volumes ranging from moderate to high, depending on their proximity to major highways like I-20.

Factory Shoals Road sees considerable traffic due to its connection to I-20 and the surrounding industrial and residential areas. The AADT here is elevated, although it remains lower than on major arterials like Thornton Road.

Riverside Parkway and Six Flags Road also carry substantial traffic, acting as collectors that channel vehicles to and from arterial roads and local streets. Their traffic volumes, while lower than major arterials, are still significant, especially during peak hours.

*Figure 2-3. Traffic Volumes*



## Truck Traffic

Truck traffic, particularly heavy vehicle movement, is a significant component, 10%, of the overall traffic on Factory Shoals Road. As one of the main access points to I-20 and a vital arterial for industrial traffic, Thornton Road also sees a high concentration of truck traffic. Land uses around Thornton Road, specifically south of I-20, include logistics centers, manufacturing facilities, and warehousing. It also connects to the large Norfolk Southern Intermodal Terminal that was opened in 2001 and spurred much of the industrial development in the area. With its proximity to these industrial uses, Thornton Road experiences daily truck volumes of over 500 single-unit trucks and over 300 combination trucks, contributing heavily to the overall AADT. This high volume is indicative of Thornton Road's function as a critical link for freight entering and exiting the interstate.

Serving both industrial areas and as a connector to residential regions, Factory Shoals Road handles moderate truck traffic compared to I-20 and Thornton Road. According to AADT counts:

- On Thursday, the 24-hour AADT for Factory Shoals Road, south of Riverside Parkway, was 1,499 single-unit trucks and 987 combination trucks, with a total of 512 heavy vehicles.
- On Saturday, the truck traffic decreased, reflecting reduced industrial and freight activity over the weekend, with 535 single-unit trucks and 324 combination trucks.

Riverside Parkway also handles considerable truck traffic due to its connection to nearby industrial zones. However, the truck AADT is slightly lower than on Thornton Road and Factory Shoals Road, as it serves more localized industrial traffic.

The high volume of heavy trucks places significant wear and tear on the roads in the Study Area particularly along key freight corridors. Roads like Thornton Road, Factory Shoals Road, and I-20 are subjected to continuous strain, necessitating frequent maintenance and capacity improvements to manage the load effectively.

Given the truck traffic AADT, the heavy vehicle movement on these roads contributes to congestion during peak travel times. While I-20 has the capacity to manage large volumes of freight traffic, Thornton Road and Factory Shoals Road can experience bottlenecks, especially at key intersections and access points. This congestion can delay not only freight movement but also local commuter traffic.

## Transit

Multiple transit services pass through the study area. The Georgia Regional Transit Authority (GRTA) Express, operated by the State Road and Tollway Authority (SRTA), travels across I-20 to provide regional connections. Metropolitan Atlanta Rapid Transit Authority (MARTA) service reaches a small portion of the study area near South Service Road SW and I-20, providing a connection to Fulton County.

The predominant transit service in the area is CobbLinc, operated by Cobb County. Two CobbLinc routes service the study area. While Route 25 travels along the edge of the study area, Route 30 makes a number of stops throughout the center of the study area and crosses Factory Shoals Road at Riverside Parkway.

Additionally, two Connect Douglas routes operated by Douglas County serve the study area. Routes 30 and Route 40 (Six Flags) access the southern portion of the study area. There is a ride transfer agreement between CobbLinc and Connect Douglas, with a transfer point at Riverside Epicenter.

*Figure 2-4. Existing Transit Routes and Stops*

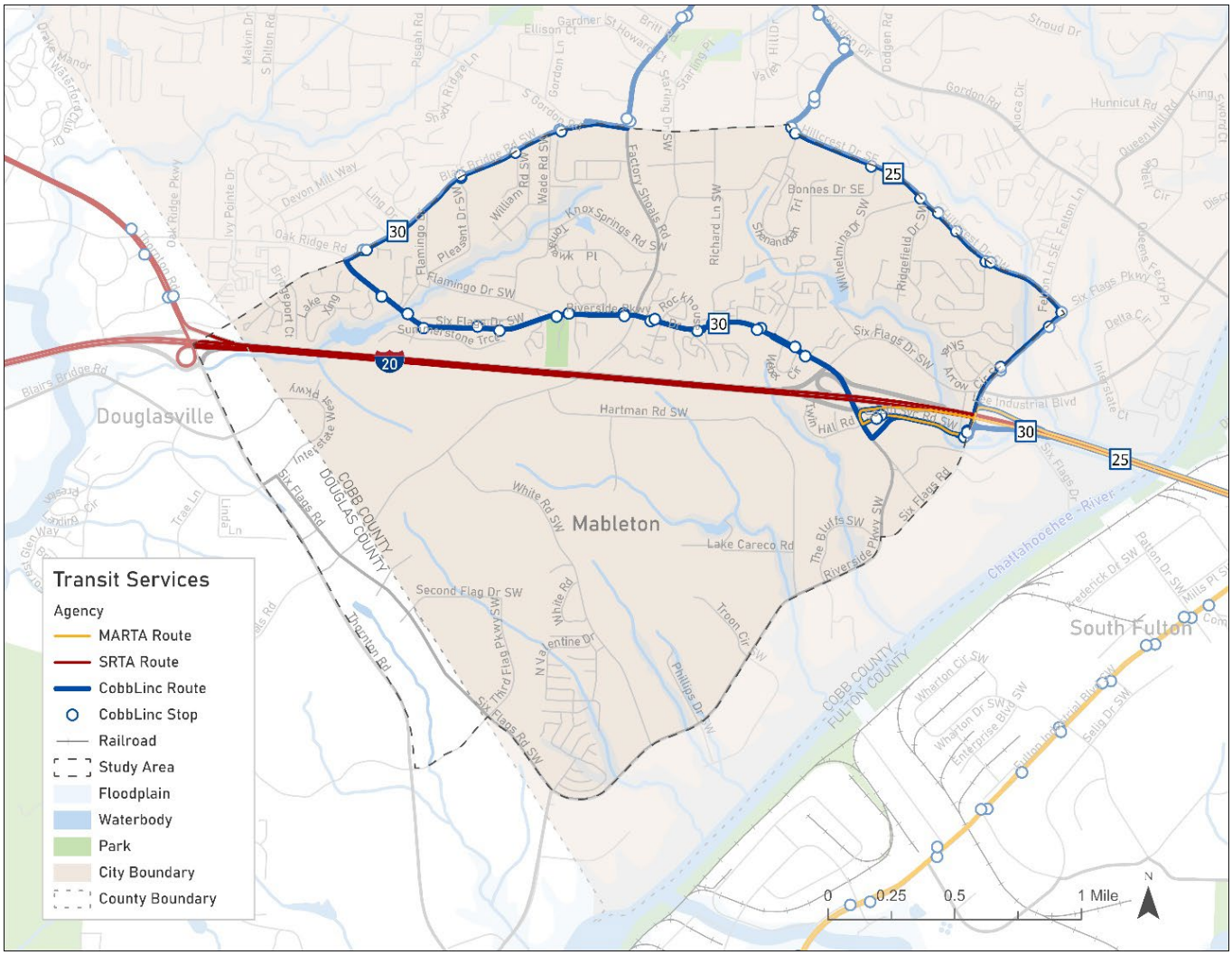


*Figure 2-5. Connect Douglas Route 30 Map (Source: NEW ROUTES! | Douglas County, GA)*

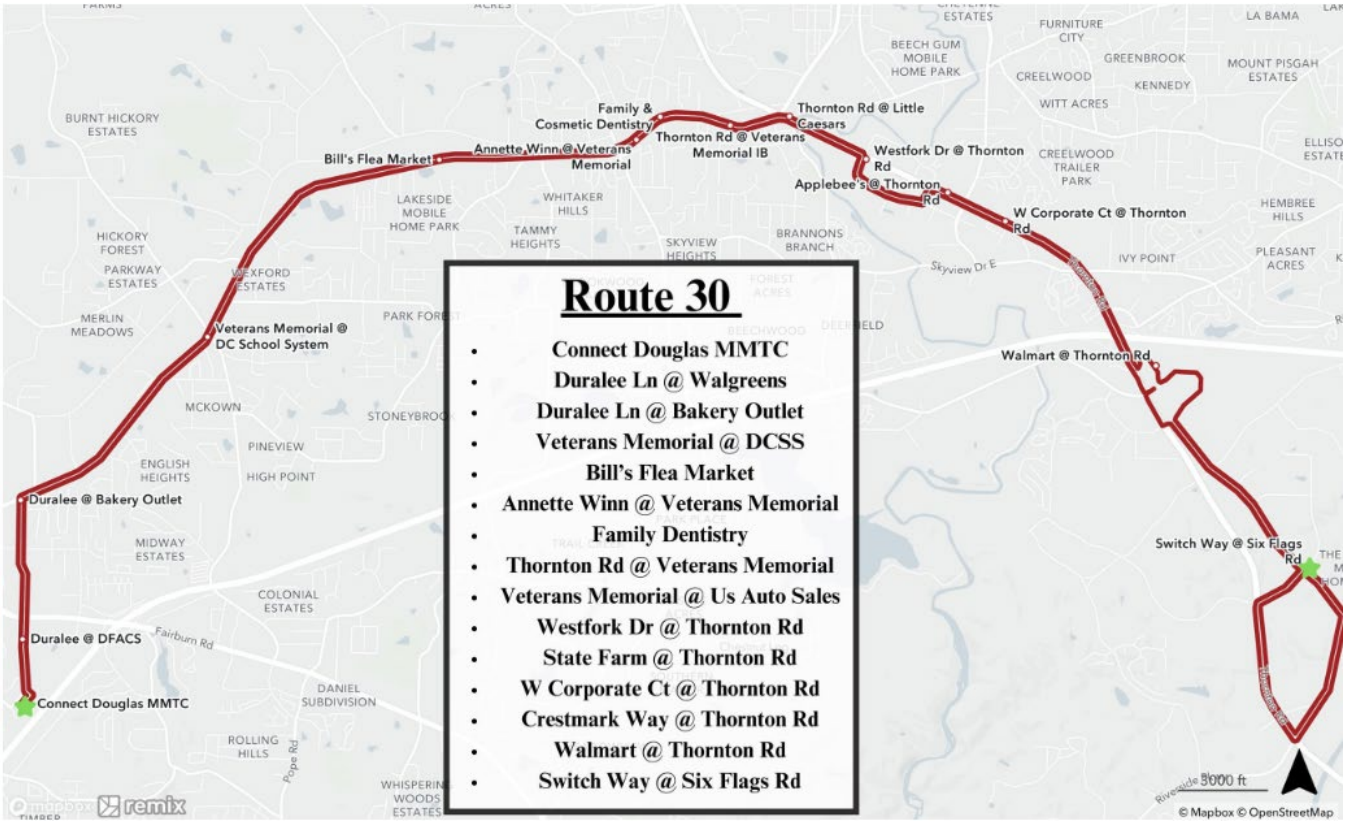
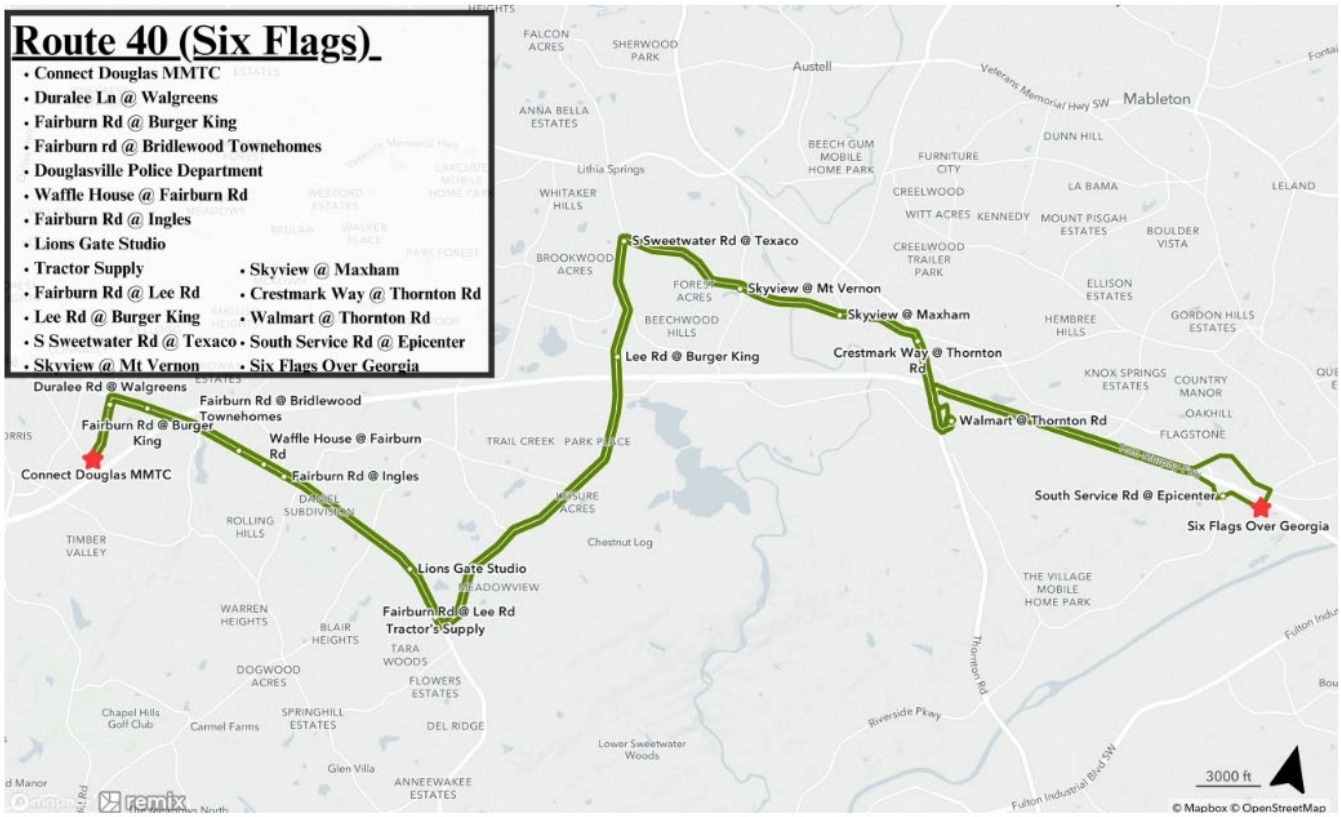


*Figure 2-6. Connect Douglas Route 40 (Six Flags) Map (Source: NEW ROUTES! | Douglas County, GA)*



## Transit Ridership

Understanding ridership along CobbLinc transit routes serving our study area help to identify locations where a number of people are regularly travelling and potential needs to may exist. Daily boarding for each stop is depicted in Figure 2-7, and daily alighting at each stop is depicted in Figure 2-8.

*Figure 2-7. Existing Route 30 Daily Boarding*

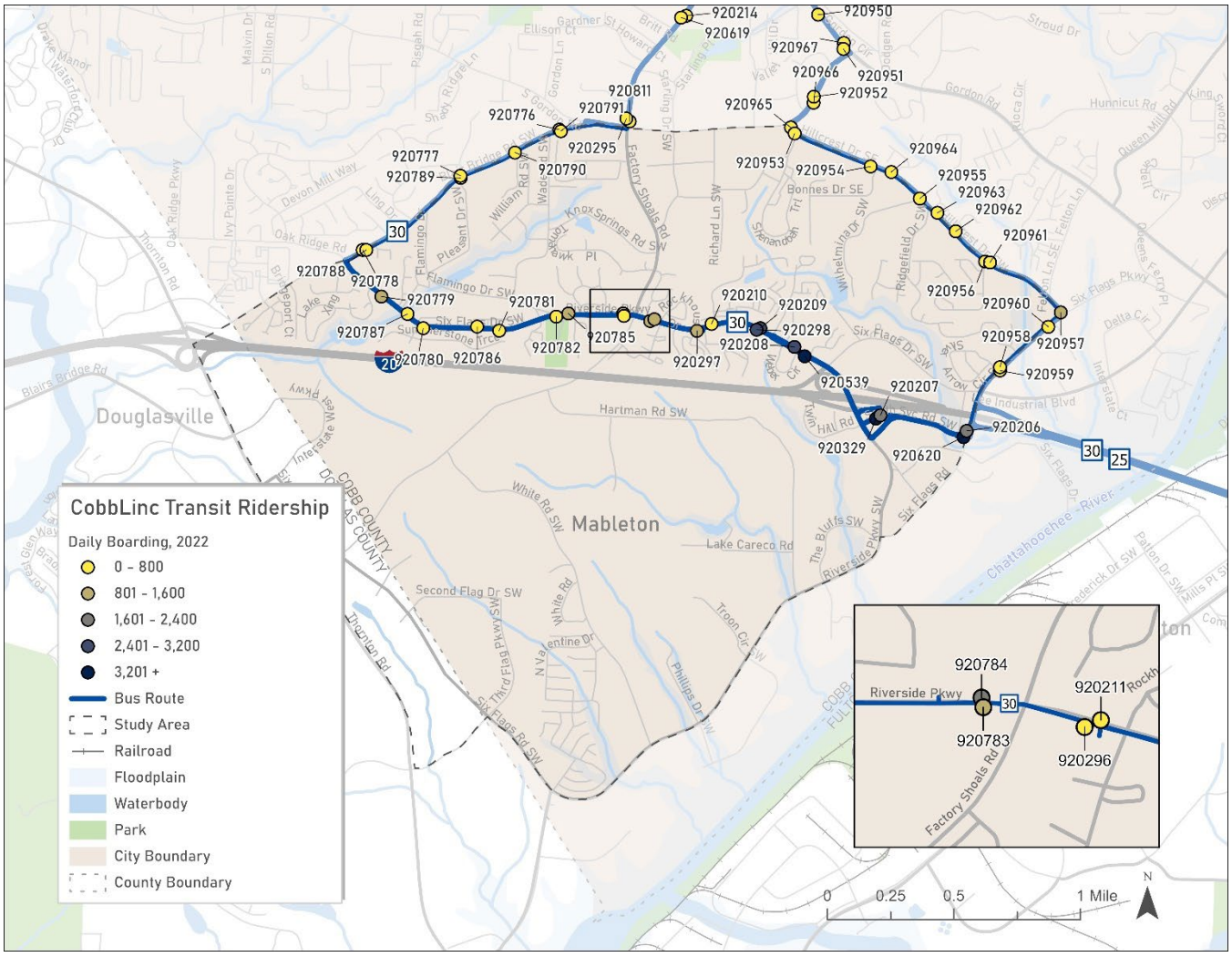



*Figure 2-8. Existing Route 30 Daily Alighting*

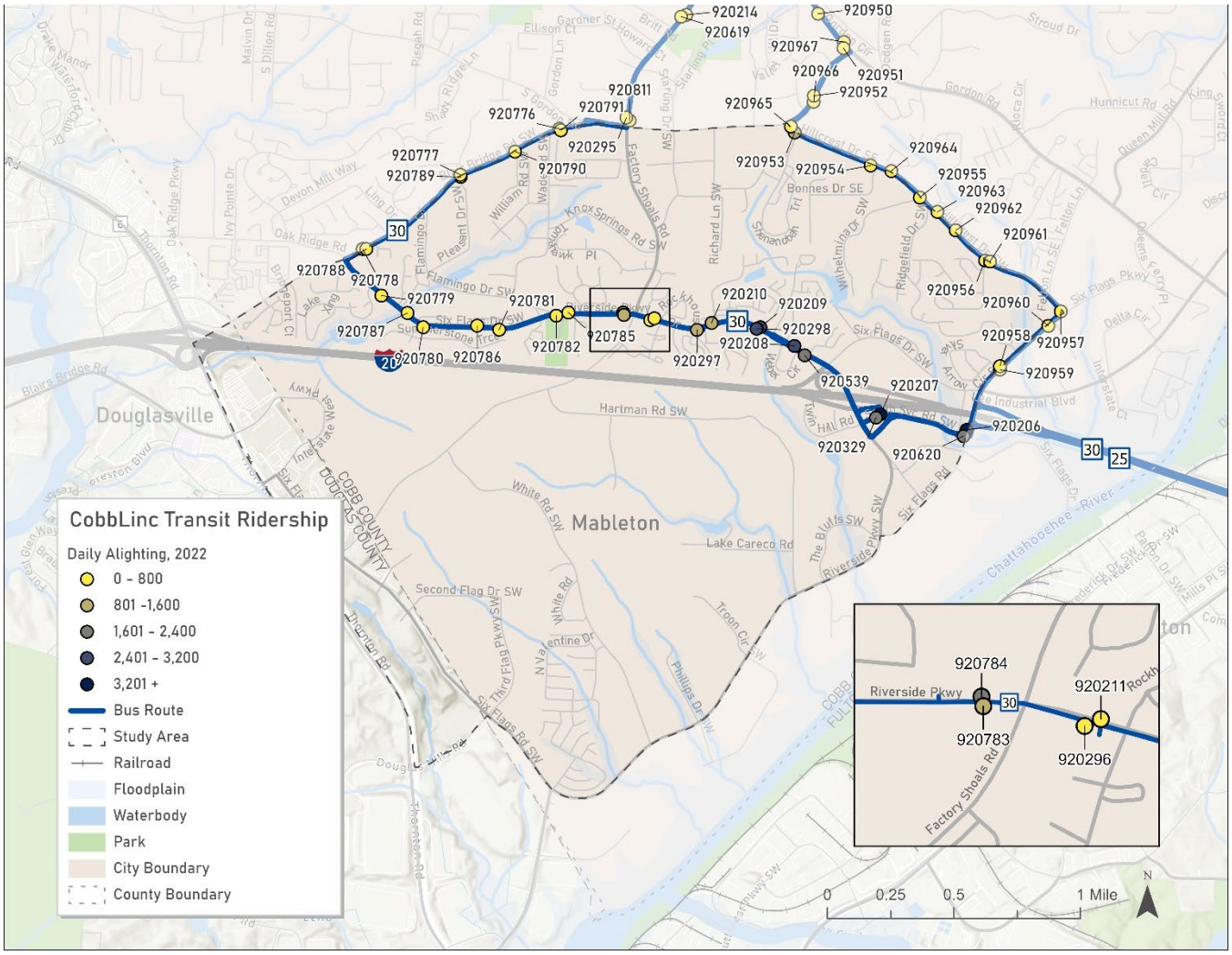



Table 2-2 shows specific counts for boarding and alighting at each stop. The stops nearest to Factory Shoals Road have high ridership, both boarding and alighting. Stop #920784 located at Six Flag Drive at Factory Shoals Road has the highest ridership, with 1417 people boarding at this stop each day and 2227 people alighting at this stop each day traveling further north into Mableton. Other stops near Factory Shoals Road have daily boarding and alighting totaling to more than 1,500 individuals per day at each stop.

