



Evermore  
Community Improvement District

# Comprehensive Transportation Plan



January 2019



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# Executive Summary

The Comprehensive Transportation Plan documents how a community would like to see their transportation networks develop to serve their current and future needs. The Plan consists of recommendations for transportation improvements to maintain and expand the CID's infrastructure while fostering a healthy, livable community. The recommended improvements include, but are not limited to new roadway alignments, intersections, roadway widenings, transit, sidewalks, bike facilities, and trails.



# Executive Summary

## Plan Development

The Plan development process consists of four primary steps: Reviewing Existing Conditions, Needs Assessment, Developing Recommendations, and Prioritizing Recommendations.

## Existing Conditions

The first step consisted of reviewing existing conditions. The existing conditions are a snapshot of the transportation system as it exists right now. Vehicle, pedestrian, bicycle, and transit infrastructure was reviewed. Below are some key findings:

- Within the study limits, the US 78 corridor carries between 55,000 and 65,000 vehicles per day during the weekday. The weekend daily volume is slightly lower. Traffic volumes are expected to continue to increase in the corridor at a rate of 1.0% per year.
- A significant portion of traffic on US 78 is associated with business employees traveling to and from work. To learn more about where these local commuting trips occur, data from the U.S. Census Bureau's Longitudinal Employer-Household Dynamics (LEHD) survey was reviewed. **Figure 1.3.3** shows the home locations of people who work within one mile of the US 78 corridor. Workers generally live in southern and central Gwinnett County, with the highest concentrations of employees living immediately south of the study area.
- The regional Travel Demand Model (TDM) provides insight into regional travel patterns. The model indicates approximately 30% of trips both began and ended within the subarea around the study area; a high rate of local trips along US 78.
- Another way to analyze Travel Demand Model outputs is to view the driving paths of all vehicles that cross a specific point along a roadway. An analysis was performed of the peak period routing for vehicles that use US 78 just east of Killian Hill Road/Bethany Church Road. This analysis shows a substantial amount of the vehicles use US 78 to get between locations in DeKalb and Gwinnett Counties. Approximately half of passenger vehicles crossing this point during the morning and afternoon periods have an origin or destination directly on the US 78 corridor within the CID boundary. All other trips travel along US 78 to get to a location beyond the study area, or purely as a through route.
- Crash rates for the US 78 corridor were calculated and compared to the statewide averages for urban principal arterials. **Table 1.5.4** summarizes the crash rate calculations and indicates the average crash rate of 505 crashes per 100 million vehicles miles (MVM) for the five year period was slightly lower than the statewide average of 583 in the year 2015.



## **Needs Assessment**

The needs assessment identifies where there are opportunities for improvements in the various travel modes and specific locations. The intersections projected to operate at an unacceptable Level-of-Service, or overcapacity, were identified. To improve operations along the US 78 corridor, there are three critical areas which currently experience congestion and where improvements should be prioritized.

- The first area along US 78 is around the E Park Place Blvd intersection, and extending eastward.
- The second area along US 78 is around the Killian Hill Rd/Bethany Church Rd intersection.
- The third area is along US 78, beginning at the SR 124/Scenic Highway intersection and extending to the east.

Additionally, the needs assessment identified opportunities to improve safety, accommodate heavy vehicle movements, improve pedestrian/bicycle mobility, and increase transit service.



# Executive Summary

## Recommendations

The plan includes transportation recommendations to address the identified needs. The consultant team developed project recommendations, identified on **Figures 3.1 and 3.2**. The 46 projects consist of:

- Intersection Improvements (16 projects)
- Roadways – both new and widenings (15 projects)
- Bridge – (1 project)
- Pedestrian and bicycle facilities (6 projects)
- Transit recommendations (5 projects)
- Other projects (3 projects)

The plan developed project recommendations based on previously identified needs, stakeholder input, and traffic analysis of intersection conditions along US 78. An evaluation of the projects was performed to indicate the potential benefits. Planning level cost estimates were developed for most of the roadway and intersection projects (some projects require further evaluation). The short-term, mid-term, and long-term estimated project cost totals are indicated below.

Planning Level Cost Estimate Totals for Roadway and Intersection Projects	
Short-term	\$32,395,000
Mid-term	\$89,870,000
Long-term	\$79,275,000





## Comprehensive Transportation Plan

### Implementation

The evaluation analysis presented in the CTP is intended to help the Evermore CID and community understand the relative merits of each of the transportation projects when compared to each other. The actual implementation and phasing of improvements must consider many additional factors, including funding, ease of construction, benefit to community, and other projects and initiatives.

The CTP divides the projects into three potential implementation tiers (short-term, mid-term, and long-term). Additionally, 15 projects were identified as having a high return on investment, as indicated below in **Table 3.3**.

Table 3.3- High Return on Investment Projects			
Project ID	Project Name	Implementation Tier	Planning Level Cost Estimate
I-1	US 78 at E. Park Place Blvd	SHORT	\$950,000
I-2	NE Quadrant Roadway at US 78/E. Park Place Blvd - Using Glenn Club Drive	SHORT	\$450,000
R-5	Roadway Improvements on Parker Ct, north of US 78	SHORT	\$50,000
I-3	US 78 at Stone Dr/Lowes Driveway	SHORT	\$265,000
I-4	US 78 at Gresham Road	SHORT	\$2,245,000
I-5	US 78 at Ross Rd	SHORT	\$280,000
I-6	US 78 at Killian Hill Rd/Bethany Church Rd	SHORT	\$3,230,000
I-14	Killian Hill Road at Paxton Lane	SHORT	\$2,030,000
I-7	US 78 at Hewatt Rd	SHORT	\$2,080,000
R-9	US 78 / SR 10 / Stone Mountain Highway Parallel Road from Hewatt Road to Britt Road	SHORT	\$16,740,000
R-10	NE Quadrant Roadway at US 78/Wisteria Drive	SHORT	\$4,075,000
R-6	New Parallel Local Street, north of US 78, from Pucketts Drive to Lowes Shopping Center (New Location)	MID	\$4,385,000
R-8a	New Parallel local street, north of US 78, from Lake Lucerne Road to Paxton Lane	MID	\$11,780,000
R-12	SR 124/Scenic Hwy	MID	\$39,300,000
R-11	US 78/Main Street Widening	LONG	\$16,500,000

Implementation of the plan will require coordination and cooperation with adjacent jurisdictions and partner agencies. The CTP has identified projects which the Evermore CID can study further, program, and seek funding based on their priorities. This CTP document provides the recommendations for the Evermore CID leaders and Gwinnett County to consider and implement as they deem appropriate. It is paramount for the Evermore CID and Gwinnett County to continue investment in transportation infrastructure improvements to enhance the quality of life for the community.







# 1-Existing Conditions

The plan began with reviewing and establishing the existing conditions – a snapshot of the transportation system as it exists now. The process began with a review of previous plans performed at the local, county, and regional level. A summary of the plans and progress was documented.

Vehicle, pedestrian, bicycle, and transit infrastructure was reviewed and summarized. Traffic volumes were collected and traffic patterns were analyzed based on regional travel modeling data. The plan documented operational conditions based on field reviews along the corridor and at key intersections.

The final component in defining the existing conditions was a thorough crash review along the corridor to identify areas of concern. Establishing and understanding the existing conditions allowed the CTP to develop recommended enhancements. This chapter summarizes these components.



## 1.1-Previous Plan Summaries

### Gwinnett County Comprehensive Transportation Plan (2008 and 2017)

The Gwinnett County CTP was completed in September 2008. As a part of the overall Gwinnett Unified Plan, the CTP sought to assess the current state of transportation in the county, and provide recommendations on how transportation and land use strategies could enhance quality of life in Gwinnett County. The plan identified several issues hindering Gwinnett County's explosive growth, including the county's lack of a notable downtown, struggle to foster revitalization in certain areas, and increasing diversity, among several others. From a transportation perspective, increasing traffic volumes along I-85 as well as concerns over frequent crashes in this corridor were also among the various reasons for creating recommendations.

With respect to Evermore CID area – more specifically Highway 78 – the plan provided several transportation-specific recommendations, including the implementation of an access management plan and numerous streetscape projects. These projects were developed considering the goals and vision of the CTP. The list of projects within the Evermore CID corridor derived from the Gwinnett CTP are listed in **Table 1.1.1**.





## **Destination2040: Gwinnett Comprehensive Transportation Plan**

The Gwinnett County Comprehensive Transportation Plan (CTP) –Destination2040– provides a framework to improve quality of life for everyone in the County by facilitating the mobility of people and goods safely and efficiently across all modes of transportation. The CTP was unanimously adopted by the Board of Commissioners in December 2017 and included a programmatic list of transportation initiatives and policies for the County to consider in the coming years. The planning team created this list by working with County staff, technical and stakeholder committees, and engaging community members to select implementable projects that can be funded by the County with State and Federal assistance.





# Existing Conditions

## Gwinnett 2040 Unified Plan

The Gwinnett 2040 Unified Plan is the latest update of Gwinnett County's Comprehensive Plan. The Unified Plan provides the County with a framework for long-term development through 2040. The plan provides recommendations on development related to several elements: Transportation, Land Use, Economic Development, Housing, and Broadband Access. In the unincorporated portions of Gwinnett County, the Unified Plan provides an understanding of future expectations of land use. The majority of the area covered by Evermore CID along US 78 is designated "Community Mixed-Use," intended to provide integrated residential, commercial, public, and service-oriented spaces. The plan is expected to be completed in early 2019.





### Park Place Supplemental LCI (2011) and Update (2013)

The Park Place Supplemental LCI Study was first completed in 2011. The plan examines the viability of redeveloping the now vacant Stone Mountain Tennis Center and adjacent lot of a former Target. The study calls for converting the Tennis Center into a multi-purpose recreation venue, along with a sports training facility and mixed-use development on the former Target site. An endeavor that would require both public and private investment, these facilities would seek to catalyze growth in a once bustling area that has been marked by years of decline. Transportation improvements provided by the plan include a two-way connection between the center and Stone Mountain Park, realigning Bermuda Road, relocating GRTA's 424 bus Park n' Ride lot to the planned recreation center, and even a circulator system providing service to/from the development.

The update to the LCI was completed in 2013, noting that financial challenges have been the biggest inhibitor to completing many of the projects outlined in the original study. Projects like the realignment of Bermuda Road and redevelopment of the Stone Mountain Tennis Center have not moved forward. Still, since the original plan, numerous vehicular and pedestrian projects have been successfully completed. Within the past year, the county demolished the Tennis Center.





# Existing Conditions

## City of Snellville Comprehensive Plan (2009) and Plan Update (estimated 2019)

The City of Snellville completed its most recent update to its comprehensive plan in 2009, following a community assessment conducted by Jordan, Jones & Goulding. The plan addresses traffic, safety, and connectivity along Highway 78 as substantial issues plaguing the corridor. Several recommendations were made in the community assessment to improve the Highway 78 corridor, including intersection redesign, altering auto-centric land use patterns around downtown, and considering senior and commuter express bus service. While express bus service has since been added, the updated comprehensive plan does not make any specific recommendations for transportation improvements along the corridor. The city is in the process of updating the comprehensive plan - which is anticipated to be completed in 2019.





## Gwinnett County SPLOST

Gwinnett County administers a Special Purpose Local Option Sales Tax (SPLOST) program, which includes funding for implementation of transportation and other infrastructure improvements throughout the county via a one-cent sales tax. A list of capital projects was developed by representatives of both Gwinnett County and the 16 municipalities within its boundaries. After voters overwhelmingly passed a referendum vote in November 2016, the current SPLOST was extended for an additional six-year cycle, funding projects from FY 2017 through FY 2022. Of the estimated \$950 million from the SPLOST program, Gwinnett County will devote 65 percent of its share of SPLOST funding specifically for transportation-related projects. The list of projects currently programmed for construction are listed in **Table 1.1.2.**





# Existing Conditions

## ARC Regional Transportation Plans

The Atlanta Region's Plan is a long-range blueprint that details investments that will be made over a 25-year period to improve the region's quality of life. The RTP examines the 20-county metropolitan planning area's transportation needs over the next 25 years and provides a framework to address anticipated growth through transportation strategies to improve mobility and investments to improve the region's transportation system. The RTP is a comprehensive statement of the regional future transportation needs as identified by local jurisdictions, the State and other planning and public stakeholders. The TIP (current FY 2018-2023 TIP) allocates federal funds for use in construction of the highest-priority transportation projects in the near term of the RTP. The ARC RTP and TIP included planned and programmed projects within the Evermore CID. The projects supported by these funding mechanisms are listed in **Table 1.1.1**.



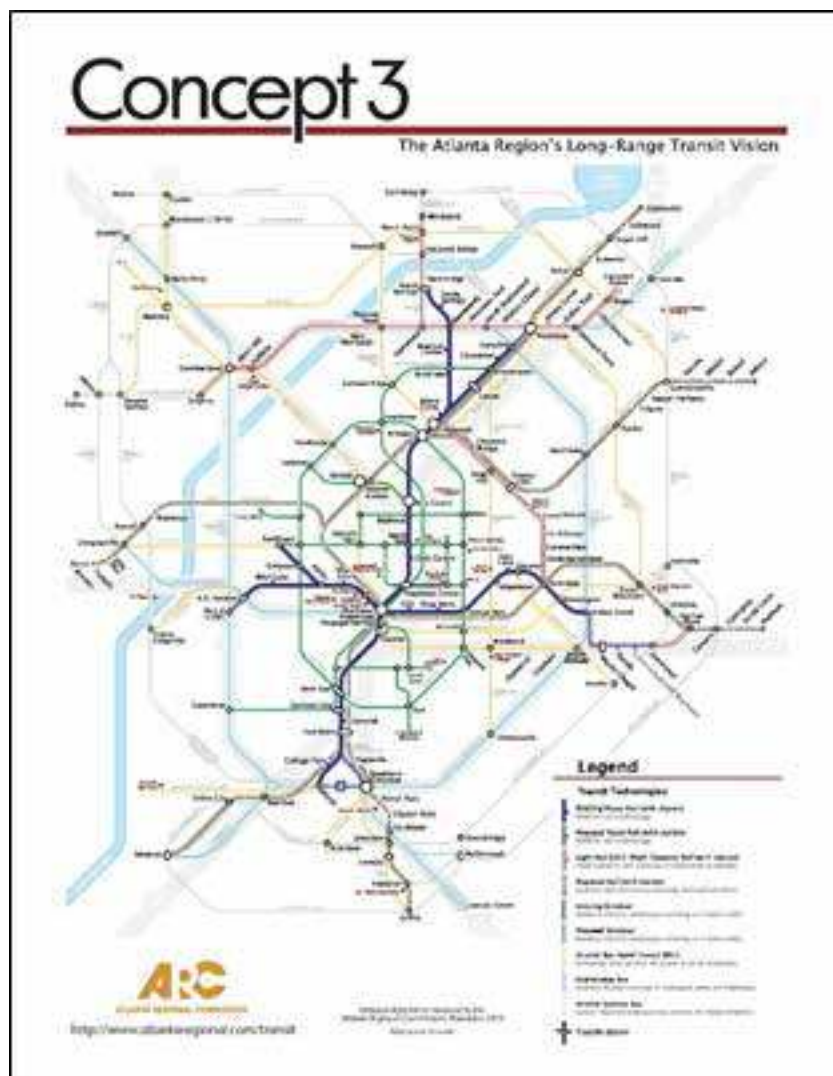




## Comprehensive Transportation Plan

### Concept 3 Regional Transit Plan

Concept 3 is the Atlanta region's official long-range transit vision. The vision was adopted in 2008 and serves as the transit element of the Aspirations Plan of the Regional Transportation Plan. The Concept 3 Regional Transit Plan identified a future arterial bus rapid transit service along the US 78 corridor, connecting Snellville to downtown Atlanta.





## Summary of Projects from Previous Plans

Project from previous plans are listed in **Table 1.1.1**. This table summarizes the project name, project description, source of project, and status. **Figure 1.1.1** illustrates the completed projects from previous plans. **Figure 1.1.2** illustrates identified projects from previous plans.



Table 1.1.1 - Projects from Previous Plans				
Project Name	Project Description	Source	Status	
Killian Hill Road	Pedestrian Facility from Arcado Road to US 78	Gwinnett CTP (2008)	TBD	
SR 124 Scenic Hwy	Widen SR 124 from US 78 to Ronald Reagan Parkway to 6 lanes	Gwinnett CTP (2008)/ARC RTP	Long Range	
US 78/SR 10	Widen US 78 from SR 124 to SR 84 to 6 lanes; add Frontage Rds	Gwinnett CTP (2008)	TBD	
US 78 Parallel Road	Add parallel access from Hewatt Road to Walton Court	Gwinnett SPLOST (2017)	Acquiring ROW	
Hewatt Road	Sidewalk/pedestrian safety improvements from US 78/ Stone Mountain Highway to Cherie Glen Road	Gwinnett SPLOST (2017)	Construction	
US 78 / SR 10 / Stone Mountain Highway Parallel Road from Lake Lucerne Road to Hewatt Road (New Location)	Adding parallel road from Lake Lucerne Road to Hewatt Road	Destination 2040	TBD	
US 78 / SR 10 / Stone Mountain Highway Parallel Road from Rockbridge Road to Lake Lucerne Road (New Location)	Adding parallel road from Rockbridge Road to Lake Lucerne Road	Destination 2040	TBD	
US 78 / SR 10 / Stone Mountain Highway Parallel Road Connecting Bridge (New Bridge)	Adding new connecting bridge	Destination 2040	TBD	
US 78 West Capacity Improvement	Roadway capacity improvements along US 78	Destination 2040	TBD	
US 78 / SR 10 Stone Mountain Highway at East Park Place Boulevard (Intersection of Two Major Roadways)	Intersection improvements	Destination 2040	TBD	
US 78 / SR 10 / Stone Mountain Highway at McDaniel's Bridge Road (Intersections of one Major Roadway and one Minor Roadway)	Intersection improvements	Destination 2040	TBD	
SR 124 / Scenic Highway at Wisteria Drive Realignment, Traffic Signal and Turn Lanes	Major Roads	Destination 2040	TBD	
SR 124 / Scenic Highway widening from US 78 / SR 10 / West Main Street to Pharris Road (4 to 6 lanes)	Widening SR 124 from 4 to 6 lanes	Destination 2040	TBD	
US 78 / SR 10 / Stone Mountain Highway Parallel Road from Hewatt Road to Britt Road (New Location)	Adding new road from Hewatt Road to Britt Road	Destination 2040	Programmed	



Table 1.1.1 - Projects from Previous Plans (Continued)				
Project Name	Project Description	Source	Status	
US 78 and Henry Clower Boulevard / Oak Street Intersection Ped Improvements	Pedestrian Improvements at intersection of Henry Clower Boulevard and US 78	Destination 2040	TBD	
US 78 / SR 10 / Stone Mountain Highway Parallel Road from Britt Road to Old US 78 (New Location)	Adding new road from Britt Road to Old US 78	Destination 2040	TBD	
US 78 / SR 10 (East Main Street / Athens Highway) Signal Upgrades at 5 Locations	Signal upgrades on SR 10/ US 78 in the Snellville and Grayson Areas; signal upgrades for Wisteria Dr/Skyland Dr	ARC RTP	Programmed	
SR 124 (Scenic Highway) Widening	Widening SR 124 from US 78 (Main Street) to SR 864 (Ronald Reagan Parkway)	ARC RTP	TBD	
US 78 (Main Street in City of Snellville) Continuous Flow Intersection	Including Westward and Eastward to intersections with Henry Clower Boulevard	ARC RTP	Complete	
Hwy 78 @ McGee Rd Realignment	Realign skewed intersection with Cambridge St	Highway LCI	Complete	
Hwy 78 @ Walton Ct Realignment	Align Old Hwy 78 directly across from Walton Ct	Highway LCI	Complete	
Westside Ct. Connection	Parallel Circulator Route (construct approx. 1,500' of roadway)	Highway LCI	TBD	
Westside Ct. Partial Opening	Partial Median Opening	Highway LCI	TBD	
Highway 78 @ Highpoint Rd	Vertical Realignment	Highway LCI	Complete	
Killian Hill Rd. Node Construction	Beautification	Highway LCI	Complete	
High Point Rd. Node Construction	Beautification	Highway LCI	Complete	
Inter-parcel Access from Highpoint Rd. to Walton Ct	Interparcel access	Highway LCI	TBD	
Scenic Dr. Multi-Use Path	Pedestrian Access	Highway LCI	Complete	
Yellow River Scenic Trail	Pedestrian Access	Highway LCI	Complete	
ITS (Intelligent Transportation System Installation)	Roadway	Highway LCI	Complete	

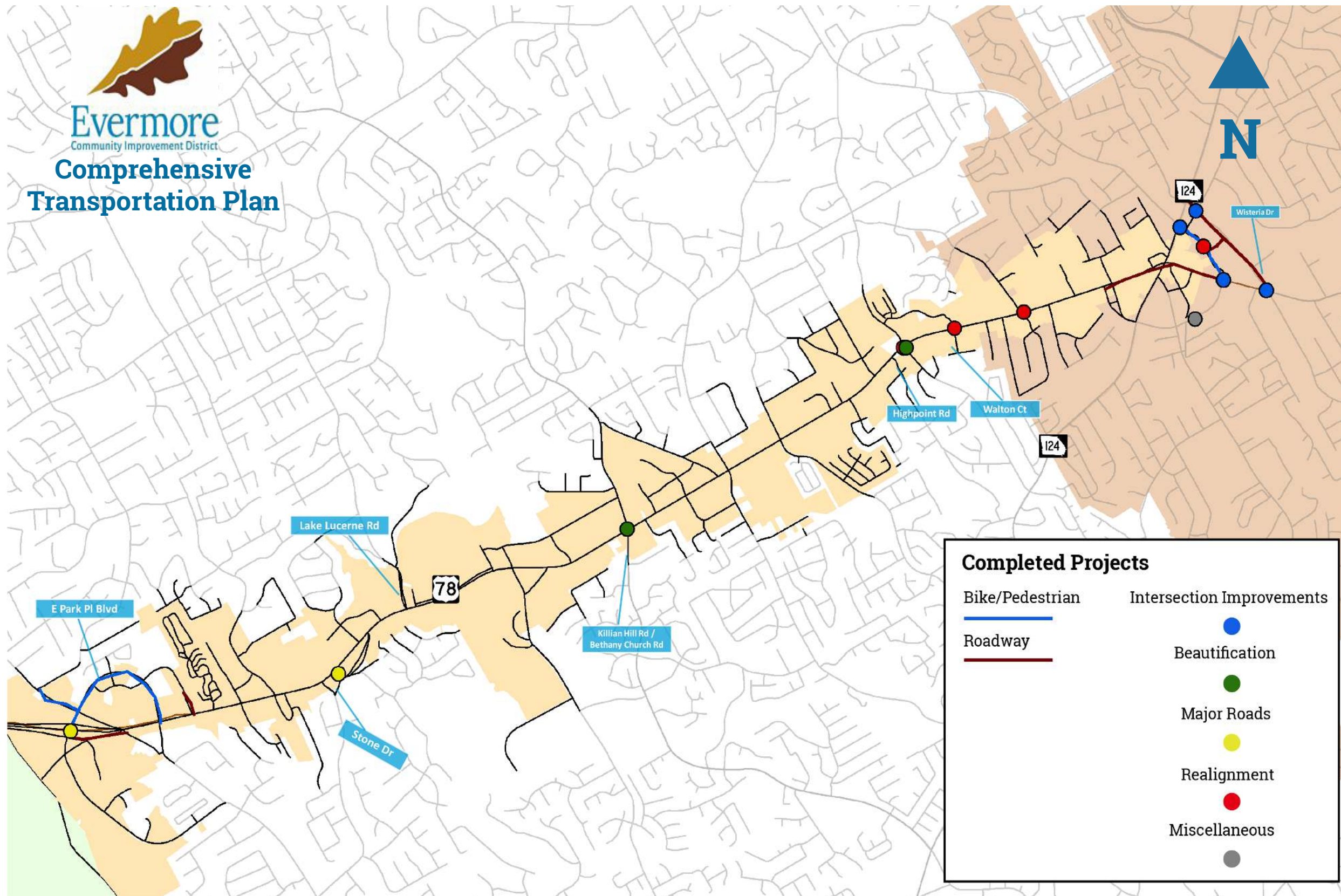


Table 1.1.1 - Projects from Previous Plans (Continued)				
Project Name	Project Description	Source	Status	
Sidewalk construction	5' sidewalk construction on both sides of Hwy 78 as part of DOT project	Highway 78 LCI	Complete	
Bus Stop locations	Coordinate with GRTA and Gwinnett Transit to locate potential bus stops	Highway 78 LCI	TBD	
LCI Supplemental Funding	Explore LCI Supplemental funding opportunities	Highway 78 LCI	TBD	
Signal interconnectivity along West Park Place Blvd from Rockbridge Rd to Target entrance		Park Place LCI	TBD	
Signal interconnectivity along East Park Place Blvd from US 78 to Rockbridge Rd		Park Place LCI	TBD	
Provide geometric improvement / clear sign and pavement markings / add left turn protected phase at US 78 & Stone Dr		Park Place LCI	Complete	
Provide longer deceleration lane and/or consolidated curb cuts and/or interparcel access along US 78 at Glenn Club Dr		Park Place LCI	Complete	
Parallel access road between West Park Place Blvd and Rockbridge Rd		Park Place LCI	Complete	
Parallel access road between Davis Rd and Camp Cir		Park Place LCI	TBD	
Parallel access road between Camp Cir and Manking Rd		Park Place LCI	TBD	
Extend sidewalk along Glenn Club Dr		Park Place LCI	TBD	
Extend sidewalk along East Park Pl Blvd		Park Place LCI	Complete	
Extend sidewalk along Rockbridge Rd North of East Park Place Blvd		Park Place LCI	Complete	
Extend sidewalk along Parker Rd		Park Place LCI	TBD	
Extend sidewalk along Pucketts Rd		Park Place LCI	TBD	
Extend sidewalk along Stone Dr		Park Place LCI	Complete	



