



Table of Contents

1.	Intro	duction1	I
1	.1	Overview of the Metropolitan Transportation Plan (MTP)1	i
1	.2	Purpose of Report1	ł
2.	Key	Observations and Implications	3
2	.1	Land Use and Socioeconomic Data	3
2	.2	Roadway Characteristics	5
2	.3	Safety Analysis	7
2	.4	Freight Network and Multimodal Infrastructure10)
2	.5	Transit and Active Transportation11	ł
2	.6	Intelligent Transportation Systems and Emerging Technologies	3
3.	Soci	oeconomic Data14	ł
3	.1	Jobs and Economy18	3
4.	Land	Use21	I
4	.1	Zoning21	l
4	.2	Future Land Use	<u>)</u>
4	.3	Community Facilities	5
4	.4	Natural and Cultural Resources	5
5.	Tran	sportation, Mobility, and Safety34	ł
5	.1	Commuting	ł
	5.1.1	Impact of Remote Work and COVID-1934	ł
	5.1.2	Environmental and Health Implications	5
	5.1.3	Socio-economic Factors35	5
	5.1.4	Future Considerations	3
5	.2	Roadway Network and Inventory	3
5	.3	Roadway Capacity	7
	5.3.1	Projected Roadway Capacity)
5	.4	Congestion Management	3
5	.5	Traffic Control System	5
5	.6	Bridge Inventory and Conditions	7
5	.7	Pavement Quality	3
6.	Traff	ic Safety50)
	6.1.1	Crash Summary)







M-P-H



6.1.2	2 Crashes by Lighting Condition52
6.1.3	3 Crashes by Road Surface Condition53
6.2	Fatal Crashes54
6.2.7	Fatal Crashes by Type57
6.2.2	2 Fatal Crashes by Lighting Condition58
6.2.3	Fatal Crashes by Road Surface Condition59
6.3	Serious Injury Crashes
6.3.7	I Serious Injury Crashes by Type60
6.3.2	2 Serious Injury Crashes by Lighting Condition61
6.3.3	3 Serious Injury Crashes by Road Surface Condition62
6.4	Pedestrian and Bicycle Crashes63
6.4.1	Fatal Crashes Involving Vulnerable Roadway Users
6.4.2	2 Serious Injury Crashes Involving Vulnerable Roadway Users
6.5	High Crash Intersections and Highway Links70
6.5.2	Highest Intersection Crash Locations
6.5.2	2 High Fatal Crash Locations
6.5.3	8 High Serious Injury Crash Intersections72
6.6	Corridor Crash Analysis75
6.6.2	I Urban Freeways
6.6.2	2 Urban Principal Arterials77
6.6.3	3 Urban Major Collectors
7. Avia	tion and Air Cargo80
7.1	Overview of Regional Airports80
7.2	Air Cargo Facilities and Trends81
8. Freig	ght82
8.1	Truck Movements
8.2	Truck Parking
8.3	Freight Rail
8.4	Intermodal Facilities
9. Tran	sit88
9.1	Existing Transit Service
9.2	Microtransit and Other Transit Providers90
9.3	Intercity Bus Service







M-P-H



9.4	Future Transit Planning	91
10. Acti	ve Transportation	92
10.1	Sidewalks and Bike Lanes	94
10.2	Trails and Greenways	99
10.3	Safe Routes to School	99
10.4	Complete Streets	101
11. ITS a	and Emerging Technologies	102
11.1	Stakeholders	103
11.2	Existing Data Sources	103
11.3	Existing ITS Infrastructure	103
11.4	Transportation System Management and Operations (TSMO)	104
11.5	Regional Aspirations	105
11.6	Statewide ITS and Smart Transportation Initiatives	105
11.7	System Needs	106
11.8	Potential for Expanded Technology Development	106
11.9	Goals, Objectives, and Measures of Effectiveness	107
11.9	0.1 Existing Goals and Objectives	107
11.10	Plan Development and Documentation	115
11.1	0.1 Existing and Emerging ITS Applications Most Appropriate for the DARTS	Region . 115
11.1	0.2 Funding Opportunities for Smart Technology	115
11.1	0.3 Expected Development Trends in the DARTS Region	117
11.1	0.4 Emergent Technologies	117
11.1	0.5 List of Needed Actions Related to ITS in the DARTS Region	120
12. Prev	vious Studies	122
12.1	Statewide Recommendations: Georgia	122
12.1 Tran	.1 2021 Statewide Strategic Transportation Plan (SSTP)/2050 Statewide	122
12.1	.2 Georgia Statewide Freight and Logistics Plan	123
12.1	.3 GDOT Transportation Asset Management Plan	125
12.1	.4 Georgia State Rail Plan 2021	126
12.1		
12.2	Regional Recommendations: DARTS	128
12.2	2.1 DARTS 2045 MTP	128







M-P-H

12.2.2	DARTS Regional Freight Profile	130
12.2.3	DARTS Transportation Improvement Plan (TIP)	131
12.2.4	DARTS Bicycle and Pedestrian Plan	132
12.3 Lo	ocal Recommendations: Cities and Counties	133
12.3.1	Albany & Dougherty County Comprehensive Plan 2026	133
12.3.2	Lee County-Leesburg-Smithville Comprehensive Plan 2024	134
12.4 Aı	rea-Specific Recommendations: Corridors and Districts	135
12.4.1	2017 East Albany Revitalization Plan	135
12.4.2	Flint River Trails Master Plan	136





Table of Figures

Figure 1: DARTS Planning Area	2
Figure 2: Base Year 2020 Population Distribution by TAZ	16
Figure 3: Base Year 2020 Household Distribution by TAZ	17
Figure 4: Base Year 2019 Employment Distribution by TAZ	18
Figure 5: Land Use Zoning in the DARTS Region	21
Figure 6: Dougherty County Future Land Use Map	22
Figure 7: Albany Future Land Use Map	23
Figure 8: Lee County Future Land Use Map	24
Figure 9: Leesburg Future Land Use Map	24
Figure 10: DARTS Community Facilities Map	25
Figure 11: Albany/Dougherty County Regionally Important Resources (Natural)	
Figure 12: Dougherty County Flood Map	
Figure 13: National Wetland Inventory: Dougherty County	
Figure 14: Dougherty County Rivers, Lakes, Streams, and Ponds	30
Figure 15: Dougherty County Greenspace Program	31
Figure 16: Albany Historic Resources	32
Figure 17: Albany Federally listed brownfield sites	33
Figure 18: Changes in Commuting Statistics	34
Figure 19: DARTS Region Road Infrastructure	36
Figure 20: Miles of Road in DARTS Region by Road Type	37
Figure 21: Existing AADT (2022)	39
Figure 22: Projected AADT (2050)	40
Figure 23: Existing Level of Service (LOS) (2022)	
Figure 24: Projected Level of Service (LOS) (2050)	45
Figure 25: City of Albany Traffic Signals	46
Figure 26: Bridge Conditions	47
Figure 27: City of Albany Pavement Conditions	49
Figure 28: DARTS MPO Crash Density (2018-2022)	50
Figure 29: Number of Crashes in DARTS MPO (2018-2022)	51
Figure 30: DARTS MPO Reported Fatal and Serious Injury Crashes (2018-2022)	56
Figure 31: DARTS MPO Reported Bicycle Crashes by Severity (2018-2022)	64
Figure 32: DARTS MPO Reported Pedestrian Crashes by Severity (2018-2022)	65
Figure 33: DARTS MPO Reported Motorcycle Crashes (2018-2022)	66
Figure 34: DARTS MPO Reported Scooter Crashes (2018-2022)	67
Figure 35: Top 20 Intersections by Overall Crashes Within DARTS MPO (2018-2022)	72







M-P-H



Figure 36: Intersections With at Least Three Serious Injury Crashes (2018-2022)	74
Figure 37: Corridor Crash Analysis Locations	76
Figure 38: Airports	
Figure 39: Trend of Air Cargo Volume	
Figure 40: DARTS Freight Network	
Figure 41: Existing Truck AADT (2022)	
Figure 42: Projected Truck AADT (2050)	
Figure 43: Rail yards, at-grade crossings, and railroads by owner in DARTS region	
Figure 44: Key Intermodal Facilities	
Figure 45: Albany Transit System Routes and Stops	
Figure 46: Albany Transit System Route Map	90
Figure 47: Existing Bicycle and Pedestrian Infrastructure	93
Figure 48: Bicycle and Pedestrian Projects by Priority Tier	95
Figure 49: Flint River Trail System	
Figure 50: Propensity Attraction for Bicycle and Pedestrian Projects – Schools	100
Figure 52: EV Charging locations in downtown Albany	102
Figure 53: Locations of Speed Cameras in the DARTS Region	104
Figure 53: Major Mobility Investment Program	123
Figure 54: Analytical Framework for Benefit-Cost and Total Economic Impact Analyses f Proposed Corridor Investments	
Figure 55: GDOT Strategic Vision	
Figure 56: Summary of Rail Service and Investment Program	
Figure 57: Safety Performance Measures & Goals	
Figure 58: Project Impact Analysis: MTP Projects within % Minority Population	
Figure 59: Project Impact Analysis: MTP Projects within Poverty Population	
Figure 60: 2019 Truck Traffic Volumes	
Figure 61: Year 2045 Projected Volume/Capacity Ratios	
Figure 62: Total Expected Highway & Transit STIP Funds	131
Figure 63: Map of Existing Bicycle and Pedestrian Facilities	132
Figure 64: Bicycle and Pedestrian Projects by Priority Tier	132
Figure 65: Neighborhood Revitalization Strategy Areas and Local Target Areas	133
Figure 66: Lee County Future Land Use Map	134
	105
Figure 67: Study area map with census tracts	135

Table of Tables







GTS M-P-H & associates, inc.