*Table 2-2. Cobb Linc Route 30 Daily Ridership Counts*

| Stop ID | Location | Daily Boarding | Daily Alighting | Daily Total Boarding and Alighting |
|---|---|---|---|---|
| 920206 | Six Flags Parkway at S Service Road | 1,976 | 4,995 | 6,971 |
| 920207 | S Service Road at Riverside Parkway | 2,214 | 4,244 | 6,458 |
| 920208 | Six Flags Dr at Riverside Parkway | 2,968 | 2,599 | 5,567 |
| 920209 | Six Flags Dr at Six Flags Parkway | 2,504 | 2,537 | 5,041 |
| 920210 | Six Flags Dr at Elsner Road | 526 | 1,177 | 1,703 |
| 920211 | Six Flags Dr at Factory Shoals Road | 854 | 699 | 1,553 |
| 920296 | Six Flags Dr at Whisper Ct | 1,346 | 453 | 1,799 |
| 920297 | Six Flags Dr at Elsner Road | 1,279 | 992 | 2,271 |
| 920298 | Six Flags Dr at Six Flags Parkway | 2,898 | 2,513 | 5,411 |
| 920329 | S Service Road at Riverside Parkway | 3,735 | 2,247 | 5,982 |
| 920539 | Six Flags Dr at Riverside Parkway | 3,615 | 1,851 | 5,466 |
| 920620 | S Service Road at Six Flags Parkway | 6,983 | 1,647 | 8,630 |
| 920779 | Riverside Parkway at Lake Crossing | 1,161 | 392 | 1,553 |
| 920780 | Six Flags Dr at Summer Stone Ln | 190 | 125 | 315 |
| 920781 | Six Flags Dr at Winterglen Ln | 23 | 35 | 58 |
| 920782 | Six Flags Dr at Pine View Way | 684 | 794 | 1,478 |
| 920783 | Six Flags Dr at Factory Shoals Road | 618 | 1,139 | 1,757 |
| 920784 | Six Flags Dr at Factory Shoals Road | 1,417 | 2,227 | 3,644 |
| 920785 | Six Flags Dr at Springchase St | 1,001 | 721 | 1,722 |
| 920786 | Six Flags Dr at Winterglen Lane | 215 | 60 | 275 |
| 920787 | Six Flags Dr at Winterbrook Way | 215 | 412 | 627 |
| 920789 | Blair Bridge Road at Pleasant Dr | 110 | 317 | 427 |
| 920790 | Blair Bridge Road at William Road | 35 | 19 | 54 |

Further, Table 2-3 shows ridership for each time period at the stops closest to Factory Shoals Road. The highest ridership is often seen during the midday, 9:00 AM – 3:29 PM as well as during the AM peak, 6:00 AM-8:59 AM.

*Table 2-3. Route 30 Factory Shoals Road Bus Stop Ridership*

| Stop ID | Time Period | Boarding | Alighting |
|---|---|---|---|
| **920211** | | | |
| | AM Early | 27 | 11 |
| | AM Peak | 301 | 140 |
| | Midday | 396 | 146 |
| | PM Late | 14 | 158 |
| | PM Peak | 116 | 243 |
| | Unknown | 0 | 1 |
| | **Daily Total** | **854** | **699** |
| **920296** | | | |
| | AM Early | 90 | 5 |
| | AM Peak | 272 | 30 |
| | Midday | 684 | 177 |
| | PM Late | 110 | 99 |
| | PM Peak | 188 | 140 |
| | Unknown | 2 | 2 |
| | **Daily Total** | **1,346** | **453** |
| **920783** | | | |
| | AM Early | 27 | 113 |
| | AM Peak | 114 | 225 |
| | Midday | 282 | 481 |
| | PM Late | 78 | 150 |
| | PM Peak | 115 | 169 |
| | Unknown | 2 | 1 |
| | **Daily Total** | **618** | **1,139** |
| **920784** | | | |
| | AM Early | 8 | 7 |
| | AM Peak | 303 | 749 |
| | Midday | 566 | 736 |
| | PM Late | 144 | 290 |
| | PM Peak | 396 | 445 |
| | Unknown | 0 | 0 |
| | **Daily Total** | **1,417** | **2,227** |

Analyzing the boarding and alighting counts at each bus stop reveals that stops near residential areas, such as Chimney Hill Townhomes, as well as those near business areas like Flags Village Shopping Center, Liberty Plaza, and the EpiCenter, experience higher boarding numbers. Most of these stops are equipped with shelters, enhancing passenger comfort. The stop with the highest number of boarding is located near Six Flags, underscoring its significance in the local transit network.

**High Ridership Stops:**

- Six Flags Parkway at S Service Road (Stop ID: 920206) and S Service Road at Six Flags Parkway (Stop ID: 920620) have the highest daily boarding and alighting numbers, with a combined total of 6,971 and 8,630 daily boardings and alightings, respectively. These stops

are crucial hubs for transit users, particularly near Six Flags and the surrounding commercial areas. These stops indicate the significant role of Route 30 in serving both daily commuters and visitors to this high-traffic area.

- Transfer to/from Connect Douglas Route 40 (Six Flags) (Stop ID: 920329) also shows high usage with a total of 5,982 boardings and alightings daily. This indicates that Riverside Parkway is a critical corridor for transit, which is near the proposed pedestrian bridge study area. Enhancing pedestrian connectivity here would likely benefit a significant number of riders who rely on transit access.

**Moderate to High Ridership Stops:**

- Six Flags Dr at Riverside Parkway (Stop ID: 920539) with 5,466 total boardings and alightings, and Six Flags Dr at Six Flags Parkway (Stop ID: 920298) with 5,411, are moderate to high-volume stops. These stops further emphasize the importance of Riverside Parkway and its connectivity to Six Flags as a key area for both residential and commercial transit users.

**Factory Shoals Road Area:**

Stops along Factory Shoals Road are also significant:

- Riverside Pkwy at Whisper Ln (Stop ID: 920211) shows a total of 1,553 daily boardings and alightings.
- Riverside Pkwy at Factory Shoals Road (Stop ID: 920783) and (Stop ID: 920784) have daily totals of 1,757 and 3,644 respectively.

These numbers highlight Factory Shoals Road as an important transit corridor. The stops along this road serve a critical residential area and have substantial boarding and alighting activity, making it essential to enhance pedestrian access and safety, especially with the proposed pedestrian bridge.

**Other Noteworthy Stops**:

- Riverside Parkway at Lake Crossing (Stop ID: 920779) and Six Flags Dr at Elsner Road (Stop ID: 920210) also see moderate activity, with daily totals of 1,553 and 1,703 respectively. These stops serve smaller residential or business areas, yet they still contribute to the overall flow of transit users.

The high ridership numbers across several key stops indicate that the Study Area experiences significant transit demand, especially around the Six Flags Parkway, Riverside Parkway, and Factory Shoals Road corridors. These areas are vital for commuters, residents, and even visitors traveling through the area, making them key points for transit infrastructure improvements.

## Sidewalk Inventory and Pedestrian Connections

The Active Transportation Facilities Map offers a detailed view of the existing and proposed pedestrian infrastructure within the Study Area, focusing on sidewalks, trails, and connections to transit. Active transportation refers to modes of travel powered by human energy, such as walking and biking. A well-connected pedestrian network is essential to ensuring safe, accessible, and continuous routes, particularly for transit-dependent residents.

Existing trails are concentrated along Riverside Parkway and near recreational areas along the Chattahoochee River. These trails promote recreational use and provide critical links for pedestrians and cyclists. Sidewalks are present along some primary corridors, such as Riverside Parkway and Hartman Road SW, but the coverage is fragmented, leaving significant gaps.

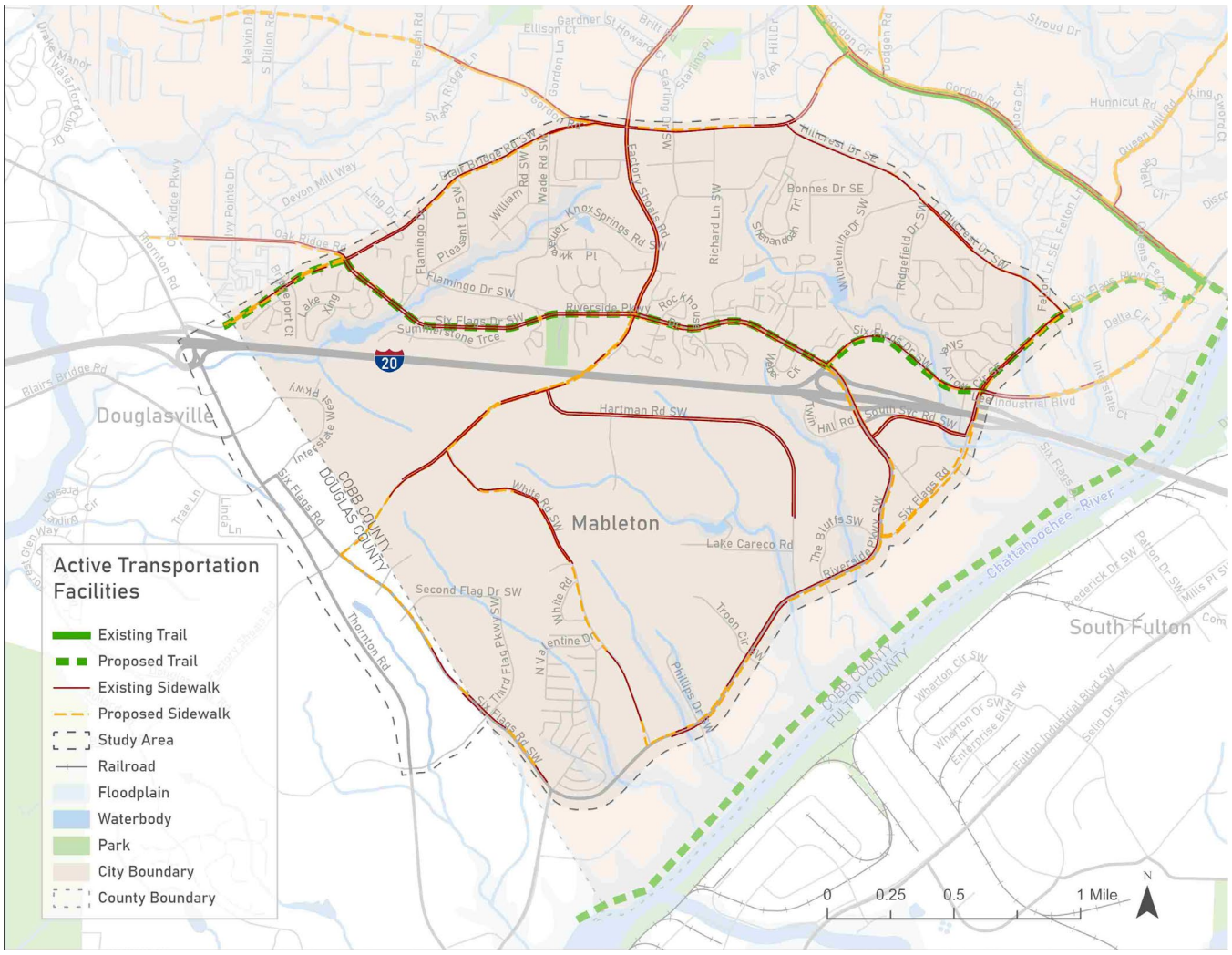
In the Study Area there are 5.4 miles of roads with complete sidewalks (sidewalk on both sides of the street). There are 3.2 miles of roads with partial sidewalk (sidewalk on one side of the street). Sidewalk facilities are scattered along arterials and collectors.

A majority of sidewalk facilities follow one side of the roadway. This includes road segments of Factory Shoals Road and White Road SW. The side lacking sidewalks are predominantly near forested areas, which tend to lack sidewalks entirely, creating barriers to pedestrian movement and safety risks due to limited visibility and uneven terrain.

A critical gap in the sidewalk network exists where Factory Shoals Road crosses I-20 as a bridge. This bridge lacks sidewalks, requiring pedestrians to walk within the roadway next to high vehicle traffic.

Additionally, there are stretches of roadway that lack sidewalks on both sides. These include Six Flags Road, White Road SW, and a segment of Riverside Parkway SW. The missing sidewalks on Six Flags Road are in close proximity to industrial and construction zones, leaving pedestrians without dedicated facilities in high-traffic areas.

*Figure 2-9. Active Transportation Facilities*




## Lighting and Infrastructure Safety

Evaluating lighting conditions and pedestrian infrastructure is critical for identifying safety risks and ensuring the well-being of all road users. Streetlights can be implemented to improve visibility for drivers, pedestrians, cyclists, and transit users, especially during nighttime and adverse weather conditions.

The northern and northeastern sections of the study area, including portions near Riverside Parkway, show a high density of streetlights, which aligns with existing sidewalks and trails. These areas are better illuminated, promoting safe pedestrian travel. Central and southern sections near Mableton and Factory Shoals Road show gaps in streetlight coverage, especially in areas with proposed sidewalks and trails.

Factory Shoals Road and portions of Hartman Road SW and White Road SW have few or no streetlights, potentially increasing safety risks for pedestrians, cyclists, and other non-motorized travelers. Proposed trails and sidewalks are seen near I-20 and along Industrial Boulevard.

# Traffic Forecasting

## Vehicular Traffic Growth Projections

In order to determine the growth rates used for traffic projections in the project area, demographic data trends, historical traffic count data from GDOT, and ARC's travel demand model (TDM) were utilized.

As part of the traffic forecasting process, a review of projected demographic data was prepared to better understand growth trends within and around the project area. Demographic data from the Atlanta Regional Commission was examined to understand future growth rates. As the project is located in close proximity to Douglas and Fulton Counties, demographic data for those geographies was also evaluated. Furthermore, Census Tracts adjacent to the study corridor were included in the analysis; Table 2-4, 2-5 and 2-6 present population, household, and employment projections from ARC respectively. While county-wide demographic forecasts do not necessarily match traffic growth patterns in a specific study area, they provide valuable context regarding long-term growth when forecasting traffic volumes. Source data and detailed calculations are included in Appendix C.

### Population Growth Projections

- Cobb County: The population is expected to grow from 766,149 in 2020 to 914,448 by 2050, at a Compound Annual Growth Rate (CAGR) of 0.58%.
- Douglas County and Fulton County are projected to have slightly higher growth rates, at 0.72% and 0.71%, respectively.
- The study area Census Tracts (Census Tracts 13097080102, 13067031311, 13067031308, and 13067031310) are projected to grow from 30,313 in 2020 to 35,054 by 2050, reflecting a more moderate CAGR of 0.48%.

### Household Growth Projections

- Cobb County households are projected to increase from 291,639 in 2020 to 360,871 by 2050, at a CAGR of 0.70%.
- The household growth in Douglas and Fulton Counties is slightly higher, at 0.85% CAGR, suggesting these areas will experience faster residential development.
- In the study area tracts, the number of households is expected to grow from 11,477 in 2020 to 14,181 by 2050, with a CAGR of 0.70%. Census Tract 13067031308 shows the highest growth rate, with households increasing at a 1.02% CAGR, reflecting localized residential developments that may spur future traffic growth.

### Employment Growth Projections

- Employment in Cobb County is projected to grow at a CAGR of 0.56%, increasing from 415,121 in 2020 to 495,388 by 2050.
- Employment growth in Douglas and Fulton Counties is slightly higher, at 0.80% and 0.67%, respectively.
- In the study area tracts, employment is expected to rise from 18,288 in 2020 to 24,145 by 2050, representing a relatively high CAGR of 0.88%. This is driven by industrial and commercial developments, particularly in Census Tracts 13097080102 and 13067031308, which show growth rates of 0.94% and 1.01%, respectively.

