

TUCKER SUMMIT COMMUNITY IMPROVEMENT DISTRICT FREIGHT CLUSTER PLAN Recommendations Report

January 14, 2021

PREPARED FOR:



PREPARED BY:



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1 Overview of Report

1.1 Purpose of Report

The purpose of the Recommendations Report is to provide a summary of the Tucker Summit Community Improvement District's (TSCID) Freight Cluster Plan (FCP). This report describes how recommended projects, policies, and actions were developed, evaluated, and prioritized. The process began with the development of a project management plan and statement of the FCP's vision, goals, and objectives. Once those pieces were in place, a robust community engagement and best practices review quickly followed. The next steps included the creation of an *Inventory and Assessment and Traffic Study Reports*. Then a fiscally constrained short-term action plan and fiscally unconstrained long-term vision project list were built upon the information gathered. This report documents the FCP's process, evaluation, and future project priorities.

1.2 Organization of Report

As such, the remainder of this report is organized as follows:

- Chapter 2 – An overview and summary of results from various outreach activities conducted throughout the TSCID FCP. Some of the activities completed include Steering Committee Meetings, Trucker Interviews, Cargo Oriented Demand (COD) Workshops, and other activities. The chapter also includes a summary of major takeaways from the outreach exercises.
- Chapter 3 – A summary of major analytical findings from the *Inventory and Assessment Report*, including needs of roadways, land use and development, freight routing, transit workforce access, and bicycle and pedestrian.
- Chapter 4 – An overview of previously identified projects and policy recommendations including roadway, bridge and safety, resurfacing, land use and development, transit initiatives, and bicycle and pedestrian improvements.
- Chapter 5 – A description of proposed new and modified projects identified during the development of the TSCID FCP. Projects include roadway improvements, operational improvements, transit initiatives, and policies.
- Chapter 6 – This chapter reviews the vision, goals, and objectives developed early in the TSCID FCP. It presents a prioritization framework for new roadway and capacity projects, operation improvements, bridge projects, and resurfacing projects.
- Chapter 7 – This chapter identifies potential project costs. It also identifies potential project funding sources such as federal, state, county, and local.
- Chapter 8 – This chapter provides a prioritized short-term fiscally constrained project list which identifies roadway and pedestrian studies and improvements. It also includes potential strategies and policies for land use and development, transit, and workforce access.
- Chapter 9 – This chapter provides long-term vision fiscally unconstrained projects, studies, and strategies. These include goals for increased roadway capacity, operations, and safety. It also includes potential strategies and policies for transit and workforce access, land use, and development.

2 Outreach Activities

A variety of outreach activities were completed as part of the TSCID FCP. A Stakeholder and Outreach Engagement Strategy was prepared. The sections below include descriptions and summaries of those activities. Major activities completed include the selection of a Steering Committee, multiple Steering Committee meetings, stakeholder interviews, and surveys. The outreach also included periodic briefings to the TSCID Board of Directors.

2.1 Steering Committee

During the kickoff of this plan a Steering Committee was formed that included a diverse group of participants including TSCID staff, property owners, local government, freight providers and business owners. Representatives from the following public organizations were invited to participate in the Steering Committee Meetings:

- Georgia Department of Transportation (GDOT)
- Atlanta Regional Commission (ARC)
- City of Tucker
- DeKalb County
- Gwinnett County
- Gateway 85 Community Improvement District
- Lilburn Community Improvement District

Representatives from the following public and private organizations were also invited to participate in the Steering Committee process:

- Metro Atlanta Chamber of Commerce
- Georgia Motor Trucking Association
- UPS
- CSX
- City of Tucker Police Department
- Marten Transport, Ltd.
- Ram Tool
- Macy's
- International Paper Company
- Flowers Baking Company
- Cox Enterprises, Inc.
- Pepsi Beverages Company
- American Medical Response of Georgia, Inc.
- House of Cheatham, Inc.
- Southern Region Distribution Services, LLC
- Comcast/Xfinity

The Steering Committee met four times and provided input on the needs and recommendations for the FCP. While these meetings were intended to be held as in-person events, the final three meetings had to be held virtually due to the COVID-19 pandemic. A list of the meeting dates and a short description of the purpose of each meeting is included below:

- **Steering Committee Meeting #1 – February 4, 2020 @ 11:30 a.m. (Stone Ridge Event Center)** – This meeting began with an introduction of the FCP and the project team. Then the team provided a timeline for events and presentation of the FCP’s overview. Following the presentation, an input session was held. Attendees were asked to provide input on what they would like to see the plan accomplish, industries to attract, and any additional feedback beneficial to the FCP process.
- **Steering Committee Meeting #2 – April 8, 2020 @ 1:30 p.m. (Virtual via Zoom)** – The second meeting agenda included the status of deliverables such as the Outreach Activities, *Best Practices Report*, and *Inventory and Assessment Report*. Further, topics discussed included general TSCID travel characteristics, and an overview of the area’s land use and development analysis. The Steering Committee participants input was requested following the presentation. Several questions regarding congestion, safety issues, potential improvements, truck parking, and overall development vision were addressed during the input session.
- **Steering Committee Meeting #3 – July 1, 2020 @ 1:30 p.m. (Virtual via Zoom)** – The third Steering Committee Meeting began with an update of current deliverables in progress followed by a presentation. The presentation included an update on Outreach Activities, findings of the *Inventory and Assessment Report*, and the methodology and findings of the *Traffic Study Report*. The meeting discussions focused on a review of land use and market strategies, short-term projects, and long-term projects. Input was gathered from participants during the meeting and through an online mapping tool.
- **Steering Committee Meeting #4 – September 15, 2020 @ 2:00 p.m. (Virtual via Zoom)** – The fourth meeting began with the status of current deliverables including project recommendations. A presentation of the Draft Short-term and Long-term Plan was given to the attendees. This presentation included land use and multimodal recommendations, the short-term and long-term project lists. An input session was held following the presentation which focused on the proposed project lists. The meeting was attended by 40 people.

The minutes for each of the Steering Committee meetings are provided in Appendix A.

Major input highlights from the Steering Committee Meetings include:

- The purpose of the FCP should be to identify projects that can be implemented.
- TSCID’s FCP should work cohesively with the Statewide Freight Plan which provides policy strategies but does not drill down to local roadways such as Mountain Industrial Boulevard.
- Group confirmed local planning efforts such as the TSCID FCP are necessary because it is also not included at the regional planning level.
- The need for short-term operational improvements should be prioritized over long-range visionary improvements.

- Several potential safety and operational improvements were suggested by outreach participants at locations throughout the TSCID.
- Coordination between the TSCID, City of Tucker, and DeKalb County will help provide productive results for future growth and mobility.
- Potential transit operations, such as Bus Rapid Transit (BRT) may be coming to the area soon and should be considered during planning for this corridor.
- Alternative funding sources should be considered during the development of this plan.
- Truck parking and staging availability is an issue to be addressed.
- The addition of an Amazon facility east of the study area will significantly increase traffic.
- Causes of congestion in the areas were identified as improper signal phasing, lack of alternative routes, volume of cars, distracted driving, need for flexible work schedules, left-turn movements out of drives, and the Mountain Industrial Boulevard and US 78 interchange.
- Problem intersections include: Jimmy Carter Boulevard and Singleton Road, Mountain Industrial Boulevard and Hugh Howell Road, Mountain Industrial Boulevard and US 78, Jimmy Carter Boulevard and US 29, Mountain Industrial Boulevard and Lewis Road.
- Problem driveways include Sam's Club, Convenient Store at Mountain Industrial Boulevard and E. Ponce de Leon Avenue, QT, and Stone Mountain Inn.
- Improvements stakeholders would like to see included: median along Mountain Industrial Boulevard, signal phasing coordination, roundabouts, turning radius improvements, adaptive signals along Mountain Industrial Boulevard, Tucker Industrial Road extension across US 78 with half diamond interchange, connected vehicle technology, and shared truck parking.
- Barriers to redevelopment of the TSCID include funding, permit issues, and worker access.
- Stakeholders identified potential mixed-use areas along Hugh Howell and Lawrenceville Highway.

2.2 Interviews

A total of 15 stakeholder interviews were conducted with companies and agencies who have an interest in the process and outcomes of the FCP. The interviews included both public and private sector.

Interviewees included:

Private Sector

- Flowers Bakery
- Graphic Packaging
- Clean Harbors Environmental
- Friends of Disabled Adults and Children (FODAC)
- Green Ranger
- House of Cheatham
- Church of Latter-Day Saints
- Macy's
- PepsiCo
- Sempert Transportation
- UPS

- ITW Pro Brands
- Thermopac

Public Sector

- City of Tucker
- DeKalb County

The purpose of the interviews was to gather input on:

- Freight-related transportation challenges being experienced.
- How their facilities operate, trends in the logistics and supply chain industry that are impacting the interviewee's business.
- Improvements the interviewee believed could make a difference.

A questionnaire was created to obtain feedback on current and future freight transportation in the area. This report represents common themes that highlight shared issues among interviewees and includes feedback on origin and destination and staging and trucking needs.

2.2.1 Origin and Destination

This section highlights questions and answers asked during the interviews regarding origins and destinations of trips.

- **Where do your incoming trucks typically come from?**
 - Logistics centers in Norcross, Covington, and Chamblee
 - Distribution centers in Macon, Augusta, and Rome
 - Port of Savannah
 - North Carolina, South Carolina, and Florida
- **What major roadways are typically used to access and depart from your businesses?**
 - US 78, Mountain Industrial Boulevard, Jimmy Carter Boulevard, E. Ponce de Leon Avenue, Hugh Howell Road, Flintstone Drive, Lawrenceville Highway, and Tucker Industrial Road (All via I-20, I75/85, GA 400, I-285)
 - Local roads within industrial park areas include Lewis Road, Roadhaven Road, Stone Ridge Drive, Rock Mountain Road, and Goldsmith Street
- **What are the destinations for the trucks that leave your facility?**
 - Retail areas around the Atlanta region (mainly DeKalb and Fulton Counties)
 - Logistics centers in Doraville, Covington, and Suwannee
 - Macon, Augusta, Rome, Brunswick, and Port of Savannah
 - North Carolina, South Carolina, Alabama, Florida, Virginia, and New Jersey
 - Cross-country including California, Indiana, Illinois, Texas, and Arkansas

2.2.2 Truck Parking/Staging

This section highlights questions and answers asked during the interviews regarding truck parking and staging.

- **What areas of the TSCID are in most need of staging areas for trucks?**
 - Lewis Road, Roadhaven Road, and Stone Ridge Drive

- **Is there demand for overnight parking in the district? If so, where?**
 - Yes, there is demand for overnight parking
 - Near 78 and Mountain Industrial Boulevard
 - Rock Mountain Road near E. Ponce de Leon Avenue

2.2.3 Other Common Themes

Other common themes identified through the interview process included the following:

- Most businesses operate a minimum of 5 days per week, from 10 to 24 hours per day.
- Most businesses used truck only; three exceptions – one primarily ships by rail and air; two others transport by truck to ports for international shipping.
- Inadequate turning radius was the most commonly mentioned difficulty.
- Other challenges include lack of parking and/or staging areas; traffic congestion, especially along Mountain Industrial Boulevard, US 78, Ponce de Leon Avenue, and I-285
- Scheduling sometimes negatively affected by the Georgia Department of Public Safety driving hours restrictions¹.
- Recommended improvements include – future transportation designs include wider radii that accommodate modern truck wheelbase; new warehouse space should incorporate truck overnight parking.
- Potential for partnerships – coordination between private sector and government agencies; partnerships between private companies to coordinate scheduling to lessen congestion; coordination with government agencies on growth plans, construction, zoning, transportation improvements, etc. (A specific example of such a partnership would be UPS coordinating with Amazon on scheduling delivery time. It should also be noted that one of TSCIDs core missions is to develop partnerships with local businesses and government.)
- Worker transportation – Most respondents said workers use private vehicles, with few using transit. Of those employees utilizing transit, pedestrian safety accessing the transit stops is a concern. Two respondents work with MARTA on incentives; one uses the Georgia Commute Options program.
- Trends indicate that more training will be needed (CDL licensing, warehouse operations, use of navigation tools) to ensure an adequate workforce
- Dedicated truck routes will help, along with better signage, signalization, and synchronization of traffic lights.
- Navigation databases need to be updated to include more Tucker data.
- To attract millennials, the area will need infrastructure improvements such as up-to-the minute information for drivers, development of walkable amenity rich areas, and better and more accessible transit service.

¹ <http://dps.georgia.gov/document/publication/hours-service-rules/download>

- All respondents anticipate Amazon’s new facility nearby to the east of the TSCID will create greater congestion and competition for workers; one respondent indicated that the move would revitalize the area along with other planned construction.

Government agency responses during the interviews included:

- Concern that growth will continue to outpace the ability to expand infrastructure and upgrade transportation systems.
- Greater coordination is needed between agencies involved in zoning, permitting, construction, and transportation services.
- Private sector can help with beautification and landscape maintenance.
- The appeal of the TSCID area is growing, mainly because of proximity to Atlanta, still a desirable region for businesses; lots of potential for mixed use commercial and residential, less industrial.
- Private and public sectors should work together on economic development planning.
- Workforce development training is needed; should explore outreach to local schools.

2.3 Other Outreach Activities

In addition to the Steering Committee Meetings and Stakeholder Interviews, a few other outreach activities were conducted during the development of the TSCID FCP. Trucker surveys were conducted within the TSCID boundaries. A public website was maintained, and an online survey was also conducted during the development of this plan.

2.3.1 Trucker Surveys

An important element of the outreach process was creating an opportunity to receive feedback from truck drivers that serve businesses within the TSCID FCP study area. A questionnaire was created to obtain information that would inform the study process and document the transportation issues and challenges truck drivers face in the area. The original approach to conduct the questionnaire was to identify businesses within the industrial area that would allow for onsite intercept opportunities directly with drivers. Due to the COVID-19 restrictions however, that process was abandoned. The surveyors (who are retired truck drivers) suggested an intercept process using the Citizens Band (CB) radio technology. Using the CB radio, surveyors were able to reach 26 truck drivers, and many of them allowed the questionnaire to be shared in person while staging within the study area.

The participating companies included: Status, 1Load Express, Caspi, Premier, G & G Global, Fat Rabbit Express, Roadmaster Transportation, Lazer Spot, Cross Country, New Market Equipment, Detroit Express, Beacon Roofing, Valles Trucking, Red Classic, MAPF Logistics, IBT, Old Dominion, Brown Trucking, and Capable Express

Responses to the truck driver surveys indicated that drivers were primarily fleet or independent. Of those drivers, 8 were local and 18 were long-distance drivers. Challenges faced while driving in the TSCID were congestion, small curb radii, small parking lots, inadvertent destruction of grass and trees, and narrow roads. Location specific issues were identified by drivers at Mountain Industrial Boulevard and Lewis Road, US 78 and I-285, Mountain Industrial Boulevard and E. Ponce de Leon Avenue. The survey revealed that about 50% of respondents utilize off-peak delivery times (between 12 am and 6 am). Drivers identified the barriers to utilizing off-peak deliveries as lack of parking and lack of staff at

plants. Drivers also identified the following safety issues when driving in the area: trees close to the roadways, cars mixed with trucks, driveways in and out, narrow intersections and roads, speeding vehicles, and traffic operations. Drivers identified the following safety issues when parked or staging: no rest areas, poor lighting and security, insufficient parking and staging areas. When asked what improvements would benefit drivers and businesses in the TSCID, the common themes from drivers were wider turn lanes, wider roads, speed monitoring, additional lighting and signage, and more parking facilities.

2.3.2 Online Survey

In addition to the activities above, an online survey was designed to reach a larger audience of stakeholders targeting feedback on freight issues in the study area. The survey was extended to TSCID members, area businesses, and employees. A total of 37 surveys were completed. Survey respondents were a mix of employees and business owners. The respondents included freight buyers, distributors, manufacturers, logistics planners, dispatch personnel, drivers, and administrators. Drivers and administrators accounted for about 52% of respondents. The following themes were mentioned by respondents:

- Biggest challenges facing the area are traffic volumes, congestion, and poor road conditions.
- Drivers commuting to work are primarily in individual vehicles.
- Priorities should include more transit, access, and rail crossings.
- Most respondents worked from 9am – 5pm.
- Biggest safety concerns included speeding, lack of rest areas, security, unsafe lane changes, jaywalking, and poor visibility.
- Most drivers do not use traffic apps during the daily commute.
- Mountain Industrial Boulevard and US 78 is the most challenging intersection in the area.
- Respondents felt road widenings would benefit businesses the most.
- Illegal truck parking should be ticketed.

2.3.3 Website

A public website was maintained throughout the development of this plan. General information, documentation, maps, and online surveys were available on the site.

2.4 Summary of Outreach

Several common themes were identified throughout the outreach process during the development of this plan. Key takeaways from the outreach activities are:

- The TSCID suffers from congestion and safety issues caused by improper signal phasing, lack of alternative routes, volume of cars, distracted driving, need for flexible work schedules, left-turn movements out of drives, and the Mountain Industrial Boulevard and US 78 interchange.
- An overall development vision should be identified for the corridor.
- Projects proposed should be those that will result in implementation.
- Short-term and long-term project coordination should be made at all levels of government.
- Proposed plans and projects should include a potential future transit plan for the area.

- Alternative funding sources should be considered to implement projects.
- Truck parking and staging needs should be considered as part of any plan.
- Problem intersections noted by participants include: Jimmy Carter Boulevard and Singleton Road (outside the TSCID), Mountain Industrial Boulevard and Hugh Howell Road, Mountain Industrial Boulevard and US 78, Jimmy Carter Boulevard and Lawrenceville Highway, Mountain Industrial Boulevard and Lewis Road.
- Access management throughout the corridor should be considered in this plan.
- Mountain Industrial Boulevard is the primary route in the TSCID for ingress and egress to local businesses.
- Origins for freight primarily include the Atlanta Region, but also the Port of Savannah and out of state goods.
- Destinations for freight out of the TSCID are primarily the Atlanta Region, but can be going as far away as California.
- Most businesses utilize trucks for freight movements rather than air or rail.
- Inadequate turning radii was the most mentioned difficulty in the area.
- Transportation for workers to get to work is needed in the area.
- The new Amazon facility along with other new facilities could create a lot more traffic in the TSCID.

3 Major Analytical Findings from FCP

The following chapter represents the major findings from the TSCID FCP *Inventory and Assessment Report* as they relate to freight mobility and industrial development. For ease of review, these findings have been organized by the subject matter presented below:

- Roadway Needs
- Land Use and Development Needs
- Freight Routing Needs
- Workforce Access Needs

3.1 Roadway Needs

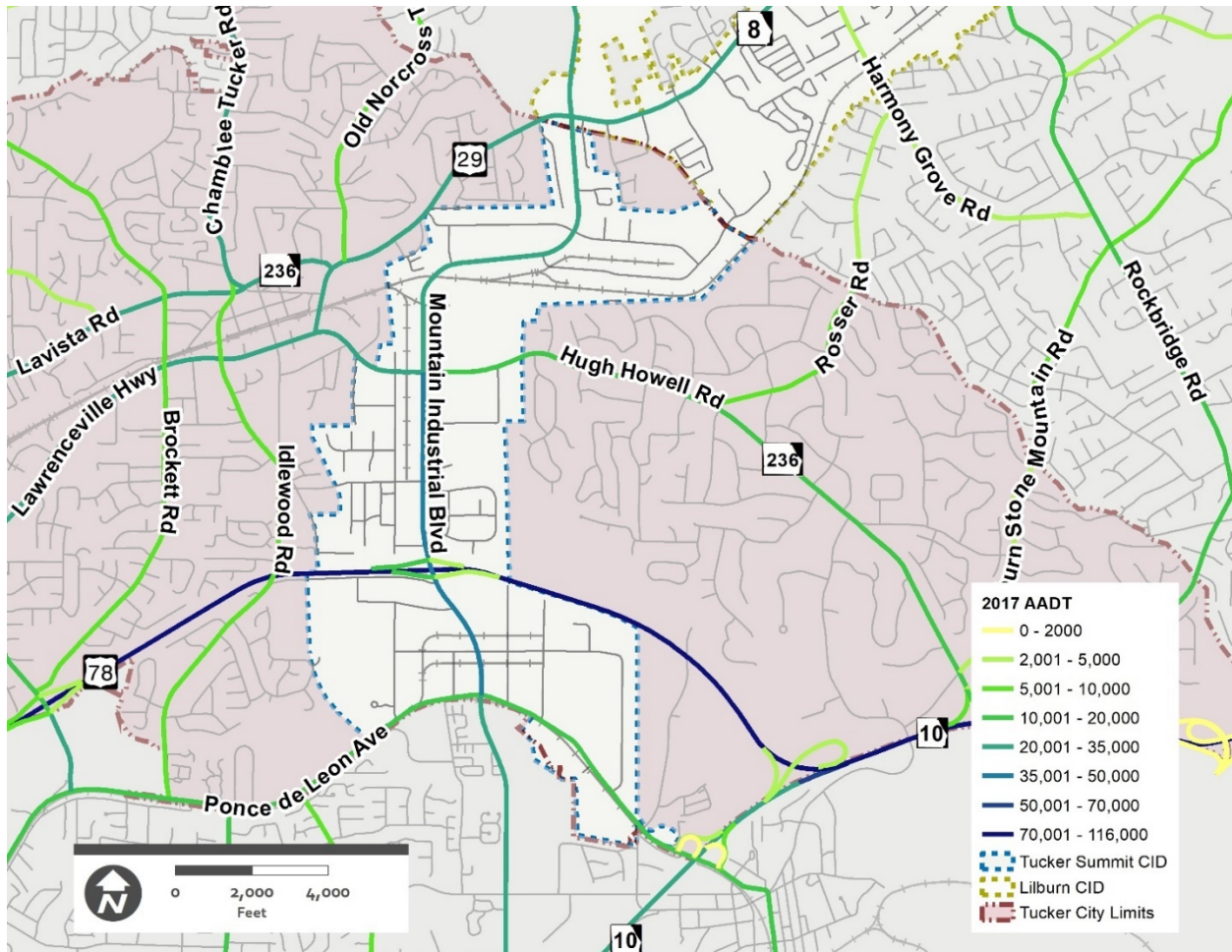
The following sections discuss the results found during analysis of study area roadways. Topics include capacity, operations, safety, resurfacing, bridges, and system resiliency.

3.1.1 Capacity

Analysis from the *Inventory and Assessment Report* indicates that, based on total daily volume as shown below in Figure 1, the worst congestion within the TSCID is observed along Mountain Industrial Boulevard. Particularly, the section between Hugh Howell Road and US 78 experiences a Level of Service (LOS) F as shown below in Figure 2. Within the TSCID, US 78 operates in congested conditions, with ramps at Mountain Industrial Boulevard operating at a LOS E and F. Future volumes from the ARC Activity-Based Model shown in Figure 3, indicate that Mountain Industrial Boulevard is projected to carry 39,800 to 67,100 vehicles per day by 2040. The highest projected volumes are anticipated between the junction with US 78 and Hammermill Road. The greatest growth in traffic is projected to be 29 to 31% north of S. Royal Atlanta Drive. Traffic is also projected to grow 23 to 25% between E. Ponce de Leon Avenue and Hugh Howell Road. Projected future LOS for the entire Mountain Industrial Boulevard within the TSCID show as Level E and F as shown in Figure 4 below.

Recent GDOT traffic counts also determined that within the study area, US 78 carries the highest volume of trucks and serves as a critical truck route to freight-oriented businesses in the TSCID. While US 78 carries the most trucks, Mountain Industrial Boulevard also carries a significant amount of trucks through the study area. It carries 1,990 average daily trucks south of S. Royal Atlanta Drive, as shown in Figure 5. The analysis also revealed that local roads off Mountain Industrial Boulevard, are heavily utilized by trucks accessing distribution centers and warehouses. These findings highlight the need for effective capacity improvements, optimization, and access management along Mountain industrial Boulevard.

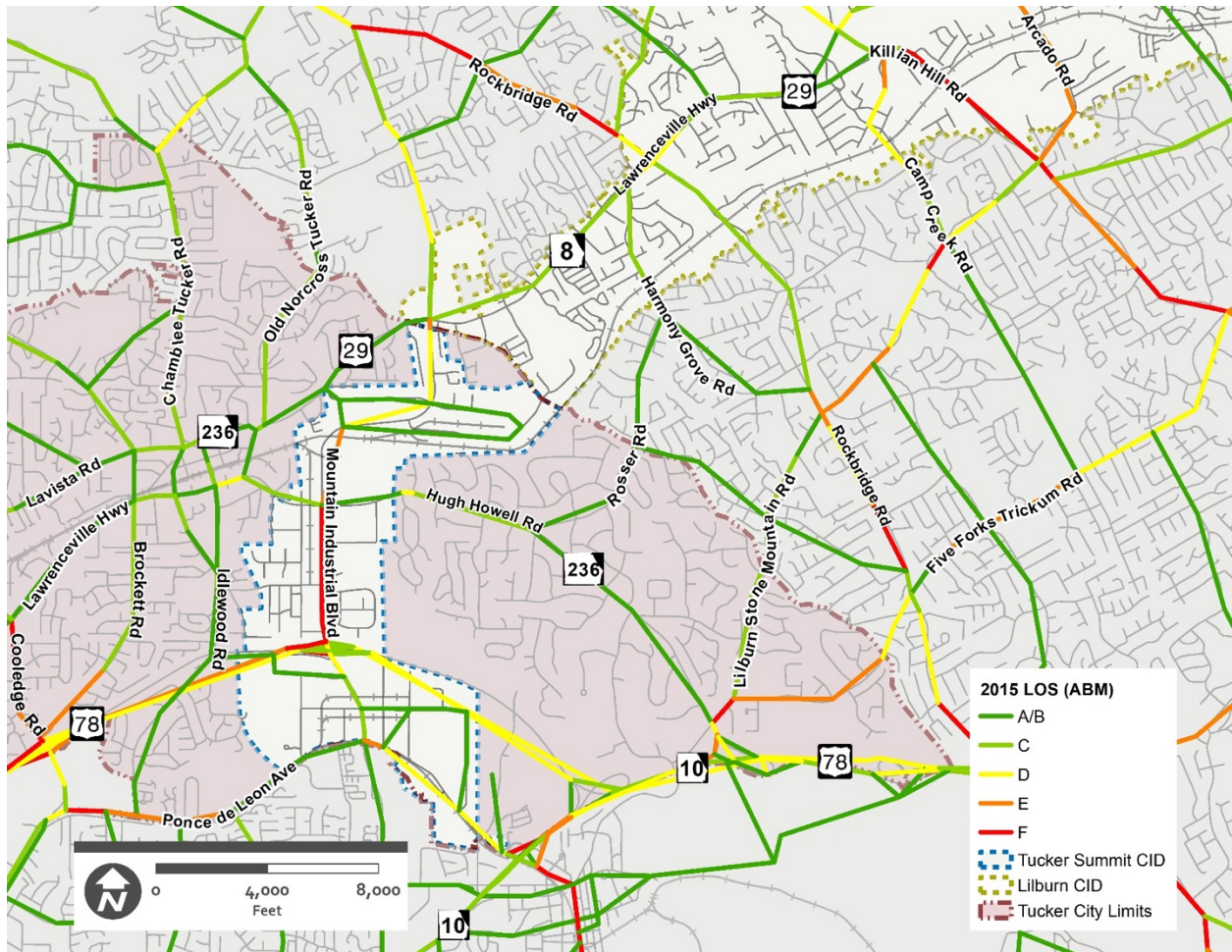
Figure 1: Existing (2018) Roadway Volumes



Source: GDOT²

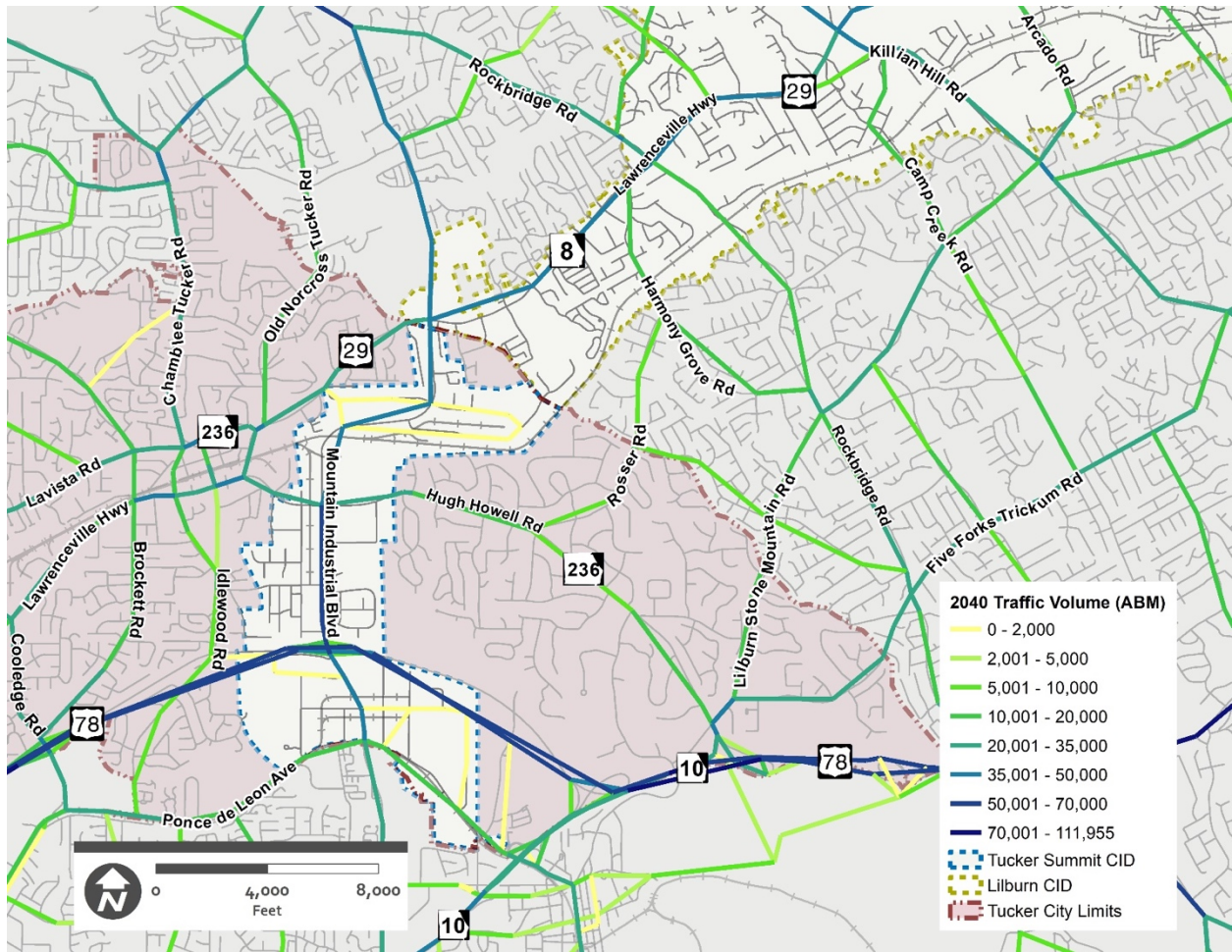
² GDOT (2019). Traffic Counts. Retrieved from http://www.dot.ga.gov/DriveSmart/Data/Documents/Traffic_GeoDatabase.zip.

Figure 2: Existing Congestion 2015 LOS Along Major Roadways



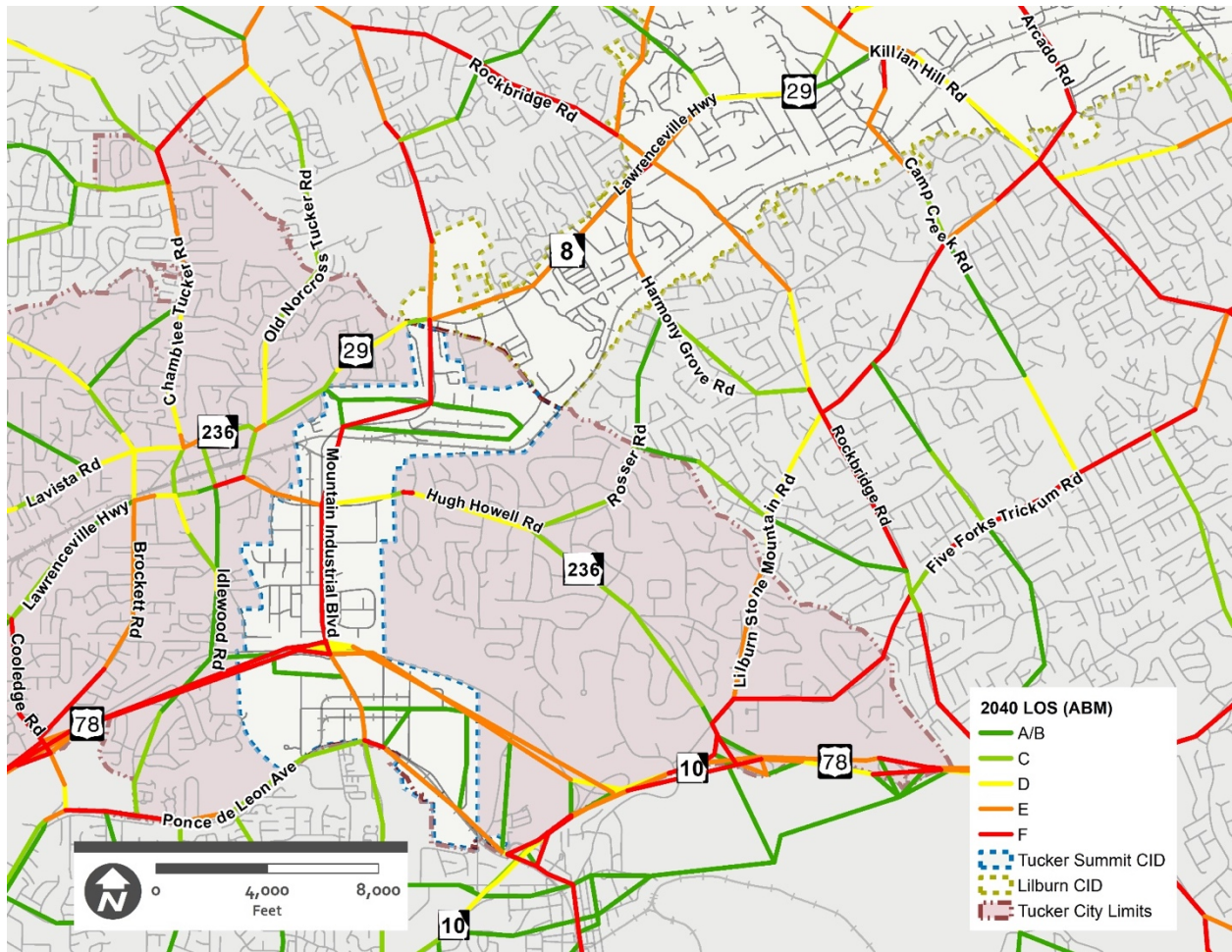
Source: ARC Activity-Based Model

Figure 3: Projected Roadway Volumes (2040)



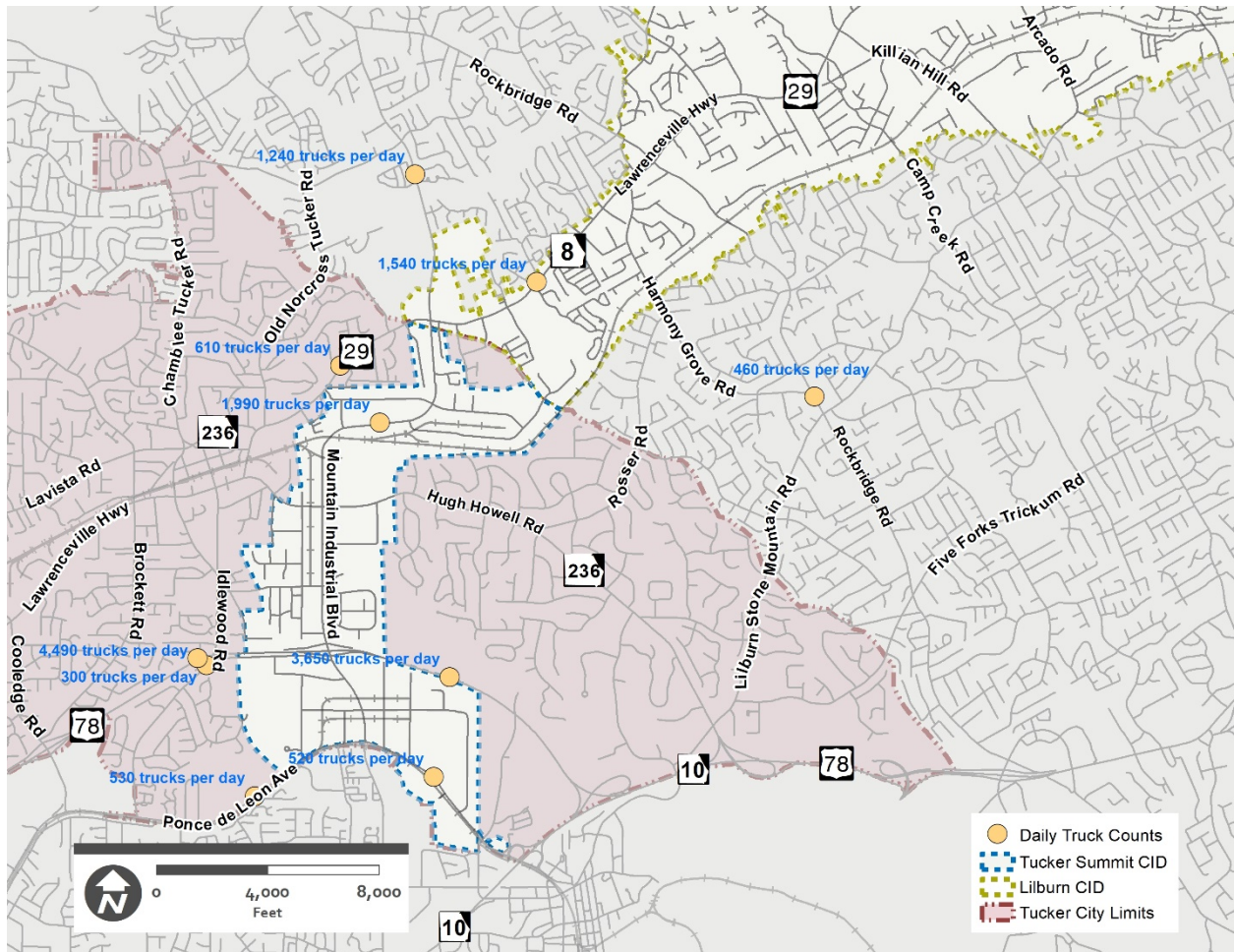
Source: ARC Activity-Based Model

Figure 4: Projected Congestion 2040 Roadway LOS



Source: ARC Activity-Based Model

Figure 5: Existing GDOT Daily Truck Volumes



Source: GDOT

3.1.2 Operations

As part of the FCP, a detailed traffic study was conducted at 14 intersections. Eleven intersections are located within TSCID, one intersection is located just west of TSCID in the City of Tucker, and two intersections are in the City of Lilburn and Lilburn CID just north of TSCID. Key findings from the traffic study include the following:

- Under the existing year (2020) conditions, most of the intersections evaluated operate at an acceptable LOS (LOS D or better) during peak periods. The exception is Lawrenceville Highway (US 29/SR 8) at Indian Trail Lilburn Road/Killian Hill Road, which currently operates at LOS E in the morning peak period.
- Based on the projected growth in traffic at the study intersections, if no improvements are made, four intersections are projected to operate at LOS E or worse during peak periods by the future horizon year (2030):
 - The Mountain Industrial Boulevard at Elmdale Drive/Roger Marten Way intersection is projected to operate at LOS F during the afternoon peak period.
 - The Mountain Industrial Boulevard at E. Ponce de Leon Avenue intersection is projected to operate at LOS E during the morning peak period.
 - The Lawrenceville Highway (US 29/SR 8) at Rockbridge Road intersection is projected to operate at LOS E during the morning peak period.
 - The Lawrenceville Highway (US 29/SR 8) at Killian Hill Road/Indian Trail Road intersection is projected to operate at LOS F and LOS E during the morning and afternoon peak periods, respectively.

3.1.3 Safety

As shown in Figure 6 below, a crash analysis was conducted for crashes occurring on non-freeway routes in TSCID from 2014 to 2018. Key findings from this analysis are as follows:

- Between 2014 and 2018, there were a total of 2,931 crashes in TSCID along non-freeway routes. Of these crashes, 278 took place on private property.
- The most prevalent crash types were rear-end crashes (43 percent) and angle crashes (33 percent). Collectively, head-on collisions and sideswipes account for approximately 15 percent of all crashes.
- Twenty-three percent of all crashes resulted in at least one injury. Three crashes resulted in one or more fatalities.
- As shown in Figure 7 below, there were 178 crashes involving a tractor-trailer or other type of commercial vehicle. Most of these crashes occurred on Mountain Industrial Boulevard. One of these crashes involved a pedestrian. The most prevalent crash types among crashes involving commercial vehicles were angle crashes (41 percent) and rear-end crashes (31 percent). Same-direction sideswipe crashes accounted for 18 percent of all commercial crashes. Among all commercial crashes, 17 percent (30 crashes) took place on private property.
- A corridor-level crash analysis was performed for Mountain Industrial Boulevard within TSCID.
 - A total of 1,827 crashes, including both commercial and non-commercial vehicles, occurred along the corridor between 2014 and 2018. Most crashes were rear end (47

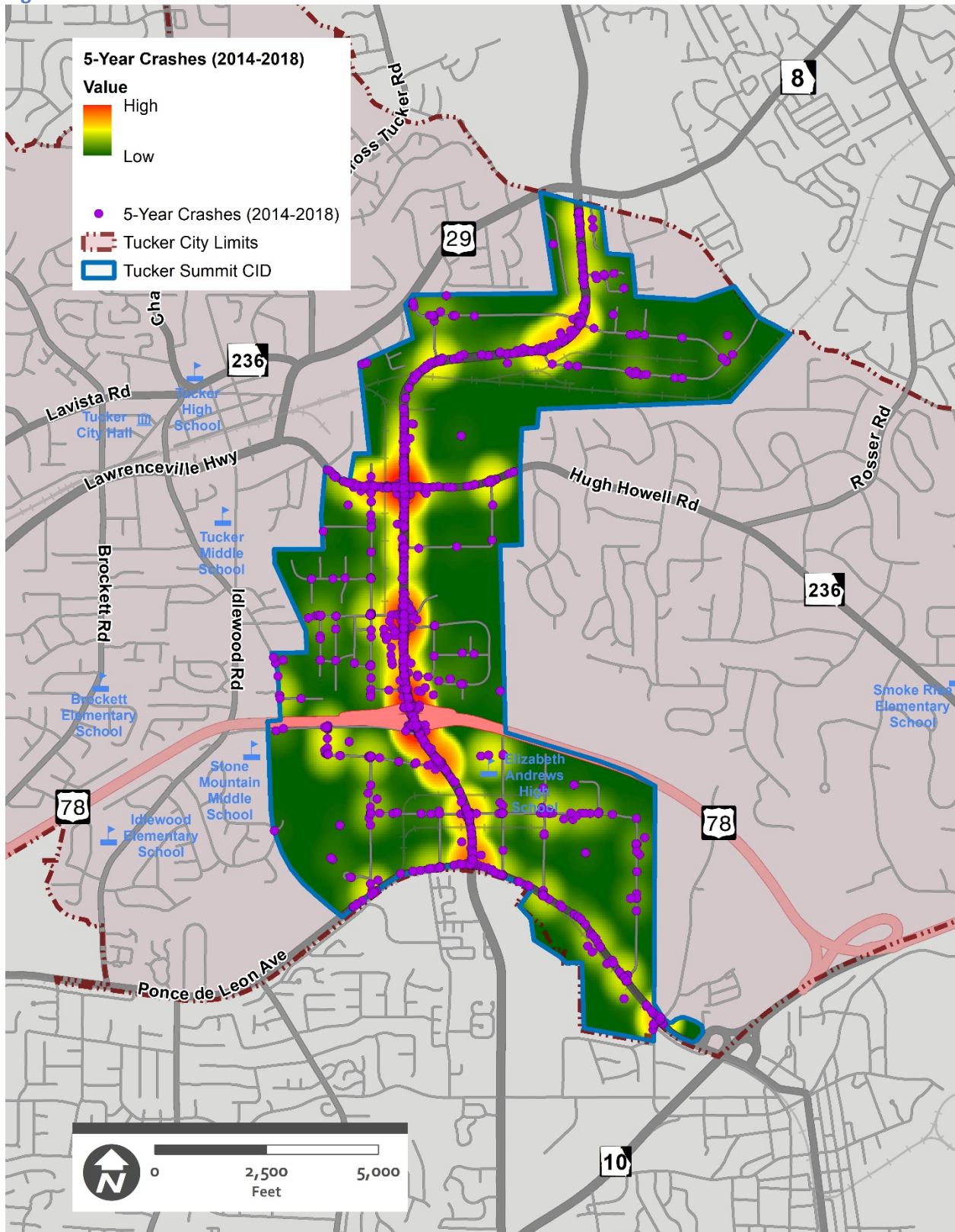
percent) and angle crashes (32 percent). Most crashes along the corridor involved property damage only. Twenty-six percent of crashes resulted in at least one injury, and three crashes resulted in a fatality. The average crash rate along the corridor exceeds statewide averages for total crashes, injury crashes, and fatal crashes, compared to other routes with the same functional classification (urban principal arterial).