Table 1: Base Year 2020 Population and Household Summary
Table 2: Base Year 2019 Employment Summary 15
Table 3: Population and Employment Trends and Projections for Albany MSA (in 1000s)
Table 4: CTPP Worker Flows to Dougherty County (Top 15 Origin Counties)
Table 5: Albany MSA No. of Workers by Industry
Table 6: Existing and Projected Traffic Volumes
Table 6: Crashes by Collision Type 52
Table 7: DARTS MPO Crashes by Lighting Condition
Table 8: DARTS MPO Crashes by Road Surface Condition 53
Table 9: DARTS MPO Crashes by Severity54
Table 10: DARTS MPO Crashes by Number of Fatalities and Injuries
Table 11: DARTS MPO Reported Fatalities and Injuries by Year from Fatal Crashes
Table 12: DARTS MPO Reported Fatal Crashes by Type 58
Table 13: DARTS MPO Reported Fatal Crashes by Lighting Condition 58
Table 14: DARTS MPO Reported Fatal Crashes by Road Surface Condition 59
Table 15: DARTS MPO Reported Fatalities and Injuries by Year from Serious Injury Crashes 59
Table 16: DARTS MPO Reported Serious Injury Crashes by Type MPO Reported Serious Injury Crashes by Type
Table 17: DARTS MPO Reported Serious Injury Crashes by Lighting Condition 61
Table 18: DARTS MPO Reported Serious Injury Crashes by Road Surface Condition 62
Table 19: DARTS MPO Crashes Involving Vulnerable Roadway Users 63
Table 20: DARTS MPO Reported Fatal Crashes Involving Vulnerable Roadway Users
Table 21: DARTS MPO Reported Serious Injury Crashes Involving Vulnerable Roadway Users 69
Table 22: Top 20 Intersections by Overall Crashes Within DARTS MPO (2018-2022)
Table 23: Intersections With at Least Three Serious Injury Crashes (2018-2022) 73
Table 24: Urban Freeway Corridor Average Annual Crashes and Crash Rates (2018-2022) 77
Table 25: Urban Principal Arterial Average Annual Crashes and Crash Rates (2018-2022)
Table 26: Urban Collector Average Annual Crashes and Crash Rates (2018-2022)
Table 27: Prioritized Bicycle and Pedestrian Project Tier (Tiers 1-5)







1. Introduction

The Dougherty Area Regional Transportation Study (DARTS) is the designated Metropolitan Planning Organization (MPO) for the Albany, GA region.

The DARTS planning area includes all of Dougherty County, including the City of Albany, and the southern portion of Lee County, including its county seat of Leesburg. The DARTS MPO aims to comprehensively address transportation needs and challenges faced by residents, commuters, and businesses alike, with a focus on enhancing mobility, accessibility, and sustainability. The area is served by a network of highways, arterial roads, and local streets, facilitating transportation connectivity across the region while promoting economic growth and environmental stewardship. The Dougherty Area Regional Transportation Study (DARTS) planning area shown in **Figure 1** exhibits multifaceted and dynamic geographic and demographic characteristics, encompassing dense commercial urban regions as well as rural areas with extensive agricultural lands.

1.1 Overview of the Metropolitan Transportation Plan (MTP)

The purpose of the MTP is to serve as a strategic blueprint for transportation development and investment through 2050. It encompasses various modes of transportation, including roadways, public transit, bicycle and pedestrian facilities, and freight infrastructure, to ensure an integrated and efficient transportation system. The MTP is based on extensive data analysis, public input, and collaboration with stakeholders to identify existing transportation challenges and future growth projections. It outlines key strategies and projects to improve mobility, enhance safety, and promote economic development while considering environmental sustainability and equity in transportation access. Through the MTP, DARTS aims to facilitate seamless connectivity and accessibility for residents, commuters, and businesses across the region, fostering a vibrant and resilient transportation network that supports the overall quality of life. The MTP aligns with regional and national transportation goals, including compliance with the Bipartisan Infrastructure Law (BIL). It also brings together various stakeholders to collaboratively shape a transportation network that meets the current and future needs of the region.

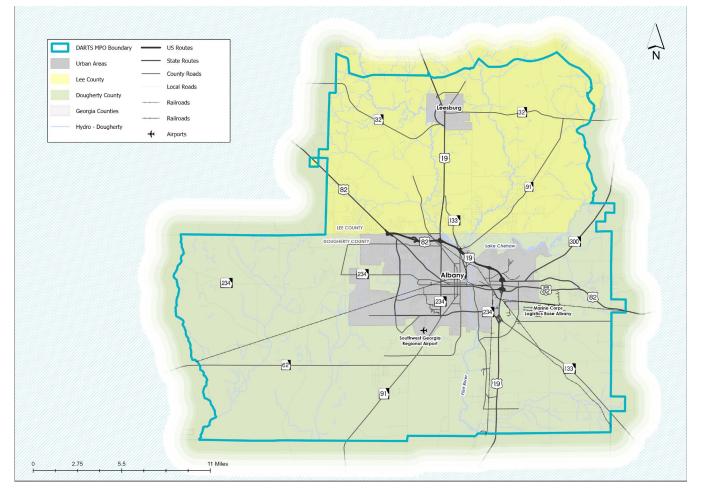
1.2 Purpose of Report

The purpose of the Baseline Conditions and Needs Assessment Technical Memorandum is to provide an inventory of the existing multimodal transportation network, analyze network performance using various data sources, and identify transportation needs based on congestion, crashes, and inputs from stakeholders and the community. The purpose of this report is to establish a detailed understanding of the current transportation landscape to inform the MTP process.





Figure 1: DARTS Planning Area



Source: DARTS, GDOT





2. Key Observations and Implications

2.1 Land Use and Socioeconomic Data

The social and economic conditions of populations in the built environment are strongly related to land use policies, and both socioeconomics and land use patterns influence travel demand. Analysis of travel patterns within the context of an urban area's social environment can lead to more equitable policies which better serve local populations.

Emphasis Areas	Key Observations	Assessment and Implications	Section	Figures
Demographics and Economics	The DARTS region, though characterized by economically disadvantaged populations, a high unemployment rate, and little growth, has seen a recent significant increase in employment numbers; this trend is projected to continue into the year 2050, despite the population not being expected to change significantly.	A growing workforce presents new opportunities for expansion of key freight industries, but also creates the challenge of providing sufficient commute options and having roadways suited for increased traffic volume.	3 3.2	Figure 2 Figure 3 Figure 4 Table 1 Table 2 Table 4 Table 5
Land Use and Zoning	There are significant residential and commercial corridors along US 82, US 19, and SR 91; Dougherty County envisions conversion of agricultural land to mixed-use, as well as an intensification of its forestry industry and institutional activity. In Lee County, residential areas will proliferate to complement the increase in population	The expansion of the region's mixed- land use corridors and intensified usage of existing facilities coincides with its projected employment increase, which will require higher capacity and transit options for the workforce.	4.1 4.2	Figure 5 Figure 6 Figure 8





Emphasis Areas	Key Observations	Assessment and Implications	Section	Figures
Community Facilities	The predominantly residential areas in and around Albany contain a high concentration of community facilities, including schools, parks, grocery stores, and libraries; Lee County has significantly less of these facilities.	To access these destinations, residents would be well-served by having more robust active transportation infrastructure and transit opportunities; these could be significant for improving traffic flow and making usage of these facilities safer and more feasible for a greater number of patrons.	4.3	Figure 11
Natural and Cultural Resources	There are numerous sites in the region that are protected from development due to their unique historical or cultural character, environmental conservation concerns, or safety purposes. These include the Flint River, the river's floodplain, greenspaces, parks and recreation areas, brownfields, and historic districts and properties.	It is important that natural and cultural resources are protected from development but are also served by transportation infrastructure in a way that makes them accessible for both residents and visitors, encouraging a unique sense of place for the region.	4.4	Figure 12 Figure 16 Figure 17



Existing Conditions and Needs Assessment Technical Memo



2.2 Roadway Characteristics

Emphasis Areas	Key Observations	Assessment and Implications	Section	Figure
Commuting	The majority of the region's commuters (86.7%) drive to work and a significant share of them (77.2% of the total commuter base) drive alone; the COVID-19 pandemic, and the corresponding proliferation of remote and hybrid work, has reduced the mean travel time to work and also increased the number of workers with vehicle access, likely due to the stimulus checks provided and money people saved during the pandemic.	It is not clear if recent changes in the region's commute patterns are permanent or temporary, therefore more research is needed to determine the impact of various factors on commute decision-making; these factors may include income level, occupation type, job market changes, or workplace distribution. There is space for commute-related policies that encourage reduced congestion and emissions, including carpool initiatives and mixed-use development that reduces reliance on personal vehicles.	5.1	Figure 19