*Table 2-4. ARC Population Projections*

| Geography | 2020 | 2030 | 2040 | 2050 | CAGR |
|---|---|---|---|---|---|
| Cobb County | 766,149 | 827,009 | 867,150 | 914,448 | **0.58%** |
| Douglas County | 144,237 | 157,967 | 168,954 | 179,227 | **0.72%** |
| Fulton County | 1,066,710 | 1,196,716 | 1,274,673 | 1,321,079 | **0.71%** |
| Census Tract 13097080102 | 8,103 | 8,376 | 8,855 | 9,363 | 0.49% |
| Census Tract 13067031311 | 9,868 | 10,419 | 10,734 | 11,188 | 0.41% |
| Census Tract 13067031308 | 5,287 | 5,477 | 5,828 | 6,401 | 0.64% |
| Census Tract 13067031310 | 7,055 | 7,454 | 7,585 | 8,102 | 0.43% |
| Study Area Tracts | 30,313 | 31,726 | 33,002 | 35,054 | **0.48%** |

*Table 2-5. ARC Household Projections*

| Geography | 2020 | 2030 | 2040 | 2050 | CAGR |
|---|---|---|---|---|---|
| Cobb County | 291,639 | 319,985 | 340,012 | 360,871 | **0.70%** |
| Douglas County | 51,024 | 57,474 | 62,202 | 65,992 | **0.85%** |
| Fulton County | 448,577 | 517,444 | 555,262 | 580,993 | **0.85%** |
| Census Tract 13097080102 | 3,261 | 3,640 | 3,909 | 4,053 | 0.73% |
| Census Tract 13067031311 | 3,702 | 3,983 | 4,219 | 4,444 | 0.61% |
| Census Tract 13067031308 | 1,787 | 2,021 | 2,211 | 2,436 | 1.02% |
| Census Tract 13067031310 | 2,727 | 2,924 | 3,021 | 3,248 | 0.56% |
| Study Area Tracts | 11,477 | 12,568 | 13,360 | 14,181 | **0.70%** |

*Table 2-6. ARC Employment Projections*

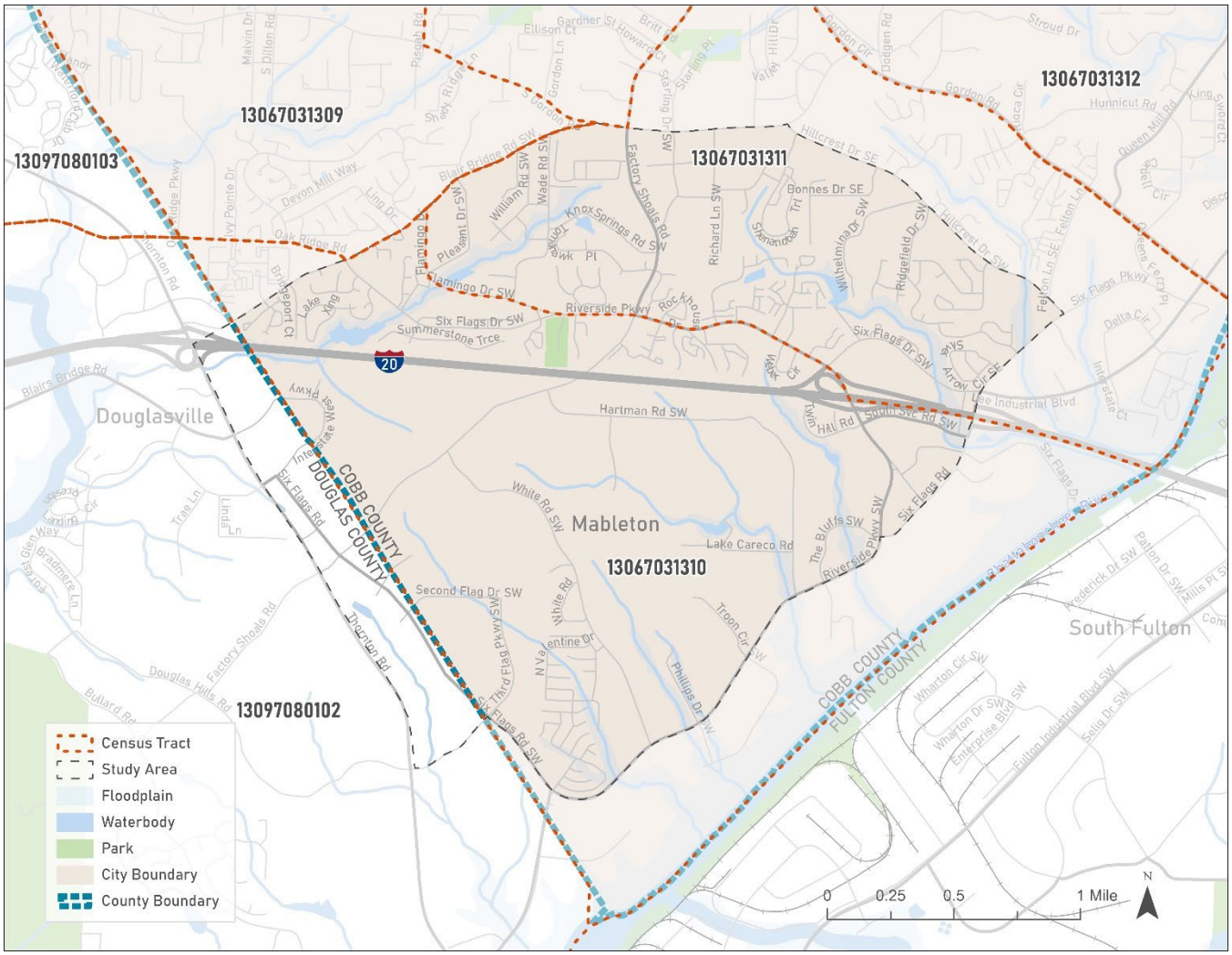
| Geography | 2020 | 2030 | 2040 | 2050 | CAGR |
|---|---|---|---|---|---|
| Cobb County | 415,121 | 465,986 | 479,946 | 495,388 | **0.56%** |
| Douglas County | 52,730 | 60,245 | 64,840 | 67,066 | **0.80%** |
| Fulton County | 906,973 | 1,028,875 | 1,075,566 | 1,115,354 | **0.67%** |
| Census Tract 13097080102 | 7,758 | 8,971 | 9,841 | 10,266 | 0.94% |
| Census Tract 13067031311 | 3,060 | 3,473 | 3,546 | 3,765 | 0.64% |
| Census Tract 13067031308 | 980 | 1,123 | 1,226 | 1,330 | 1.01% |
| Census Tract 13067031310 | 6,490 | 8,298 | 8,277 | 8,784 | 0.91% |
| Study Area Tracts | 18,288 | 21,865 | 22,890 | 24,145 | **0.88%** |

The moderate population and household growth in the Study Area, alongside slightly higher rates in nearby Douglas and Fulton counties, suggest a steady increase in vehicular traffic. Residential developments in Census Tracts 13067031308 and 13067031310 will likely contribute to additional local traffic, particularly as more households are established.

The significant growth in employment, particularly in tracts adjacent to industrial zones, is expected to increase commuter and freight traffic. As employment in the study area grows by 32.1% between 2020 and 2050, the demand for road capacity will intensify, particularly along key corridors like Factory Shoals Road, Thornton Road, and I-20. Increased freight activity from industrial employment will also

add pressure to existing infrastructure, necessitating potential capacity improvements and traffic management strategies.

*Figure 2-10. Census Tracts within the Study Area*




## GDOT Historical Traffic Count Data

GDOT provides historical count data which is used in analyzing historical volume trends and can be an indication of future growth. A compound annual growth rate was calculated using GDOT historical AADT data (excluding estimated data points) over the past 15 years at locations within the study area. Historical count AADT volumes were determined from the raw counts from the TADA database with the corresponding GDOT adjustment factors from each year of count collection. This compound annual growth rate was calculated using an exponential regression model of best fit. Data from 2020-2022 was excluded from this analysis due to the effects of the COVID-19 pandemic. This weighted average annual growth rate was calculated to be **2.93%** and is included in Table 2-7 below.

*Table 2-7. GDOT Historical Growth Rate Analysis*

| TC | Location | AADT | | | | | | | | | | | | | | | CAGR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020* | 2021* | 2022* | 2023 | 2024 | |
| 067-0231 | Factory Shoals Rd N/O Riverside Pkwy | 13,398 | | | | 16,171 | | | | 19,167 | | | | | 16,040 | | 1.54% |
| 067-0784 | Riverside Pkwy W/O Factory Shoals Rd | 8,793 | | | | | | 10,212 | | | 11,314 | | | | | | 2.80% |
| 097-0043 | Six Flags Rd W/O Factory Shoals Rd | 4,624 | | | | 4,958 | | 5,541 | | 5,925 | | | | | | | 3.21% |
| 097-0044 | Interstate West Pkwy N/O Six Flags Rd | | | 1,230 | | | | | 2,522 | | | | | | | | 15.44% |
| 067-0785 | Six Flags Rd W/O Riverside Pkwy | | | 3,108 | | | | 5,657 | | | 5,170 | | | | | | 7.99% |
| 067-0787 | Riverside Pkwy N/O Hartman Rd | 10,282 | | | | | | | | 16,203 | | | | | | 16,815 | 3.70% |
| 067-0783 | Riverside Pkwy S/O Six Flags Rd | | 7,846 | | | | 11,546 | | | 11,770 | | | | | | 13,097 | 3.64% |
| 067-8323 | Blair Bridge Rd S/O S Gordon Rd | | 6,023 | | | | | | | | | | | | | 7,986 | 2.19% |
| 067-2541 | Mableton Pkwy S/O Factory Shoals Rd | 21,087 | | 19,416 | | 22,495 | | 24,339 | | 22,047 | | | | | | 22,104 | 0.60% |
| | | | | | | | | | | | | | **Weighted Average:** | | | | **2.93%** |

## Travel Demand Model

ARC's Regional Travel Demand Model (TDM) was utilized to understand projected traffic volume trends for the future along area roads. In contrast to historical count data, the TDM is a macroscopic model that estimates future travel patterns and growth using input data consisting of current travel behavior, anticipated land uses and intensities, and demographics. 2020 and 2050 models were reviewed. It was determined that the TDM model projects a growth rate of **1.21%** for roadways within the study area. Table 2-8 presents the daily volumes and corresponding growth rates from the TDM. It is important to note that while the exact traffic volumes from this model may not accurately reflect actual volumes on project area roadways, changes in volume identified by the model are still useful for traffic projections. This is because they account for changes in future land uses, land use intensities, population, and employment.

*Table 2-8. ARC Travel Demand Model Growth Rates*

| Location | Daily Vehicular Volume | | CAGR |
|---|---|---|---|
| | 2020 | 2050 | |
| Factory Shoals Road North of Riverside Parkway | 13,565 | 22,983 | 1.77% |
| Factory Shoals Road North of Hartman Road | 7,711 | 10,512 | 1.04% |
| Factory Shoals Road North of White Road | 6,849 | 8,923 | 0.89% |
| Factory Shoals Road North of Six Flags Road | 6,508 | 8,162 | 0.76% |
| Factory Shoals Road East of SR 6 | 4,318 | 5,376 | 0.73% |
| **Total** | **38,951** | **55,956** | **1.21%** |

## Growth Rate Selection for Use in Vehicular Volume Forecasting

Based on a review of the data sources presented above, it was determined that a rate of 3.0% will be used to forecast growth from the existing year (2024) to the opening year (2030). This rate was selected based on historical traffic count growth. Additionally, a rate of 1.25% will be used to forecast from opening year (2030) to design year (2050) and design year +2 (2052). This rate was selected based on ARC TDM growth.

**Proposed Short-Term Growth Rate (Existing 2023 to Opening 2030) - 3.00%**

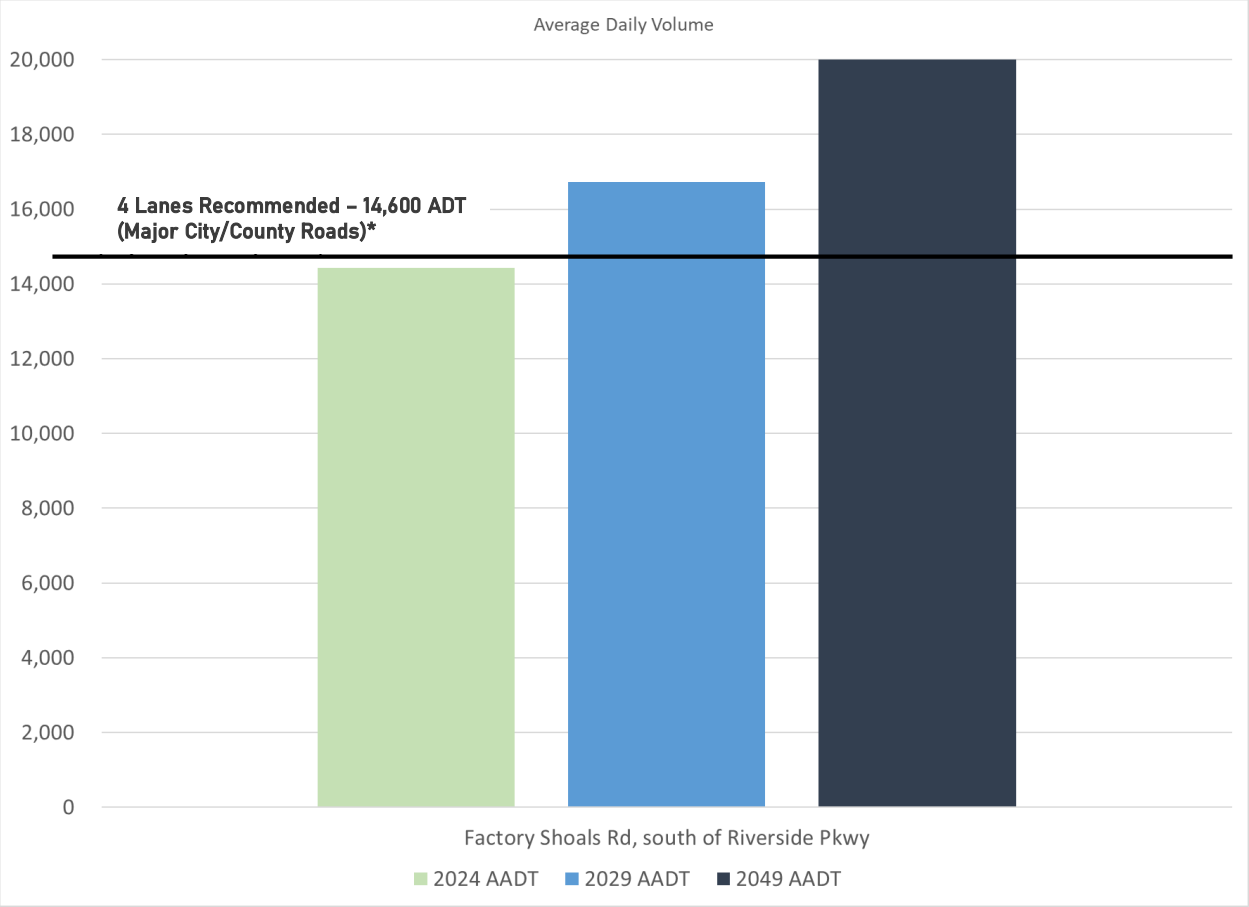
**Proposed Long-Term Growth Rate (Opening 2030 to Design +2 2052) - 1.25%**

The application of these growth rates to the daily traffic volume collected on Thursday, August 8th is presented in **Table 2-9** and **Figure 2-11**.

*Table 2-9. Vehicular Traffic Forecasting Summary*

| Count Location | 2024 AADT | 24-HR T% | S.U. Truck % | Comb. Truck % | 2029 AADT | 2049 AADT |
|---|---|---|---|---|---|---|
| Factory Shoals Road, south of Riverside Parkway | 14,428 | 10.4% | 6.8% | 3.5% | 16,726 | 21,443 |

*Figure 2-11. Vehicular Traffic Forecasting Summary (Source: GRTA)*




## Active Mode Traffic Growth Projections

The growth methodology accounts for higher growth rates initially, reflecting increased usage as new facilities become available (e.g., pedestrian bridge). The longer-term growth (1% annually) ensures sustainability by accounting for gradual increases in usage over 20 years.

This forecasting approach supports infrastructure planning by providing realistic estimates for future demand and emphasizes the importance of both short-term upgrades and long-term investments to meet pedestrian and cycling needs in the region.

**2029 Projections**:

- Pedestrian volumes are projected to increase to 39 on Thursday and 50 on Friday.
- Bicycle volumes remain stable at 6 for Thursday and 4 for Friday.

**2049 Projections**:

- Pedestrian counts could rise to 46 on Thursday and 60 on Friday.
- Bicycle volumes are expected to increase slightly, reaching 7 on Thursday and 5 on Friday.

*Table 2-10. Active Transportation Projections*

| Location | Day | Period | Active Mode Volume | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | 2024 | | | 2029 | | | 2049 | | |
| | | | Total | Pedestrian | Bicycle | Total | Pedestrian | Bicycle | Total | Pedestrian | Bicycle |
| Factory Shoals Rd, at I-20 Overpass Bridge | Thursday | 16-HR | 43 | 37 | 6 | 45 | 39 | 6 | 53 | 46 | 7 |
| Factory Shoals Rd, at I-20 Overpass Bridge | Friday | 16-HR | 52 | 48 | 4 | 54 | 50 | 4 | 65 | 60 | 5 |
| Factory Shoals Rd, at I-20 Overpass Bridge | Saturday | 16-HR | 20 | 19 | 1 | 21 | 20 | 1 | 25 | 24 | 1 |
| Factory Shoals Rd, north of Bob White Rd | Thursday | 16-HR | 42 | 37 | 5 | 44 | 39 | 5 | 52 | 46 | 6 |
| Factory Shoals Rd, north of Bob White Rd | Friday | 16-HR | 39 | 35 | 4 | 41 | 37 | 4 | 49 | 44 | 5 |
| Factory Shoals Rd, north of Bob White Rd | Saturday | 16-HR | 19 | 17 | 2 | 20 | 18 | 2 | 23 | 21 | 2 |
| Bob White Rd, east of Factory Shoals Rd | Thursday | 16-HR | 6 | 6 | 0 | 6 | 6 | 0 | 7 | 7 | 0 |
| Bob White Rd, east of Factory Shoals Rd | Friday | 16-HR | 14 | 11 | 3 | 14 | 11 | 3 | 18 | 14 | 4 |
| Bob White Rd, east of Factory Shoals Rd | Saturday | 16-HR | 7 | 7 | 0 | 7 | 7 | 0 | 9 | 9 | 0 |

## Transit Ridership Growth Projections

Additionally, growth projections were calculated for transit ridership, shown in Table 2-11, to understand increased usage of new facilities near the intersection of Factory Shoals Road and Riverside Parkway.

The overall growth rate of 2% ensures sustainability by accounting for gradual increases in usage over 20 years.

This growth forecasting provides estimates for future demand that support infrastructure planning by emphasize the importance of both short-term upgrades and long-term investments to meet the needs of transit users in the region.

**2050 Projections**:

- Transit ridership is projected to increase to at three of the four existing transit stops near the intersection of Factory Shoals Road and Riverside Parkway.
- Overall transit ridership is projected to increase slightly at Factory Shoals Road and Riverside Parkway.