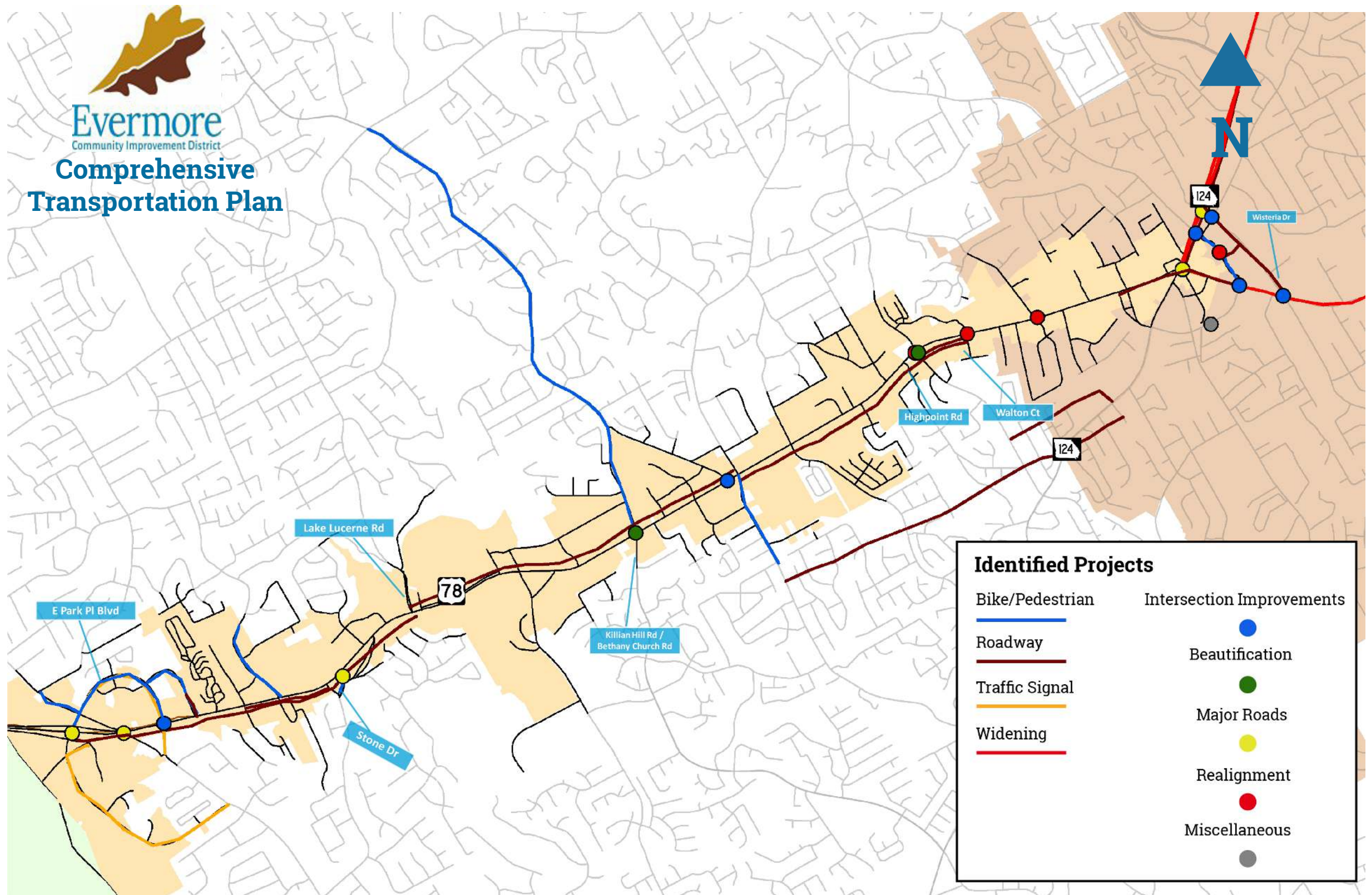
Table 1.1.1 - Projects from Previous Plans (Continued)				
Project Name	Project Description	Source	Status	
Upgrade W Park Pl pedestrian underpass		Park Place LCI	Complete	
Construct new pedestrian overpass on Rockbridge Rd		Park Place LCI	TBD	
GRTA Xpress Park & Ride		Park Place LCI	Complete	
Oak Road Realignment		Snellville LCI	Complete	
Bicycle/Pedestrian Network Project		Snellville LCI	TBD	
Town Center Streetscape Improvements - TE Funding Application		Snellville LCI	TBD	
Town Center Roundabouts - TE Funding Application		Snellville LCI	TBD	
Grade Separated Interchange at US 78 and SR 124		Snellville LCI	TBD	
SR 124 and Oak Rd Pedestrian Improvements		Snellville LCI	Complete	
Wisteria Drive and North Rd Pedestrian Improvements		Snellville LCI	Complete	
US 78 and Wisteria Dr/Skyland Dr Pedestrian Improvements		Snellville LCI	Complete	
Oak Road (SR 124 to US 78) Cross Sections		Snellville LCI	Complete	
Clower Street (Oak Road to Wisteria Rd) Cross Sections		Snellville LCI	Complete	
Wisteria Dr (SR 124 to US 78) Cross Sections		Snellville LCI	Complete	
Coordinate all highway improvements with Evermore CID		Snellville LCI	Complete	
US 78 North Collector/Distributor Road	Multiple existing and new segments, running north of US 78	Main Street/ US 78 Widening	TBD	
US 78 Collector/Distributing Connecting Bridge	New US 78 Roadway West of Lake Lucerne Road	Destination 2040	TBD	





**Figure 1.1.1 - COMPLETED PROJECTS FROM PREVIOUS PLANS**





**Figure 1.1.2 - IDENTIFIED PROJECTS FROM PREVIOUS PLANS**



## 1.2-Existing Transportation Conditions

An inventory of the existing transportation conditions was performed to establish a baseline understanding of the existing roadway network, facilities for pedestrians and bicycles, and existing transit service. Additionally, a review of existing traffic volumes, roadway level of service, safety, congestion, and travel patterns adds to understanding of how the transportation network currently functions. The existing conditions are a snapshot of the transportation system as it exists right now.

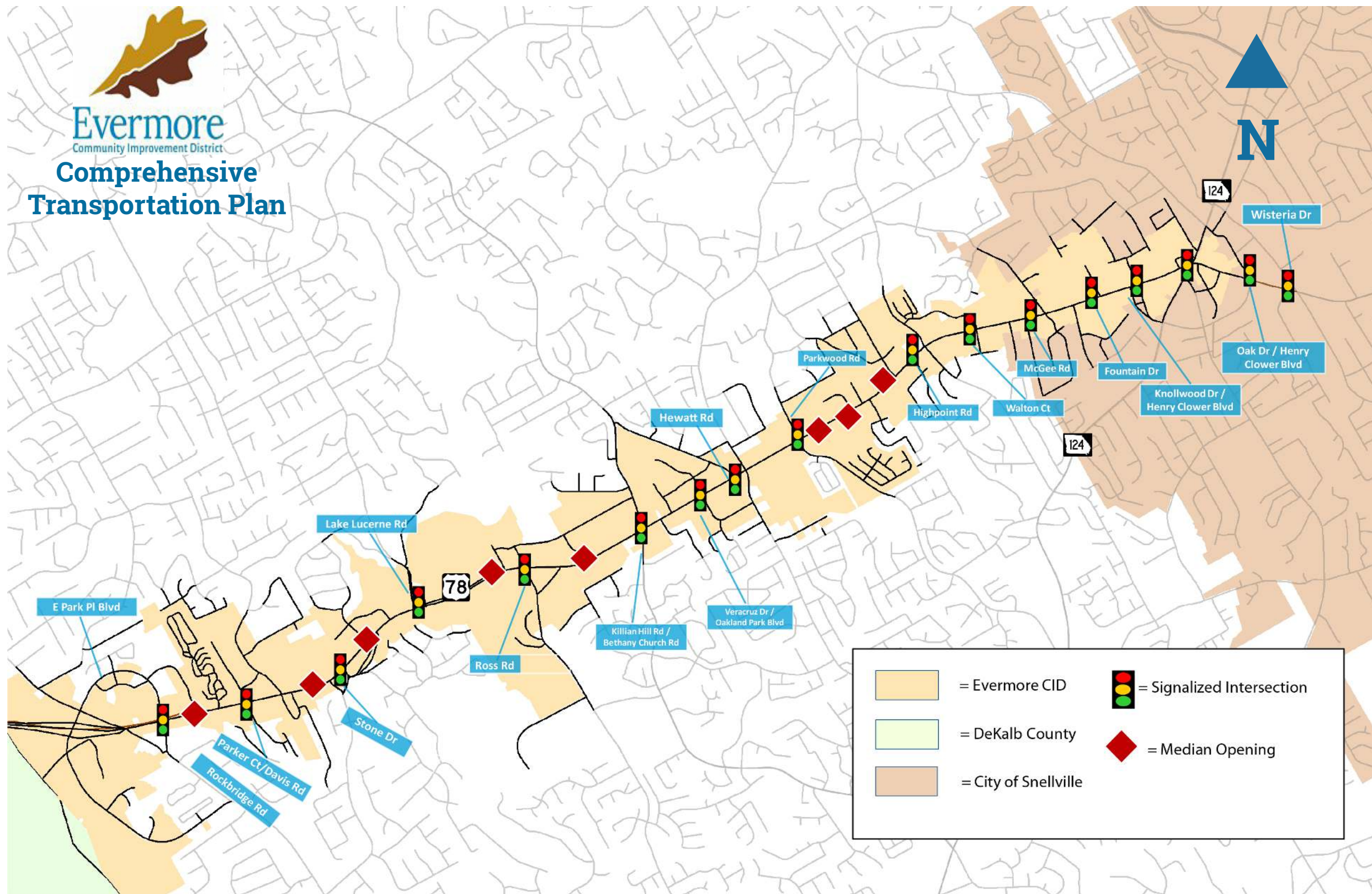
### Roadway Conditions

The existing roadway network serves the residents, businesses, and commuters traveling within and throughout the Evermore CID. US 78 serves as the dominant east-west corridor through the area, carrying a high volume of commuters during the weekday from their homes to their work. To better understand the current state of the roadway conditions, **Figure 1.2.1** illustrates the major signalized intersections and unsignalized median openings along the US 78 corridor. Roadway characteristics were identified and summarized in **Table 1.2.1**









**Figure 1.2.1 - EXISTING ROADWAY CONDITIONS**







**Table 1.2.1: Existing Roadway Characteristics**

Segment #	Road	From (N/W)	To (S/E)	Number of Lanes	Median Type	Posted Speed Limit	Side-walks	Daily Traffic Volume (year)	GDOT Roadway Classification	Additional Info
1	US 78/ SR 10	DeKalb Co/ Gwinnett Co line	E. Park Place Blvd	6	None	45	None	58,800 (GDOT, 2016)	Freeway/Express-way	NHS Route
1	Joseph St	US 78/SR 10	--	2	Raised	25	None	--	Local Road	--
2	US 78/ SR 10	E. Park Place Blvd	Davis Rd/Parker Ct	6	Raised	45	Yes	--	Principal Arterial	NHS Route
2	E Park Place Blvd	North of US 78/SR 10	--	4	Raised	45	Partial	8,310 (GDOT, 2016)	Major Collector	--
2	W Park Place Blvd	South of US 78/SR 10	--	4	Raised	45	Partial	35,690 (Sub, 2017)	Major Collector	--
2	Rock-bridge Rd SW	North of US 78/SR 10	--	2	Raised	35	Partial	--	Minor Arterial	--
2	Rock-bridge Rd SW	South of US 78/SR 10	--	2	None	35	None	--	Minor Arterial	--
2	E Park Place Blvd	North of US 78/SR 10	--	4	TWLT	45	Yes	--	Major Collector	--
2	E Park Place Blvd	South of US 78/SR 10	--	4	None	45	Yes	--	Major Collector	--
2	Glenn Club Dr	North of US 78/SR 10	--	2	Raised	34	Partial	--	Local Road	--
2	Sharp Trail SW	South of US 78/SR 10	--	2	None	25	None	--	Local Road	--
2	Park Way SW	North of US 78/SR 10	--	2	None	25	None	--	Local Road	--



Table 1.2.1: Existing Roadway Characteristics (Continued)										
Segment #	Road	From (N/W)	To (S/E)	Number of Lanes	Median Type	Posted Speed Limit	Side-walks	Daily Traffic Volume (year)	GDOT Roadway Classification	Additional Info
3	US 78/ SR 10	Davis Rd SW/Parker Ct	Stone Dr SW	6	Raised	45	Yes	60,823 (Sub, 2017)	Principal Arterial	NHS Route
3	Parker Ct	North of US 78/SR 10	--	2	None	25	Partial	--	Local Road	--
3	Davis Rd SW	South of US 78/SR 10	--	2	None	25	None	--	Local Road	--
3	Puckett Rd	North of US 78/SR 10	--	2	None	30	None	--	Local Road	--
3	Camp Cir SW	South of US 78/SR 10	--	2	None	25	None	--	Local Road	--
3	Old Camp Rd SW	South of US 78/SR 10	--	2	None	25	None	--	Local Road	--
3	Mankin Dr	South of US 78/SR 10	--	2	None	25	None	--	Local Road	--
4	US 78/ SR 10	Stone Dr SW	Lake Lucerne Rd	6	Raised	45	Yes	--	Principal Arterial	NHS Route
4	Stone Dr SW	North of US 78/SR 10	--	2	None	25	None	--	Local Road	--
4	Stone Dr SW	South of US 78/SR 10	--	4	None	34	Partial	9,310 (Sub, 2017)	Local Road	--
4	Lake Lucerne Dr	North of US 78/SR 10	--	2	Raised	25	Partial	--	Local Road	--
4	Gresham Cir SW	South of US 78/SR 10	--	2	None	25	None	644 (Sub, 2017)	Local Road	--



Table 1.2.1: Existing Roadway Characteristics (Continued)										
Segment #	Road	From (N/W)	To (S/E)	Num-ber of Lanes	Median Type	Posted Speed Limit	Side-walks	Daily Traffic Volume (year)	GDOT Roadway Classifi-cation	Additional Info
4	Matter-horn Dr SW	North of US 78/ SR 10	--	2	None	25	None	--	Local Road	--
5	US 78/ SR 10	Lake Lucerne Rd	Ross Rd SW	6	Raised	45	Yes		Principal Arterial	NHS Route
5	Lake Lucerne Rd	North of US 78/ SR 10	--	2	None	35	Partial	--	Major Col-lector	--
5	Front-age Rd (north side of US 78)	North of US 78/ SR 10	Paxton Ln SW	2	None	25	None	171 (Sub, 2017)	Local Road	--
6	US 78/ SR 10	Ross Rd SW	Killian Hill Rd SW/ Bethany Church Rd SW	6	Raised	45	Yes	62,734 (Sub, 2017); 65,000 (GDOT, 2016)	Principal Arterial	NHS Route
6	Ross Rd	North of US 78/ SR 10	--	2	Raised	25	None	--	Local Road	--
6	Ross Rd	South of US 78/ SR 10	--	2	TWLT	40	Partial	--	Local Road	--
6	Ross Rd	South of US 78/ SR 10	--	2	None	35	None	--	Local Road	--
6	Paxton Dr SW	South of US 78/ SR 10	--	2	None	30	None	--	Local Road	--



Table 1.2.1: Existing Roadway Characteristics (Continued)										
Segment #	Road	From (N/W)	To (S/E)	Number of Lanes	Median Type	Posted Speed Limit	Side-walks	Daily Traffic Volume (year)	GDOT Roadway Classification	Additional Info
7	US 78/ SR 10	Killian Hill Rd SW/ Bethany Church Rd SW	Oakland Park Blvd/Ve-racruz Dr SW	6	Raised	45	Yes	--	Principal Arterial	NHS Route
7	Killian Hill Rd SW	North of US 78/ SR 10	--	4	None	45	Partial	--	Minor Arterial	--
7	Bethany Church Rd	South of US 78/ SR 10	--	4	None	35	Partial	--	Minor Arterial	--
7	Country Walk	South of US 78/ SR 10	--	2	Raised	25	None	--	Local Road	--
7	Monte-rey Dr	North of US 78/ SR 10	--	2	None	25	None	--	Local Road	--
8	US 78/ SR 10	Oakland Park Blvd/Ve-racruz Dr SW	Hewatt Rd	6	Raised	45	Yes	--	Principal Arterial	NHS Route
8	Veracruz Dr SW	North of US 78/ SR 10	--	2	None	25	Partial	--	Local Road	--
8	Oakland Park Blvd SW	South of US 78/ SR 10	--	2	None	25	Partial	--	Local Road	--
8	Mc-Daniels Bridge Rd SW	North of US 78/ SR 10	--	2	None	35	None	--	Local Road	--



Table 1.2.1: Existing Roadway Characteristics (Continued)										
Segment #	Road	From (N/W)	To (S/E)	Number of Lanes	Median Type	Posted Speed Limit	Side-walks	Daily Traffic Volume (year)	GDOT Roadway Classification	Additional Info
9	US 78/ SR 10	Hewatt Rd	Park-wood Rd	6	Raised	45	Yes	52,021 (Sub, 2017)	Principal Arterial	NHS Route
9	Hewatt Rd	North of US 78/ SR 10	--	2	TWTL	40	None	--	Minor Arterial	--
9	Hewatt Rd	South of US 78/ SR 10	--	2	TWTL	40	None	--	Minor Arterial	--
10	US 78/ SR 10	Park-wood Rd	High-point Rd	6	Raised	45	Yes	--	Principal Arterial	NHS Route
10	Park-wood Rd	North of US 78/ SR 10	--	2	None	35	None	--	Local Road	--
10	Park-wood Rd	South of US 78/ SR 10	--	2	None	35	Partial	--	Local Road	--
10	Westside Ct	North of US 78/ SR 10	--	2	None	25	None	--	Local Road	--
10	Easy St SW	North of US 78/ SR 10	--	2	None	25	Partial	--	Local Road	--
10	Georgia Ln	South of US 78/ SR 10	--	2	None	25	None	--	Local Road	--
10	Thackerery Rd SW	South of US 78/ SR 10	--	2	None	25	Partial	--	Local Road	--
10	Britt Dr	North of US 78/ SR 10	--	2	None	35	None	--	Local Road	--
10	Rosedale Rd	South of US 78/ SR 10	--	2	None	25	None	--	Local Road	--



Table 1.2.1: Existing Roadway Characteristics										
Segment #	Road	From (N/W)	To (S/E)	Number of Lanes	Median Type	Posted Speed Limit	Sidewalks	Daily Traffic Volume (year)	GDOT Roadway Classification	Additional Info
11	US 78/SR 10	Highpoint Rd	Walton Ct/Old Hwy 78	6	Raised	45	Yes	--	Principal Arterial	NHS Route
11	High-point Rd	North of US 78/SR 10	--	2	None	25	Partial	--	Local Road	--
11	High-point Rd	South of US 78/SR 10	--	2	None	40	Partial	--	Local Road	--
12	US 78/SR 10	Walton Ct/Old Hwy 78	McGee Rd/Cam-bridge St	6	Raised	45	Yes	--	Principal Arterial	NHS Route
12	Old Hwy 78	North of US 78/SR 10	--	2	None	30	Partial	--	Local Road	--
12	Walton Ct	South of US 78/SR 10	--	2	None	25	Partial	--	Local Road	--
12	Scenic Dr	South of US 78/SR 10	--	2	None	25	Partial	--	Local Road	--
12	Westridge Dr	South of US 78/SR 10	--	2	None	25	Partial	--	Local Road	--
13	US 78/SR 10	McGee Rd/Cambridge St	Fountain Dr	6	Raised	45	Yes	44,800 (GDOT, 2016)	Principal Arterial	NHS Route
13	McGee Rd SW	North of US 78/SR 10	--	2	None	30	Partial	--	Local Road	---
13	Cam-bridge St	South of US 78/SR 10	--	2	None	30	Partial	--	Local Road	---
13	Valley Dr	South of US 78/SR 10	--	2	None	25	None	--	Local Road	---



Table 1.2.1: Existing Roadway Characteristics (Continued)