- Of the 178 commercial crashes in TSCID from 2014 to 2018, 96 crashes, or 54 percent of all commercial crashes, occurred along Mountain Industrial Boulevard. The most prevalent crash type was angle crashes (36 percent), followed by rear end crashes (32 percent), sideswipes in the same direction (23 percent). Collectively, sideswipes in the opposite direction and collisions with objects other than a motor vehicle accounted for five percent of all crashes.

A crash analysis was performed for the 14 intersections included in the traffic study. Eight intersections averaged ten or more crashes annually:

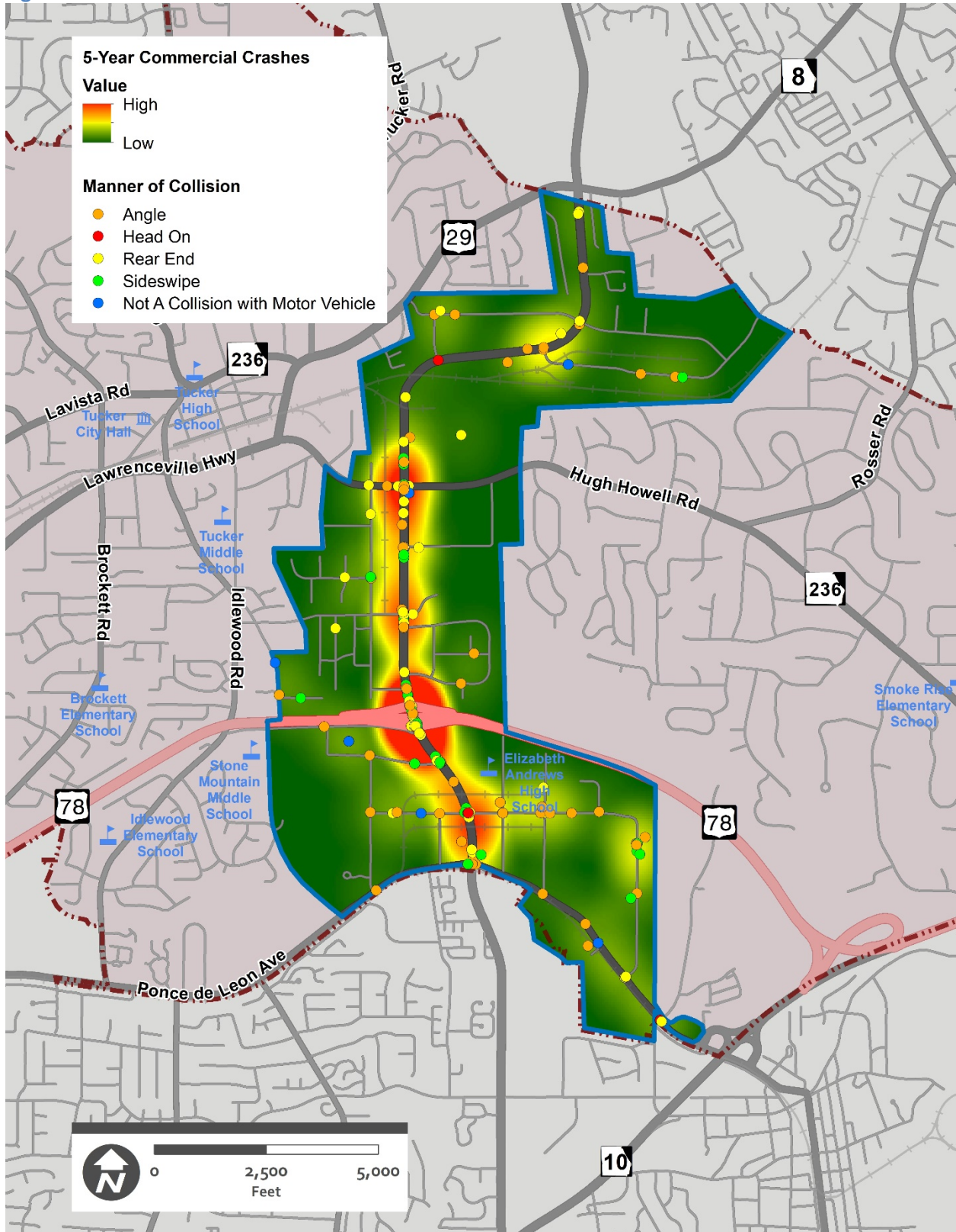
- Mountain Industrial Boulevard at North Royal Atlanta Drive – 24 annual average crashes
- Mountain Industrial Boulevard at South Royal Atlanta Drive – 11 annual average crashes
- Mountain Industrial Boulevard at Elmdale Drive/Roger Marten Way – 22 annual average crashes
- Mountain Industrial Boulevard at Greer Circle – 25 annual average crashes
- Mountain Industrial Boulevard at Lewis Road – 13 annual average crashes
- Mountain Industrial Boulevard at E. Ponce de Leon Avenue – 30 annual average crashes
- Lawrenceville Highway (US 29/SR 8) at Rockbridge Road – 39 annual average crashes
- Lawrenceville Highway (US 29/SR 8) at Indian Trail Lilburn Road/Killian Hill Road – 36 annual average crashes

Figure 6: Auto Crash Locations



Source: GEARS

Figure 7: Commercial Vehicle Crash Locations



Source: GEARS

3.1.4 Resurfacing

The FCP includes an evaluation of pavement condition based on the City of Tucker’s pavement analysis (2018) and highlights resurfacing projects that are planned or have been recently completed.

- In 2018, most roadways within TSCID received scores indicating that roadway pavement is of poor, very poor, or serious condition, with a limited number of roadways in fair, good, or excellent condition. Mountain Industrial Boulevard was determined to be in very poor condition (score of 31.2 on a scale of 0 to 100). Since 2018, however, Mountain Industrial Boulevard has been resurfaced along its extent through the TSCID. Other roads that were recently resurfaced include Lewis Road, Rock Mountain Boulevard, Roadhaven Drive, Auger Drive, Beverage Drive, Greer Circle, Flintstone Drive, Granite Drive, and South Royal Atlanta Drive.
- Roads within TSCID that were in poor condition or worse at the time of the 2018 pavement analysis that have yet to be scheduled for resurfacing by the City of Tucker include Bibb Boulevard, Hirsch Drive, Kilman Drive, McCurdy Drive, North Royal Atlanta Drive, North Royal Place, Presidents Walk, Presidents Way, South Bibb Drive, and Tuckerstone Parkway.³

3.1.5 Bridge Needs

An inventory of the bridges in the TSCID identified only three located within the TSCID boundary. As shown in Table 1, the bridges within the TSCID identified as being in Good to Fair condition, based on bridge inspections and according to National Bridge Inventory (NBI) standards.

Table 1. Condition of Major Bridges in or Near TSCID Study Area

Bridge Name	Location	Condition
089-0131-0	Mountain Industrial Boulevard @ CSX Railroad	Good
089-0132-0	Mountain Industrial Boulevard @ US 78	Fair
089-0144-0	N. Hairston Road @ CSX Railroad	Fair

Because two of the bridges within the TSCID are overpasses over railroads, these bridges pose no issue regarding vertical clearance. It should be noted, however, that the Mountain Industrial Boulevard bridge over US 78 was identified to have a 16’3” vertical clearance, which falls below the vertical clearance standard as established by GDOT.⁴ The minimum vertical clearance for bridges over state routes (non-interstate) is 16’9”, and the permissible clearance (with approval from the GDOT Bridge Office) is 16’6”. This indicates that this bridge may be vulnerable to impact from tall trucks, and that the bridges should be elevated to meet the minimum clearances when they undergo repair or replacement.

³ City of Tucker (2018). Tucker Pavement Condition Index (PCI) Ratings.

https://www.tuckerga.gov/meeting_detail_T51_R223.php

⁴ GDOT (2020). Bridges and Structures Manual. Chapter 2, Section 2.3.3.1. Retrieved from

http://www.dot.ga.gov/PartnerSmart/DesignManuals/BridgeandStructure/GDOT_Bridge_and_Structures_Policy_Manual.pdf

In addition to the vertical clearance issue above, the bridge located along North Hairston Road over the CSX Railroad immediately south of the intersection with E. Ponce de Leon Avenue currently has weight restrictions. H-modified trucks, type 3/tandem trucks, and timber trucks each have posting requirements of 16 tons, 15 tons, and 22 tons, respectively. This bridge is currently in fair condition; it was constructed in 1963 and reconstructed in 1982.⁵

⁵ GDOT (2020). 089-0144-0 Bridge Documents – GeoPi. Retrieved from <http://www.dot.ga.gov/applications/geopi/Pages/BridgeDocument.aspx?StructureID=089-0144-0>.

3.1.6 System Resilience Needs

A common theme heard from the TSCID and other stakeholders throughout the development of the TSCID FCP is system resilience. From a regional perspective, TSCID and particularly Mountain Industrial Boulevard was identified by stakeholders as an alternative route for I-285 during peak and emergency conditions. In addition, stakeholders identified the I-285/I-85 interchange just to the northwest of the TSCID as having both operational and capacity issues that force drivers to find alternate routes. This intersection was ranked the #2 freight bottleneck in 2020 by the American Transportation Research Institute (ATRI) in their annual rankings⁶. Because of the overarching issues on I-285, the Jimmy Carter Boulevard and Mountain Industrial Boulevard Corridor becomes a critical north-south arterial for automobile and freight traffic.

As noted within the *Inventory and Assessment Report*, portions of Mountain Industrial Boulevard currently operate at LOS F. The entirety of Mountain Industrial Boulevard is projected to operate at LOS F in 2040. Alleviating congestion along this provides a system resilience and an alternative for I-285.

The short-term and long-term projects would address TSCID system resilience in a phased approach. Short-term projects would address immediate operational and safety issues. While the long-term projects would provide future capacity and mobility improvements.

3.2 Land Use and Development Needs and Opportunities

Based on the assessment of current zoning, development patterns, and economic trends noted within the *Inventory and Assessment Report*, the following needs were identified:

- Local governments can undertake redevelopment and revitalization efforts in older commercial and industrial areas. Those areas can then qualify for the State's job tax credit in areas designated as Opportunity Zones by the state. This credit can be taken against the businesses' Georgia tax liability and payroll withholding tax.
- Federal Opportunity Zones were created to allow investors to defer federal taxes by taking capital gains from other investments and investing in these designated areas. There is currently an opportunity zone along E. Ponce de Leon Avenue east of Mountain Industrial Boulevard, and it may make sense to pursue opportunity zone funding for roadway improvements.
- Various funding sources exist in city, county, regional, state, and federal budgets that can be utilized to partner on capital and operational improvements related to transportation and infrastructure. Examples of these potential sources of funds include municipal public works budgets, Georgia Department of Transportation Quick Response program funds, and competitive federal grant programs. Active and thorough coordination with elected officials and staff are crucial to effectively securing assistance.
- Local quasi-governmental organizations like the Tucker Downtown Development Authority, DeKalb Chamber of Commerce, etc. may also have funding or expertise to help support capital projects and economic development initiatives. Other non-profit organizations may offer

⁶ <https://truckingresearch.org/2020/02/18/atri-releases-annual-list-of-top-100-truck-bottlenecks-3/>

programs (particularly related to sustainability) that may be complementary to addressing freight mobility challenges.

- Corporate partners may be available to contribute funding or donate right of way or easements as in-kind contributions for important capital projects. Some companies may also have innovative technology-based solutions that they wish to test in a pilot program at reduced or no cost to local governments.
- A robust communication and social media strategy can help raise awareness of the need for and opportunities to create enhancements to freight infrastructure.
- Smart land use policies that concentrate on encouraging context sensitive design can enhance operations with no additional public investment needed. Encouraging non-freight uses like data centers in buildings no longer suitable for logistics operations may mitigate truck congestion.

Land use and development recommendations based on these needs and opportunities are provided in Chapter 8 (short-term) and Chapter 9 (long-term) herein.

3.3 Freight Routing Needs

Given the relatively small roadway network and industrial development throughout the TSCID area, there are no specific freight routing concerns within the study area. There are two sets of designated truck networks that comprise the cumulative roadway freight network within the TSCID:

- ARC Regional Freight Network - Regional truck routes in the TSCID are Mountain Industrial Boulevard and US 78. These routes provide the following critical connections:
 - Mountain Industrial Boulevard - Provides connections to I-85 via Jimmy Carter Boulevard as well as US 78 and I-20 via Wesley Chapel Road. Other truck routes accessible through this route include Peachtree Industrial Boulevard, SR 155, and Buford Highway (US 23/SR 13).
 - US 78 - Provides limited-access east-west connectivity through the study area and allows vehicles to access I-285 and Decatur to the west and Stone Mountain, Stone Mountain Park, Snellville, and Athens to the east. Additional truck routes that can be accessed through this route include Clairmont Road (US 23) and SR 124 in Snellville.
- National Highway Freight Network – I-85 and I-285, which connect the TSCID to the national highway network.
- DeKalb County Truck Routes – The DeKalb 2014 Transportation Plan identifies Mountain Industrial Boulevard and US 78 as “Potential Regional Routes” and Hugh Howell Road (SR 236) and US 29 (Lawrenceville Highway) as “Current County Routes.” However, the Plan expresses the need to update their County network to be more consistent with the ARC Regional Freight Network.

3.4 Workforce Access Needs

During the development of the *Inventory and Assessment Report*, the plan reviewed and identified workforce access needs, including transit, bicycle, and pedestrian. The sections below provide details of needs found.

3.4.1 Transit Needs

A review of transit characteristics was conducted during the *Inventory and Assessment Report*. The report identified three existing bus routes provided by the Metropolitan Atlanta Rapid Transit Authority (MARTA) in the TSCID. It also identified that MARTA has approximately 88 bus stops in the TSCID of which 14 have shelters, as shown in Figure 8 below. As of early 2019, nearly all bus stops were determined to be in good condition; the exception being the bus stop at N. Royal Atlanta Drive and S. Royal Atlanta Drive, which were documented as fair condition⁷. Some of these locations were on a potential list for new bus stop amenities to be installed by MARTA, including shelters and benches.⁸ There is one park-and-ride lot located near the study area. The Goldsmith Park & Ride in Stone Mountain, located at 5530 Central Drive, is served by MARTA Route 120.⁹

Between August and December 2019, among the 88 MARTA bus stops within TSCID, 729 bus riders embarked, and 643 bus riders disembarked during weekdays, representing a total ridership of 1,373 riders during the weekday period according to data obtained from MARTA. These stops serve multiple warehouses in the vicinity.

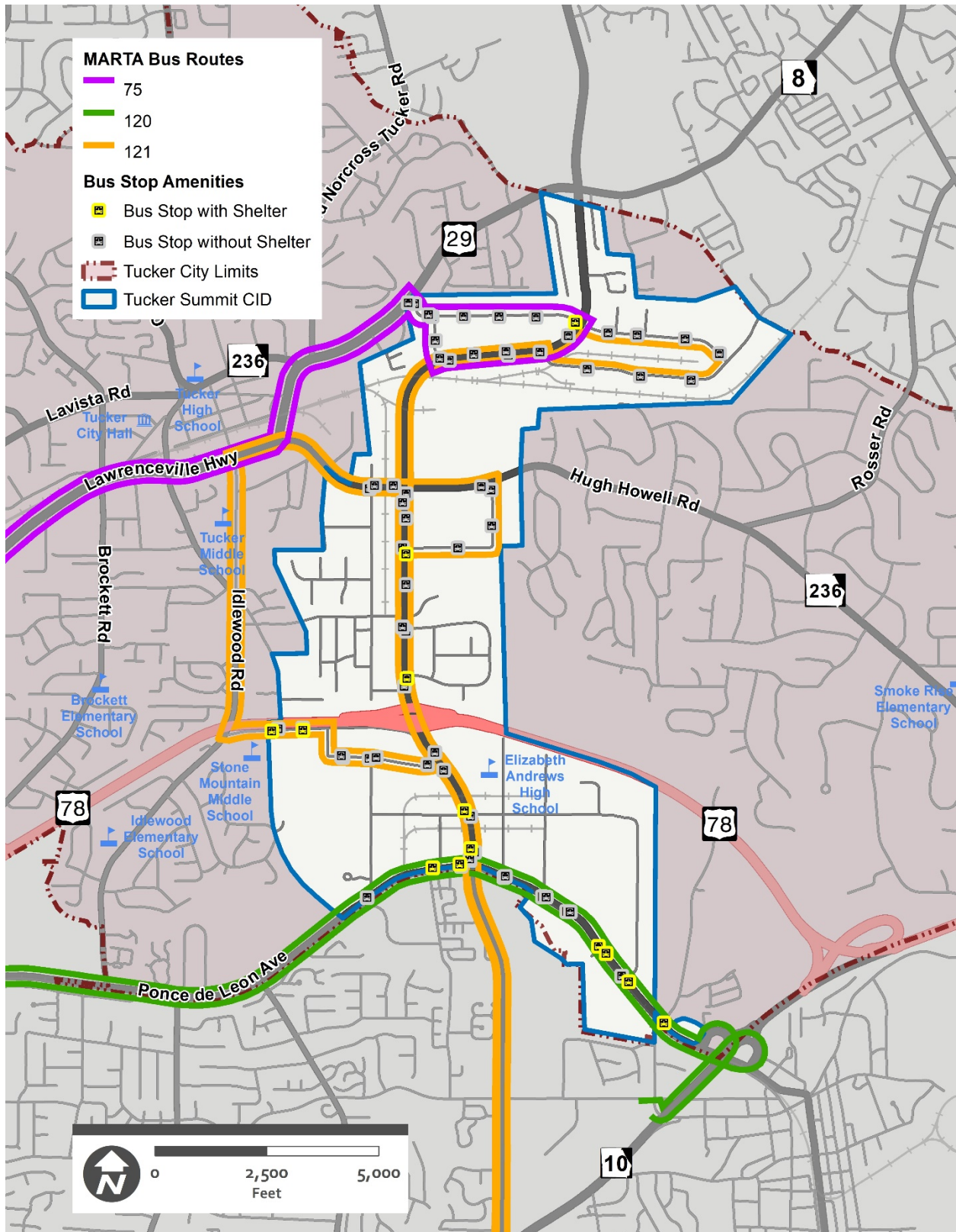
Based on the findings in the *Inventory and Assessment Report*, the Mountain Industrial Boulevard corridor currently has full coverage from the routes provided by MARTA. The corridor currently is well served, and no additional transit needs are necessary at the writing of this report. However, some considerations were mentioned during stakeholder input and outreach sessions. It was mentioned by stakeholders that additional connections and long-term transit solutions to Gwinnett County would help the area. It was also brought to the project team's awareness that a potential future transit station could be on the horizon just south of the US 78 and Mountain Industrial Boulevard Interchange at the current site of the Ethiopian Evangelical Church of Atlanta.

⁷ City of Tucker (2020). City of Tucker – Asset Map. Retrieved from <https://gis.interdev.com/tucker/tuckerassets/>
Also, input from Larry Kaiser in May 2020.

⁸ Tucker Summit CID (2019). Tucker Summit CID December 2019 Newsletter. Retrieved from <https://www.tuckersummitcid.com/news/newsletters/tucker-summit-cid-december-2019-newsletter/>.

⁹ MARTA (2019). Route 120 – E. Ponce de Leon Avenue. Retrieved from <https://www.itsmarta.com/120.aspx>.

Figure 8: MARTA Bus Routes w Shelters and Amenities

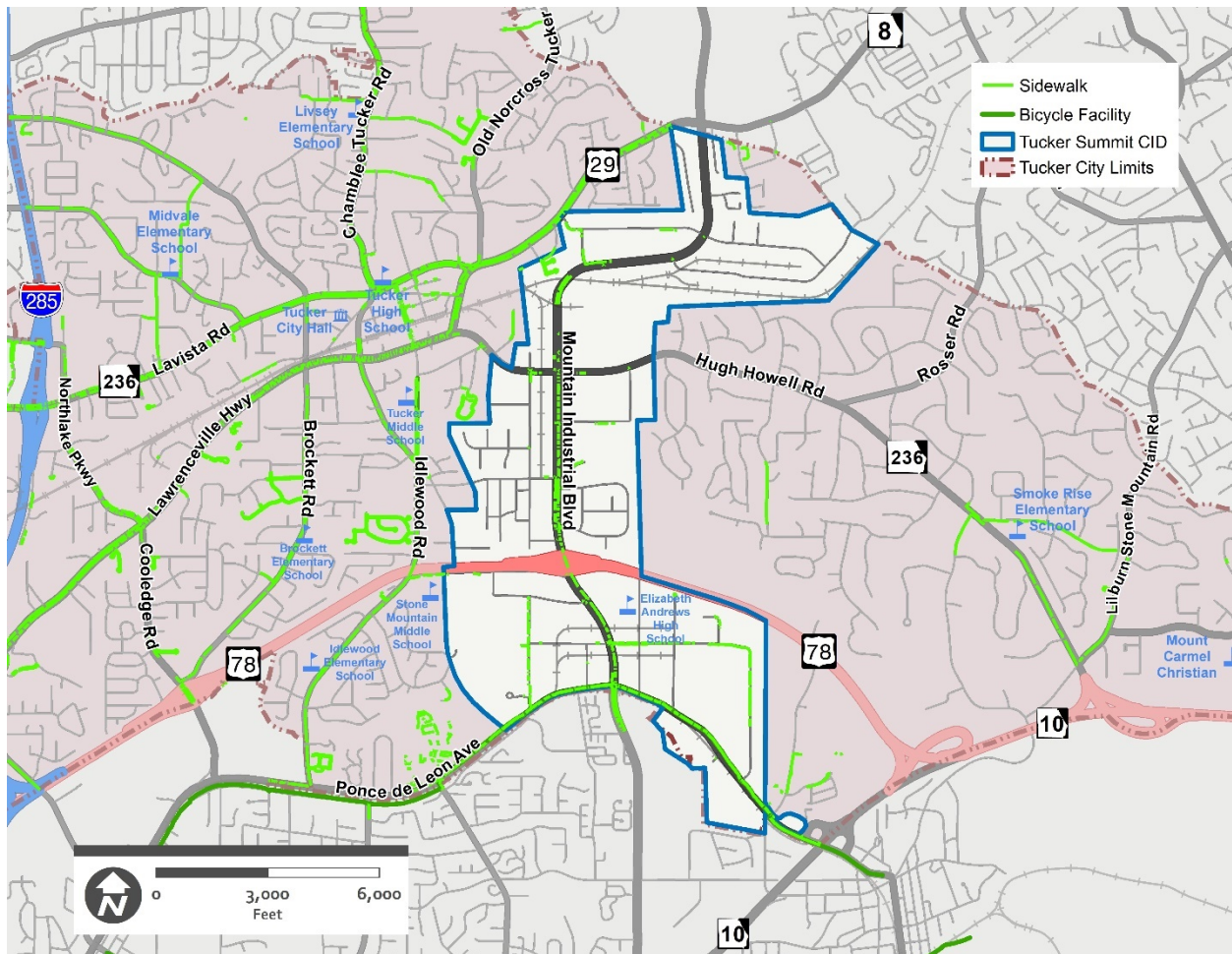


Source: ARC, City of Tucker, MARTA

3.4.2 Pedestrian Needs

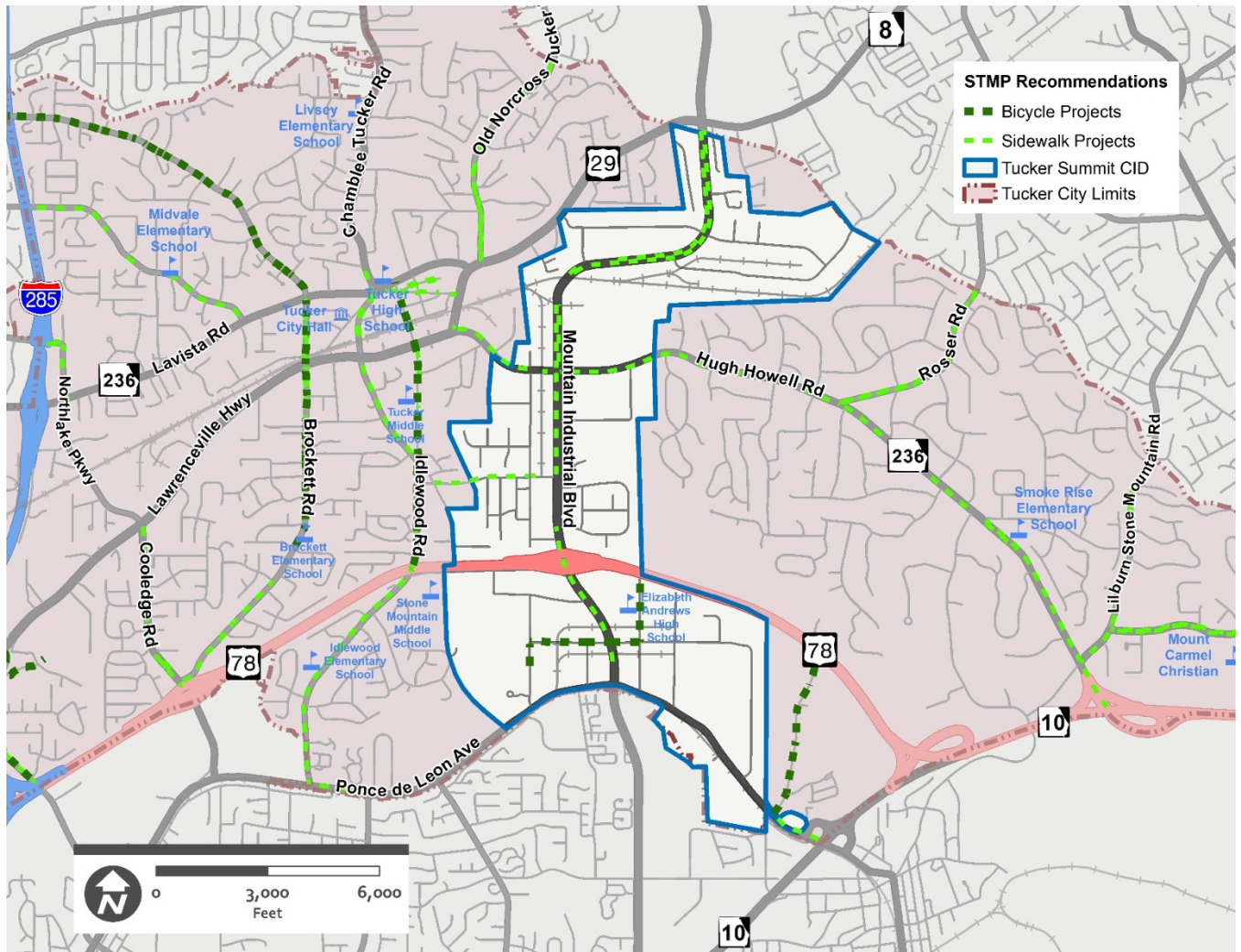
- Mountain Industrial Boulevard and Hugh Howell Road both have gaps in sidewalk coverage. Many segments along the corridors have no sidewalks, or sidewalks on only one side of the roadway. Figure 9 shows the existing bicycle and pedestrian network within TSCID. To address these needs, the Tucker Tomorrow STMP includes eight Tier 1, short-term sidewalk projects and two Tier 3 long-term sidewalk projects in the study area; located along Mountain Industrial Boulevard and Hugh Howell Road.
- Many of the MARTA stops within TSCID lack bus stop amenities, such as shelters and benches. TSCID and MARTA have collaborated and will continue to do so to install these types of features at the most heavily utilized bus stops. TSCID is also prioritizing sidewalk projects that provide direct connections to MARTA bus stops.

Figure 9: Existing Sidewalks and Pedestrian Facilities



Source: City of Tucker

Figure 10: Planned Pedestrian Facilities



Source: City of Tucker

Table 2: Mode Share in the TSCID Study Area and Vicinity

	Count	Share
Estimate; Total: - Car, truck, or van - drove alone:	6,731	69%
Estimate; Total: - Car, truck, or van - carpooled:	940	10%
Estimate; Total: - Public transportation (excluding taxicab):	1,155	12%
Estimate; Total: - Walked:	97	1%
Estimate; Total: - Taxicab, motorcycle, bicycle, or other means:	328	3%
Estimate; Total: - Worked at home:	548	6%

Source: 2017 American Community Survey (US Census Bureau)

4 Previously Identified Projects and Policy Recommendations

As part of the *Inventory and Assessment Report* review process, the project team inventoried several transportation projects already planned and programmed in the TSCID study area. Projects identified included maintenance, new roadways, roadway widenings, and traffic operations intended to improve mobility and safety. These previously planned and programmed projects provided the baseline from which to develop an overall project list for the FCP.

4.1 Roadway Improvements

The following section provides the inventories of the roadway projects programmed within the ARC TIP, planned at the state level within the GDOT work program, or identified from other studies and provide a benefit to the freight system in the TSCID.

4.1.1 Programmed

The following projects have been programmed at the regional, county, or city level:

- **City of Tucker – I-3 – Lawrenceville Hwy/Mountain Industrial Boulevard** (Tucker STMP)
- **City of Tucker – Hugh Howell Road/Flintstone Drive Intersection Improvements**

4.1.2 Planned

The following projects were within the GDOT work program. Since they have secured designated funding, they were not included in the FCP project lists:

- **GDOT 0015216 – Mountain Industrial Boulevard/Hugh Howell Dual Left Turn Lanes** – This project consists of the addition of dual left turns on northbound and southbound Mountain Industrial Boulevard at Hugh Howell Road. This scope includes widening Mountain Industrial Boulevard by approximately six feet and reducing lane widths to 11 feet to accommodate the new turn lanes. The proposed improvements will taper back to match the existing lane configuration. In addition, a right turn lane will be constructed on the eastbound SR 236 approach. Construction of this project is scheduled for 2022.¹⁰
- **GDOT 0017399 – US 78/Mountain Industrial Boulevard Interchange** – This project consists of improvements to the Mountain Industrial Boulevard interchange at US 78. In addition to funding from GDOT, the City of Tucker and TSCID funds and the GTIB are being used to implement this project.

The Interchange project components include:

- Installation of a narrow median on Mountain Industrial Boulevard from Elmdale Drive to Greer Circle.

¹⁰ GDOT (2019). PI#0015216 SR 236 @ CR 5164/CR 9476/Mountain Industrial Boulevard. Retrieved from <http://www.dot.ga.gov/applications/geopi/Pages/Dashboard.aspx?ProjectID=0015216>.

- Changes in traffic signal phasing at the two US 78 ramp intersections to protected-only left-turn phases, along with prohibitions for right turns at red signals.
- Increase in the length of deceleration lanes and reduction of skew on US 78 exit ramps.
- Two exclusive left-turn lanes and two exclusive right-turn lanes on US 78 eastbound exit ramp, along with an increase in the length of the deceleration ramp.
- One exclusive left-turn lane and two exclusive right-turn lanes on US 78 westbound exit ramp, along with an increase in the length of the deceleration ramp.
- Conversion of Hirsch Drive to a right-in, right-out only intersection.
- Conversion of Hammermill Road (north) to a right-in right-out only intersection.

4.1.3 Planned – Long-Term

The following planned project was identified by the Tucker Tomorrow STMP and carried forward for consideration in the FCP.

- **City of Tucker - Mountain Industrial Boulevard Widening (6 Lanes, Hugh Howell to US 78) -** The City of Tucker adopted this project through Tucker Tomorrow STMP. It will widen Mountain Industrial Boulevard to 6-lanes from Hugh Howell Rd to US 78.

4.2 Bridge Improvements

There were no previously planned or programmed bridge improvements within the TSCID.

4.3 Safety Improvements

The only identified safety improvement prior to this study are lighting improvements at the US 78 interchange with Mountain Industrial Boulevard.

4.4 Resurfacing

Roadways within TSCID are resurfaced through City of Tucker’s pavement program, which is funded through the DeKalb County SPLOST program. TSCID roadways with scheduled resurfacing projects are listed in Table 3. These roadways provide direct connections to freight-intensive businesses within TSCID. This resurfacing schedule will continue to be maintained and updated by the City of Tucker.

Table 3: Corridors Scheduled for Future Resurfacing

Road Name	Year
Lewis Way	2022
Litton Drive	2022
Elmdale Drive	2023
Juliette Road	2023
Roger Marten Way	2023
Tucker Industrial Road	2023

Source: City of Tucker¹¹

¹¹ City of Tucker (2020). City of Tucker - City Map. Retrieved from <https://gis.interdev.com/tucker/citymap/>.

4.5 Land Use and Development

A review of documents from previous studies provided both local and regional land use strategies and recommendations considered during the development of the FCP. Those strategies and recommendations are described in the sections below.

4.5.1 Local

The *Inventory and Assessment Report* conducted a review of documents from previous studies. The most relevant document reviewed regarding local land use and development recommendations was the City of Tucker Comprehensive Plan – Tucker Tomorrow Strategic Transportation Master Plan (STMP). The plan identified three sub-areas in the City of Tucker, one of which is the Mountain Industrial Boulevard corridor. The plan envisions the following land use and development strategies:

- Replace auto-oriented commercial, aging motels serving as residential uses with areas of mixed-use development, and multi-story residential facilities.
- Creation of ‘pedestrian pockets’, clusters of retail space, and offices near transit resources.
- Recruitment of bio-medical firms, zoning changes to improve aesthetics, and additional bike lanes.
- Preservation of industrial land uses along Hugh Howell Road, including policies to prevent strip retail.

4.5.2 Regional

The previous studies also revealed some regional land use and development recommendations. Relevant recommendations and strategies include the following:

- **DeKalb 2014 Transportation Plan**
 - Develop activity centers to reduce sprawl and strip development
- **DeKalb County Transit Master Plan**
 - Align land use policy with transit investment to promote walkability and transit usage near stations.
 - Incentivize private development and enhance opportunities to secure FTA funds
- **Atlanta Regional Truck Parking Assessment Study**
 - Integrate truck parking with local land use plans.

4.6 Transit Initiatives

While the *Inventory and Assessment Report* process did not reveal any specific planned or programmed transit initiatives, the report identified both local and regional transit initiatives described in the sections below.

4.6.1 Local

The Tucker Tomorrow STMP includes the following policy recommendations regarding transit within the City of Tucker and TSCID: ¹²

- Examine potential for a future shuttle between downtown Tucker and Northlake area.
- Coordinate with DeKalb County, MARTA and Gwinnett County regarding specific transit needs and opportunities within the Lawrenceville Highway (US 29/SR 8) corridor.
- Coordinate with DeKalb County and GDOT for future express bus access to the planned I-285 corridor managed lanes, allowing an express transit connection to MARTA Doraville Station and to the Perimeter Center district.
- Provide improved bus shelters at key locations – coordinate with MARTA on their initiative to improve bus shelters.

4.6.2 Regional

The previous studies also revealed some regional transit initiatives and strategy recommendations. Pertinent recommendations and strategies include the following:

- **DeKalb County 2014 Transportation Plan**
 - TSCID consideration of funding for shuttle routes to major employers.
- **DeKalb County Transit Master Plan**
 - Consider potential upgrades to service routes.
 - Tucker is identified as a possible location for 2-3 'Arterial Rapid Transit' buses with stations along Lavista Road, Lawrenceville Highway and Hairston Road.
 - Align land use policy with transit investment to promote walkability and transit usage near stations.
- **Destination 2040: Gwinnett Comprehensive Transportation Plan**
 - Enact transit supporting overlay districts.
- **Connect Gwinnett: Transit Plan**
 - Coordination with new regional transit agency, the Atlanta Transit Link (ATL).
 - Additional transit service noted include a semi-rapid bus service or form of Arterial Rapid Transit following Lawrenceville Highway, and would likely connect with the planned 'Mobility Center' in Tucker.
- **ARC Regional Transportation Plan (RTP)**
 - Seek additional funding, find alternative financing options and public private partnerships to provide transit to major activity centers.
- **Strategic Regional Thoroughfare Plan**

¹² City of Tucker (2019). Tucker Tomorrow Strategic Transportation Master Plan, p. 31.

- Utilize design criteria from the SRTP in local plans to provide coordinated transit development and planning.

4.7 Local Pedestrian Improvements

The Tucker Tomorrow STMP includes recommendations for sidewalk projects assigned to three tiers based on need and prioritization. Tier 1 projects are short-term, Tier 2 projects are mid-term, and Tier 3 are long-term projects. There are eight Tier 1 sidewalk projects and two Tier 3 sidewalk projects along Mountain Industrial Boulevard and Hugh Howell Road (SR 236). These planned sidewalk projects will help improve multimodal connectivity to and within TSCID for the local workforce.¹³

Table 4: Tiered Sidewalk Projects from Tucker Tomorrow STMP

Project ID	Corridor	From	To	Length (ft)	Tier
S-29-A/S-29-B	Mountain Industrial Boulevard	North of 2301 Mountain Industrial Boulevard	Hugh Howell Road (SR 236)	3,680	1
S-42	Mountain Industrial Boulevard	Northern City Limit/Gwinnett County Line	CSX Railroad	6,607	1
S-11	Hugh Howell Road	Lawrenceville Highway	Tucker Industrial Road	2,138	1
S-43	Mountain Industrial Boulevard	Northern City Limit/Gwinnett County Line	2530 Mountain Industrial Boulevard	6,953	1
S-26	Mountain Industrial Boulevard	Hammermill Road	Lewis Road	3,364	1
S-13	Hugh Howell Road (SR 236)	Mountain Industrial Boulevard	Rosser Road	7,062	1
S-27	Mountain Industrial Boulevard	Hugh Howell Road	Elmdale Drive	2,789	1
S-44	Mountain Industrial Boulevard	Tuckerstone Parkway	CSX Railroad	544	1
S-28	Mountain Industrial Boulevard	Lewis Road	1600 Mountain Industrial Boulevard	750	3
S-10	E. Ponce de Leon Avenue	Juliette Road	Eastern City Limit	905	3

Source: Tucker Tomorrow STMP

¹³ City of Tucker (2019). Tucker Tomorrow Strategic Transportation Master Plan, Appendix A. Retrieved from https://www.tuckerga.gov/document_center/Plans%20&%20Studies/Tucker%20Strategic%20Transportation%20Master%20Plan%209-10-2019.pdf.

The City of Tucker has adopted policies in its Comprehensive Plan (2018) and STMP that address the need for pedestrian safety and connectivity in the city. The 5-Year Community Work Program in the Comprehensive Plan update includes the following strategies:¹⁴

- Complete a Transportation Master Plan (adopted by the City of Tucker in 2019).
- Consider a sidewalk master plan/policy that defines where sidewalks are required for development projects as part of the City’s transportation network.

The Tucker STMP includes the following policy recommendations geared towards pedestrians:¹⁵

- Adopt a Complete Streets policy.
- Implement improvements recommended in the 2018 Intersection Safety Analysis.
- Continue to add sidewalks throughout the City and connect the existing sidewalks.
- Examine potential additional midblock pedestrian crossings where warranted and feasible.

The Tucker STMP also includes three bicycle projects along local roads south of US 78. These are included in Table 5.¹⁶

Table 5: Planned Bicycle Projects in TSCID Study Area

Project ID	Project Name	Road	Type
B-5	Roadhaven Drive Shared Lane	Roadhaven Drive	Shared Lane
B-6	Lewis Road Buffered Bike Lane or Bike Lane	Lewis Road	Bike Lane (5') or Buffered Bike Lane (4')
B-7	Litton Drive Shared Lane	Litton Drive	Shared Lane

Source: Tucker Tomorrow STMP

¹⁴ Ibid, p. 63-64.

¹⁵ City of Tucker (2019). Tucker Tomorrow Strategic Transportation Master Plan, p. 31.

¹⁶ City of Tucker (2019). Tucker Tomorrow Strategic Transportation Master Plan, p. 34. Retrieved from https://www.tuckerga.gov/document_center/Plans%20&%20Studies/Tucker%20Strategic%20Transportation%20Master%20Plan%209-10-2019.pdf.

5 New and Modified Projects Identified through the Cluster Plan

This chapter will identify new or modified projects that were developed from the TSCID FCP process. In addition to specific projects, some planning projects were identified to assess the feasibility and begin the development of future roadway improvements. Roadway improvements identified include capacity, safety, and operational improvements. Transit initiatives were developed from stakeholder input, outreach activities, analysis from the *Inventory and Assessment Report*, and the *Traffic Study Report*. Details regarding the identified improvements are described below.

5.1 Planning Studies

This plan identified multiple planning studies that will help determine the feasibility and begin future development of the TSCID roadway system. The planning studies identified are as follows:

- **Scoping Study for Reconfiguration of Tuckerstone Parkway at Mountain Industrial Boulevard** - This project includes conducting a scoping study to determine the feasibility of reconfiguring the intersection area of Tuckerstone Parkway at Mountain Industrial Boulevard. The reconfiguration could potentially be a roundabout.
- **Scoping Study for Mountain Industrial Boulevard/S. Royal Atlanta Drive & Mountain Industrial Boulevard/N. Royal Atlanta Drive** - This project is to conduct a scoping study to determine the feasibility of implementing a roundabout at Mountain Industrial Boulevard at S Royal Atlanta Drive, the median U-turns (teardrop configuration) just north of Mountain Industrial Boulevard at N. Royal Atlanta Drive, and the reconfiguration of Mountain Industrial Boulevard and N. Royal Atlanta Drive.
- **Interchange Modification Report - US 78 at Mountain Industrial Boulevard Interchange** - In coordination with GDOT and City of Tucker, this project includes the development and completion of an interchange modification report (IMR) to identify a preferred interchange design alternative for Mountain Industrial Boulevard at US 78 and seek FHWA approval for modification of the interchange. This interchange is a vital component of mobility within the TSCID and as a system resiliency asset for the region. Further developing this interchange and determining an optimal mobility strategy will enhance and provide a myriad of benefits to the TSCID and the Atlanta region well into the future

5.2 Roadway Improvements

Roadway improvements identified through the Plan process are either capacity/new roadway or safety/operational improvements. Some of the projects are suited for short-term implementation while others are long-term visionary projects. The long-term visionary projects are identified so they can support a long-term vision for the TSCID.

5.2.1 Capacity and New Roadway

The following capacity and new roadway projects have been identified for further evaluation in the prioritization process:

It should be noted that in Chapter 4, the Mountain Industrial Boulevard Widening to 6 Lanes from Hugh Howell to US 78 was presented as a project that is currently being planned as a long term-solution to address capacity issues for the Mountain Industrial Boulevard corridor.