*Table 2-11. Transit Ridership Projections*

| Location | Transit Ridership | | | | | | |
|---|---|---|---|---|---|---|---|
| | 2020 | | | 2050 | | | Growth Rate |
| | Total | Park and Ride Volume | Kids and Ride Volume | Total | Park and Ride Volume | Kids and Ride Volume | |
| Factory Shoals Rd N/O Riverside Pkwy | 99 | 69 | 30 | 186 | 129 | 57 | 2% |
| Factory Shoals Rd S/O Riverside Pkwy | 7 | 2 | 5 | 420 | 269 | 151 | 15% |
| Riverside Pkwy E/O Factory Shoals Rd | 265 | 161 | 104 | 56 | 1 | 55 | -5% |
| Riverside Pkwy W/O Factory Shoals Rd | 159 | 90 | 69 | 252 | 139 | 113 | 2% |
| Total | 322 | 208 | 530 | 538 | 376 | 914 | 2% |

# Travel Pattern and Activity Analysis

## Longitudinal Employer-Household Dynamics (LEHD)

### Concentration of Employment Centers

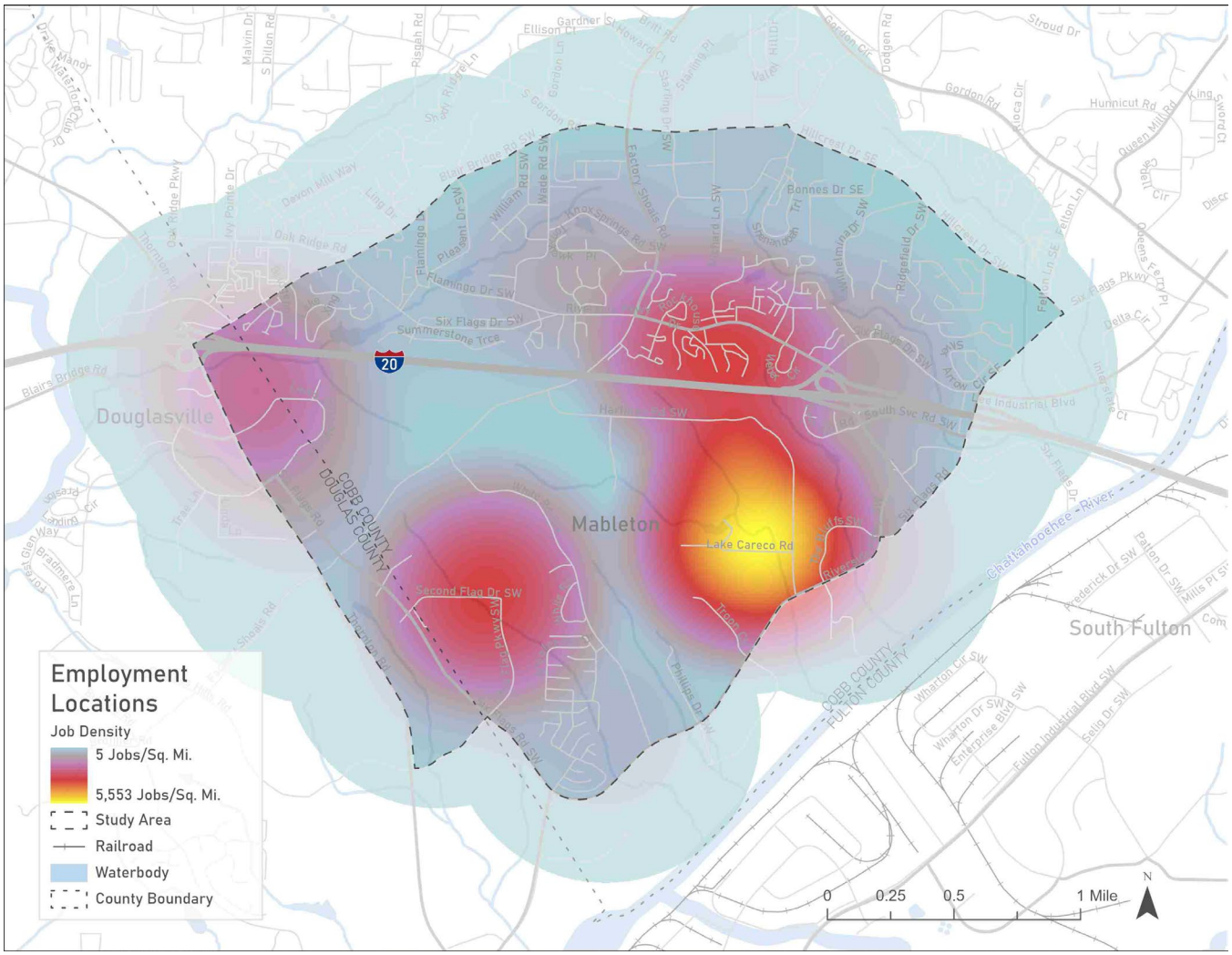
Data from the US Census Center of Economic Studies for the year 2022 was used to understand travel and activity patterns. The heatmap below indicates the number of employment centers within the study area, with the most densely concentrated locations marked in red and yellow. These areas appear along I-20 and in the southern portion of the Study Area. The densest cluster of employment is located near Hartman Road, near major warehousing businesses. This area likely hosts large employers, potentially due to the proximity of transportation infrastructure like the interstate, making it attractive for distribution centers, warehousing, or manufacturing. Other employment hotspots are located near Douglas County and directly north of I-20.

The heatmap suggests a dispersed spread of employment locations rather than a single, dominant employment center. This points to a mixed-use or decentralized employment area where jobs may be spread across multiple sectors such as retail, light manufacturing, or service industries. Some of the

lower-density clusters (in magenta and blue) indicate smaller or less concentrated employment areas, which could include smaller offices, retail centers, or neighborhood services.

The presence of existing employment centers near key infrastructure like I-20 suggests this area could continue to attract business development, particularly industries that rely on easy transportation access. Planning efforts may need to focus on improving transportation connectivity and managing the impact on residential areas as employment hubs grow, particularly in more densely populated parts of Mableton.

*Figure 2-12. LEHD - Employment Locations*



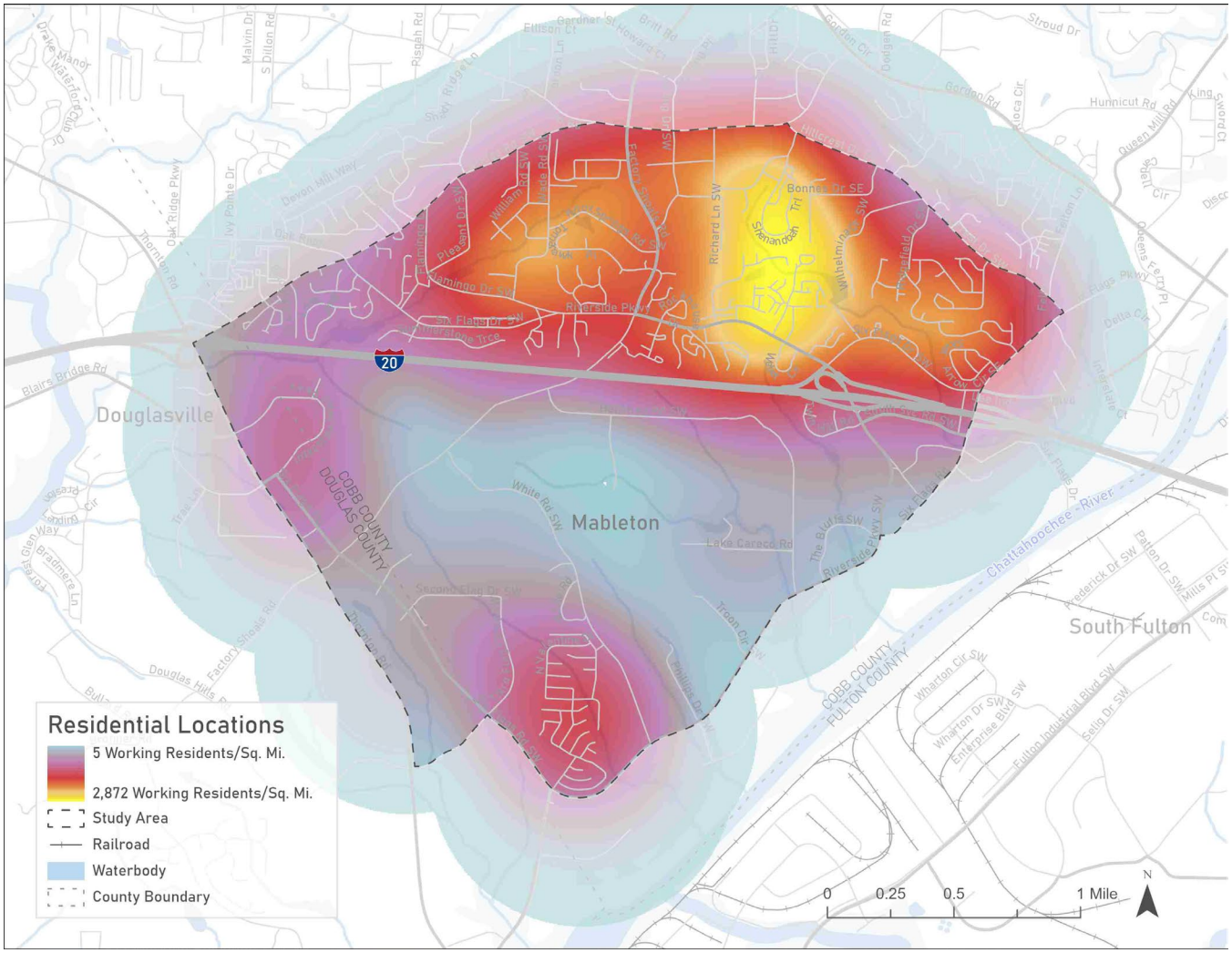

## Concentration of Residences

The map highlights residential density, with red and yellow areas indicating high concentrations of residents, while blue areas are more sparsely populated. The highest concentration of residences is observed in the northern parts of Study Area, particularly along Riverside Parkway and surrounding roadways. This area contains larger residential neighborhoods, likely due to proximity to schools, parks, or local amenities. A significant residential concentration can also be seen in the southernmost point of the Study Area where the Village at Six Flags Manufactured Home Community is located. Additionally,

the westernmost portion of the Study Area shows some residential density. This area closer to I-20 is contains more multi-family housing and dense single family development, potentially influenced by access to commercial services and transportation.

The proximity to I-20 seems to have less impact on residential density compared to employment locations. The areas further from the interstate, especially toward the north and east, show higher residential concentrations. This suggests that while employment may cluster near transportation hubs like the interstate, residential areas tend to be slightly removed from such major roadways and industrial uses that located nearby.

*Figure 2-13. LEHD – Residences*



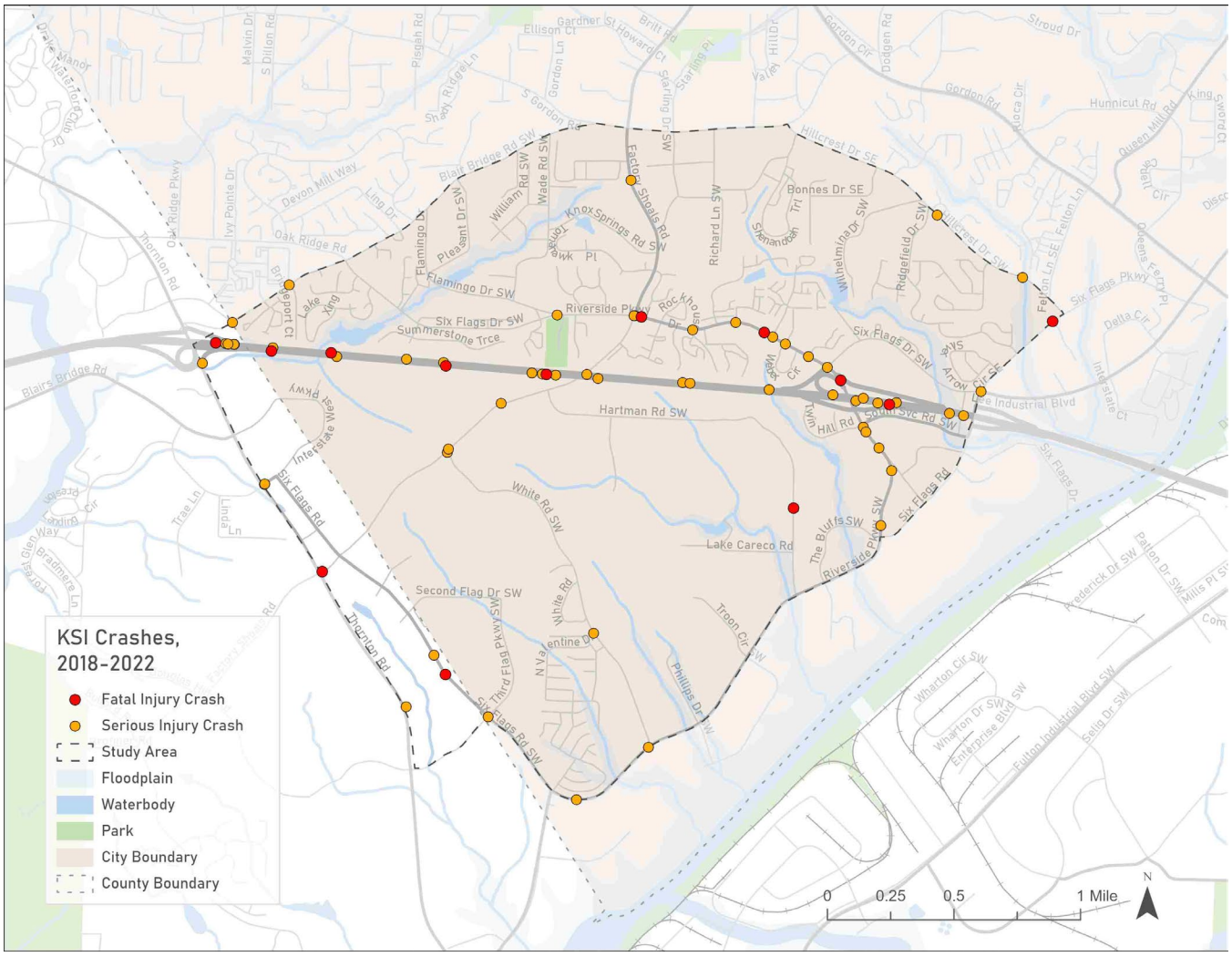
# Crash Data Analysis

The Crash Data Analysis examines the frequency and severity of crashes within the study area, with a focus on fatal and injury crashes, particularly those involving pedestrians and cyclists. This analysis also evaluates crash patterns along transit routes and in other high-risk areas to identify opportunities for targeted safety improvements. Using GDOT crash data from 2018-2022, the analysis highlights hotspots where a high number of crashes occur, providing valuable insights into areas where infrastructure upgrades and safety interventions can most effectively reduce risks for all roadway users. These findings help prioritize improvements for both vulnerable populations and key corridors, ensuring a safer, more accessible transportation network.

## KSI Crashes

The crash intensity analysis for the study area highlights locations with higher concentrations of KSI (Killed or Seriously Injured) crashes from 2018 to 2022. The map, Figure 2-14, provides key insights into areas with heightened safety concerns and informs the need for safety interventions.

*Figure 2-14. KSI Crashes, 2018-2022*



**Crash Hotspots:**

Crashes are concentrated around the I-20 corridor, particularly near intersections Thorton Road / SR 6 and Riverside Parkway at Six Flags Road. This suggests increased risk at major intersections and near highway ramps where traffic volumes are high. Apart from those occurring on I-20, the roadway with the largest number of KSI crashes is Riverside Parkway.

**Key Locations Along Factory Shoals Road:**

Crashes are recorded along the length of Factory Shoals Road, with specific instances at intersections of roadways such as Riverside Parkway and White Road. Two of four crashes occurring at the intersection of Riverside Parkway involved vehicles turning. Four of the additional crashes along Factory Shoals Road involved vehicles leaving their lane or the roadway, crash types that are more likely to result in severe outcomes.

**Active Transportation Safety Concerns:**

Four KSI crashes in the study area involved a pedestrian, all occurring on Riverside Parkway. Three of these crashes occurred in dark- not lighted conditions. In two of these instances, pedestrians were crossing the roadway outside of a marked crosswalk. Marked crosswalks along this segment of Riverside Parkway, between Factory Shoals Road and Six Flags Parkway SW, limited; distances between marked crosswalks range from about 0.25 mile to 0.5 mile. These crashes emphasize the coincidence of crashes along key pedestrian and bicycle routes, highlighting the opportunity for dedicated facilities and adequate lighting to reduce conflicts between motorized and non-motorized users. Pedestrian safety should be considered near commercial zones and intersections where pedestrian movements are frequent.

*Table 2-12. KSI Intersection Crashes, 2018-2022*

| Intersection Location | Serious Injury | Fatality |
|---|---|---|
| I-20 at Thornton Road / SR 6 | 5 | 2 |
| I-20 at Factory Shoals Road and vicinity | 6 | 1 |
| I-20 at Riverside Parkway and vicinity | 11 | 2 |
| Factory Shoals Road at Thornton Road | 0 | 1 |
| Factory Shoals Road at White Road | 2 | 0 |
| Factory Shoals Road at Riverside Parkway | 3 | 1 |

## Pedestrian and Bicycle Crashes

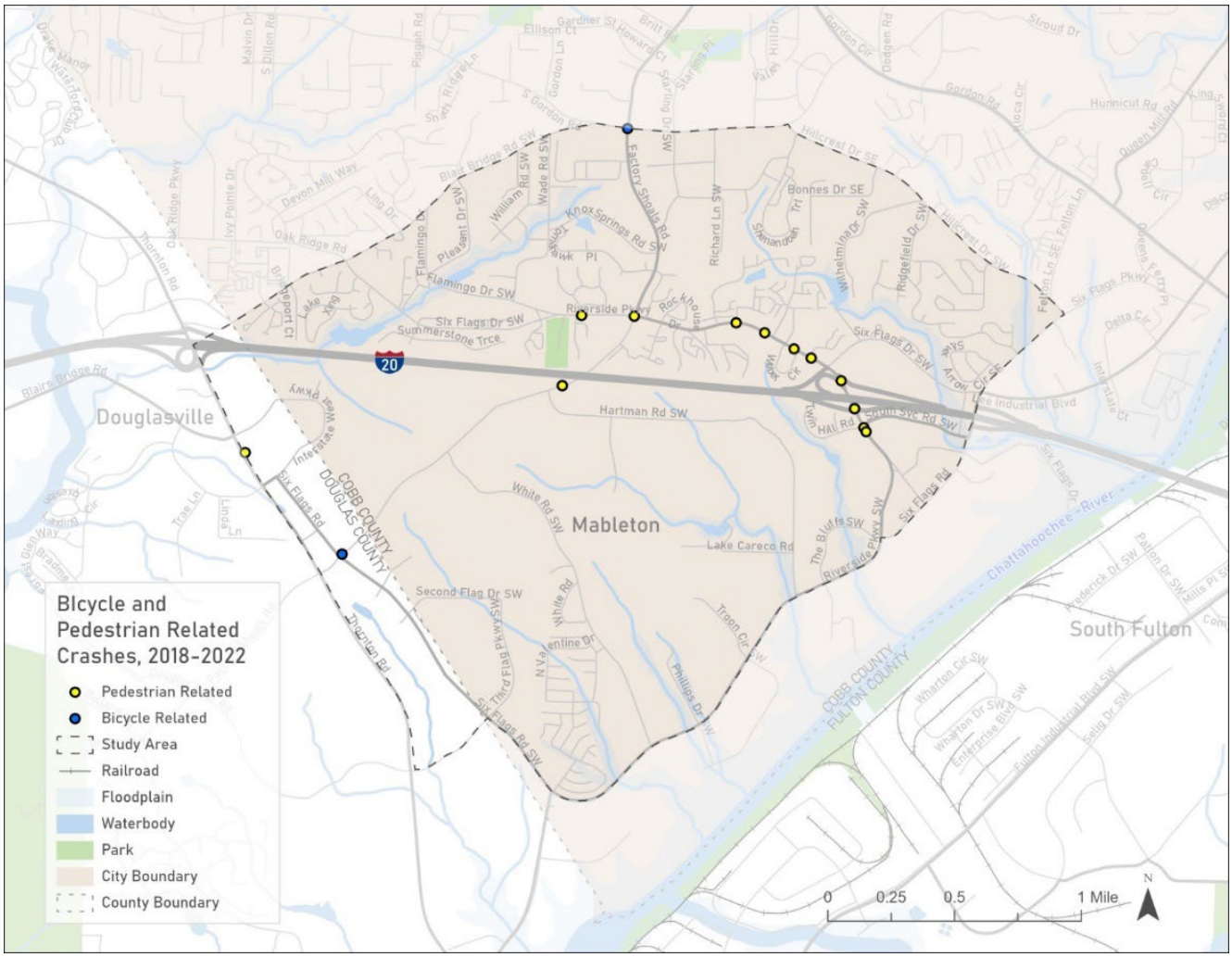
Pedestrian- and bicycle-involved crashes highlight key locations where crashes involving pedestrians and cyclists have occurred from 2018 to 2022. As roadways within the study area are largely geared towards vehicular modes of transportation, it is important to understand the conditions that other roadway users experience while travelling.

The majority of pedestrian-involved crashes are concentrated along Riverside Parkway and Six Flags Road. Two pedestrian-involved crashes occurred along Factory Shoals Road, one near the I-20 bridge. One pedestrian-involved crash occurred on Thornton Road, both areas known for high traffic volumes.

Two bicycle-involved crashes occurred between 2018-2022. Both crashes occurred along Factory Shoals Road, one at the intersection of Six Flags Road and one at the intersection of South Gordon Road. One bicyclist crash occurred while the bicyclist was crossing in the crosswalk. The other crash occurred while the bicyclist was traveling in the same direction as vehicle traffic. Bicycle crashes are less frequent but occur at intersections at which turning movements complicate traffic patterns and where bicyclists are travelling within the roadway.