Emphasis Areas	Key Observations	Assessment and Implications	Section	Figure
Roadway Capacity and Congestion Management	The busiest and most congested roadways in the DARTS region are in Albany, especially on and around the Liberty Expressway (US 82/US 19), which is a critical commuter highway between East Albany and residential areas of Lee County and northwest Albany. Several other roadways in downtown Albany, such as Oglethorpe Boulevard and North Jefferson Street, also experience congestion.	Congestion at these major roadways inhibits the overall efficiency of the region's transportation system and creates various issues for drivers. Targeted investments should be for infrastructure improvement projects that increase capacity at major corridors and enhance traffic management.	5.3 5.4	Figure 22 Figure 23 Figure 24 Figure 25
Bridge and Pavement Conditions	The conditions of bridges in the DARTS region are generally well- graded, though some bridges in Dougherty County are in suboptimal condition, primarily bridges over the Flint River and its constituent waterways. A significant number of the region's roadways have pavement which is in very poor or highly stressed/base failure condition, making reconstruction of these roads urgent.	Bridges that are graded merely as "acceptable" have the potential to degrade further, which will impact safety, efficiency, and maintenance costs. This can be prevented by prioritizing bridge inspection and maintenance and implementing weight restrictions as necessary. Similarly, poor pavement conditions create a multitude of safety, property damage, and mobility issues, making the repair of these roads extremely important.	5.6 5.7	Figure 27 Figure 28



Existing Conditions and Needs Assessment Technical Memo



2.3 Safety Analysis

Emphasis Areas	Key Observations	Assessment and Implications	Section	Figure
Vehicle Safety Concerns	A high density of crashes is observed near the Albany Mall in northwest Albany, on major corridors in downtown Albany (Slappey Boulevard and Oglethorpe Boulevard), and along the commercial corridor in East Albany. A total of 19,979 crashes occurred from 2018-2022, with a majority of these being angle and rear end collisions; over 500 of these crashes resulted in fatalities or serious injuries.	These safety concerns have severe implications for traffic disruptions and economic costs; it is critical that safety improvement projects target areas with high density of crashes and address contributing factors.	6.1 6.2 6.3	Figure 29 Figure 31 Table 6 Table 9 Table 10 Table 12 Table 16





Emphasis Areas	Key Observations	Assessment and Implications	Section	Figure
Pedestrian and Bicycle Crashes	From 2018-2022 there were over 400 crashes in the DARTS region involving vulnerable roadway users, which includes pedestrian, bicycle, motorcycle, and scooter crashes. 10 percent of reported pedestrian crashes and 21 percent of reported scooter crashes were fatal; over 20 percent of pedestrian, motorcycle, and scooter crashes resulted in serious injuries. A high number of these crashes are observed on busy roadways such as Oglethorpe Boulevard, Slappey Boulevard, and US 19.	To reduce risk to pedestrians and other vulnerable roadway users, it is critical to implement measures such as enhancing bicycle-pedestrian infrastructure, improving lighting, and adding more designated crossing points.	6.4	Figure 32 Figure 33 Table 19





Emphasis Areas	Key Observations	Assessment and Implications	Section	Figure
High Crash Intersections and Corridor Crash Analysis	The intersections in the DARTS region with the highest number of crashes are located on roadways mostly within Albany, particularly northwest Albany (Nottingham Way, Dawson Road, Westover Boulevard) and downtown Albany (Oglethorpe Boulevard, Slappey Boulevard, Jefferson Street). 12 roadway segments were selected for corridor crash analysis, meaning that they have both a significant volume of traffic and high crashes densities. These corridors include the Liberty Expressway between Jefferson Street and Blaylock Street, segments of Dawson Road, Slappey Boulevard, Oglethorpe Boulevard, Westover Boulevard, Clark Avenue, US 82 in Lee County, and US 19 in Lee County.	Both high crash intersections and high crash corridors require safety interventions and infrastructure improvements that address the factors contributing to crashes.	6.5 6.6	Figure 36 Figure 37 Figure 38 Table 22 Table 24 Table 25 Table 26





2.4 Freight Network and Multimodal Infrastructure

Emphasis Areas	Key Observations	Assessment and Implications	Section	Figure
Air Cargo	The Southwest Georgia Regional Airport (ABY) has air cargo operations that are primarily operated by the United Parcel Service (UPS). These services have expanded in recent years owing to the proliferation of e-commerce, and ABY plans to double its cargo space.	ABY has the potential to become a regional air cargo hub for South Georgia and efforts should be initiated to increase its intermodal capabilities to facilitate growth.	7	Figure 40
Truck Movements	The region supports significant truck volumes, particularly in Albany along the Liberty Expressway between Slappey Boulevard and Clark Avenue; other highways, such as SR 300, US 82, US 19, and SR 91 are critical for interregional freight operations with neighboring counties. These volumes are projected to increase overall, with roadways in downtown Albany and northwest Albany becoming more prominent in supporting truck movement, including Slappey Boulevard, Dawson Road, Oglethorpe Boulevard, and Westover Boulevard.	Optimization of truck routes is critical for alleviating congestion on truck routes where traffic volumes are projected to intensify, as inefficient truck access creates mobility issues for the entire region's transportation system.	8.1	Figure 42 Figure 43



Existing Conditions and Needs Assessment Technical Memo



Emphasis Areas	Key Observations	Assessment and Implications	Section	Figure
Freight Rail	The DARTS region, especially Dougherty County, boasts an extensive freight rail system that is served by Norfolk Southern and two short-line railroads. This network creates regional freight connections to the north, west, east, and south, which is made possible by the two rail yards located in downtown Albany and East Albany, respectively.	The DARTS region (especially the City of Albany) would benefit from a comprehensive, intermodal freight network that capitalizes on ABY airport and Dougherty County's extensive freight rail system; this would enhance the efficiency and regional competitiveness of its overall freight network.	8.3 8.4	Figure 44

2.5 Transit and Active Transportation

Emphasis Areas	Key Observations	Assessment and Implications	Section	Figure
Transit Services	The Albany Transit Service (ATS) provides both a fixed route bus system and an ADA On-Demand paratransit service for disabled populations. Albany is also served by a single Greyhound intercity bus stop, located in East Albany.	The region's workforce can benefit from improved accessibility and connectivity through an expansion of transit options and availability, particularly for communities in the northwest and northeast areas of Albany, and to the west beyond Westover Boulevard, to better connect these populations to employment opportunities, community facilities, and commerce.	9.1 9.2 9.3	Figure 46 Figure 48





Emphasis Areas	Key Observations	Assessment and Implications	Section	Figure
Bicycle and Pedestrian Infrastructure	There is a notable lack of bicycle and pedestrian infrastructure in west Albany, parts of East Albany, remote areas in Dougherty County, and nearly all of Lee County. The DARTS MPO seeks to address these gaps as per prioritized projects and policies listed in the DARTS Bicycle and Pedestrian Plan.	The development of pedestrian and bicycle infrastructure, including bike lanes, sidewalks, and crosswalks, promotes safe, active transportation and enhances accessibility for local populations (especially households that do not own cars).	10.1 10.2	Figure 48 Figure 49 Figure 50 Table 27
Active Transportation Policies	To accompany the proposed bicycle and pedestrian projects, the DARTS MPO is making coordinated efforts to establish Safe Routes to School (SRTS) and Complete Streets policies in alignment with state and federal standards.	These active transportation policies are geared towards educating residents on and encouraging them to use bicycle and pedestrian infrastructure, which has benefits for safety, sustainability, and roadway efficiency.	10.3 10.4 10.5	Figure 51





2.6 Intelligent Transportation Systems and Emerging Technologies

Emphasis Areas	Key Observations	Assessment and Implications	Section	Figure
Baseline Assessment	There is a regional aspiration to implement ITS and Transportation System Management and Operations (TSMO) through technologies such as fiber optics, smart public transit, traffic signal synchronization, electric vehicles, and truck signal priority.	Statewide ITS and Smart Transportation initiatives serve the purposes of improving mobility, safety, transit reliability, and freight and roadway efficiency. These will become more critical in the future due to sustainability concerns, but also more viable from a market perspective.	11.1	Figure 53
Plan Development	The DARTS region has received funding from various federal sources, such as the SMART program, the Safe Streets for All (SS4A) program, and RAISE Grants to implement ITS technologies in the near term (such as traffic control and traffic camera systems, EV infrastructure, and Smart Public Transit) and mid-term (dynamic land control, air quality sensors, truck signal priority, dynamic lane control signs, etc.).	Implementing these technologies in both the near- and mid-term will require multi-jurisdictional effort, particularly across the City of Albany, Dougherty County, Albany Transit, and Georgia Department of Transportation (GDOT); establishing a timeframe for implementation is critical as there is an imperative to meet expected market demand, reach established safety and sustainability goals, and proactively address future traffic patterns and urban growth.	11.3	





3. Socioeconomic Data

As documented previously in the 2022 DARTS Regional Freight Profile, population in the Albany Metropolitan Statistical Area (MSA) has remained stable over the 40-year period from 1980 through 2020, only increasing from approximately 142, 900 to 146,600 residents. MSA employment has increased at a more significant rate over this same period, from 64,900 to 80,000. Much of the region is characterized by low median household incomes, low-wage jobs, and above-average unemployment. All Census Tracts within Dougherty County have been defined by the US DOT as either an area of persistent poverty (AOPP) or a historically disadvantaged community (HDC).