5.2.2 Operational Improvements

The *Traffic Study Report* component of the FCP proposes operational and safety improvements throughout the TSCID area. With the proposed improvements, each intersection is projected to operate at an acceptable LOS D or better during peak periods by the future year horizon.

The following operational improvements are described in further detail in the sections below:

- 5.1.2.1 - Mountain Industrial Boulevard at N. Royal Atlanta Drive
- 5.1.2.2 - Lawrenceville Highway (US 29/SR 8) at N. Royal Atlanta Drive
- 5.1.2.3 - Mountain Industrial Boulevard at S. Royal Atlanta Drive
- 5.1.2.4 - Tucker Industrial Road at Hugh Howell Road
- 5.1.2.5 - Mountain Industrial Boulevard at Elmdale Drive/Roger Marten Way
- 5.1.2.6 - Tucker Industrial Road at Elmdale Drive/Roger Marten Way
- 5.1.2.7 - Mountain Industrial Boulevard at Hammermill Road (South)
- 5.1.2.8 - Mountain Industrial Boulevard at Greer Circle
- 5.1.2.9 - Mountain Industrial Boulevard at Lewis Road
- 5.1.2.10 - Mountain Industrial Boulevard at E. Ponce de Leon Avenue
- 5.1.2.11 - E. Ponce de Leon Avenue at Rock Mountain Boulevard
- 5.1.2.12 - Lawrenceville Highway (US 29/SR 8) at Rockbridge Road
- 5.1.2.13 - Lawrenceville Highway (US 29/SR 8) at Indian Trail Lilburn Road/Killian Hill Road
- 5.1.2.14 - Mountain Industrial Boulevard at Tuckerstone Parkway
- 5.1.2.15 - Mountain Industrial Boulevard at Tuckerstone Parkway
- 5.1.2.16 - Mountain Industrial Boulevard at Tuckerstone Parkway
- 5.1.2.17 - Roundabout/Realignment at Mountain Industrial Boulevard/Tuckerstone Parkway
- 5.1.2.18 - Roundabout at Mountain Industrial Boulevard/S. Royal Atlanta Drive, Teardrop Roundabout north of Mountain Industrial Boulevard/N. Royal Atlanta Drive

5.2.2.1 Mountain Industrial Boulevard at N. Royal Atlanta Drive

- **Turn Lanes and Geometric Improvements:** Install channelized single right-turn lanes with wide curb radii. These will accommodate truck turning movements along the northbound and southbound Mountain Industrial Boulevard and the westbound N. Royal Atlanta Drive approaches.
- **Flashing Yellow Arrows (FYAs):** Install FYA signal head indications for the southbound Mountain Industrial Boulevard and eastbound and westbound North Royal Atlanta Drive left-turns. FYAs give a clearer indicator to drivers to yield to oncoming traffic for permissive left turns on green, thereby improving safety.

- **Signal Phasing:** Convert the northbound Mountain Industrial Boulevard left-turn phase to a protected-only movement. A protected-only movement provides an exclusive phase for left-turn maneuvers in the form of a left-turn arrow indication. The left-turn movement can be made only under the green left-turn indication. Currently, this left-turn movement is allowed during the permissive phase (circular green indication). The existing horizontal curve along the north leg of the intersection restricts sight distance for northbound vehicles. This creates unsafe conditions for vehicles turning left. Converting the left-turn phase to a protected-only movement will make the left-turn movement safer by allowing the left turns without any conflicting traffic maneuvers.
- **Supplemental Signals:** Install supplemental signal heads along the northbound and southbound Mountain Industrial Boulevard approaches.
- **Signage:** Install “traffic signal ahead” signage along the northbound and southbound Mountain Industrial Boulevard approaches.
- **Median Nose Delineators:** Install median nose delineators at the median along Mountain Industrial Boulevard to enhance the visibility of medians.
- **Driveway Relocation:** Work with the property owner to consider relocating the driveway along North Royal Atlanta Drive west of the intersection further away from the intersection.
- **Pavement Markings:** Restripe the intersection and install raised pavement markers. Raised pavement markers improve the intersection safety by making the delineation between lanes more visible to drivers, particularly in dark, foggy, or other low-visibility conditions.
- **Retroreflective Signal Head Backplates:** Install backplates with retroreflective borders on traffic signal heads. This enhances the visibility of traffic signals, especially in dark, foggy, or other low-visibility conditions.
- **Pedestrian Accommodations:**
 - Install pedestrian crosswalks and pedestrian signals along the northbound and southbound Mountain Industrial Boulevard approaches.
 - Install sidewalks along Mountain Industrial Boulevard and North Royal Atlanta Drive at the intersection to connect to adjacent MARTA bus stops. Extend sidewalks along the north leg of Mountain Industrial Boulevard to the Gwinnett County line.
 - Install ADA curb ramps at all four corners of the intersection.

5.2.2.2 Lawrenceville Highway (US 29/SR 8) at North Royal Atlanta Drive

- **Pavement Markings:** Repave and restripe N. Royal Atlanta Drive at the intersection and install raised pavement markers. Raised pavement markers improve the intersection safety by enhancing delineation and driver awareness and by providing positive guidance for motorists, especially in low visibility conditions.
- **Median Nose Delineators:** Install median nose delineators at the median along N. Royal Atlanta Dr.
- **Signal Heads:** Install FYA signal head indications for the southbound Lawrenceville Hwy. (US 29/SR 8) left turn.

- **Turn Lane and Geometric Improvements:**
 - Install a single right-turn lane with a wide curb radius accommodating truck turning movements along the northbound Lawrenceville Hwy. (US 29/SR 8) approach.
 - Reconstruct the northeast quadrant of the intersection to widen the curb radius to accommodate wider right-turning truck movements along the westbound N. Royal Atlanta Dr. approach.
- **Sidewalks:**
 - Install sidewalk along the south side of N. Royal Atlanta Dr. from the intersection curb radius to the existing sidewalk east of the intersection.
 - Install sidewalk along the north side of N. Royal Atlanta Dr. from the intersection curb radius to the existing MARTA bus stop east of the intersection.
 - Reconstruct the existing sidewalks along both sides of Lawrenceville Hwy. (US 29/SR 8) at the intersection.
- **Tree Clearing:** Cut trees back along the west side of Lawrenceville Hwy. (US 29/SR 8) at the intersection.

5.2.2.3 *Mountain Industrial Boulevard at South Royal Atlanta Drive*

- **Turn Lane and Geometric Improvements:** Install channelized single right-turn lane with wide curb radius to accommodate truck turning movements along the eastbound Mountain Industrial Boulevard approach.
- **Eyebrow/Loon:** Remove the acceleration lane on the west leg of the intersection and install an eyebrow or loon to accommodate eastbound U-turns along Mountain Industrial Boulevard. An eyebrow or loon is a paved area on the outside edge of the travel lane that enables U-turns by large vehicles.
- **FYAs:** Install FYA signal head indications for the left-turns on all four approaches. FYAs give a clearer indicator to drivers to yield to oncoming traffic for permissive left turns on green, thereby improving safety.
- **Signal Ahead Signage:** Install “traffic signal ahead” signage along the westbound Mountain Industrial Boulevard approach.
- **Median Nose Delineators:** Install median nose delineators at the median along Mountain Industrial Boulevard to enhance the visibility of medians.
- **Driveway Relocation:** Work with the property owner to consider relocating the driveway along Mountain Industrial Boulevard east of the intersection further away from the intersection.
- **Retroreflective Signal Head Backplates:** Install backplates with retroreflective borders on traffic signal heads. This enhances the visibility of traffic signals, especially in dark, foggy, or other low-visibility conditions.
- **Pedestrian Accommodations:**
 - Install pedestrian crosswalks and pedestrian signals across all four legs of the intersection.
 - Install sidewalks along Mountain Industrial Boulevard and South Royal Atlanta Drive at the intersection to connect to adjacent MARTA bus stops.

- Install ADA curb ramps at all four corners of the intersection.

5.2.2.4 Tucker Industrial Road at Hugh Howell Road (SR 236)

- **Turn Lane and Geometric Improvements:**
 - Install channelized single right-turn lane with wide curb radius to accommodate truck turning movements along the eastbound Hugh Howell Road (SR 236) approach.
 - Reconstruct the southeast quadrant of the intersection to widen the curb radius to accommodate wider right-turn movements by trucks.
- **FYAs:** Install FYA signal head indications for the left-turns on all four approaches. FYAs give a clearer indicator to drivers to yield to oncoming traffic for permissive left turns on green, thereby improving safety.
- **Retroreflective Signal Head Backplates:** Install backplates with retroreflective borders on traffic signal heads. This enhances the visibility of traffic signals, especially in dark, foggy, or other low-visibility conditions.
- **Pedestrian Accommodations:** Install sidewalks along Tucker Industrial Road and Hugh Howell Road (SR 236) at the intersection to connect to adjacent MARTA bus stops.

5.2.2.5 Mountain Industrial Boulevard at Elmdale Drive/Roger Marten Way

- **Turn Lane Installation:** Install channelized single right-turn lane with wide curb radius to accommodate truck turning movements along the northbound Mountain Industrial Boulevard approach. (This is in addition to the improvements recommended by the TSCID's December 2019 traffic engineering study.)
- **FYAs:** Install FYA signal head indications for the left-turns on the northbound and southbound approaches of Mountain Industrial Boulevard. FYAs give a clearer indicator to drivers to yield to oncoming traffic for permissive left turns on green, thereby improving safety.
- **Pavement Markings:** Restripe Elmdale Drive and Roger Marten Drive at the intersection and install raised pavement markers. Raised pavement markers improve the intersection safety by making the delineation between lanes more visible to drivers, particularly in dark, foggy, or other low-visibility conditions.
- **Retroreflective Signal Head Backplates:** Install backplates with retroreflective borders on traffic signal heads. This enhances the visibility of traffic signals, especially in dark, foggy, or other low-visibility conditions.
-
- **Pedestrian Accommodations:** Install sidewalks along the west side of Mountain Industrial Boulevard and along Roger Marten Way at the intersection to connect to adjacent MARTA bus stops.

5.2.2.6 Tucker Industrial Road at Elmdale Drive/Roger Marten Way

- **Repave and Restripe:** Repave, restripe, and install raised pavement markers. Raised pavement markers improve the intersection safety by enhancing delineation and driver awareness. This provides positive guidance for motorists, especially in low visibility conditions.

- **Install Raised Curb and Gutter:** Install raised curb and gutter on all four corners of the intersection with wide curb radii to accommodate right-turn movements by trucks. Install drainage structures to ensure positive drainage at the intersection and along all four approaches.

5.2.2.7 *Mountain Industrial Boulevard at Hammermill Road (South)*

- **Lane Reconfiguration, Signing and Pavement Markings:**
 - Reconfigure the inside lane on the Elmdale Drive approach to allow left, through, and right turns. This reconfiguration includes installing corresponding pavement markings. Install no right-turn-on-red (RTOR) overhead signage on the mast arm above the inside lane to prohibit right turns on red from the inside lane of the Elmdale Drive approach. Reconstruct the southwest quadrant of the intersection to widen the curb radius to accommodate wider right-turn movements by trucks.
 - Reconfigure westbound Roger Marten Way at the intersection to add a separate left-turn lane, in addition to the existing left-through-right lane.
- **Turn Lane Installation:** Install channelized single right-turn lane with wide curb radius to accommodate truck turning movements along the northbound Mountain Industrial Boulevard approach. (This should be implemented as a supplement to the improvements recommended by the TSCID's December 2019 traffic engineering study for the intersection and in coordination with the forthcoming GDOT improvement at the interchange (PI 017399)).
- **One-Way Pavement Markings and Signage:** Install one-way pavement markings along the west leg of the intersection. Install signage at the restaurant driveway on the west leg of the intersection to prohibit eastbound traffic.
- **FYAs:** Install FYA signal head indications for the left-turns on the southbound Mountain Industrial Boulevard approach and the westbound Hammermill Road (South) approach. FYAs give a clearer indicator to drivers to yield to oncoming traffic for permissive left turns on green, thereby improving safety.
- **Retroreflective Signal Head Backplates:** Install backplates with retroreflective borders on traffic signal heads. This enhances the visibility of traffic signals, especially in dark, foggy, or other low-visibility conditions.
- **Driveway Relocation:** Work with the property owner to consider relocating the driveway of the "Public Storage" parcel along the west side of Mountain Industrial Boulevard south of the intersection.
- **Pedestrian Accommodations:** Install sidewalks along Roger Marten Way and the west side of Mountain Industrial Boulevard to connect to adjacent MARTA bus stops. Extend the sidewalks to the US 78 interchange.

5.2.2.8 *Mountain Industrial Boulevard at Greer Circle*

- **Turn Lane Installation:** Install channelized single right-turn lane with wide curb radius to accommodate truck turning movements along the southbound Mountain Industrial Boulevard approach. (This should be implemented as a supplement to the improvements recommended by

the TSCID's December 2019 traffic engineering study for the intersection and in coordination with the forthcoming GDOT improvement at the interchange (PI 017399)).

- **FYAs:** Install FYA signal head indications for the left-turns on all four approaches. FYAs give a clearer indicator to drivers to yield to oncoming traffic for permissive left turns on green, thereby improving safety.
- **Signal Phasing:** Install protected/permissive phasing for the eastbound Greer Circle left-turn movement.
- **Retroreflective Signal Head Backplates:** Install backplates with retroreflective borders on traffic signal heads. This enhances the visibility of traffic signals, especially in dark, foggy, or other low-visibility conditions.
- **Pavement Markings:** Restripe Greer Circle at the intersection and install raised pavement markers. Raised pavement markers improve the intersection safety by making the delineation between lanes more visible to drivers, particularly in dark, foggy, or other low-visibility conditions.
- **Repaving:** Repave the intersection to improve pavement condition.
- **Pedestrian Accommodations:** Install sidewalks along the west side of Mountain Industrial Boulevard and along Greer Circle west of the intersection to connect to adjacent MARTA bus stops.

5.2.2.9 *Mountain Industrial Boulevard at Lewis Road*

- **Turn Lane Installation:** Install channelized single right-turn lanes with wide curb radii accommodating truck turning movements along the northbound and southbound Mountain Industrial Boulevard approaches and along the westbound Lewis Road approach.
- **FYAs:** Install FYA signal head indications for the left-turns on all four approaches. FYAs give a clearer indicator to drivers to yield to oncoming traffic for permissive left turns on green, thereby improving safety.
- **Retroreflective Signal Head Backplates:** Install backplates with retroreflective borders on traffic signal heads. This enhances the visibility of traffic signals, especially in dark, foggy, or other low-visibility conditions.
- **Driveway Relocation:** Work with the property owner to consider relocating the driveway along Lewis Road west of the intersection further away from the intersection.
- **Pedestrian Accommodations:** Install sidewalks along the west side of Mountain Industrial Boulevard and along Lewis Road west of the intersection to connect to adjacent MARTA bus stops.

5.2.2.10 *Mountain Industrial Boulevard at E. Ponce de Leon Avenue*

- **Geometric Improvements:** Reconstruct the southeast and northeast quadrant of the intersection to widen the curb radius to accommodate wider right-turn movements by trucks. Extend the thru and left-turn lane on east leg of the intersection.
- **Median Nose Delineators:** Install median nose delineators at the median along the south leg of the intersection (North Hairston Road).

- **Driveway Closure/Consolidation:** Work with the property owner to consider closing one of the two Texaco driveways (the one closest to the intersection) along each Mountain Industrial Boulevard and E. Ponce de Leon Avenue at the northeast corner of the intersection.

5.2.2.11 E. Ponce de Leon Avenue at Rock Mountain Boulevard

- **Pavement Markings:** Restripe the intersection and install raised pavement markers. Raised pavement markers improve the intersection safety by enhancing delineation and driver awareness. This provides positive guidance for motorists, especially in low visibility conditions.
- **Retroreflective Signal Head Backplates:** Install backplates with retroreflective borders to all traffic signal head indications.
- **Flashing Yellow Signal Head:** Install FYA signal head indications for the left-turns along the eastbound E. Ponce de Leon Avenue approach.
- **Pedestrian Accommodations:**
 - Install a pedestrian crosswalk and pedestrian signals west of the intersection to cross E. Ponce de Leon Avenue. Install pedestrian landing area at the MARTA stop on the southwest corner of the intersection and install sidewalks from the landing area to the crosswalk across E. Ponce de Leon Avenue.
 - Install supplemental signal heads and advance signal ahead sign for the southbound Rock Mountain Blvd. approach to the intersection.
 - Install sidewalk along the west side of Rock Mountain Blvd. from the intersection curb radius to the existing sidewalk approximately 1500' north of the intersection.

5.2.2.12 Lawrenceville Highway (US 29/SR 8) at Rockbridge Road

- **Turn Lane Installation:**
 - Install a second left-turn lane along the eastbound and westbound Lawrenceville Highway (US 29/SR 8) approaches and convert these left-turns to protected-only movements.
 - Install single right-turn lanes with channelization and wide curb radii accommodating truck turning movements along the southbound Rockbridge Road approach and along the eastbound Lawrenceville Highway (US 29/SR 8) approach.
- **Curb Repair:** Repair the minor damage to the southeast curb at the intersection.

5.2.2.13 Lawrenceville Highway (US 29/SR 8) at Indian Trail Lilburn Road/Killian Hill Road

- **Displaced Left Turn:** Install a two-legged Displaced Left-Turn (DLT) intersection along Indian Trail Lilburn Road and Killian Hill Road.
- **Retroreflective Signal Head Backplates:** Install backplates with retroreflective borders on traffic signal heads. This enhances the visibility of traffic signals, especially in dark, foggy, or other low-visibility conditions.

- **Pavement Markings:** Restripe the intersection and install raised pavement markers. Raised pavement markers improve the intersection safety by making the delineation between lanes more visible to drivers, particularly in dark, foggy, or other low-visibility conditions.

5.2.2.14 Mountain Industrial Boulevard at Tuckerstone Parkway

- **Clearing and Grubbing:** Clear cut trees just south of the intersection to improve sight distance.
- **Flashing Warning Signal:** Install a flashing warning signal on the westbound approach to warn motorists of southbound right-turns from Tuckerstone Parkway. Install flashing beacons in the northbound approach along Mountain Industrial Blvd to warn motorists of approaching Tuckerstone Parkway intersection per MUTCD guidelines.

5.2.2.15 Mountain Industrial Boulevard at Tuckerstone Parkway

- **Access:** Install a 12-ft wide 200-ft long left-turn lane in the Mountain Industrial Boulevard median just east of Tuckerstone Parkway across from the Ram Tool Driveway including an eyebrow for a WB-60 truck to make a U-turn.

5.2.2.16 Mountain Industrial Boulevard at Tuckerstone Parkway

- **Safety:** Convert Tuckerstone Parkway to a right-in right-out only at the Tuckerstone Parkway/Mountain Industrial Boulevard intersection.

5.2.2.17 Roundabout/Realignment at Mountain Industrial Boulevard/Tuckerstone Parkway

- **Realign Road and Construct Roundabout:** Construct a roundabout just east of existing Mountain Industrial Boulevard/Tuckerstone Parkway intersection and realign Tuckerstone Parkway. This project serves as a long-term solution for a safety hazard associated with sight distance issues. To accommodate a roundabout, the intersection will need to be relocated to the east to create additional separation from the CSX bridge.

5.2.2.18 Roundabout at Mountain Industrial Boulevard/S. Royal Atlanta Drive, Teardrop Roundabout north of Mountain Industrial Boulevard/N. Royal Atlanta Drive

- **Construct Roundabout:** Construct a roundabout at Mountain Industrial Boulevard/S. Royal Atlanta Drive.
- **Construct Teardrop Roundabout:** Construct teardrop roundabout just north of Mountain Industrial Boulevard/N. Royal Atlanta Drive.
- **Lane Reconfigurations:** Reconfigure Mountain Industrial Boulevard/N. Royal Atlanta intersection to remove left turn lanes and redirect left turns north to teardrop roundabout.

5.3 Transit Initiatives

Given the bus service coverage within the TSCID area currently being provided by MARTA, there were no specific recommendations for additional enhancements. However, given the study area location at the outer boundary of the MARTA service area and adjacent to the Gwinnett County line, TSCID staff should continue to coordinate with the ATL and Gwinnett Transit to improve transit connections from Gwinnett into the area. Furthermore, there has been discussion about a regional premium transit service along

the US 78 Corridor including a potential transit center in the TSCID. The analysis confirms that the TSCID could benefit from this service to enhance worker access.

5.4 Pedestrian Improvements

All proposed sidewalk projects moved forward in the process were from the Tucker Tomorrow STMP.

6 Prioritization Framework

This chapter will summarize the development of the Prioritization Framework used to initially evaluate potential projects for meeting the overall goals and objectives of the FCP as well as consideration of key factors assessed by the ARC in their overall project evaluation process.

6.1 Vision, Goals, and Objectives

Early in the development of the Plan, an overall vision with a complementary set of goals and objectives was developed. The overall mission of the Plan was based on the RFP, Scope of Services, fieldwork, preliminary analysis, and initial input from the Steering Committee meeting held on February 4, 2020. The sections below summarize the vision, goals, and objectives which provide the basis for the prioritization framework.

6.1.1 Vision Statement

Based on input received from stakeholders and the Steering Committee, the following represents the overall vision for the TSCID FCP:

“Identify an innovative, coordinated, and well-defined short-term action plan as well as a long-term vision to improve freight mobility and maximize the economic potential of the TSCID in a rapidly growing, everchanging marketplace that is the Atlanta region”

6.1.2 Goals and Objectives

The goals and objectives of the TSCID FCP are as follows:

Goal 1: Improve freight mobility throughout the TSCID and surrounding areas

- Objective 1.1: Identify roadway capacity and operational improvements needed to facilitate efficient freight mobility in the TSCID.
- Objective 1.2: Identify solutions for roadway geometric deficiencies to accommodate the operation of trucks within the TSCID.
- Objective 1.3: Investigate potential traffic signal enhancements to reduce delay related to freight movement.
- Objective 1.4: Plan for the progression and implementation of connected vehicle technologies and other Intelligent Transportation Systems (ITS) applications along the roadway network.
- Objective 1.5: Identify frequent crash locations and prioritize related safety improvements.

Goal 2: Support Local and Regional Policy Initiatives

- Objective 2.1: Promote consistency with the policy and project recommendations of the City of Tucker Comprehensive Plan (Tucker Tomorrow) and associated STMP within the TSCID.
- Objective 2.2: Coordinate with Gwinnett County and the City of Tucker to minimize duplicative efforts associated with the upcoming Jimmy Carter Boulevard/Mountain Industrial Boulevard Corridor Study.
- Objective 2.3: Promote consistency with the policy and project recommendations of the DeKalb County Comprehensive Transportation Plan (CTP).
- Objective 2.4: Coordinate with the City of Tucker, DeKalb County, and local business leaders to strengthen economic development opportunities within the TSCID.

Goal 3: Promote Innovative Land Use and Development Strategies

- Objective 3.1: Research and evaluate the potential for best practices for sustainable industrial development/redevelopment.
- Objective 3.2: Research best practices for industrial development that most effectively takes advantage of new technology and advances in supply chain management.
- Objective 3.3: Research and identify opportunities for redevelopment of underutilized and/or vacant parcels.
- Objective 3.4: Investigate potential zoning initiatives to promote truck parking opportunities to accommodate demand.
- Objective 3.5: Coordinate with the City of Tucker and nearby jurisdictions to identify potential sites for additional truck parking in and around the TSCID.
- Objective 3.6: Minimize potential conflicts between industrial development and residential communities.

Goal 4: Promote Cost Effective Solutions and Innovative Funding Strategies

- Objective 4.1: Maximize the use of existing right-of-way for transportation improvements to reduce additional life-cycle costs created by new improvements.
- Objective 4.2: Prioritize cost efficient operational improvements to provide opportunities for short-term implementation.
- Objective 4.3: Identify opportunities to pursue all funding options, whether through GDOT, ARC, or federal grants.

Goal 5: Improve Workforce Access

- Objective 5.1: Identify strategies to enhance and promote transit accessibility to the TSCID.
- Objective 5.2: Investigate and improve key pedestrian connections between major employers to existing bus stops.
- Objective 5.3: Identify opportunities for new bicycle facilities to better connect employment with MARTA, Gwinnett Transit, and the Stone Mountain Trail along E. Ponce de Leon Avenue.

6.2 Project Prioritization Methodology

The vision, goals and objectives described in the previous section were integrated into a spreadsheet-based project prioritization tool to implement the methodology described in this section. For additional details on the spreadsheet-based prioritization tool, see *Appendix B: Prioritization Technical Memo*. A set of criteria were also developed, on which the projects were evaluated and compared. These criteria served as the foundation for developing the project prioritization framework. The study team developed the following six criteria:

1. Mobility
2. Safety
3. Economic Benefit
4. Environment & Public Health
5. Project Readiness
6. System Reliability

The project prioritization methodology included establishing the qualitative and quantitative evaluation factors, also called measures, for each criterion. The project values were collected for each measure, and an ordinal rating scheme was developed that converted the project values to scores between 0 and 100. These scores were used to estimate the total points each project received and then rank-ordered by the total number of points.

This section discusses the criteria, the measures within each criterion and the rating scheme.

6.2.1 Criteria 1: Mobility

Criteria Mobility was used to assess potential improvements that are considered to address an operational deficiency. Five measures, two quantitative, and three qualitative were included in Mobility.

- **Total Average Annual Daily Trips (AADT)** - The total AADT was estimated for each project using the ARC's Travel Demand Model (TDM). The analysis was done for the existing year 2020, for which travel model was available from the ARC. The procedure to calculate AADT depended on the project type. For capacity projects, maximum AADT was picked from the segments that make up the project corridor. For intersection improvements, maximum AADT from the intersecting segments was selected. Projects in locations with higher vehicle AADT received a higher score than the ones in areas with lower vehicle AADT.
- **Truck percentage** - The truck percentage was estimated for each project using ARC's TDM for the year 2020. The truck percentage for each project was based on the links at which AADT was estimated. Projects in locations with higher truck percentage received a higher score than the ones in areas with lower truck percentage.
- **Travel time savings** - Travel time savings are important measure for evaluating the performance of projects. Ideally, a travel demand model could provide the travel time savings by comparing the model results from a No-Build model run and a build (with project in place) run. However, ARC model run requires high computing power and time (more than 36 hours) making it

infeasible to run a build scenario for each project. Therefore, travel time savings were estimated qualitatively using professional judgment. The values used were “Low”, “Medium” and “High.” A project with high travel time savings received a higher score.

- **Serve congested corridor (existing LOS)** - The level of congestion was estimated from the ARC’s TDM. The LOS was estimated for each project using links that were used to estimate AADT. The projects were classified into four categories of LOS – A-C, D, E and F. The projects serving regions with poor LOS received more points than the others.
- **Freight-designated corridor** - The values used of the measure freight-designated corridor were qualitative and the projects were classified into Yes or No categories, depending if the project lies on a freight corridor or not. The projects that are on a freight corridor receive higher points than the ones that are not.

6.2.2 Criteria 2: Safety

Criteria Safety was used to identify the potential improvements that are considered to improve highway safety. The project was considered to improve safety if it is in a location where all types of crash occurrences are high or if the improvement has high Crash Modification Factor (CMF). Safety consists of five measures, four quantitative, and one qualitative, they are described below.

- **Fatal crashes per thousand AADT (within 0.25 mi)** - The crash data was obtained from Georgia Electronic Accident Reporting System (GEARS). A quarter mile buffer was created along each project and the number of fatal crashes for five years from 2014 to 2018 were collected. The crashes were normalized by the AADT to estimate the fatal crashes per thousand AADT. The projects in locations with higher fatal crashes per thousand AADT receive higher scores.
- **Injury crashes per thousand AADT (within 0.25 mi)** – Like the fatal crashes, injury crashes were also estimated from GEARS. The process was similar to estimating the injury crashes per thousand AADT for each project. The projects in locations with higher injury crashes per thousand AADT receive higher scores.
- **Other crashes per thousand AADT (within 0.25 mi)** - Like the fatal and injury crashes, Property Damage Only (PDO) crashes were also estimated from GEARS. The process was similar to estimating the injury crashes per thousand AADT for each project. The projects in locations with higher PDO crashes per thousand AADT receive higher scores.
- **Percent Truck crashes** - Project scoring was also done using the number of trucks involved in the corridor. The GEARS data included trucks involved in the crashes which were used to calculate the percentage of truck crashes for each project. The projects in locations with higher truck crashes receive higher scores.
- **Expected reductions in crashes by project type** - The expected reduction was estimated qualitatively using the CMF for each project. The CMF clearinghouse provided the crash reduction by type of improvement. In case the project included multiple improvements, the highest crash modification factor was used. Since all the projects did not have CMF available, professional judgment was used. The projects were classified into High, Medium, and Low expected reduction in crashes.

6.2.3 Criteria 3: Economic Benefit

Criteria Economic Benefit was used to identify potential improvements that are generally considered to support connectivity and economic growth. Four measures, all qualitative, were used to evaluate the projects under this criterion.

- **Supporting Regionally Significant Locations** - The measure is qualitative and values the project by assigning Yes and No values to each project depending if the project connects to (or is within) a Regional Employment Center, a Freight Cluster Area or a Regional Place.
- **Regional Freight Significance** - Each project was evaluated to see if it improves the movement of freight and is it located on ARC's regional freight system (ASTRoMaP), GDOT's Statewide Designated Freight Corridors or the FHWA National Highway Freight Network (NHFN). The values of Yes or No were assigned to the project and projects with values Yes received higher scores.
- **Maximize use of ROW** - The measure was used to evaluate if the project requires ROW acquisition, including construction easements, from a potential historic property or National Register listed property. The projects were assigned values of Yes and No and the ones that maximize the use of right-of way received higher scores.
- **Multimodal connectivity (Transit, Bicycle, Pedestrian)** - This is a qualitative measure and was used to evaluate whether the project provided connectivity to multiple modes like transit, bicycle, and pedestrian. The projects were assigned values of Yes and No and the ones that provided multimodal connectivity, received higher scores.

6.2.4 Criteria 4: Environment & Public Health

Criteria Environmental and Public Health was used to identify projects that were expected to reduce emissions. It included only one qualitative measure, describe below.

- **Diesel emission reduction** - The projects which helped in reducing vehicle emissions that cause bad air quality and contribute to climate change, received higher scores than others. The projects were categorized qualitatively into High, Medium, and Low values. The projects with High emission reductions received higher scores.

6.2.5 Criteria 5: Project Readiness

Criteria Project Readiness was used to evaluate what would be the level of effort to implement a project. It reflects project complexity, and the following qualitative measures were used to evaluate it. Three measures, all qualitative, were used to evaluate the projects under this criterion.

- **Coordination with City and County; Consistency with County CTP, Transportation Master Plan, etc.** - Each project was evaluated to see if it requires coordination with cities or counties and is consistent with their CTPs or Transportation Master plans. Qualitative values of Yes and No were used. Projects with value of Yes, were consistent with the CTPs and RTPs and received higher scores.

- **Included in RTP** - Qualitative values of Yes and No were used for this measure. If the project is included in the RTP, it would have already been studied regionally. Such projects received higher scores.
- **Level of effort to implement project (project complexity)** - It is a qualitative measure that evaluated the level of effort to implement the project based on ROW and environmental requirements. Low, Medium, and High values were assigned to the projects. Projects with low level of effort to implement received higher scores.

6.2.6 Criteria 6: System Reliability

Criteria System Reliability was used to determine which projects were helpful in adding network resiliency to the transportation network. Only one qualitative measure was used.

- **Provide resiliency to regional and TSCID network** - It is a qualitative measure that assigned values of Yes or No to the projects, based on whether they are expected to provide resiliency to the regional and TSCID transportation networks. Projects with value of Yes received higher scores.

After the project values, which included both quantitative and qualitative values, were obtained for each measure under each criterion, they were converted to scores of 0-100. For additional details on scoring methodology, see *Appendix B: Prioritization Technical Memo*.

6.3 Ranking of Projects

The next step involved assigning values to the criteria above, the definition of seven scenarios with varying criteria weights, and ranking the projects under each scenario. Scenarios were developed by assigning different weighting factors to individual criteria. The purpose of this was to understand the impact of each criteria on project rankings. It also identified projects that consistently appeared near the top of the rankings, regardless of where the emphasis was placed.

As listed below, six scenarios were developed to demonstrate how each factor influenced the rating for potential projects to inform the development of a “User Defined” scenario. Scenarios 1 through 6 were given 50 percent weight assigned to respective criterion, while the remaining criteria received 10 percent each.

- Scenario 1: Mobility
- Scenario 2: Safety
- Scenario 3: Economic Benefit
- Scenario 4: Environment & Public Health
- Scenario 5: Project Readiness
- Scenario 6: System Reliability

The preferred, or “user defined” scenario (Scenario 7), shown in Figure 11, was determined through input from the TSCID staff. This user defined scenario provided the basis for the overall ranking of

projects to inform stakeholders how each met the overall performance goals of the Plan. Additional details are provided in *Appendix B: Prioritization Framework Technical Memo*.

The weights of individual performance measures within each criterion are shown in Table 6.

Figure 11: Weight Assigned within User Defined Scenario (Scenario 7)

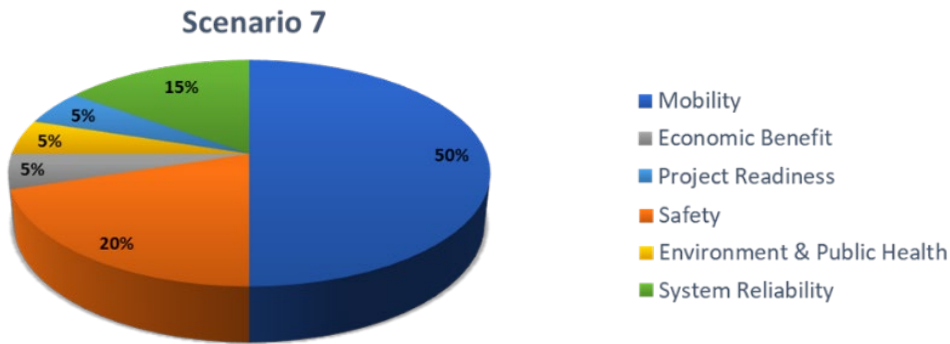


Table 6: Weights of Performance Measures within Criteria

No.	Criteria	Measures	Criteria %
1	Mobility	Total AADT	15%
		Truck Percent	20%
		Travel time savings	25%
		Serve congested corridor (existing LOS)	25%
		Freight-designated corridor	15%
2	Safety	Fatal crashes per thousand AADT (within 0.25 mi)	25%
		Injury crashes per thousand AADT (within 0.25 mi)	25%
		Other crashes per thousand AADT (within 0.25 mi)	10%
		Percent Truck crashes	20%
		Expected reductions in crashes by project type	20%
3	Economic Benefit	Supporting Regionally Significant Locations	25%
		Regional Freight Significance	25%
		Maximize use of ROW	25%
		Multimodal connectivity (Transit, Bicycle, Pedestrian)	25%
4	Environment & Public Health	Diesel emission reduction	100%
5	Project Readiness	Coordination with City and County; Consistency with County CTP, Transportation Master Plan, etc.	33%
		Included in RTP	33%
		Level of effort to implement project (project complexity)	33%
6	System Reliability	Provide resiliency to regional and TSCID network	100%

6.4 Prioritization Results

To rank the projects under a selected scenario, total points were calculated for each project under that scenario. For each project, the score (0-100) of each measure was multiplied by the weight of the measure and the weight of the criterion that measure belongs to. The total points each project received were estimated by summing up the weighted scores of all the performance measures. The project that received the most points received the highest ranking.

Tables 7, 8, and 9 represents the project rankings for short-term roadway and operational projects, short-term bicycle and pedestrian projects, and long-term vision projects under the User-Defined Scenario. It should be emphasized that the rankings were developed merely to inform stakeholders on how each project performed related to the overall goals of the plan. Other factors, such as local support, project costs, and funding opportunities ultimately determine the overall prioritization of these projects in the recommended project list.

Table 7: Short-Term Roadway/Operational Project Rankings

Rank	Project Name
1	Mountain Industrial Boulevard at Elmdale Drive/Roger Marten Way Intersection Improvement
2	Mountain Industrial Boulevard at Tuckerstone Parkway Intersection Improvement
3	Mountain Industrial Boulevard at E. Ponce de Leon Avenue Intersection Improvement
4	Lawrenceville Highway (US 29/SR 8) at Indian Trail Lilburn Road/Killian Hill Road Intersection Improvement
5	Mountain Industrial Boulevard at N. Royal Atlanta Drive Intersection Improvement
6	Mountain Industrial Boulevard at Lewis Road Intersection Improvement
7	Mountain Industrial Boulevard at Hammermill Road (South) Intersection Improvement
8	Mountain Industrial Boulevard at Greer Circle Intersection Improvement
9	Lawrenceville Highway (US 29/SR 8) at Rockbridge Road Intersection Improvement
10	Mountain Industrial Boulevard at S. Royal Atlanta Drive Intersection Improvement
11	E. Ponce de Leon Avenue at Rock Mountain Boulevard Intersection Improvement
12	Tucker Industrial Road at Hugh Howell Road (SR 236) Intersection Improvement
13	Tucker Industrial Road at Elmdale Dr Intersection Improvement
14	Lawrenceville Highway (US 29/SR 8) at N. Royal Atlanta Drive Intersection Improvement
15	Idlewood Road at Sarr Parkway Intersection Improvement

Table 8: Short-Term Bicycle and Pedestrian Project Rankings

Rank	Project Name
1	Mountain Industrial Boulevard Sidewalk (West side of Mountain Industrial from Hammermill Road (south) to Lewis Road)
2	Mountain Industrial Boulevard Sidewalk (West side of Mountain Industrial from Hugh Howell Road to Elmdale Drive)
3	Mountain Industrial Boulevard Sidewalk (West side of Mountain Industrial from Old Sears Outlet to Hugh Howell Road)
4	Mountain Industrial Boulevard Sidewalk (East side of Mountain Industrial from Old Sears Outlet to Hugh Howell Road)
5	Mountain Industrial Boulevard Sidewalk (East Side of Mountain Industrial from Gwinnett County line to bridge over CSX railroad)
6	LCI Study - TSCID Pedestrian Improvements
7	Mountain Industrial Boulevard Sidewalk (West side of Mountain Industrial from Gwinnett County line to bridge over CSX railroad)
8	Mountain Industrial Boulevard Sidewalk (West side of Mountain Industrial from Lewis Road to 1600 Mountain Industrial Boulevard)
9	Mountain Industrial Boulevard Sidewalk (West side of Mountain Industrial from Tuckerstone Parkway to bridge over CSX railroad)
10	Hugh Howell Road Sidewalk (North side of Hugh Howell Road from Lawrenceville Highway to Tucker Industrial Road)
11	Hugh Howell Road Sidewalk (South side of Hugh Howell Road from Mountain Industrial Boulevard to Rosser Road)
12	City of Tucker - Hugh Howell Road Pedestrian Improvements

Table 9: Long-Term Vision Project Rankings

Rank	Project Name
1	One Way Pair - Mountain Industrial Boulevard/Tucker Industrial Road
2	City of Tucker - Mountain Industrial Boulevard Widening (6 Lanes, Hugh Howell Road to US 78)
3	Roundabout at Mountain Industrial Boulevard/S. Royal Atlanta Drive, Teardrop Roundabout north of Mountain Industrial Boulevard/N. Royal Atlanta Drive
4	Roundabout/Realignment at Mountain Industrial Boulevard/Tuckerstone Parkway

7 Cost Estimates and Revenue Forecasts

The following chapter provides a summary of the costing tool, the methodology of determining projects cost estimates, and the development of potential revenue forecasts.

7.1 Summary of Costing Tool/Assumptions

As part of this FCP project lists, the project team estimated costs for each of the proposed operational improvement and pedestrian recommendations. This was done in consultation with the ARC's Planning Level Cost Estimation Tool to determine costs by unit and mile for corresponding project elements.¹⁷ Additionally, the project team utilized engineering judgment and the GDOT pay item index to cost certain components of each project such as necessary curb improvements, signal upgrades, and sidewalk construction. Additional input on project costing was provided by TSCID.

Across all projects, raw costs were calculated based on these per-unit inputs. Then increased by specified magnitudes to account for grading, erosion control, ROW, utilities, and engineering inspection costs. The final costs included a 20 percent contingency.

7.2 Potential Revenue Sources

When developing a work program, the pivoting factor that determines capacity to implement projects is the amount of local funding that can be contributed. This includes either 100% funding local projects or providing a local match for federal aid offered through the ARC. The following section breaks down the available revenue sources and how revenue projections were developed.

- Local sources – Funding sources from the TSCID tax allocations and contributions from the City of Tucker.
- Federal sources – Funding from federal aid programs administered by ARC.

It should be noted that no state funding was assumed for any of the short-term projects within the TSCID because most were along local roadways. However, state funds could be utilized along Lawrenceville Highway (US 29/SR 8) and longer-term improvements. Furthermore, no funding allocations were assumed from DeKalb County given their obligations within the unincorporated portions of the County.

7.2.1 TSCID Tax Allocations

The foundation of revenues for the work program revolve around TSCID tax revenues. Tax revenues for the TSCID come from a percentage of the property taxes within the TSCID boundaries. This funding source is considered a consistent source of income based on historical tax revenue. Based on TSCID historical records and staff input, it was assumed that the average tax revenues from 2016 through 2020

¹⁷ Atlanta Regional Commission (2016). Planning Level Cost Estimation Tool.
[http://documents.atlantaregional.com/transportation/projsolicitation/2019/Cost%20Estimation%20Tool%20\(2016%20Final\).zip](http://documents.atlantaregional.com/transportation/projsolicitation/2019/Cost%20Estimation%20Tool%20(2016%20Final).zip)

of \$1.1 million would remain steady throughout the year 2025. While the COVID-19 pandemic has impacted traditional transportation funding sources such as gas taxes and sales taxes, no significant impacts to property taxes revenues are anticipated. The historical allocation of 30 percent of the revenues being dedicated to infrastructure projects was also carried forward through 2025. As a result, a total of \$330,000 annually resulting in approximately \$1.65 million of tax revenue assumed through the duration of the short-term fiscally constrained projects. The allocations of TSCID revenues for each year of the for both roadway and sidewalk projects are presented in **Table 10**. These annual estimates were determined based on the funds necessary to meet the obligations of the short-term fiscally constrained projects, detailed in Chapter 8.

Table 10: Proposed Allocation of TSCID Tax Revenues by Year

	Total Revenues	Roadway (%)	Sidewalk (%)
2021	\$330,000	\$0	\$172,000
2022	\$330,000	\$324,000	\$0
2023	\$330,000	\$206,000	\$124,000
2024	\$330,000	\$0	\$10,000
2025	\$330,000	\$133,040	\$0
Total	\$1,650,000	\$663,040 (72%)	\$309,400 (28%)

7.2.2 City of Tucker Revenues

Based on input from City staff, revenues from the City of Tucker incorporated into the short-term fiscally constrained project list for roadway projects were assumed to come from the Special Projects Local Option Sales Tax (SPLOST) and potentially the City’s general fund. Given that the City of Tucker does not have a specific list of projects identified for SPLOST funds, the share of SPLOST revenues from the City was estimated through the evaluation of their current 5-year Capital Improvements Program for available funds for projects in the TSCID. Based on available revenues, it was assumed that approximately \$1.9 million would be allocated toward the short-term improvements in the TSCID. For sidewalk improvements, it was assumed that \$1.07 million of the \$4.5 million dedicated to sidewalks from the City’s general fund would support the TSCID short-term fiscally constrained projects.