The pattern of crashes aligns with areas where pedestrian infrastructure is limited or inconsistent. Factory Shoals Road is a major corridor with significant truck and vehicular traffic, presenting potential challenges for safe non-motorized travel. The lack of bike lanes or protected spaces along high-traffic corridors increases the risk for cyclists. Intersections along Riverside Parkway appear to be hotspots for pedestrian-related crashes. Similarly, the intersections of Factory Shoals Road with Six Flags Road and S Gordon Road lack bicycle facilities where bicycle-related crashes have occurred. These areas have complex vehicle movements and are frequented by both local and commuter traffic. Thornton Road / SR 6 and I-20 overpass crossings are also notable for incidents, highlighting the need for safer crossings. The lack of continuous sidewalks and bike lanes contributes to pedestrian and cyclist vulnerability. Heavy truck traffic and high vehicle speeds may contribute to safety concerns, especially along Factory Shoals Road and I-20 crossings.

*Figure 2-15. Bicycle and Pedestrian Crashes, 2018-2022*



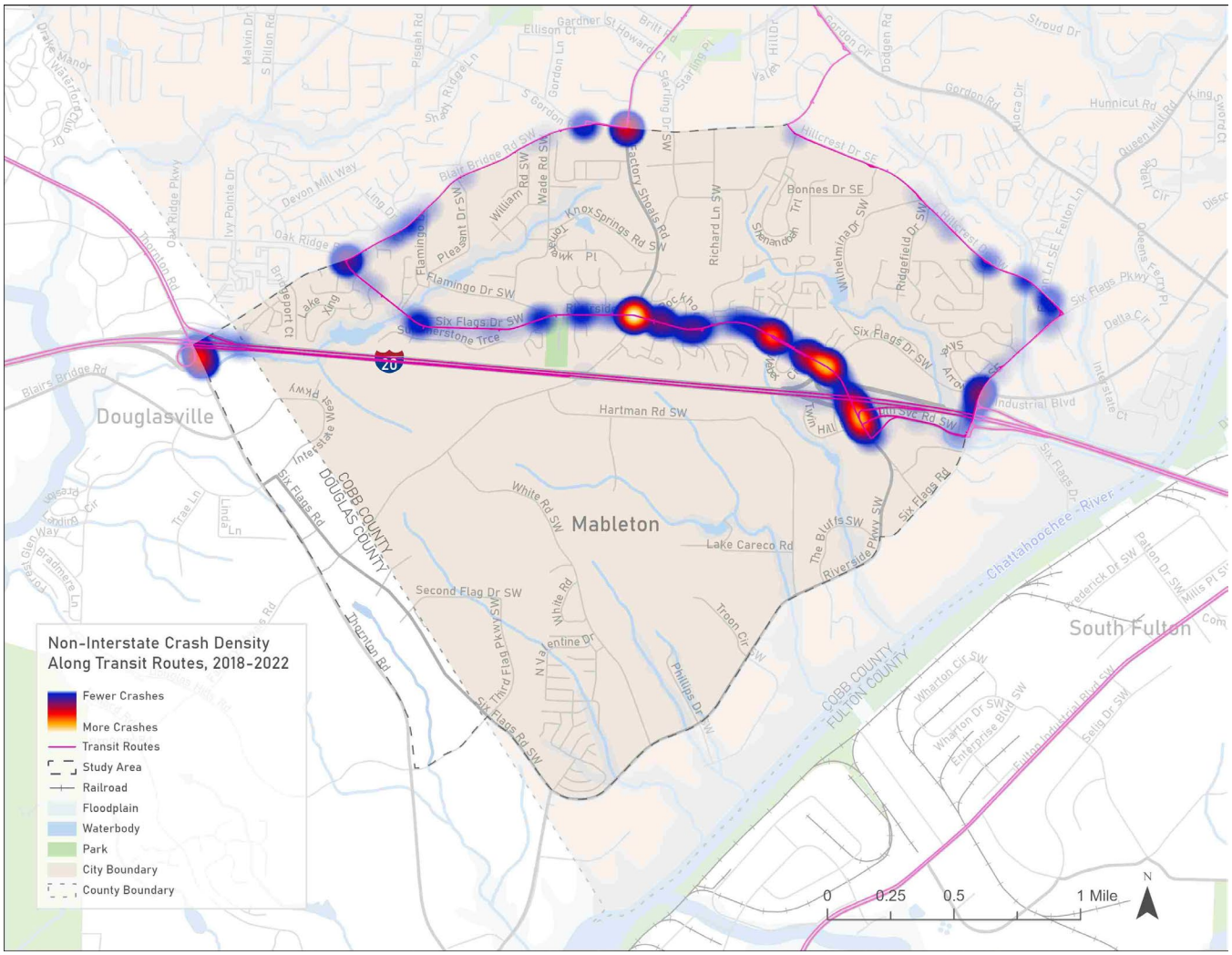

## Crashes Along Transit Routes

Figure 2-16 highlights crash incidents along CobbLinc transit routes, with key hotspots identified at the I-20 and Riverside Parkway interchange, the I-20 and Thornton Road interchange, and the intersections of Riverside Parkway with Factory Shoals Road and Six Flags Drive. The Riverside Parkway corridor experiences a high concentration of crashes along transit routes. These areas present significant challenges, as transit vehicles exhibit frequent stops, lane changes, and multi-modal interactions. Over 400 crashes along transit routes involved large trucks, highlighting the combination of buses, trucks, and general traffic interacting on the roadway. Over 300 crashes involved turning movements, particularly at the intersection Factory Shoals Road and Riverside Parkway.

Frequent crashes along Factory Shoals Road and Riverside Parkway highlight an opportunity for improvements in bus stop design, intersection control, and signal timing to reduce potential conflicts between vehicles and transit operations. This location represents an area where pedestrians and cyclists are likely traveling to access bus stops or waiting for transit services. The absence of designated pedestrian and bicycle infrastructure near transit routes require transit users to navigate

busy roads to reach bus stops. Addressing these infrastructure gaps is essential to enhancing safety for all roadway users, particularly non-motorized travelers.

*Figure 2-16. Crashes Along Transit Routes, 2018-2022*




## Crashes occurring along or near the Factory Shoals Road Bridge

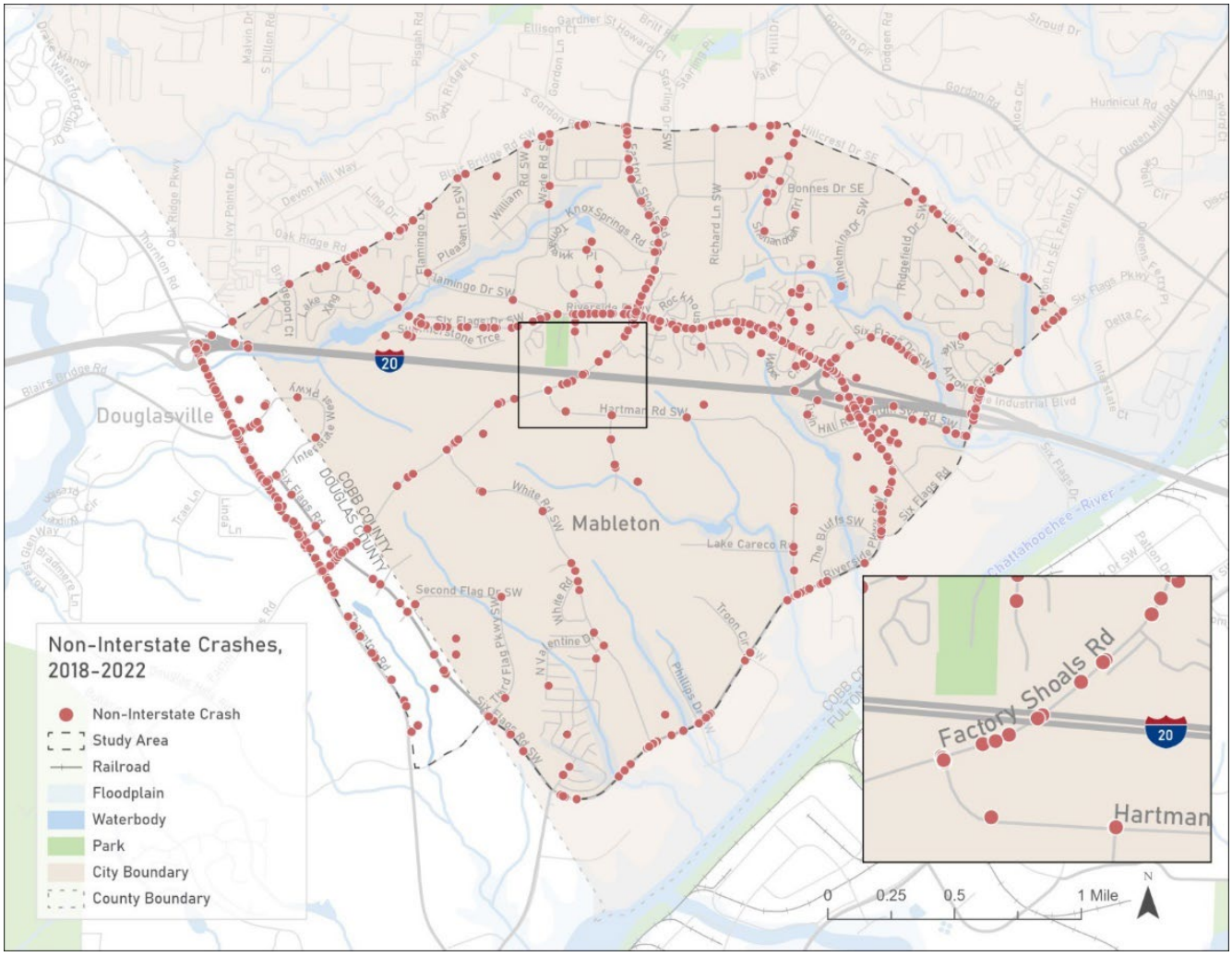
Figure 2-17 displays all crashes occurring between 2018 and 2022 near the Factory Shoals Road bridge and surrounding roadways. A significant cluster of crashes is concentrated along Factory Shoals Road, particularly near intersections with Riverside Parkway and the I-20 overpass, areas with high traffic volumes and frequent turning movements. These conditions increase the likelihood of incidents, particularly where non-motorized users such as pedestrians and cyclists navigate alongside heavy vehicular traffic.

Crashes are notable near the I-20 overpass, where limited pedestrian and bicycle facilities present safety risks for non-motorized users. The mix of fast-moving vehicles, including trucks, and the absence of sidewalks or bike lanes complicates travel for pedestrians and bicyclists. Within 1,000 feet on either side of the bridge, 23 crashes occurred between 2018 and 2022. Out of these 23 crashes, nine were related to turning movements at intersections. None of these incidents resulted in a KSI crash, though

the proximity of these crashes to a key crossing highlights the importance of safety improvements where turning movements occur.

The intersection of Riverside Parkway and Factory Shoals Road emerges as a high-risk location, with 35 crashes involving turning movements. Thirteen crashes involved large trucks, highlighting the presence of commuter, industrial, and transit traffic in this area. Crashes are also dispersed along local roads intersecting with Factory Shoals Road, indicating potential safety challenges at neighborhood access points. These crashes highlight the opportunity for better traffic management at key intersections.

*Figure 2-17. Crashes Along or Near I-20 Bridge, 2018-2022*



# Equity Analysis

The Equity Analysis examines the demographics of the study area, focusing on disadvantaged communities, as defined by the USDOT Justice 40 initiative, to ensure equitable access to transportation infrastructure and economic opportunities. Understanding the distribution of population and employment helps identify areas where vulnerable populations, including minority groups, low-income households, and transit-dependent residents, may face barriers to mobility. This analysis helps identify future transportation improvements that can promote inclusive growth, reduce disparities, and enhance access to jobs, education, and essential services for all residents. By prioritizing equity, the study aims to foster a transportation network that serves underserved communities effectively and promotes social and economic mobility.

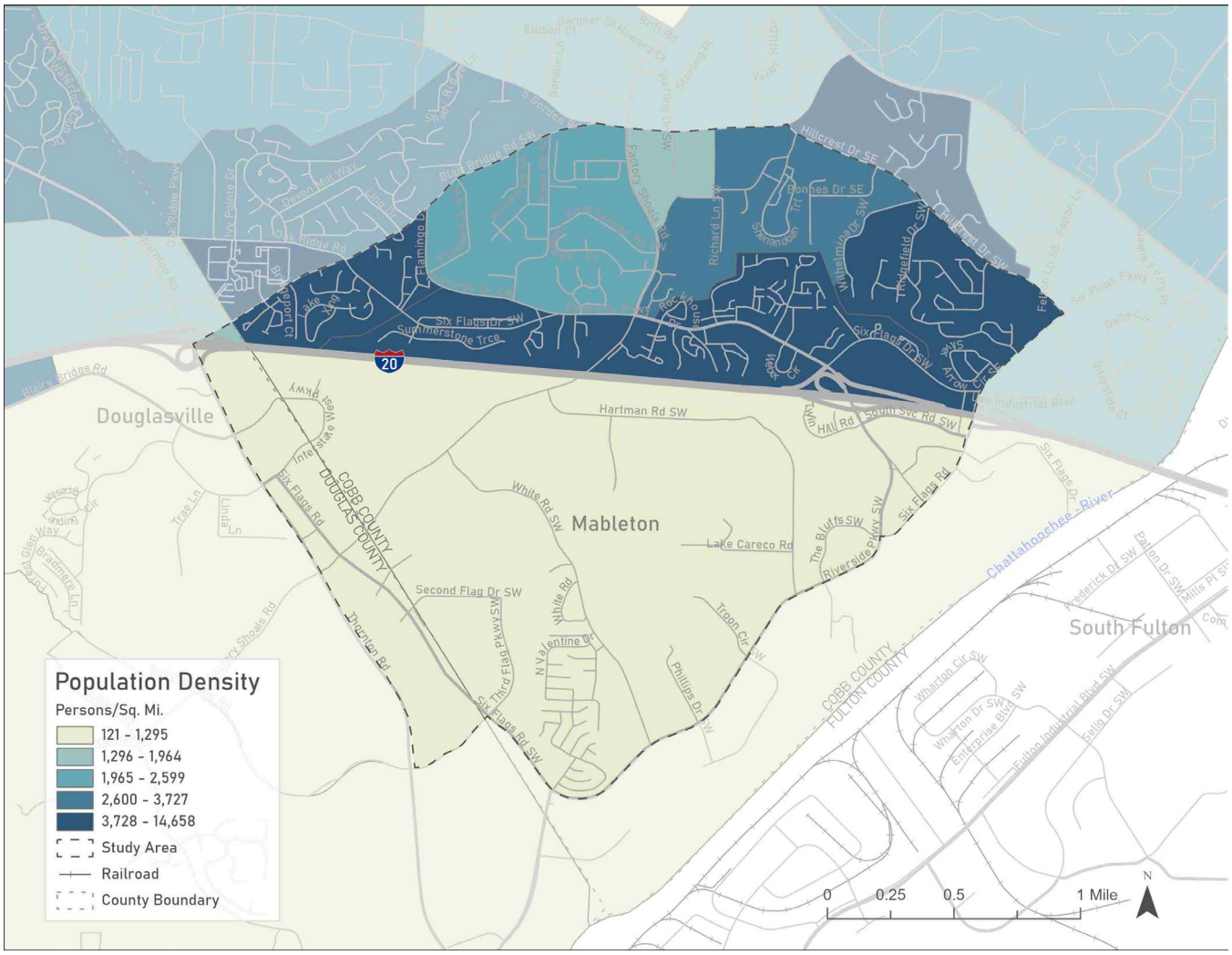
The 2022 US Census American Community Survey data was used to perform all equity analyses discussed in this section. Population density per census block group is illustrated in Figure 2-18. Population data was obtained at the block group level from 2022 Census. These patterns provide key insights into areas where transportation planning efforts, especially those focused on equity and accessibility, should prioritize services and improvements.

The northern section of the study area, especially near Riverside Parkway and Six Flags Drive, shows the highest population density. These high-density areas are likely to have a significant number of transit-dependent residents and individuals who rely on walking or biking for transportation. This makes these regions critical for targeted infrastructure improvements to ensure safe and equitable access.

Moderate-density areas may contain a mix of residential communities and light commercial activity, with residents relying on both public transit and private vehicles for mobility. Improvements here should focus on enhancing connectivity to key destinations such as schools, businesses, and transit stops.

The southern and western portions of the study area near Douglasville and Mableton's southern boundary have the lowest population densities, are primarily residential, and have limited public transportation services. Efforts should focus on expanding transit options to serve these areas and ensure equitable access to economic opportunities and essential services.

*Figure 2-18. Population Density by Block Group, 2022*

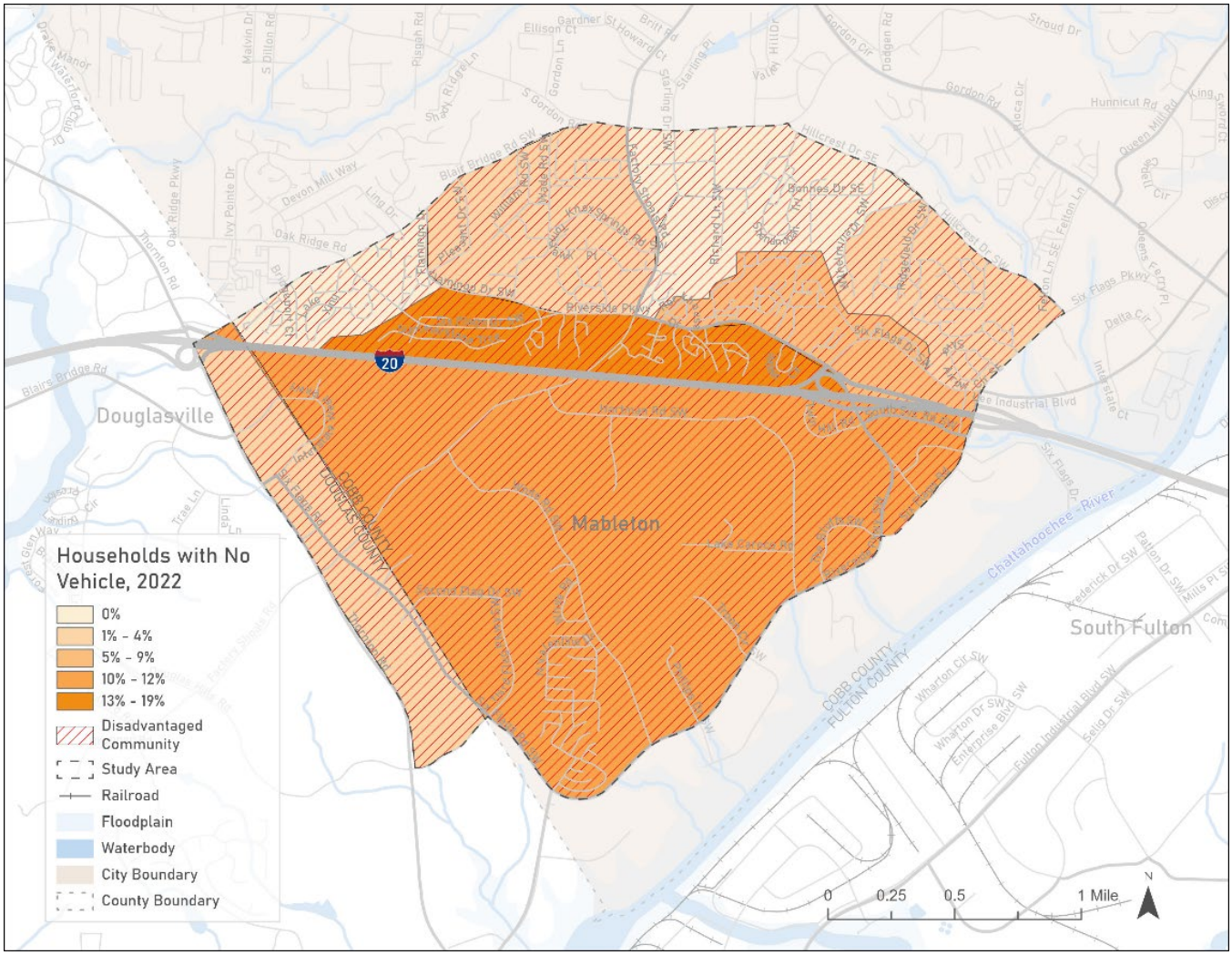


## Vehicles Available

A significant proportion of households (10% - 19%) without access to vehicles are located in the central and southern sections of the study area, including parts of Mableton and areas near Riverside Parkway. This concentration suggests a high level of dependence on public transportation, walking, or biking for daily travel and access to essential services. The map indicates that many areas with higher percentages of households without vehicles overlap with disadvantaged communities (hatched areas). These communities face additional barriers to mobility, limiting access to employment, healthcare, and educational opportunities. Areas along the I-20 corridor and Riverside Parkway also show moderate levels of households without vehicles. This pattern highlights the need for reliable transit services and pedestrian infrastructure in these high-traffic areas.