All MPOs use travel demand models to forecast traffic growth. Traffic projections also require demographic forecasts and a validation process to ensure that models accurately estimate current traffic volumes. Most models use the most recent Census year for the base year validation process. Thus, the latest base year model was developed and validated to reflect year 2020 conditions. DARTS MPO staff prepared an initial set of socioeconomic data by traffic analysis zone (TAZ) for use in the model validation process. Base year 2020 socioeconomic estimates used data from the U.S. Census, Longitudinal Employer Household Dynamics (LEHD), area Chambers of Commerce, local school boards, Albany State University, and public agency contacts.

GDOT has a team of consultants that assist in validating base year models and forecasting traffic for MTP horizon years using socioeconomic estimates from MPO staff. Draft base year 2020 socioeconomic estimates prepared by DARTS MPO staff were submitted to GDOT Consultants for review and comment. GDOT comments were subsequently provided to DARTS staff and Metro Analytics was tasked to refine the 2020 socioeconomic estimates in response to the GDOT comments.

Refined TAZ data were validated to GDOT standards provided in the report *Georgia MPO Travel Demand Models Socioeconomic Data Development Guide*, prepared in August 2023. Summed county level data were also compared against other data sources such as Woods & Poole, the Georgia Department of Labor, and the Georgia Department of Education. **Table 1** depicts a favorable comparison of validated 2020 population and households for the DARTS regional model against other sources used to refine initial estimates.





Sources	Population	Households
2019 Totals (DARTS TAZs)	119,293	54,146
2020 Woods & Poole	117,885	49,298
Difference (DARTS vs. W&P)	1,408	4,848
Census 2020 Totals	118,953	53,269
Numeric Difference (DARTS vs. Census)	340	877
Percent Difference (DARTS vs. Census)	0.3%	1.6%
GA Office of Planning & Budget 2022	118,754	n/a
2022 County Business Patterns	116,608	53,719
2020 County Business Patterns	118,952	n/a
2020 Lee County SE Totals	32,193	13,168
2020 Dougherty County SE Totals	87,101	40,978
Lee County Census	33,162	13,059
Dougherty County Census	85,790	40,660
Census 2020 Totals (Recheck)	118,952	53,719
Note: Census Co. HHs are for 2022 (not 2	2020)	

Table 1: Base Year 2020 Population and Household Summary

Due to the COVID-19 pandemic in 2020, and its impacts on employment, GDOT requested that 2019 LEHD data be used to estimate base year employment, rather than 2020 data. **Table 2** similarly depicts a favorable comparison of validated 2019 employment for the DARTS regional model against other sources used to refine initial estimates.

Table 2: Base Year 2019 Employment Summary

Sources	Employment
2019 Totals (DARTS TAZs)	54,480
2020 Woods & Poole	70,459
Difference (DARTS vs. W&P)	(15,979)
GA Dept of Labor, Workforce Statistics & Economic Research (Employment)	48,550
GA Dept of Labor, Workforce Statistics & Economic Research (Labor Force)	52,475
U.S. Census Bureau Quick Facts: 2021 Employment (Dougherty Co.)	34,689
U.S. Census Bureau Quick Facts: 2021 Employment (Lee Co.)	4,711
U.S. Census Bureau Quick Facts: 2021 Employment (both counties)	39,400
2020 County Business Patterns (Dougherty Co.)	36,907
2020 County Business Patterns (Lee Co.)	4,599
2020 County Business Patterns (both counties)	41,506
Census vs. SE data (Lee Co.)	-3%
Census vs. SE data (Dougherty Co.)	2%
U.S. Bureau of Labor Statistics Employment, 2020 Q4	53,195
GA Dept of Labor, Workforce Statistics & Economic Research (Unemployed)	3,925





Thematic mapping of key demographic attributes was also used as a logic check on TAZ estimates. **Figure 2**, **Figure 3**, and **Figure 4** present 2020 TAZ estimates of population, households, and employment, respectively. The distribution of land use intensity is greatest in areas in and around Albany and southern portions of Lee County.

Figure 2 shows that Base Year 2020 population is primarily most populous just north of the Lee County Line. In addition, areas west of Albany, in and around the airport, and northeast of Albany in Dougherty County also appear to have larger populations.

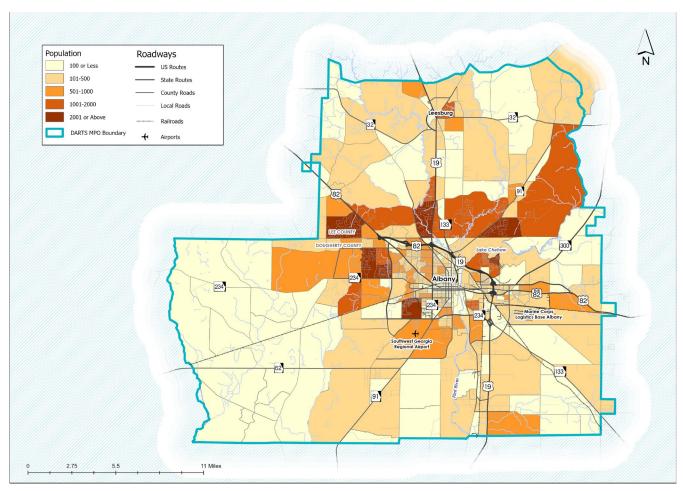


Figure 2: Base Year 2020 Population Distribution by TAZ

Source: US Census





Figure 3 similarly shows the distribution of households is similar in nature to the distribution of the population with the most households just north of the Lee County Line, areas west of Albany, in and around the airport, and northeast of Albany in Dougherty County.

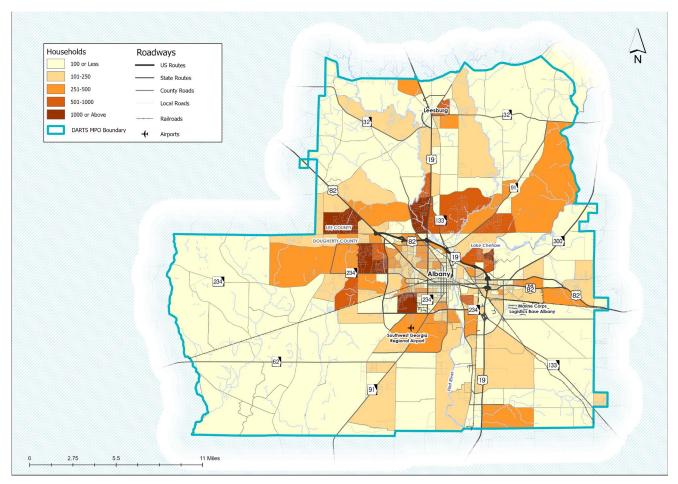


Figure 3: Base Year 2020 Household Distribution by TAZ

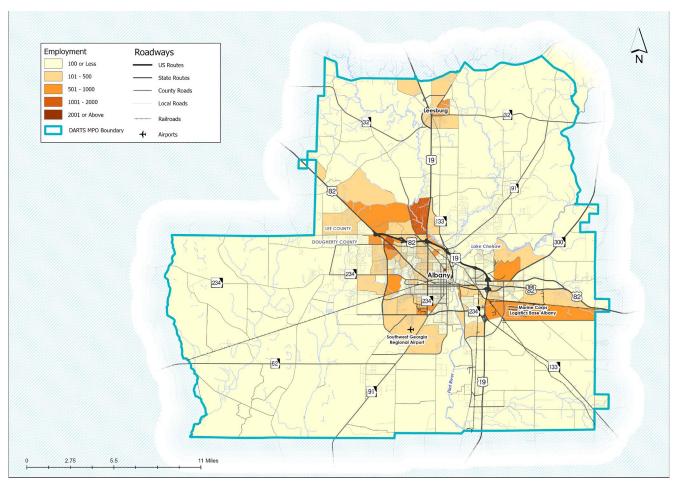
Source: US Census





Finally, **Figure 4** shows that primary employment locations are just north of US 82 between US 82 and US 19. Other hot spots include the Marine Corp Logistics Base, and the airport.

Figure 4: Base Year 2019 Employment Distribution by TAZ



Source: US Census

3.1 Jobs and Economy

Woods and Poole data are available at the County and MSA level for the years 1969 to the present, as well as forecasted metrics out to the year 2050, and served as a primary source for aggregate demographics for this study. **Table 3** depicts population and employment estimates for the Albany MSA in 10-year increments (1970-2050). As shown, employment in the MSA grew steadily to roughly 80,000 in 2000, but the area has experienced a flat population growth rate through 2020. The lack of employment opportunities between 2000 and 2020 has led to a decline in population of 7,000 persons, or roughly 5 percent. With respect to future conditions, the Albany region is projected to grow in employment through 2050 by nearly 30,000 jobs, or 36 percent, while the population is projected to remain relatively the same





Table 3: Population and Employment Trends and Projections for Albany MSA (in 1000s)

Metric	1970	1980	1990	2000	2010	2020	2030	2040	2050
Employment	54,372	64,932	71,183	79,566	77,795	80,085	92,357	100,536	108,926
Population	123,725	142,885	143,025	153,585	154,145	146,570	147,546	146,961	145,595

Source: Woods & Poole, 2021

The American Association of State Highway and Transportation Officials (AASHTO) maintains the Census Transportation Planning Products (CTPP), an online dashboard application that uses data from the American Community Survey (ACS). CTPP was used to estimate worker commute patterns among counties surrounding the greater Albany region. These worker flows provide useful information on the workforce of major employers in the DARTS study area and where workers originate their commute trips. **Table 4** summarizes the top 15 counties providing workers to Dougherty County employers. The top 15 account for 97.4 percent of all workers, according to the CTPP.