7.2.3 Federal Revenue Sources

While Mountain Industrial Boulevard is included in the National Highway System (NHS), it is not a designated federal and/or state highway. The roadways within the TSCID designated as such are Stone Mountain Freeway (US 78), Lawrenceville Highway (US 29/SR8) and Hugh Howell Road (SR 236). As a result, the following FHWA funding sources are technically eligible for use in the TSCID FCP project list:

- NHS Funds – Since Mountain Industrial Boulevard is on the NHS, it is technically eligible for funding for NHS facilities, called the National Highway Performance Program (NHPP). However, these funds are specifically tied to achieving performance targets established by GDOT for the statewide NHS network. As a result, nearly all these funds are allocated to major interstate

facilities that impact statewide mobility. Therefore, this funding source was not considered a viable option for the TSCID FCP projects.

- Surface Transportation Block Grant (STBG) Funds – This federal program is much more flexible. It allows for projects to preserve or improve conditions and performance on any Federal-aid highway, bridge projects on any public road. Projects can include facilities for nonmotorized transportation, transit capital projects, and public bus terminals and facilities.
- STBG - Transportation Alternatives Program - These funds are a subset of the overall STBG funds specifically set aside for smaller-scale transportation projects such as pedestrian and bicycle facilities, recreational trails, and safe routes to school projects.

Based on the criteria above, it was assumed that the federal aid most suitable for the TSCID short-term fiscally constrained projects is the STBG program for both roadway and sidewalk improvements. This funding source is consistent with the current ARC TIP, which was assessed to identify funding sources used for projects similar to those proposed within the TSCID FCP projects list.

More important than identifying overall eligibility for federal aid, a critical step for project implementation is recognizing and addressing the competitive process to secure these funds within the ARC project solicitation process. The process requires demonstrating benefits for several factors – such as mobility, economic benefit, safety, et. al. In recognition, individual projects developed within the TSCID were assessed for their overall interrelationship and common objectives and redefined in the short-term fiscally constrained project list based on their collective benefits. By strategically defining the projects in the short-term fiscally constrained project list, the TSCID better positions itself to secure these competitive resources.

7.2.4 State Revenue Sources

In addition to ARC funds, GDOT offers programs for funding that can be applied for outside the ARC TIP solicitation process. There are only two proposed improvements within the work program along state roadways. The GDOT funding sources most appropriate for the implementation of the non- ARC funded work program are the Quick Response and the Local Maintenance and Improvement Grant (LMIG) programs.

- Quick Response Projects - The program is designed for lower-cost operations are operational projects such as restriping, intersection improvements, turn lane additions and extensions that can be implemented in a short period of time (within one year) and for under \$200k.
- Local Maintenance & Improvement Grant (LMIG) - The annual LMIG allocation is based on the total centerline road miles for each local road system and the total population of each county or city as compared with the total statewide centerline road miles and total statewide population. The following types of projects could be eligible for LMIG funds:
 - Preliminary engineering (including engineering work for R/W plans and Utility plans)
 - Construction supervision & inspection
 - Utility Adjustments or replacement
 - Patching, leveling, and resurfacing a paved roadway
 - Grading, Drainage, Base and Paving existing or new roads

- Replacing storm drainpipe or culverts
- Intersection improvements
- Turn lanes
- Bridge repair or replacement
- Sidewalk adjacent (within right of way) to a public roadway or street
- Roadway Signs, striping, guardrail installation
- Signal installation or improvement

Based on input from TSCID staff, attempts to procure GDOT funds have historically been largely unsuccessful. It will be a recommendation of this report that the TSCID work with the City of Tucker to secure these funding sources when appropriate.

There are other funding programs that are typically for lower cost projects such as Community Development Block Grant (CDBG) and the Multi-Modal Safety Access Grant (MMAG). The former is a federally funded program administered through DeKalb County and the latter one through GDOT. Project types for the CDBG program can be applied towards public buildings, storm water infrastructure and sidewalks while the MMAG funding is utilized for sidewalk and pedestrian improvement projects.

7.3 Potential Additional Revenue Sources

The ARC has stressed to the importance of defining projects that can compete for grants suited for improving areas such as the TSCID. Based on the types of projects identified within the overall FCP project list, the most relevant grant programs are:

- Better Utilizing Investments to Leverage Development (BUILD) Program – BUILD transportation grants are for planning, capital investments in surface transportation infrastructure, and are awarded on a competitive basis for projects that will have a significant local or regional impact. Projects can range from \$5 million to a maximum of \$25 million. The program selection criteria encompass safety, economic competitiveness, quality of life, state of good repair, environmental sustainability, innovation, and partnerships with a broad range of stakeholders. However, it should be noted that grants in urban areas such as the TSCID have become more competitive since the FHWA has made a commitment for 50 percent of funds to be allocated towards rural areas. Furthermore, the overall statewide cap is \$100 million. Any applications would need to be coordinated through GDOT to ensure eligibility.
- Infrastructure for Rebuilding America (INFRA) Grants – INFRA grants are essentially a similar program as the BUILD program but at a much larger scale. The minimum project cost is \$100 million in Georgia. The projects within the TSCID FCP project list need to be part of a larger program and include projects from multiple jurisdictions. Still, it is a potential funding source given that the Jimmy Carter Boulevard/Mountain Industrial Boulevard/Hairston Road corridor is designated on the NHS as a “MAP-21 Principal Arterial”. There is also emphasis within the FHWA to allocate these funds to rural areas as well.
- Fostering Advancements in Shipping and Transportation for the Long-Term Achievement of National Efficiencies (FASTLANE) Grants – Very similar to the INFRA grant requirements,

FASTLANE grants have a minimum project cost of \$100 million. However, unlike the INFRA program, the FHWA does reserve 10 percent of the overall program budget for “Small Projects” that demonstrate cost efficiency and overall regional benefits. While the grant may not exceed 60 percent of the total eligible project costs, an additional 20 percent of project costs may be funded with other Federal assistance, bringing total Federal participation in the project to a maximum of 80 percent. The same emphasis on rural areas also applies to this program.

- GTIB – This is a grant and loan program administered by the State Road and Tollway Authority (SRTA). This program is also competitive and accepts applications for projects up to \$10 million. An important aspect of the GTIB program is that it can be used as local match for the “traditional” ARC programs in the previous section. Key factors SRTA considers for GTIB applications include demonstrating economic development potential, project readiness, and feasibility. It should be noted that GTIB funds have been utilized for funding a large portion of the design costs for the US 78/Mountain Industrial Boulevard improvement that is currently scheduled for construction in 2023.

Based on the eligibility requirements for these programs and the overall scale of improvements needed within the TSCID, the BUILD and GTIB offer the most potential for future utilization. More detail on potential strategies is provided in Chapter 9 of this report.

8 Fiscally Constrained Project List

The following chapter outlines the proposed TSCID FCP short-term fiscally constrained project list. As noted in previous sections of this report, the process of developing the FCP project list was a culmination of the following efforts:

- Step 1: Identification of a Universe of Projects – A universe of initial projects was identified through: 1) the analysis within the *Inventory and Assessment Report*; 2) the completion of the *Traffic Study Report* to identify more detailed issues at problem intersections; 3) an inventory of projects identified through previous studies; and 4) input from stakeholders and truckers within the TSCID.
- Step 2: Development of a Project Prioritization Tool: A project evaluation tool was developed specifically for this Plan based on: 1) factors utilized by the ARC in their project evaluation process; and 2) goals set forth for this FCP. This tool was specifically designed to assess projects in a manner consistent with the ARC TIP prioritization to ensure compatibility with the regional process.
- Step 3: Initial Evaluation of Projects based on the Prioritization Framework: All proposed projects were assessed within the tool to provide insight on the potential for projects to meet the overall goals of the project.
- Step 4: Refinement of Project Prioritization: The initial priorities developed within the tool were vetted with TSCID staff and refined based on local knowledge, previous project development efforts with the City, and well-known needs historically voiced from TSCID members.
- Step 5: Development of Project Costs: Detailed cost estimates were developed based on the ARC Costing tool, specific project details, and input from TSCID staff.
- Step 6: Development of Projected Local Revenues: Historical tax revenues provided from TSCID staff and the 5-year Work Program from the City of Tucker were utilized to determine realistic revenue forecasts for local funds available for the short-term FCP project list through 2025.
- Step 7: Definition of Projects for TIP solicitation: Individual projects were organized, or “bucketed,” to increase their overall benefit for ARC consideration and potential for federal funding. As a result, the improvement of seven intersections along Mountain Industrial Boulevard are being presented as one project because improving all these intersections at once serves a collective purpose and presents a much greater benefit than improving one at a time. Sidewalk improvements along Mountain Industrial Boulevard have also been combined for the same reason.

8.1 Overview of Fiscally Constrained Project List

Projects and recommendations included in the short-term fiscally constrained project list consist of 1) five projects (consisting of 12 intersection improvements) that address capacity, safety, and operational issues; 2) four preliminary engineering and scoping projects for the development of long-term goals; and 3) 10 sidewalk projects which address work force access and transit connectivity issues. Collectively, the short-term fiscally constrained project list consists of a total of 22 individual improvements and four studies projects defined as twelve overall projects. The sections that follow provide a detailed description of these projects as proposed for inclusion in the overall TIP for the region. The long-term projects are discussed in greater detail in Chapter 9. A table of the short-term fiscally constrained roadway projects along with their associated costs are provided in Table 12. Figure 12 provides an overview of the short-term fiscally constrained roadway project locations. A table of the short-term fiscally constrained pedestrian projects and their associated costs are provided in Table 13. Figure 13 provides an overview of the short-term fiscally constrained pedestrian project locations. And finally, a table of short-term policy recommendations are provided in Table 14, which are discussed later in this chapter. A more detailed breakdown of project costs, including their costs by phase, program year and potential funding sources is provided in Appendix C.

Table 11: Fiscally Constrained Projects by Type

Project Type	Short-Term Projects (Improvements)	Long-Term Projects
Capacity	0	2
Intersection/Operations	5 (12)	2
Preliminary Engineering/Scoping/IMR	3	2
Pedestrian	3 (10)	0

Table 12: Short-Term Work Program – Roadway Projects

Combined Project ID	Project Title	Project ID	Project Name	Sponsoring Agencies	Estimated Total Project Cost	Federal/State	Potential Federal Funding Sources	Total Local Match
FCP-1.1	NA – Component of FCP-1	15	Mountain Industrial Boulevard at Elmdale Drive/Roger Marten Way Intersection Improvement	TSCID, City of Tucker	\$530,000	\$424,000	Surface Transportation Block Grant (STBG) Program (ARC)	\$106,000
FCP-1.2	NA – Component of FCP-1	11	Mountain Industrial Boulevard at N. Royal Atlanta Drive Intersection Improvement	City of Tucker	\$720,000	\$576,000	Surface Transportation Block Grant (STBG) Program (ARC)	\$144,000
FCP-1.3	NA – Component of FCP-1	13	Mountain Industrial Boulevard at S. Royal Atlanta Drive Intersection Improvement	City of Tucker	\$200,000	\$160,000	Surface Transportation Block Grant (STBG) Program (ARC)	\$40,000
FCP-1.4	NA – Component of FCP-1	19	Mountain Industrial Boulevard at Lewis Road Intersection Improvement	City of Tucker	\$400,000	\$320,000	Surface Transportation Block Grant (STBG) Program (ARC)	\$80,000
FCP-1.5	NA – Component of FCP-1	18	Mountain Industrial Boulevard at Greer Circle Intersection Improvement	City of Tucker	\$380,000	\$304,000	Surface Transportation Block Grant (STBG) Program (ARC)	\$76,000
FCP-1.6	NA – Component of FCP-1	17	Mountain Industrial Boulevard at Hammermill Road (South) Intersection Improvement	City of Tucker	\$280,000	\$224,000	Surface Transportation Block Grant (STBG)	\$56,000

Combined Project ID	Project Title	Project ID	Project Name	Sponsoring Agencies	Estimated Total Project Cost	Federal/State	Potential Federal Funding Sources	Total Local Match
							Program (ARC)	
FCP-1	Freight Cluster Plan Improvements along Mountain Industrial Boulevard	I5, I1, I3, I9, I7, I8	Mountain Industrial Boulevard - Multiple Locations (Individual Project Details Above)	City of Tucker	\$2,510,000	\$2,008,000	Surface Transportation Block Grant (STBG) Program (ARC)	\$502,000
FCP-2.1	NA – Component of FCP-2	I15	Mountain Industrial Boulevard at Tuckerstone Parkway Intersection Improvement - Clear Cut Trees and Warning Signal	City of Tucker	\$120,000	\$-	Assumed No Federal Funds	\$120,000
FCP-2.2	NA – Component of FCP-2	I16	Mountain Industrial Boulevard at Tuckerstone Parkway Intersection Improvement - Add Left Turn Lane	City of Tucker	\$215,000	\$-	Assumed No Federal Funds	\$215,000
FCP-2.3	NA – Component of FCP-2	I17	Mountain Industrial Boulevard at Tuckerstone Parkway Intersection Improvement - Right In/Right Out at Tuckerstone	City of Tucker	\$30,000	\$-	Assumed No Federal Funds	\$30,000
FCP-2	Mountain Industrial Boulevard at Tuckerstone Boulevard Intersection Improvements	I15, I16, I17	Mountain Industrial Boulevard at Tuckerstone Boulevard Intersection Improvements	City of Tucker	\$365,000	\$-	Assumed No Federal Funds	\$365,000
FCP-3	E. Ponce de Leon Avenue at Rock Mountain Boulevard Intersection Improvement	I11	E. Ponce de Leon Avenue at Rock Mountain Boulevard Intersection Improvement	City of Tucker	\$350,000	\$-	Assumed No Federal Funds	\$350,000
FCP-4	Lawrenceville Highway (US 29/SR 8) and N. Royal Atlanta Intersection Improvement	I6	Lawrenceville Highway (US 29/SR 8) and N. Royal Atlanta Intersection Improvement	City of Tucker	\$460,000	\$-	Assumed No Federal Funds	\$460,000
FCP-5	Mountain Industrial Boulevard Speed Advisory Study	NA	Mountain Industrial Boulevard Speed Advisory Study	City of Tucker	\$20,000	\$-	Assumed No Federal Funds	\$20,000

Combined Project ID	Project Title	Project ID	Project Name	Sponsoring Agencies	Estimated Total Project Cost	Federal/State	Potential Federal Funding Sources	Total Local Match
FCP-6	Scoping Study for Reconfiguration of Tuckerstone Parkway at Mountain Industrial Boulevard	NA	Scoping Study for Reconfiguration of Tuckerstone Parkway at Mountain Industrial Boulevard	City of Tucker	\$200,000	\$-	Assumed No Federal Funds	\$200,000
FCP-7	Tucker Industrial Road at Hugh Howell Road (SR 236) Intersection Improvement	I4	Tucker Industrial Road at Hugh Howell Road (SR 236) Intersection Improvement	City of Tucker	\$400,000	\$-	Assumed No Federal Funds	\$400,000
FCP-8	Mountain Industrial and E. Ponce DeLeon Avenue Intersection Improvements - PRELIMINARY ENGINEERING	NA	Mountain Industrial and E. Ponce DeLeon Avenue	City of Tucker	\$157,200	\$-	Assumed No Federal Funds	\$157,200
FCP-9	Mountain Industrial Boulevard Median Enhancements - PRELIMINARY ENGINEERING	NA	Mountain Industrial Boulevard Median Improvements	City of Tucker	\$108,000	\$-	Assumed No Federal Funds	\$108,000
TOTAL PROJECT COSTS – COST FEASIBLE ROADWAY PROJECTS					\$4,570,200	\$2,008,000		\$2,562,200

Table 13: Short-Term Fiscally Constrained Pedestrian Projects

Combined Project ID	Project Title	Project ID	Project Name	Partner Jurisdiction	Estimated Total Project Cost	Federal	Potential Funding Sources	Total Local Match
FCP-10.1	NA – Component of FCP-10	PS2	Mountain Industrial Boulevard Sidewalk (West side of Mountain Industrial from Gwinnett County line to 2530 Mountain Industrial Blvd)	City of Tucker	\$500,000	\$400,000	Transportation Alternatives Program (ARC); Surface Transportation Block Grant (STBG) Program	\$100,000
FCP-10.2	NA – Component of FCP-10	PS1	Mountain Industrial Boulevard Sidewalk (East Side of Mountain Industrial from Gwinnett County line to bridge over CSX railroad)	City of Tucker	\$500,000	\$400,000	Transportation Alternatives Program (ARC); Surface Transportation Block Grant (STBG) Program	\$100,000
FCP-10.3	NA – Component of FCP-10	PS3	Mountain Industrial Boulevard Sidewalk (West side of Mountain Industrial from Tuckerstone Parkway to bridge over CSX railroad)	City of Tucker	\$120,000	\$96,000	Transportation Alternatives Program (ARC); Surface Transportation Block Grant (STBG) Program	\$24,000
FCP-10.4	NA – Component of FCP-10	PS4	Mountain Industrial Boulevard Sidewalk (West side of Mountain Industrial from Old Sears Outlet to Hugh Howell Rd)	City of Tucker	\$130,000	\$104,000	Transportation Alternatives Program (ARC); Surface Transportation Block Grant (STBG) Program	\$26,000
FCP-10.5	NA – Component of FCP-10	PS5	Mountain Industrial Boulevard Sidewalk (East side of Mountain Industrial from Old Sears Outlet to Hugh Howell Rd)	City of Tucker	\$130,000	\$104,000	Transportation Alternatives Program (ARC); Surface Transportation Block Grant (STBG) Program	\$26,000
FCP-10.6	NA – Component of FCP-10	PS6	Mountain Industrial Boulevard Sidewalk	City of Tucker	\$200,000	\$160,000	Transportation Alternatives Program	\$40,000

Combined Project ID	Project Title	Project ID	Project Name	Partner Jurisdiction	Estimated Total Project Cost	Federal	Potential Funding Sources	Total Local Match
			(West side of Mountain Industrial from Hugh Howell Rd to Elmdale Dr)				(ARC); Surface Transportation Block Grant (STBG) Program	
FCP-10.7	NA – Component of FCP-10	PS7	Mountain Industrial Boulevard Sidewalk (West side of Mountain Industrial from Hammermill Rd to US 78 interchange)	City of Tucker	\$50,000	\$40,000	Transportation Alternatives Program (ARC); Surface Transportation Block Grant (STBG) Program	\$10,000
FCP-10.8	NA – Component of FCP-10	PS8	Mountain Industrial Boulevard Sidewalk (West side of Mountain Industrial from Lewis Rd to 1600 Mountain Industrial Blvd)	City of Tucker	\$100,000	\$80,000	Transportation Alternatives Program (ARC); Surface Transportation Block Grant (STBG) Program	\$20,000
FCP-10	Freight Cluster Workforce Access Sidewalks - Mountain Industrial Boulevard	PS1, PS2, PS3, PS4, PS5, PS6, PS7, PS8	Freight Cluster Workforce Access Sidewalks - Mountain Industrial Boulevard (Individual Project Descriptions Above)	City of Tucker	\$1,730,000	\$1,384,000	Transportation Alternatives Program; Surface Transportation Block Grant (STBG) Program	\$346,000
FCP-11	Hugh Howell Rd Sidewalk (South side of Hugh Howell Rd from Mountain Industrial Blvd to Rosser Rd)	PS9	Hugh Howell Rd Sidewalk (South side of Hugh Howell Rd from Mountain Industrial Blvd to Flintstone Drive)	City of Tucker	\$100,000	\$-	Assumed No Federal Funds	\$100,000
FCP-12	Hugh Howell Rd Sidewalk (North side of Hugh Howell Rd from Lawrenceville Hwy to Tucker Industrial Rd)	PS10	Hugh Howell Rd Sidewalk (North side of Hugh Howell Rd from Lawrenceville Hwy to Tucker Industrial Rd)	City of Tucker	\$170,000	\$-	Assumed No Federal Funds	\$170,000
TOTAL PROJECT COSTS - BICYCLE AND PEDESTRIAN - COST FEASIBLE					\$2,000,000	\$1,384,000		\$616,000

Table 14: Short-Term Policy Recommendations

Project ID	Recommendation Type	Project Description	Implementing Agencies	Timeframe (Initiation)
SU-1	Signal Upgrades	Coordinate with GDOT to add three signalized intersections along Mountain Industrial Blvd to the Regional Traffic Operations Program (RTOP): Hugh Howell Rd (SR 236), S. Royal Atlanta Dr, and N. Royal Atlanta Dr.	TSCID, GDOT	1-5 Years
SU-2	Signal Upgrades	Work with DeKalb County, GDOT, and ARC to deploy connected vehicle (CV) technologies at signalized intersections along Mountain Industrial Blvd from E. Ponce de Leon Ave to N. Royal Atlanta Dr as part of the regional connected vehicle program. These upgrades will include the deployment of DSRC and C-V2X communication and allow for potential future connected vehicle applications such as freight signal priority.	TSCID, GDOT, DeKalb County, ARC	1-5 Years
P-1	Workforce Access	Actively work with ATL and/or Gwinnett County to provide better connectivity of transit services between the TSCID and Gwinnett County. The worn foot paths along Mountain Industrial Boulevard from Lawrenceville Highway to North Royal Atlanta Drive provide clear evidence for this need.	TSCID, ATL, Gwinnett County	1-5 Years
P-2	Workforce Access	Continue coordination with the ATL to monitor and promote premium transit along the US 78 corridor. In the interim, the TSCID should work to preserve a potential station area in the vicinity of the US 78/Mountain Industrial Boulevard interchange.	TSCID, ATL	1-5 Years
P-3	Workforce Access	Work with the City of Tucker to coordinate with MARTA for more bus shelters and amenities.	TSCID, City of Tucker	1-5 Years
P-4	Workforce Access	Coordinate with MARTA for opportunities to provide employers in the TSCID reduced rates/passes for their workers	TSCID, MARTA	1-5 Years
P-5	Workforce Access	Increase awareness of Georgia Commute Options for the TSCID workforce residing in the Atlanta metro area by TSCID staff promoting its services to CID employers.	TSCID	1-5 Years
P-6	Truck Parking	Identify potential parcels with 5-20 acres of available space, already identified for development activities, and adjacent to Mountain Industrial Boulevard to be considered for tuck parking and staging purposes.	TSCID	1-5 Years
P-7	Truck Parking	Continued TSCID coordination with business owners and the public regarding truck parking and staging needs and issues	TSCID	1-5 Years
P-8	Truck Parking	TSCID should continue to monitor innovative best practices to attract private-sector interests interested in providing truck parking and staging within the district.	TSCID	1-5 Years
P-9	Truck Parking	TSCID will assess opportunities to construct additional lane on City ROW for on-street truck staging. Coordination with the City will be necessary and code revisions to allow for parking within ROW.	TSCID, City of Tucker	1-5 Years
P-10	Economic Development	The City of Tucker and DeKalb County should support programs and incentives to provide workforce and affordable housing near employment centers such as TSCID.	City of Tucker/DeKalb County	1-5 Years
P-11	Economic Development	The Tucker Summit Community Improvement District can serve as a vehicle to distribute and provide information regarding both job training and educational opportunities as well as open job positions.	TSCID	1-5 Years

Project ID	Recommendation Type	Project Description	Implementing Agencies	Timeframe (Initiation)
P-12	Interagency Coordination	The Tucker Summit Community Improvement District should coordinate with the City of Tucker for a resolution to adopt the TSCID Freight Cluster Plan as a policy document for future investment.	TSCID, City of Tucker	1-5 Years
P-13	Interagency Coordination	The TSCID should work with the City of Tucker to monitor and support the eventual upgrade to the I-285 interchange at US 78, which is projected to be operating well over its capacity, to preserve the economic viability of the district.	TSCID, City of Tucker	1-5 Years
P-14	Interagency Coordination	As new development/redevelopment occurs, the TSCID should continue to coordinate with the City to ensure that the access management design standards are kept to mitigate driveway relocations associated with future freight projects	TSCID, City of Tucker	1-5 Years

Figure 12: Short-Term Fiscally Constrained Roadway Projects

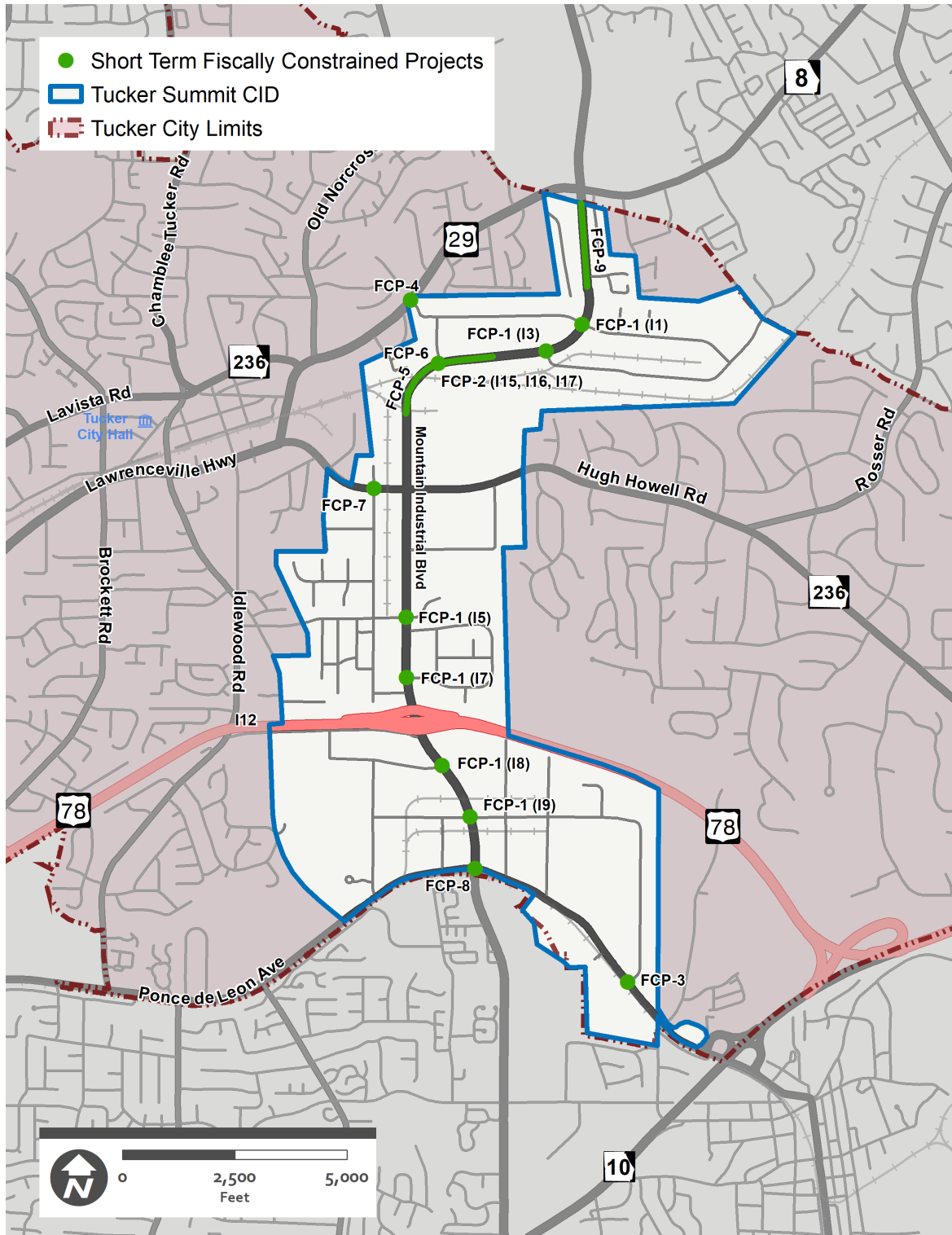
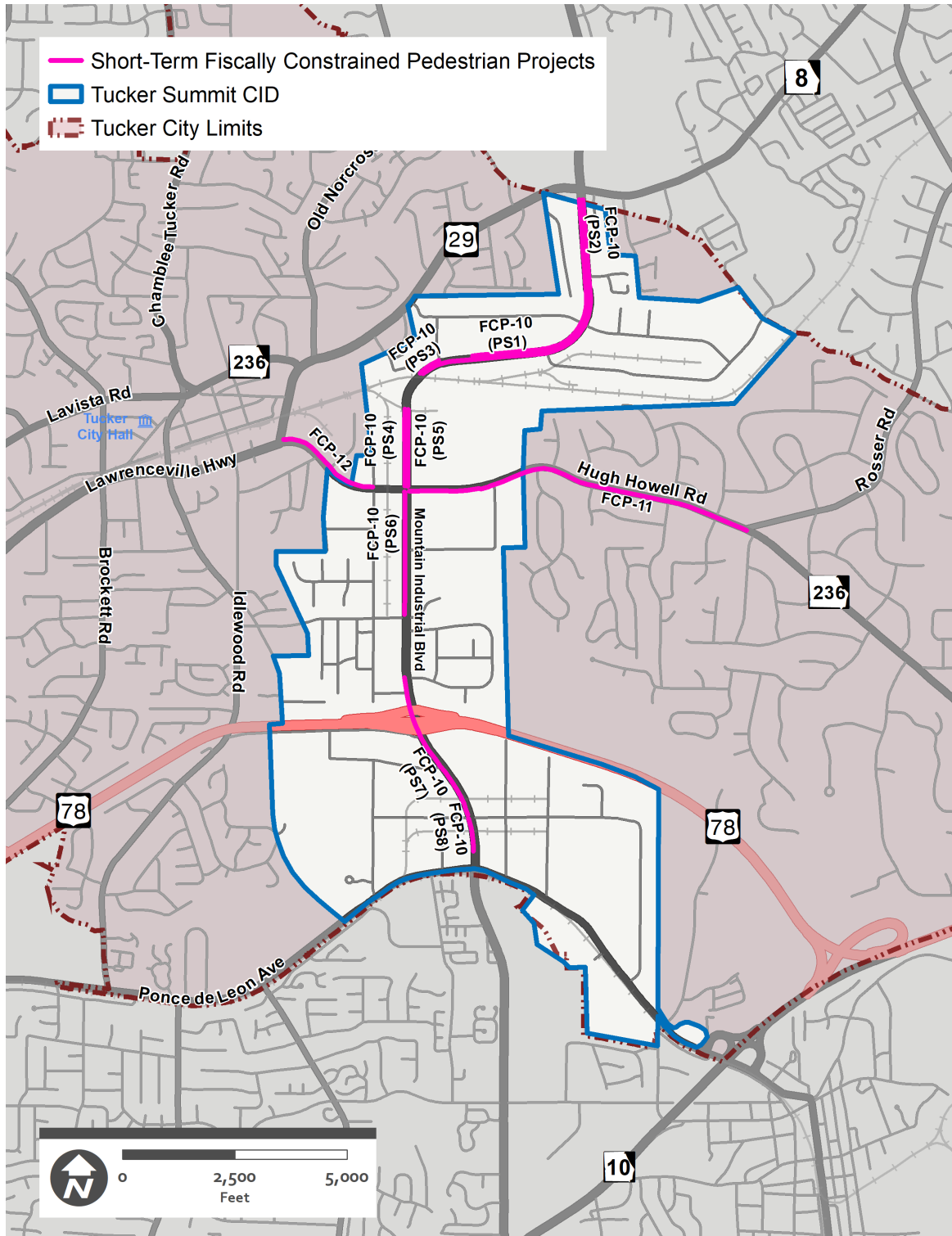


Figure 13: Short-Term Fiscally Constrained Pedestrian Projects



8.2 FCP Improvements along Mountain Industrial Boulevard

The following section details the individual improvements that comprise the FCP-1 project, FCP Improvements along Mountain Industrial Boulevard, within the fiscally constrained project list. These improvements comprise the project that should be considered the highest priority based on the results of the prioritization process and stakeholder input. More detailed improvement descriptions can be found in Chapter 5 of this report. As part of the overall project to improve Mountain Industrial Boulevard, the TSCID will seek STBG monies from the ARC to provide 80 percent of the required funding with the local match being provided by the TSCID and/or the City of Tucker. Please note the potential funding sources within each of the improvement descriptions.

8.2.1 Mountain Industrial Boulevard at N. Royal Atlanta Drive Intersection Improvements

Shown in Figure 14, the proposed improvements at this intersection includes:

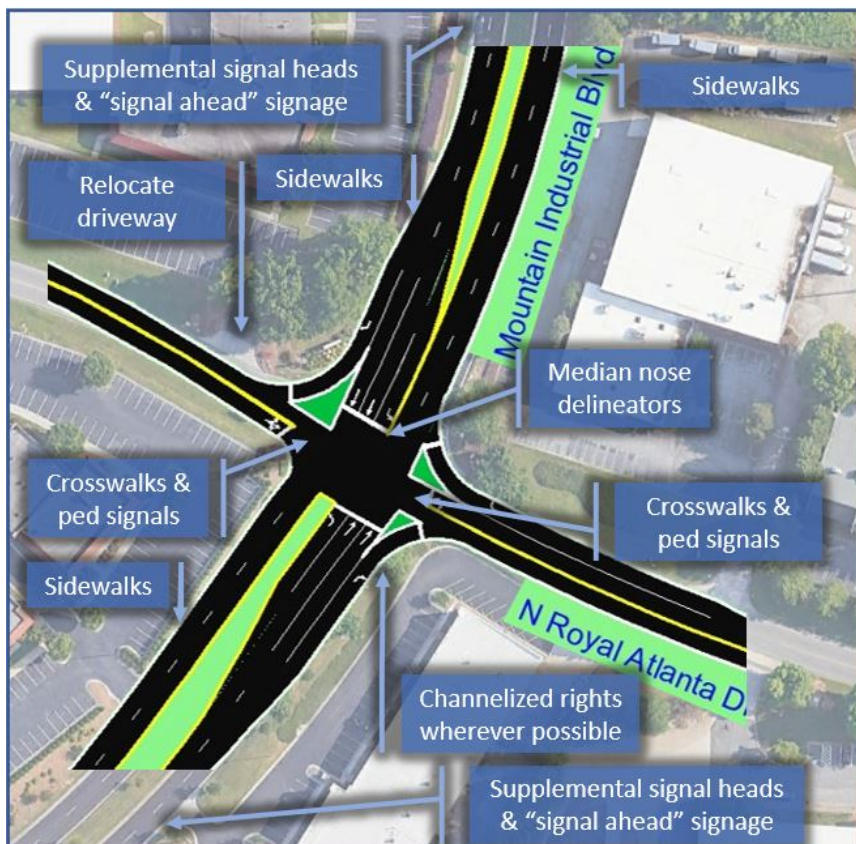
- Repave and restripe N. Royal Atlanta Dr. at the intersection and install raised pavement markers. Raised pavement markers improve the intersection safety by enhancing delineation and driver awareness and by providing positive guidance for motorists, especially in low visibility conditions.
- Install median nose delineators at the median along Mountain Industrial Blvd.
- Install backplates with retroreflective borders to all traffic signal head indications.
- Install flashing yellow arrow signal head indications for the southbound Mountain Industrial Blvd. and eastbound and westbound N. Royal Atlanta Dr. left-turns.
- Convert northbound Mountain Industrial Blvd. left-turn to a protected-only movement. A protected-only movement provides an exclusive phase for the left-turn maneuvers in the form of a left-turn arrow indication such that the left-turn movement can be made only under the green left-turn indication. This will make this northbound Mountain Industrial Blvd. left-turn movement safer by allowing the movement to be made without any conflicting traffic maneuvers. Currently this left-turn movement is allowed during the permissive phase (circular green indication) where the sight distance for this maneuver to yield to the southbound through movement appears to be restricted due to the horizontal curve along the north leg of Mountain Industrial Blvd.
- Install supplemental signal heads and “traffic signal ahead” signage along the northbound and southbound Mountain Industrial Blvd. approaches.
- Install single right-turn lanes with channelization and wide curb radii accommodating truck turning movements along the northbound and southbound Mountain Industrial Blvd. approaches and along the westbound N. Royal Atlanta Dr. approach.
- Install pedestrian crosswalks and pedestrian signals along the northbound and southbound Mountain Industrial Blvd. approaches.
- Install sidewalks along Mountain Industrial Blvd. and N. Royal Atlanta Dr. at the intersection. The sidewalks along Mountain Industrial Blvd. should be extended to the Gwinnett County line. The

sidewalks, specifically on the west side of Mountain Industrial Blvd. from N. Royal Atlanta Dr. to the Gwinnett County line, will serve those that live in Gwinnett County and yet use the MARTA system for work in DeKalb County.

- Install ADA curb ramps at all four corners of the intersection.
- Relocate the driveway along N. Royal Atlanta Dr. west of the intersection further away from the intersection.

- **Estimated Cost:** \$720,000 Construction: \$486,098.30
 - Preliminary Engineering: \$45,271
 - Right of Way: \$56,589
 - Utilities : \$37,726
 - Engineering Inspection: \$18,863
 - Contingency: \$75,453
- **Federal Share:** \$576,000
- **Local Share:** \$144,000 (to be split between TSCID and City of Tucker)

Figure 14: Proposed Improvements at Mountain Industrial Boulevard and N. Royal Atlanta Drive



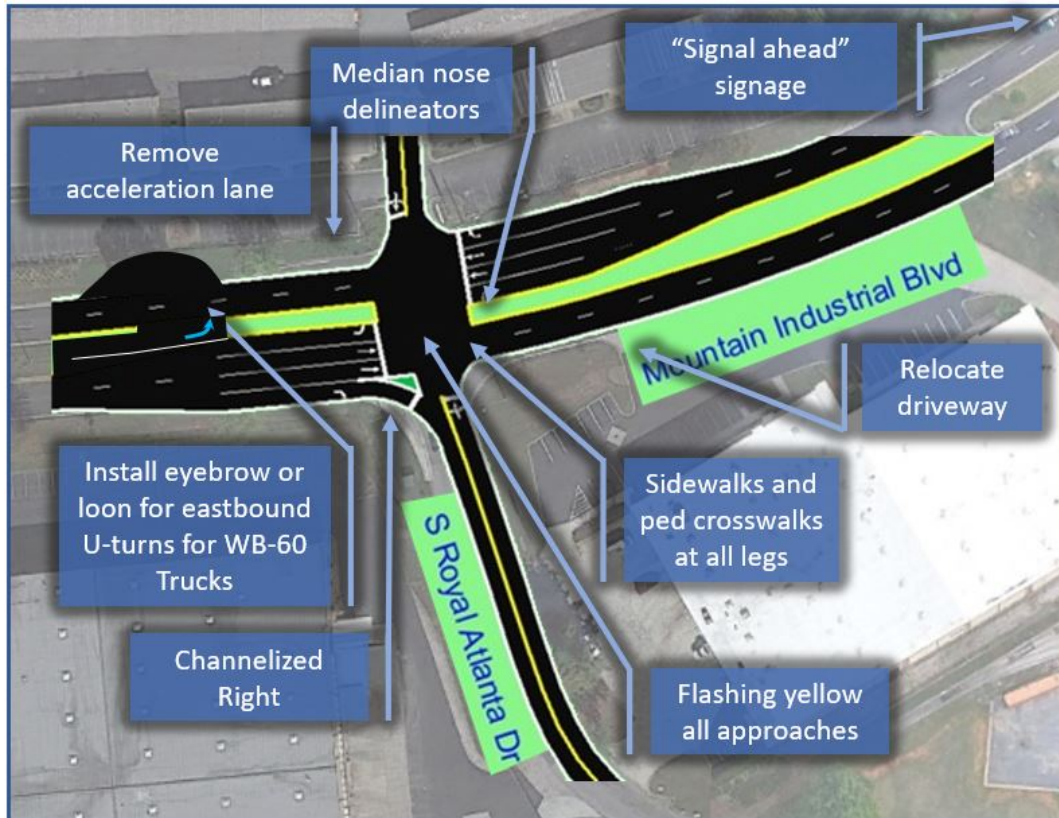
8.2.2 Mountain Industrial Boulevard at S. Royal Atlanta Drive Intersection Improvements

As shown in Figure 15, the proposed improvements at this intersection includes:

- Install median nose delineators at the median along Mountain Industrial Blvd.
- Install backplates with retroreflective borders to all traffic signal head indications.
- Install flashing yellow arrow signal head indications for the left-turns on all four approaches.
- Install “traffic signal ahead” signage along the westbound Mountain Industrial Blvd. approach.
- Install a single right-turn lane with channelization and wide curb radius accommodating truck turning movements along the eastbound Mountain Industrial Blvd. approach.
- Remove the acceleration lane on the west leg of the intersection and install an eyebrow or loon to accommodate eastbound U-turns along Mountain Industrial Blvd.
- Install pedestrian crosswalks across all four legs of the intersection with ADA curb ramps and pedestrian signals.
- Install sidewalks along Mountain Industrial Blvd. and S. Royal Atlanta Dr. at the intersection.
- Install ADA curb ramps at all four corners of the intersection.
- Relocate the driveway along Mountain Industrial Blvd. east of the intersection further away from the intersection.

- **Estimated Cost:** \$200,000
 - Construction: \$143,687
 - Preliminary Engineering : \$10,899
 - Right of Way: \$13,624
 - Utilities : \$9,083
 - Engineering Inspection: \$4,542
 - Contingency: \$18,165
- **Federal Share:** \$160,000
- **Local Share:** \$40,000 (to be split between TSCID and City of Tucker)

Figure 15: Proposed Improvements at Mountain Industrial Boulevard and S. Royal Atlanta Drive



8.2.3 Mountain Industrial Boulevard at Elmdale Drive/Roger Marten Way Intersection Improvements

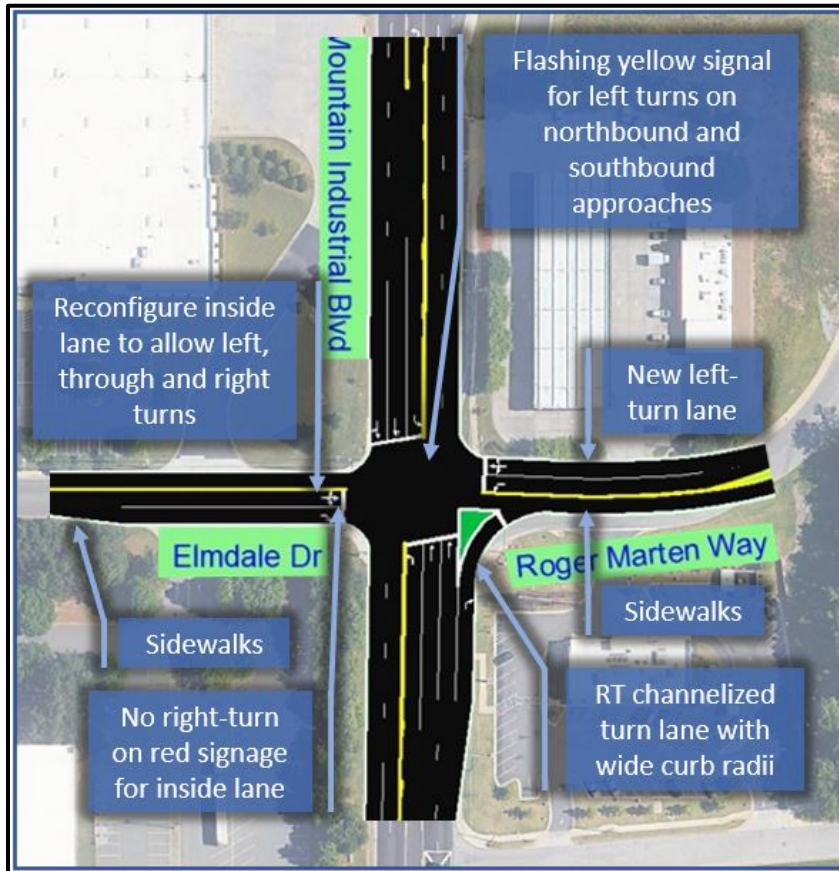
As shown in Figure 16, the proposed improvements at Mountain Industrial Boulevard and Elmdale Drive/Roger Martin Way consist of:

- Install backplates with retroreflective borders to all traffic signal head indications.
- Install flashing yellow arrow signal head indications for the left-turns on the northbound and southbound approaches of Mountain Industrial Blvd.
- Install a single right-turn lane with channelization and wide curb radius accommodating truck turning movements along the northbound Mountain Industrial Blvd. approach. (This is in addition to the improvements recommended by the TSCID’s December 2019 traffic engineering study.)
- Repave and restripe Elmdale Dr. and Roger Marten Way at the intersection and install raised pavement markers. Raised pavement markers improve the intersection safety by enhancing delineation and driver awareness and by providing positive guidance for motorists, especially in low visibility conditions.