Segment #	Road	From (N/W)	To (S/E)	Number of Lanes	Median Type	Posted Speed Limit	Sidewalks	Daily Traffic Volume (year)	GDOT Roadway Classification	Additional Info
14	US 78/ SR 10	Fountain Dr	Henry Clower Blvd SW/ Knollwood Dr SW	6	Raised	45	Yes	49,869 (Sub, 2017)	Principal Arterial	NHS Route
14	Fountain Dr	North of US 78/ SR 10	--	2	Raised	30	Partial	--	Local Road	--
14	Henry Clower Blvd SW	South of US 78/ SR 10	--	2	None	25	None	--	Local Road	--
15	US 78/ SR 10	Henry Clower Blvd SW/ Knollwood Dr SW	SR 124/ Scenic Hwy	6	Raised	35	Yes	--	Principal Arterial	NHS Route
15	Knollwood Dr SW	North of US 78/ SR 10	--	2	None	25	Partial	--	Local Road	--
15	Henry Clower Blvd SW	South of US 78/ SR 10	--	2	None	30	Partial	--	Local Road	--
15	Rawlins St SW	North of US 78/ SR 10	--	2	None	25	None	--	Local Road	--
16	US 78/ SR 10	SR 124/ Scenic Hwy	Henry Clower Blvd SW/ Oak Rd SW	4	TWTL	35	Partial	--	Principal Arterial	NHS Route
16	SR 124/ Scenic Hwy N	North of US 78/ SR 10	--	4	TWTL	45	Partial	--	Principal Arterial	NHS Route



Table 1.2.1: Existing Roadway Characteristics (Continued)										
Segment #	Road	From (N/W)	To (S/E)	Number of Lanes	Median Type	Posted Speed Limit	Side-walks	Daily Traffic Volume (year)	GDOT Roadway Classification	Additional Info
16	SR 124/ Scenic Hwy S	South of US 78/ SR 10	--	4	TWLT	45	Partial	--	Principal Arterial	NHS Route
16	Pate St	South of US 78/ SR 10	--	2	None	25	Partial	--	Local Road	--
16	Civic Dr SW	South of US 78/ SR 10	--	2	TWLT	25	Yes	--	Local Road	--
17	US 78/ SR 10	Henry Clower Blvd SW/ Oak Rd SW	Wisteria Dr SW/ Skyland Dr SW	4	TWLT	35	Partial	37,800 (GDOT, 2016)	Principal Arterial	NHS Route
17	Oak Rd SW	North of US 78/ SR 10	--	4	None	35	Yes	--	Local Road	--
17	Henry Clower Blvd SW	South of US 78/ SR 10	--	4	None	35	Yes	--	Local Road	--
17	Church St	South of US 78/ SR 10	--	2	None	25	Partial	None	Local Road	--
17	Wisteria Dr SW	North of US 78/ SR 10	--	2	None	35	Partial	--	Local Road	--
17	Skyland Dr SW	South of US 78/ SR 10	--	2	None	35	Partial	--	Local Road	--



## Roadway Classification and Truck Facilities

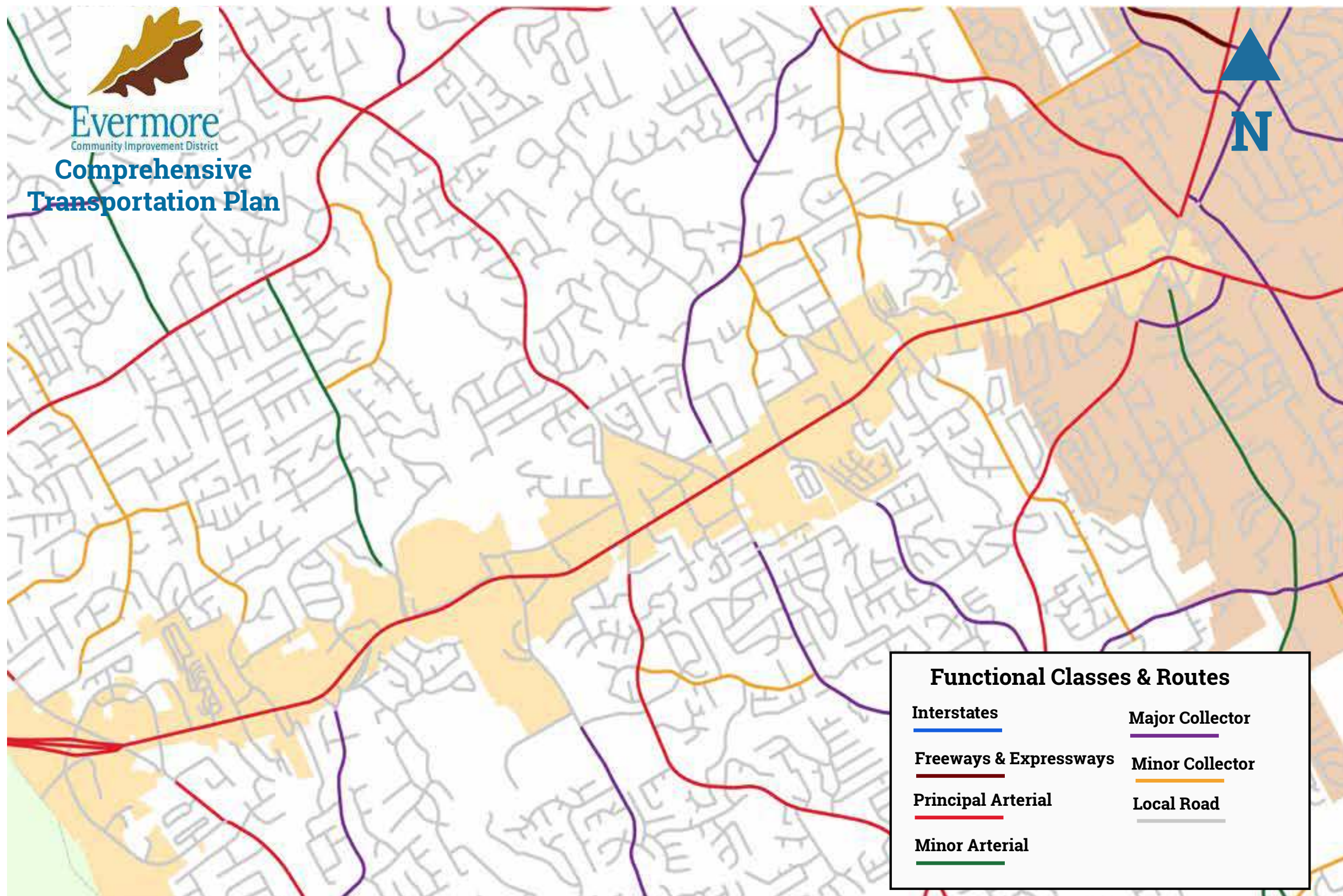
The Georgia DOT has designated Roadway Functional Classifications for all roadways within the state. Functional classifications are defined for roadways to indicate the general relationship between access and mobility. Functional classification is defined by the Federal Highway Administration (FHWA) and used by policy makers, planners, and engineers to designate the purpose of the roadways. Roadways classified as major arterials favor mobility over access, while local roads favor access over mobility. **Figure 1.2.2** illustrates the roadways in the study area and their classifications.

US 78 and SR 124 are both identified by the Atlanta Regional Commission (ARC) MPO as part of the ASTRoMaP system. The Atlanta Region developed the Atlanta Strategic Truck Route Master Plan (ASTRoMaP) to identify the regional routes serving freight truck traffic. The routes were identified to direct truck traffic to the roadways whose physical and operational characteristics can effectively accommodate truck traffic, and to improve traffic flow and access management to protect the freight corridors.









**Figure 1.2.2 - FUNCTIONAL CLASSIFICATIONS OF ROADS**







# Existing Conditions

## Pedestrian and Bicycle Conditions

US 78 has continuous sidewalks along both sides of the street, from E Park Place Blvd to SR 124/Scenic Highway. The sidewalk conditions along the major and minor cross streets within the CID boundary vary. The Existing Road Network table includes identifying sidewalk conditions for the listed streets. Many streets have sidewalks along both sides, while some streets have partial sidewalks and gaps, while some streets lack sidewalks.

There are currently no designated bicycle facilities along streets within the CID. Bicyclists are observed riding in sidewalks along the US 78 corridor to reach their destinations, which include employment or retail.

## Transit Conditions

Evermore CID is located within the Gwinnett County transit agency boundary; however, there is currently no transit service located within the CID limits. To access the MARTA system residents must first travel out of the corridor, either by personal vehicle or for-hire vehicle.

Evermore CID is served by one commuter bus route connecting Snellville with downtown Atlanta at the MARTA Five Points rail station. The GRTA Xpress bus route #419 (a commuter route with limited stops that provides service to Atlanta) is operated by the Georgia Regional Transportation Authority (GRTA). Service is limited to weekdays and only the morning and afternoon peak periods. During the weekday peak morning period, there are ten buses inbound (west). During the weekday afternoon there are ten buses outbound (east).

The existing GRTA Xpress 419 bus route makes three stops along US 78 within the study area. The image to the right illustrates the GRTA Xpress Bus route. The three Park-n-Ride lots along the route are located at:

- U.S. 78 at Snellville First Baptist Church
- U.S. 78 at Hewatt Road
- U.S. 78 at Stone Mountain





## 1.3-Traffic Volumes and Patterns

### Existing Traffic Volumes

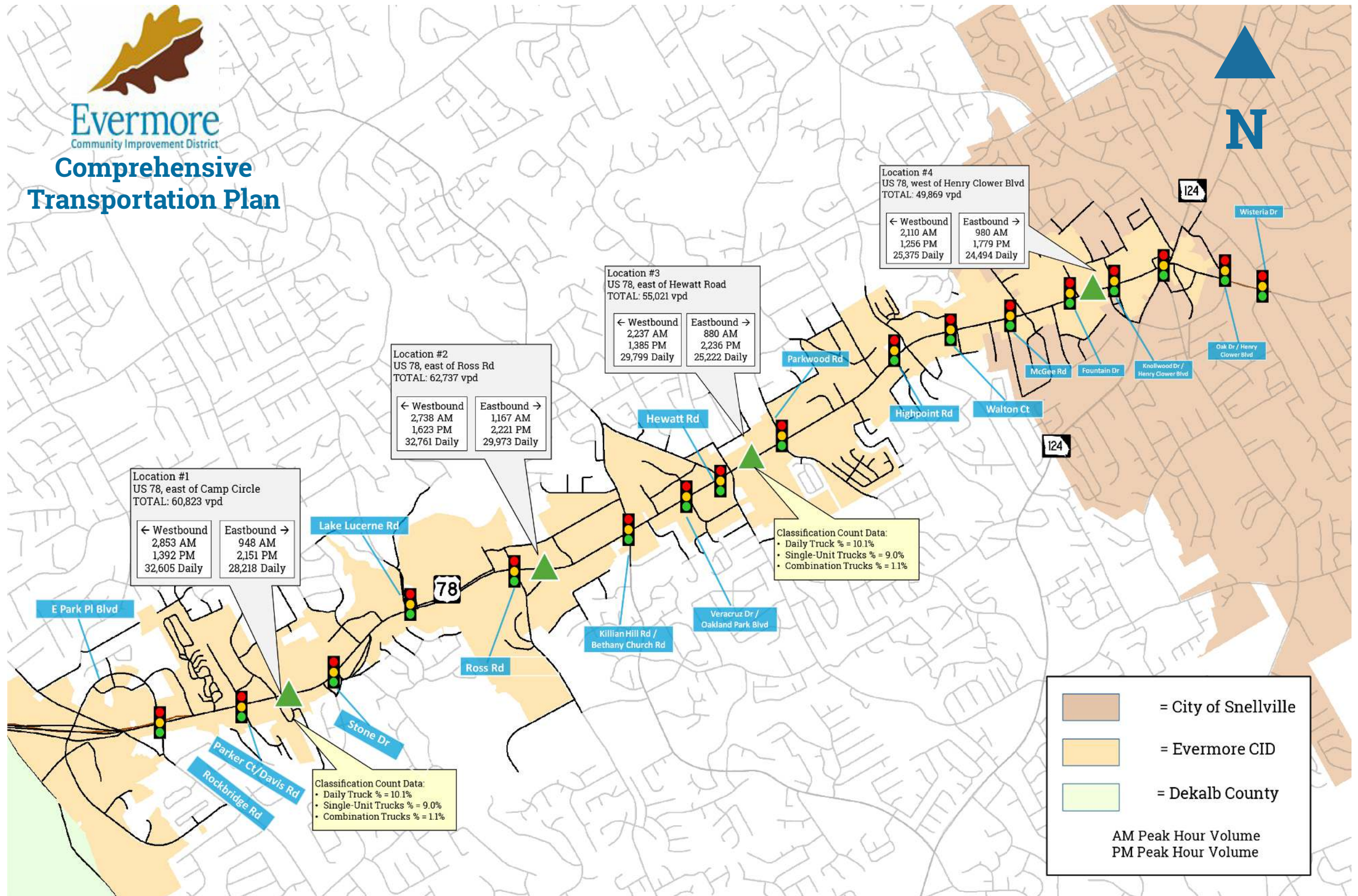
To understand traffic conditions, a review of available data from Georgia DOT sources was conducted. **Table 1.2.1** includes year 2016 count information along the study corridor, and on major cross-streets, where available. Based on volume alone, the corridor's major cross-streets are Killian Hill Road-SR 264/Bethany Church Road and SR 124/Scenic Highway.

In addition to the Georgia DOT counts, as part of this study, additional weekday volume counts along US 78 were conducted in May 2017. These counts confirm US 78 carries a typical weekday volume between 50,000 and 63,000 vehicles/day. An additional count was performed on a Saturday in October 2017. The count indicates the corridor is very busy during the weekend, partly due to the retail destinations along the corridor. The results of these counts are shown in **Table 1.3.1**.

Table 1.3.1 - Daily Traffic Volumes		
Location	Weekday ADT (May 2017)	Saturday ADT (October 2017)
US 78 east of Camp Circle	60,823 vpd	--
US 78 between Ross Rd and Ross Circle	62,737 vpd	53,721 vpd
US 78 east of Hewatt Rd	55,021 vpd	--
US 78 west of Henry Clower Blvd	49,869 vpd	--

**Figure 1.3.1** illustrates the traffic volumes at these four count locations. The daily volume and the directional volumes during the peak hours is indicated.





**Figure 1.3.1 - EXISTING TRAFFIC VOLUMES**







# Existing Conditions

Furthermore, the Atlanta Regional Commission (ARC) maintains an activity-based regional Travel Demand Model (TDM). The TDM indicates year 2015 volumes on US 78 and surrounding roadways. The model estimates a typical volume along US 78 between 45,000 and 60,000 vehicles/day.

## Traffic Growth

In order to estimate traffic conditions in the future, historic data and the regional traffic demand model were both consulted. An average compound growth rate was calculated for the six GDOT count locations on US 78 in the study area using historical data. These rates are shown in **Table 1.3.2**. These historic compound growth rates are fairly modest, with one location even indicating an overall reduction in volumes. The average growth rate across these six locations is just under 1% per year.

Table 1.3.2 - Historic Traffic Growth		
Summary trend annual compound growth rates from GDOT historical count stations		
GDOT Count Station #	Station Location	15-Year Trend
1356043	US 78/SR 19 between W of Rockbridge Rd & E Park Pl Blvd	0.57%
1350045	US 78/SR 10 east of Camp Circle SW	1.36%
1350047	US 78/SR 10 west of Ross Circle SW	0.44%
1350049	US 78/SR 10 west of Parkwood Rd SW	3.13%
1350052	US 78/SR 10 west of Fountain Dr SW	-0.49%
1350054	US 78/SR 10 east of Henry Clower Blvd SW	0.45%
Average of all locations		0.9%



The TDM's year 2040 results were also consulted to approximate future growth. Using year 2015 and 2040 volumes at the same six locations, a similar exercise was done projecting out to the future. Results from this model are shown in **Table 1.3.3**. These results indicate an expectation of slightly more aggressive growth. However, the model's year 2015 volumes are notably lower than observed volumes, so the model expects there to be more excess capacity that can handle growth than exists in reality. Based on the results from historic traffic counts and the regional travel demand model, an average compound growth rate of 1% per year was used in this analysis to project future year traffic volumes. This growth rate is consistent with historic growth along the corridor and within a reasonable margin of the rate predicted by the regional travel demand model.

Table 1.3.3 - Traffic Volumes from Travel Demand Model			
Station Location	Year 2015 Volume	Year 2040 Volume	Average Compound Trend
US 78/SR 19 between W of Rockbridge Rd & E Park Pl Blvd	78,391	104,976	1.2%
US 78/SR 10 east of Camp Circle SW	64,196	80,611	0.9%
US 78/SR 10 west of Ross Circle SW	54,361	77,076	1.4%
US 78/SR 10 west of Parkwood Rd SW	47,639	67,786	1.4%
US 78/SR 10 west of Fountain Dr SW	37,448	53,761	1.5%
US 78/SR 10 east of Henry Clower Blvd SW	37,448	53,761	1.5%
Average of all locations			1.3%



# Existing Conditions

## Truck Volumes

To understand the volume of trucks, or heavy vehicles, traveling the US 78 corridor, two classification counts were performed during a weekday in May 2017. One count was performed on the western part of the corridor and one on the eastern part of the corridor. The 24-hour count provided the total vehicle volume count over the period, as well as volumes for individual hours of the day, for each direction along US 78. The data additionally split the vehicle types into the thirteen FHWA vehicle classification types. **Table 1.3.4** summarizes the total vehicle volumes by time period and direction for both locations. Additionally, the table summarizes the volume and percentage of total trucks, single-unit trucks, and combination trucks by time period and direction.

Roadway Location	Time Period	Direction	Total Volume	Total Trucks		Single-Unit Heavy Trucks		Combination Vehicles	
				Volume	%	Volume	%	Volume	%
US 78, east of Camp Circle (Western part of Corridor)	Daily	Both	<b>60,823</b>	<b>5,141</b>	<b>8.4%</b>	<b>4,712</b>	<b>7.7%</b>	<b>429</b>	<b>0.7%</b>
		Westbound	32,605	2,500	7.7%	2,203	6.8%	297	0.9%
		Eastbound	28,218	2,641	9.4%	2,509	8.9%	132	0.5%
	AM Peak Hour	Both	<b>3,801</b>	<b>313</b>	<b>8.2%</b>	<b>278</b>	<b>7.3%</b>	<b>35</b>	<b>0.9%</b>
		Westbound	2,853	214	7.5%	183	6.4%	31	1.1%
		Eastbound	948	99	10.4%	95	10.0%	4	0.4%
	PM Peak-Hour	Both	3,543	287	8.1%	263	7.4%	24	0.7%
		Westbound	1,392	100	7.1%	84	6.0%	16	1.1%
		Eastbound	2,151	187	8.7%	179	8.3%	8	0.4%
US 78, east of Hewatt Road (Eastern part of corridor)	Daily	Both	<b>52,021</b>	<b>5,274</b>	<b>10.1%</b>	<b>4,686</b>	<b>9.0%</b>	<b>588</b>	<b>1.1%</b>
		Westbound	26,799	3,013	11.3%	2,776	10.4%	237	0.9%
		Eastbound	25,222	2,261	9.0%	1,190	7.6%	351	1.4%
	AM Peak Hour	Both	<b>3,117</b>	<b>311</b>	<b>10.0%</b>	<b>277</b>	<b>8.9%</b>	<b>34</b>	<b>1.1%</b>
		Westbound	2,237	224	10.0%	210	9.4%	14	0.6%
		Eastbound	880	87	9.9%	67	7.6%	20	2.3%
	PM Peak Hour	Both	<b>3,621</b>	<b>327</b>	<b>9.1%</b>	<b>285</b>	<b>7.9%</b>	<b>42</b>	<b>1.2%</b>
		Westbound	1,385	147	10.6%	129	9.3%	18	1.3%
		Eastbound	2,236	180	8.1%	156	7.0%	24	1.1%



As seen in the table, the majority of vehicles are passenger vehicles. Approximately 8% to 10% of the vehicles on a daily basis are trucks, or heavy vehicles. During the 7:00-8:00am and 5:00-6:00pm peak hours, the truck percentage is about the same as the daily. When one looks closer at the westbound and eastbound direction data, there is a noticeable smaller volume of trucks traveling in the peak direction. Another way to say this is more passenger vehicles are headed in the peak direction, westbound during the AM peak period, and eastbound during the PM peak period.

























Another key observation from reviewing the data is the single-unit heavy vehicles constitutes a majority of the total truck volume. For example, at the western location, the daily percentage of single-unit trucks is 7.7%; the percentage of combination vehicles is 0.7%. The thirteen FHWA vehicle classification types are illustrated in the graphic below. The single-unit heavy vehicles, class 4 through 7, consist of buses, 2-axle trucks, 3-axle trucks, and 4 or more axle trucks. The majority of the types of vehicle seen on the corridor include school buses, box-trucks making deliveries, landscape service pick-up trucks with trailers, contractor and service trucks with trailers.



# Existing Conditions

The importance of the split between single-unit and combination trucks is the vehicles have different operation characteristics. Many of the single-unit vehicle types mentioned above can have comparable acceleration and deceleration operating characteristics to passenger vehicles. Oppositely, the combination vehicles have slower acceleration and deceleration operating characteristics. Knowing the split in vehicle types traveling along the corridor is beneficial in developing recommended improvements.

Additionally, one classification count was performed on a Saturday in October 2017. The 24-hour count provided the total vehicle volume count over the period, as well as volumes for individual hours of the day, for each direction along US 78. The data additionally split the vehicle types into the thirteen FHWA vehicle classification types. **Table 1.3.5** summarizes the total vehicle volumes by time period and direction for both locations. Additionally, the table summarizes the volume and percentage of total trucks, single-unit trucks, and combination trucks by time period and direction.

FHWA Vehicle Classification	
1. Motorcycles -2 axes, 2 or 3 tires	
2. Passenger Cars -2 axes, can have 1 or 2 axle trailers	 
3. Pickups, Panels, Vans -2 axes, 4-tire single units, can have 1 or 2 axle trailers	 
4. Buses -2 or 3 axes, full length	 
5. Single Unit 2-Axle Trucks -2 axes, 6 tires (Dual rear tires), single unit	  
6. Single Unit 3-Axle Trucks -3 axes, single unit	
7. Single Unit 4 or More Axle Trucks -4 or more axes, single unit	
8. Single Trailer 3 or 4 Axle Trucks -3 or 4 axes, single trailer	  
9. Single Trailer 5 Axle Trucks -5 axes, single trailer	 
10. Single Trailer 6 or More Axle Trucks -6 or more axes, single trailer	 
11. Multi-Trailer 5 or Less Axle Trucks -5 or less axes, multiple trailers	 
12. Multi-Trailer 6 Axle Trucks -6 axes, multiple trailers	 
13. Multi-Trailer 7 or More Axle Trucks -7 or more axes, multiple trailers	





## Comprehensive Transportation Plan

**Table 1.3.5: Vehicle Classification Count Data - Saturday**

Roadway Location	Time Period	Direction	Total Volume	Total Trucks		Single-Unit Heavy Trucks		Combination Vehicles	
				Volume	%	Volume	%	Volume	%
US 78 between Rodd Rd and Ross Circle (Middle of corridor)	Daily	Both	53,721	2,906	5.4%	2,849	5.3%	57	0.1%
		Westbound	26,794	1,666	6.2%	1,631	6.1%	35	0.1%
		Eastbound	26,927	1,240	4.6%	1,218	4.5%	22	0.2%
	Peak Hour of the Day (2-3 PM)	Both	4,032	244	6.1%	240	6.0%	4	0.1%
		Westbound	2,115	146	6.9%	145	6.9%	1	0.0%
		Eastbound	1,917	98	5.2%	95	5.0%	3	0.2%

As seen in the table, the majority of vehicles are passenger vehicles.