Rank	Residence	Workers ages 16+	Percent
1	Dougherty County	29,035	62.0%
2	Lee County	8,640	18.4%
3	Worth Country	3,030	6.5%
4	Mitchell County	1,210	2.6%
5	Terrell County	965	2.1%
6	Sumter County	600	1.3%
7	Colquitt County	460	1.0%
8	Crisp County	385	0.8%
9	Tift County	330	0.7%
10	Calhoun County	240	0.5%
11	Baker County	210	0.4%
12	Turner County	195	0.4%
13	Thomas County	145	0.3%
14	Decatur County	130	0.3%
15	Early County	115	0.2%

Source: U.S. Census Bureau, American Community Survey 2012-2016 Five-Year Estimates. Special Tabulation: Census Transportation Planning

CTPP also provides a breakdown of workers by employment category for all Counties of the Albany Metropolitan Statistical Area (MSA). According to the CTPP, educational, health, and social services account for nearly 25 percent of the workforce within the MSA, followed by retail





trade and manufacturing, both just under 12 percent. **Table 5** provides a breakdown of workers by industry for the Albany MSA.

Table 5: Albany MSA No. of Workers by Industry

Industry	Total No. of Workers 16+ by Industry	Percent by Category
Education, Health, and Social Services	16,325	24.2%
Retail Trade	7,995	11.9%
Manufacturing	7,975	11.8%
Public Administration	5,875	8.8%
Professional, Scientific, Management, Administrative	5,135	7.6%
Arts, Entertainment, Recreation, Accommodation, and Food	5,015	7.4%
Other Services (Except Public Administration)	3,975	5.9%
Construction	3,440	5.1%
Finance, Insurance, Real Estate, and Rental and Leasing	3,215	4.8%
Transportation and Warehousing, and Utilities	2,995	4.4%
Agriculture, Forestry, Fishing and Hunting, and Mining	1,985	2.9%
Wholesale Trade	1,975	2.9%
Information	1,054	1.6%
Armed Forces	349	0.5%

Source: U.S. Census Bureau, American Community Survey 2012-2016 Five-Year Estimates, Special Tabulation: Census Transportation Planning



H



4. Land Use

4.1 Zoning

Figure 5 provides an overview of zoning designations within the DARTS region. These are based on each county's individual adopted zoning maps and may not correspond exactly to their actual use or be fully inclusive of the types of land use that can be found in the region. Nonetheless, these designations drive travel behavior and planning decisions, including the distribution of and investment in transportation infrastructure.

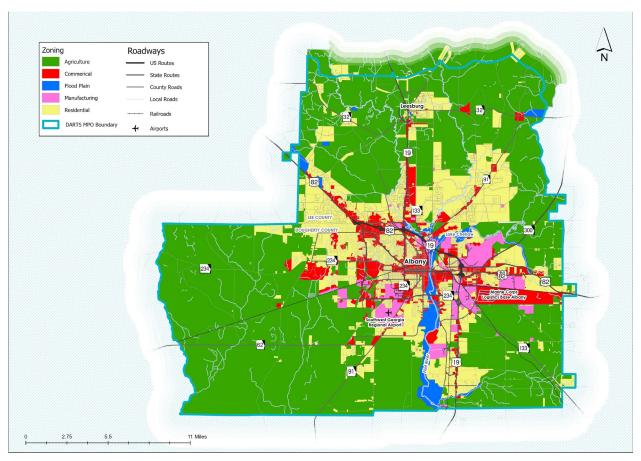


Figure 5: Land Use Zoning in the DARTS Region

Source: DARTS

Analysis reveals that the largest distribution of residentially zoned land is in south Lee County and northwestern Dougherty County, particularly around the corridors of US 82, US 19, and SR 91. Commercial areas closely follow these highways, including the segment of US 19 in Albany that exists in the region to the east. Downtown Albany contains a significant cluster of commercial zoning on either side of the Flint River. The flood plain of the Flint River is designated as such to protect it from development. Additionally, this zoning type is bordered mostly by residential areas throughout southern Albany and commercial areas downtown. The greatest concentration of industrially zoned land can be found in East Albany and western





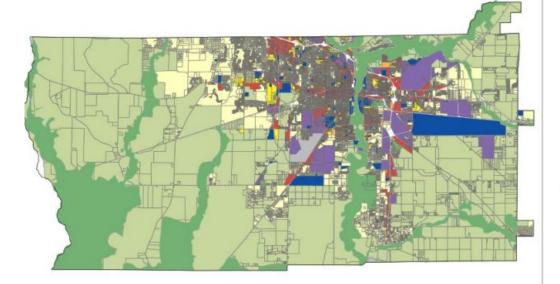
Albany adjacent to the Southwest Georgia Regional Airport (ABY). Unlike Albany, a significant portion of downtown Leesburg is residentially zoned. Most of the remaining DARTS region consists of agriculturally zoned land with low population density.

4.2 Future Land Use

Zoning is a tool that local government officials can use to manage future land uses in a community so that developments in the neighborhoods reflect the values and preferences of their residents. Zoning decisions reflect the economic, environmental, and policy goals of the local government.

Figure 6 depicts future land use in Dougherty County based on planned zoning types designated by local government. Dougherty County envisions an expansion of its forest industry, as Albany already has an infrastructure and labor force suited to the production of agricultural and forest products. There are intentions to increase the maintenance and usage of parks and recreational facilities, including Chehaw Park, Riverfront Trail, and Radium Springs Gardens. This coincides with Dougherty County's environmental resource protection goals (see **Natural and Cultural Resources**). Additionally, Dougherty County envisions the conversion of agricultural land to higher-intensity land uses (see **Figure 6**).

Figure 6: Dougherty County Future Land Use Map





Source: Albany and Dougherty County Comprehensive Plan 2026 (2021)



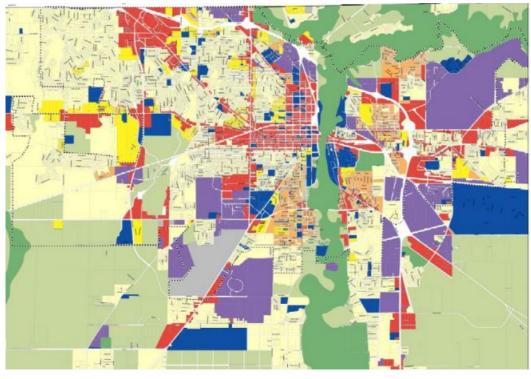


In Albany, an expansion of the Pheobe Health System has created an increased need for offices and medical supply activity in the downtown area (see **Figure 7**), and this trend is expected to

increase as Pheobe campuses increase. This is anticipated as part of a wider increase in major

Figure 7: Albany Future Land Use Map

institutional usage (such as universities and hospitals).





Source: Albany and Dougherty County Comprehensive Plan 2026 (2021)





Lee County envisions rapid growth of its residential areas, shown in **Figure 8**. The county also intends to build and strengthen collaborative economic networks around its existing agriculture, with the stated policy of redirecting development pressure away from agricultural areas.

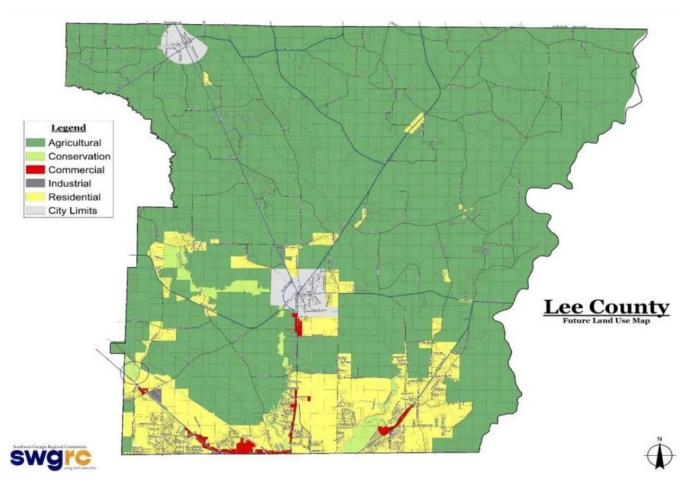


Figure 8: Lee County Future Land Use Map

Source: Lee County-Leesburg-Smithville Comprehensive Plan 2024 (2023)

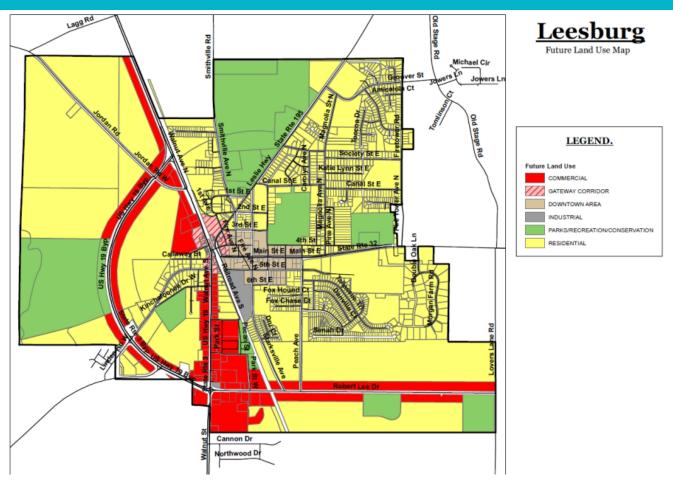
Leesburg, the largest municipality in Lee County, anticipates a continuation of its steady population growth rate, and therefore an expansion of its residential zoning and a corresponding economic growth in Downtown Leesburg (see **Figure 9**). There is also a planned Gateway Corridor, which will mainly be a thoroughfare into Leesburg connecting Georgia to Florida, with a direct route from Atlanta to Tallahassee.