- Reconstruct the southwest quadrant of the intersection to widen the curb radius in order to accommodate wider right-turn movements by trucks (TSCID’s December 2019 traffic engineering study stops short of the Mountain Industrial Blvd. @ Elmdale Dr./Roger Marten Way intersection and does not recommend any improvements to the Elmdale Dr. approach). Install a Permissive-Plus-Overlap phase for the right-turn movement along the Elmdale Dr. approach.
- Reconfigure the westbound Roger Marten Way at the intersection to add a separate left-turn lane, in addition to the existing left-through-right lane. (TSCID’s December 2019 traffic engineering study stops short of the Mountain Industrial Blvd. @ Elmdale Dr./Roger Marten Way intersection and does not recommend any improvements to the Roger Marten Way approach)
- Install sidewalks along the west side of Mountain Industrial Blvd. and along Roger Marten Way at the intersection.

- **Estimated Cost: \$530,000**
 - Construction: \$330,374
 - Preliminary Engineering: \$38,637
 - Right of Way: \$48,297
 - Utilities : \$32,198
 - Engineering Inspection: \$16,099
- Contingency: \$64,395 **Federal Share: \$424,000**
- **Local Share: \$106,000** (to be split between TSCID and City of Tucker)

Figure 16: Proposed Improvements at Mountain Industrial Boulevard and Elmdale Drive/Roger Martin Way



8.2.4 Mountain Industrial Boulevard at Hammermill Road (South) Intersection Improvements

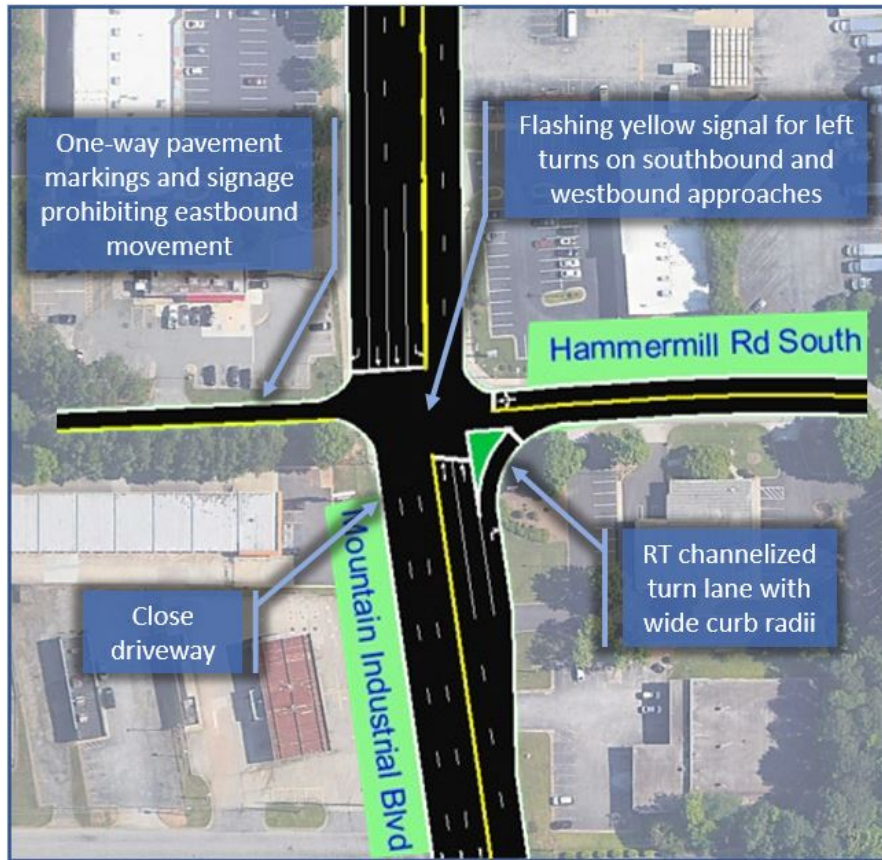
As shown in Figure 17, the proposed improvements at this intersection include:

- Install backplates with retroreflective borders to all traffic signal head indications.
- Install flashing yellow arrow signal head indications for the left-turns on the southbound Mountain Industrial Blvd. approach and the westbound Hammermill Rd. (South) approach.
- Install a single right-turn lane with channelization and wide curb radius accommodating truck turning movements along the northbound Mountain Industrial Blvd. approach. (This is in addition to the improvements recommended by the TSCID’s December 2019 traffic engineering study.)
- Install one-way pavement markings along the west leg of the intersection. Install signage at the Waffle House driveway on the west leg of the intersection prohibit vehicles entering the west leg of the intersection from Waffle House to get to Mountain Industrial Blvd.

- Remove “DO NOT ENTER” sign at the southwest corner of the intersection to allow westbound through-traffic at the intersection to access the Waffle House lot.
- Install a “NO LEFT TURN” sign to prohibit left-turns along the northbound Mountain Industrial Blvd. approach.
- As a long-term measure, consider converting the west leg of this intersection into a bidirectional street to connect Mountain Industrial Blvd. to Tucker Industrial Rd. With this improvement, also consider a left-turn lane along the northbound Mountain Industrial Blvd. approach and allow northbound left-turn traffic from Mountain Industrial Blvd.
- Close driveway to “Public Storage” parcel along the west side of Mountain Industrial Blvd. south of the intersection. Provide access to the “Public Storage” parcel via inter-parcel access from the Valero gas station parcel.
- Install sidewalks along the west side of Mountain Industrial Blvd. south of the intersection. Extend the sidewalks to the US 78 interchange.

- **Estimated Cost:** \$280,000
 - Construction: \$175,439
 - Preliminary Engineering : \$20,238
 - Right of Way: \$25,297
 - Utilities: \$16,865
 - Engineering Inspection: \$8,432
 - Contingency: \$33,729
- **Federal Share:** \$224,000
- **Local Share:** \$56,000 (to be split between TSCID and City of Tucker)

Figure 17: Proposed Improvements at Mountain Industrial Boulevard and Hammermill Road (South)



8.2.5 Mountain Industrial Boulevard at Greer Circle Intersection Improvements

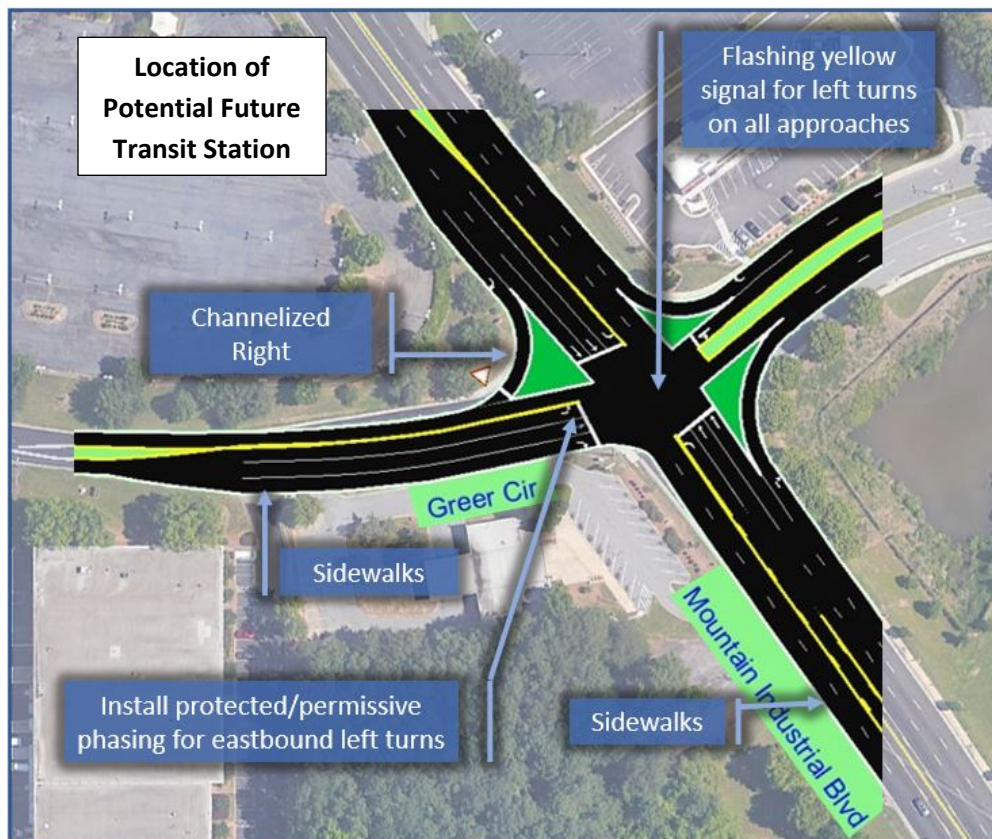
As shown below in Figure 18, the proposed improvements at Mountain Industrial Boulevard and Greer Circle include:

- Repave and restripe Greer Cir. east of the intersection and install raised pavement markers. Raised pavement markers improve the intersection safety by enhancing delineation and driver awareness and by providing positive guidance for motorists, especially in low visibility conditions.
- Install protected/permissive phasing for the eastbound Greer Cir. left-turn movement.
- Install backplates with retroreflective borders to all traffic signal head indications.
- Install flashing yellow arrow signal head indications for the left-turns on all four approaches.
- Install a single right-turn lane with channelization and wide curb radius to accommodate truck turning movements along the southbound Mountain Industrial Blvd. approach. (This is in addition to the improvements recommended by the TSCID’s December 2019 traffic engineering study.)
- Install sidewalks along the west side of Mountain Industrial Blvd. and along Greer Cir. west of the intersection.

It should be noted that operational improvements at this location could be included under the current Mountain Industrial Boulevard/US 78 Interchange Project (PI #0017399).

- **Estimated Cost:** \$380,000
 - Construction: \$235,413
 - Preliminary Engineering: \$27,985
 - Right of Way: \$34,981
 - Utilities : \$23,320
 - Engineering Inspection: \$11,660
 - Contingency: \$46,641
- **Federal Share:** \$304,000
- **Local Share:** \$76,000 (to be split between TSCID and City of Tucker)

Figure 18: Proposed Improvements at Mountain Industrial Boulevard and Greer Circle



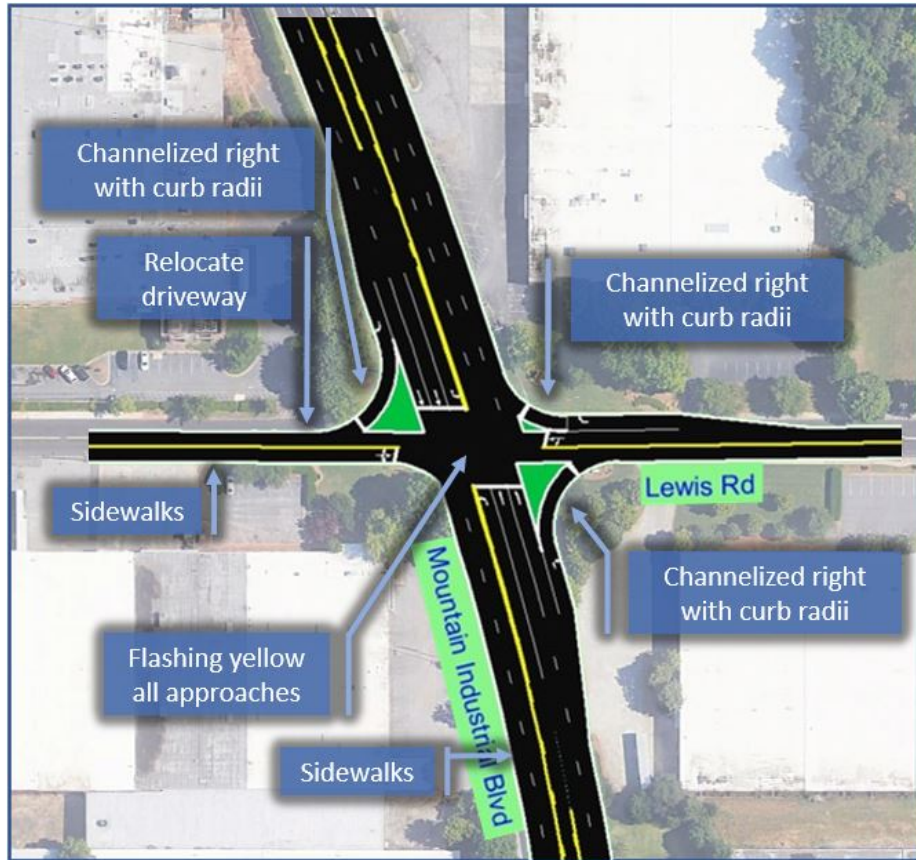
8.2.6 Mountain Industrial Boulevard at Lewis Road Intersection Improvements

As shown below in Figure 19, the proposed improvements for this project include:

- Install backplates with retroreflective borders to all traffic signal head indications.
- Install flashing yellow arrow signal head indications for the left-turns on all four approaches.
- Install single right-turn lanes with channelization and wide curb radii accommodating truck turning movements along the northbound and southbound Mountain Industrial Blvd. approaches and along the westbound Lewis Rd. approach.
- Install sidewalks along the west side of Mountain Industrial Blvd. and along Lewis Rd. west of the intersection.
- Relocate the driveway along Lewis Rd. west of the intersection further away from the intersection.

- **Estimated Cost:** \$400,000
 - Construction: \$249,692
 - Preliminary Engineering: \$29,092
 - Right of Way: \$36,365
 - Utilities : \$24,243
 - Engineering Inspection: \$12,122
 - Contingency: \$48,486
- **Federal Share:** \$320,000
- **Local Share:** \$80,000 (to be split between TSCID and City of Tucker)

Figure 19: Proposed Improvements at Mountain Industrial Boulevard and Lewis Road



8.3 FCP Improvements Mountain Industrial Boulevard and Tuckerstone Parkway

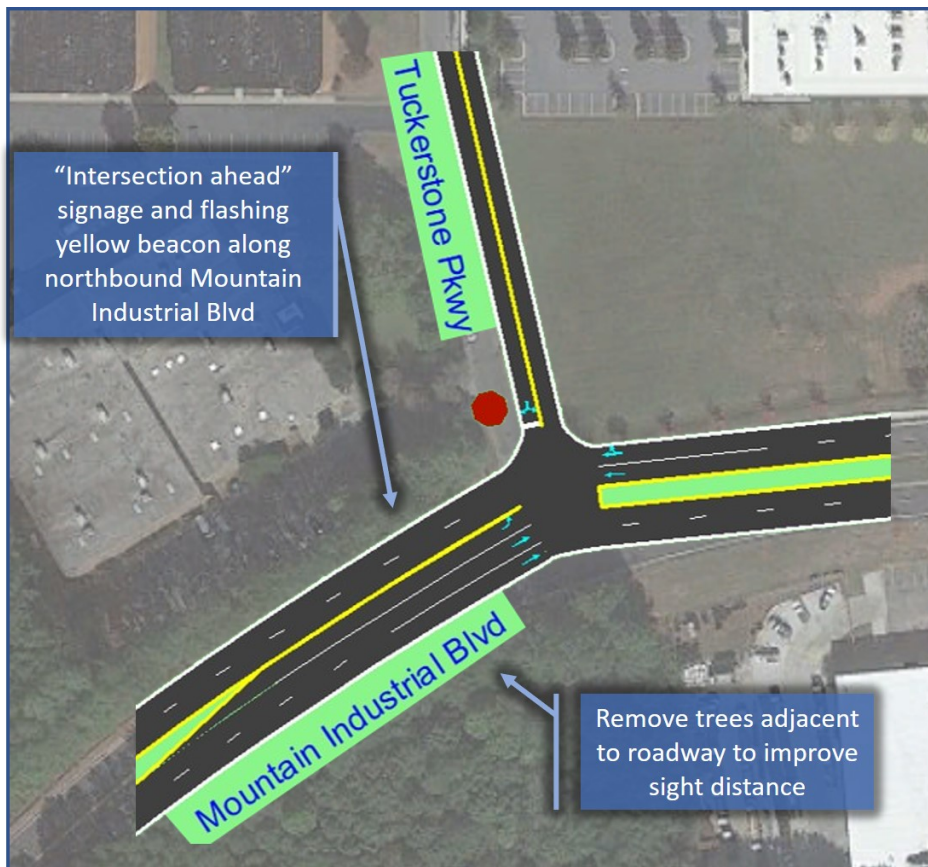
8.3.1 Mountain Industrial Boulevard at Tuckerstone Parkway Intersection Improvements

As shown in Figure 20, the proposed improvements at Mountain Industrial Boulevard and Tuckerstone Parkway includes:

- Clear cutting trees just south of the intersection to improve sight distance
- Install a signal activated warning signal on the westbound approach to warn motorists of southbound right-turns from Tuckerstone Parkway
- Install signal activated warning signal in the northbound approach along Mountain Industrial Boulevard to warn motorists of approaching Tuckerstone Parkway intersection per MUTCD guidelines.

- **Estimated Cost:** \$120,000
 - Construction: \$75,360
 - Preliminary Engineering: \$8,640
 - Right of Way: \$10,800
 - Utilities : \$7,200
 - Engineering Inspection: \$3,600
 - Contingency: \$14,400
- **Federal Share:** \$96,000
- **Local Share:** \$24,000 (80% from City of Tucker, 20% from TSCID)

Figure 20: Proposed Improvement at Mountain Industrial Boulevard and Tuckerstone Parkway – Clear Cut and Signalization

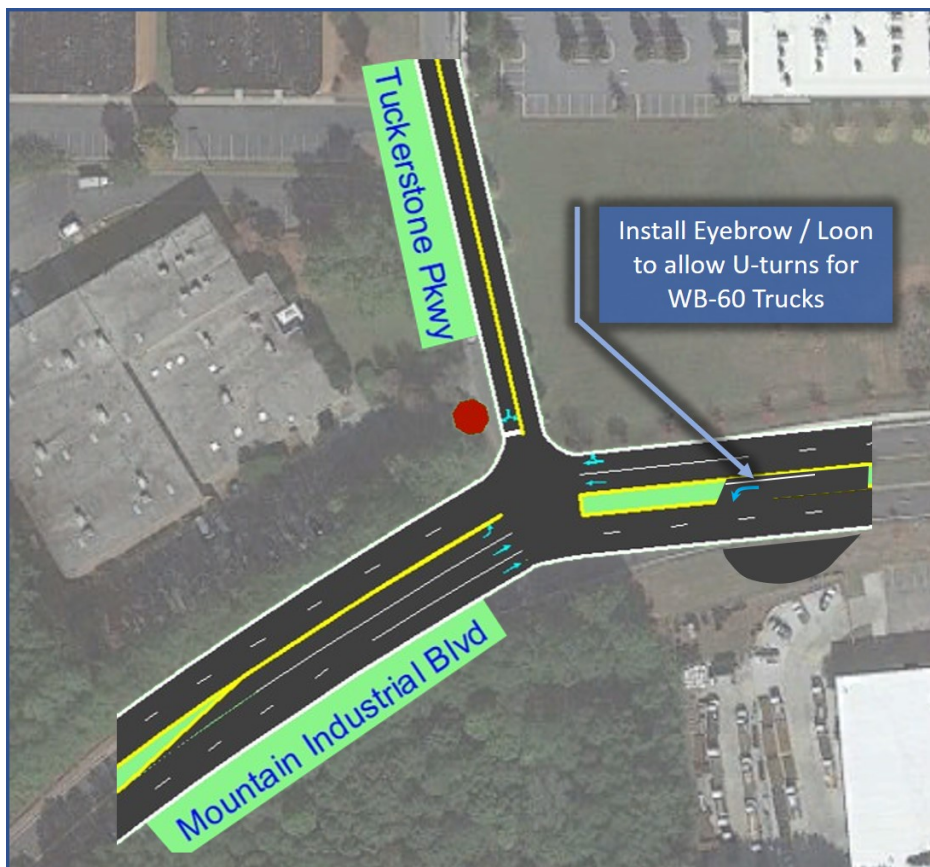


8.3.2 Mountain Industrial Boulevard at Tuckerstone Parkway Intersection Improvements

As shown in Figure 21, the proposed improvements at Mountain Industrial Boulevard and Tuckerstone Parkway include:

- Install a 12-ft wide 200-ft long left-turn lane in the Mountain Industrial Boulevard median just east of Tuckerstone Parkway across from the Ram Tool Driveway including an eyebrow for a WB-60 truck to make a U-turn.
- Install a 12-ft wide 200-ft long left-turn lane in Mountain Industrial Boulevard median just west of Tuckerstone Parkway and include an eyebrow for a WB-60 truck to make a U-turn.
- **Estimated Cost:** \$215,000
 - Construction \$200,000
- Preliminary Engineering \$15,000 **Federal Share:** \$0
- **Local Share:** \$215,000 (80% from City of Tucker, 20% from TSCID)

Figure 21: Proposed Improvement at Mountain Industrial Boulevard and Tuckerstone Parkway – Add U-Turn



8.3.3 Mountain Industrial Boulevard at Tuckerstone Parkway Intersection Improvements

As shown in Figure 22 below, the proposed improvements at Mountain Industrial Boulevard and Tuckerstone Parkway includes:

- Convert Tuckerstone Parkway to a right-in right-out only at the Tuckerstone Parkway/Mountain Industrial Boulevard intersection.
- **Estimated Cost:** \$30,000
 - Construction: \$26,400
 - Preliminary Engineering: \$3,600
- **Federal Share:** \$0
- **Local Share:** \$30,000 (80% from City of Tucker, 20% from TSCID)

Figure 22: Proposed Improvement at Mountain Industrial Boulevard and Tuckerstone Parkway – Right In, Right Out at Tuckerstone



8.4 Other Intersection Improvements

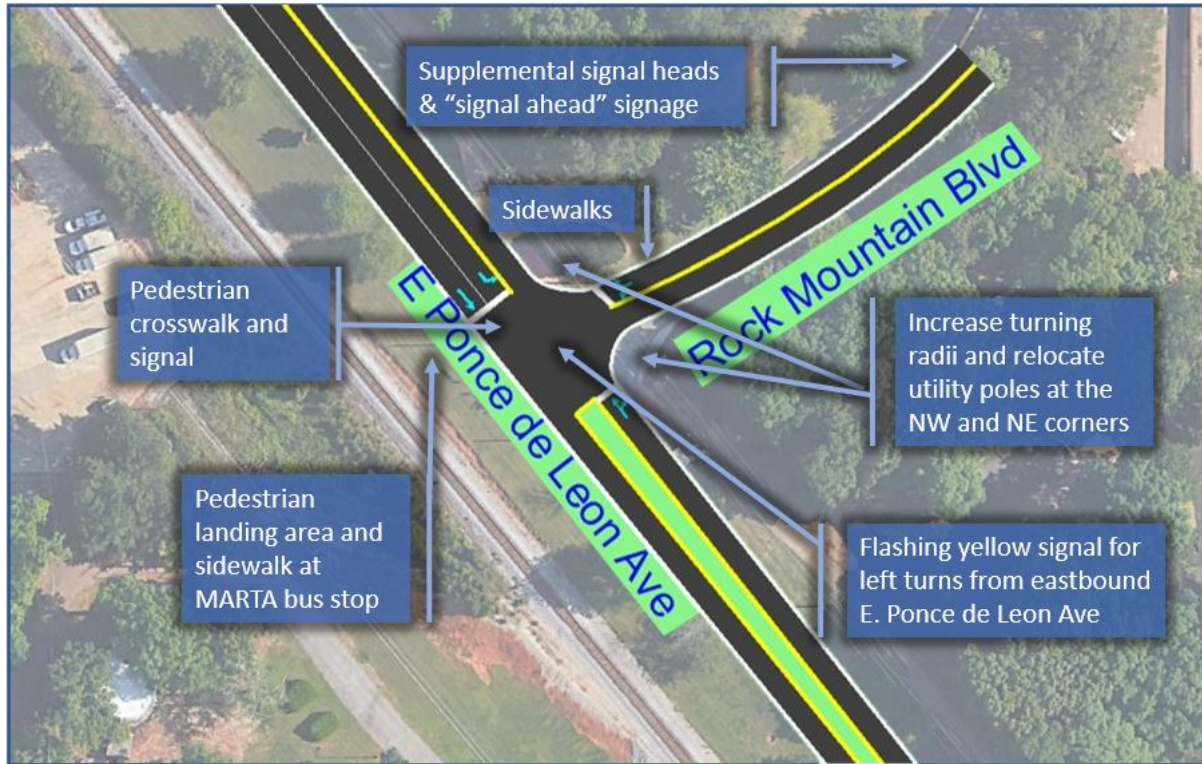
8.4.1 E. Ponce de Leon Avenue at Rock Mountain Boulevard Improvements

As shown below in Figure 23, the proposed improvements for this project include:

- Restripe the intersection and install raised pavement markers
- Install backplates with retroreflective borders to all traffic signal head indications
- Convert left-turn signal on eastbound E. Ponce de Leon Avenue approach to flashing yellow arrow (FYA)
- Install a pedestrian crosswalk and pedestrian signal west of the intersection to cross E. Ponce de Leon Avenue
- Install pedestrian landing area at MARTA bus stop on the southwest corner of the intersection at the southwest corner, and install sidewalks from the landing area to the crosswalk across E. Ponce de Leon Avenue
- Install supplemental signal heads and advance "signal ahead" signage on southbound Rock Mountain Boulevard
- Install sidewalk along the west side of Rock Mountain Boulevard (approximately 1500 ft.)
- Increase radii NW and NE corners to accommodate WB 60 tractor trailers; relocate signal cabinet and 2 poles

- **Estimated Cost: \$350,000**
 - Construction: \$217,047
 - Preliminary Engineering: \$25,733
 - Right of Way: \$32,166
 - Utilities : \$21,444.00
 - Engineering Inspection: \$10,722
 - Contingency: \$42,888
- **Federal Share: \$0**
Local Share: \$350,000 (50% from City of Tucker, 50% from TSCID)

Figure 23: Proposed Improvements at E. Ponce de Leon Avenue and Rock Mountain Boulevard



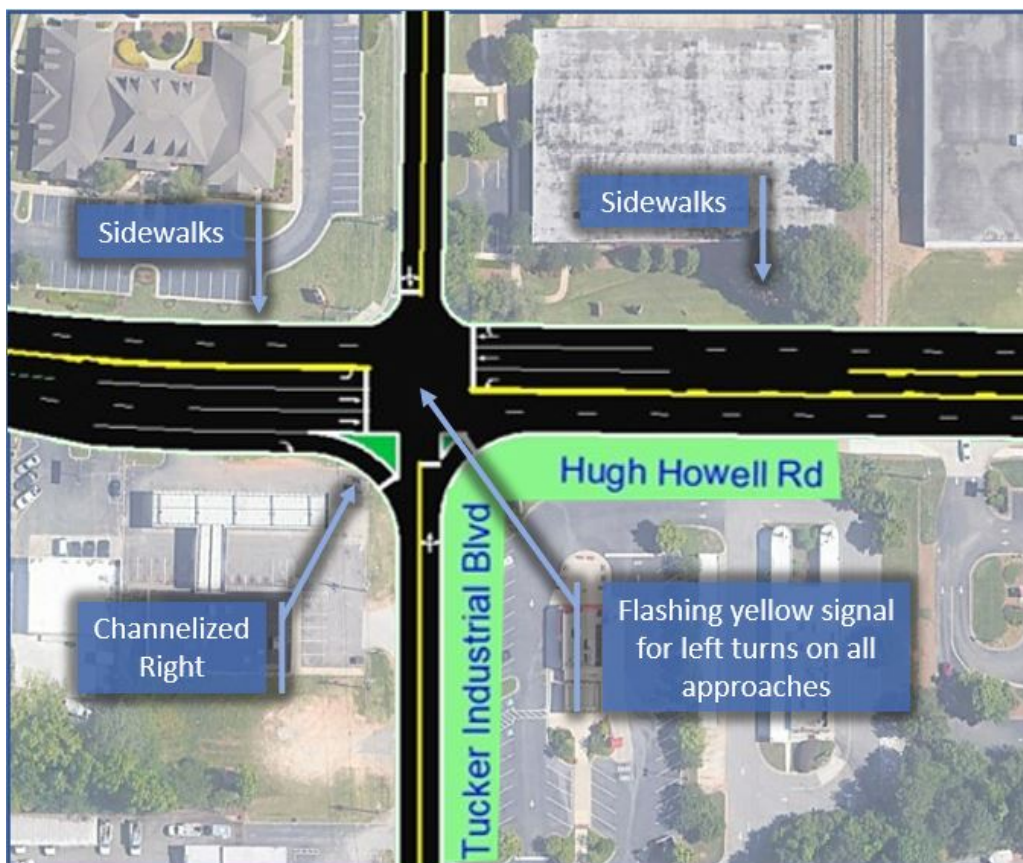
8.4.2 Tucker Industrial Road at Hugh Howell Road Improvements

As shown below in Figure 24, the proposed improvements for this project include:

- Install backplates with retroreflective borders to all traffic signal head indications.
- Install flashing yellow arrow signal head indications for the left-turns on all four approaches.
- Install a single right-turn lane with channelization and wide curb radius accommodating truck turning movements along the eastbound Hugh Howell Rd. (SR 236) approach.
- Reconstruct the southeast quadrant of the intersection to widen the curb radius in order to accommodate wider right-turn movements by trucks.
- Install sidewalks along Tucker Industrial Rd. and Hugh Howell Rd. (SR 236) at the intersection.

- **Estimated Cost:** \$400,000
 - Construction: \$284,687
 - Preliminary Engineering: \$22,319
 - Right of Way: \$27,898
 - Utilities : \$18,599
 - Engineering Inspection: \$9,299
 - Contingency: \$37,198
- **Federal Share:** \$0
- **Local Share:** \$400,000 (80% from City of Tucker, 20% from TSCID)

Figure 24: Proposed Improvements at Tucker Industrial Road and Hugh Howell Road



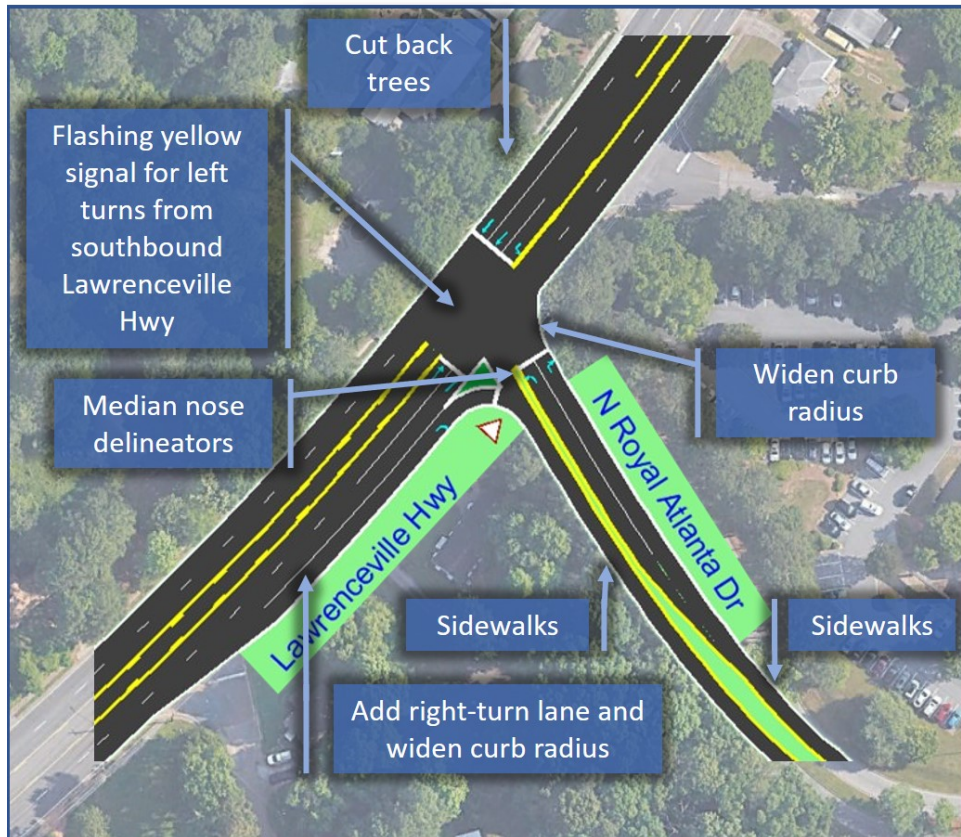
8.4.3 Lawrenceville Highway (US 29/SR 8) at N. Royal Atlanta Drive Improvements

As shown below in Figure 25, the proposed improvements for this project include:

- Repave and restripe N. Royal Atlanta Dr. at the intersection and install raised pavement markers. Raised pavement markers improve the intersection safety by enhancing delineation and driver awareness and by providing positive guidance for motorists, especially in low visibility conditions.
- Install median nose delineators at the median along N. Royal Atlanta Dr.
- Install flashing yellow arrow signal head indications for the southbound Lawrenceville Hwy. (US 29/SR 8) left turn.
- Install a single right-turn lane with a wide curb radius accommodating truck turning movements along the northbound Lawrenceville Hwy. (US 29/SR 8) approach.
- Reconstruct the northeast quadrant of the intersection to widen the curb radius in order to accommodate wider right-turning truck movements along the westbound N. Royal Atlanta Dr. approach.
- Install sidewalk along the south side of N. Royal Atlanta Dr. from the intersection curb radius to the existing sidewalk east of the intersection.
- Install sidewalk along the north side of N. Royal Atlanta Dr. from the intersection curb radius to the existing MARTA bus stop east of the intersection.
- Reconstruct the existing sidewalks along both sides of Lawrenceville Hwy. (US 29/SR 8) at the intersection.
- Cut trees back along the west side of Lawrenceville Hwy. (US 29/SR 8) at the intersection.

- **Estimated Cost:** \$460,000
 - Construction: \$405,733
 - Preliminary Engineering: \$10,503
 - Right of Way: \$13,129
 - Utilities: \$8,753
 - Engineering Inspection: \$4,376
 - Contingency: \$17,506
- **Federal Share:** \$0
- **Local Share:** \$460,000 (80% from City of Tucker, 20% from TSCID)

Figure 25: Proposed Improvements at Lawrenceville Highway (US 29/SR 8) and N. Royal Atlanta Drive



8.4.4 Mountain Industrial Boulevard and E. Ponce DeLeon Avenue Intersection Improvements - PRELIMINARY ENGINEERING (PE)

This project includes the preliminary engineering for the long-term project at the intersection of Mountain Industrial Boulevard and E. Ponce DeLeon Avenue. The project calls for:

- Widen of curb radius and install a retaining wall and fill at southeast quadrant of intersection
- Extend left-turn lane on east leg of the intersection
- Install median nose delineators at median on south leg
- Work with property owner to close driveways along Mountain Industrial Blvd. and E. Ponce de Leon Ave. that are closest to the intersection.

Further project details can be found in Section 9.

- **Estimated PE Cost:** \$157,200
- **Federal Share:** \$0
- **Local Share:** \$157,200 (80% from City of Tucker, 20% from TSCID)

8.4.5 Mountain Industrial Boulevard Median Enhancements - PRELIMINARY ENGINEERING

This project includes the preliminary engineering for the long-term project along Mountain Industrial Boulevard from just south of Presidents Way to the Gwinnett County line. The project is Phase 2 of a median project which includes:

- Install 1000 ft. of median in the center of Mountain Industrial Boulevard from south of Presidents Way to the Gwinnett County Line.

Phase 1, which is already funded, includes installation of median from approximately 400 feet north of Presidents Way to approximately 200 feet south of the Gwinnett County line. Further project details can be found in Section 9.

- **Estimated PE Cost:** \$108,000
- **Federal Share:** \$0
- **Local Share:** \$108,000 (80% from City of Tucker, 20% from TSCID)

8.4.6 Mountain Industrial Boulevard Speed Advisory Study

In accordance with guidance from MUTCD Section 2C.08, this project will conduct an engineering study to determine the advisory speed for horizontal curve along Mountain Industrial Boulevard adjacent to Tuckerstone Parkway, and install advisory speed plaques along the northbound and southbound approaches just south of just north of the curve, respectively. This project will also examine the need for digital speed warning signage along the northbound and southbound approaches.

- **Estimated Study Cost:** \$20,000
- **Federal Share:** \$0
- **Local Share:** \$20,000 (80% from City of Tucker, 20% from TSCID)

8.4.7 Scoping Study for Reconfiguration of Tuckerstone Parkway at Mountain Industrial Boulevard

This project includes conducting a scoping study to determine the feasibility of reconfiguration of the Tuckerstone Parkway at Mountain Industrial Boulevard, including the potential conversion to a roundabout.

- **Estimated Scoping Study Cost:** \$200,000
- **Federal Share:** \$0
- **Local Share:** \$200,000 (80% from City of Tucker, 20% from TSCID)

8.5 Truck Parking Opportunities

One of the consistent issues voiced by TSCID staff, ARC, and respondents during the outreach efforts was a clear need to identify opportunities for additional truck parking and staging to help curb

unauthorized truck parking and idling. To address this concern, the following policy recommendations should be considered:

- The TSCID should identify potential parcels with 5-20 acres of available space, already identified for development activities, and adjacent to Mountain Industrial Boulevard to be considered for truck parking and staging purposes.
- The TSCID should continue coordination with business owners and the public regarding truck parking and staging needs and issues.
- The TSCID should continue to monitor innovative best practices to attract private-sector interests interested in providing truck parking and staging within the district.
- The TSCID and City of Tucker should assess opportunities to construct additional lanes on City right-of-way for on-street truck staging. Coordination with the City will be necessary and to make code revisions to allow for parking within City right-of-way. These enhancements should include needed pavement markings and signage that clearly identify these areas to address safety concerns.

In addition to the policy recommendations above, a cursory analysis was conducted as part of this plan to identify potential locations that could accommodate a moderate number of trucks, while not using valuable land that could be better used as industrial or commercial land uses. The following criteria were used to identify the potential locations:

- Identify parcels within the TSCID with 5-20 acres.
- Eliminate parcels already identified for development activities.
- Identify parcels adjacent or accessible to Mountain Industrial Boulevard.
- Per TSCID's input, eliminate sites with an assessed value greater than \$150,000/acre.
- Per TSCID's input, two additional sites were identified as good candidates for truck parking.

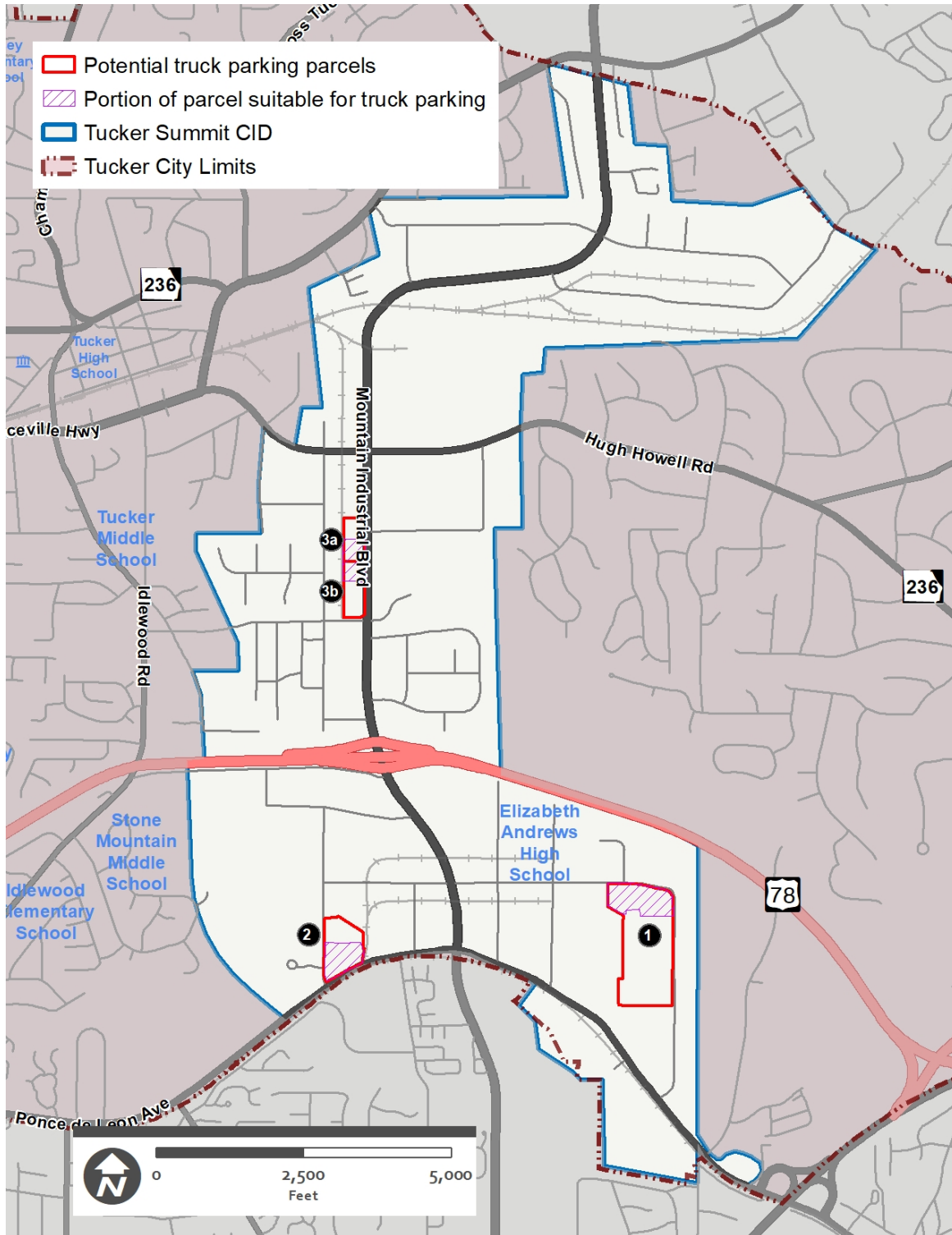
As shown in Table 15 and Figure 26, based on the DeKalb County Assessor website and client input, there were 3 parcels which met these criteria. The rank column in the table provides a preliminary rank of parcels that may be suitable based on current land use, assessed property value, and a cursory review of satellite imagery.

Parcels 3a & 3b are two adjacent parcels. Each has a sizeable parking area which when combined is larger than 5 acres. Held by a single owner, there is potential to merge the adjacent parking areas to form a larger truck parking area along Mountain Industrial Boulevard. A proportional value for the land only was applied to this merged parcel, and it is under \$61,000 per acre.

Table 15: Potential Truck Parking and Staging Development Locations

ID	Parcel ID	Parcel Address	Acres	Current Land Use	Assessed Value*	Building Value*	Land Value*	Visual Image Assessment	Observations	Rank
1	18 138 02 026	1644 Rock Mountain Boulevard, Stone Mountain, GA 30083	12.2 (of the 39-acre site)	398-Warehouse (bulk)	\$21,364,500	\$13,981,385	\$7,383,115	Vegetated area of the larger Pepsi Bottling Plant site	Has direct access to MIB, part of larger parcel	2
2	18 139 05 002	1555 Roadhaven Drive, Stone Mountain, GA 30083	7.8 (of the 13.5-acre site)	398-Warehouse (bulk)	\$6,849,400	\$3,286,100	\$3,563,300	Parking area, asphalt lot of Topcu Tile site	On Ponce de Leon – easy access to MIB, part of a larger parcel	1
3a	18 215 04 010	2050 5 Mountain Industrial Blvd	2.3 (of the 6.4-acre site)	398-Warehouse (bulk)	\$4,134,848	\$2,599,808	\$1,535,040	Portions of two adjacent parcels with a single owner, currently being used for parking/storing building materials	On MIB, can add to congestion but potential to reduce truck miles travelled in CID. Aggregating parcel might pose a challenge	3
3b	18 184 02 004	2008 Mountain Industrial Blvd	3.2 (of the 7.6-acre site)	398-Warehouse (bulk)	\$3,018,500	\$2,350,593	\$667,908			
*Based on DeKalb County's 2020 assessment values										
** All potential sites have portions of the parcel that are suitable for parking. The rest of the site is occupied by active industrial businesses.										