Households without vehicles are likely to experience greater transportation challenges, particularly in areas with limited public transit options or insufficient active transportation infrastructure. Improving access to safe and reliable transit options is essential for promoting transportation equity.

*Figure 2-19. Households with No Vehicle*

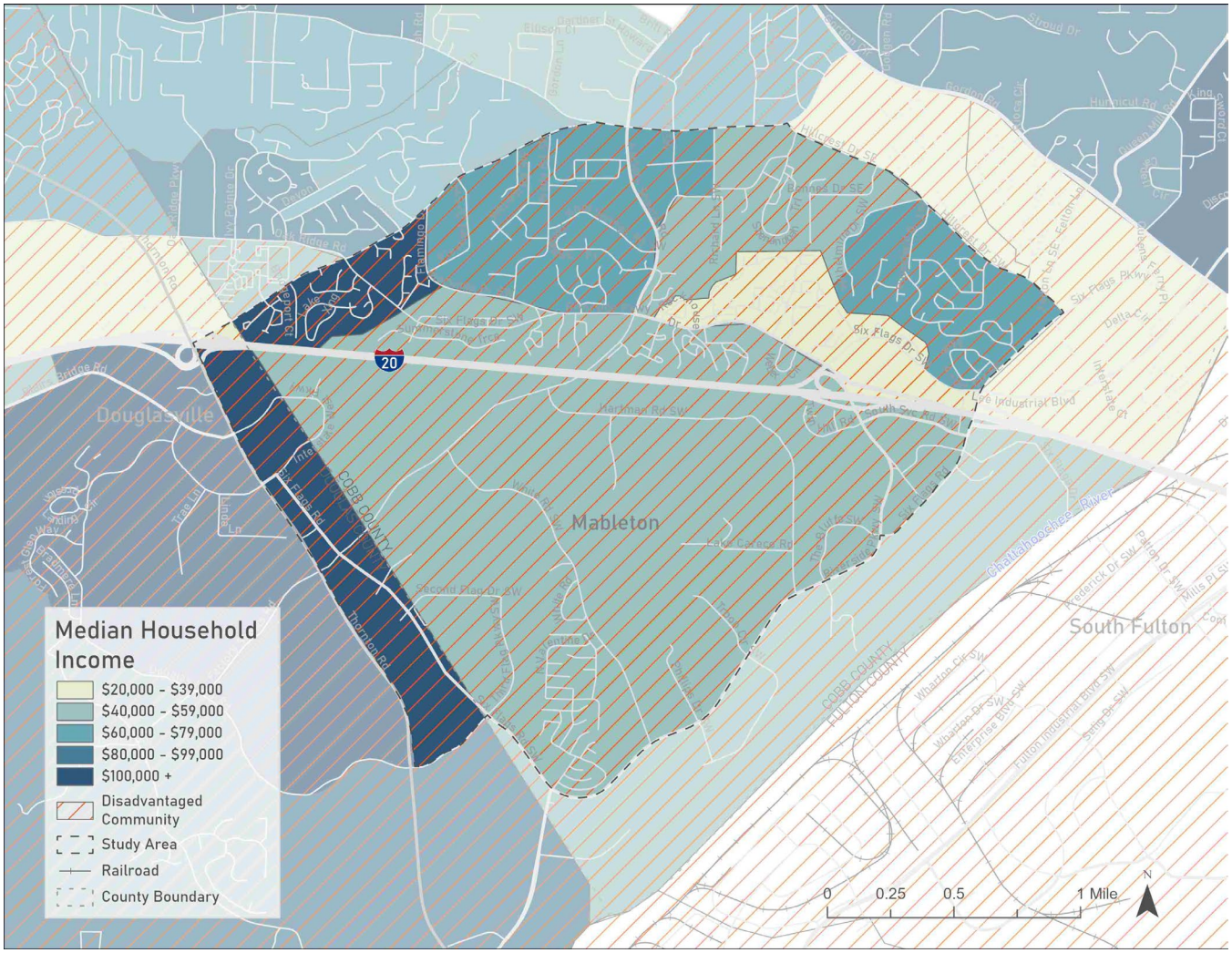


## Median Household Income

Median household income provides insight into income distribution across the study area, highlighting areas with varying economic conditions and identifying disadvantaged communities. The study area features a concentration of moderate-income households with incomes ranging between $48,481 and $83,093, covering much of the central and southern portions of the study area. Higher-income areas with median incomes exceeding $83,093 are located along the northern boundary and northeast portions of the study area.

Pale, hatched areas indicate disadvantaged communities with lower income levels, primarily located in the western section near Douglasville and parts of the I-20 corridor. These areas are likely to include transit-dependent populations and individuals with limited access to personal vehicles, increasing their reliance on public transportation and walking. The south-central region around Mableton has moderate income levels but is included within the disadvantaged community boundary. These areas may require targeted transportation investments to improve mobility and access to jobs and essential services.

*Figure 2-20. Median Household Income, 2022*




## Means of Transportation to Work

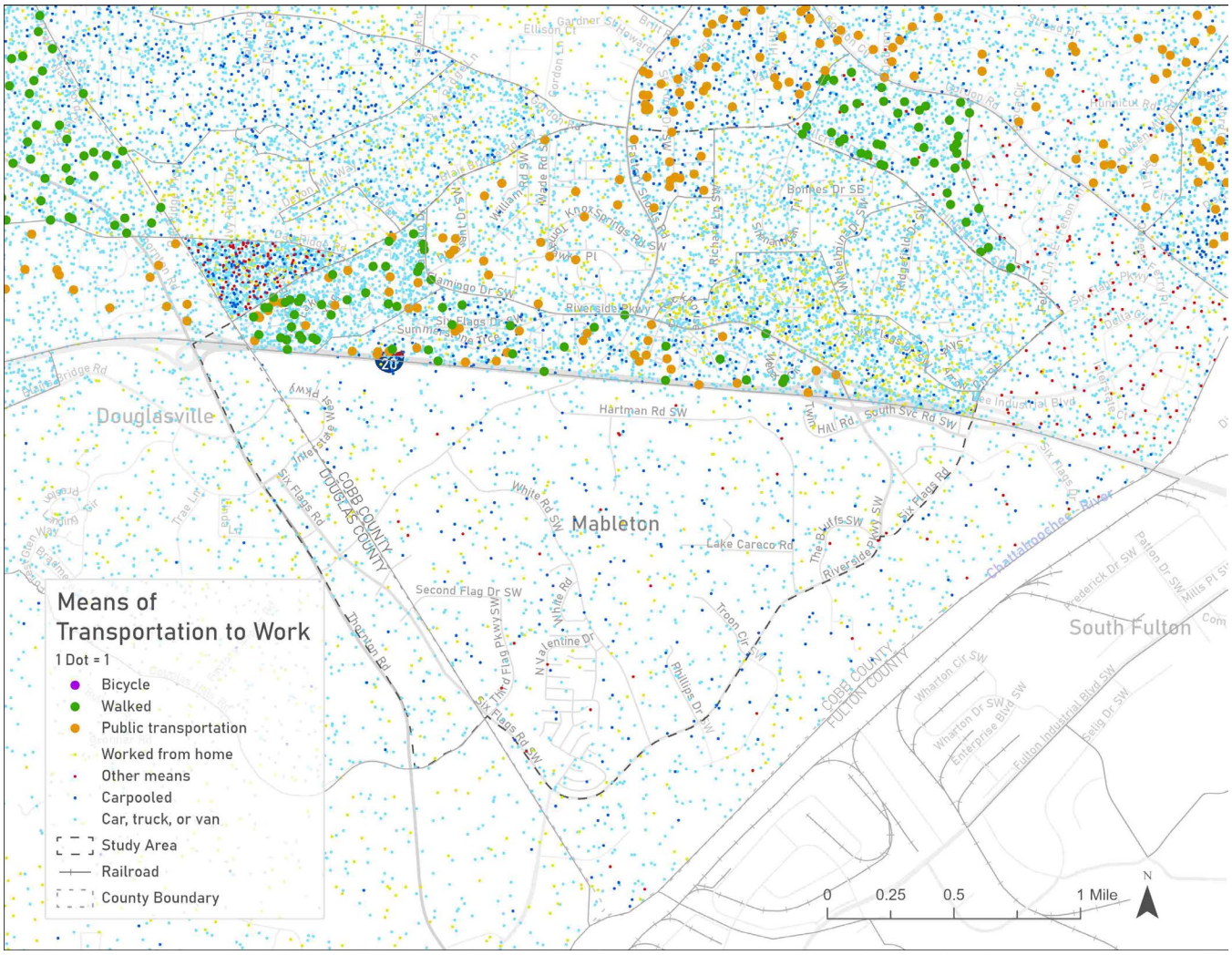
The Means of Transportation to Work Map provides insights into how residents within the study area commute, reflecting the transportation preferences and mobility options available to the local

workforce. The majority of commuters (84%) in the study area travel by car, truck, or van, as indicated by the high density of blue points on the map. This pattern suggests a strong reliance on personal vehicles due to limited access to alternative transportation modes or challenges with public transit availability.

Pink points scattered across the study area represent commuters (1.8%) using public transportation, though these are relatively sparse compared to personal vehicle use. The low density of public transit users reflects potential gaps in transit coverage or reliability issues, especially in southern and western sections of the study area. Purple and yellow points denote individuals who walk or bike to work, primarily concentrated near denser neighborhoods along Riverside Parkway and Six Flags Drive. These patterns indicate localized employment opportunities and a demand for safe pedestrian and cycling infrastructure near residential areas.

The limited distribution of public transportation users suggests that residents without access to personal vehicles may face challenges reaching employment opportunities. Expanding transit services and improving reliability could better serve disadvantaged populations. The presence of walkers and cyclists in select areas emphasizes the need for safe pedestrian and bike infrastructure. Enhancing sidewalks, bike lanes, and crosswalks would support those relying on active modes for commuting. The dominance of personal vehicles indicates high traffic volumes along key corridors like Factory Shoals Road and Riverside Parkway, highlighting the importance of managing congestion and maintaining road infrastructure.

*Figure 2-21. Means of Transportation of Commuting, 2022*

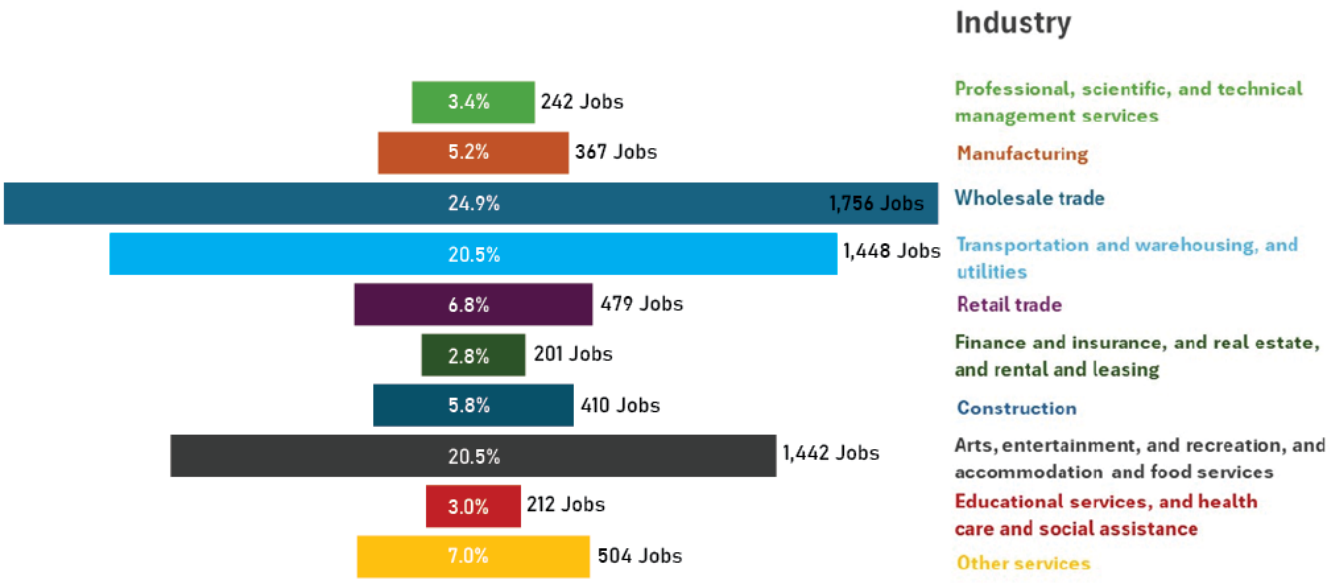



## Industry

The relationship between transportation and industry is two-fold. A healthy transportation network is necessary to support employees getting to and from their jobs in a reliable and convenient way. Besides, there are many significant industries within the Study Area that are freight-focused such as the headquarters of FedEx, and therefore, rely on the transportation network to conduct business activities.

As shown in Figure 2-22, the Manufacturing and Transportation, warehousing, and utilities industries makes up about 25% of the study area's workforce and employment. This means that roughly one in four County residents works in this industry that relies on a transportation network that supports reliable truck travel. Meanwhile, a significant proportion of workforce are found in professional, educational and artistic services, suggesting a shift away from traditional manufacturing and industrial sectors towards sectors that require specialized skills and knowledge.

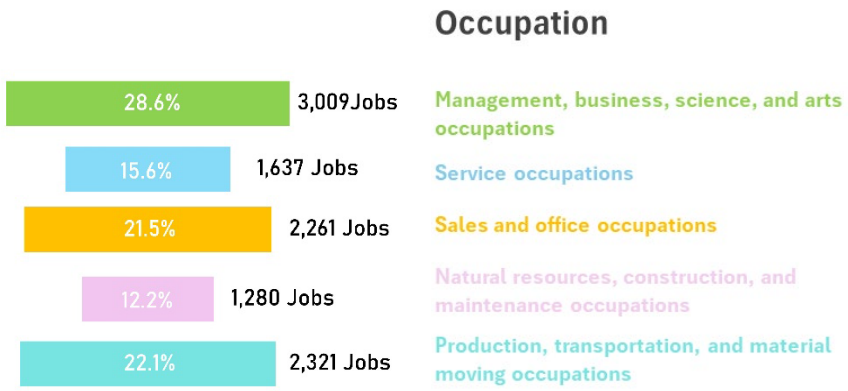
*Figure 2-22. Employment and Workforce by Industry*




## Occupation

The occupation pattern in the study area is characterized by a strong representation in professional and knowledge-based occupations, with more than a quarter of the workforce employed in management, business, science, and arts roles. This suggests a well-educated population and an economy that relies heavily on specialized skills. Additionally, a significant portion of the workforce is engaged in production, transportation, and material moving occupations, as well as sales and office occupations.

*Figure 2-23. Employment and Workforce by Occupation*

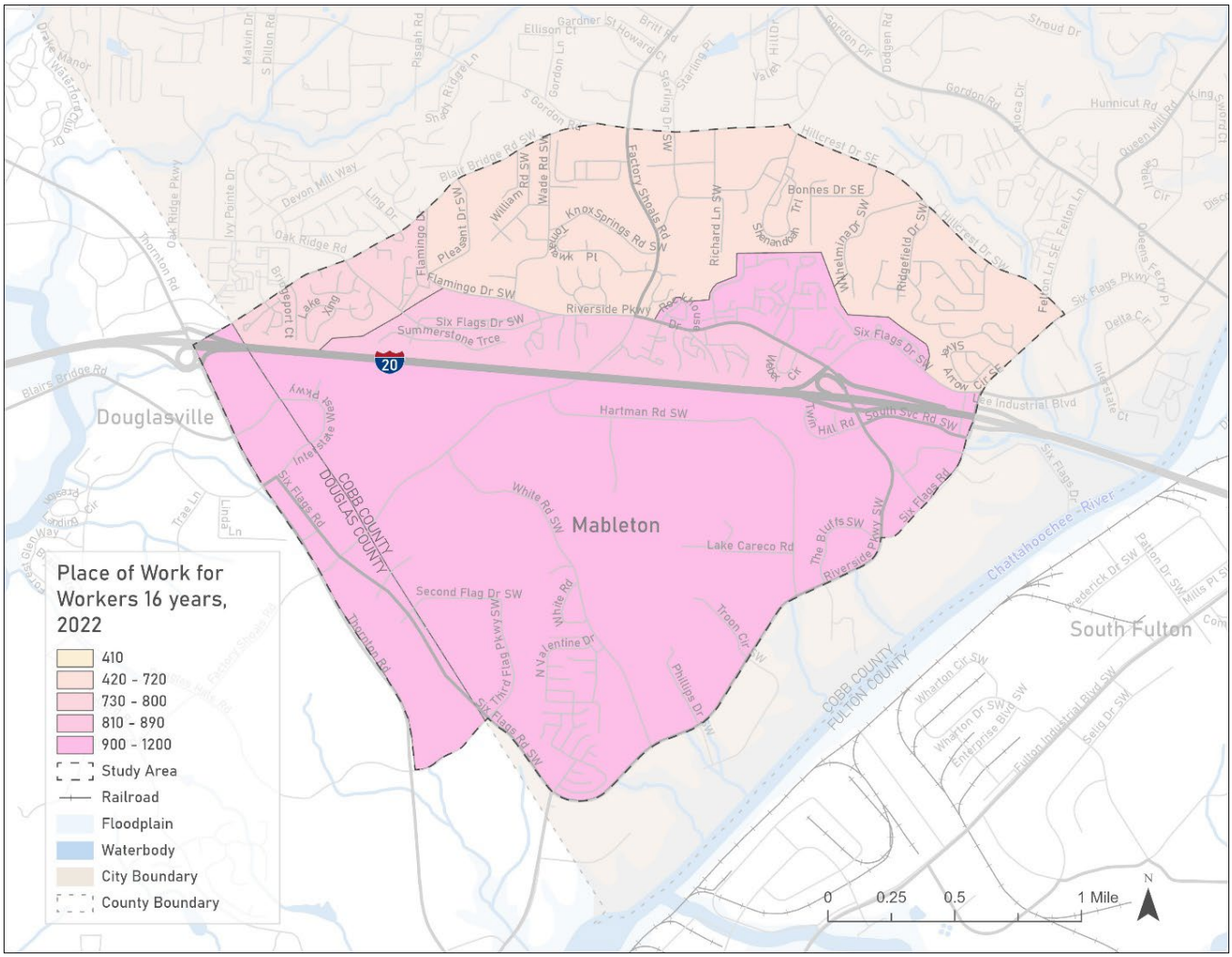



## Place of Work

Figure 2-24 displays the distribution by block group of jobs for residents within the study area. The southern and central areas of the study area, particularly around Mableton, show the highest density of employment, with 890 to 1,200 workers concentrated in these areas. These locations are likely home to local businesses, industrial areas, and service jobs, contributing to the higher number of employed individuals working nearby. Northern and northeastern sections show moderate concentrations of workers, ranging between 420 and 810 employees. These areas may host smaller businesses or serve

as residential employment hubs where individuals work locally. Areas with high employment density require efficient transportation connections to support commuting needs. Workers likely rely on transit services, personal vehicles, and active transportation modes to travel to job sites, particularly in high-density zones.