Figure 9: Leesburg Future Land Use Map





Existing Conditions and Needs Assessment Technical Memo



Source: Lee County-Leesburg-Smithville Comprehensive Plan 2024 (2023)

4.3 Community Facilities

Community facilities frequently serve as trip destinations for residents and visitors, and their location influences travel patterns for an area. Understanding this helps inform decisions on transportation investments that will better serve patrons of community facilities.

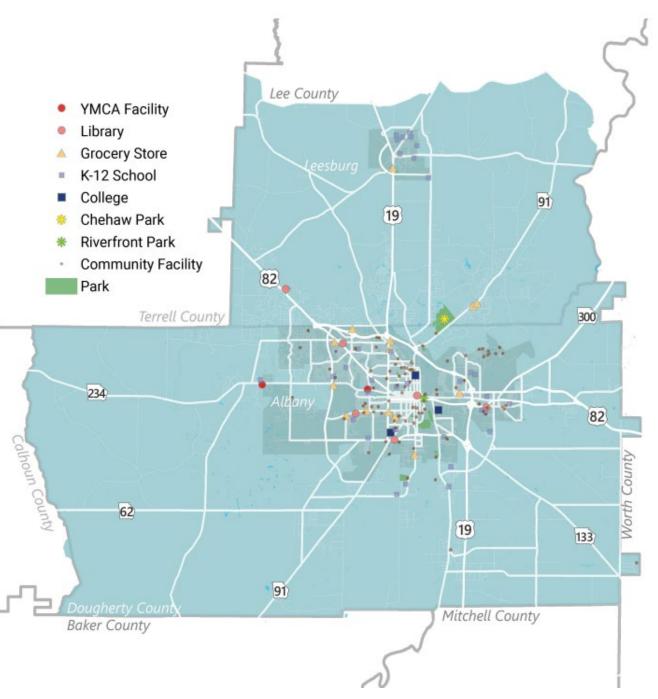
Figure 10 provides a comprehensive overview of community facilities in the study area. Most facilities are in downtown Albany, but there are clusters of facilities along major commercial or residential corridors, specifically in East Albany, along I-82, and in the Radium Springs area south of Albany.

Figure 10: DARTS Community Facilities Map





Existing Conditions and Needs Assessment Technical Memo



Source: DARTS Bicycle and Pedestrian Master Plan (2023)

4.4 Natural and Cultural Resources

According to the Georgia Department of Natural Resources (DNR), the term "natural resources" refers to the state's air, soil, and water. It also refers to all the state's plant and animal species and includes every cultural, historic, or recreational resource. This section will focus on areas within the study region that are considered environmentally sensitive, which includes but it not





limited to floodplains, conservation areas, brownfields, and watersheds. Also included here are locations of cultural and historical significance to the region, which often includes properties and districts that have been entered into a local historic registry or the National Register of Historic Places. These assets are highly valued by residents and create a unique sense of place for the region, so it is important to ensure that potential transportation improvements do not adversely impact these resources.

The Regionally Important Resource Plan was created in 2010 by the Southwest Georgia Regional Commission, in which resources were identified for Albany and Dougherty County as requiring enhanced focus on protection and management.

It lists the following resources:

Natural Resources

- Flint River
- Prime Agricultural Land
- Radium Springs
- Albany Nursery Wildlife Management Area
- Chickasawhatchee Wildlife Management Area
- Floridian Aquifer

Cultural Resources

- Carnegie Library
- Bridge House
- Mount Zion Church
- Historic Dixie Highway Scenic Byway

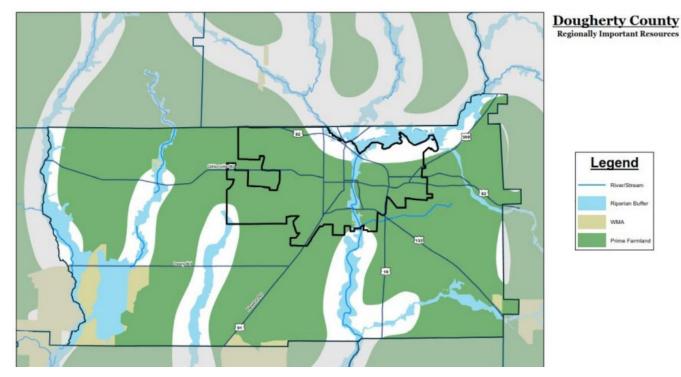
Source: Albany and Dougherty County Comprehensive Plan 2026 (2021)





A map of the natural resources in the Regionally Important Resource Plan is shown in Figure 11.

Figure 11: Albany/Dougherty County Regionally Important Resources (Natural)



Source: Albany and Dougherty County Comprehensive Plan 2026 (2021)





Outside of Regionally Important Resources, there are numerous areas in the study region that are categorized as "Unsuitable for Development", which includes open water, floodways (see **Figure 12**), wetlands (see **Figure 13**), the Flint River Protection Corridor, existing parks/recreation/conservation areas, and areas with "severe" soil limitations. A comprehensive overview of waterways in Dougherty County, including the Flint River Protection Corridor, can be seen in **Figure 14**. The 100-year-old floodplain in Dougherty County is categorized as "Extremely Limited Development, which is one step down from "Unsuitable for Development" on Dougherty County's Development Limitations Map.



Figure 12: Dougherty County Flood Map



Source: Albany and Dougherty County Comprehensive Plan 2026 (2021)

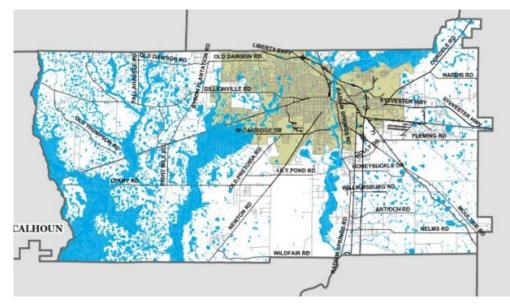


Figure 13: National Wetland Inventory: Dougherty County

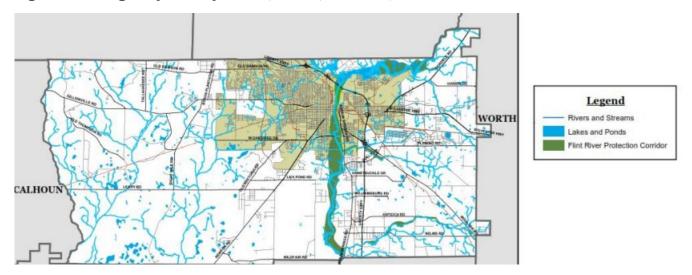


Source: Albany and Dougherty County Comprehensive Plan 2026 (2021)





Figure 14: Dougherty County Rivers, Lakes, Streams, and Ponds



Source: Albany and Dougherty County Comprehensive Plan 2026 (2021)



The Flint River Protection Corridor is a part of the Dougherty County Greenspace Program. The program has a stated priority of wetlands acquisition, particularly along the Flint River Protection Corridor. The Greenspace Program is one of several organizations with vested interest in protecting the Flint River and acquiring its natural resources for designation as greenspace; others include RiverCare 2000, the Federal Emergency Management Agency (FEMA), and the Special Purpose Local Option Sales Tax (SPLOST). An overview of these various greenspace programs can be found in **Figure 15**.

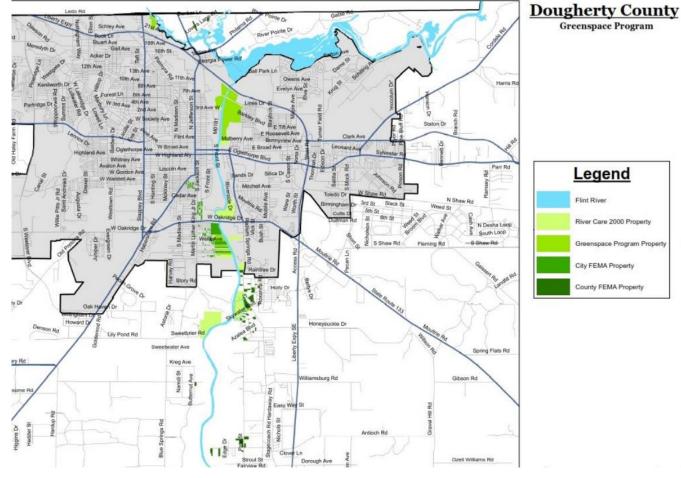


Figure 15: Dougherty County Greenspace Program

Source: Albany and Dougherty County Comprehensive Plan 2026 (2021)



🚯 😂 😂 🖨 😫 🚷

DA



There are 21 properties and districts in Dougherty County (all located in Albany) that are part of the National Register for Historic Places, shown in **Figure 16**.