Approximately 5.4% of the vehicles on a daily basis are trucks, or heavy vehicles. The volume on Saturday peaks during the 2:00-3:00pm hour. Interestingly the peak hour volume of over 4,000 vehicles is higher than the weekday peak hours. The volumes in each direction are about even on Saturday.





## Comprehensive Transportation Plan

### Traffic Patterns

This section of the US 78 corridor features several retail locations and other businesses. A significant portion of traffic on US 78 is likely associated with employees of these businesses traveling to and from work. To learn more about where these local commuting trips occur, data from the U.S. Census Bureau's Longitudinal Employer-Household Dynamics (LEHD) survey was reviewed. **Figure 1.3.2** shows the home locations of all 13,845 people who work within one mile of the study corridor. Workers generally live in southern and central Gwinnett County, with the highest concentrations of employees living immediately south of the study area, between US 78, SR 124/Scenic Highway, and SR 264/Bethany Church Road. Just over 40% of area employees travel less than 10 miles to get to work, and approximately 75% of employees live within 25 miles of their job on US 78.

The regional TDM can also provide insight into regional travel patterns. While the TDM is only an estimation of travel, it captures all trips types and purposes, not just commuting trips. To better understand travel to and from the US 78 area, the metropolitan Atlanta area was broken into subareas, including a subarea for the area immediately along the study corridor. Total trips between the study area and each subarea were calculated, and are represented in **Figure 1.3.3**. Approximately 30% of trips both began and ended within the subarea around the study area, showing a high rate of local trips likely along US 78. The next most frequent trips were those to adjacent subareas in Gwinnett County to the south, northwest, and northeast. These low-distance trips echo the commuting results shown by LEHD and make up another approximately 30% of trips.

Another way to analyze TDM outputs is to view the driving paths of all vehicles that cross a specific point along a roadway. **Figure 1.3.4** shows the peak period routing for vehicles that use US 78 just east of Killian Hill Road/Bethany Church Road. This analysis shows a substantial amount of these cars using US 78 and to get between locations in DeKalb and Gwinnett Counties, as well as a small but notable amount of trips that begin or end inside the I-285 perimeter, especially in Downtown Atlanta and the CDC/Emory area. Based on results from this analysis, approximately half of passenger vehicles crossing this point during the morning and afternoon periods have an origin or destination directly on the corridor, within the study limits. All other trips travel along US 78 to get to a location beyond the study area, or purely as a through route.



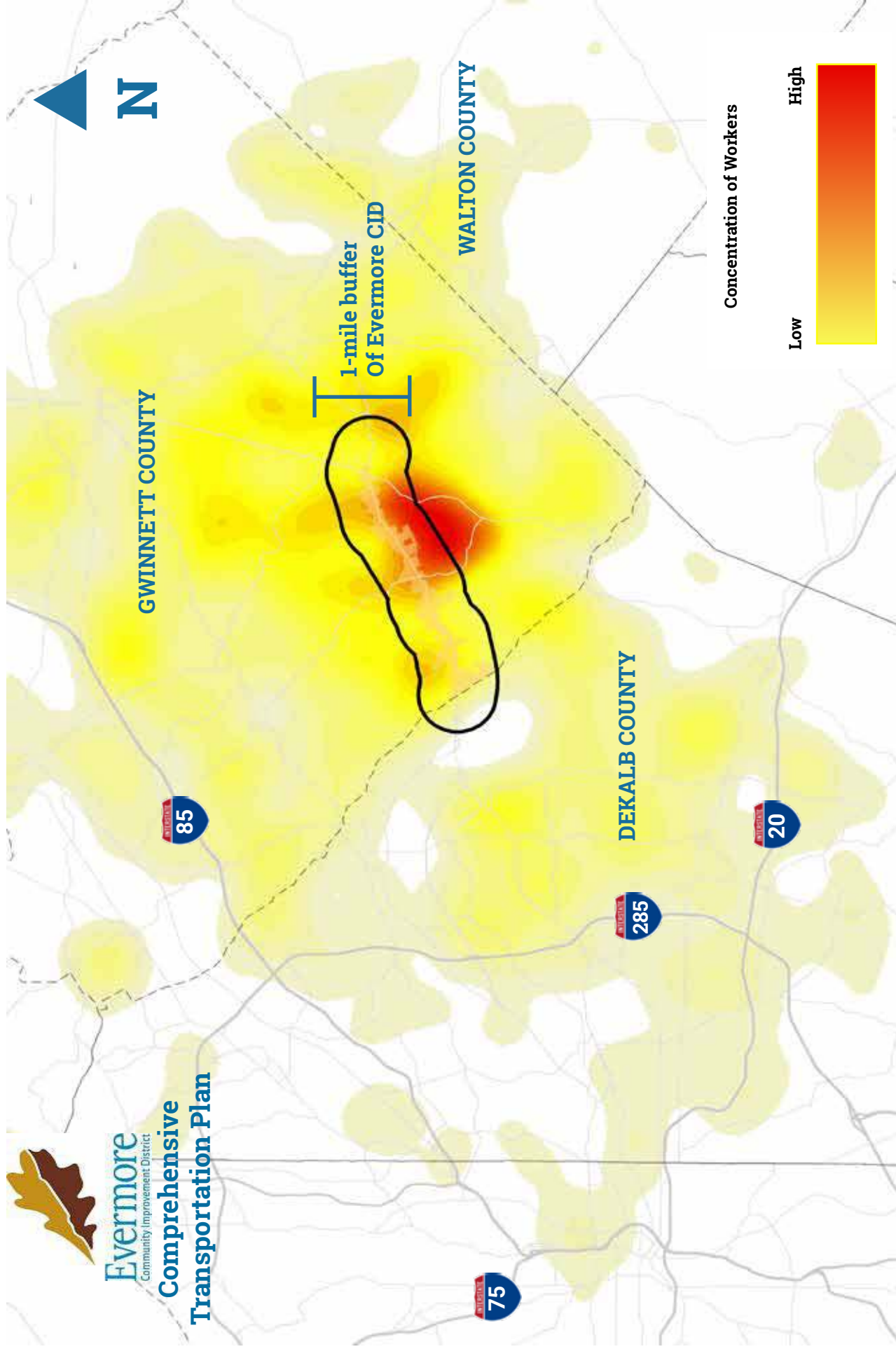


Figure 1.3.2 - HOME LOCATIONS OF STUDY AREA EMPLOYEES



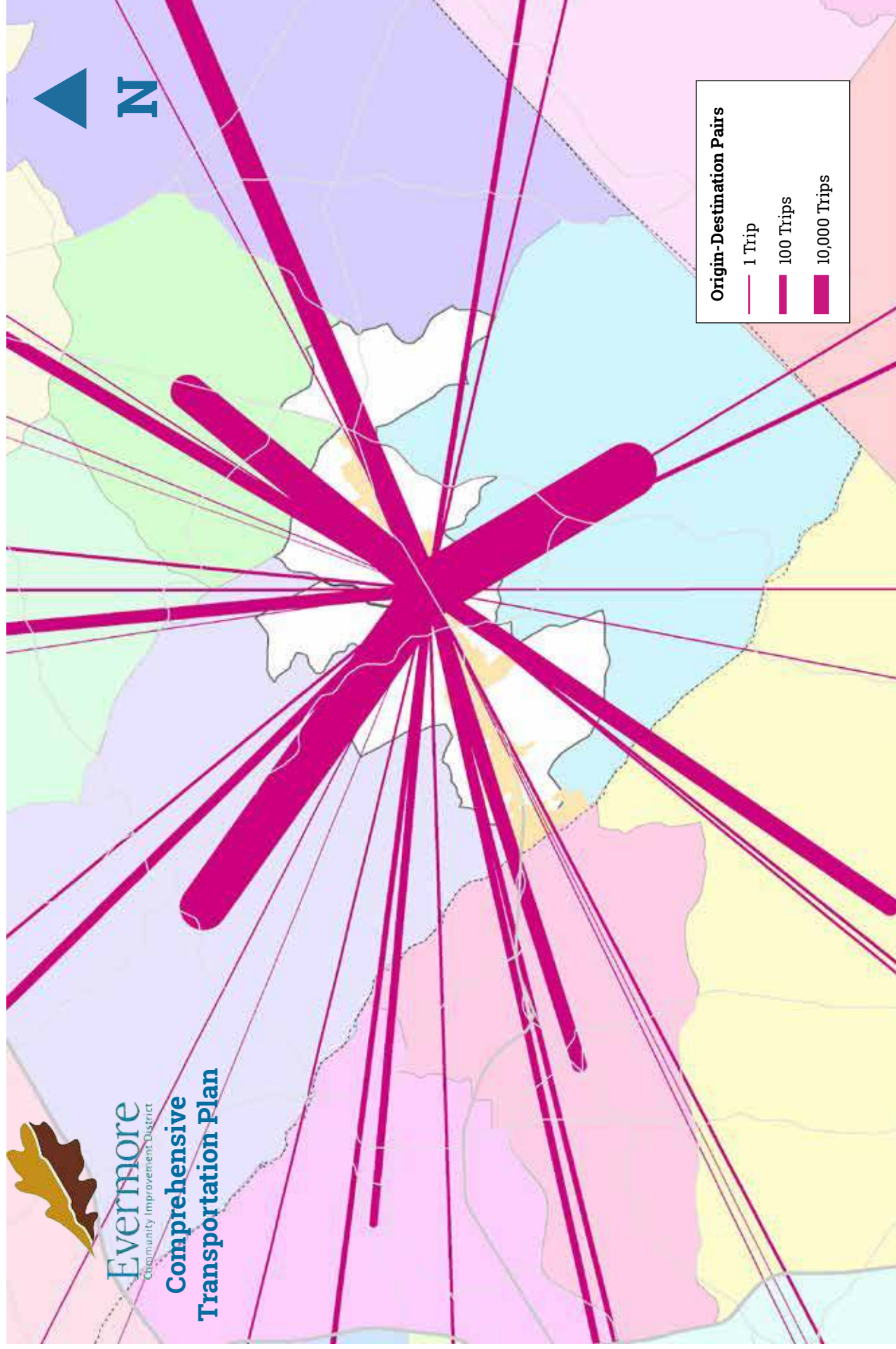


Figure 1.3.3 -TRAVEL DEMAND MODEL (TDM) TRAVEL PATTERNS BY SUBAREA



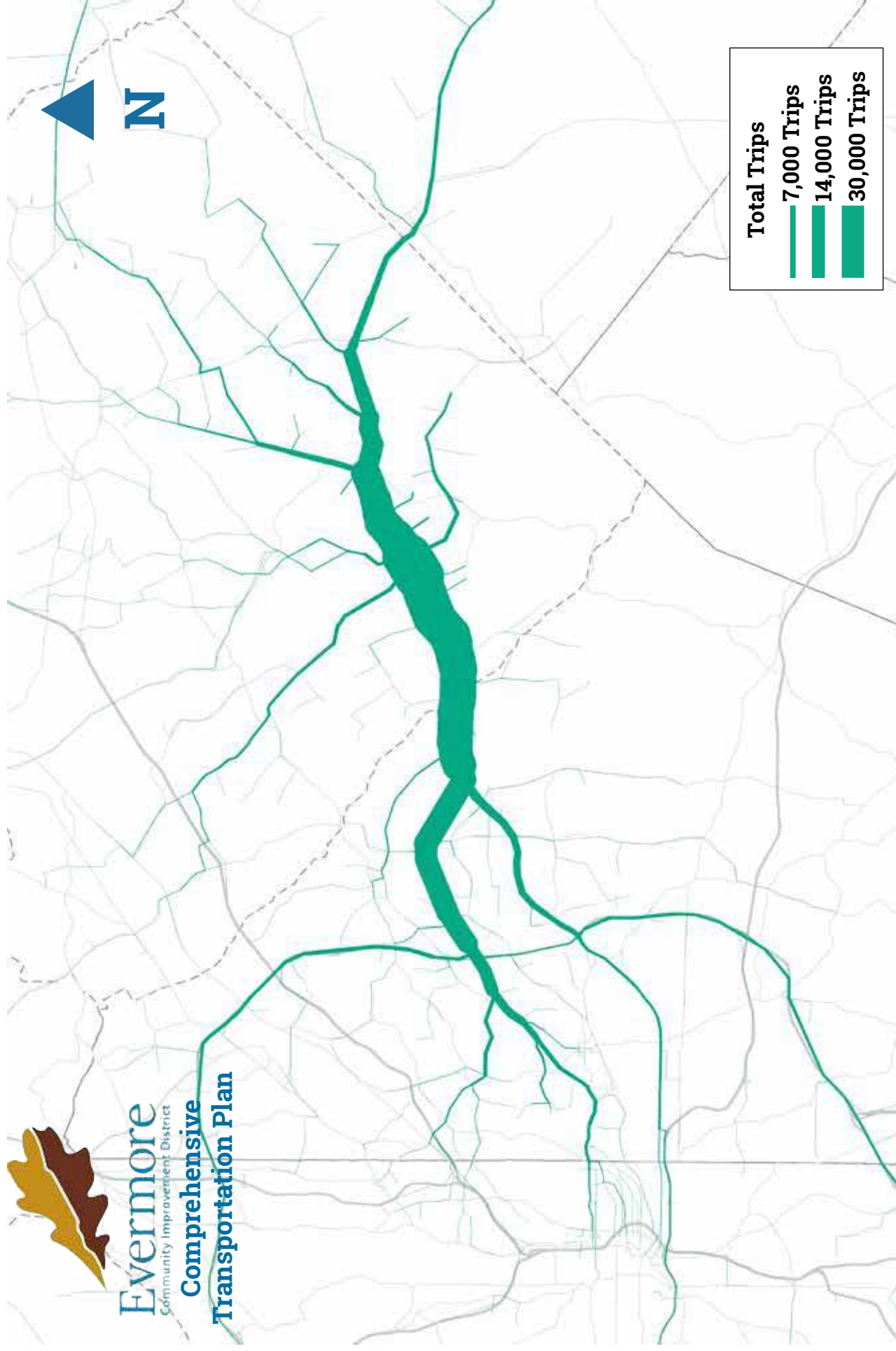


Figure 1.3.4 - TRAVEL DEMAND MODEL (TDM) TRAVEL PATTERNS



### 1.4-Operational Conditions

Operations on the 7-mile segment of US 78 vary greatly by time of day and by location. West of the intersection with SR 124, where the partial continuous-flow interchange (CFI) is to be constructed, the corridor is a six-lane highway with frequent driveways and some access management medians. East of SR 124, the typical section reduces to a four-lane highway with a flush, two-way left turn lane. Congestion on the corridor typically occurs in the westbound direction in the AM, and the eastbound direction in the PM. Traffic patterns form as a result of the morning commute into Midtown and Downtown Atlanta, as well as to the I-285 Perimeter. The reverse of this pattern occurs in the afternoon when people return home to locations along the US 78 corridor and to the east.

Volume on the corridor is high, with approximately 60,000 vehicles traveling on the road daily. Truck traffic is also relatively high, with heavy vehicles making up between 8.5% to 10% of the total traffic on a daily basis. Between signalized intersections, the corridor tends to operate relatively well. This is due to the median restrictions that are present, and also due to the number of travel lanes and the roadway geometrics. Certain signalized intersections act as bottlenecks for traffic. These bottlenecks can create vehicle queues that build and can even spill back to adjacent, upstream signals that would otherwise be operating efficiently. Congestion on the corridor can be attributed to three main causes:

- Signalized intersection operations
- Heavy vehicle traffic
- Crashes and other emergency events





**Evermore**  
Community Improvement District

## **Comprehensive Transportation Plan**

Early in this study, a multiple agency meeting was held to discuss and identify transportation conditions and issues along the US 78 corridor. The meeting included staff from Gwinnett County DOT, Georgia DOT, Evermore CID, the RTOP (Regional Traffic Operations Program) corridor manager for US 78, and the project team. Additionally, the project team performed observations along the corridor to document operational issues

A list of signalized intersections, and any observed or otherwise identified issues that are effecting signal capacity, is provided in **Table 1.4.1**. Additionally, **Figure 1.4.1** illustrates the locations of observed congestion during the AM and PM peak periods.

A general observation along the US 78 corridor was the travel lane widths and mix of traffic affects the operations and capacity of US 78. The travel lanes are approximately 10.5-feet wide, which is narrower than typical on major arterials in the metro Atlanta region. The presence of large trucks, even if few, tends to affect drivers of passenger vehicles in the adjacent lanes.

The large trucks at times may travel on the lane lines in curves or fail to maintain their lane. During the hours when volumes are higher, the presence of large trucks has an negative impact on operations. During the hours when volumes are lower, vehicle speeds are generally higher, and passenger vehicles sometime fail to maintain their lane in curves.



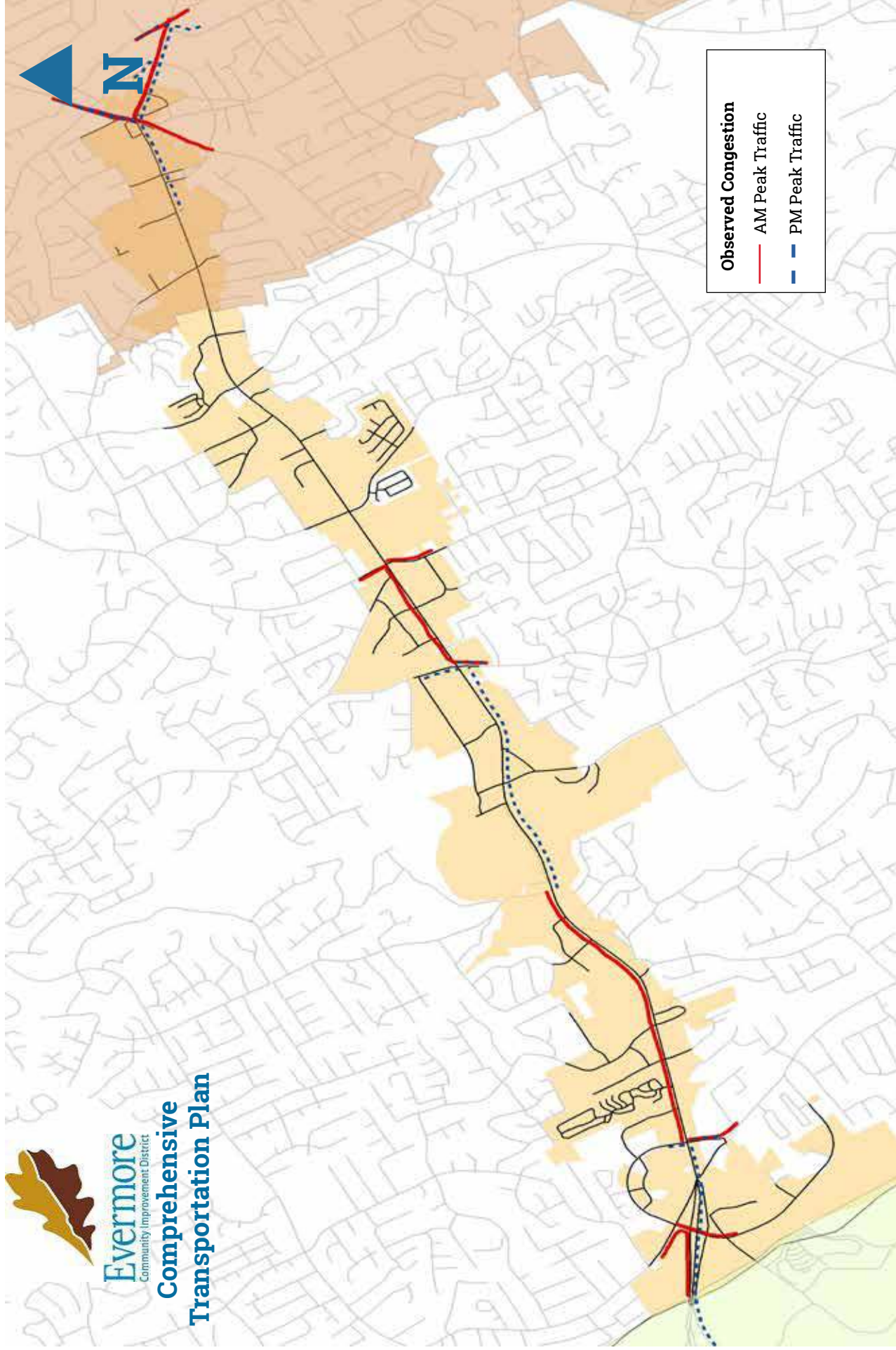


Figure 1.4.1- OBSERVED CONGESTION (AM & PM PEAK HOURS)



## Comprehensive Transportation Plan

Table 1.4.1 Existing Operational Issues		
Intersection or Street		Operational Issue
1	E Park Place Blvd & US 78	The intersecting volume in the AM and PM peak periods is very high; roadway network results in significant left turns to and from the side streets, which limits the throughput for the major street; AM queues can potentially reduce capacity at three upstream signals (Parker Court, Stone Drive, and Lake Lucerne Road); AM eastbound U-turn volume is very high; PM queues form to the SR 10 on-ramp; the signal is also split-phased
2	Davis Rd/ Parker Ct & US 78	Minor side street traffic, congestion is typically only a result of queue spillback at E Park Place Blvd signal; northbound left turn lane is short and may not adequately store the queue
3	Stone Dr/ Shopping Center & US 78	Minor side street traffic, congestion is typically only a result of queue spillback at E Park Place Blvd signal; PM period westbound to southbound left turn volume is high
4	US 78 & Lake Lucerne Rd	Minor side street traffic, congestion is typically only a result of queue spillback at E Park Place Blvd signal; the signal has an exclusive pedestrian phase across the east leg that can reduce efficiency when called
5	Ross Rd & US 78	Split phased side streets reduce capacity; PM queue spillback from Killian Hill Road reduces throughput
6	Bethany Church Rd/Killian Hill Rd & US 78	The Eastbound left turn lane is a single lane, and can spill back and block one through lane; the PM westbound U-turn volume is high and reduces turn lane capacity; southbound PM queues are long - the approach has two through lanes, but immediately downstream of the signal, Bethany Church Road reduces back down to one southbound lane; AM queues can form that effect two upstream signals (Veracruz Drive/Oakland Park Boulevard and Hewatt Road); PM queues can form and effect two upstream signals (Lake Lucerne Road and Ross Road); high volume of pedestrian activity has been identified here
7	Oakland Park Blvd/Veracruz Dr & US 78	Minor side street traffic, congestion is typically only a result of queue spillback at Killian Hill Road/Bethany Church Road signal; AM northbound left turn volume is high because of traffic diverting from the signal at Hewatt Road
8	Hewatt Rd & US 78	The Eastbound left turn lane is a single lane, and can spill back and block one through lane; southbound PM volume is very high and each movement is only served by one lane (LT, TH, RT)
9	Skyland/ Wisteria Dr & US78	The intersection is severely skewed and the dual left turn lanes from the side streets are timed to have a leading and a lagging phase; this signal also is congested during AM and PM periods due to the queues that form at the SR 124 signal



# Existing Conditions

**Table 1.4.1 Existing Operational Issues (Continued)**

Intersection or Street		Operational Issue
10	Parkwood Rd & US 78	Minor side street traffic; side street approaches consist of only a single lane for all movements
11	Highpoint Rd & US 78	Northbound left turn volume is moderately high in the AM peak
12	Walton Ct & US 78	Minor side street traffic; this signal is located at the terminus of the Old Highway 78 alignment
13	US 78 & McGee Rd	Minor side street traffic; the northbound approach consists of a single lane for all movements
14	US 78 & Fountain Dr	Minor side street traffic; the northbound approach consists of a single lane for all movements
15	Henry Clower Blvd/ Knollwood Dr & US 78	Minor side street traffic; the capacity of this signal is effected by the queue spillback from the signal with SR 124 during the PM peak; this signal will become the primary location for northbound to westbound left turns when the CFI is complete
16	Scenic Hwy & US 78	High volume of intersecting traffic results in poor operations; high volume of eastbound to northbound left turns during peak periods; southbound right turn volume is high and currently is controlled by the traffic signal; this is the location of the new CFI; the westbound approach consists of only two through lanes
17	Henry Clower Blvd/ Oak Rd & US 78	During the peak periods, the westbound left turn and the northbound right turn volumes are significant; during the PM peak, the southbound volume on Oak Road is very high - this is likely due to diverting traffic that is looking to avoid the signal at SR 124; the GRTA Xpress Park and Ride lot serving Route 419 is located to the south, on Henry Clower Boulevard; this signal also is congested during AM and PM periods due to the queues that form at the SR 124 signal
18	Skyland/ Wisteria Dr & US78	The intersection is severely skewed and the dual left turn lanes from the side streets are timed to have a leading and a lagging phase; this signal also is congested during AM and PM periods due to the queues that form at the SR 124 signal





## Comprehensive Transportation Plan

### Traffic Analysis and Level of Service

The standard approach to defining intersection traffic congestion is the use of Level of Service (LOS), a quantifiable measure of congestion that is correlated to the delay experienced by the average vehicle. LOS is measured on a letter grade scale from A to F, with LOS A indicating free-flow conditions and LOS F indicating severe congestion as shown in the graphic below. Typically, LOS D or better is considered satisfactory, with LOS E or F considered failing.