Figure 26: Potential Truck Parking and Staging Development Sites



While it is generally recognized that the TSCID and City would prefer a vibrant industrial use for the parcels noted in Figure 26, the presence of a truck parking/staging facility within the TSCID could certainly render the area more attractive for potential new clients as well as its current businesses. It should also be noted that the two parcels identified for potential parking areas are in the southern portion of the TSCID that experiences the most problems with illegal truck parking and staging. As truck parking and staging continues to be a nationwide crisis, it is a reasonable assumption that the free market will eventually develop solutions to fill this need. As such, the TSCID should continue to monitor innovative best practices to attract private-sector interests interested in providing truck parking and staging within the district.

8.6 Other Short-Term Strategies

8.6.1 Resurfacing

No specific resurfacing projects are currently recommended through the FCP. The City of Tucker is expected to update its pavement analysis in 2021. In addition to the updated pavement analysis, the following roadways are currently scheduled to be resurfaced from 2021-2023:

- Flintstone Drive
- Litton Drive
- Richardson Street
- Bibb Boulevard
- N Bibb Drive
- S Bibb Drive
- Clark Drive
- Commerce Place
- Florence Street
- Herbert Drive
- Hirsch Drive
- Kilman Drive
- Little Miller Grove Road
- McCurdy Drive
- Peters Road
- Pine Drive
- Presidents Way
- Roger Marten Way
- Rosser Terrace
- N Royal Atlanta Drive
- N Royal Place
- Wynyly Way
- Wynbury Court

At this time, TSCID should coordinate with the City to identify other priorities for resurfacing within the district. The overall need for resurfacing throughout the district was one of the most received complaints from stakeholders throughout the outreach process.

8.6.2 Transit and Workforce Access Strategies

Another finding during the preliminary stages of developing this plan was the need for better access for workers in the TSCID to get to work. Given its location on the outer limits of the MARTA service area, bus route coverage within the TSCID (prior to the COVID-19 pandemic) served most of the employment in the area. As shown in Figure 27, the only gap in bus service serving employment areas within the district was along Lewis Road near the southeast corner of the TSCID. Other activities related to transit recommended for TSCID staff include:

- Actively work with ATL and/or Gwinnett County to provide better connectivity of transit services between the TSCID and Gwinnett County. The worn foot paths along Mountain Industrial Boulevard from Lawrenceville Highway to North Royal Atlanta Drive provide clear evidence for this need.
- Continue coordination with the ATL to monitor and promote premium transit along the US 78 corridor. In the interim, the TSCID should work to preserve a potential station area in the vicinity of the US 78/Mountain Industrial Boulevard interchange.
- Work with the City of Tucker to coordinate with MARTA for more bus shelters and amenities.
- Coordinate with MARTA and GA Commute Options for opportunities to provide employers in the TSCID reduced rates/passes for their workers.
- Increase awareness of Georgia Commute Options for the TSCID workforce residing in the Atlanta metro area by TSCID staff promoting its services to CID employers.

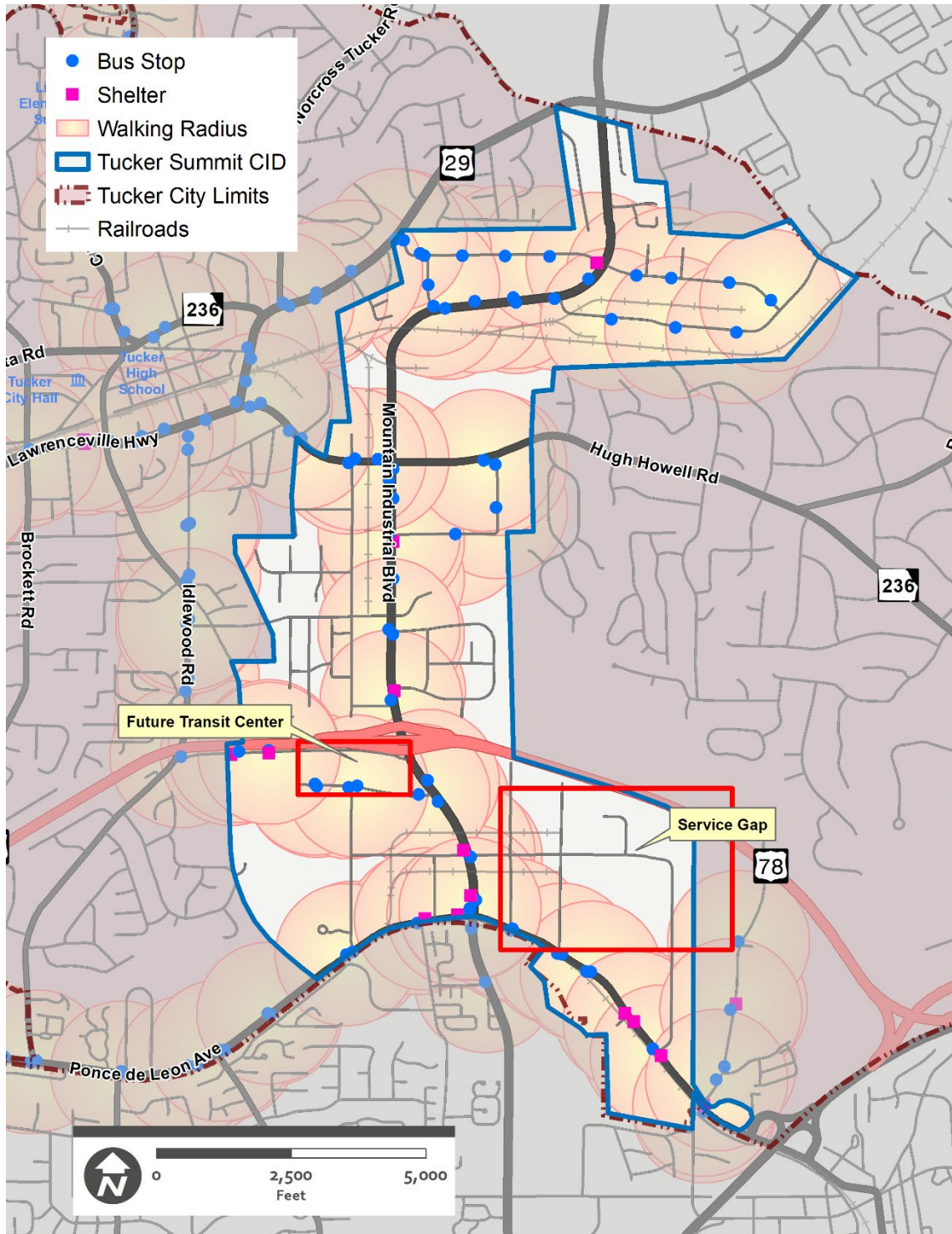
8.6.3 Technology Strategies

The TSCID FCP also reviewed the district for potential upgrades to up and coming transportation technologies. While the TSCID cannot implement these strategies on its own it should partner with local, regional, and state agencies to coordinate these efforts. The following short-term policies are recommended to address potential upgrades to signals within the TSCID:

- Coordinate with GDOT to add three signalized intersections along Mountain Industrial Boulevard to the Regional Traffic Operations Program (RTOP): Hugh Howell Road (SR 236), S. Royal Atlanta Drive, and N. Royal Atlanta Drive.
- Work with DeKalb County, GDOT, and ARC to deploy connected vehicle (CV) technologies at signalized intersections along Mountain Industrial Boulevard from E. Ponce de Leon Avenue to N. Royal Atlanta Drive as part of the regional connected vehicle program. These upgrades will include the deployment of dedicated short-range communication (DSRC) and cellular vehicle-to-

everything (C-V2X) communication and allow for potential future connected vehicle applications such as freight signal priority.

Figure 27: Potential Transit Center and Bus Service Gap



8.6.4 Other Interagency Coordination

For this plan to be an effective instrument in the development of a vibrant and mobile TSCID, it is recognized that the City of Tucker is an invaluable partner to the TSCID. Because of that partnership, this plan also recommends the following interagency coordination policy:

- The TSCID should coordinate with the City of Tucker for a resolution to adopt the TSCID FCP as a policy document for future investment.
- The TSCID should work with the City of Tucker and GDOT to monitor and support the eventual upgrade to the I-285 interchange at US 78 to preserve the economic viability of the district.
- As new development/redevelopment occurs, the TSCID should continue to coordinate with the City to ensure that the City's access management design standards are kept to mitigate driveway relocations associated with future projects.

9 Fiscally Unconstrained Projects and Strategies

This chapter outlines proposed fiscally unconstrained long-term projects and strategies identified during the development of the FCP. The long-term improvements represent a collection of projects that are not feasible over the next five years. This is due to overall monetary costs and other coordination requirements.

When defining the overall function and developing long-term recommendations for Mountain Industrial Boulevard, considerations include: 1) its role as part of a freight corridor with Jimmy Carter Boulevard connecting US 78 and I-85 parallel to I-285; and/or 2) its role as a regional corridor along with Jimmy Carter Boulevard and Hairston Road connecting I-20 and I-85 parallel to I-285. This connectivity is why Mountain Industrial Boulevard is included in the NHS as a MAP-21 Principal Arterial. No other corridor in the Atlanta region provides the overall system resiliency to the “East Wall” of I-285. Therefore, any significant investments along Mountain Industrial Boulevard need to be coordinated with at least one of these overall corridor visions in mind.

In recognition of this overall need, the TSCID in partnership with the City of Tucker, Gwinnett County, Gateway 85, and the Lilburn CID has recently initiated the Incredible Corridor Study. This study will perform a collective analysis of Mountain Industrial Boulevard and Jimmy Carter Boulevard in Gwinnett County as one corridor. It represents a collective strategy between jurisdictions to identify a unified approach to best utilize the connection between US 78 and I-85.

9.1 Roadway Projects

The long-term roadway improvements can be bracketed in four groups:

- 1) Operational improvements not considered as cost-feasible in the short-term fiscally constrained project list but could certainly be implemented in a 5-10-year timeframe - the E. Ponce de Leon Avenue and Mountain Industrial Boulevard intersection improvements and the completion of the median near the Gwinnett County line.
- 2) The two roundabout projects designed to preserve freight mobility by reducing signalization phasing demands at key intersections while still providing access to properties along northern portions of Mountain Industrial Boulevard with a closed median.
- 3) Two different capacity alternatives for Mountain Industrial Boulevard that require more assessment from a corridor-wide perspective.
- 4) Two scoping studies and an Interchange Modification Report that will provide clarification on development of some of the other long-term recommendations.

All these projects will need to be considered as part of an overall corridor strategy within the Incredible Corridor Study. The sections that follow provide detailed descriptions of proposed long-term vision projects and policy strategies identified through the planning process.

Table 16 and Figure 28 shows the long-term roadway projects recommended for further consideration as part of this Plan. This table has been abbreviated for legibility in this report. The full table can be found in Appendix D of this report. The table is followed by a figure showing an overview of the project locations.

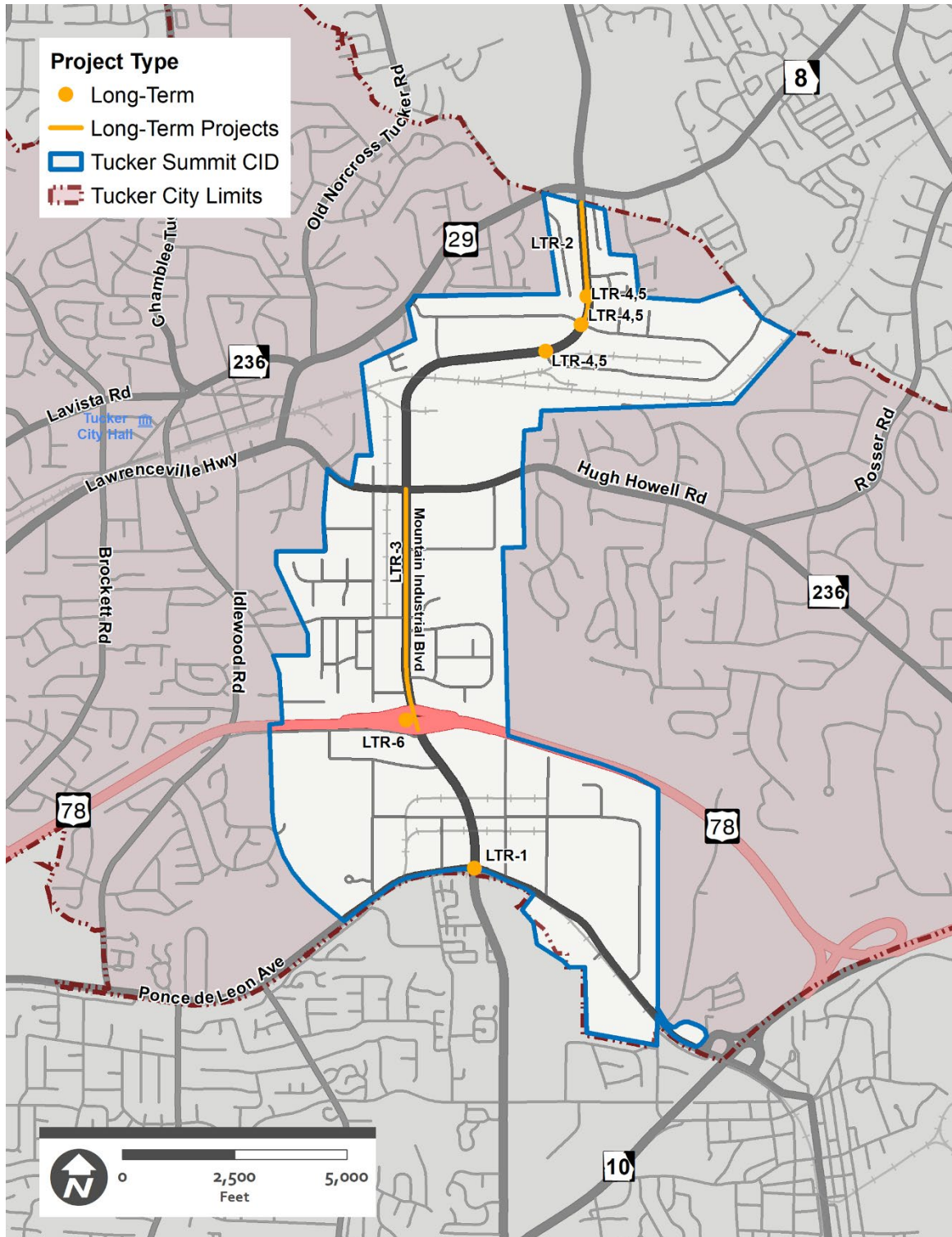
Table 16: Long-Term Vision Roadway Projects

Project ID	Project Name	Sponsoring Agencies	From	To	Estimated Total Project Cost*
LTR-1	Mountain Industrial and E. Ponce DeLeon Avenue Intersection Improvements	City of Tucker	NA	NA	\$1,310,000
LTR-2	Mountain Industrial Boulevard Median Enhancements	City of Tucker	S. of Presidents Way	Gwinnett County Line	\$900,000
LTR-3	City of Tucker - Mountain Industrial Blvd Widening (6 Lanes, Hugh Howell to US 78) - Including Widening of Bridge	City of Tucker	Hugh Howell Road	US 78	\$21,700,000
LTR-4	Scoping Study for Mountain Industrial Boulevard Roundabouts between Tuckerstone Boulevard & N Royal Atlanta Drive	City of Tucker	S Royal Atlanta Drive	North of N Royal Atlanta Drive	\$300,000
LTR-5	Roundabout at Mountain Industrial Blvd/S Royal Atlanta Dr, Teardrop Roundabout north of Mountain Industrial Blvd/N Royal Atlanta Dr.	City of Tucker	S Royal Atlanta Drive	North of N Royal Atlanta Drive	\$11,700,000
LTR-6	IMR - US 78 at Mountain Industrial Boulevard Interchange	City of Tucker	N/A	N/A	\$300,000

Table 17: Long-Term Policy Recommendations

Project ID	Recommendation Type	Project Description	Implementing Agencies	Timeframe (Initiation)
P-12	Truck Parking	The shortage of truck parking is a serious regional issue. As new technologies continue to evolve, the TSCID should continually promote and encourage the use of the latest truck parking technologies to its membership. This not only includes awareness, but also investigating new infrastructure that can support these technologies.	TSCID, GDOT	Long-Term

Figure 28: Long-Term Fiscally Unconstrained Projects Overview



9.1.1 Mountain Industrial Boulevard at E. Ponce de Leon Avenue Intersection Improvements

The proposed improvements at Mountain Industrial Boulevard and E Ponce de Leon Avenue consist of the following:

- Install median nose delineators at the median along the south leg of the intersection (N. Hairston Rd.)
- Reconstruct the southeast and northeast quadrant of the intersection to widen the curb radius in order to accommodate wider right-turn movements by trucks.
- Close one of the two (the one closest to the intersection) Texaco driveways along each Mountain Industrial Blvd. and E. Ponce de Leon Ave. at the northeast corner of the intersection.
- **Estimated Cost:** \$1,310,000

9.1.2 Phase 2 of Mountain Industrial Boulevard Median Safety Project

The proposed improvements for this project include:

- Install 1000 feet of median along Mountain Industrial Boulevard from just south of Presidents Way to the Gwinnett County Line.

Phase one of this project is currently underway. This project was identified by TSCID staff as a high priority project that would improve safety in the corridor. Phase I will be under construction by TSCID in early 2021.

- **Estimated Cost:** \$900,000

9.1.3 City of Tucker - Mountain Industrial Boulevard Widening (6 Lanes, Hugh Howell to US 78)

The City of Tucker adopted this project through its STMP. To provide better mobility with this scenario, it is recommended that back-to-back teardrop roundabouts be strategically installed so that the center median can be converted to a raised/planted median, and trucks can still make an easy U-turn. This concept would provide a fully controlled median, create a safer corridor, and provide better mobility. This improvement would also require the bridge along Mountain Industrial Boulevard over US 78 to be reconstructed to accommodate 6 lanes of traffic and sidewalks.

- **Estimated Cost:** \$21,700,000

9.1.4 Scoping Study for Mountain Industrial Boulevard Roundabouts between Tuckerstone Boulevard and N. Royal Atlanta Drive

In section 9.1.5, recommends the development of a roundabout at S. Royal Atlanta Drive, a teardrop roundabout just north of N. Royal Atlanta Drive, and intersection modifications at N. Royal Atlanta Drive.

This project is to conduct a scoping study to determine the feasibility of implementing a roundabout at Mountain Industrial Boulevard at S. Royal Atlanta Drive, the median U-turns (teardrop configuration) just north of Mountain Industrial Boulevard at N. Royal Atlanta Drive, and the reconfiguration of Mountain Industrial Boulevard and N. Royal Atlanta Drive.

- **Estimated Study Cost:** \$300,000

9.1.5 Roundabout at Mountain Industrial Boulevard/S. Royal Atlanta Drive, Teardrop Roundabout north of Mountain Industrial Boulevard/N. Royal Atlanta Drive

This project would construct a roundabout at Mountain Industrial Boulevard and S. Royal Atlanta Drive. It would also construct a teardrop roundabout just north of Mountain Industrial Boulevard and N. Royal Atlanta Drive. Finally, it would reconfigure the Mountain Industrial Boulevard and N. Royal Atlanta Drive intersection to remove westbound to southbound left turn lanes and redirect left turns north to the teardrop roundabout. This configuration would relieve westbound backups on N. Royal Atlanta Drive by allowing southbound traffic to turn right on Mountain Industrial Boulevard. Vehicles could also safely make a U-turn to the southbound direction at the teardrop roundabout. Alternatively, westbound traffic could continue and turn left at Tuckerstone Parkway and make a right onto Mountain Industrial Boulevard to continue southbound.

- **Estimated Cost:** \$11,700,000

Figure 29 shows a potential layout for this concept.

Figure 29: Mountain Industrial Boulevard and N. Royal Atlanta Drive/S. Royal Atlanta Drive Improvements



9.1.6 Interchange Modification Report - US 78 at Mountain Industrial Boulevard Interchange

In coordination with GDOT and the City of Tucker, this project includes the development and completion of an interchange modification report (IMR). This report would identify a preferred interchange design alternative, including potential construction schedule and costs, for Mountain Industrial Boulevard at US 78 and seek FHWA approval for modification of the interchange. This interchange is a vital component

of mobility and system resiliency. Developing this interchange and determining an optimal mobility strategy will enhance and provide a myriad of benefits to the region.

- **Estimated Cost:** \$300,000

9.2 Truck Parking

The shortage of truck parking is a serious regional issue. As new technologies continue to evolve, the TSCID should continually promote and encourage the use of the latest truck parking technologies to its membership. This not only includes awareness, but also investigating new infrastructure that can support these technologies.

9.3 Funding Possibilities

Based on the review of potential grant programs provided in Chapter 7, the following guidance is recommended with respect to seeking alternative sources outside of funding from local sources, ARC, and GDOT:

- Given that the Mountain Industrial/Jimmy Carter Boulevard corridor is on the NHS, BUILD, INFRA, and funds are technically in play for potential sources. However, given their respective funding ranges and eligibility, a BUILD grant application would be more in line given the respective eligible project cost thresholds of \$5 million to \$25 million.
- It should be noted that BUILD applications for urban projects are much more competitive given FHWA commitment to use 50 percent of funding for rural projects.
- Regarding the actual prime grant applicant, the TSCID is not an eligible applicant. The City of Tucker, DeKalb County, GDOT, and ARC are all potential eligible applicant candidates. FHWA does look favorably upon applications with multiple sponsors. Therefore, involving more of the affected agencies supporting the application (GDOT, ARC, Counties, Cities, and CIDs) in the process would be beneficial.
- Project readiness is a key consideration for all grant applications. Completing project development tasks, such as environmental clearance, prior to a BUILD application process will increase TSCID's chances for approval.
- The minimum local match requirement is 20 percent for BUILD, having more local match increases an application's chances tremendously. Additional GTIB funds and/or GDOT HB 170 funds could be a differentiator for success considering they could be used as a local match.
- HB 170 funds from GDOT recently provided funding for projects across Georgia. If another house bill were passed, it could also provide potential funding for TSCID projects, particularly those on state routes.

As noted previously in this plan, developing corridor strategies for both Jimmy Carter Boulevard and Mountain Industrial Boulevard as one corridor is the first step for identifying overarching needs on both sides of the Gwinnett and DeKalb County lines. In addition to the specific projects identified within this

study, the Incredible Corridor Study can identify a defined action plan that would resolve intergovernmental issues and create a coordinated corridor approach from US 78 to I-85.

9.4 Economic Development Strategies

9.4.1 Support Affordable Housing

Although it is not a desire to promote non-industrial uses within the TSCID, the City of Tucker and DeKalb County should support programs and incentives to provide workforce and affordable housing in the vicinity of employment centers such as TSCID. In its Tucker Tomorrow comprehensive plan, the City of Tucker encourages the development of affordable housing that is integrated into new development (live-work spaces), as opposed to being located separately. The same plan also encourages redevelopment of existing residential structures where possible, to be used as affordable housing.

Taken together these indicate a preference by the community to locate affordable and workforce housing within commercial nodes, in areas that have robust access to transit and pedestrian transportation options. It is important that any such development not interfere with the operation of TSCID as a freight cluster, and that the separation of land uses between industrial and residential be kept intact. This is particularly relevant given recently approved housing developments along Fuller Way located next to existing industrial development.

9.4.2 Foster Relationships Between Education, Industry, Government, and Individuals

The Tucker Summit Community Improvement District should continue to serve as a vehicle to distribute and provide information regarding both job training and educational opportunities as well as open job positions. Considering its unique position within the economic and governmental environment in DeKalb County, TSCID is well placed to act as a point of communication between those in search of employment or education opportunities and those providing such things.

The Board members of the CID represent various private organizations that employ hundreds of workers within the immediate CID boundaries. Robust communication between CID staff and human resource professionals working with companies in the CID would allow TSCID to advertise career opportunities and broaden the reach of companies conducting recruitment in the area.

Similarly, TSCID can act as a conduit for information about any job training and education programs the City of Tucker and DeKalb County may offer. Just as the CID would maintain links to information about these job opportunities on its website, it could do the same for training programs. Conversely, TSCID would also help connect interested individuals working with companies in the CID to the continuing education resources made available by the city and the County.

Meanwhile, the Georgia Piedmont Technical College is a valuable potential partner in providing applicants to fill job opportunities. TSCID could partner with the college on placement for internship positions at companies within the CID. Additionally, the CID could provide contact information of hiring

managers recruiting for companies in the area to new graduates of the college in relevant programs. A relationship between the college and the CID could even extend to the latter providing funding for scholarship opportunities.

TSCID could even serve as a partner to the college in developing a curriculum relevant to the future needs of the freight industry. As companies in the CID begin to see new trends in technology and business practices unfolding, it would benefit them to partner with Georgia Piedmont Technical College to ensure that the skills being taught to students represent the state of the practice.

Another resource for cultivating a workforce for the TSCID is coordinating with WorkSource DeKalb. WorkSource DeKalb is funded through the US Department of Labor's Workforce Innovation and Opportunity Act (WIOA). The purpose of the program is to help job seekers access employment, education, training, and support services to succeed in the labor market. The program is designed to serve dislocated workers, adults, and youth who are in need of training to enter or re-enter the labor market. Moving forward, the TSCID should continue to coordinate with DeKalb County to ensure full utilization of the program.

Appendix A

TSCID FCP

Steering Committee Minutes



**Freight Cluster Plan
Steering Committee Meeting #1
Meeting Notes**

TSCID and Consultant Attendees

Emory Morsberger, TSCID	Larry Kaiser, Co-Infra Services	Felecia Basolo, Atlas
Wade Carroll, Metro Analytics	Jonathan Gelber, BAG	Stan Reecy, BAG
Megha Young, Gresham Smith	Inga Kennedy, PEQ	

Steering Committee Attendees

Daniel Studdard, ARC	Gary Stephens, Roadmaster	Victoria King, UPS
Sarah Lamothe, GDOT	Vince Edwards, Gwinnett Co.	Ken Hildebrandt, City of Tucker
Ted Rhinehart, DeKalb County	Wes Phillips, Ram Tool	Steven Towe, Ram Tool
Skip Vaughan, Pepsico	Ed Weeks, Roadmaster	Kathy Zahul, GDOT
Mark Ward, Roadmaster	Joseph Mazzeo, Macy's	Ted Hicks, GDOT
Russell Orr, Flowers Foods	Ariel Toledo, DeKalb Co. Police	Cedric Hudson, DeKalb County
Ben Harris, MACOC (by phone)		

Introductions

Emory Morsberger, Executive Director of the Tucker Summit Community Improvements District (TSCID), welcomed attendees and made introductions of each Steering Committee member present. Emory also acknowledged important partnerships with the Lilburn CID and Gwinnett County. Larry Kaiser, with Collaborative Infrastructure Services, also acknowledged project coordination with the Gwinnett County Transportation Department.

Plan Overview

Wade Carroll, Project Manager with Metro Analytics presented an overview of the study purpose. He highlighted the major study tasks and existing activities. Wade also discussed the study schedule and major milestones.

Cargo Oriented Development

Wade explained a specific task that is included in the study focused on development opportunities around cargo activities. The Cargo Oriented Development (COD) task will focus on integrating freight system efficiency with manufacturing and logistics business development. Strategies will be identified that can benefit local economies.

Stakeholder Input Session

Following the presentation of the study, Wade opened the meeting for a brief question and answer segment. The following provides an overview of the discussion.

- Does ARC have origin and destination (O/D) data? Daniel Studdard mentioned that ARC does not have data other than demand models. He mentioned the Aerotropolis purchased Streetlight data to support their freight cluster and emphasized there is a cost.
- Emory confirmed the study's purpose is to identify projects that will result in implementation. Larry acknowledged that the CID started several years ago planning for these freight traffic issues and improvements are being made.
- A comment was made that the TSCID Freight Cluster Plan should fit in a statewide plan since freight management is an issue around the state. Wade summarized the Statewide Freight Study recently completed by GDOT. He also indicated that corridors like Mountain Industrial Blvd. that are not state roadways are generally not included in state planning efforts. He also suggested that the Statewide Plan is a policy document but does not drill down to the local level corridors that are impacted by freight traffic. Wade further shared that the Atlanta Regional Commission's Regional Freight Plan is more applicable and allows grantees to focus on specific improvements to local roads and streets in the TSCID jurisdictions. The State is also considering a freight logistics bill that will provide a mechanism for funding future freight projects.
- Daniel provided an overview of the Atlanta Regional Commission and how the agency assists local governments with transportation planning including the Regional Freight Plan. He indicated the Regional Plan highlights the need for more local planning such as the TSCID Freight Study.
- Wade told the group there is a need for more short-term projects rather than the long-range planning projects.
- Question was asked about the implementation timeline and Wade responded that some projects would have a short-term horizon (10 years) and some will have a long-term implementation timeline of up to 20 years.
- Emory noted the importance of the need for immediate improvements and pulled up a Google map to point out the location of the new Amazon location at the Gwinnett/DeKalb County border.

Following the question and answer segment, Wade asked each attendee what they hope to accomplish during this study and the following responses were provided:

- Ram Tool has numerous trucks that travel in and out of the area. There is a need for a median at railroad for safety.
- There is a need for better traffic flow along US 78 with improved signals and wider ramp access to accommodate trucks.
- The I-285/US 78 interchange should be a priority. The location presents a real challenge. More than 50% of trucks accessing Mountain Industrial use this interchange.
- Are there plans to use Killian Hill Road more? Amazon is going to use this route.
- What is required to update the design at the I-285/US 78 interchange?

- What was the impetus for selecting the TSCID area for study? The location is far from interstate access. Emory mentioned the historic use of the area which was a railroad site back in the 60s and primarily farmland. The area emerged as an industrial land use accommodating 40-foot trailers instead of the current longer units now in use.
- Ensure long term coordination between the TSCID, the City of Tucker and DeKalb County to maximize funding of several studies and take a comprehensive look at the studies to avoid overlap. Officials also need to coordinate with the GDOT board to bring awareness and garner support. These study results can be synergistic if the comprehensive framework can be kept in mind. The 2030 horizon is important, and various plans and evolving technologies should be included.
- The GDOT would like to hear from stakeholders about traffic patterns. Are there residential districts affected? Outside the TSCID boundaries, are there desirable routes for trucks such as SR 236? Every few months, Hugh Howell is identified to be removed from the state's list of roadways. To date, it has not been an issue.
- Would like to see a list of smaller projects that would help feed into DeKalb County's land use and transportation planning efforts.
- Gwinnett County will pass a transportation plan with a BRT (Bus Rapid Transit) – would like to see a BRT station at Mountain Industrial Boulevard and US 78.
- Jimmy Carter Blvd is being studied to increase the flow from Mountain Industrial Boulevard to US 78.
- Congress is trying to pass a transportation funding bill that will hopefully lead to funding the types of projects needed in the TSCID study area.
- Would like to see specific quantitative analysis for now and the future including economic development potential. Would also like to see current capacity and projected needs. From a local standpoint, Pepsi has 100 employees travelling in and out of the area and the I-285/US 78 interchange exacerbates the traffic challenges. For truck drivers, 40% go north with no problems. The remaining 60% experience traffic challenges getting back to the facility in the afternoon. No problem in the morning but the afternoon is challenging. Do think Amazon will be a big deal and should know what the traffic implications need to be assessed with short term recommendations for improvement. What can GDOT do? The goal is to provide managed lanes which are being planned in other areas that affect the TSCID (Interstate 20). Current Federal transportation funding is focused on autonomous vehicles and safety.
- Amazon went through a DRI (Development of Regional Impacts) process through ARC that includes traffic projections. Not certain if Amazon is following anything from the studies. All the DRI reports are available on ARC's web site. There are Infra grants available through local governments to further assist with transportation issues and may be open for application at this time.
- Amazon is a big customer of UPS. Getting up to the facility from I-285 via 85 is not an option. There is access to Mountain Industrial Blvd. and may get through to Pleasantdale Road. More common carriers will be providing service to Amazon and by October, traffic will be a challenge.
- Hope the study identifies truck parking needs which is very limited in the area.
- Macy's is on Star Parkway and access is difficult. The street was previously a two-way and is now one-way which requires trucks to make turnarounds. The study needs to address this

situation. Also, school traffic operates during the day which can also create conflicts. The Greer Street intersection expansion should help. Underpriced Furniture is also coming to the area.

- The intersection of Mountain Industrial and Hugh Howell needs to be addressed. A Corridor Study with Gwinnett County along Hwy 140 to Jimmy Carter to Mountain Industrial Blvd is being conducted as is a consideration for a potential extension of Hwy.140.
- In addition to planning for vehicular traffic, the area will have to deal with pedestrians and improvements for transit.
- Unify plans and conduct coordination with all areas. Bermuda Street and Rockbridge Road are cut through streets and experience more congestion that affect residential areas.
- The law enforcement community did not know Amazon was coming. The additional traffic will add to response time in the afternoons. Deploying resources with all the added traffic and accidents will need to be addressed.

Jonathan Gelber posed a question to attendees about the challenges of attracting a work force to the available jobs and the following responses were provided:

- UPS – There are many challenges with labor force issues due to traffic. Entry level employees often rely on transit which can take two hours one way to get to their site. Many jobs are considered good (\$20 per hour), but a four-hour commute can be a hindrance.

Jonathan also asked if there were in any other industry types any of the companies were considering but there were no responses.

Next Steps

Wade indicated that the next meeting will be scheduled in April. Prior to then, stakeholder interviews and surveys of truck drivers and employees will be conducted. The meeting was adjourned.



Meeting Summary
Tucker Summit CID Freight Cluster Plan
Steering Committee Meeting #2
April 8, 2020 – 1:30 PM Via Zoom™

Summary Date: May 26, 2020

Participants: **Program Management Team**

- Wade Carroll, Metro Analytics
- Felecia Basolo, Atlas
- Todd Long, Atlas
- Larry Kaiser, Collaborative Infrastructure
- Stan Reecy, Bleakly Advisory
- Jonathan Gelber, Bleakly Advisory
- Megha Young, Gresham Smith
- Andrew Smith, Gresham Smith
- Preeti Shankar, CNT
- Inga Kennedy, Planners for Environmental Quality (PEQ)
- Marla Hill, Planners for Environmental Quality (PEQ)

Atlanta Regional Commission

- Daniel Studdard

TSCID

- Emory Morsberger

Steering Committee Members

- Skip Vaughan, Pepsico
- Victoria King, UPS
- Joseph Mazzeo, Macy's
- Steve Towe, Ram Tool
- Ken Hildebrandt, City of Tucker
- John McHenry, City of Tucker

- Daniel Piotrowski, Gwinnett County
- Ted Rhinehart, DeKalb County
- Patrece Keeter, DeKalb County
- Sylvia Smith, DeKalb County
- Cedric Hudson, DeKalb County
- Tom McQueen, GDOT
- Daniel Dolder, GDOT

Overview and Summary

1. The second meeting of the Tucker Summit CID Freight Cluster Plan Steering Committee (SC) was held April 8, 2020 at 1:30 PM. The meeting was conducted via Zoom™ due to COVID-19 concerns.
2. Inga Kennedy and Wade Carroll opened the meeting with introductions and an overview of the meeting agenda. (Attached)
3. Wade Carroll updated SC members on the status of key project deliverables, including the Public Outreach, Best Practices and Inventory and Assessment Reports. The project remains on schedule for an October 2020 completion.
4. Inga Kennedy gave an update on stakeholder activities, including preliminary results from an online public survey and interviews with key stakeholders. She asked for recommendations from the SC members on a strategy for interviewing truck drivers. Victoria King of UPS recommended that the team reach out to SC member Ed Crowell, president of the Georgia Motor Trucking Association.
5. Wade Carroll gave an update on the Inventory and Assessment Report, which includes the Transportation, Land Use and Market Analyses. The Inventory and Assessment Report will be completed and submitted for project team review in May 2020. Wade Carroll recapped the findings from the Transportation Analysis, which included a traffic analysis and review of travel characteristics throughout the project area for the primary modes of transportation – cars, trucks, transit, bicycle and pedestrian. The traffic analysis included existing and projected traffic volume and congestion; identifying levels of safety, crash analyses for vehicle, bike and pedestrian traffic; truck travel characteristics; transit ridership.
6. Stan Reecy and Preeti Shankar gave some highlights and recapped the major findings from the Land Use and Market Analyses, including a study of existing and future land use in the corridor, identifying development patterns and opportunities for redevelopment, and looking at employment trends and projections.

7. Inga conducted a Mentimeter live survey with SC members, the results of which are attached to this summary. Results of the online surveys, interviews and Steering Committee input will be part of the Needs Assessment in the overall plan submittal. The following questions were posed to the SC Members:
- a. What are the causes of congestion/safety issues related to truck traffic?
 - b. What are the problem intersections? Why?
 - c. Are there problem driveways and issues with ingress/egress?
 - d. What type of improvements should we be considering? Where?
 - e. What strategies do you recommend to increase parking? Any specific locations within the corridor that are most appropriate?
 - f. What is the overall development vision for the TSCID?
 - g. What type of industries would be most appropriate in the TSCID?
 - h. What are the barriers to redevelopment of older industrial properties?
 - i. Is there market pressure in preserving industrial uses?
 - j. Where are mixed uses (commercial and industrial) more appropriate in the TSCID?
 - k. With increasing traffic congestion and need to access dense populations very quickly, the pendulum may be swinging back towards smaller, nimbler spaces. In your opinion, will there be potential demand for new smaller flex and warehouse spaces, and could such buildings be appropriate for TSCID?

Wade Carroll presented next steps in the project, including the Report on the Traffic Study, Review of Potential Improvements (from the Inventory and Assessment, Traffic Studies), and another Input Opportunity with the Steering Committee to discuss Potential Improvements.

The meeting concluded. The next meeting will be scheduled and announced at a future date.



Menti Survey Results

Steering Committee 2 – April 8, 2020

Question 1: What are the causes of congestion/safety issues related to truck traffic?

- Improper signal phasing
- Lack of alternate routes
- Volume
- Too many cars.
- Traffic spikes, someone distracted
- Mix of lots of trucks and lots of cars on the same facilities.
- Traffic spikes
- Need more flexed schedules for report times to work
- Lack of alternate routes
- Cars and Trucks mixed in traffic
- Limited alternative routes, narrow turning radii, and most signalized intersections have high traffic in all directions at peak hours
- need better signal coordination
- traffic lights working improperly or unsynchronized; roads not set up for truck traffic (not enough turning radius); too much cut through traffic by cars
- problem with left turns out
- Left approaching Lanes are a little confusing turning East in 78 from MIB in afternoon...
- Volume
- Improper signal phasing

- Mountain Industrial and Hwy 78
- Mountain Industrial Blvd at 78
- Hwy 78 and East Park Place
- stone mountain inn near 78
- stone mountain inn near 78

Question 2 - What are the problem intersections? Why?

- JCB @ Singleton
- Mountain Ind'l at Hugh Howell. Two main routes with high volumes.
- MIB and 78
- Mountain Industrial Boulevard & Hugh Howell
- Mountain Industrial Boulevard and 78
- JCB @ US-29
- Mountain Industrial Blvd at 78
- MIB @ Hugh Howell and MIB @ US 78 - need to move forward with short term improvements while analyzing more long-range improvements.
- Lewis and MIB during school year in mornings
- intersections near Pleasantdale facility.
- Hugh Howell at Mountain Industrial and Mountain Industrial at SR 78: congestion in all directions at most times of day
- MIB @ 78. There is all sorts of traffic and congestion.
- Highway 78 and East Park Place
- QT
- Anywhere near 85

Question 3 - Where are problem driveways and issues with ingress/egress?

- Sam's
- Convenience store at MIB and Ponce
- QT

- stone mountain inn near 78
- Need to have access management in general throughout the corridor.
- locations near UPS Pleasantdale facility. UPS will also work with Amazon Warehouse once it is operational and will be interested in ingress/egress between those two locations.
- a median would help along MIB
- One thing to consider is that large radius for trucks means

Question 4 - What type of improvements should we be considering? Where?

- median along entire MIB
- Signal phasing coordination
- roundabouts could help
- diverging diamond interchange at 78?
- One thing to consider is when you increase radius for trucks, you increase the pedestrian crossing lengths and times. Impacts signal timing.
- Adaptive signals along MIB
- truck-only lanes; increased capacity (additional lanes)
- Better sequencing of traffic signals
- Extend Tucker Industrial Rd across US 78 to Greer Circle, possibly with a half diamond interchange
- Access road from Amazon (East Park Place) to I-285
- Need to consider connected vehicle technology along MIB and other major corridors.
- Is there a way or room to build an exit directly to 78 that connects to Dekalb School Board and/or businesses on Lewis Rd to relieve some MIB congestion
- Could the church parking lot at Ethiopian Evangelical be used, if some mutual benefit to the church could be demonstrated?

Question 5 - What strategies do you recommend to increase parking? Any specific locations within the corridor that are most appropriate?

- Shared truck parking.

- Church at SR 78 and MIB (former Dodge/Chrysler operation) might be willing to lease space?
- Identify vacant parcels and/or closed businesses that could potentially be used for truck parking
- Use of a Drop Lots may be an option
- Leasing space out from closed businesses

Question 6 - What is the overall development vision for the TSCID?

- Strategic , can handle incremental traffic, upholds land value
- There are a lot of little lots- I'd like to see these combined to attract a larger facility.

Question 7 - What type of industries would be most appropriate in the TSCID?

- An industry which supplies a lot of the members now
- Technical school
- high tech, medical technologies (capitalizing on GA Tech and University of GA technology)

Question 8 - What are the barriers to redevelopment of older industrial properties?

- Cost
- Cost of remodeling
- \$\$\$, lots of individual property owners.
- funding
- Permit issues - bringing up to code
- Entrance and an Exit perhaps
- County approval process, access to public transportation for workers
- right mix of industrial uses

Question 9 - Is there market pressure in preserving industrial uses?

- large parcels are at a premium
- Lots of people moving out to the area, where are they going to work?

Question 10 - Where are mixed uses (commercial and industrial) more appropriate in the TSCID?

- Along Hugh Howell- to connect to the existing neighborhoods.
- Adjacent, not in, along Lawrenceville Hwy there are significant redevelopment opportunities
- Down from MIB and Hugh Howell

Question 11 - In your opinion, will there be potential demand for new smaller flex and warehouse spaces, and could such buildings be appropriate for TSCID?

- This will add significantly to traffic so must have traffic plan first
- definitely think that will be the future of logistics. Allowing for seasonal needs, growth potential, etc. Provide for dynamic growth.