Albany Historic Resources

Legen	d
A. Albury Dist. Pecan Growers Exch.	L. Municipal Auditorium
5. Albany House Fumilahing Co.	M. New Albany Hotel
C. Alberry Relinced Depot Hal. Dist.	N. Old SI. Teresa's Catholic Churd
D. Bridge House	O. Rosenberg Brothers Dept. Stor
E. Carnegie Library of Albany	R W. E. Smith House
F. Davis-Excharge Bank Bidg.	G. St. Nicholas Hole1
G. John A. Davis House	PL Tift Park
H. Samuel Parkas House	S. U.S. Post Office & Courthouse
I. Luebon House at 1200 Pitth Ave.	T. Union Depot
J. Lustron House at 711 North Ave.	U. Albany Theatre
K. Mount Zion Baplist Church	

Source: Albany and Dougherty County Comprehensive Plan 2026 (2021)





The Environmental Protection Agency's Comprehensive Environmental Response, Compensation, and Liability Information System (CERCLIS) contains information on hazardous waste sites, site inspections, preliminary assessments, and remedial status. The EPA employs a Hazard Ranking System (HRS) which assesses sites and grades them based on potential threat to human health and the environment. Sites with a HRS score of 28.5 or higher are eligible for placement on the National Priority List (NPL). There are a total of 10 CERCLIS brownfield sites in Dougherty County (see **Figure 17**), with 7 of these sites residing within Albany city limits on the west bank of the Flint River. 3 of these 10 sites are placed on the NPL; two of these sites are outside city limits, with one located adjacent to the Marine Corps Logistics Base and the other located along I-82 just outside city limits. The other NPL-listed brownfield site is adjacent to the I-82/I-19 Interchange in Albany.

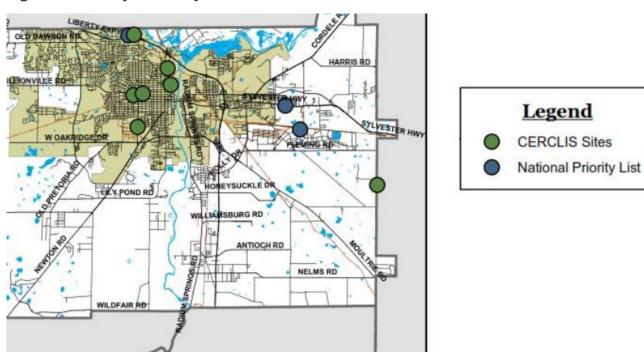


Figure 17: Albany Federally listed brownfield sites

Source: Albany and Dougherty County Comprehensive Plan 2026 (2021)





5. Transportation, Mobility, and Safety

5.1 Commuting

In 2019, 86.7% of commuters used cars, trucks, or vans with 77.2% of those commuters reporting that they drove alone while only 9.5% carpooled to work. Between 2019 and 2022, there were several key changes in commuting trends which reflect a transforming landscape as it relates to the workplace in light of the COVID-19 pandemic and the significant increase in remote and hybrid work. They are:

- The mean travel time to work decreased from 29.3 minutes in 2019 to 28.2 minutes in 2022. This reduction could reflect a variety of factors, including changes in work patterns (e.g., more remote work), improvements in transportation infrastructure, or shifts in the locations where people work and live.
- The percentage of workers without reliable access to a vehicle decreased slightly, from 3.0% in 2019 to 2.8% in 2022. This small change suggests relative stability in terms of vehicle availability among workers over these years.
- The percentage of workers with 60+ minute commutes decreased from 11.4% in 2019 to 9.8% in 2022. This decrease could be indicative of changes in commuting habits, possibly influenced by the aforementioned factors or other socio-economic trends. Each of these changes represents notable shifts from long-term trends in commuting behavior.

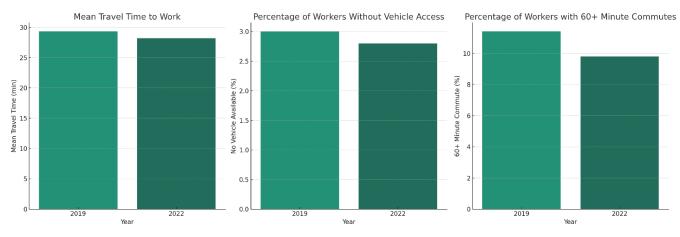


Figure 18: Changes in Commuting Statistics

5.1.1 Impact of Remote Work and COVID-19

While the full extents are not known of the impact remote work and COVID-19 on the DARTS region's traffic network, COVID-19 did expedite the adoption of remote and hybrid work models. This change from the traditional work model could have been a catalyst for the decrease in mean travel time and the percentage of workers commuting 60 minutes or more, also contributing to a decrease in traffic congestion during peak hours for those who were still required to travel to work.





The slight decrease in workers without vehicle access could also indicate improved access to vehicles for some populations, potential changes in urban demographics, or increased availability of alternative transportation options (e.g., bike-sharing, e-scooters). In addition, several stimulus funds were distributed during the COVID-19 pandemic which potentially enabled some to purchase vehicles. Some new to the telecommuter pool may also have been enabled to reduce personal costs and use those savings to purchase a vehicle.

5.1.2 Environmental and Health Implications

Reducing or eliminating commute times and promoting car-alternative modes of transportation such as walking, biking, or using public transportation can meaningfully contribute to lower emissions and improved air quality. Furthermore, the potential health benefits for individuals and communities are numerous as there is a strong correlation between sitting for long periods of time and a decrease in overall health.

For those who are still required to travel to a worksite, promoting alternative modes of transportation by improving the walkability and bikeability of the city can produce considerable positive results. Commonly, bicycle and pedestrian infrastructure is centered on recreational use, bypassing social and economic hotspots. In addition, in heavily car-dependent areas, existing infrastructure is frequently in a state of deterioration or not made with its users in mind, often prioritizing car-centric infrastructure. By ensuring that safe, convenient, and pleasant-to-use routes connect people to where they work, live, and play, bicycling and walking can be changed from a purely recreational activity to a viable form of transportation.

One note, however, is that even if infrastructure is significantly improved, if destinations are too far apart, as is typical with car-dependent areas. Prospective employers and social centers should be encouraged to locate closer to residential areas. Having employment centers near residential land uses can provide a positive impact on underprivileged groups, such as the disabled and elderly, lower income and minority populations. If employment opportunities cannot be relocated closer, providing reliable public transportation opportunities can improve quality of life by providing easy access to work, healthcare, and social activities.

5.1.3 Socio-economic Factors

There are socio-economic factors that might be at work when considering the changes in commuting times, including housing affordability and the decentralization of workplaces. Increased housing costs in and near city centers may force some workers to choose or be forced to live further from work which impacts commuting times. However, the decrease in long commutes could suggest that workplaces are becoming more distributed or that remote work is diminishing the need to live close to central business districts. Economic conditions, job market changes, and industry shifts can also influence commuting patterns, and sectors that have more easily transitioned to remote work may see more pronounced changes in commute times compared to those requiring physical presence.





5.1.4 Future Considerations

Monitoring these trends can inform policy and business decisions regarding work arrangements, urban development, and transportation planning. The resilience of these changes—whether they represent a permanent shift in work and commuting patterns or a temporary adjustment—remains to be seen. Further research could explore the impact on specific demographics, including differences by income level, occupation type, and geographic region, to develop more specialized interventions and support.

5.2 Roadway Network and Inventory

The DARTS Region has a diverse network of roads that facilitate transportation and connectivity within the area. The road network is comprised of a combination of County Roads, Local Roads, State Routes, and US Routes (see **Figure 19**) with the total mileage across all road types amounting to approximately 1312.76 miles (see **Figure 20**).

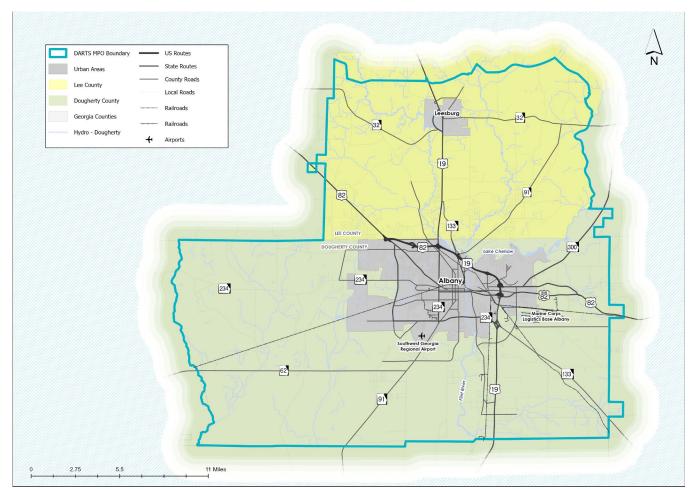


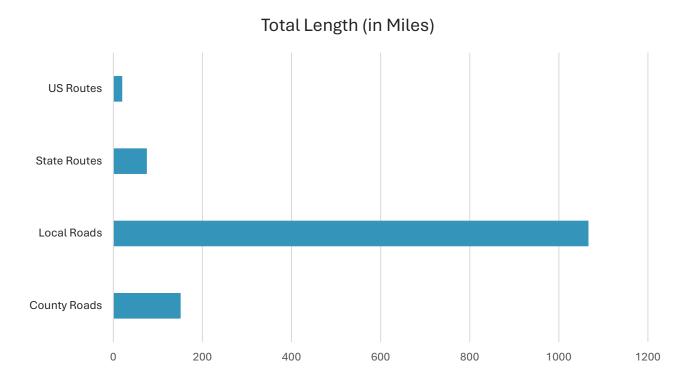
Figure 19: DARTS Region Road Infrastructure