The Highway Capacity Manual (HCM) defines LOS at signalized intersections in terms of average control delay per vehicle, which is composed of initial deceleration delay, queue move-up time, stopped delay, and final acceleration delay. Unsignalized intersection LOS is defined in similar terms, but with lower delay thresholds. These delay thresholds are presented in **Table 1.4.2**.



Table 1.4.2: Level of Service Criteria		
Level of Service	Signalized Average Delay (sec/veh)	Unsignalized Average Delay (sec/veh)
A	$\leq 10.0$	$\leq 10.0$
B	$> 10.0$ and $\leq 20.0$	$> 10.0$ and $\leq 15.0$
C	$> 20.0$ and $\leq 35.0$	$> 15.0$ and $\leq 25.0$
D	$> 35.0$ and $\leq 55.0$	$> 25.0$ and $\leq 35.0$
E	$> 55.0$ and $\leq 80.0$	$> 35.0$ and $\leq 50.0$
F	$> 80.0$	$> 50.0$



## Existing Conditions

The HCM 2010 states that unsignalized intersections are associated with more uncertainty for users, as delays are less predictable than they are at signals, which can reduce a user's tolerance to delay. Unfortunately, limitations in the methodology also assume uniform gaps in traffic on major streets which often results in the analysis showing a significantly more conservative delay result for side street stop approaches.

A capacity analysis of the signalized intersections along the US 78 corridor was conducted with Synchro 9.0, utilizing HCM 2000 methodology. The HCM 2000 methodology was selected due to limitations with the HCM 2010 methodology regarding the provision for U-turns at intersections. Given the number of U-turns that are made at each signalized intersection and the effect on capacity that those U-turns have, this study makes the determination that the HCM 2000 methodology is most appropriate. The intent of this analysis is to provide an understanding of the current operations at each signalized intersection to identify areas where congestion-reducing improvements are needed. The US 78 corridor existing conditions delay and LOS for each signalized intersection during the AM and PM weekday peak periods is reported in **Table 1.4.3**.





## Comprehensive Transportation Plan

Table 1.4.3 Peak Hour (AM/PM) Signalized Level-of-Service, 2017 Year Conditions			
Intersection		Existing LOS	
		AM	PM
1	E Park Place Blvd & US 78	F	F
2	Davis Rd/ Parker Ct & US 78	B	B
3	Stone Dr/ Shopping Center & US 78	B	D
4	US 78 & Lake Lucerne Rd	B	C
5	Ross Rd & US 78	B	C
6	Bethany Church Rd/Killian Hill Rd & US 78	E	E
7	Oakland Park Blvd/Veracruz Dr & US 78	B	A
8	Hewatt Rd & US 78	D	D
9	Parkwood Rd & US 78	B	B
10	Highpoint Rd & US 78	D	C
11	Walton Ct & US 78	A	A
12	US 78 & McGee Rd	A	B
13	US 78 & Fountain Dr	A	A
14	Henry Clower Blvd/ Knollwood Dr & US 78	B	B
15	Scenic Hwy & US 78	E	F
16	Henry Clower Blvd/ Oak Rd & US 78	C	E
17	Skyland/ Wisteria Dr & US78	E	F



## Corridor Travel Times

The traffic signals along the SR 10/US 78 corridor are actively maintained including signal timing coordination through GDOT's Regional Traffic Operations Program (RTOP). In addition to this RTOP Corridor having a corridor manager overseeing the signal operations, the corridor has BlueToad technology. This technology collects travel time data. GDOT provided travel time data for the corridor, from Wisteria Drive/Skyland Drive to E. Park Place Boulevard for the Eastbound and Westbound direction. The historical comparison was performed for Tuesdays through Thursdays, on a 12-week period, from April 5, 2016 through June 27th, 2017. The Tuesday through Thursday data was reviewed because this is representative of typical weekday traffic flows.

Corridor congestion is examined using several metrics that are documented in the Federal Highway Administration (FHWA) publication, Travel Time Reliability, Making it There On Time, All the Time. The BlueToad travel time data provided by GDOT allows for estimations to be made for the corridor's directional Travel Time Index (TTI), Free Flow Speed and Travel Time, Average Peak Hour Travel Time, and directional buffer time.

## Free Flow Speed and Travel Time

The free-flow speed for a corridor is a theoretical speed that a vehicle would travel if there were no other vehicles, obstacles, or traffic control devices that increased delays. Practical estimates for free-flow speed can be made by taking the individual speeds recorded across all hours of the day, and sorting them in order of increasing magnitude. The 85th-percentile point of the observed speeds can serve as a reliable proxy for the speed of free-flow traffic (Atlanta Regional Commission, ARC). The free-flow travel time can then be calculated, knowing the length of the road segment.



## Average Travel and Buffer Time

For the purposes of this study, the AM peak period is taken to be the time of day between 6-9 AM and the PM peak period is taken to be the time of day between 4-7 PM. The average travel time for the corridor, by direction, is developed using the BlueToad data by averaging all travel times for each 15 minute period over a 14-month period. This metric is used to calculate the corridor's travel time index as well as the buffer time.

Buffer Time is a measure of how much extra time that a traveler must add to their average travel time when planning a trip to ensure an on-time arrival. If the travel time index is a measure of the average travel time on a road segment during a specific time period, then the buffer time is a measure of how much variation there can be in that average. Typically, the buffer time is the difference in the 95th percentile longest recorded travel time during a specific time period and the average travel time during that same period.

These travel time metrics are summarized in **Table 1.4.4** for the 6:00-9:00am peak hour and the 4:00-7:00pm peak hour. The data indicates directional values for the average peak hour travel time, the average daily travel time, the free-flow travel time, the travel time indices (TTI) and the buffer time during the AM peak hour and PM peak hour.



# Existing Conditions

**Table 1.4.4. Travel Time Data, by Direction of US 78 Eastbound between E. Park Place Blvd and Wisteria Dr**

	Travel Time (min)							
	Average AM	Average PM	Daily Average	Freeflow Travel Time (85th %ile)	AM Travel Time Index	PM Travel Time Index	AM Buffer Time	PM Buffer Time
(04/05/16 - 06/28/16)	10.58	14.27	11.25	9.85	1.07	1.45	1.3 min	2.1 min
(07/05/16 - 09/27/16)	10.48	13.61	11.29		1.06	1.38		
(10/04/16 - 12/27/16)	10.68	14.28	11.38		1.08	1.45		
(01/03/17 - 03/28/17)	10.36	13.67	11.11		1.05	1.39		
(04/04/17 - 06/27/17)	10.92	13.16	11.34		1.11	1.34		
Average	10.60	13.80	11.27					

**Table 1.4.5. Travel Time Data, by Direction of US 78 Westbound between E. Park Place Blvd and Wisteria Dr**

	Travel Time (min)							
	Average AM	Average PM	Daily Average	Freeflow Travel Time (85th %ile)	AM Travel Time Index	PM Travel Time Index	AM Buffer Time	PM Buffer Time
(04/05/16 - 06/28/16)	12.97	13.23	11.82	9.85	1.32	1.34	2.7	0.7
(07/05/16 - 09/27/16)	12.08	13.11	11.52		1.23	1.33		
(10/04/16 - 12/27/16)	13.18	13.71	11.74		1.34	1.39		
(01/03/17 - 03/28/17)	11.81	13.30	11.42		1.20	1.35		
(04/04/17 - 06/27/17)	13.93	13.96	12.11		1.41	1.42		
Average	12.79	13.46	11.72					

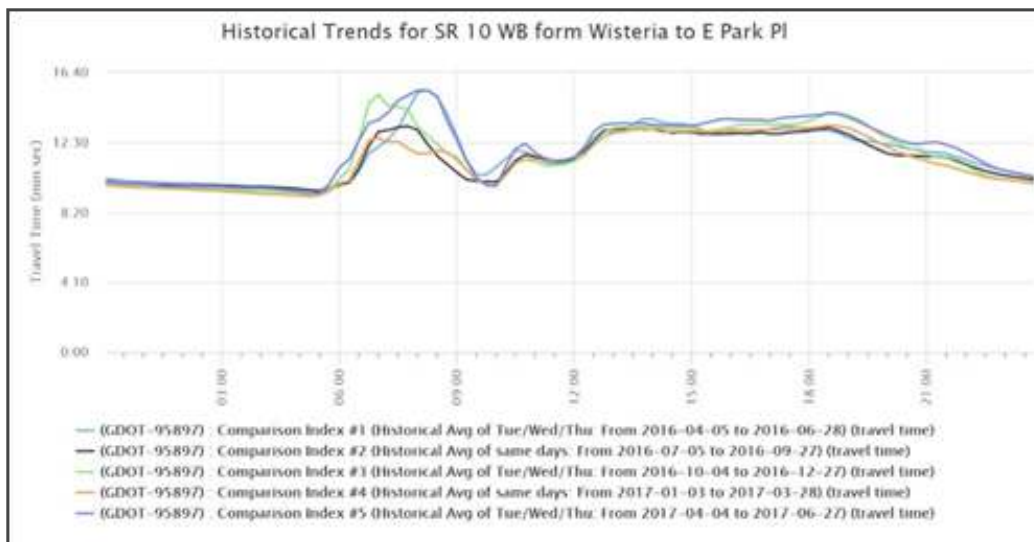




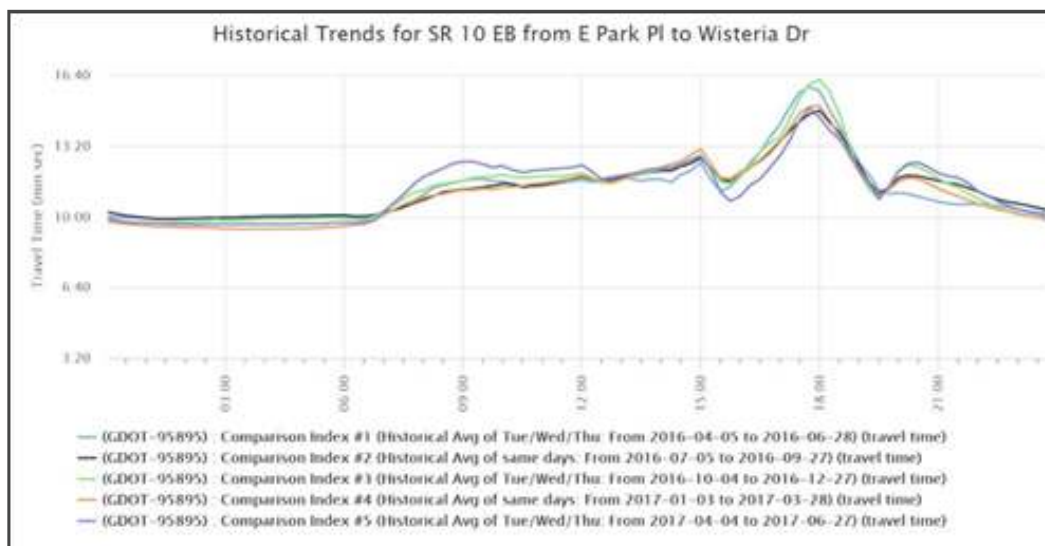
## Comprehensive Transportation Plan

The following two graphics illustrate the travel times over a 24-hour period during the study period. As can be expected the travel time in the westbound direction is highest during the AM peak period and becomes relatively consistent from noon to about 7pm. The travel time in the eastbound direction is consistent from 9am until 3pm. Beginning around 4pm, the travel time starts to increase to a peak around 5:45pm.

### Travel Time along US 78 Eastbound



### Travel Time along US 78 Westbound





## 1.5-Roadway Crash Review

Traffic safety is a key consideration of how the existing transportation network is functioning. Five years of crash data for the years 2012 to 2016 was obtained from Georgia DOT's Safety Office. Crash data was provided for all us US 78 in Gwinnett County. For the purposes of this analysis, crash data was examined from Park Place Boulevard through Wisteria Drive/Skyland Drive. For the five year period a total of 3,394 crashes occurred along the US 78 corridor. Of these, a total of 789 were injury crashes and 7 were fatalities. The crash data shows that there were four pedestrian/bicycle crash recorded during the observation period. **Table 1.5.1** summarizes the crashes along the US 78 corridor. **Figure 1.5.1** illustrates the crash locations. The heat map shows the frequency of all crashes, regardless of severity. Crashes that involved injuries are shown with orange circle, and crashes with fatalities are shown with a red "X."

Table 1.5.1 Crash Review Summary for US 78 Corridor		
Crash Type	Number of Crashes	Percentage of Total Crashes
Angle	1,019	30%
Head On	48	1%
Not A Collision with Motor Vehicle	149	4%
Rear End	1,630	48%
Sideswipe-Opposite Direction	33	1%
Sideswipe-Same Direction	494	15%
Other/Unspecified	21	1%
<b>Total Crashes</b>	<b>3,394</b>	<b>100%</b>
Crashes with Injuries	789	23%
Crashes with Fatalities	7	<1%
Crashes involving Bicyclists or Pedestrians	4	<1%
Crashes involving a Left-Turn or U-Turn	602	18%



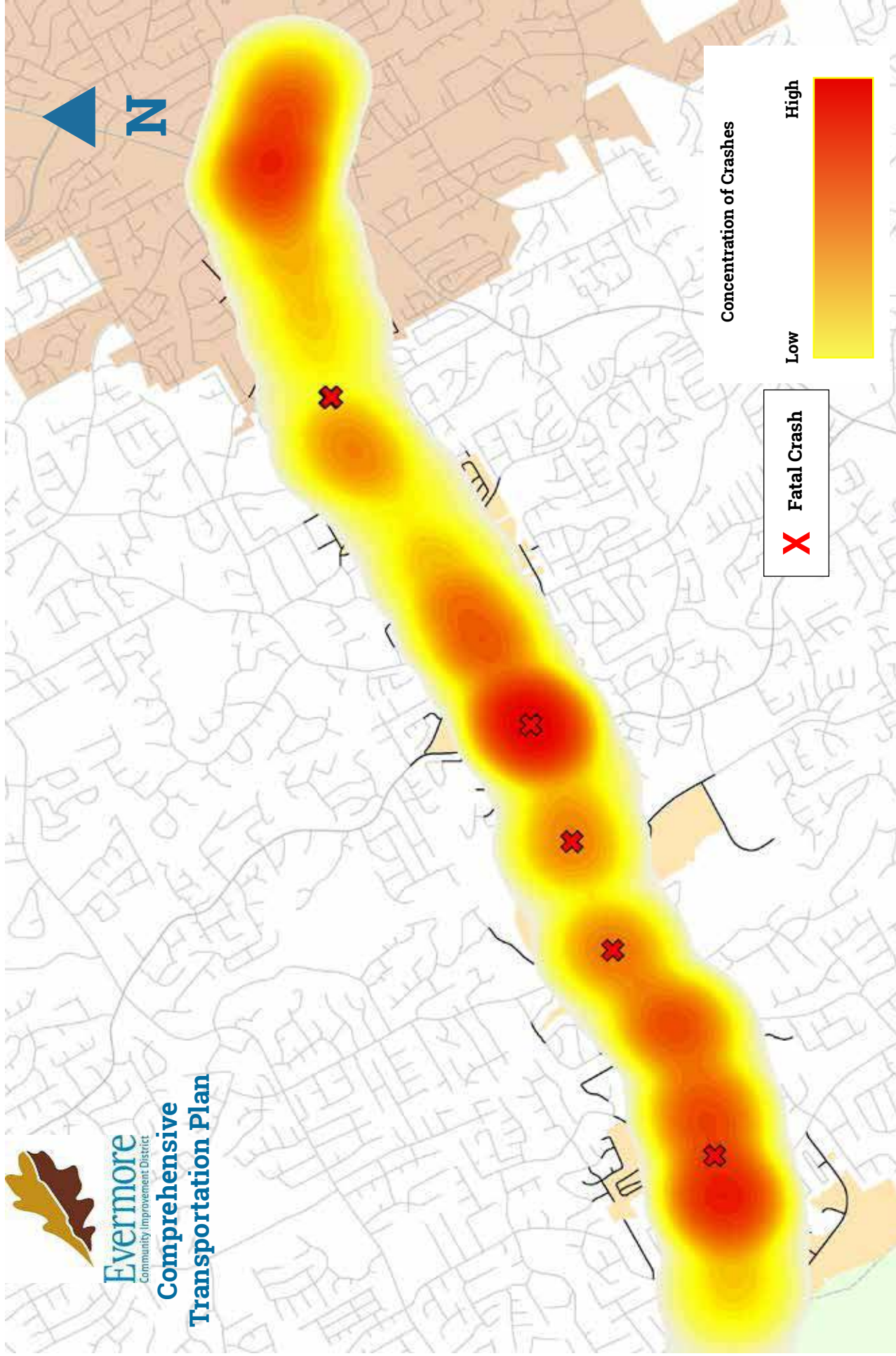


Figure 1.5.1 - CRASH REVIEW FOR US 78 CORRIDOR



# Existing Conditions

The predominant types of crashes included rear end, accounting for 48% of the total. Angle crashes accounted for 30% and sideswipe same direction crashes accounted for 15%. The high percentage of rear end crashes is commonly associated with congestion. The high percentage of sideswipe same direction crashes confirms there is a significant amount of lane changing occurring along the corridor. An additional analysis of the data found that 18% of the crashes involve a left-turn or u-turn movement.

Analysis of the crashes by roadway segments and by intersection was performed to better understand the location of the accidents along the corridor. **Table 1.5.2** summarizes the total crashes by intersection.

<b>Intersecting Road</b>	<b>Number of Accidents</b>	<b>Rank</b>
Park Place Boulevard	251	2
Davis Road/Parker Court	162	4
Stone Drive/Lowe's Driveway	141	6
Lake Lucerne Road	141	7
Ross Road	69	14
Killian Hill Road/Bethany Church Road	306	1
Veracruz Drive/Oakland Park Boulevard	76	12
Hewatt Road	162	5
Parkwood Road	82	11
Highpoint Road	123	8
Old Highway 78/Walton Court	38	17
McGee Road/Cambridge Street	69	15
Fountain Road	41	16
Knollwood Drive/Henry Clower Boulevard	72	13
SR 124/Scenic Highway	202	3
Oak Road/Henry Clower Boulevard	113	9
Wisteria Drive/Skyland Drive	106	10





## Comprehensive Transportation Plan

Table 1.5.3 summarizes the total crashes by segment.

Table 1.5.3: Crash Review for US 78 Corridor Roadway Segments				
Roadway Segment		Number of Accidents	Accidents/Mile	Rank
From	To			
Park Place Boulevard	Davis Road/Parker Court	151	410	3
Davis Road/ Parker Court	Stone Drive	160	352	4
Stone Drive	Lake Lucerne Road	79	183	7
Lake Lucerne Road	Ross Road	69	126	11
Ross Road	Killian Hill Road/Bethany Church Road	170	293	6
Killian Hill Road/ Bethany Church Road	Veracruz Drive/Oakland Park Boulevard	137	494	2
Veracruz Drive/ Oakland Park Boulevard	Hewatt Road	30	161	8
Hewatt Road	Parkwood Road	16	67	13
Parkwood Road	Highpoint Road	117	158	9
Highpoint Road	Old Highway 78/Walton Court	8	39	16
Old Highway 78/ Walton Court	McGee Road/Cambridge Street	12	42	15
McGee Road/ Cambridge Street	Fountain Road	16	72	12
Fountain Road	Knollwood Drive/Henry Clower Boulevard	19	148	10
Knollwood Drive/Henry Clower Boulevard	SR 124/Scenic Highway	13	58	14
SR 124/Scenic Highway	Oak Road/Henry Clower Boulevard	140	572	1
Oak Road/ Henry Clower Boulevard	Wisteria Drive/Skyland Drive	50	303	5



# Existing Conditions

Crash rates for the US 78 corridor were calculated and compared to the statewide averages for urban principal arterials. **Table 1.5.4** summarizes the crash rate calculations and indicates the average crash rate of 505 crashes per 100 million vehicle miles (100 MVM) for the five year period was slightly lower than the statewide average of 583 in the year 2015.

Table 1.5.4 - Crash Rate for US 78 Corridor						
Crash Analysis Section	Distance (mile)	Time Period	Number of Crashes	ADT	Annual VMT	CrashRate (100MVM)
US 78: Park Place Blvd to Wisteria Dr/Skyland Dr	6.5	Five Years	3,394	56,670	134,449,585	505

1 2

1 Note: Statewide Urban Principal Arterial Average: 583 crashes per 100 million vehicle miles of travel (100MVM), based on GDOT data for 2015.

2 Note: Based on 2015 ADT from traffic data collection effort. ADT is average of four segments along US 78 corridor.







## 2-Needs Assessment

Based on the existing transportation system conditions, a needs assessment was performed. The needs assessment identifies where there are opportunities for improvements in the various travel modes and specific locations. The needs assessment focused on the short-term conditions expected by year 2030. In addition to the technical analysis, an on-line survey was conducted of the community to provide further input.

### 2.1-Vehicle Operations

An expected growth in travel volumes at an annual rate of 1-percent per year equates to approximately a 14-percent increase in volumes by the year 2030. The expected daily vehicle volume demand along US 78 are shown in **Table 2.1.1**.

Table 2.1.1 - Expected 2030 Daily Traffic Volume Demand		
Location	Weekday ADT	Saturday ADT
US 78 East of Camp Circle	69,225 vpd	---
US 78 between Ross Road and Ross Circle	71,400 vpd	60,000 vpd
US 78 East of Hewatt Road	62,625 vpd	---
US 78 West of Henry Clower Boulevard	56,750 vpd	---





**Evermore**  
Community Improvement District

## **Comprehensive Transportation Plan**

The year 2030 expected traffic volumes during the weekday AM and PM peak hour were analyzed. The projected intersection Level-of-Service and delay for each signalized intersection along the US 78 corridor is reported in Table 2.1.2. The intersections projected to operate at an unacceptable Level-of-Service, or overcapacity, are highlighted. For critical intersections, the volume to capacity ratio (v/c), and green-to-cycle ratio (g/c) are reports for the eastbound or westbound through movements. The v/c ratio indicates the extent the demand volume exceeds the capacity and the g/c ratio (based on existing signal timings conditions) indicates the amount of the cycle the approach receives. Capacity improvements at the intersection would improve the operations.