Meeting Summary
Tucker Summit CID Freight Cluster Plan
Steering Committee Meeting #3
July 1, 2020 – 1:30 PM Via Zoom™

Summary Date: July 15, 2020 Draft

Participants: **Program Management Team**

- Wade Carroll, Metro Analytics
- Michael Brown, Metro Analytics
- Vince Metheny, Metro Analytics
- Felecia Basolo, Atlas
- Todd Long, Atlas
- Larry Kaiser, Collaborative Infrastructure
- Stan Reecy, Bleakly Advisory
- Jonathan Gelber, Bleakly Advisory
- Megha Young, Gresham Smith
- Preeti Shankar, CNT
- Inga Kennedy, Planners for Environmental Quality (PEQ)

Atlanta Regional Commission

- Daniel Studdard

TSCID

- Emory Morsberger

Steering Committee Members

- Skip Vaughan, Pepsico
- Victoria King, UPS
- Joseph Mazzeo, Macy's
- Ken Hildebrandt, City of Tucker
- John McHenry, City of Tucker
- Vince Edwards, Gwinnett County

- Daniel Piotrowski, Gwinnett County
- Ted Rhinehart, DeKalb County
- Patreece Keeter, DeKalb County
- Sylvia Smith, DeKalb County
- Cedric Hudson, DeKalb County
- Tom McQueen, GDOT
- Habte Kassa, GDOT
- Joshua Higgins, GDOT
- Don Williams, MARTA

Overview and Summary

1. The third meeting of the Tucker Summit CID Freight Cluster Plan Steering Committee (SC) was held July 1, 2020 at 1:30 PM. The meeting was conducted via Zoom.
2. Wade Carroll opened the meeting with introductions and an overview of the meeting agenda.
3. Wade Carroll updated SC members on the status of key project deliverables, including the Public Outreach, Best Practices and Inventory and Assessment Reports. The project remains on schedule for an October 2020 completion.
4. Inga Kennedy gave an update on stakeholder activities, including preliminary results from the online survey, stakeholder interviews and the truck driver survey. She acknowledged the truck driver surveys were conducted using the CB radio technology that also led to some being conducted in person while drivers waiting in staging lines. Inga also acknowledged that all completed documents were posted to the project web site and encouraged everyone to visit the site for recent posts.
5. Wade Carroll gave a recap of the major findings of the Inventory and Assessment Report which was completed and submitted to the TSCID. He provided an overview of the key roadway and travel characteristics, truck travel characteristics, transit and bike/ped travel, and a land use development analysis.
6. Megha Young provided an overview of the Traffic Study which included 14 locations within the study area. She described the types of potential operations and safety improvements that could be effective at the locations including intersection geometry improvements, access management, pavement marking and signage, bike/ped safety, adjustments to signal phasing and timing, and new intersection control. She then showed three specific locations where some of the potential improvements could work.

7. Michael Brown led the SC in a stakeholder input session using a mapping demonstration to illustrate potential short and long- term improvements for locations identified in the Traffic Study and some legacy projects. He also described how land use and development strategies could be leveraged to facilitate traffic improvements in the study area.
8. The meeting was opened for comments and questions and SC members, and the following comments were made:
 - a. The City of Tucker and the TSCID are initiating a safety project at Mountain Industrial Blvd and Hwy 78 using state funds. The CID received an infrastructure grant and the project will align ramps and a median.
 - b. Ensure legacy projects are identified to avoid confusion.
 - c. Ensure all projects can comply with City of Tucker zoning updates. The City is installing a signal Flintstone Dr. for the new school and Publix. The remaining industrial building will be a challenge.

Wade discussed the next steps including developing a prioritization framework, finalizing cost estimates and revenue forecasts, and summarizing the stakeholder input. Vince Methany demonstrated the interactive exercise that SC members are asked to use to provide additional comments to the potential projects. Inga will send the link to all members. The meeting concluded. The next meeting will be scheduled and announced at a future date.



Meeting Summary
Tucker Summit CID Freight Cluster Plan
Steering Committee Meeting #4
September 15, 2020 – 2:00 PM Via Zoom™

Summary Date: September 18, 2020 Draft

Participants: **Program Management Team**

- Wade Carroll, Metro Analytics
- Vince Metheny, Metro Analytics
- David Hurst, Metro Analytics
- Peter Haas, CNT
- Felecia Basolo, Atlas
- Brent Cook, Atlas
- Todd Long, Atlas
- Larry Kaiser, Collaborative Infrastructure
- Nithin Gomez, Gresham Smith
- Megha Young, Gresham Smith
- Andrew Smith, Gresham Smith
- Preeti Shankar, CNT
- Inga Kennedy, Planners for Environmental Quality (PEQ)

Atlanta Regional Commission

- Daniel Studdard

TSCID

- Emory Morsberger

Steering Committee Members

- Victoria King, UPS
- Joseph Mazzeo, Macy's
- Ken Hildebrandt, City of Tucker
- John McHenry, City of Tucker

- Vince Edwards, Gwinnett County
- Roman Dakare, Gwinnett County
- Patrece Keeter, DeKalb County
- Sylvia Smith, DeKalb County
- Cedric Hudson, DeKalb County
- Tom McQueen, GDOT
- Tad Leithead, Lilburn CID

Other Participants

- Anne Lerner
- Matt Robbins
- Rebekah Coblenz
- Frances Chang
- Catherine Long
- Sharon Goldman
- Rusty McKellar
- Bill Kaduk
- Bill Rosenfeld
- Noel Monferdini
- Carlene Burnett
- Stephen Bridges
- Robert Martin
- Kamani Mustafa

Agenda

1. The fourth meeting of the Tucker Summit CID Freight Cluster Plan Steering Committee (SC) was held September 15, 2020 at 2:00 PM. The meeting was conducted via Zoom.
2. Emory Morsberger opened the meeting with introductions and the purpose of the meeting. He welcomed SC members and new participants including City of Tucker elected officials, TSCID Board members and property owners.
3. Wade Carroll updated participants on the status of the project including the schedule and completed tasks.
4. Wade then described the overall work program development including how projects were identified and the process for prioritizing projects. He described projects that are already underway and/or programmed with planning partners. An overview of the short-term work program was given including general cost estimates.

5. Nithin Gomez provided details of each short-term improvement projects that would assist with improving freight movement in the area. He included four roadway projects and seven intersection improvements including general cost estimates.
6. Wade gave an overview of the pedestrian projects which he iterated are important to the area for work force access. He described the location of eight projects that include sidewalk improvements including general cost estimates.
7. Wade concluded the presentation identifying long-term projects and other recommendations for grant opportunities, transit improvements, truck parking needs and economic development opportunities.
8. The meeting was opened for comments and questions.
 - a. What is the plan for applying for the STBG funding? When is the next call for projects? These will be included in the 2021 application process.
 - b. Mountain Industrial Boulevard at Hammermill improvements are already in City of Tucker's program.
 - c. For the benefit of new participants, it is important to acknowledge the full project list from those in the City of Tucker.
 - d. It was mentioned that the Mountain Industrial Boulevard at Greer improvement is going to become a main access point and intersection within the study area
 - e. Consider making Cherry Lane one way instead of closing altogether. Many crashes occur and a left turn with one-way access may work better.
 - f. DeKalb is currently conducting a traffic calming program and these projects should be reviewed before making decision. DeKalb is the funding source. They may be further along in the process. The projects will be provided to Wade.
 - g. Can funds be split for the costs of the Tucker Industrial Road at Hugh Howell Road project? It was acknowledged that these are planning level projects and funding could come from various sources. Cost estimates are high level at this time.
 - h. Look closer at the long-term improvement for the one-way pair adjacent to residential areas. There could be concern from residents.
 - i. Emory complimented the great job on the plan. He also acknowledged the Mountain Industrial Boulevard and Hwy 78 and Hugh Howell projects that are already programmed and underway. Emory also acknowledged Victoria King with UPS who will be providing transportation around the new Amazon site with expected increase in congestion. He also indicated that the process of bucketing projects is new and good concept to consider.
 - j. Victoria King indicated that she participated in a State Freight Logistics committee meeting to discuss the master plan that is underway. She suggested coordination between the two process and to put projects on a wish list with the State. Daniel

- Studdard responded that he has been working with the State Freight Master Plan and presented on truck parking today during the recent meeting. He mentioned that the primary purpose of the Master Plan is their support for freight related projects. He is not sure if funding will be identified in the plan. He stressed that there is an opportunity for private sector support for infrastructure projects around the large e-commerce facilities. Some of these could be intersection and corridor level improvements.
- k. Wade concluded with an overview of the next steps in the process including finalizing the report with a review by ARC and the TSCID staff and adoption by the TSCID Board. Inga Kennedy thanked the SC members for their participation during the process. The meeting was adjourned.

Appendix B

TSCID FCP

Prioritization Tech Memo

Technical Memorandum

To: Emory Morsberger, Tucker Summit CID
Felecia Basolo, Atlas

From: Metro Analytics

Date: September 9, 2020

Re: Tucker Summit Freight Cluster Plan – Prioritization Methodology

Introduction

The purpose of this technical memorandum is to document the prioritization of projects for the Tucker Summit Community Improvement District (TSCID) Freight Cluster Plan. The purpose of the Plan is to provide detailed insight into the TSCID’s current and future freight activity in order to address transportation planning, traffic operations, and related planning. This analysis is associated with the development of the Work Program task of the Plan Scope of Services.

1.1 Project Prioritization Methodology

The vision, goals and objectives described in the previous section were integrated into a set of criteria, on which the projects were evaluated and compared. These criteria served as the foundation for developing the project prioritization framework. The study team developed the following six criteria:

1. Mobility
2. Safety
3. Economic Benefit
4. Environment & Public Health
5. Project Readiness
6. System Reliability

The project prioritization methodology included establishing the qualitative and quantitative evaluation factors, also called measures, for each criterion. The project values were collected for each measure, and an ordinal rating scheme was developed that converted the project values to scores between 0 and 100. These scores were used to estimate the total points each project received and then rank-ordered by the total number of points.

This section discusses the criteria, the measures within each criterion and the rating scheme.

1.1.1 Criteria 1: Mobility

Criteria Mobility was used to assess potential improvements that are considered to address an operational deficiency. Five measures, two quantitative and three qualitative, were included in Mobility.

1.1.1.1 Total AADT

The total AADT was estimated for each project using the Atlanta Regional Commission's (ARC) Travel Demand Model (TDM). The analysis was done for the existing year 2020, for which travel model was available from ARC. The procedure to calculate AADT depended on the project type. For capacity projects, maximum AADT was picked from the segments that make up the project corridor. For intersection improvements, maximum AADT from the intersecting segments was selected. Projects in locations with higher vehicle AADT received a higher score than the ones in areas with lower vehicle AADT.

1.1.1.2 Truck percentage

The truck percentage was estimated for each project using ARC's TDM for the year 2020. The truck percentage for each project was based on the links at which AADT was estimated. Projects in locations with higher truck percentage received a higher score than the ones in areas with lower truck percentage.

1.1.1.3 Travel time savings

Travel time savings are important measure for evaluating the performance of projects. Ideally, a travel demand model could provide the travel time savings by comparing the model results from a No-Build model run and a build (with project in place) run. However, ARC model run requires high computing power and time (more than 36 hours) making it practically not possible to run a build scenario for each project. Therefore, travel time savings were estimated qualitatively using professional judgment, and the values used were "Low", "Medium" and "High". A project with high travel time savings received a higher score.

1.1.1.4 Serve congested corridor (existing LOS)

The level of congestion was estimated from the ARC's travel demand model. The level of service (LOS) was estimated for each project using links that were used to estimate AADT. The projects were classified into four categories of LOS – A-C, D, E and F. The projects serving regions with poor LOS received more points than the others.

1.1.1.5 Freight-designated corridor

The values used of the measure freight-designated corridor were qualitative and the projects were classified in two categories, Yes or No, depending if the project lies on a freight corridor or not. The projects that are on a freight corridor receive higher points than the ones that are not.

1.1.2 Criteria 2: Safety

Criteria safety was used to identify the potential improvements that are considered to improve highway safety. The project was considered to improve safety if is in location where crash occurrences are high, have high truck crashes or if the improvement has high Crash Modification Factor (CMF). Safety consists of five measures, four quantitative and one qualitative, and are described below.

1.1.2.1 Fatal crashes per thousand AADT (within 0.25 mi)

The crash data was obtained from Georgia Electronic Crash Reporting System (GEARS). A quarter mile buffer was created along each project and the number of fatal crashes for five years from 2014 to 2018 were collected. The crashes were normalized by the AADT to estimate the fatal crashes per thousand AADT. The projects in locations with higher fatal crashes per thousand AADT receive higher scores.

1.1.2.2 Injury crashes per thousand AADT (within 0.25 mi)

Like the fatal crashes, injury crashes were also estimated from Georgia Electronic Crash Reporting System (GEARS). The process was similar to estimating the injury crashes per thousand AADT for each project. The projects in locations with higher injury crashes per thousand AADT receive higher scores.

1.1.2.3 Other crashes per thousand AADT (within 0.25 mi)

Like the fatal and injury crashes, PDO crashes were also estimated from Georgia Electronic Crash Reporting System (GEARS). The process was similar to estimating the injury crashes per thousand AADT for each project. The projects in locations with higher PDO crashes per thousand AADT receive higher scores.

1.1.2.4 % Truck crashes

Project scoring was also done using the number of trucks involved in the corridor. The GEARS data included trucks involved in the crashes which were used to calculate the percentage of truck crashes for each project. The projects in locations with higher truck crashes receive higher scores.

1.1.2.5 Expected reductions in crashes by project type

The expected reduction was estimated qualitatively using the crash modification factor for each project. The CMF clearinghouse provided the crash reduction by type of improvement. In case the project included multiple improvements, the highest crash modification factor was used. Since all the projects did not have crash modification factors available, professional judgment was used. The projects were classified into High, Medium and Low expected reduction in crashes.

1.1.3 Criteria 3: Economic Benefit

Criteria Economic was used to identify potential improvements that are generally considered to support connectivity and economic growth. Four measures, all qualitative, were used to evaluate the projects under this criterion.

1.1.3.1 Supporting Regionally Significant Locations

The measure is qualitative and values the project by assigning Yes and No values to each project depending if the project connects to (or is within) a Regional Employment Center, a Freight Cluster Area or a Regional Place.

1.1.3.2 Regional Freight Significance

Each project was evaluated to see if it improves the movement of freight and is it located on ARC's regional freight system (ASTRoMaP), GDOT's Statewide Designated Freight Corridors or the FHWA

National Highway Freight Network (NHFN). The values of Yes or No were assigned to the project and projects with values Yes received higher score.

1.1.3.3 Maximize use of ROW

The measure was to evaluate if the project requires Right-of-Way (ROW) acquisition, including construction easements, from a potential historic property or National Register listed property. The projects were assigned values of Yes and No and the ones that maximize the use of right-of way received higher scores.

1.1.3.4 Multimodal connectivity (Transit, Bicycle, Pedestrian)

This is a qualitative measure and was used to evaluate whether the project provided connectivity to multiple modes like transit, bicycle, and pedestrian. The projects were assigned values of Yes and No and the ones that provided multimodal connectivity, received higher scores.

1.1.4 Criteria 4: Environment & Public Health

The criteria Environmental and Public Health was used to identify projects that were expected to reduce emissions. It included only one qualitative measure, describe below.

1.1.4.1 Diesel emission reduction

The projects which helped in reducing vehicle emissions that cause bad air quality and contribute to climate change, reduced higher scores than others. The projects were categorized qualitatively into High, Medium, and Low values. The projects with High emission reductions received higher score.

1.1.5 Criteria 5: Project Readiness

The criteria Project Readiness was used to evaluate what would be the level of effort to implement project. It reflects project complexity and following qualitative measures were used to evaluate it. Three measures, all qualitative, were used to evaluate the projects under this criterion.

1.1.5.1 Coordination with City and County; Consistency with County Comprehensive Transportation Plan (CTP), Transportation Master Plan, etc.

Each project was evaluated to see if it requires coordination with cities or counties and is consistent with their CTPs or Transportation Master plans. Qualitative values of Yes and No were used. Projects with value of Yes, were consistent with the CTPs and RTPs and received higher score.

1.1.5.2 Included in Regional Transportation Plan (RTP)

Qualitative values of Yes and No were used for this measure. If the project is included in the RTP, it would have already been studied regionally. Such projects received higher score.

1.1.5.3 Level of effort to implement project (project complexity)

It is a qualitative measure that evaluated the level of effort to implement the project based on ROW and environmental requirements. Low, Medium, and High values were assigned to the projects. Projects with low level of effort to implement received higher score.

1.1.6 Criteria 6: System Reliability

The criterion of reliability was used to determine which projects were helpful in adding network resiliency to the transportation network. Only one qualitative measure was used.

1.1.6.1 Provide resiliency to regional and TSCID network

It is a qualitative measure that assigned values of Yes or No to the projects, based on whether they are expected to provided resiliency to the regional and TSCID transportation networks. Projects with value of Yes received higher score.

After the project values, which included both quantitative and qualitative values, were obtained for each measure under each criterion, they were converted to scores of 0-100 using the scoring scheme presented in Table 1.

Table 1: Scoring scheme for project values

Criteria	Measure	Score
Mobility	Total AADT	
	0 - 10,000	0
	10,000 - 20,000	20
	20,000 - 30,000	40
	30,000 - 40,000	60
	40,000 - 50,000	80
	>= 50,000	100
	Truck %	
	0% - 5%	0
	5% - 10%	20
	10% - 15%	40
	15% - 20%	60
	20% - 25%	80
	>= 25%	100
	Travel time savings	
	Low	20
	Med	60
	High	100
	Serve congested corridor (existing LOS)	
	A-C	0
D	33	
E	67	
F	100	
Freight-designated corridor		
No	0	
Yes	100	
Safety	Fatal crashes per thousand AADT (within 0.25 mi)	

Criteria	Measure	Score	
	0.00 - 0.01	0	
	0.01 - 0.03	20	
	0.03 - 0.06	40	
	0.06 - 0.10	60	
	0.10 - 0.20	80	
	>= 0.20	100	
	Injury crashes per thousand AADT (within 0.25 mi)		
	0.0 - 0.5	0	
	0.5 - 1.0	20	
	1.0 - 5.0	40	
	5.0 - 10.0	60	
	10.0 - 30.0	80	
	>= 30	100	
	Other crashes per thousand AADT (within 0.25 mi)		
	0 - 2	0	
	2 - 5	20	
	5 - 10	40	
	10 - 20	60	
	20 - 30	80	
	>= 30	100	
	% Truck crashes		
	0% - 5%	0	
	5% - 10%	25	
10% - 20%	50		
20% - 40%	75		
>= 40%	100		
Expected reductions in crashes by project type			
Low	20		
Med	60		
High	100		
Economic Benefit	Supporting Regionally Significant Locations		
	No	0	
	Yes	100	
	Regional Freight Significance		
	No	0	
	Yes	100	
	Maximize use of ROW		
	No	0	
Yes	100		
Multimodal connectivity (Transit, Bicycle, Pedestrian)			

Criteria	Measure	Score
	No	0
	Yes	100
Environment & Public Health	Diesel emission reduction	
	Low	20
	Med	60
	High	100
Project Readiness	Coordination with City and County; Consistency with County CTP, Transportation Master Plan, etc.	
	No	0
	Yes	100
	Included in RTP	
	No	0
	Yes	100
	Level of effort to implement project (project complexity)	
	Low	100
Med	60	
High	20	
System Reliability	Provide resiliency to regional and TSCID network	
	No	0
	Yes	100

1.2 Ranking of Projects

The next step involved defining multiple scenarios and ranking the projects under each scenario. Scenarios were developed by assigning different weighting factors to individual criteria. The purpose of this was to understand the impact of each criteria on project rankings and to identify projects that consistently appeared near the top of the rankings, regardless of where the emphasis was placed.

Seven scenarios were developed:

- Scenario 1: Mobility
- Scenario 2: Safety
- Scenario 3: Economic Benefit
- Scenario 4: Environment & Public Health
- Scenario 5: Project Readiness
- Scenario 6: System Reliability
- Scenario 7: User Defined

The weighting factor, in percentage, for each criterion under each scenario is shown in the pie charts in Figure 1. Scenarios 1 through 6 have 50% weight assigned to respective criterion, while the remaining criteria received 10% each. The weights of the criteria under scenario 7 were determined in consultation

with the priorities of the TSCID members. In this scenario 50% weightage was given to mobility and 20% to safety. The other four criteria made up the remaining 30%.

The weights of individual performance measures within each criterion are shown in Table 2. The weights of performance measures do not vary by scenario.

Figure 1: Weight Assigned to Each Criteria by Scenario

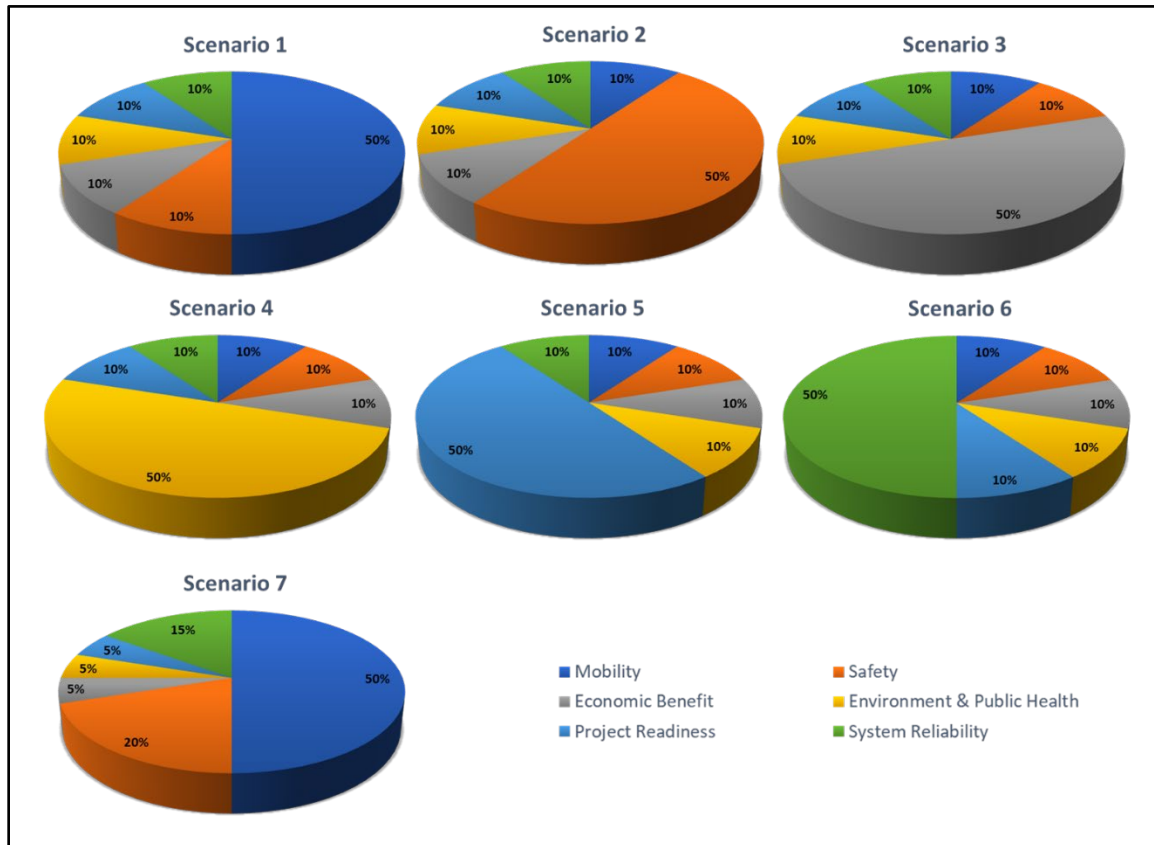


Table 2: Weights of Performance Measures within Criteria

No.	Criteria	Measures	Criteria %
1	Mobility	Total AADT	15%
		Truck %	20%
		Travel time savings	25%
		Serve congested corridor (existing LOS)	25%
		Freight-designated corridor	15%
2	Safety	Fatal crashes per thousand AADT (within 0.25 mi)	25%
		Injury crashes per thousand AADT (within 0.25 mi)	25%
		Other crashes per thousand AADT (within 0.25 mi)	10%

		% Truck crashes	20%
		Expected reductions in crashes by project type	20%
3	Economic Benefit	Supporting Regionally Significant Locations	25%
		Regional Freight Significance	25%
		Maximize use of ROW	25%
		Multimodal connectivity (Transit, Bicycle, Pedestrian)	25%
4	Environment & Public Health	Diesel emission reduction	100%
5	Project Readiness	Coordination with City and County; Consistency with County CTP, Transportation Master Plan, etc.	33%
		Included in RTP	33%
		Level of effort to implement project (project complexity)	33%
6	System Reliability	Provide resiliency to regional and TSCID network	100%

In order to rank the projects under a selected scenario, total points were calculated for each project under that scenario. For each project, the score (0-100) of each measure was multiplied by the weight of the measure (from Table xx) and the weight of the criterion that measure belongs to. The total points each project received were estimated by summing up the weighted scores of all the performance measures. The project that received the most points received the highest ranking.

While the priority rankings were based on the qualitative and quantitative criteria discussed previously, it should be noted that the scores are not meant to be the final decision on whether a project should be implemented. Rather, they reflect the prioritization ranking of each project within the study area under different scenarios and weighting factors. They provide input and guidance for planners and decision-makers.

The project ranking under Scenario 7, which is User-Defined Scenario, is presented in Table 3.

Table 3: Project Ranking under Scenario 7

Rank	Project Name	Description	ID	Total Score
1	One Way Pair - Mountain Industrial Blvd/Tucker Industrial Blvd	This project would develop a 3-lane one-way couplet utilizing existing Mountain Industrial Blvd and Tucker industrial Blvd beginning with the development of a transition from existing Mountain Industrial Blvd SB lanes to existing Tucker Industrial Blvd just north of Hugh Howell Rd which would become south bound lanes. It would continue south over a new bridge over I-78 and transition back into existing Mountain Industrial Blvd just north of E Ponce De Leon Ave. Existing Mountain Industrial Blvd. would become the northbound lanes of the one-way couplet. Tucker Industrial would be upgraded to a 3-lane cross section, while Mountain Industrial would be remarked a 3-lane cross-section.	LTR-2	86.3
2	GDOT 0015216 - Mountain Industrial Blvd./Hugh Howell Dual Left Turn Lanes	The addition of dual left turns on northbound and southbound Mountain Industrial Boulevard at Hugh Howell Road. This will be implemented by widening Mountain Industrial Boulevard by approximately six feet and reducing lane widths to 11 feet to accommodate the new turn lanes. The proposed improvements will taper back to match the existing lane configuration. In addition, a right turn lane will be constructed on the eastbound SR 236 approach. Construction of this project is scheduled for 2022	LR2	83.2
3	City of Tucker I-3 - Lawrenceville Hwy./Mountain Industrial Blvd.	From Tucker STMP	LR3	75.4
4	City of Tucker - Mountain Industrial Blvd Widening (6 Lanes, Hugh Howell to US 78)	The City of Tucker adopted this project through Tucker Tomorrow STMP. It will widen Mountain Industrial Blvd. to 6-lanes from Hugh Howell Rd to US 78.	LTR-1	73.3
5	Mountain Industrial Boulevard at Elmdale Drive/Roger Marten Way Intersection Improvement	Install single right-turn lane with channelization and widen curb radius along the northbound approach; widen curb radius at southwest quadrant; reconfigure Roger Marten Way to add a new separate left-turn lane; reconfigure inside lane of Elmdale Dr. to allow left, through, and right turns; convert northbound and southbound left turn signals to flashing yellow arrow (FYAs); install no right-turn-on-red (RTOR) overhead signage on the mast arm above the inside lane to prohibit RTOR from the inside lane of the Elmdale Dr. approach; install sidewalks along Roger Marten Way and west side of Mountain Industrial Blvd. to connect to MARTA bus stops; install backplates with retroreflective borders on all traffic signal	I5	72.7

Rank	Project Name	Description	ID	Total Score
		heads; repave and restripe Elmdale Dr. and Roger Marten Way; install raised pavement markers on Elmdale Dr. and Roger Marten Way.		
6	GDOT 0017399 - US 78/Mountain Industrial Blvd Interchange	Improvements to the Mountain Industrial Boulevard interchange at US 78. The project stems from a Traffic Engineering Study (TE Study) completed in 2019, which identified short-term safety improvements from Elmdale Drive to Greer Circle and a redesign of the interchange.	LR1	66.8
7	Roundabout at Mountain Industrial Blvd/S Royal Atlanta Dr, Teardrop Roundabout north of Mountain Industrial Blvd/N Royal Atlanta Dr.	Construct roundabout at Mountain Industrial Blvd/S Royal Atlanta Dr. Construct teardrop roundabout just north of Mountain Industrial Blvd/N Royal Atlanta Dr. Reconfigure Mountain Industrial Blvd/N Royal Atlanta intersection to remove left turn lanes and redirect left turns north to teardrop roundabout.	LTR-4	62.2
8	Roundabout/Realignment at Mountain Industrial Blvd/Tuckerstone Pkwy	Construct roundabout just east of existing Mountain Industrial Blvd/Tuckerstone Pkwy intersection and realign Tuckerstone Pkwy.	LTR-3	61.4
9	Mountain Industrial Boulevard at Tuckerstone Parkway Intersection Improvement	Clear cut trees just south of the intersection to improve sight distance; install a flashing warning signal on the westbound approach to warn motorists of southbound right-turns from Tuckerstone Pkwy.	I15	59.4
10	Mountain Industrial Boulevard at E. Ponce de Leon Avenue Intersection Improvement	Widen curb radius at southeast quadrant of intersection; install median nose delineators at median on south leg; work with property owner to close driveways along Mountain Industrial Blvd. and E. Ponce de Leon Ave. that are closest to the intersection.	I10	56.9
11	Lawrenceville Highway (US 29/SR 8) at Indian Trail Lilburn Road/Killian Hill Road Intersection Improvement	Install two-legged displaced left-turn (DLT) intersection along two legs of Indian Trail Lilburn Rd. and Killian Hill Rd.; install backplates with retroreflective borders on all traffic signal heads; restripe intersection and install raised pavement markers.	I14	56.5
12	Mountain Industrial Boulevard at N. Royal Atlanta Drive Intersection Improvement	Install single right-turn lanes with channelization and wide curb radii along the northbound, southbound, and westbound approaches; convert southbound, eastbound, and westbound left turn signals to flashing yellow arrow (FYAs); convert northbound left-turn to a protected-only movement; install pedestrian signals and crosswalks across the east and west legs (N. Royal Atlanta Dr.) of the intersection; install ADA ramps at all four corners; install sidewalks along all approaches to connect to MARTA bus stops; install median nose delineators along Mountain Industrial Blvd.; install backplates with retroreflective borders on all traffic signal	I1	56.4

Rank	Project Name	Description	ID	Total Score
		heads; install supplemental signal heads and "traffic signal ahead" signage along the northbound and southbound approaches; repave and restripe N. Royal Atlanta Dr; install raised pavement markers on N. Royal Atlanta Dr.; work with property owner to consider relocating driveway just west of intersection further away from the intersection.		
13	Mountain Industrial Boulevard at Lewis Road Intersection Improvement	Install single right-turn lanes with channelization and widen curb radius along northbound, southbound, and westbound approaches; convert all left turn signals to flashing yellow arrow (FYAs); install sidewalks along west side of Mountain Industrial Blvd. and along Lewis Rd. west of intersection to connect to MARTA bus stops; install backplates with retroreflective borders on all traffic signal heads; work with property owner to relocate driveway just west of intersection further away from the intersection.	19	55.7
14	Mountain Industrial Boulevard at Hammermill Road (South) Intersection Improvement	Install single right-turn lane with channelization and widen curb radius along the northbound approach; convert southbound and westbound left turn signals to flashing yellow arrow (FYAs); install sidewalks along west side of Mountain Industrial Blvd. south of the intersection and extend to the US 78 interchange; install one-way pavement markings on west leg, and signage at driveway on west leg to prohibit eastbound traffic; install backplates with retroreflective borders on all traffic signal heads; work with property owner to close driveway to Public Storage just south of the intersection.	17	55.4
15	Mountain Industrial Boulevard Sidewalk (West side of Mountain Industrial from Hammermill Rd (south) to Lewis Rd)	Install sidewalk along west side of Mountain Industrial from Hammermill Rd (south) to Lewis Rd	PS7	52.0
16	Mountain Industrial Boulevard at Greer Circle Intersection Improvement	Install single right-turn lane with channelization and widen curb radius along the southbound approach; convert all left turn signals to flashing yellow arrow (FYAs); install protected/permissive phasing for eastbound Greer Cir. left-turn movements; install sidewalks along west side of Mountain Industrial Blvd. and along Greer Cir. west of the intersection to connect to MARTA bus stops; install backplates with retroreflective borders on all traffic signal heads; repave and restripe Greer Cir. east of the intersection;	18	51.8

Rank	Project Name	Description	ID	Total Score
		install raised pavement markers on Greer Cir. east of the intersection.		
17	Lawrenceville Highway (US 29/SR 8) at Rockbridge Road Intersection Improvement	Install single right-turn lanes with channelization and widen curb radii along the southbound and eastbound approaches; install second left-turn lanes along eastbound and westbound approaches, and convert left turns to protected-only movements; repair damaged curb at southeast quadrant; install backplates with retroreflective borders on all traffic signal heads; restripe intersection and install raised pavement markers.	I13	50.9
18	Mountain Industrial Boulevard at S. Royal Atlanta Drive Intersection Improvement	Install single right-turn lane with channelization and wide curb radius along the eastbound approach; remove acceleration lane on west leg and install eyebrow or loon for eastbound U-turns; install pedestrian signals and crosswalks along all approaches; install ADA ramps at all four corners; install sidewalks along all approaches to connect to MARTA bus stops; install median nose delineators along Mountain Industrial Blvd.; install backplates with retroreflective borders on all traffic signal heads; install "traffic signal ahead" signage along the westbound approach; work with property owner to consider relocating driveway just east of intersection further away from the intersection.	I3	48.6
19	Mountain Industrial Boulevard Sidewalk (West side of Mountain Industrial from Hugh Howell Rd to Elmdale Dr)	Install sidewalk along west side of Mountain Industrial from Hugh Howell Rd to Elmdale Dr	PS6	46.5
20	Mountain Industrial Boulevard Sidewalk (West side of Mountain Industrial from Old Sears Outlet to Hugh Howell Rd)	Install sidewalk along west side of Mountain Industrial from 2301 Mountain Industrial Blvd (old Sears outlet) to Hugh Howell Rd	PS4	46.1
20	Mountain Industrial Boulevard Sidewalk (East side of Mountain Industrial from Old Sears Outlet to Hugh Howell Rd)	Install sidewalk along east side of Mountain Industrial from 2301 Mountain Industrial Blvd (old Sears outlet) to Hugh Howell Rd	PS5	46.1
22	Mountain Industrial Boulevard Sidewalk (East Side of Mountain Industrial from Gwinnett County line to bridge over CSX railroad)	Install sidewalk along east side of Mountain Industrial from Gwinnett County line to bridge over CSX railroad	PS1	45.9
23	LCI Study - TSCID Pedestrian Improvements	Various pedestrian signage projects throughout the TSCID	LP2	44.9
24	Mountain Industrial Boulevard Sidewalk (West side of Mountain Industrial from Gwinnett County line to bridge over CSX railroad)	Install sidewalk along west side of Mountain Industrial from Gwinnett County line to bridge over CSX railroad	PS2	44.9
25	City of Tucker - Hugh Howell Rd./Flintstone Dr.	Intersection improvements as noted by County Staff	LR4	42.0

Rank	Project Name	Description	ID	Total Score
26	LCI Study - US 78/Mountain Industrial Blvd. Ramp Lighting	Interchange Lighting Improvements	LR5	40.9
27	Mountain Industrial Boulevard Sidewalk (West side of Mountain Industrial from Lewis Rd to 1600 Mountain Industrial Blvd)	Install sidewalk along west side of Mountain Industrial from Lewis Rd to 1600 Mountain Industrial Blvd	PS8	40.1
28	E. Ponce de Leon Avenue at Rock Mountain Boulevard Intersection Improvement	To be determined.	I11	39.6
29	Mountain Industrial Boulevard Sidewalk (West side of Mountain Industrial from Tuckerstone Parkway to bridge over CSX railroad)	Install sidewalk along west side of Mountain Industrial from Tuckerstone Parkway to bridge over CSX railroad	PS3	38.7
30	Tucker Industrial Road at Hugh Howell Road (SR 236) Intersection Improvement	Install single right-turn lane with channelization and wide curb radii along eastbound approach; widen curb radius at southeast quadrant of intersection; install sidewalks along all approaches to connect to MARTA bus stops; convert all left-turn signals to flashing yellow arrows (FYAs); install backplates with retroreflective borders on all traffic signal heads; work with property owner to consider relocating driveway just east of intersection further away from the intersection.	I4	36.9
31	Tucker Industrial Road at Elmdale Dr Intersection Improvement	To be determined.	I6	35.6
32	Lawrenceville Highway (US 29/SR 8) at N. Royal Atlanta Drive Intersection Improvement	To be determined.	I2	34.4
33	Idlewood Road at Sarr Parkway Intersection Improvement	To be determined.	I12	32.8
34	Hugh Howell Rd Sidewalk (North side of Hugh Howell Rd from Lawrenceville Hwy to Tucker Industrial Rd)	Install sidewalk along north side of Hugh Howell Rd from Lawrenceville Hwy to Tucker Industrial Rd	PS10	25.9
35	Hugh Howell Rd Sidewalk (South side of Hugh Howell Rd from Mountain Industrial Blvd to Rosser Rd)	Install sidewalk along south side of Hugh Howell Rd from Mountain Industrial Blvd to Rosser Rd	PS9	22.4
36	City of Tucker - Hugh Howell Rd. Pedestrian Improvements	Sidewalk and Pedestrian Improvements along the Hugh Wowell Rd. corridor through the TSCID	LP1	22.2

1.3 Project Prioritization Spreadsheet Tool

A spreadsheet-based project prioritization tool was developed to implement the methodology in the previous section and rank the projects. The inputs required are the values of each performance measure in each criterion for every project. The values were converted to a score between 0 and 100. Once the

scores were established, the user has the flexibility of choosing the scenario under which he would like to see project ranking. Once the scenario was chosen, the scores was multiplied by appropriate wights of the criteria and the measures to estimate total project scores, which were eventually used to rank the projects. Following are some of the features of the tool:

- It is User-friendly and flexible
- It has Navigation menu with instructions
- It is easy to add and delete projects, and select projects and add project data
- The user can change the scoring criteria and weights, and view the results on the fly
- The user can develop and print reports

Following figures show the useful worksheets in the tool.

- Figure 1: Opening sheet with navigation menu
- Figure 2: Database
- Figure 3: Evaluation Criteria and Scenarios
- Figure 4: Screening Points
- Figure 5: Scenario Selection and Project Ranking
- Figure 6: Report – Project Rank by Scenario

Figure 2: Opening sheet with navigation menu

TSCID

Project Prioritization Tool

Prepared by: Metro Analytics

Navigation

Input Sheets

Report Sheets

Database

Scenario Selection

Scenarios

Report All

Screening Points

Report - Points

Instructions

The spreadsheet opens in the **Main** page. Use Navigation buttons for input and output sheets. Input and output sheets have **Back to Main** button to navigate to the Main page

Description of worksheets:

Database - To enter the projects and input values for various measures. The data can be entered in yellow highlighted cells

Scenarios - No changes to be done in this. It contains weights for predefined scenarios and themes under

ScreeningPoints: Information on scoring of project values

Scenario Selection: Report sheet with projects sorted by ranks for selected scenario.

Report All: Report sheet with project ranking under all scenarios.