*Figure 2-24. Place of Work by Block Group*



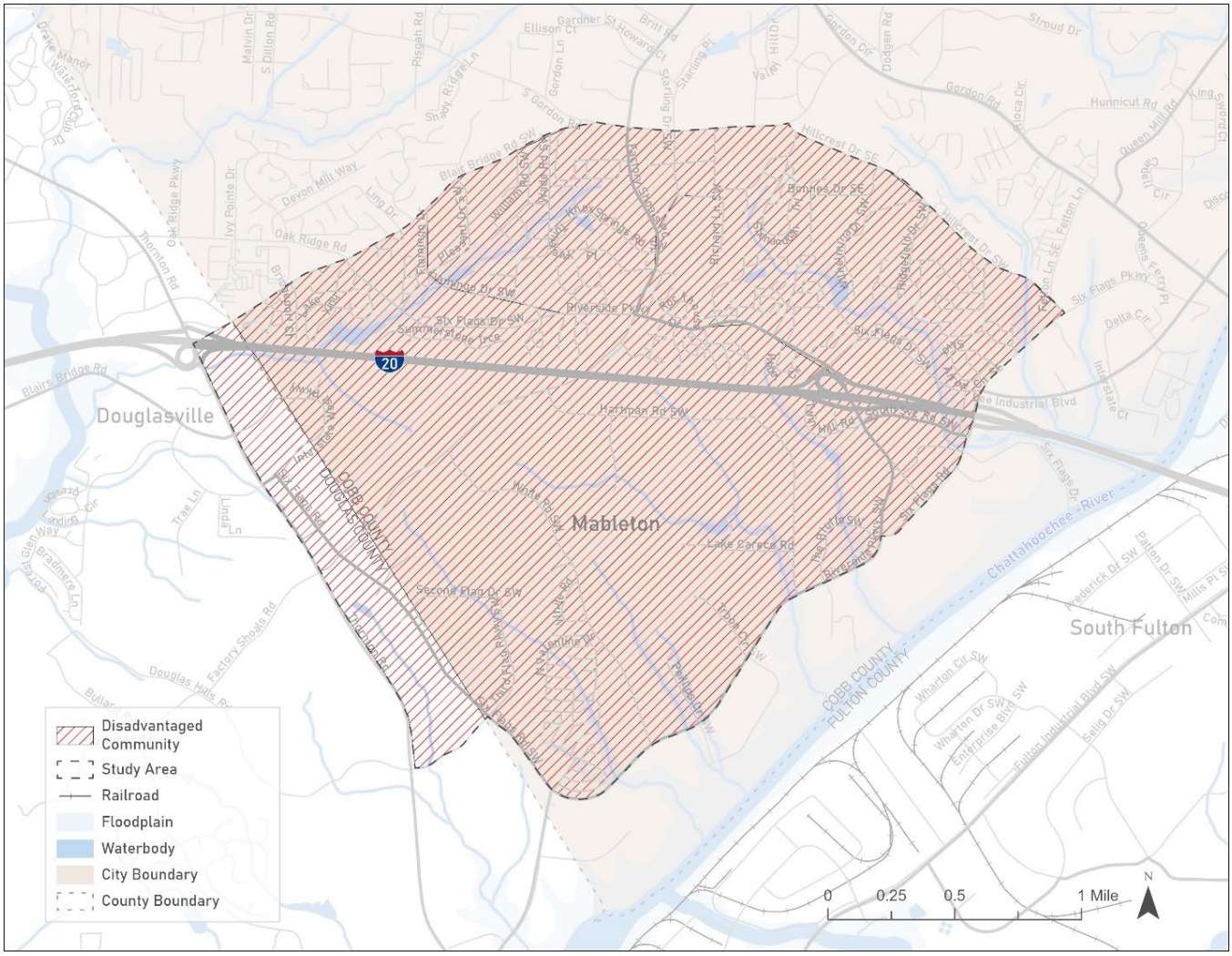

## Justice40

Justice40 is a groundbreaking federal initiative which aims to allocate 40% of the overall benefits of certain federal investments to disadvantaged communities. Disadvantaged communities are determined by the Justice40 program through an analysis of 36 burden indicators, including fossil dependence, energy burden, environmental and climate hazards, and socio-economic vulnerabilities. This initiative is part of a broader commitment to addressing social and environmental justice such as climate change, clean energy, and sustainable transportation investments reach disadvantaged communities. More information on how disadvantaged communities were determined can be viewed in the Council on Environmental Quality's Climate and Economic Justice Screening Tool (Methodology & data - Climate & Economic Justice Screening Tool).

The majority of the study area is identified as a disadvantaged community, particularly along Factory Shoals Road, Riverside Parkway, and I-20. This designation highlights the need for equitable transportation investments to ensure that these communities benefit from improved infrastructure and mobility solutions. Disadvantaged communities often have limited access to personal vehicles and rely on public transit, walking, and biking for mobility. The study area includes pockets of transit-dependent residents who face barriers to accessing employment, healthcare, and essential services due to infrastructure gaps.

The Justice40 framework provides an opportunity to prioritize funding for public transit improvements, pedestrian and bicycle infrastructure, and traffic safety enhancements in the study area. Investments in green infrastructure and active transportation networks would also align with federal goals to address climate and environmental justice in disadvantaged areas.

*Figure 2-25. Disadvantaged Community*




## Traditionally Underserved Populations

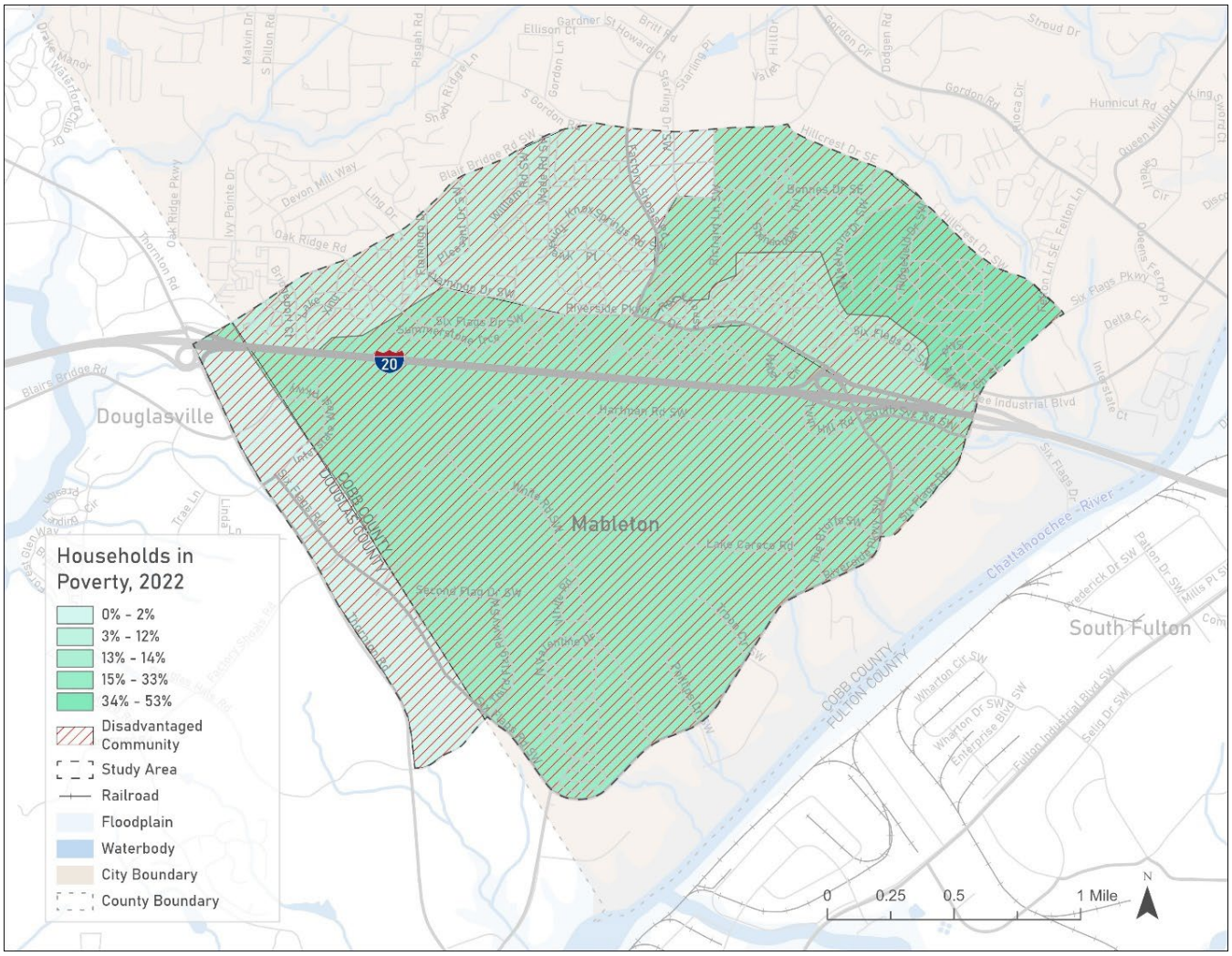
Traditionally underserved populations often face significant barriers to accessing transportation and other essential services, perpetuating cycles of poverty and limiting economic opportunities. Traditionally underserved populations include, but are not limited to, racial and ethnic minorities, low-

income households, people with disabilities, elderly individuals, and households without a vehicle. Demographic Analyses were completed using geospatial methods to visualize the geographic distribution of underserved populations in relation to Justice40 areas.

Each year, the U.S. Department of Health and Human Services (HHS) establishes a poverty threshold for the country, which varies depending on different household size. For 2022, the federal poverty income threshold was set at $23,030 for a family size of three people. According to data from the 2022 American Community Survey (ACS), there are moderate concentrations of poverty within the region. Households experiencing poverty are predominantly located in the southern and northeastern regions of the study area, encompassing a substantial portion of the study area. The block groups with the highest percentage of households in poverty are Silver Creek community. The central and southern portions of the study area exhibit higher poverty rates, with 33% to 53% of households living below the poverty line. These areas align with disadvantaged community zones, as indicated by the hatched overlay, signaling a critical need for targeted investments in infrastructure and services.

Areas with 15% to 33% poverty rates are present along the I-20 corridor and Factory Shoals Road. These regions reflect pockets of economic hardship, underscoring the importance of providing affordable transportation options for residents. The northern and eastern sections of the study area report lower poverty levels, with 2% to 12% of households living in poverty. These regions are likely to have better access to employment, resources, and transportation services compared to higher-poverty areas. Figure 2-26 illustrates the concentrations of households in poverty within the Study Area.

*Figure 2-26. Concentrations of Households in Poverty*




Populations of minority residents are concentrated in the study area, in and around the vicinity of I-20. Figure 2-27 shows concentrations of populations of minority residents. Minority populations are defined as all persons who self-identify as Hispanic or non-white, including Black or African American, American Indian and Alaska Native, Asian, and Native Hawaiian and Other Pacific Islander. The whole area has a minority resident percentage of above 80%, indicating a significant representation of these demographic groups.

*Figure 2-27. Concentrations of Minority Residents*

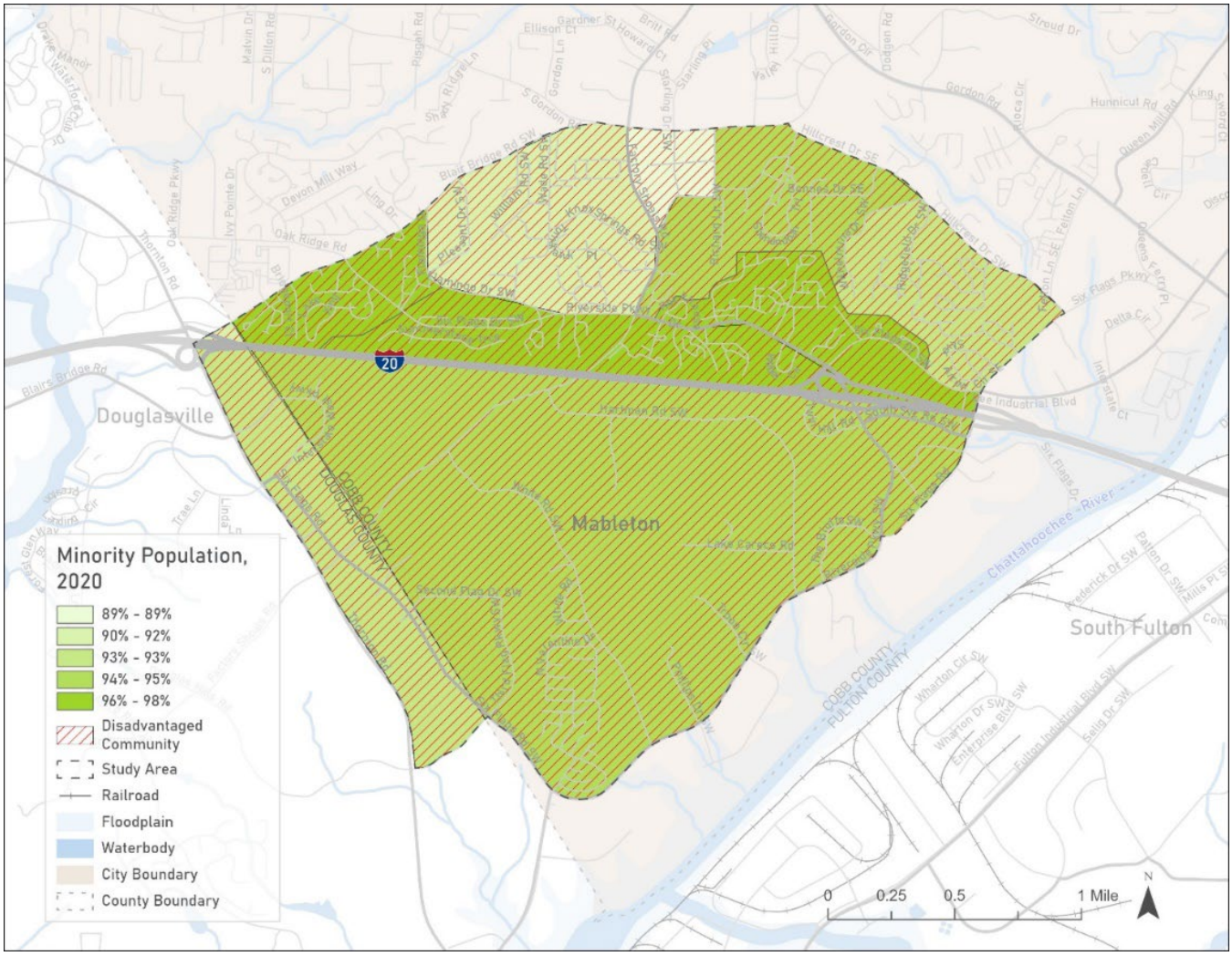
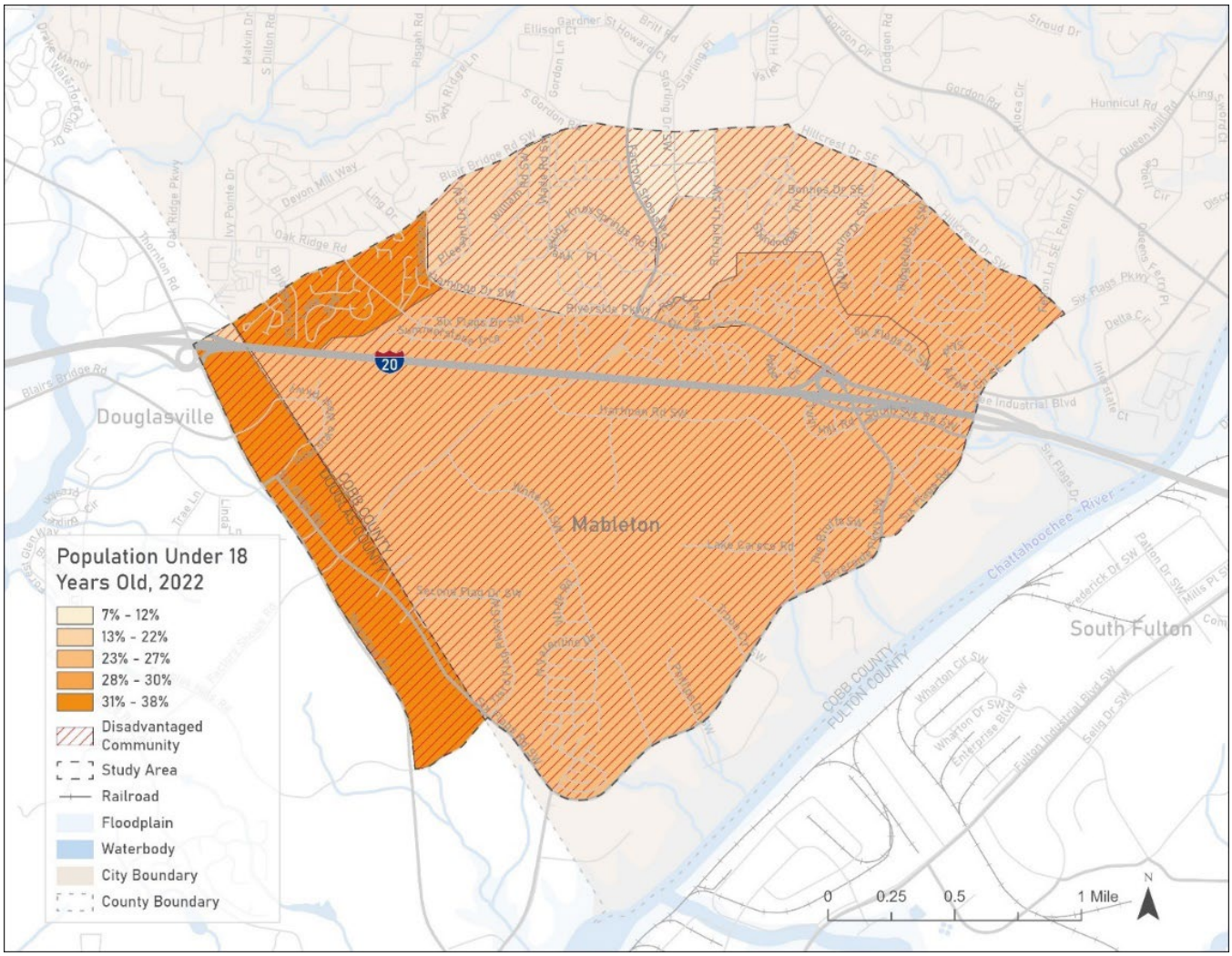


Figure 2-28 illustrates concentrations of residents under the age of 18. It shows that block groups with the highest concentrations of such populations are situated around Ambercrest area and parts in Douglas County. A significant portion of the study area has a population under 18 years of age, with over 10% of the residents falling within this age group. This demographic distribution highlights the presence of a relatively young population in the area, suggesting a potential need for facilities and services geared towards children and adolescents, such as schools, playgrounds, and recreational programs.