Based on the short-term intersection analysis, the following 6 intersections are in need of capacity/operational improvements:

- US 78 at E Park Place Blvd
- US 78 at Stone Dr/Driveway
- US 78 at Killian Hill Rd/Bethany Church Rd
- US 78 at Hewatt Rd
- US 78 at Oak Rd/Henry Clower Blvd (east)
- US 78 at Wisteria Dr/Skyland Dr

It is important to note there is an intersection improvement project at US 78 at SR 124/Scenic Hwy to construct a Continuous Flow Intersection. This project will address the poor Level-of-Service reported in the table.



# Needs Assessment

**Table 2.1.2: Peak Hour (AM/PM ) Signalized Level of Service, 2030 Year Conditions**

Location	AM Peak Hour			PM Peak Hour		
	LOS (delay in sec)	Westbound Through Direction		LOS (delay in sec)	Eastbound Through Direction	
		v/c ratio	g/c ratio		v/c ratio	g/c ratio
US 78 at E Park Pl Boulevard	F (108)	1.03	0.55	F (117)	1.21	0.52
US 78 at Parker Ct/Davis Rd	C (26)	1.02	0.71	D (45)	1.1	0.66
US 78 at Stone Dr/Driveway	C (23)	1.01	0.72	F (82)	1.2	0.58
US 78 at Lake Lucerne Rd	E (60)	1.13	0.62	C (32)	0.95	0.77
US 78 at Ross Rd	C (22)	0.94	0.64	D (55)	1.1	0.59
US 78 at Killian Hill Rd/ Bethany Church Rd	F (104)	1.05	0.53	F (96)	1.0	0.52
US 78 at Veracruz/Oakland Park Blvd	B (14)	0.89	0.67	A (9)	0.82	0.7

Based on existing operational issues identified by agency staff and field reviews during the peak periods, the following needs are listed in **Table 2.1.3**.





## Comprehensive Transportation Plan

**Table 2.1.3 Existing Operational Needs**

Intersection or Street		Operational Needs
1	E Park Place Blvd & US 78	Increase Intersection Capacity; Reduce vehicle queue along US 78 to adjacent signals; Add capacity for side-street left-turns
2	US 78 at Parker Ct/Davis Rd	Improve capacity due to new development traffic
3	Stone Dr/Shopping Center & US 78	Increase capacity for westbound left-turn
4	US 78 & Lake Lucerne Rd	Review opportunity to remove/modify exclusive pedestrian phase across the east leg
5	Ross Rd & US 78	Side streets operate with split-phase which reduces capacity; study opportunity to remove split-phasing
6	Bethany Church Rd/Killian Hill Rd & US 78	Additional eastbound and westbound left-turn capacity; improve northbound/southbound capacity/lane utilization; identify enhancements due to high pedestrian volumes at intersection; enhance or modify westbound U-turn movement
8	Hewatt Rd & US 78	Increase capacity for southbound approach and eastbound left-turn movement
9	Parkwood Rd & US 78	Side street approaches consist of a single lane for all movements; review opportunity to add lanes
14	Henry Clower Blvd/ Knollwood Dr & US 78	This signal will become the primary location for northbound to westbound left turns when the CFI is completed at the SR 124/Scenic Highway intersection; monitor operations in the future
16	Henry Clower Blvd/ Oak Rd & US 78	Additional capacity to address the volume and queues
17	Skyland/ Wisteria Dr & US78	Additional capacity to the volume and queues; investigate geometric options to improve the skewed intersection



# Needs Assessment

In summary, to improve operations along the US 78 corridor, there are three critical areas which currently experience congestion and where improvements should be prioritized.

- The first area along US 78 is around the E Park Place Blvd intersection, and extending eastward
- The second area along US 78 is around the Killian Hill Rd/Bethany Church Rd intersection.
- The third area is along US 78, beginning at the SR 124/Scenic Highway intersection and extending to the east.

## 2.1-Transportation Safety

The needs assessment identified the following opportunities to improve the corresponding safety needs identified along the US 78 corridor.

### Safety Needs

1. Crashes at intersections
2. US 78 segment with highest crash rate
3. High percentage (15%) of sideswipe-same direction accidents along US 78
4. Re-occurring crashes along corridor causing travel delays
5. Re-occurring crashes/incidents along corridor causing travel delays

### Opportunities to Improve Safety

1. Intersection/Safety Improvements Study
2. Raised median along US 78 west of SR 124/Scenic Hwy
3. Widen through travel lanes (from 10.5 ft) to 11 ft
4. Redundancy in Roadway Network (i.e. additional secondary roads)
5. Dedicated Incident/Break-down corridor Operator





## **Comprehensive Transportation Plan**

An explanation of the opportunities to improve safety is provided below:

### **Intersection Safety and Improvement Study**

The top ten intersections, in terms of number of accidents, are recommended to be studied further to identify potential safety improvements. Examples of safety improvements could include converting a permissive left-turn phase to a protected-only phase; signal timing adjustment; or geometric reconstruction. The top two intersections, based on total number of crashes, are US 78 at Killian Hill Road/Bethany Church Road, and US 78 at E. Park Place Boulevard.

### **Raised Median along US 78, east of SR 124/Scenic Highway**

Install a raised median to replace the existing center two-way left-turn lane. This should reduce crashes and improve operations.

### **Widen through travel lanes (from 10.5 feet) to 11-feet**

The high percentage (15%) of sideswipe-same direction accidents along the corridor indicates the narrower lane width could be attributing to this crash type. As part of future intersection improvement projects and/or roadway reconstruction projects, consider widening all of the travel lanes, or at a minimum the outside (right-most) travel lane to better accommodate commercial vehicle trucks. Along some segments of US 78 there are paved shoulders which could be striped to widen the outside travel lane for relative low cost.

### **Redundancy in Roadway Network (i.e. additional secondary roads)**

Re-occurring crashes along corridor result in reduced travel times, and can have a significant impact during the peak volume periods. Travelers desire a consistent travel time. To improve travel times, providing redundancy in the roadway network provides an opportunity for drivers to re-route their trip around a crash or incident. This improvement consists of constructing/connecting additional parallel streets along both sides of US 78 (where feasible), and in some locations additional quadrant roads at major side-streets.

### **Dedicated Incident/Break-Down Corridor Operator**

Consideration of providing one dedicated vehicle and attendant to monitor the US 78 corridor during critical periods and respond as needed. The attendant could respond to vehicle break-downs in the travel lanes, and assist with moving the vehicle out of the travel lane, and aiding the driver in need (i.e. with changing a flat tire; calling a tow service). The attendant could also assist emergency response personnel with lane closures or advance notification to drivers of an incident ahead (with use of message sign mounted on truck). In terms of hours of operation, this service may experience the best return on investment during the weekday AM period (5:00AM – 9:00AM), weekday PM period (2:00PM – 6:00PM), and during the Saturday mid-day period (10:00AM – 4:00PM) - when the corridor volumes are the highest of all days. Additional time periods, such as during the busy December shopping season, may also be appropriate to maintain travel speeds along the US 78 corridor.



### 2.3-Truck Operations

Truck traffic is also relatively high, with heavy vehicles making up between 8-percent to 10-percent of the total traffic on a daily basis. A key observation is the single-unit heavy vehicles constitutes a majority of the total truck volume. The percentage of combination vehicles (the large commercial vehicles) is around 1-percent of the daily and peak hour volumes. This equates to around 600 commercial vehicles per day, and about 40 commercial vehicles during the peak hour.

The US 78 corridor is a designated truck route for the Atlanta region. The infrastructure needs to be maintained in a good state of repair and upgraded as appropriate to maintain consistent traffic flow and reliable travel times. Additionally, access management along the corridor needs to be maintained, and improved when feasible, to protect the freight corridor.

In terms of infrastructure, the roadway pavement condition needs to be maintained to accommodate the high traffic volume and truck volumes. There are some pavement locations which are recommended to be reviewed and repaired in the near term. The traffic signal equipment, detection, and traffic cameras need to be maintained. Fortunately, to address this Georgia DOT is performing active management of the US 78 corridor as part of the Regional Traffic Operations Program.

As stated previously, an option to improve safety along the US 78 corridor is to widen the through travel lanes - from 10.5 feet to 11-feet. This would provide additional maneuvering room for commercial vehicles and wide-loads moving through the corridor.



## 2.4-Bike/Pedestrian Needs

A significant portion of traffic on US 78 is associated with employees of these businesses traveling to and from work. The existing conditions analysis identified that workers generally live in southern and central Gwinnett County, with the highest concentrations of employees living immediately south of the study area, between US 78, SR 124/Scenic Highway, and SR 264/Bethany Church Road.

Based on this information, an identified need is to provide/enhance alternate transportation access from the US 78 corridor to the adjacent residential neighborhoods and areas. Improving access would reduce the number of vehicles on the roadway and provide an alternate mode. Access could be provided in different forms, such as:

- Adding sidewalks from US 78 along major streets (such as Bethany Church Road, Hewatt Rd/Everson Rd/Leach Rd, Parkwood Rd)
- Providing public transportation to/from adjacent residential neighborhoods to the businesses and retail destinations along the US 78 corridor

There are currently no designated bicycle facilities along streets within the CID. Bicyclists are observed riding in sidewalks along the US 78 corridor to reach their destinations, which include employment or retail. There is an opportunity to establish a parallel facility to US 78 to provide bicycle travel. This bicycle facility would preferably be separated from US 78, and provide for both short-distance and long-distance travel. To enhance this facility, a connection to the Stone Mountain Park would provide a recreation destination.



### 2.5-Transit Needs

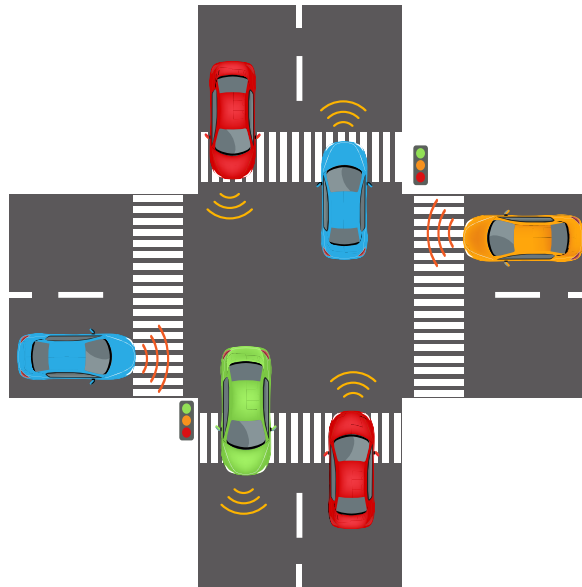
In addition to the existing GRTA Xpress Route service along the US 78 corridor, there is a need to provide public transportation for destination within the corridor and nearby. Based on the existing conditions analysis, which identified a high rate of local trips within the subarea around the US 78 corridor, providing some form of public transportation would improve access for employees and residents. There are many forms of local transit service. One opportunity to consider is a 'flex service' which offers the convenience of an on-demand, door-to-door service by reservation and the flexibility of walk-up service from a collection point. An example of this service is FLEX which operates in Cobb County. For the US 78 corridor, a 'zone' could be established, for instance a 2-mile distance from the US 78 corridor.

To improve the existing GRTA Xpress Route service along US 78, and mitigate the impacts of traffic congestion on bus service, elements of bus rapid transit could be constructed. Examples of these could include queue jumpers, or improved off-street Xpress bus stations at the park-n-ride lots.



## 2.6-Autonomous Vehicles

The impacts of autonomous vehicles on the transportation system in the next ten years and beyond are unknown at this time. There is significant interest in autonomous vehicles and speculation on autonomous vehicles impact on travel behavior, the capacity of our transportation system, or the land use and character of the community. At this time, there is a need to recognize autonomous vehicles will have an important effect on our transportation system and how we utilize it. Therefore, there will be a need to support infrastructure improvements which accommodate the future introduction of autonomous vehicles.

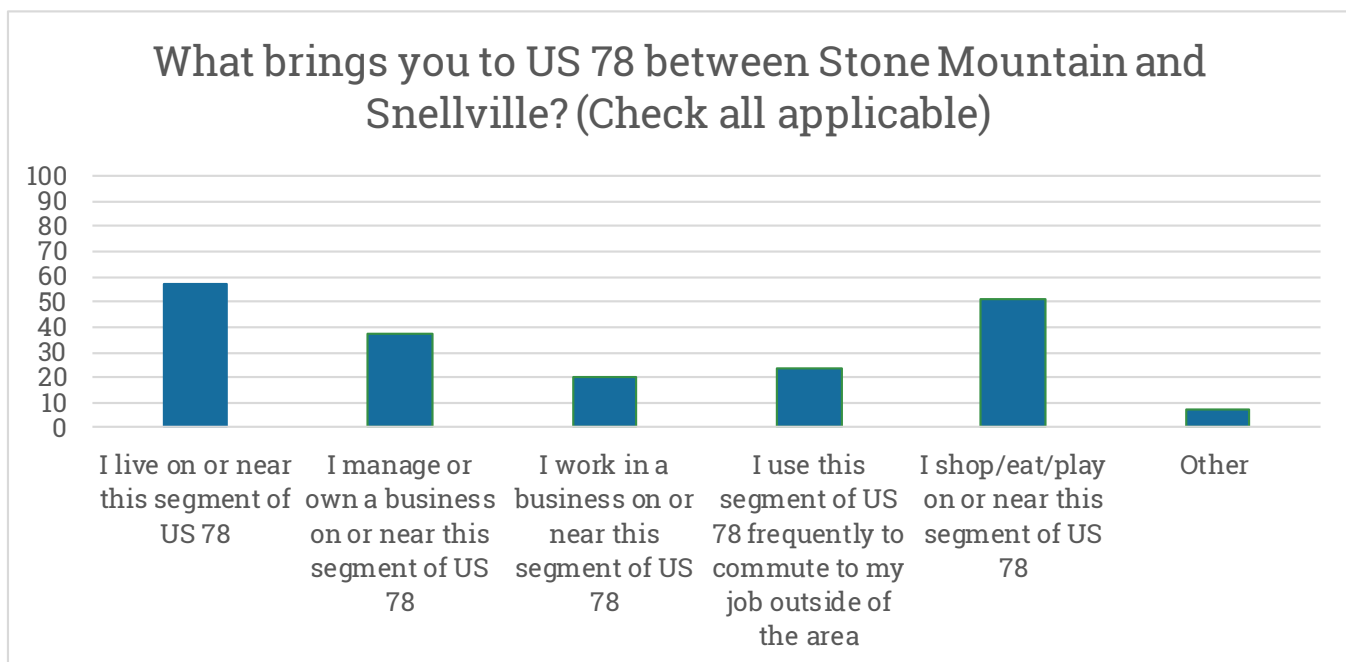




## 2.6-Community

### Survey Results

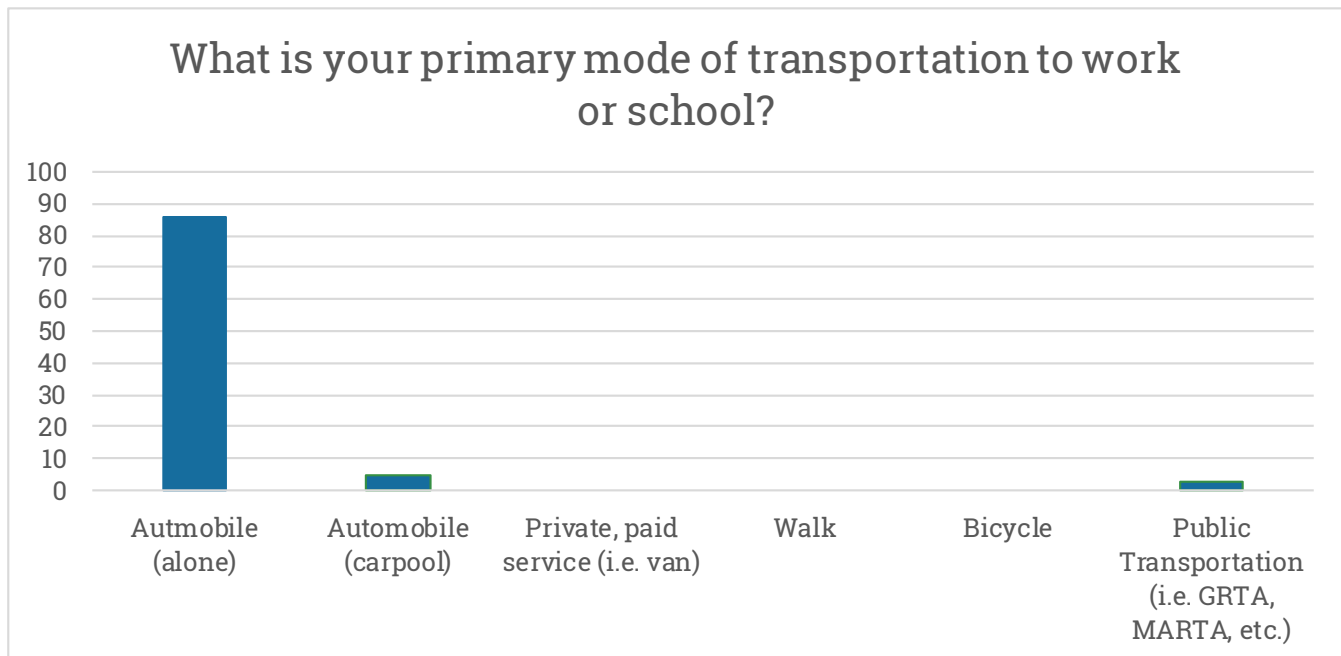
As part of the plan, an on-line survey was conducted in May 2018. A short nine-question survey was provided to the community. Results of the feedback received is provided on the following pages.



Over half of respondents (57%) noted that they live on or near this segment of US 78 as the primary reason as to why they travel on 78 between Stone Mountain and Snellville. A third of respondents also answered that they manage or own a business along the corridor segment.



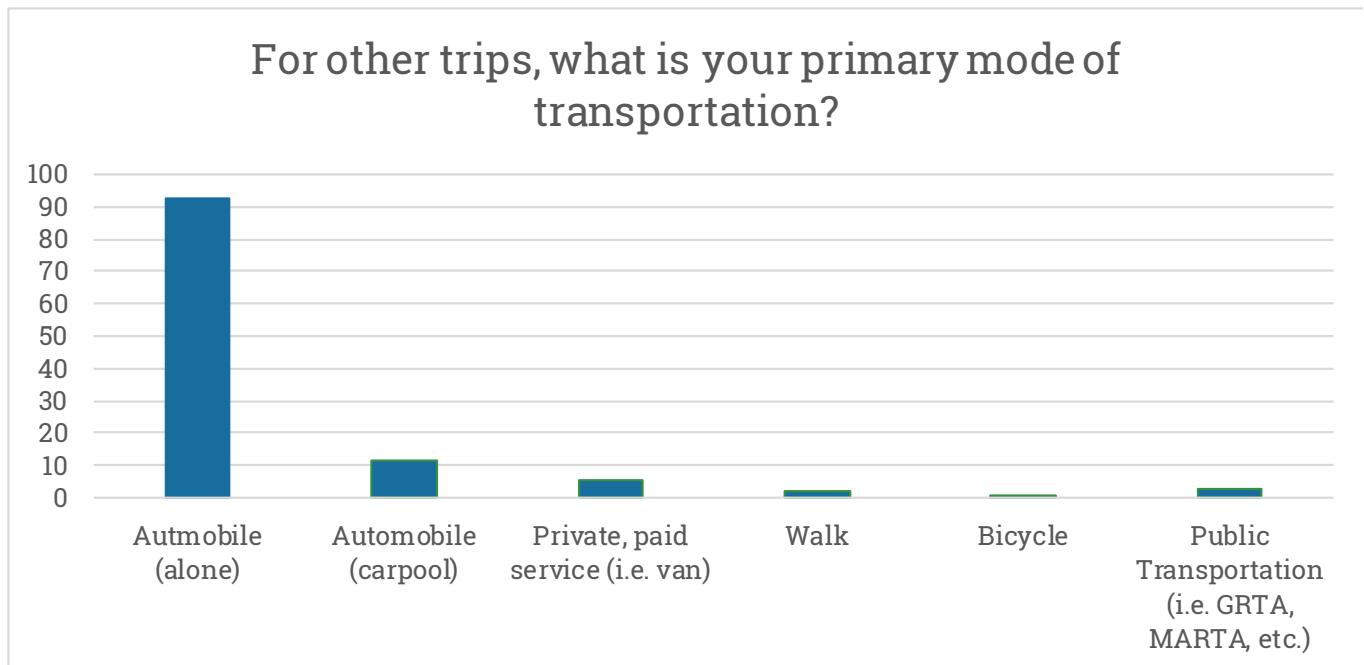
An overwhelming majority (86%) of respondents travel along the corridor via automobile alone for work or school. This is compared to about 3% of respondents utilize public transportation (GRTA, MARTA, etc.) to traverse the corridor for similar trips.





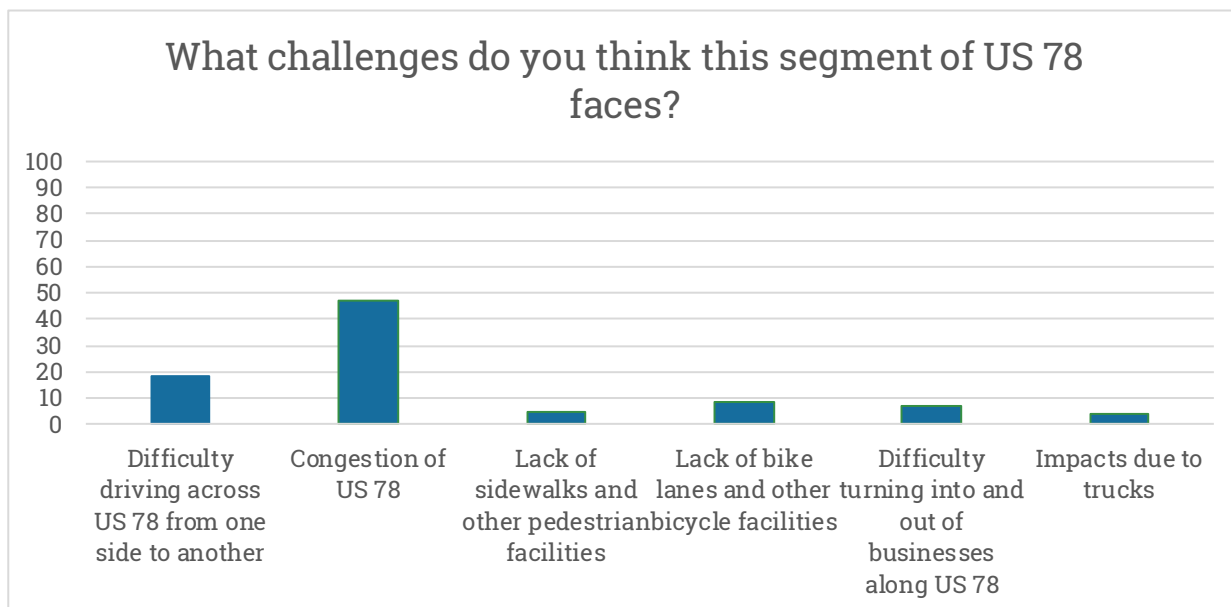
# Needs Assessment

For other types of trips, most respondents (93%) also noted that they get around the corridor segment via automobile, particularly as single-occupancy trips. However, close to 11 % of trips were also done via carpool.