ReportPoints: Unweighted project points for each criteria

Scores: Weighted project points and total project score by Scenario

Figure 3: Database

Project No	ID	Project Name	Description	Total Project Cost	O&M Cost	Selection	Mobility					Safety				
							Total AADT	Truck %	Travel time savings	Serve congested corridor (existing LOS)	Freight-designated corridor	Fatal crashes per thousand AADT (within 0.25 mi)	Injury crashes per thousand AADT (within 0.25 mi)	Other crashes per thousand AADT (within 0.25 mi)	% Truck crashes	Expected reductions in crashes by project type
		Back to Main				"X" to exclude the project										
1	11	Mountain Industrial Boulevard at N. Royal	Install single right-turn lanes with				37,304	23%	Med	A-C	Yes	0.00	0.64	3.97	25%	Med
2	12	Lawrenceville Highway (US 29/SR 8) at N. Royal	To be determined.				19,366	12%	TBD	A-C	No	0.05	1.86	3.41	19%	TBD
3	13	Mountain Industrial Boulevard at S. Royal	Install single right-turn lane with				39,761	23%	Low	A-C	Yes	0.00	0.55	3.37	25%	Low
4	14	Tucker Industrial Road at Hugh Howell Road (SR	Install single right-turn lane with				13,833	14%	Low	A-C	No	0.00	9.90	27.90	23%	Low
5	15	Mountain Industrial Boulevard at Eldale	Install single right-turn lane with				50,534	21%	High	D	Yes	0.00	1.48	5.11	23%	High
6	16	Tucker Industrial Road at Eldale Dr	To be determined.				10,223	14%	TBD	A-C	No	0.00	7.34	25.24	24%	TBD
7	17	Mountain Industrial Boulevard at Hammermill	Install single right-turn lane with				50,534	21%	Low	A-C	Yes	0.02	5.32	15.87	20%	Low
8	18	Mountain Industrial Boulevard at Greer Circle	Install single right-turn lane with				37,797	19%	Low	A-C	Yes	0.05	5.05	16.40	19%	Med
9	19	Mountain Industrial Boulevard at Lewis Circle	Install single right-turn lanes with				36,695	18%	Med	A-C	Yes	0.03	3.24	7.36	40%	Low
10	110	Mountain Industrial Boulevard at E. Ponce de	Widen curb radius at southeast				36,695	18%	High	A-C	Yes	0.03	2.83	7.36	18%	Low
11	111	E. Ponce de Leon Avenue at Rock Mountain	To be determined.				19,481	19%	TBD	D	No	0.00	8.86	11.05	11%	TBD
12	112	Idewood Road at San Parkway Intersection	To be determined.				10,971	11%	TBD	A-C	No	0.00	2.37	6.88	19%	TBD
13	113	Lawrenceville Highway (US 29/SR 8) at	Install single right-turn lanes with				31,515	15%	Med	D	No	0.00	5.24	11.61	19%	High
14	114	Lawrenceville Highway (US 29/SR 8) at Indian	Install two-lagged displaced left-				39,012	15%	High	D	No	0.00	4.00	11.94	22%	Med
15	115	Mountain Industrial Boulevard at Tuckerstone	Clear cut trees just south of the				39,761	23%	TBD	E	Yes	0.00	0.45	0.88	28%	Med
16	PS1	Mountain Industrial Boulevard Sidewalk (East	Install sidewalk along east side of				39,761	23%	N/A	E	Yes	0.10	7.27	19.01	21%	Med
17	PS2	Mountain Industrial Boulevard Sidewalk (West	Install sidewalk along west side of				39,761	23%	N/A	E	Yes	0.08	7.17	18.89	21%	Med
18	PS3	Mountain Industrial Boulevard Sidewalk (West	Install sidewalk along west side of				39,761	23%	N/A	E	Yes	0.00	0.58	1.06	26%	Med
19	PS4	Mountain Industrial Boulevard Sidewalk (West	Install sidewalk along west side of				42,239	22%	N/A	F	Yes	0.00	3.48	9.26	23%	Med
20	PS5	Mountain Industrial Boulevard Sidewalk (East	Install sidewalk along east side of				42,239	22%	N/A	F	Yes	0.00	3.50	9.33	23%	Med
21	PS6	Mountain Industrial Boulevard Sidewalk (West	Install sidewalk along west side of				45,194	22%	N/A	F	Yes	0.00	4.65	14.43	23%	Med
22	PS7	Mountain Industrial Boulevard Sidewalk (West	Install sidewalk along west side of				57,130	21%	N/A	F	Yes	0.05	7.26	21.09	19%	High
23	PS8	Mountain Industrial Boulevard Sidewalk (West	Install sidewalk along west side of				36,695	18%	N/A	E	Yes	0.03	3.68	8.37	16%	High
24	PS9	Hugh Howell Rd Sidewalk (South side of Hugh	Install sidewalk along south side				16,057	14%	N/A	A-C	No	0.00	11.15	31.70	23%	High
25	PS10	Hugh Howell Rd Sidewalk (North side of Hugh	Install sidewalk along north side				20,194	13%	N/A	A-C	No	0.05	15.25	44.47	21%	High
26	LR1	GDOT 0017399 - US 29/Mountain Industrial Blvd	Improvements to the Mountain				82,712	23%	Med	A-C	Yes	0.02	5.45	10.34	19%	High
27	LR2	GDOT 0015216 - Mountain Industrial Blvd/Hugh	The addition of dual left turns on				42,399	22%	High	F	Yes	0.00	3.08	8.64	23%	High
28	LR3	City of Tucker I-3 - Lawrenceville Hwy/Mountain	From Tucker STMP				39,076	24%	High	E	Yes	0.05	6.17	14.36	19%	Med

Figure 4: Evaluation Criteria and Scenarios

Evaluation Criteria				Mobility		Safety		Economic Benefit		Environment & Public Health		Project Readiness		System Reliability		User Defined			
				Scenario 1		Scenario 2		Scenario 3		Scenario 4		Scenario 5		Scenario 6		Scenario 7			
No.	Criteria	Measures	Description	Criteria %	Goals	Criteria	Goals	Criteria	Goals	Criteria	Goals	Criteria	Goals	Criteria	Goals	Criteria	Goals	Criteria	
1	Mobility	Total AADT		15%		7.5%		1.5%		1.5%		1.5%		1.5%		1.5%		7.5%	
		Truck %		20%	50%	10.0%		2.0%		2.0%		2.0%		2.0%		2.0%		10.0%	
		Travel time savings		25%		12.5%	10%	2.5%	10%	2.5%	10%	2.5%	10%	2.5%	10%	2.5%	10%	2.5%	12.5%
		Serve congested corridor (existing LOS)		25%		12.5%		2.5%		2.5%		2.5%		2.5%		2.5%		2.5%	12.5%
		Freight-designated corridor		15%		7.5%		1.5%		1.5%		1.5%		1.5%		1.5%		1.5%	7.5%
2	Safety	Fatal crashes per thousand AADT (within 0.25 mi)		25%		2.5%		2.5%		2.5%		2.5%		2.5%		2.5%		2.5%	
		Injury crashes per thousand AADT (within 0.25 mi)		25%		2.5%		2.5%		2.5%		2.5%		2.5%		2.5%		2.5%	
		Other crashes per thousand AADT (within 0.25 mi)		10%	10%	1.0%	50%	5.0%	10%	1.0%	10%	1.0%	10%	1.0%	10%	1.0%	10%	1.0%	20%
		% Truck crashes		20%		2.0%		2.0%		2.0%		2.0%		2.0%		2.0%		2.0%	4.0%
		Expected reductions in crashes by project type		20%		2.0%		2.0%		2.0%		2.0%		2.0%		2.0%		2.0%	4.0%
3	Economic Benefit	Supporting Regionally Significant Locations		25%		2.5%		2.5%		2.5%		2.5%		2.5%		2.5%		2.5%	
		Regional Freight Significance		25%		2.5%		2.5%	50%	12.5%		2.5%		2.5%		2.5%		1.3%	
		Maximize use of ROW		25%		2.5%		2.5%		12.5%		2.5%		2.5%		2.5%		1.3%	
		Multimodal connectivity (Transit, Bicycle, Pedestrian)		25%		2.5%		2.5%		12.5%		2.5%		2.5%		2.5%		1.3%	
4	Environment & Public Health	Diesel emission reduction		100%	10%	10.0%	10%	10.0%	10%	10.0%	50%	50.0%	10%	10.0%	10%	10.0%	5%	5.0%	
5	Project Readiness	Coordination with City and County; Consistency with County CTP, Transportation Master Plan, etc.		33%		3.3%		3.3%		3.3%		3.3%		16.7%		3.3%		1.7%	
		Included in RTP		33%	10%	3.3%	10%	3.3%	10%	3.3%	10%	3.3%	50%	16.7%	10%	3.3%	5%	1.7%	
		Level of effort to implement project (project complexity)		33%		3.3%		3.3%		3.3%		3.3%		16.7%		3.3%		1.7%	
6	System Reliability	Provide resiliency to regional and TSCID network		100%	10%	10.0%	10%	10.0%	10%	10.0%	10%	10.0%	10%	10.0%	50%	50.0%	15%	15.0%	
Total				100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	

Figure 5: Screening Points

No. Themes	Criteria	Questions	Lookup detail	Lookup value	Scores	
1	Mobility	Total AADT	0	0	0	
				10,000	20	
				20,000	40	
				30,000	60	
				40,000	80	
				50,000	100	
1	Mobility	Truck %	0	0%	0	
				5%	20	
				10%	40	
				15%	60	
				20%	80	
				25%	100	
1	Mobility	Travel time savings	0	Low	20	
				Med	60	
				High	100	
				Given medium score	N/A	0
					TBD	60
1	Mobility	Serve congested corridor (existing LOS)	0	A-C	0	
				D	33	
				E	67	
				F	100	
1	Mobility	Freight-designated corridor	0	No	0	
				Yes	100	
2	Safety	Fatal crashes per thousand AADT (within 0.25 mi)		0	0	
				0.01	20	
				0.03	40	
				0.06	60	
				0.1	80	
				0.2	100	

Figure 6: Scenario Selection and Project Ranking

Select Scenario				Scenario 1		
Mobility						
Rank	Project Name	Description	ID			Total Score
1	GDOT 0015216 - Mountain Industrial Blvd./Hugh Howell Dual Left Turn Lanes	The addition of dual left turns on northbound and	LR2			85.2
2	One Way Pair - Mountain Industrial Blvd/Tucker Industrial Blvd	This project would develop a 3-lane one-way	LTR-2			82.2
3	City of Tucker - Mountain Industrial Blvd Widening (6 Lanes, Hugh Howell to US	The City of Tucker adopted this project through	LTR-1			78.1
4	City of Tucker I-3 - Lawrenceville Hwy./Mountain Industrial Blvd.	From Tucker STMP	LR3			74.0
5	Mountain Industrial Boulevard at Elmdale Drive/Roger Marten Way Intersection	Install single right-turn lane with channelization	I5			71.1
6	GDOT 0017399 - US 78/Mountain Industrial Blvd Interchange	Improvements to the Mountain Industrial	LR1			67.8
7	Roundabout/Realignment at Mountain Industrial Blvd/Tuckerstone Pkwy	Construct roundabout just east of existing	LTR-3			58.5
8	Roundabout at Mountain Industrial Blvd/S Royal Atlanta Dr, Teardrop	Construct roundabout at Mountain Industrial	LTR-4			57.9
9	Mountain Industrial Boulevard at N. Royal Atlanta Drive Intersection	Install single right-turn lanes with channelization	I1			55.0
10	Lawrenceville Highway (US 29/SR 8) at Indian Trail Lilburn Road/Killian Hill	Install two-legged displaced left-turn (DLT)	I14			55.0
11	Mountain Industrial Boulevard at Tuckerstone Parkway Intersection	Clear cut trees just south of the intersection to	I15			54.9
12	Mountain Industrial Boulevard at E. Ponce de Leon Avenue Intersection	Widen curb radius at southeast quadrant of	I10			53.3
13	Mountain Industrial Boulevard at Lewis Road Intersection Improvement	Install single right-turn lanes with channelization	I9			53.0
14	Mountain Industrial Boulevard at Hammermill Road (South) Intersection	Install single right-turn lane with channelization	I7			51.7
15	Mountain Industrial Boulevard Sidewalk (West side of Mountain Industrial from	Install sidewalk along west side of Mountain	PS7			49.6
16	Mountain Industrial Boulevard at Greer Circle Intersection Improvement	Install single right-turn lane with channelization	I8			47.2
17	Mountain Industrial Boulevard at S. Royal Atlanta Drive Intersection	Install single right-turn lane with channelization	I3			46.8
18	Lawrenceville Highway (US 29/SR 8) at Rockbridge Road Intersection	Install single right-turn lanes with channelization	I13			46.4
19	Mountain Industrial Boulevard Sidewalk (West side of Mountain Industrial from	Install sidewalk along west side of Mountain	PS6			46.1
20	Mountain Industrial Boulevard Sidewalk (West side of Mountain Industrial from	Install sidewalk along west side of Mountain	PS4			45.9
20	Mountain Industrial Boulevard Sidewalk (East side of Mountain Industrial from	Install sidewalk along east side of Mountain	PS5			45.9
22	LCI Study - TSCID Pedestrian Improvements	Various pedestrian signage projects throughout	LP2			45.9
23	Mountain Industrial Boulevard Sidewalk (East Side of Mountain Industrial from	Install sidewalk along east side of Mountain	PS1			43.0
24	Mountain Industrial Boulevard Sidewalk (West side of Mountain Industrial from	Install sidewalk along west side of Mountain	PS2			42.5
25	City of Tucker - Hugh Howell Rd./Flintstone Dr.	Intersection improvements as noted by County	LR4			40.8
26	Mountain Industrial Boulevard Sidewalk (West side of Mountain Industrial from	Install sidewalk along west side of Mountain	PS3			39.4
27	LCI Study - US 78/Mountain Industrial Blvd. Ramp Lighting	Interchange Lighting Improvements	LR5			39.3
28	Mountain Industrial Boulevard Sidewalk (West side of Mountain Industrial	Install sidewalk along west side of Mountain	PS8			39.1
29	E. Ponce de Leon Avenue at Rock Mountain Boulevard Intersection Improvement	To be determined.	I11			38.6
30	Tucker Industrial Road at Elmdale Dr Intersection Improvement	To be determined.	I6			33.2
31	Tucker Industrial Road at Hugh Howell Road (SR 236) Intersection Improvement	Install single right-turn lane with channelization	I4			33.1
32	Lawrenceville Highway (US 29/SR 8) at N. Royal Atlanta Drive Intersection	To be determined.	I2			32.6
33	Idlewood Road at Sarr Parkway Intersection Improvement	To be determined.	I12			31.8
34	City of Tucker - Hugh Howell Rd. Pedestrian Improvements	Sidewalk and Pedestrian Improvements along the Hugh Howell Rd. corridor through the TSCID	LP1			23.8
35	Hugh Howell Rd Sidewalk (North side of Hugh Howell Rd from Lawrenceville Hwy to Tucker Industrial Rd)	Install sidewalk along north side of Hugh Howell Rd from Lawrenceville Hwy to Tucker Industrial Rd	PS10			22.3
36	Hugh Howell Rd Sidewalk (South side of Hugh Howell Rd from Mountain Industrial Blvd to Rosser Rd)	Install sidewalk along south side of Hugh Howell Rd from Mountain Industrial Blvd to Rosser Rd	PS9			19.8

Figure 7: Report – Project Rank by Scenario

ID	Project Name	Rank By Scenario						
		1	2	3	4	5	6	7
I1	Mountain Industrial Boulevard at N. Royal Atlanta Drive Intersection Improvement	9	17	7	10	13	9	12
I2	Lawrenceville Highway (US 29/SR 8) at N. Royal Atlanta Drive Intersection Improvement	32	26	25	20	32	21	32
I3	Mountain Industrial Boulevard at S. Royal Atlanta Drive Intersection Improvement	17	27	13	16	19	16	18
I4	Tucker Industrial Road at Hugh Howell Road (SR 236) Intersection Improvement	31	21	17	17	21	17	30
I5	Mountain Industrial Boulevard at Elmdale Drive/Roger Marten Way Intersection Improvement	5	6	2	9	8	5	5
I6	Tucker Industrial Road at Elmdale Dr Intersection Improvement	30	23	23	19	31	20	31
I7	Mountain Industrial Boulevard at Hammermill Road (South) Intersection Improvement	14	14	11	12	15	11	14
I8	Mountain Industrial Boulevard at Greer Circle Intersection Improvement	16	10	12	13	16	12	16
I9	Mountain Industrial Boulevard at Lewis Road Intersection Improvement	13	13	8	11	14	10	13
I10	Mountain Industrial Boulevard at E. Ponce de Leon Avenue Intersection Improvement	12	24	9	22	18	15	10
I11	E. Ponce de Leon Avenue at Rock Mountain Boulevard Intersection Improvement	29	28	22	18	30	19	28
I12	Idlewood Road at Sarr Parkway Intersection Improvement	33	32	27	21	35	22	33
I13	Lawrenceville Highway (US 29/SR 8) at Rockbridge Road Intersection Improvement	18	12	15	15	17	14	17
I14	Lawrenceville Highway (US 29/SR 8) at Indian Trail Lilburn Road/Killian Hill Road Intersection Improvement	10	9	10	5	11	6	11
I15	Mountain Industrial Boulevard at Tuckerstone Parkway Intersection Improvement	11	30	20	23	23	18	9
PS1	Mountain Industrial Boulevard Sidewalk (East Side of Mountain Industrial from Gwinnett County line to bridge over CSX railroad)	23	15	26	27	24	27	22
PS2	Mountain Industrial Boulevard Sidewalk (West side of Mountain Industrial from Gwinnett County line to bridge over CSX railroad)	24	19	28	28	25	28	24
PS3	Mountain Industrial Boulevard Sidewalk (West side of Mountain Industrial from Tuckerstone Parkway to bridge over CSX railroad)	26	36	35	35	34	35	29
PS4	Mountain Industrial Boulevard Sidewalk (West side of Mountain Industrial from Old Sears Outlet to Hugh Howell Rd)	20	33	31	30	27	30	20
PS5	Mountain Industrial Boulevard Sidewalk (East side of Mountain Industrial from Old Sears Outlet to Hugh Howell Rd)	20	33	31	30	27	30	20
PS6	Mountain Industrial Boulevard Sidewalk (West side of Mountain Industrial from Hugh Howell Rd to Elmdale Dr)	19	31	30	29	26	29	19
PS7	Mountain Industrial Boulevard Sidewalk (West side of Mountain Industrial from Hammermill Rd (south) to Lewis Rd)	15	18	24	26	22	26	15
PS8	Mountain Industrial Boulevard Sidewalk (West side of Mountain Industrial from Lewis Rd to 1600 Mountain Industrial Blvd)	28	29	33	32	29	32	27
PS9	Hugh Howell Rd Sidewalk (South side of Hugh Howell Rd from Mountain Industrial Blvd to Rosser Rd)	36	25	36	36	36	36	35
PS10	Hugh Howell Rd Sidewalk (North side of Hugh Howell Rd from Lawrenceville Hwy to Tucker Industrial Rd)	35	16	34	34	33	34	34
LR1	GDOT 0017399 - US 78/Mountain Industrial Blvd Interchange	6	4	6	3	2	3	6
LR2	GDOT 0015216 - Mountain Industrial Blvd./Hugh Howell Dual Left Turn Lanes	1	2	1	1	1	1	2
LR3	City of Tucker I-3 - Lawrenceville Hwy./Mountain Industrial Blvd.	4	5	4	8	4	4	3
LR4	City of Tucker - Hugh Howell Rd./Flintstone Dr.	25	20	14	14	5	13	25
LR5	LCI Study - US 78/Mountain Industrial Blvd. Ramp Lighting	27	8	21	24	6	24	26
LP1	City of Tucker - Hugh Howell Rd. Pedestrian Improvements	34	35	29	33	10	33	36

Appendix C

TSCID FCP

Short-Term Fiscally Constrained

Detailed Project List

Appendix C
Fiscally Constrained Roadway Projects

Combined Project ID	Project Title	Project ID	Project Type	Project Name	Sponsoring Agencies	Project Description	From	To	Timeframe (Initiation)	CST*	PE (12%)	ROW (15%)	UTL (10%)	Engineering Inspection (5%)	Contingency (20%)	Estimated Total Project Cost**	Federal	Total Local Match	City Funds	TSCID Funds	Potential Local Match
FCP 1.1	N/A	15	Intersection Improvements	Mountain Industrial Boulevard at Elddale Drive/Roger Marten Way Intersection Improvement	TSCID, City of Tucker	Install single right-turn lane with channelization and widen curb radius along the northbound approach; widen curb radius at southwest quadrant; reconfigure Roger Marten Way to add a new separate left-turn lane; reconfigure inside lane of Elddale Dr. to allow left, through, and right turns; convert northbound and southbound left turn signals to flashing yellow arrow (FYAs); install no right-turn-on-red (RTOR) overhead signage on the east arm above the inside lane to prohibit RTOR from the inside lane of the Elddale Dr. approach; install sidewalks along Roger Marten Way and west side of Mountain Industrial Blvd. to connect to MARTA bus stops; install backplates with retroreflective borders on all traffic signal heads; repave and restripe Elddale Dr. and Roger Marten Way; install raised pavement markers on Elddale Dr. and Roger Marten Way.	N/A	N/A	2022	\$ 330,374	\$ 38,637	\$ 48,297	\$ 32,198	\$ 16,099	\$ 64,395	\$ 530,000	\$ 424,000	\$ 106,000	\$ 53,000	\$ 53,000	TSCID Funds; City of Tucker - General Funds or S/LOST
FCP 1.2	N/A	11	Intersection Improvement	Mountain Industrial Boulevard at N. Royal Atlanta Drive Intersection Improvement	City of Tucker	Install single right-turn lanes with channelization and wide curb radii along the northbound, southbound, and westbound approaches; convert southbound, eastbound, and westbound left turn signals to flashing yellow arrow (FYAs); convert northbound left-turn to a protected-only movement; install pedestrian signals and crosswalks across the east and west legs (N. Royal Atlanta Dr.) of the intersection; install ADA ramps at all four corners; install sidewalks along all approaches to connect to MARTA bus stops; install median nose delineators along Mountain Industrial Blvd.; install backplates with retroreflective borders on all traffic signal heads; install supplemental signal heads and "traffic signal ahead" signage along the northbound and southbound approaches; repave and restripe N. Royal Atlanta Dr.; install raised pavement markers on N. Royal Atlanta Dr.; work with property owner to consider relocating driveway just west of intersection further away from the intersection.	N/A	N/A	2022	\$ 486,098	\$ 45,271	\$ 56,589	\$ 37,726	\$ 18,863	\$ 75,452	\$ 720,000	\$ 576,000	\$ 144,000	\$ 72,000	\$ 72,000	TSCID Funds; City of Tucker - General Funds or S/LOST
FCP 1.3	N/A	13	Intersection Improvement	Mountain Industrial Boulevard at S. Royal Atlanta Drive Intersection Improvement	City of Tucker	Install single right-turn lane with channelization and wide curb radius along the eastbound approach; remove acceleration lane on west leg and install eyebrow or loon for eastbound U-turns; install pedestrian signals and crosswalks along all approaches; install ADA ramps at all four corners; install sidewalks along all approaches to connect to MARTA bus stops; install median nose delineators along Mountain Industrial Blvd.; install backplates with retroreflective borders on all traffic signal heads; install "traffic signal ahead" signage along the westbound approach; work with property owner to consider relocating driveway just east of intersection further away from the intersection.	N/A	N/A	2022	\$ 143,687	\$ 10,899	\$ 13,624	\$ 9,083	\$ 4,541	\$ 18,165	\$ 200,000	\$ 160,000	\$ 40,000	\$ 20,000	\$ 20,000	TSCID Funds; City of Tucker - General Funds or S/LOST
FCP 1.4	N/A	19	Intersection Improvement	Mountain Industrial Boulevard at Lewis Road Intersection Improvement	City of Tucker	Install single right-turn lanes with channelization and wide curb radius along northbound, southbound, and westbound approaches; convert all left turn signals to flashing yellow arrow (FYAs); install sidewalks along west side of Mountain Industrial Blvd. and along Lewis Rd. west of intersection to connect to MARTA bus stops; install backplates with retroreflective borders on all traffic signal heads; work with property owner to relocate driveway just west of intersection further away from the intersection.	N/A	N/A	2022	\$ 249,692	\$ 29,092	\$ 36,365	\$ 24,243	\$ 12,122	\$ 48,486	\$ 400,000	\$ 320,000	\$ 80,000	\$ 40,000	\$ 40,000	TSCID Funds; City of Tucker - General Funds or S/LOST
FCP 1.5	N/A	18	Intersection Improvement	Mountain Industrial Boulevard at Greer Circle Intersection Improvement	City of Tucker	Install single right-turn lane with channelization and wide curb radius along the southbound approach; convert all left turn signals to flashing yellow arrow (FYAs); install protected/permissive phasing for eastbound Greer Cir. left-turn movements; install sidewalks along west side of Mountain Industrial Blvd. and along Greer Cir. west of the intersection to connect to MARTA bus stops; install backplates with retroreflective borders on all traffic signal heads; repave and restripe Greer Cir. east of the intersection; install raised pavement markers on Greer Cir. east of the intersection.	N/A	N/A	2022	\$ 235,413	\$ 27,985	\$ 34,981	\$ 23,320	\$ 11,660	\$ 46,641	\$ 380,000	\$ 304,000	\$ 76,000	\$ 38,000	\$ 38,000	TSCID Funds; City of Tucker - General Funds or S/LOST
FCP 1.6	N/A	17	Intersection Improvement	Mountain Industrial Boulevard at Hammermill Road (South) Intersection Improvement	City of Tucker	Install single right-turn lane with channelization and wide curb radius along the northbound approach; convert southbound and westbound left turn signals to flashing yellow arrow (FYAs); install sidewalks along west side of Mountain Industrial Blvd. south of the intersection and extend to the US 78 interchange; install one-way pavement markings on west leg, and signage at driveway on west leg to prohibit eastbound traffic; install backplates with retroreflective borders on all traffic signal heads; work with property owner to close driveway to Public Storage just south of the intersection.	N/A	N/A	2022	\$ 175,439	\$ 20,238	\$ 25,297	\$ 16,865	\$ 8,432	\$ 33,729	\$ 280,000	\$ 224,000	\$ 56,000	\$ 28,000	\$ 28,000	TSCID Funds; City of Tucker - General Funds or S/LOST
FCP-1	Freight Cluster Plan Improvements along Mountain Industrial Boulevard	15, 11, 13, 19, 17, 18	Intersection Improvements	Mountain Industrial Boulevard - Multiple Locations (Individual Project Details Above)	City of Tucker	Set of nine improvements focused on operational improvements critical to freight mobility within the Tucker Summit Community Improvement District (TSCID) - More Detail in Application	Lawrenceville Highway (US 29/SR-5)	Lewis Road	2022	\$ 1,620,704	\$ 172,122	\$ 215,152	\$ 143,435	\$ 71,717	\$ 286,870	\$ 2,510,000	\$ 2,008,000	\$ 502,000	\$ 251,000	\$ 251,000	TSCID Funds; City of Tucker - General Funds or S/LOST
FCP 2.1	N/A	115	Intersection Improvement	Mountain Industrial Boulevard at Tuckerstone Parkway Intersection Improvement - Clear Cut Trees and Warning Signal	City of Tucker	Clear cut trees just south of the intersection to improve sight distance; install a signal activated warning signal on the westbound approach to warn motorists of southbound right-turns from Tuckerstone Pkwy. Install signal activated warning signal in the northbound approach along Mountain Industrial Blvd to warn motorists of approaching Tuckerstone Parkway intersection per MUTCD guidelines (see Chapter 2C).	N/A	N/A	2022	\$ 75,360	\$ 8,640	\$ 10,800	\$ 7,200	\$ 3,600	\$ 14,400	\$ 120,000	\$ -	\$ 120,000	\$ 96,000	\$ 24,000	TSCID Funds; City of Tucker - General Funds or S/LOST
FCP 2.2	N/A	116	Intersection Improvement	Mountain Industrial Boulevard at Tuckerstone Parkway Intersection Improvement - Add Left Turn Lane	City of Tucker	Install a 12-ft wide 200-ft long left-turn lane in the Mountain Industrial Boulevard median just east of Tuckerstone Parkway across from the Ram Tool Driveway including an eyebrow for a WB 60 to make a U-turn.	N/A	N/A	2022	\$ 200,000	\$ 15,000	\$ -	\$ -	\$ -	\$ -	\$ 215,000	\$ -	\$ 215,000	\$ 172,000	\$ 43,000	TSCID Funds; City of Tucker - General Funds or S/LOST
FCP 2.3	N/A	117	Intersection Improvement	Mountain Industrial Boulevard at Tuckerstone Parkway Intersection Improvement - Right In/Right Out at Tuckerstone	City of Tucker	Convert Tuckerstone Parkway to a right-in right-out only at the Tuckerstone Parkway/Mountain Industrial Boulevard intersection.	N/A	N/A	2022	\$ 26,400	\$ 3,600	\$ -	\$ -	\$ -	\$ -	\$ 30,000	\$ -	\$ 30,000	\$ 24,000	\$ 6,000	TSCID Funds; City of Tucker - General Funds or S/LOST
FCP-2	Mountain Industrial Boulevard at Tuckerstone Boulevard Intersection Improvements	115, 116, 117	Intersection Improvements	Mountain Industrial Boulevard at Tuckerstone Boulevard Intersection Improvements (Individual Project Details Above)	City of Tucker	Set of three improvements including: Clear cut trees just south of the intersection to improve sight distance; install a vehicle activated beacon on the westbound approach to warn motorists of southbound right-turns from Tuckerstone Pkwy. Install signal activated warning signal in the northbound approach along Mountain Industrial Blvd to warn motorists of approaching Tuckerstone Parkway intersection per MUTCD guidelines (see Chapter 2C); install a 12-ft wide 200-ft long left-turn lane in the Mountain Industrial Boulevard median just east of Tuckerstone Parkway across from the Ram Tool Driveway including an eyebrow for a WB 60 to make a U-turn; and Convert Tuckerstone Parkway to a right-in right-out only at the Tuckerstone Parkway/Mountain Industrial Boulevard intersection.	N/A	N/A	2022	\$ 301,760	\$ 27,240	\$ 10,800	\$ 7,200	\$ 3,600	\$ 14,400	\$ 365,000	\$ -	\$ 365,000	\$ 292,000	\$ 73,000	TSCID Funds; City of Tucker - General Funds or S/LOST
FCP-3	E. Ponce de Leon Avenue at Rock Mountain Boulevard Intersection Improvement	111	Intersection Improvement	E. Ponce de Leon Avenue at Rock Mountain Boulevard Intersection Improvement	City of Tucker	Restripe the intersection and install raised pavement markers; install backplates with retroreflective borders to all traffic signal head indications; convert left-turn signal on eastbound E. Ponce de Leon Ave. approach to flashing yellow arrow (FYA); install a pedestrian crosswalk and pedestrian signal west of the intersection to cross E. Ponce de Leon Ave; install pedestrian landing area at MARTA bus stop on the southwest corner of the intersection at the southwest corner, and install sidewalks from the landing area to the crosswalk across E. Ponce de Leon Ave; install supplemental signal heads and advance "signal ahead" signage on southbound Rock Mountain Blvd.; install sidewalk along the west side of Rock Mountain Blvd. (approximately 1500 ft.).	N/A	N/A	2023	\$ 217,047	\$ 25,733	\$ 32,166	\$ 21,444	\$ 10,722	\$ 42,888	\$ 350,000	\$ -	\$ 350,000	\$ 280,000	\$ 70,000	TSCID Funds; City of Tucker - General Funds or S/LOST. In general, TSCID will do PE.
FCP-4	Lawrenceville Highway (US 29/SR 8) and N. Royal Atlanta Intersection Improvement	16	Intersection Improvement	Lawrenceville Highway (US 29/SR 8) and N. Royal Atlanta Intersection Improvement	City of Tucker	Install a single right-turn lane with wide curb radius along northbound Lawrenceville Hwy. (US 29/SR 8); reconstruct the northeast corner and widen curb radius; convert left-turn signal on southbound Lawrenceville Hwy. (US 29/SR 8) to a flashing yellow arrow (FYA); repave and restripe N. Royal Atlanta Dr., and install raised pavement markers; install median nose delineators along N. Royal Atlanta Dr; convert Cherry Ln. (north of the intersection) into a one-way inbound-only street, prohibiting traffic entering Lawrenceville Hwy. (US 29/SR 8) from Cherry Ln.; cut back trees along the west side of Lawrenceville Hwy. (US 29/SR 8); install sidewalk along the south side of N. Royal Atlanta Dr., filling a gap to the existing sidewalk east of the intersection; install sidewalk along the north side of N. Royal Atlanta Dr. to the existing MARTA bus stop east of the intersection; reconstruct the existing sidewalks along both sides of Lawrenceville Hwy. (US 29/SR 8).	N/A	N/A	2023	\$ 405,733	\$ 10,503	\$ 13,129	\$ 8,753	\$ 4,376	\$ 17,506	\$ 460,000	\$ -	\$ 460,000	\$ 368,000	\$ 92,000	TSCID Funds; City of Tucker - General Funds or S/LOST. In general, TSCID will do PE.
FCP-5	Mountain Industrial Boulevard Speed Advisory Study	NA	Study	Mountain Industrial Boulevard Speed Advisory Study	City of Tucker	In accordance with guidance from MUTCD Section 2C.08, conduct an engineering study to determine the advisory speed for horizontal curve along Mountain Industrial Boulevard adjacent to Tuckerstone Parkway, and install advisory speed plaques along the northbound and southbound approaches just south of just north of the curve, respectively. As part of this study, examine the need for digital speed warning signage along the northbound and southbound approaches.	South of Presidents Way	Gwinnett County Line	2023	NA	\$ 20,000	NA	NA	NA	NA	\$ 20,000	\$ -	\$ 20,000	\$ 16,000	\$ 4,000	TSCID Funds; City of Tucker - General Funds or S/LOST
FCP-6	Scoping Study for Reconfiguration of Tuckerstone Parkway at Mountain Industrial Boulevard	NA	Study	Scoping Study for Reconfiguration of Tuckerstone Parkway at Mountain Industrial Boulevard	City of Tucker	Conduct a scoping study to determine the feasibility of reconfiguration of the Tuckerstone Pkwy at Mountain Industrial Blvd., including a potential conversion to a roundabout.	N/A	N/A	2023	NA	\$ 200,000	NA	NA	NA	NA	\$ 200,000	\$ -	\$ 200,000	\$ 160,000	\$ 40,000	TSCID Funds; City of Tucker - General Funds or S/LOST
FCP-7	Tucker Industrial Road at Hugh Howell Road (SR 236) Intersection Improvement	14	Intersection Improvement	Tucker Industrial Road at Hugh Howell Road (SR 236) Intersection Improvement	City of Tucker	Install single right-turn lane with channelization and wide curb radii along eastbound approach; widen curb radius at southeast quadrant of intersection; install sidewalks along all approaches to connect to MARTA bus stops; convert all left-turn signals to flashing yellow arrows (FYAs); install backplates with retroreflective borders on all traffic signal heads; work with property owner to consider relocating driveway just east of intersection further away from the intersection.	N/A	N/A	2025	\$ 284,687	\$ 22,319	\$ 27,898	\$ 18,599	\$ 9,299	\$ 37,198	\$ 400,000	\$ -	\$ 400,000	\$ 320,000	\$ 80,000	TSCID Funds; City of Tucker - General Funds or S/LOST
FCP-8	Mountain Industrial and E. Ponce DeLeon Avenue Intersection Improvements - PRELIMINARY ENGINEERING	NA	Intersection Improvement	Mountain Industrial and E. Ponce DeLeon Avenue	City of Tucker	Preliminary Engineering for the following project: Widen curb radius and install a retaining wall and fill at southeast quadrant of intersection; extend left-turn lane on east leg of the intersection; install median nose delineators at median on south leg; work with property owner to close driveways along Mountain Industrial Blvd. and E. Ponce de Leon Ave. that are closest to the intersection.	N/A	N/A	2025	NA	\$ 157,200	NA	NA	NA	NA	\$ 157,200	\$ -	\$ 157,200	\$ 125,760	\$ 31,440	TSCID Funds; City of Tucker - General Funds or S/LOST
FCP-9	Mountain Industrial Boulevard Median Enhancements - PRELIMINARY ENGINEERING	NA	Operational Improvement	Mountain Industrial Boulevard Median Improvements	City of Tucker	Preliminary Engineering for the following project: Phase 2 of Median Project - 1000 ft. of median in the center from South of Presidents Way to Gwinnett County Line. Phase 1 is between from app. 400 feet N of Presidents Way to app. 200 feet south of the Gwinnett County Line.	N/A	N/A	2025	NA	\$ 108,000	NA	NA	NA	NA	\$ 108,000	\$ -	\$ 108,000	\$ 86,400	\$ 21,600	TSCID Funds; City of Tucker - General Funds or S/LOST
TOTAL PROJECT COSTS - TSCID ROADWAY PROJECTS - COST FEASIBLE																\$ 4,570,200	\$ 2,008,000	\$ 2,562,200	\$ 1,899,160	\$ 663,040	

Appendix C
Fiscally Constrained Pedestrian Projects

Combined Project ID	Project Title	Project ID	Project Type	Project Name	Partner Jurisdiction	Project Description	From	To	Timeframe (Initiation)	CS1*	PE (12%)	ROW (15%)	UTL (10%)	Engineering Inspection (5%)	Contingency (20%)	Estimated Total Project Cost	Federal	Total Local Match	City Funds	TSCID Funds	Potential Local Match
FCP-10.1	N/A	PS2	Pedestrian & Safety	Mountain Industrial Boulevard Sidewalk (West side of Mountain Industrial from Gwinnett County line to 2530 Mountain Industrial Blvd)	City of Tucker	Install sidewalk along west side of Mountain Industrial from Gwinnett County line to Tuckerstone	Gwinnett County Line	2530 Mountain Industrial Blvd.	2023	\$ 190,000	\$ 60,000	\$ 75,000	\$ 50,000	\$ 25,000	\$ 100,000	\$ 500,000	\$ 400,000	\$ 100,000	\$ 50,000	\$ 50,000	TSCID Funds; City of Tucker - General Funds or SPLOST
FCP-10.2	N/A	PS1	Pedestrian & Safety	Mountain Industrial Boulevard Sidewalk (East Side of Mountain Industrial from Gwinnett County line to bridge over CSX railroad)	City of Tucker	Install sidewalk along east side of Mountain Industrial from Gwinnett County line to bridge over CSX railroad	Gwinnett County Line	Bridge over CSX Railroad	2023	\$ 190,000	\$ 60,000	\$ 75,000	\$ 50,000	\$ 25,000	\$ 100,000	\$ 500,000	\$ 400,000	\$ 100,000	\$ 50,000	\$ 50,000	TSCID Funds; City of Tucker - General Funds or SPLOST
FCP-10.3	N/A	PS3	Pedestrian & Safety	Mountain Industrial Boulevard Sidewalk (West side of Mountain Industrial from Tuckerstone Parkway to bridge over CSX railroad)	City of Tucker	Install sidewalk along west side of Mountain Industrial from Tuckerstone Parkway to bridge over CSX railroad	Tuckerstone Pkwy.	Bridge over CSX Railroad	2023	\$ 45,600	\$ 14,400	\$ 18,000	\$ 12,000	\$ 6,000	\$ 24,000	\$ 120,000	\$ 96,000	\$ 24,000	\$ 12,000	\$ 12,000	TSCID Funds; City of Tucker - General Funds or SPLOST
FCP-10.4	N/A	PS4	Pedestrian & Safety	Mountain Industrial Boulevard Sidewalk (West side of Mountain Industrial from Old Sears Outlet to Hugh Howell Rd)	City of Tucker	Install sidewalk along west side of Mountain Industrial from 2301 Mountain Industrial Blvd (old Sears outlet) to Hugh Howell Rd	Old Sears Outlet	Hugh Howell Rd.	2023	\$ 49,400	\$ 15,600	\$ 19,500	\$ 13,000	\$ 6,500	\$ 26,000	\$ 130,000	\$ 104,000	\$ 26,000	\$ 13,000	\$ 13,000	TSCID Funds; City of Tucker - General Funds or SPLOST
FCP-10.5	N/A	PS5	Pedestrian & Safety	Mountain Industrial Boulevard Sidewalk (East side of Mountain Industrial from Old Sears Outlet to Hugh Howell Rd)	City of Tucker	Install sidewalk along east side of Mountain Industrial from 2301 Mountain Industrial Blvd (old Sears outlet) to Hugh Howell Rd	Old Sears Outlet	Hugh Howell Rd.	2023	\$ 49,400	\$ 15,600	\$ 19,500	\$ 13,000	\$ 6,500	\$ 26,000	\$ 130,000	\$ 104,000	\$ 26,000	\$ 13,000	\$ 13,000	TSCID Funds; City of Tucker - General Funds or SPLOST
FCP-10.6	N/A	PS6	Pedestrian & Safety	Mountain Industrial Boulevard Sidewalk (West side of Mountain Industrial from Hugh Howell Rd to Elmdale Dr)	City of Tucker	Install sidewalk along west side of Mountain Industrial from Hugh Howell Rd to Elmdale Dr	Hugh Howell Rd.	Elmdale Dr.	2023	\$ 76,000	\$ 24,000	\$ 30,000	\$ 20,000	\$ 10,000	\$ 40,000	\$ 200,000	\$ 160,000	\$ 40,000	\$ 20,000	\$ 20,000	TSCID Funds; City of Tucker - General Funds or SPLOST
FCP-10.7	N/A	PS7	Pedestrian & Safety	Mountain Industrial Boulevard Sidewalk (West side of Mountain Industrial from Hammermill Rd to US 78 interchange)	City of Tucker	Install sidewalk along west side of Mountain Industrial from Hammermill Rd (south) to US 78	Hammermill Rd. (South)	US 78 Interchange	2023	\$ 19,000	\$ 6,000	\$ 7,500	\$ 5,000	\$ 2,500	\$ 10,000	\$ 50,000	\$ 40,000	\$ 10,000	\$ 5,000	\$ 5,000	TSCID Funds; City of Tucker - General Funds or SPLOST
FCP-10.8	N/A	PS8	Pedestrian & Safety	Mountain Industrial Boulevard Sidewalk (West side of Mountain Industrial from Lewis Rd to 1600 Mountain Industrial Blvd)	City of Tucker	Install sidewalk along west side of Mountain Industrial from Lewis Rd to 1600 Mountain Industrial Blvd	Lewis Rd.	1600 Mountain Industrial Blvd.	2023	\$ 38,000	\$ 12,000	\$ 15,000	\$ 10,000	\$ 5,000	\$ 20,000	\$ 100,000	\$ 80,000	\$ 20,000	\$ 10,000	\$ 10,000	TSCID Funds; City of Tucker - General Funds or SPLOST
FCP-10	Freight Cluster Workforce Access Sidewalks - Mountain Industrial Boulevard	PS1, PS2, PS3, PS4, PS5, PS6, PS7, PS8	Pedestrian & Safety	Freight Cluster Workforce Access Sidewalks - Mountain Industrial Boulevard (Individual Project Descriptions Above)	City of Tucker	Set of eight pedestrian improvements identified through the Freight Cluster Plan enhancing workforce access to transit within the Tucker Summit Community Improvement District (TSCID) - More Detail in Application	Gwinnett County Line	Lewis Road	2023	\$ 657,400	\$ 207,600	\$ 259,500	\$ 173,000	\$ 86,500	\$ 346,000	\$ 1,730,000	\$ 1,384,000	\$ 346,000	\$ 173,000	\$ 173,000	TSCID Funds; City of Tucker - General Funds or SPLOST
FCP-11	Hugh Howell Rd Sidewalk (South side of Hugh Howell Rd from Mountain Industrial Blvd to Rosser Rd)***	PS9	Pedestrian & Safety	Hugh Howell Rd Sidewalk (South side of Hugh Howell Rd from Mountain Industrial Blvd to Flintstone Drive)	City of Tucker	Install sidewalk along south side of Hugh Howell Rd from Mountain Industrial Blvd to Flintstone Road	Mountain Industrial Blvd.	Flintstone	2024	\$ 38,000	\$ 12,000	\$ 15,000	\$ 10,000	\$ 5,000	\$ 20,000	\$ 100,000	\$ -	\$ 100,000	\$ 100,000	\$ -	TSCID Funds; City of Tucker - General Funds or SPLOST
FCP-12	Hugh Howell Rd Sidewalk (North side of Hugh Howell Rd from Lawrenceville Hwy to Tucker Industrial Rd)****	PS10	Pedestrian & Safety	Hugh Howell Rd Sidewalk (North side of Hugh Howell Rd from Lawrenceville Hwy to Tucker Industrial Rd)	City of Tucker	Install sidewalk along north side of Hugh Howell Rd from Lawrenceville Hwy to Tucker Industrial Rd	Lawrenceville Hwy.	Tucker Industrial Rd.	2025	\$ 64,600	\$ 20,400	\$ 25,500	\$ 17,000	\$ 8,500	\$ 34,000	\$ 170,000	\$ -	\$ 170,000	\$ 170,000	\$ -	TSCID Funds; City of Tucker - General Funds or SPLOST
TOTAL PROJECT COSTS - BICYCLE AND PEDESTRIAN - COST FEASIBLE																\$ 2,000,000	\$ 1,384,000	\$ 616,000	\$ 443,000	\$ 173,000	

Appendix D

TSCID FCP

Long-Term Fiscally Unconstrained

Detailed Project List

Appendix D
Long Term Roadway Projects

Project ID	Project Type	Project Name	Sponsoring Agencies	Project Description	From	To	Source	Estimated Total Project Cost*	Potential Funding Sources (Non-Local)	Total Local Match	Potential Local Match
LTR-1	Roadway	Mountain Industrial and E. Ponce DeLeon Avenue Intersection Improvements	City of Tucker	Widen curb radius and install a retaining wall and fill at southeast quadrant of intersection; extend left-turn lane on east leg of the intersection; install median nose delineators at median on south leg; work with property owner to close driveways along Mountain Industrial Blvd. and E. Ponce de Leon Ave. that are closest to the intersection.	NA	NA	Local preference - based on previous TSCID efforts	\$ 1,310,000	STBG, BUILD, INFRA (TBD)	TBD	GTIB, TSCID, City of Tucker, GDOT
LTR-2	Roadway	Mountain Industrial Boulevard Median Enhancements	City of Tucker	Phase 2 of Median Project - 1000 ft. of median in the center from South of Presidents Way to Gwinnett County Line. Phase 1 is between from app. 400 feet N of Presidents Way to app. 200 feet south of the Gwinnett County line	S. of Presidents Way	Gwinnett County Line	Local preference - based on previous TSCID efforts	\$ 900,000	None	TBD	TSCID Funds
LTR-3	Roadway	City of Tucker - Mountain Industrial Blvd Widening (6 Lanes, Hugh Howell to US 78) - Including Widening of Bridge	City of Tucker	The City of Tucker adopted this project through Tucker Tomorrow STMP. It will widen Mountain Industrial Blvd. to 6-lanes from Hugh Howell Rd to US 78.	Hugh Howell Road	US 78	TSCID Freight Cluster Plan	\$ 21,700,000	STBG, BUILD, INFRA (TBD)	TBD	GTIB, TSCID, City of Tucker, GDOT
LTR-4	Scoping Study	Scoping Study for Mountain Industrial Boulevard Roundabouts between Tuckerstone Boulevard & N Royal Atlanta Drive	City of Tucker	Conduct a scoping study to determine the feasibility of implementing a roundabout at Mountain Industrial Blvd at S. Royal Atlanta Dr and pair of median U-turns (teardrop configuration) north of Mountain Industrial Blvd at N. Royal Atlanta Dr.	S Royal Atlanta Drive	North of N Royal Atlanta Drive	TSCID Freight Cluster Plan	\$ 300,000	STBG	TBD	TSCID, City of Tucker
LTR-5	Roadway	Roundabout at Mountain Industrial Blvd/S Royal Atlanta Dr, Teardrop Roundabout north of Mountain Industrial Blvd/N Royal Atlanta Dr.	City of Tucker	Construct roundabout at Mountain Industrial Blvd/S Royal Atlanta Dr. Construct teardrop roundabout just north of Mountain Industrial Blvd/N Royal Atlanta Dr. Reconfigure Mountain Industrial Blvd/N Royal Atlanta intersection to remove left turn lanes and redirect left turns north to teardrop roundabout.	S Royal Atlanta Drive	North of N Royal Atlanta Drive	TSCID Freight Cluster Plan	\$ 11,700,000	STBG, BUILD, INFRA (TBD)	TBD	GTIB, TSCID, City of Tucker, GDOT
LTR-6	Interchange Modification Report	IMR - US 78 at Mountain Industrial Boulevard Interchange	City of Tucker	In coordination with GDOT and City of Tucker, complete an interchange modification report (IMR) to identify a preferred interchange design alternative for Mountain Industrial Boulevard at US 78 and seek FHWA approval for modification of the interchange.	N/A	N/A	TSCID Freight Cluster Plan	\$ 300,000	STBG	TBD	TSCID, City of Tucker

* - Details of the cost estimates developed for all projects can be found in the project backup spreadsheet - TSCID_Detailed_Cost_Estimates_FINAL.xls