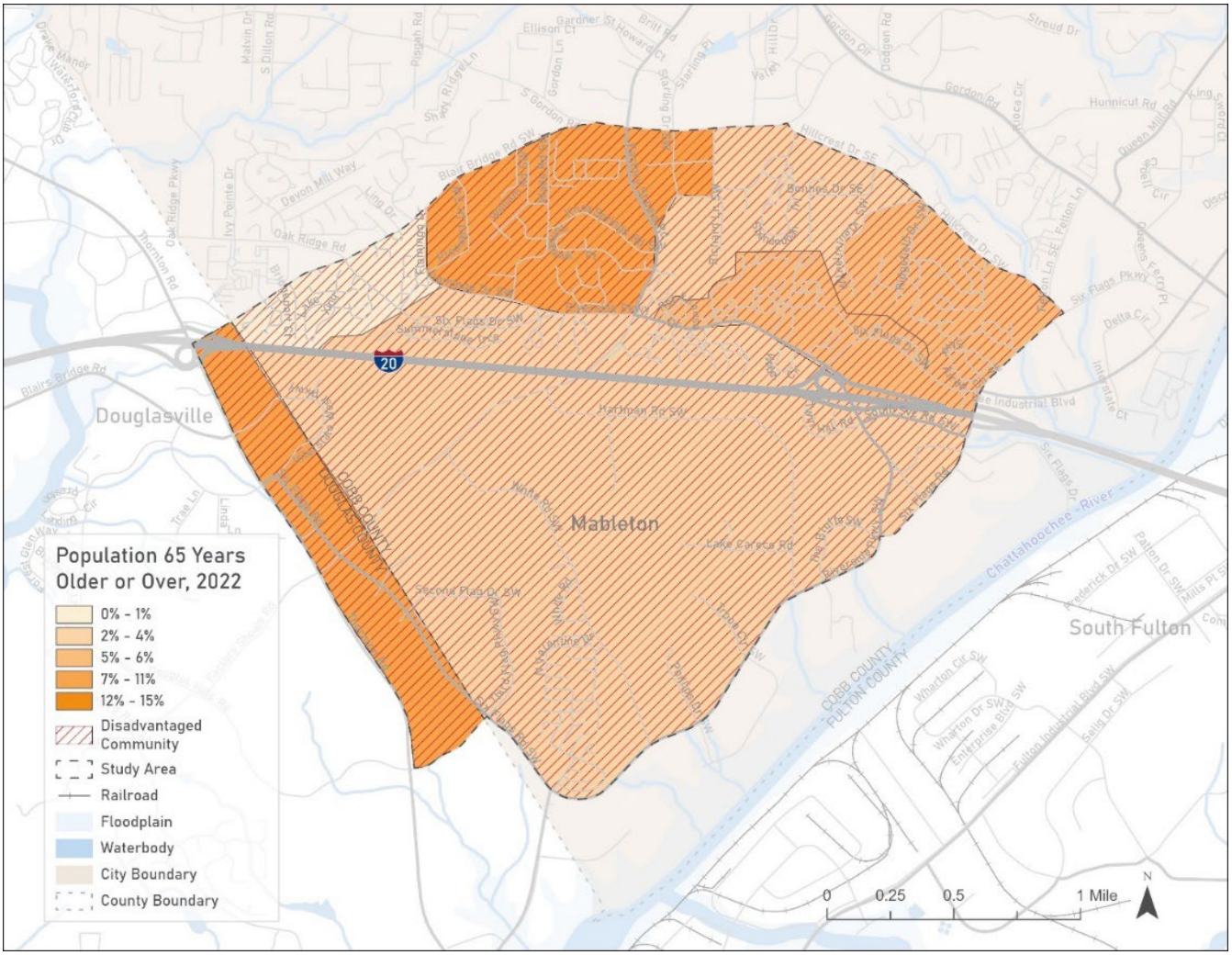
*Figure 2-28. Concentrations of Residents Aged Under 18*



The population aged 65 or older is distributed across the study area, shown in Figure 2-29. However, spatial analysis reveals notable concentrations in Creekside at Wade Farm, Springchase, and Know Springs. Several parts of the study area have 7% to 15% of the population aged 65 years or older, particularly in central and southern sections, including neighborhoods around Mableton and portions near Factory Shoals Road. These areas indicate a need for specialized transportation services, such as paratransit and accessible infrastructure.

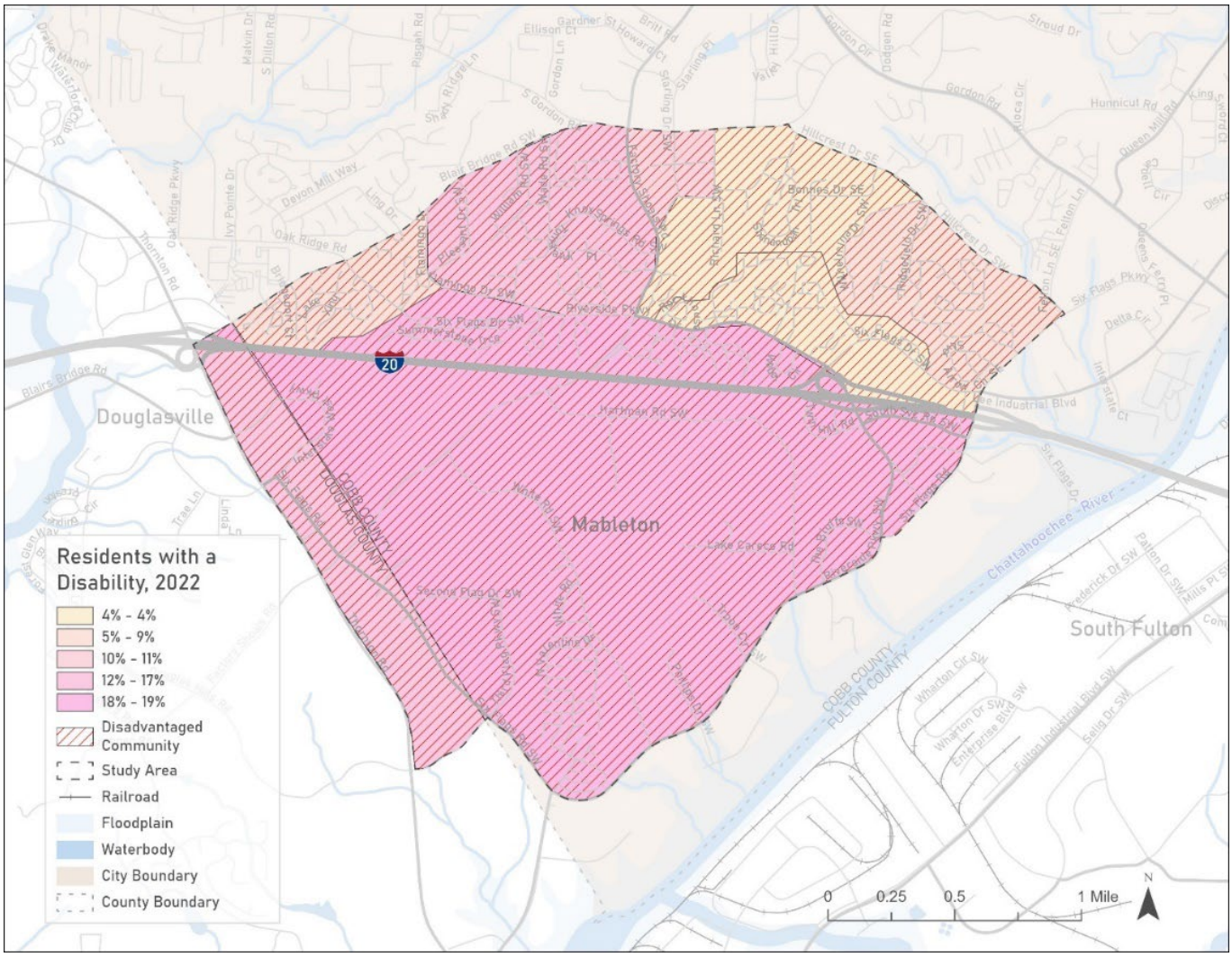
Northern areas, including neighborhoods near Riverside Parkway, exhibit 5% to 11% of the population aged 65 or older. These regions may also require improved transit services and safe pedestrian paths to ensure that older residents can access essential services and recreational facilities.

*Figure 2-29. Concentrations of Residents Aged 65 or Older*



The southern and central portions of the study area show the highest concentration of residents with disabilities, with 12% to 19% of the population in these areas, shown in Figure 2-30. Northern sections near Riverside Parkway and areas east of Mableton report 5% to 11% of the population living with disabilities.

*Figure 2-30. Concentrations of Disabled Residents*




# 3. PUBLIC ENGAGMENT

The public engagement process for the Factory Shoals Pedestrian Bridge study prioritized meaningful involvement from residents, stakeholders, and community organizations to ensure the project addresses local needs and priorities. The outreach strategy emphasized inclusivity, focusing on low-income, minority, and disadvantaged groups, as well as individuals with disabilities, to promote equitable participation. Through surveys, public meetings, stakeholder focus groups, and interviews, the engagement efforts gathered valuable input to shape the development of safe and accessible pedestrian infrastructure.

# Engagement Activities

## Public Meeting

Initial public meeting to understand community needs and held on August 27, 2024 at the South Cobb Community Center (620 Lions Club Dr SW, Mableton, GA 30126) from 5:00 – 7:00pm. This meeting was held in an open house style with boards showing initial existing conditions findings and displays for gathering input from the community.

## Stakeholders

Stakeholder focus groups included participation from elected officials, local businesses, the South Cobb Redevelopment Authority, the Mableton Improvement Coalition, and the City of Mableton. The first meeting was held on August 12, 2024 at the South Cobb Community Center from 2:30 – 4:00pm.

## Employer Interviews

The employer interviews conducted as part of the Factory Shoals Pedestrian Bridge study provided valuable insights into the transportation challenges faced by businesses and their employees. The interviews, which included Keystone Automotive, Octanorm, Professional Plastics, South Cobb Recreation Center, and Empire Distributors, revealed key concerns related to commuting, pedestrian safety, and infrastructure needs. These discussions highlighted opportunities for infrastructure improvements that would enhance employee safety, transit access, and operational efficiency.

Key Findings:

**Transportation and Commuting Patterns:**

- Most employees rely on personal vehicles to commute due to limited transit options. However, some employees use ride-share services, public transit, or walk to work, especially those in entry-level or warehouse positions.
- There is heavy truck and freight traffic along Factory Shoals Road and Riverside Parkway, creating safety risks for employees walking or biking to work.

**Pedestrian Safety Concerns:**

- All interviewees raised concerns about the lack of sidewalks and pedestrian infrastructure, especially at the Factory Shoals Road bridge over I-20.
- Limited lighting at night along Factory Shoals Road and the bridge was identified as a perceived safety risk, particularly for shift workers traveling between shifts or accessing public transit.

**Transit Access and Connectivity:**

- Several companies noted the need for improved bus stops near their locations. Keystone Automotive and Empire Distributors emphasized the importance of adding a bus stop at Hartman Road to reduce commuting difficulties for employees.
- Transit-dependent workers face challenges navigating pedestrian routes that feel unsafe due to infrastructure gaps.

**Parking and Freight Issues:**

- Most companies reported having sufficient parking on-site; however, freight traffic congestion along Factory Shoals Road and Riverside Parkway poses challenges for operations.
- Employers expressed concerns that the limited pedestrian infrastructure increases risks for both employees and truck drivers near busy intersections and loading zones.

**Opportunities for Infrastructure Improvements:**

- Employers supported sidewalk expansion, lighting improvements, and traffic calming measures along Factory Shoals Road and the I-20 bridge.
- Widening the bridge to accommodate both pedestrians and trucks was suggested as an ideal long-term solution by Empire Distributors.
- A pedestrian bridge or improved pedestrian paths would enhance safety and encourage walking and biking as commuting options.

## Street Interviews

As part of the Factory Shoals Pedestrian Bridge Study, the project team conducted street interviews to gather feedback from pedestrians, transit users, and cyclists. These interviews, held at key locations such as the Factory Shoals Road bridge over I-20 and CobbLinc bus stops along Riverside Parkway, provided valuable insights into safety concerns, transit needs, and pedestrian infrastructure gaps. The feedback collected will help guide improvements to pedestrian pathways, crossings, and transit access within the study area.

Key Findings:

**Safety Concerns on the I-20 Bridge:**

- When asked to rate the safety of Factory Shoals Road bridge, respondents gave scores ranging from 3 to 7 out of 10, reflecting a low sense of safety from pedestrians crossing the bridge.
- Many pedestrians mentioned the need for dedicated bus routes to bring them closer to their jobs, reducing the need to cross unsafe sections of the bridge.
- Participants cited high vehicle speeds, heavy truck traffic, and limited visibility as major challenges when using the bridge.
- The lack of crosswalks along Factory Shoals Road, especially near Hartman Road and the south side of I-20, creates conditions that are perceived as dangerous for pedestrians.

**Gaps in Pedestrian Infrastructure:**

- Several participants identified a lack of crosswalks at key intersections, including Riverside Parkway and Hartman Road, making it feel dangerous for pedestrians to cross.
- The overgrown and unmaintained areas on the approaches to the bridge further complicate pedestrian movement and limit visibility.

**Transit Access and Usage Patterns:**

- Many pedestrians were observed traveling to or from CobbLinc bus stops along Riverside Parkway and Factory Shoals Road. However, participants reported gaps in pedestrian infrastructure and noted that some transit stops lacked safe crossings.
- Pedestrians often avoided crosswalks at intersections, choosing instead to cross closer to bus stops, increasing safety risks.

**Truck and Freight Traffic**:

- The area experiences significant truck and tractor-trailer traffic, particularly along Factory Shoals Road. This contributes to safety concerns for pedestrians and cyclists, especially near industrial areas.

**Lack of Lighting and Infrastructure:**

- Participants noted a lack of lighting along Factory Shoals Road and across the bridge over I-20, making the area unsafe for those traveling during early morning or evening hours.
- Many pedestrians expressed the need for safe ways to cross I-20, as the current infrastructure limits safe north-south movement.

## Community Survey

The Factory Shoals Pedestrian Bridge Community Survey was conducted between August 2 and September 30, 2024, to gather insights into community travel behavior, safety concerns, and preferences regarding the proposed pedestrian bridge over I-20. The survey collected feedback from 107 participants through online and printed formats, with responses providing a clearer understanding of the community's needs. Key findings:

**Travel Patterns:**

- Frequent Crossings: Over half of the respondents (52%) cross I-20 at least four times a week, highlighting the bridge's importance to daily travel.
- Common Modes of Transportation:
- Driving alone (89%) is the primary mode of transportation.
- A significant portion of participants walk (17%) across the bridge, despite safety concerns.
- Carpooling or ridesharing (19%) and transit use (7%) are also part of the modal mix.

**Safety Concerns:**

- Perceived Danger: The majority (65%) feel unsafe or very unsafe crossing the bridge due to high traffic speeds, heavy truck volumes, narrow shoulders, and the absence of sidewalks.
- Pedestrian Safety Issues: Participants emphasized the lack of pedestrian infrastructure (sidewalks, guardrails, lighting), increasing the risk of accidents.

**Transit Challenges:**

- Access and Reliability Issues: Nearly half (48%) of respondents are unsure if accessing transit is easy, and 30% find it difficult or very difficult to reach bus stops.
- Long Wait Times: A significant percentage (44%) reported bus wait times of 20 minutes or more, with some waiting over 30 minutes.

**Active Transportation and Infrastructure**:

- Micromobility Use: While 75% of participants do not use micromobility (bikes, scooters), 13% reported using these modes on a weekly or daily basis.
- Ideal Locations for Pedestrian Crossings: Factory Shoals Road (31%) and Riverside Parkway (25%) were the preferred locations for improved pedestrian and bicycle crossings.

**Community Demographics:**

- Local Engagement: Most participants live in the area (55%) or travel through it frequently. Many respondents also travel to and from work, home, shopping, or recreational destinations across I-20.
- Diverse Community: 56% of participants identified as Black or African American, and over half reported annual household incomes below $65,000, underscoring the need for inclusive infrastructure planning.

# 4. ENVIRONMENTAL SCREENING

The Desktop Environmental Screening Report for the proposed Factory Shoals Pedestrian Bridge over I-20 provides an analysis of potential environmental constraints. This study focuses on improving pedestrian safety and connectivity between residential areas north of I-20, the warehouse district to the south, and other destinations within a 5.51-square-mile Environmental Survey Boundary (ESB).

Key findings include the identification of environmentally sensitive areas such as wetlands, protected species habitats, and cultural resources. The study highlights potential impacts to federal and state-protected species and ecological resources, necessitating further field surveys and coordination with agencies like the U.S. Fish and Wildlife Service (USFWS). Given the project's location over a federally funded highway, coordination with the Federal Highway Administration (FHWA) is recommended. Additionally, compliance with the Clean Water Act (CWA) and Section 404 permitting is anticipated for activities affecting streams or wetlands.

The project site includes industrial, commercial, and residential areas with community resources such as churches, schools, and parks. With a significant proportion of minority and low-income populations in the ESB, further analysis of potential impacts on these communities is suggested if federal funding is involved, aligning with Executive Orders 12898 and 14096 on environmental justice.

The full report, Appendix G, also highlights the need for a Phase I Environmental Site Assessment (ESA) due to the presence of potentially hazardous waste sites and underground storage tanks in the vicinity. Coordination with Georgia's Department of Natural Resources (DNR) is recommended to confirm the absence of Land and Water Conservation Fund (LWCF) assistance for South Cobb Park, ensuring compliance with federal requirements.

Public involvement will be a crucial component, especially for outreach to limited English-speaking households, to ensure inclusive stakeholder engagement throughout the project's development. Further steps include determining the necessity of a Practical Alternative Review (PAR), compliance with stormwater management permits, and a comprehensive cultural resource survey. The project's overall environmental impacts will depend on the findings of subsequent field surveys and the decision on the use of federal funds, which could trigger the National Environmental Policy Act (NEPA) process.

## Environmental Constraints and Liabilities

These environmental constraints and liabilities highlight the complexity of the project's environmental considerations and the need for careful planning, coordination with regulatory agencies, and stakeholder engagement to address potential impacts.

### Environmentally Sensitive Areas

Wetlands and Streams: Several streams and wetlands were identified within the Environmental Survey Boundary (ESB). Project activities impacting these water bodies may require a Section 404 permit under the Clean Water Act (CWA). If over 0.10 acres are affected, compensatory mitigation might be required, which could increase project costs.

Habitat for Protected Species: The ESB includes habitats suitable for federally and state-protected species. Key species of concern include the tricolored bat, monarch butterfly, Georgia rockcress, and Michaux's sumac, among others. The presence of bald eagles has also been noted, necessitating

compliance with the Migratory Bird Treaty Act (MBTA) and the Bald Eagle and Golden Eagle Protection Act (BGEPA).

Mixed Land Use Areas: The ESB contains industrial, commercial, residential, and mixed hardwood forest areas, which provide potential habitats for various protected species. A field survey is needed to confirm the presence of these habitats.

### Cultural Resources

There are two cemeteries within the ESB: Green Grove Cemetery and Baker Family Cemetery. These areas are sensitive, and if unavoidable impacts occur, a long and potentially costly process for permits and relocations may be necessary.

The area does not contain any National Register of Historic Places (NRHP) sites, but a Phase I Cultural Resource Survey is recommended to identify any unrecorded archaeological or historic resources that might be affected by the project.

### Hazardous Materials

A Phase I Environmental Site Assessment (ESA) is recommended due to the presence of underground storage tanks (USTs), gas stations, and designated EPA facilities within the ESB, including sites that handle hazardous waste and toxic releases. The ESA would identify recognized environmental concerns (RECs) that may require further testing through a Phase II ESA to assess soil and groundwater contamination.

### Flood Zones

The ESB includes areas identified as FEMA flood hazard zones. Projects in these areas require careful consideration of floodplain management regulations and may need additional coordination with FEMA for any activities that could alter flood zones.

### Air Quality

The project is located in an Ozone Non-Attainment Area, meaning it is in a region that does not meet national air quality standards for ozone levels. If federal funding is used, a Carbon Monoxide hotspot analysis might be required to assess the potential impact of the project on local air quality.

### Stormwater and Water Quality

The project is located within a Georgia DOT Municipal Separate Storm Sewer System (MS4) area, meaning stormwater management and compliance with MS4 regulations will be essential. This may include a Non-MS4 Detention Report during the preliminary design phase to manage stormwater impacts effectively.

### Community and Environmental Justice Considerations

Approximately 96.8% of the population within the ESB are minorities, and 24.2% live below the poverty level. Compliance with Executive Orders 12898 and 14096 requires careful analysis of how the project might impact these communities. If federal funding is used, additional outreach and engagement may be required to address any potential adverse effects.

### Permitting and Regulatory Requirements

Multiple permits and variances may be required, including those related to Section 404 of the CWA, stream buffer variances, and potential coordination with federal entities like the U.S. Fish and Wildlife

Service (USFWS). If the project involves impacts to federal lands or national park areas, it could trigger additional requirements under the National Environmental Policy Act (NEPA) and the Georgia Environmental Policy Act (GEPA).