Congestion on US 78 was noted as the most problematic challenge for this segment of US 78. Difficulty driving across US 78 from one side to the other, as well as difficulty turning into and out of businesses along 78 were also noted as common challenges.



The top four investments noted by respondents along this segment of 78 include: Intersection Capacity Improvements (67%), Improved safety for left turns from US 78 to side streets (50%), Parallel roads for local access (44%) and Major Roadway Capacities (additional lanes) (41%).







# EVERMORE CID COLLECTOR ROAD PROJECT





# 3-Recommendations

Based on previously identified needs, stakeholder input, and traffic analysis of intersection conditions along US 78, transportation recommendations were developed for the Evermore CID Comprehensive Transportation Plan. This section presents the recommended projects, the evaluation of the projects, and the potential implementation phasing. For many of the projects, planning level cost estimates were performed. Additionally, fifteen projects were identified as having a high return on investment.



## 3.1-Recommended Improvement Categories

A safe and efficient transportation system is key to a vital community. Recommended transportation improvements identified to address the needs were grouped into six improvement categories, as indicated below.

Improvement Categories	
1. Intersection Improvements	These projects address traffic congestion and improve operations and safety. These projects include additional travel lanes, new signals, roundabouts, and median opening modifications.
2. Roadways	These projects were identified in terms of operations, safety and travel efficiency. These projects consist of additional travel lanes, new street connections, and constructing additional parallel streets along US 78 (where feasible), and in some locations additional quadrant roads at major intersections.
3. Bridges	This project will enhance the road network of parallel streets by adding a new bridge over US 78.
4. Pedestrian & Bicycle	These projects include constructing multi-use facilities for bicycles and pedestrians, primarily along local streets, to connect businesses to Stone Mountain Park, residential areas, schools, and transit service along US 78.
5. Transit	These projects identify opportunities to expand local bus service by providing a 'flex service' in the US 78 area, to improve the existing GRTA Xpress Route stops along US 78, and mitigate the impacts of traffic congestion on bus service
6. Other Projects	This category captures technological enhancements, further safety studies, and an idea to provide one dedicated vehicle and attendant to monitor the US 78 corridor during critical periods and respond as needed.



## 3.2-Recommended Transportation Projects

The CTP identified forty-six recommended transportation projects. These projects are identified in **Table 3.1**. The projects fall into the following six improvement categories:

- Intersection Improvements (16 projects)
- Roadways (15 projects)
- Bridge – (1 project)
- Pedestrian and Bicycle (6 projects)
- Transit (5 projects)
- Other projects (3 projects)

Table 3.1 provides the project type, project ID, project name, project description, source (for instance, projects listed as Evermore CID CTP originated as part of the Evermore CTP effort while projects listed as Destination 2040, the Gwinnett County Comprehensive Transportation Plan, means this is a Gwinnett County planned or programmed project). The table provides a project status, potential implementation tier, planning level cost estimate, and potential funding partners, and whether the project is expected to have a high return on investment.

Associated with **Table 3.1** are two figures which illustrate many of the recommended project locations:

- **Figure 3.1** Recommended Projects – Roadway/Intersection/Bridge
- **Figure 3.2** Recommended Projects – Pedestrian/Bicycle/Trail

**Table 3.1** indicates the potential implementation tier for the transportation projects. All the projects are classified into short-term, mid-term, and long-term time frames. For the implementation process of the Evermore CID CTP, dividing the projects into three time frames allows the CID Board to consider and implement these projects based on the current or future needs and funding availability.



Table 3.1- Recommended Transportation Projects

Project Type	Project ID	Project Name	Project Description	Source	Status	Implemen- tation Tier	High ROI	Planning Level Cost Estimate	Potential Funding Partners
Intersection	I-1	US 78 at E. Park Place Blvd	Construct intersection improvement; recommended addition of third northbound left-turn lane along E. Park Place Blvd to westbound US 78; add raised median along northbound approach	Destination 2040 CTP, # GCint_050	CTP Level 1- Partial Funding	SHORT	X	\$950,000	SPLOST, GDOT
Intersection	I-2	NE Quadrant Roadway at US 78/E. Park Place Blvd - Using Glenn Club Drive	Utilize Glenn Club Drive as a quadrant roadway; install new traffic signal at US 78 to provide SB left-turn movement to US 78 eastbound; note existing directional median opening located at Glenn Club Drive; (companion project is SE Quadrant Roadway)	Evermore CID CTP		SHORT	X	\$450,000	SPLOST, GDOT
Roadway	R-1	SE Quadrant Roadway at US 78/E. Park Place Blvd	Modify/upgrade road (Sharp Trail) to create a quadrant roadway, note existing directional median opening located at Sharp Trail allows WB left-turn movement; (companion project is NE Quadrant Roadway); approx. 0.3 miles	Evermore CID CTP		MID	--	\$4,740,000	SPLOST, GDOT
Roadway	R-2	New street and bridge over US 78, connecting Park Plaza Dr to Rockbridge Rd/new public street (project R-3)	Adding local street to improve business access and street network; provides alternate north/south travel to congested E. Park Place intersection; provides pedestrian/bicycle connectivity between north and south sides of US 78; approx. 0.3 miles	Evermore CID CTP		LONG	--	\$17,905,000	SPLOST, GDOT
Roadway	R-3	Provide public street between W Park Place Blvd and E Park Place Blvd	Modify/upgrade roads through Stone Mountain Square shopping center to provide a public street connection could include pedestrian/bicycle facilities; project includes intersection improvement at West Park Place Blvd; potentially tie-road into US 78 Eastbound off-ramp; coordinate improvements with property owner and future development; approx 0.6 miles	Evermore CID CTP		MID	--	\$8,135,000	SPLOST
Roadway	R-13	New Parallel Local Street, north of US 78, from Glenn Club Dr to Puckett Rd	Adding two-lane local street to improve business access and street network; approx 0.3 miles; coordinate project with redevelopment activities	Evermore CID CTP		LONG	--	\$5,315,000	SPLOST
Roadway	R-4	US 78 / SR 10 / Stone Mountain Highway Parallel Road from Rockbridge Road to Lake Lucerne Road (New Location)	Along south side, adding parallel two-lane road from Rockbridge Road to Lake Lucerne Road; potential for four-lane roadway (cost estimate for two-lane road)	Destination 2040; #CTpnd_008	CTP Level 1- Partial Funding	LONG	--	--	SPLOST
Roadway	R-4a	US 78 / SR 10 / Stone Mountain Highway Parallel Road from Rockbridge Road to Davis Dr (New Location)	Adding two-lane local street to improve business access and street network; approx 0.5 miles	Destination 2040 ; segment of #CTpnd_008	CTP Level 1- Partial Funding	MID	--	\$8,115,000	SPLOST



Table 3.1 - Recommended Transportation Projects (Continued)

Project Type	Project ID	Project Name	Project Description	Source	Status	Implemen- tation Tier	High ROI	Planning Level Cost Estimate	Potential Funding Partners
Roadway	R-4b	US 78 / SR 10 / Stone Mountain Highway Parallel Road from Davis Road to Stone Dr (New Location)	Adding two-lane local street to improve business access and street network; approx 0.5 miles	Destination 2040 ; segment of #CT-pnd_008	CTP Level 1- Partial Funding	LONG	--	\$6,730,000	SPLOST
Roadway	R-4c	US 78 / SR 10 / Stone Mountain Highway Parallel Road from Stone Dr to Lake Lucerne Road (New Location)	Adding two-lane local street to improve business access and street network; approx 0.5 miles	Destination 2040 ; segment of #CT-pnd_008	CTP Level 1- Partial Funding	LONG	--	\$6,160,000	SPLOST
Roadway	R-5	Roadway Improvements on Parker Ct, north of US 78	Re-stripe existing pavement to provide southbound left-turn lane and shared through/right-turn lane between Chick-Fil-A driveway and US 78; modify Quiktrip driveway on Parker Ct to be a right-in/right-out; project would improve southbound vehicle flow at the US 78 traffic signal	Evermore CID CTP		SHORT	X	\$50,000	SPLOST
Roadway	R-6	New Parallel Local Street, north of US 78, from Puckett's Drive to Lowes Shopping Center (New Location)	Adding two-lane local street to improve business access and street network; approx 0.2 miles	Evermore CID CTP		MID	X	\$4,385,000	SPLOST, GDOT, GRTA
Intersection	I-3	US 78 at Stone Dr/Lowes Driveway	Add dedicated northbound right-turn lane along Stone Dr with raised channelized island	Evermore CID CTP		SHORT	X	\$265,000	SPLOST, GDOT
Roadway	R-7	Construct roadway improvements along Stone Drive, between US 78 and Hudson Drive (companion project to #I-3)	At intersection with US 78: Lengthen northbound left-turn storage along Stone Drive; add dedicated northbound right-turn lane along Stone Dr with raised channelized island. Potentially adjust vertical grade to improve visibility for turning vehicles at US 78 intersection. Potential re-alignment improvements at the Stone Dr/Hudson Drive intersection; maintain southbound left-turn lane along Stone Dr.	Evermore CID CTP		MID	--	\$3,065,000	SPLOST
Intersection	I-4	US 78 at Gresham Road	To address heavy westbound left-turn movement during the PM peak hour at the US 78/Stone Drive intersection: relocate existing partial median opening (westbound left-turn movement) located at Advance Auto Parts business approx. 270-feet to intersection of Gresham Rd. This requires improving Gresham Road to County standards (included in cost estimate)	Evermore CID CTP		SHORT	X	\$2,245,000	SPLOST, GDOT
Bridge	B-1	US 78 / SR 10 / Stone Mountain Highway Parallel Road Connecting Bridge (New Bridge)	Adding new bridge over US 78, connecting local parallel street from the north and south side of US 78	Destination 2040; #CTpnd_009	CTP Level 1- Partial Funding	LONG	--	\$15,510,000	SPLOST, GDOT



Table 3.1 - Recommended Transportation Projects (Continued)

Project Type	Project ID	Project Name	Project Description	Source	Status	Implemen- tation Tier	High ROI	Planning Level Cost Estimate	Potential Funding Partners
Roadway	R-8	US 78 / SR 10 / Stone Mountain Highway Parallel Road from Lake Lucerne Road to Hewatt Road (New Location)	Along north side adding parallel road from Lake Lucerne Road to Hewatt Road	Destination 2040 ; #CTpnd_007	CTP Level 1- Partial Funding	MID	--	\$21,985,000	SPLOST
Roadway	R-8a	New Parallel local street north of US 78, from Lake Lucerne Road to Paxton Lane	Adding two-lane local street to improve business access and street network; approx 0.5 miles	Destination 2040 ; segment of #CT- pnd_007	CTP Level 1- Partial Funding	MID	X	\$11,780,000	SPLOST
Roadway	R-8b	New Parallel local street, north of US 78, from Killian Hill Rd to McDaniel Bridge Rd	Adding two-lane local street to improve business access and street network; approx 0.4 miles; coordinate project with redevelopment activities	Destination 2040 ; segment of #CT- pnd_007	CTP Level 1- Partial Funding	LONG	--	\$10,205,000	SPLOST
Intersection	I-5	US 78 at Ross Rd	Intersection modification includes removing side-street split-phase operation; reconstruct Ross Road north-bound approach to have two left-turn lanes and shared through/right-turn lane; provide protected-only left-turn phase for northbound approach and protected/permitted left-turn phase for southbound approach.	Evermore CID CTP		SHORT	X	\$280,000	SPLOST, GDOT
Intersection	I-6	US 78 at Killian Hill Rd/Bethany Church Rd	Add second eastbound left-turn lane and second west-bound left-turn lane; improve northbound and south-bound lane merge locations to improve operations; construct dedicated southbound left-turn lane at southern driveway to Mountain View Village shopping center and southbound left-turn lane at Wiloaks Drive; at US 78 at Country Walk - consider providing westbound left-turn median opening (to reduce westbound u-turn volume at signal)	Evermore CID CTP		SHORT	X	\$3,230,000	SPLOST, GDOT
Intersection	I-14	Killian Hill Road at Paxton Lane	Construct intersection improvement, possibly round-about, to improve operations and safety; a related improvement is modifying the northbound right-turn at the intersection of Ross Road at Paxton Lane; these improvements will reduce the eastbound left-turn volume at the intersection of US 78 at Killian Hill Road (note: Paxton Ln is a private road)	Evermore CID CTP		SHORT	X	\$2,030,000	SPLOST
Roadway	R-14	Construct/re-align Colima Way with McDaniel's Bridge Road	Construct improved road connection between Veracruz Dr and Hewatt Road; this would help facilitate the heavy eastbound left-turn movement at the US 78/Hewatt Road signal; coordinate with proposed parallel street (project #R-8); further study recommended to refine concept	Evermore CID CTP		MID	--	\$790,000	SPLOST
Roadway	R-15	Interparcel access connection	Partner with private properties to develop an interparcel connection from west of Monterey Drive to Veracruz Dr; approx. 0.2 miles	Evermore CID CTP		MID	--	TBD	SPLOST



Table 3.1 - Recommended Transportation Project (Continued)

Project Type	Project ID	Project Name	Project Description	Source	Status	Implemen- tation Tier	High ROI	Planning Level Cost Estimate	Potential Funding Partners
Intersection	I-7	US 78 at Hewatt Rd	Add second westbound left-turn lane and second east-bound left-turn lane along US 78; provide merge lanes north and south of intersection; add second northbound left-turn lane and second northbound through lane along Hewatt Rd	Evermore CID CTP		SHORT	X	\$2,080,000	SPLOST, GDOT
Roadway	R-9	US 78 / SR 10 / Stone Mountain Highway Parallel Road from Hewatt Road to Britt Road	Adding new local road from Britt Road to Hewatt Road along north side of US 78	Destination 2040; RTP #GW-331	CTP Level 1; Design & ROW Acquisition	SHORT	X	\$16,740,000	SPLOST, GDOT
Intersection	I-8	US 78 at Parkwood Rd	Add northbound left-turn lane and southbound left-turn lane	Evermore CID CTP		LONG	--	\$375,000	SPLOST
Intersection	I-9	Westside Ct. Partial Median Opening	Add Partial Median Opening to provide access to West-side Ct	Highway 78 LCI		LONG	--	\$575,000	SPLOST, GDOT
Intersection	I-10	US 78 at Oak Rd/Henry Clower Blvd (east)	Add third westbound through lane and convert east-bound right-turn lane to a shared through/right-turn lane; this project can be stand-alone or built as part of widening project #SNE_135; Note: Gwinnett DOT requested CTP review potential options	Evermore CID CTP		LONG	--	TBD	SPLOST, GDOT
Intersection	I-11a	US 78 at Wisteria Dr/Skyland Dr - Mid-term	Improve geometry at skewed intersection; potential to re-align intersection to the west (with Church St); recommend study to review options, including potential new parallel street south of US 78 connecting Church St to Skyland Dr; potential to close Skyland Dr; Note: Gwinnett DOT requested CTP review potential options	Evermore CID CTP		MID	--	\$5,460,000	SPLOST, GDOT
Intersection	I-11b	US 78 at Wisteria Dr/Skyland Dr - Long-term	Improve geometry at skewed intersection; add third westbound through lane, third eastbound through lane, and eastbound right-turn lane; this project can be stand-alone or built as part of widening project #SNE_135; Note: Gwinnett DOT requested CTP review potential options	Evermore CID CTP		LONG	--	TBD	SPLOST, GDOT
Roadway	R-10	NE Quadrant Roadway at US 78/ Wisteria Drive	Construct 800ft of new road connecting Hugh Drive and Eastgate Place to create a quadrant roadway; install new traffic signal at US 78 to provide SB left-turn movement to US 78 eastbound; Note: Gwinnett DOT requested CTP review potential options	Evermore CID CTP		SHORT	X	\$4,075,000	SPLOST, GDOT
Roadway	R-11	US 78/Main Street Widening	Widen from 4 to 6 lanes; install center raised median; from SR I24 to SR 84	Destination 2040 CTP; #SNE_135	CTP Level 3	LONG	X	\$16,500,000	SPLOST, GDOT



Table 3.1 - Recommended Transportation Projects (Continued)

Project Type	Project ID	Project Name	Project Description	Source	Status	Implementation Tier	High ROI	Planning Cost Estimate	Potential Funding Partners
Intersection	I-12	West Park Place Boulevard at Rockbridge Road	Intersection Safety and Alignment Project (Concept TBD)	Destination 2040 CTP, #Gcint_030	CTP Level 1	SHORT	--	TBD	SPLOST
Roadway	R-12	SR 124/Scenic Hwy	Widen from 4 to 6 lanes; from US 78 to Sugarloaf Parkway	Destination 2040 CTP, #Gcmr_31; RTP GW-269	CTP Level 1	MID	X	\$39,300,000	SPLOST, GDOT
Intersection	I-13	SR 124 / Scenic Highway at Wisteria Drive Realignment, Traffic Signal and Turn Lanes	Intersection improvements (Concept TBD)	Destination 2040, #SNE_187	CTP Level 1	SHORT	--	TBD	SPLOST, GDOT
Intersection	I-15	Killian Hill Road at McDaniels Bridge Road	Construct intersection improvement, possibly roundabout, to improve operations and safety; this project will improve parallel traffic flow along US 78	Evermore CID CTP		MID	--	\$2,050,000	SPLOST, GDOT
Intersection	I-16	Hewatt Road at McDaniels Bridge Road	Construct intersection improvement, possibly roundabout, to improve operations and safety, and facilitate the westbound left-turn movement; the project will reduce the eastbound left-turn volume at the intersection of US 78 at Hewatt Road and improve parallel traffic flow along US 78	Evermore CID CTP		MID	--	\$2,050,000	SPLOST, GDOT
Ped/Bike	PB-1	Multi-use Path, located parallel to US 78, connecting from Stone Mountain Park to Lake Lucerne Road	Construct multi-use facility for bicycles and pedestrians along local streets; connecting businesses to Stone Mountain Park, to residential areas, schools, and transit service along US 78; forms the main 'spine' of the network	Evermore CID CTP		LONG	--	TBD	SPLOST
Ped/Bike	PB-2	Multi-use Path located parallel to US 78, connecting from Lake Lucerne Road to Shellville City Hall	Construct multi-use facility for bicycles and pedestrians along local streets; connecting businesses to residential areas, schools, and transit service along US 78; forms the main 'spine' of the network; identified as Priority Aspirations in Gwinnett Trails Plan	Gwinnett Trails Plan		MID	--	TBD	SPLOST
Ped/Bike	PB-3	Yellow River Trail	Construct multi-use trail along Yellow River, north of US 78	Gwinnett Trails Plan		MID	--	TBD	SPLOST
Ped/Bike	PB-4	Construct multi-use paths (pedestrian and bicycle facilities) along all streets intersecting US 78	Construct multi-use paths extending 1-mile outward into residential neighborhoods; streets include: Stone Dr, Lake Lucerne Rd, Ross Rd, Killian Hill Rd, Bethany Church Rd, Hewatt Rd, Parkwood Rd, Highpoint Rd, McGee Rd	Evermore CID CTP		SHORT	--	TBD	SPLOST, GDOT



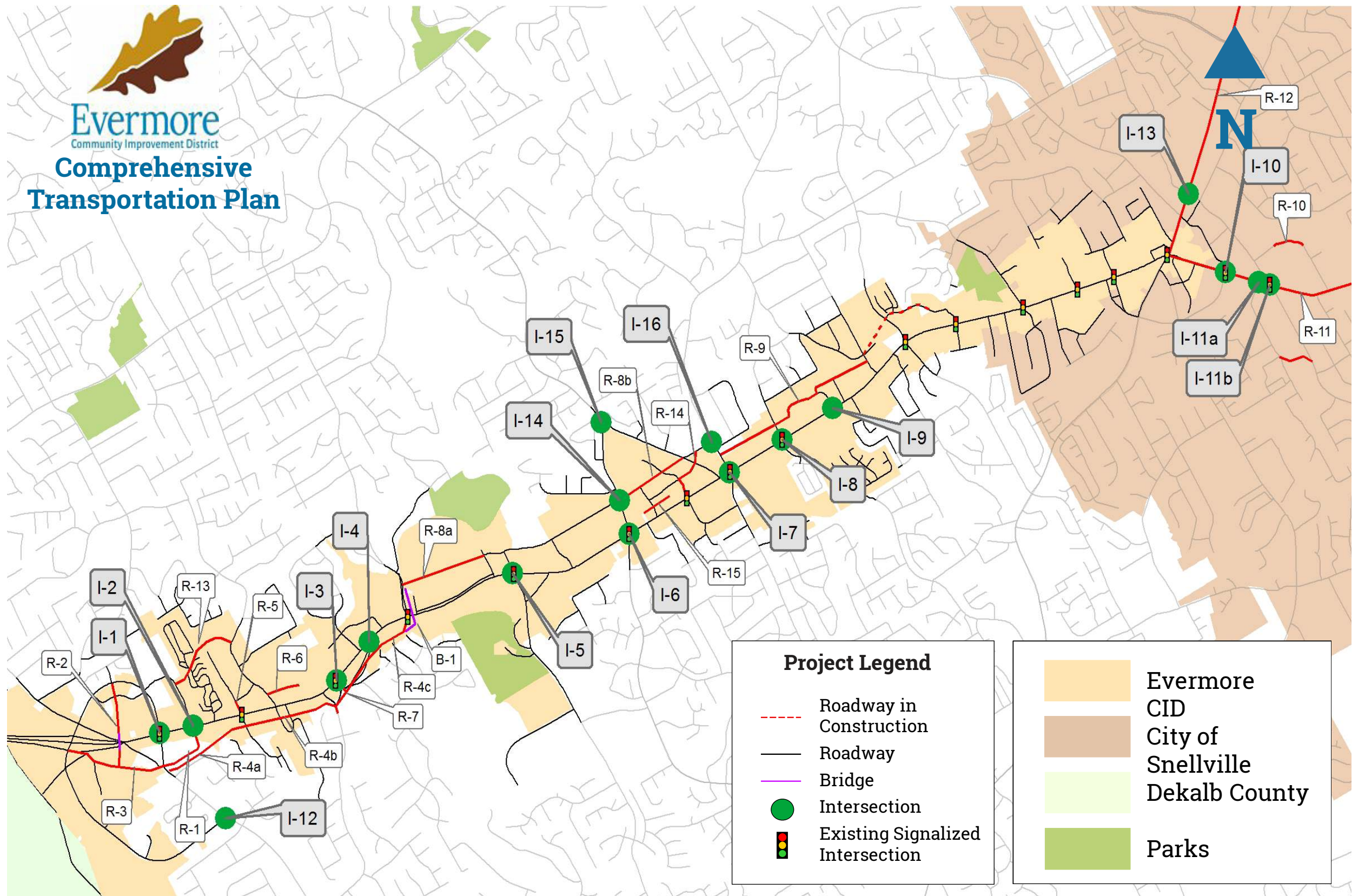
Table 3.1 - Recommended Transportation Projects (Continued)

Project Type	Project ID	Project Name	Project Description	Source	Status	Implemen- tation Tier	High ROI	Planning Level Cost Estimate	Potential Funding Partners
Ped/Bike	PB-5	Multi-use Path along SR 124, connecting Shellville to Lawrenceville	Construct multi-use facility for bicycles and pedestrians along SR 124, part of the Core Trail Network in Gwinnett Trails Plan	Gwinnett Trails Plan		MID	--	TBD	SPLOST
Ped/Bike	PB-6	Construct pedestrian facilities along streets within the Park Place LCI area	Construct pedestrian facilities where missing to improve access	Park Place LCI		SHORT	--	TBD	SPLOST
Transit	T-1	Improvements at GRTA Xpress bus stations	Improvements at off-street GRTA Xpress bus stations/park-n-ride lots	Evermore CID CTP		MID	--	TBD	GRTA
Transit	T-2	Local Bus Service along US 78	One opportunity to local bus service along the corridor, from the West Park Place Blvd area to Snellville; Gwinnett County is currently studying potential transit expansion	Gwinnett County Transit Plan	Gwinnett County currently studying	MID	--	TBD	COUNTY
Transit	T-3	Local Bus Service in the form of "Flex" Service	One opportunity to consider is a 'flex service' which offers the convenience of an on-demand, door-to-door service by reservation and the flexibility of walk-up service from a collection point. An example of this service is FLEX which operates in Cobb County. For the US 78 corridor, a 'zone' could be established, for instance a 2-mile distance from the US 78 corridor.	Evermore CID CTP	Gwinnett County currently studying	MID	--	TBD	COUNTY
Transit	T-4	Install Queue Jumpers at critical intersections along US 78	Install Queue Jumpers to improve transit travel time for GRTA Express buses and local service	Evermore CID CTP		MID	--	TBD	SPLOST, GDOT, GRTA
Transit	T-5	Bus Stop Amenities at local bus stops	Install Bus Stop Shelters, benches, and access improvements at bus stops when local bus service is implemented along US 78	Evermore CID CTP		MID	--	TBD	SPLOST
Study	O-1	Intersection Safety and Improvement Study	The top ten intersections, in terms of number of accidents, are recommended to be studied further to identify potential safety improvements	Evermore CID CTP		SHORT	--	\$15,000	CID, COUNTY
Program	O-2	Dedicated Incident/Break-down Corridor Operator	A service providing one dedicated vehicle and attendant to monitor the US 78 corridor during critical periods and respond as needed; hours of operation could be during high volume periods. Partner with Gwinnett County and Georgia DOT.	Evermore CID CTP		MID	--	TBD	CID, COUNTY, GDOT
ATMS/ITS	O-3	Upgrade vehicle detection equipment at signalized intersections along US 78	To improve safety at intersections upgrade dilemma zone protection (enhanced traffic signal technology) to detect large vehicles/Commercial Vehicles approaching intersections and adjust signal clearances	Evermore CID CTP		SHORT	--	\$15,000 PER INTER-SECTION	SPLOST, GDOT



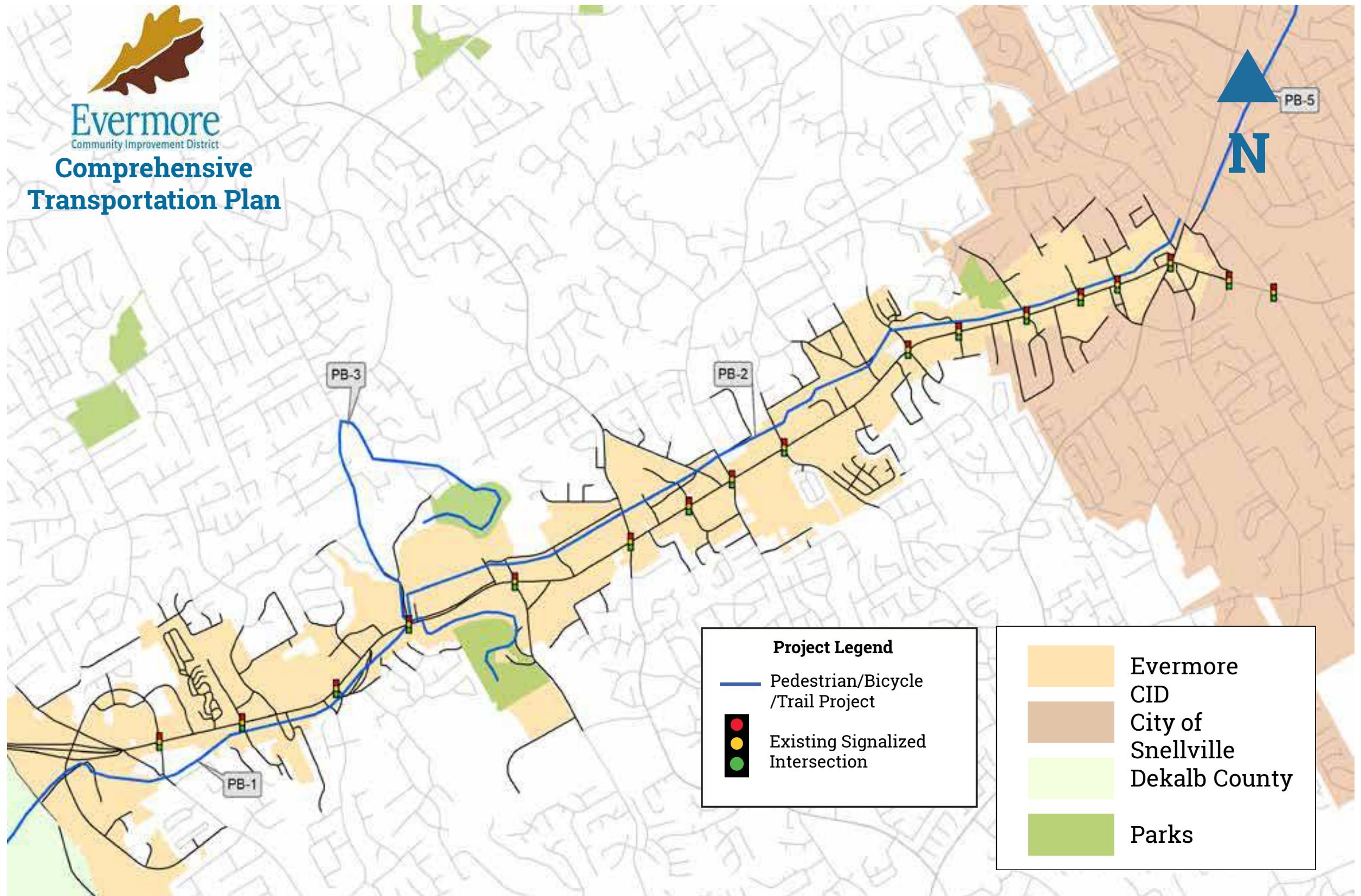






**Figure 3.1.1 - RECOMMENDED PROJECTS - ROADWAY/INTERSECTION/BRIDGE**





**Figure 3.1.2- RECOMMENDED PROJECTS - PEDESTRIAN/BICYCLE/TRAIL**



## Recommendations

**Table 3.2** indicates the planning level cost estimate and evaluation criteria results for the individual transportation projects. This table provides the project ID, project name, planning level cost estimate (divided into PE, ROW, CST and contingency), and six evaluation criteria including improving vehicular travel, improving U.S. 78 capacity, improving safety, enhancing multi-modal connections, improving access to business, and enhancing 'Last Mile' connectivity.

An additional review of the projects was performed to provide the Evermore CID with a subset of the project list. **Table 3.3** lists the top 15 high return on investment projects by project ID, project name, implementation tier, and planning level cost estimate. The Evermore CID may choose to focus efforts on these projects.



Table 3.2 - Recommended Transportation Projects - Cost Estimate and Evaluation

Projects		Planning Level Cost Estimate					Evaluation Criteria - Goals Achieved					
Project ID	Project Name	Planning Level Cost Estimate	PE	ROW	CST	Contingency	Improve Vehicular Travel	Improve US 78 Capacity	Improve Safety	Enhance Multi-modal Connections	Improve Access to businesses	Enhance Last Mile Connectivity
I-1	US 78 at E. Park Pl Blvd	\$950,000	\$95,000	\$180,000	\$545,000	\$130,000	X	X				
I-2	NE Quadrant Roadway at US 78/E Park Pl Blvd - Using Glenn Club Dr	\$450,000	\$45,000	\$0	\$340,000	\$65,000	X	X		X		
R-1	SE Quadrant Roadway at US 78/E. Park Place Blvd	\$4,740,000	\$180,000	\$3,010,000	\$1,210,000	\$340,000	X	X		X		
R-2	New street and bridge over US 78, connecting Park Plaza Dr to Rockbridge Rd/new public street (project R-3)	\$17,905,000	\$1,475,000	\$3,500,000	\$10,090,000	\$2,840,000	X			X	X	
R-3	Provide public street between W Park Place Blvd and E Park Place Blvd	\$8,135,000	\$525,000	\$3,000,000	\$3,880,000	\$730,000	X			X		
R-13	New Parallel Local Street, north of US 78, from Glenn Club Dr to Puckett Rd	\$5,315,000	\$285,000	\$2,550,000	\$2,085,000	\$395,000	X	X		X		
R-4	US 78 / SR 10 / Stone Mountain Highway Parallel Road from Rockbridge Road to Lake Lucerne Road (New Location)	\$21,005,000	--	--	--	--	X	X		X		
R-4a	US 78 / SR 10 / Stone Mountain Highway Parallel Road from Rockbridge Road to Davis Dr (New Location)	\$8,115,000	\$345,000	\$4,760,000	\$2,530,000	\$480,000	X	X		X		
R-4b	US 78 / SR 10 / Stone Mountain Highway Parallel Road from Davis Road to Stone Dr (New Location)	\$6,730,000	\$360,000	\$3,175,000	\$2,505,000	\$690,000	X	X		X		
R-4c	US 78/SR 10 Stone Mountain Highway Parallel Road from Stone Dr to Lake Lucerne Rd (New Location)	\$6,160,000	\$335,000	\$2,820,000	\$2,355,000	\$650,000	X	X		X	X	
R-5	Roadway Improvements on Parker Ct, north of US 78	\$50,000	\$8,000	\$0	\$34,000	\$8,000	X		X			
R-6	New parallel Local street, north of US 78, from Pucketts Drive to Lowes Shopping Center (New Location)	\$4,385,000	\$165,000	\$2,785,000	\$1,160,000	\$275,000	X	X		X		



Table 3.2 - Recommended Transportation Projects - Cost Estimate and Evaluation (Continued)												
Projects		Planning Level Cost Estimate					Evaluation Criteria - Goals Achieved					
Project ID	Project Name	Planning Level Cost Estimate	PE	ROW	CST	Contingency	Improve Vehicular Travel	Improve US 78 Capacity	Improve Safety	Enhance Multi-modal Connections	Improve Access to businesses	Enhance Last Mile Connectivity
I-3	US 78 at Stone Dr/Lowes Driveway	\$255,000	\$35,000	\$30,000	\$145,000	\$55,000	X	X				
R-7	Construct roadway improvements along Stone Drive, between US 78 and Hudson Drive (companion project to #I-3)	\$3,065,000	\$285,000	\$915,000	\$1,510,000	\$355,000	X		X			
I-4	US 78 at Gresham Road	\$2,245,000	\$220,000	\$345,000	\$1,365,000	\$315,000	X	X			X	
B-1	US 78 / SR 10 / Stone Mountain Highway Parallel Road Connecting Bridge (New Bridge)	\$15,510,000	\$1,315,000	\$380,000	\$11,185,000	\$2,630,000	X	X		X		
R-8	US 78 / SR 10 / Stone Mountain Highway Parallel Road from Lake Lucerne Road to Hewatt Road (New Location)	\$21,985,000	--	--	--	--	X	X		X	X	
R-8a	New Parallel local street, north of US 78, from Lake Lucerne Road to Paxton Lane	\$11,780,000	\$725,000	\$3,310,000	\$6,075,000	\$1,670,000	X	X		X	X	
R-8b	New Parallel local street, north of US 78, from Killian Hill Rd to McDaniel Bridge Rd	\$10,205,000	\$590,000	\$3,310,000	\$4,945,000	\$1,360,000	X	X		X	X	
I-5	US 78 at Ross Rd	\$280,000	\$40,000	\$0	\$200,000	\$40,000	X	X				
I-6	US 78 at Killian Hill Rd/Bethany Church Rd	\$3,230,000	\$350,000	\$340,000	\$2,080,000	\$460,000	X	X	X			
I-14	Killian Hill Road at Paxton Lane	\$2,030,000	\$170,000	\$60,000	\$1,500,000	\$300,000	X	X				
R-14	Construct/re-align Colima Way with Mc-Daniels Bridge Road	\$790,000	\$65,000	\$340,000	\$300,000	\$85,000	X				X	
R-15	Interparcel access connection	TBD	--	--	--	--	X	X				
I-7	US 78 at Hewatt Rd	\$2,080,000	\$235,000	\$270,000	\$1,280,000	\$295,000	X	X	X			



Table 3.2 - Recommended Transportation Projects - Cost Estimate and Evaluation (Continued)

Projects							Evaluation Criteria - Goals Achieved					
Project ID	Project Name	Planning Level Cost Estimate	PE	ROW	CST	Contingency	Improve Vehicular Travel	Improve US 78 Capacity	Improve Safety	Enhance Multi-modal Connections	Improve Access to businesses	Enhance Last Mile Connectivity
R-9	US 78 / SR 10 / Stone Mountain Highway Parallel Road from Hewatt Road to Britt Road	\$16,740,000	--	--	--	--	X	X		X	X	
I-8	US 78 at Parkwood Rd	\$375,000	\$60,000	\$5,000	\$250,000	\$60,000	X	X	X			
I-9	Westside Ct. Partial Median Opening	\$575,000	\$60,000	\$85,000	\$365,000	\$65,000					X	
I-10	US 78 at Oak Rd/Henry Clower Blvd (east)	TBD	--	--	--	--	X	X	X			
I-11a	US 78 at Wisteria Dr/Skyland Dr - Mid-term	\$5,460,000	\$350,000	\$2,015,000	\$2,330,000	\$765,000	X	X	X			
I-11b	US 78 at Wisteria Dr/Skyland Dr - Long-term	TBD	--	--	--	--	X	X	X			
R-10	NE Quadrant Roadway at US 78/Wisteria Drive	\$4,075,000	\$280,000	\$845,000	\$2,300,000	\$650,000	X	X	X			
R-11	US 78/Main Street Widening	\$16,500,000	\$1,050,000	\$6,000,000	\$8,400,000	\$1,050,000	X	X	X			
I-12	West Park Place Boulevard at Rockbridge Road	TBD	--	--	--	--	X		X			
R-12	SR 124/Scenic Hwy	\$39,300,000	--	--	--	--	X					
I-13	SR124 / Scenic Highway at Wisteria Drive Realignment, Traffic Signal and Turn Lanes	TBD	--	--	--	--	X		X			
I-15	Killian Hill Rd at McDaniels Bridge Rd	\$2,050,000	\$175,000	\$75,000	\$1,500,000	\$300,000	X	X	X			
I-16	Hewatt Rd at McDaniels Bridge Rd	\$2,050,000	\$175,000	\$75,000	\$1,500,000	\$300,000	X	X	X			



Table 3.2 - Recommended Transportation Projects - Cost Estimate and Evaluation (Continued)												
Projects		Planning Level Cost Estimate					Evaluation Criteria - Goals Achieved					
Project ID	Project Name	Planning Level Cost Estimate	PE	ROW	CST	Contingency	Improve Vehicular Travel	Improve US 78 Capacity	Improve Safety	Enhance Multi-modal Connections	Improve Access to businesses	Enhance 'Last Mile' Connectivity
PB-1	Multi-use path located parallel to US 78, connecting from Stone Mountain to Lake Lucerne Road	TBD	--	--	--	--			X	X	X	
PB-2	Multi-use Path located parallel to US 78, connecting from Lake Lucerne Road to Snellville City Hall	TBD	--	--	--	--			X	X	X	X
PB-3	Yellow River Trail	TBD	--	--	--	--				X		
PB-4	Construct multi-use paths (pedestrian and bicycle facilities) along all streets intersecting US 78	TBD	--	--	--	--			X	X	X	X
PB-5	Multi-use Path along SR 124, connecting Snellville to Lawrenceville	TBD	--	--	--	--			X	X	X	X
PB-6	Construct pedestrian facilities along streets within the Park Place LCI area	TBD	--	--	--	--			X	X	X	X
T-1	Improvements at GRTA Xpress bus stations	TBD	--	--	--	--		X			X	X
T-2	Local Bus Service along US 78	TBD	--	--	--	--		X			X	X
T-3	Local Bus Service in the form of "Flex" Service	TBD	--	--	--	--					X	X
T-4	Install Queue Jumpers at critical intersections along US 78	TBD	--	--	--	--		X				
T-5	Bus Stop Amenities at local bus stops	TBD	--	--	--	--				X		X
O-1	Intersection Safety and Improvement Study	\$15,000	--	--	--	--	X		X			
O-2	Dedicated Incident/Break-down Corridor Operator	TBD	--	--	--	--	X	X	X			
O-3	Upgrade vehicle detection equipment at signalized intersections along US 78	\$15,000 per intersection	--	--	--	--	X	X	X			



## 3.3-Project Evaluation

An important step in the transportation planning process is evaluating the candidate projects to indicate the potential benefits. As part of the planning process, a need assessment was performed based on the existing transportation system conditions. The needs assessment provided a preliminary list of transportation needs and opportunities to improve safety and operations.

The project evaluation goals were developed based on previously identified needs on improving traffic safety and operations to promote local businesses along the US 78 corridor. Additional input was provided from the on-line survey performed during the planning process. The project evaluation criteria are shown below.

Improvement Categories	
Improve Vehicular Travel	Facilitate safe and efficient movement of vehicles throughout the US 78 corridor area
Improve US 78 Capacity	Facilitate improved and efficient movement of vehicles along US 78
Improve Safety	Enhances safety for vehicles, pedestrians and bicyclists .
Enhance Multi-modal Connection	Connect the sidewalks, multi-use paths, and bicycle facilities to allow safe and efficient travel to/from destinations along the US 78 corridor
Improve Access to Business	Provides new connections or enhancements to improve access to businesses along the US 78 corridor
Enhance 'Last Mile' Connectivity	Provides new connections or enhancements, including pedestrian, bicycle, and transit, for employees and patrons accessing businesses and destinations along the US 78 corridor.



## Recommendations

The candidate transportation projects were evaluated for their ability to meet the six Evermore CID CTP goals, as listed in **Table 3.2**. Planning level cost estimates were developed for the roadway and intersection projects. The cost estimates are preliminary and not based on concept drawings so additional engineering is recommended to refine the cost estimate. The cost estimates are indicated in **Table 3.2**.

Cost estimates were not prepared for the “Transit, Other, and Pedestrian/Bicycle” projects. These projects require further vetting and coordination with other agencies. The pedestrian and bicycle projects are primarily long multi-use path segments, which need further study and alignment determination.



## 3.4-Implementation Plan

Implementation of the plan will require coordination and cooperation with adjacent jurisdictions, partner agencies, state agencies, and federal partners. Maintaining and improving the transportation network is an effort that many organizations and agencies must partner together to achieve. The CTP recommends that the Evermore CID continue coordinating with:

- Gwinnett County DOT – related to funding and the implementation of the projects
- City of Snellville – related to funding and the implementation of the projects
- Georgia DOT – related to state route maintenance, and on-system and off-system funding for improvements
- Recreation Departments – related to providing new connections and multi-use facilities to recreational facilities
- DeKalb County – related to major projects which cross jurisdictional boundaries
- Transit agencies (Gwinnett Transit, GRTA)– related to current and future transit service



# Recommendations

The evaluation analysis presented in the CTP is intended to help the community to understand the relative merits of each of the transportation projects when compared to each other. However, the actual implementation and phasing of improvements is a slightly different consideration. Some projects that are easy to implement, have already undergone significant study and/or design, have funding, or may simply be inexpensive, need to be considered beyond just their prioritization. Conversely, there are projects that may eventually be of great benefit to the community, but have not begun the process of more detailed analysis and community discussion to understand policy, environmental, traffic impacts, and/or design feasibility.

The CTP divided the projects into three time periods. The short-term projects fall within the 0 to 5-year timeframe. The mid-term projects within the 5 to 10-year timeframe. And the long-term projects beyond 10 years. The CTP recommends the following implementation phasing. The actual implementation and phasing of improvements will need to consider many additional factors, including funding, ease of construction, benefit to community, and other projects and initiatives.

**Short-term Projects:** These projects include funding of roadway, sidewalk projects, connectivity projects, and operational improvement projects. The short-term projects include projects where construction is imminent, significant design and detailed study has taken place, and/or financial commitments have been made by the CID/ Gwinnett County and/or other transportation partners. The short-term projects also include projects that are anticipated to have relatively minimal complexity and/or financial commitment to implement.

**Mid-term Projects:** These projects form the second tier of funding of roadway, sidewalk projects, connectivity projects, and operational improvement projects. These projects are relatively more complex or not as far along in the life cycle of implementing a transportation project but are also not likely to include particularly challenging barriers to implementation, including the need for significant right of way or reliance on possible state or federal funds.

**Long-term Projects:** The remaining projects are recommended for consideration in the long-term (10 years or more). These projects are not anticipated in the short or mid-term; however, these projects are included in the Evermore CID CTP so that they can be considered for implementation in future CTP updates or as funding becomes available from local, state, or federal sources.





**Evermore**  
Community Improvement District

## **Comprehensive Transportation Plan**

Identifying and effectively utilizing available transportation funding is a crucial element in successfully planning and implementing a transportation plan. A variety of funding sources are available; however, each has restrictions and implications. This is especially relevant since transportation funding is limited. Generally, funding is provided at the federal, state, and local levels. As for the Evermore CID CTP, Gwinnett County's SPLOST program and GDOT are important potential transportation funding partners. A local "match" such as funding from transit agencies and the Evermore CID is also required for some CTP projects. To implement the recommended transportation projects, the Evermore CID will need to pursue funds from many different available funding sources. Potential funding sources are indicated for each project in **Table 3.1**.



### 3.5-Moving Forward

The US 78 corridor carries a substantial amount of traffic. The traffic volumes are expected to continue increasing in the corridor at a rate of one percent per year. A significant portion of traffic on US 78 is associated with employees of the businesses located along US 78 traveling to and from work. Workers generally live in the southern and central Gwinnett County, with the highest concentrations of employees living immediately south of the study area of the Evermore CID. The increasing travel demand can be addressed by implementing transportation improvements, for multiple travel modes.

Implementation of the plan will require coordination and cooperation with adjacent jurisdictions and partner agencies. The CTP has identified projects which the Evermore CID can study further, program, and seek funding based on their priorities.

The CTP is a dynamic document and is meant to be a 'living' document. Like other plans with respect to the Evermore CID area, the CTP document will need to be updated to ensure it remains accurate and reflects the latest data, recent development, or changing transportation needs. Many projects will be completed, and new needs will appear in the coming years.

This Evermore CID CTP document provides the recommendations for the CID leaders and Gwinnett County to consider and implement as they deem appropriate. It is paramount for the Evermore CID and Gwinnett County to continue investment in transportation infrastructure improvements to enhance the quality of life for the community.