METROPOLITAN TRANSPORTATION PLAN 2050 UPDATE

Existing Conditions and Needs Assessment Technical Memo

Figure 20: Miles of Road in DARTS Region by Road Type



As shown above in **Figure 20**, The predominance of local roads signifies a focus on intraregional connectivity, while the presence of county, state, and US routes reflects the region's integration into larger transportation networks. Local roadways form the backbone of the region's transportation infrastructure, with over 1,000 miles of roads classified under this category. County roads contribute roughly 150 miles to the road network, serving as important links between local roads and larger state or national routes and connecting towns and smaller communities within the county. State routes, totaling about 75 miles, are typically designed to accommodate higher traffic volumes and provide more direct paths between key locations within the state, making them vital for connecting the region with the broader state transportation system. Finally, U.S. routes in the region, include approximately 20 miles of roadway and are critical segments of the national highway system, facilitating access to the region; connecting the DARTS planning area to national transportation networks. The roadway infrastructure is a key asset for the region, playing a significant role in economic development, accessibility to services, and overall quality of life for its residents

5.3 Roadway Capacity

Figure 21 depicts the average annual daily traffic (AADT) for roadways in the DARTS region for the year 2022 based on GDOT Traffic Data. The highest traffic volumes in the DARTS region occur on the Liberty Expressway where US 82 and US 19 run concurrent between the North Slappey Boulevard Interchange in North Albany and the Clark Avenue Interchange in East Albany, with traffic volumes of over 40,000 vehicles per day. Several of the major roadways





connected to the Liberty Expressway have traffic volumes in the range of 20 and 40,000 vehicles per day: North Slappey Boulevard and US 19 north of Albany, US 82 in Albany and Lee County, and US 19 south of Clark Avenue. All these roads have both large residentially zoned land use areas and commercial corridors surrounding them, particularly North Slappey Boulevard as it runs adjacent to downtown Albany. Therefore, these roadways are especially critical to supporting commuter flow to major employment centers in both directions.

Within Albany, other areas with notably high volumes of traffic include the segments of Oglethorpe Boulevard and Oakridge Drive that run over the Flint River and US 19 between Clark Avenue and Moultrie Road. While these roads likely serve as critical commuter corridors for Albany's commercial areas and Albany State University (discussed below), they also circulate traffic to numerous industrial centers in East Albany, which the Liberty Expressway has a critical role in as well.

Albany State University (ASU), with the main campus positioned between the noted parts of Oglethorpe Boulevard and Oakridge Drive and the west campus on Gillionville Road, is a major driver of traffic volumes around Albany. It housed 6,599 students as of Fall 2023, and is also the second largest employer in Albany. Road conditions are affected not only by students and employees commuting to and from campus, but also visiting friends, family, and potential students as well as people attending sports events. In 2022, ASU was estimated to provide over \$260 billion in value to the region, making it an important asset. Enrollment has increased for three consecutive years, suggesting additional pressure on road capacity around the university from accommodating the increase of students, employees, and guests.

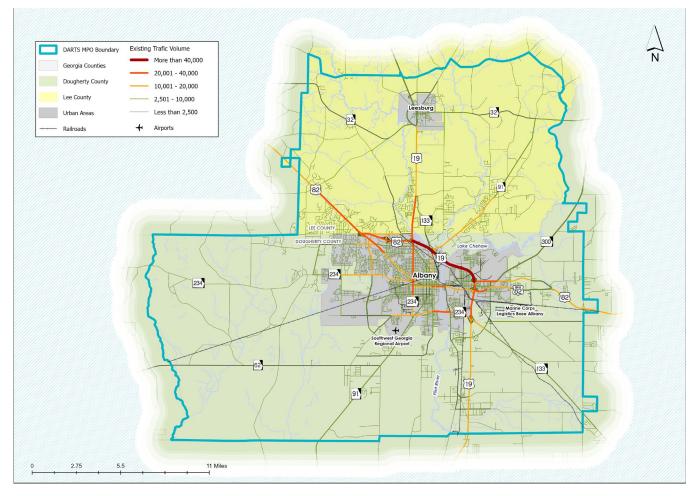
Areas around other key employers such as Albany Area Primary Health Care, Phoebe Putney Memorial Hospital, and Proctor & Gamble also have higher volumes, but commuters to these companies are likely competing with university-related traffic, particularly on the northeast side of Albany on and around the highly congested Liberty Expressway.





Existing Conditions and Needs Assessment Technical Memo

Figure 21: Existing AADT (2022)



Source: GDOT

5.3.1 Projected Roadway Capacity

The DARTS Travel Demand Model (TDM) was used to predict future changes in traffic volumes in the region through the year 2050. Due to the uncertainty in accounting for future changes in travel decision-making and enhancements to the transportation system, the values provided by the model should be viewed as an indication of general trends in regional growth and land use rather than exact projections. **Figure 22** depicts the AADT for the year 2050 predicted by the DARTS TDM while **Table 6** illustrates the change in volumes from 2022 GDOT Traffic Data to projected 2050 truck volumes using numerical estimates provided by the model.

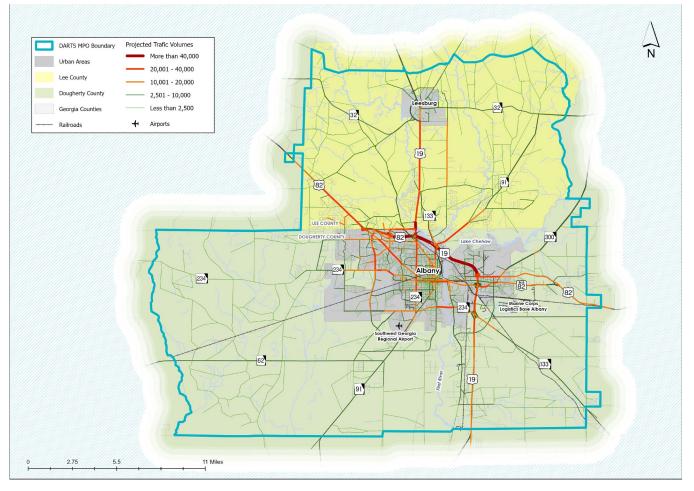
As shown below, traffic volumes are expected to increase on nearly all major roadways in the DARTS region. The Liberty Expressway, where US 19 and US 82 run concurrently on the northeast side of Albany, is expected to maintain its prominence for regional traffic volumes, with this roadway segment increasing to over 50,000 vehicles per day. This would make it the most traveled roadway in the region by number of cars. Other segments of US 82 and US 19 with significant projected increases in traffic volumes include US 19 in Lee County (between





Leesburg and US 82) with a growth from 24,000 to 35,170 vehicles per day, US 82 in Lee County with a growth from 22,800 to 30,320 vehicles per day, and US 19 between East Oglethorpe Boulevard and Moultrie Road (from 22,200 to 27,730 vehicles per day) and south of Moultrie Road in Dougherty County (from 15,000 to 20,870 vehicles per day). SR 91 is anticipated to experience relatively high increases in traffic volumes compared to other local highways, including the segment running from West Oakridge Drive to South Jefferson Street (from 5,110 to 10,050 vehicles per day), 7th Avenue to US 19 (from 15,900 to 24,860 vehicles per day), and US 19 to Forrester Parkway (from 13,700 to 24,130 vehicles per day).

Figure 22: Projected AADT (2050)



Source: DARTS Travel Demand Model (2024)





Existing Conditions and Needs Assessment Technical Memo

Table 6: Existing and Projected Traffic Volumes

Corridor	Segment	Volume (2022)	Volume (2050)	Change	Percent Change
US 82	West of Dawson Road	22,800	30,320	7,520	33%
	East of Dawson Road to US 19	38,900	42,670	3,770	10%
	East of US 19 to Blaylock St.	44,800	50,680	5,880	13%
	Blaylock St to Clark Ave	43,600	45,280	1,680	4%
	Clark Ave to Cordele Road	22,600	25,970	3,370	15%
	East of E Oglethorpe Blvd to Hill Rd (US BUS 82)	20,500	27,730	7,230	35%
US 19	North of Robert B Lee Drive	7,830	9,400	1,570	20%
	South of Robert B Lee Drive to US 82	24,000	35,170	11,170	47%
	South of Clark Ave to E Oglethorpe Blvd	27,700	25,880	(1,820)	-7%
	South of E Oglethorpe Blvd to Moultrie Rd	22,200	27,730	5,530	25%
	South of Moultrie Rd	15,000	20,870	5,870	39%
SR 300	North of Cordele Rd	7,720	9,660	1,940	25%
SR 234	West of Byron Plantation Rd	1,580	4,050	2,470	156%
	Byron Plantation Rd to N Westover Blvd	14,600	16,000	1,400	10%
	N Westover Blvd to N Slappey Blvd	17,200	21,840	4,640	27%
	South along N Slappey Blvd to W Oglethorpe Blvd	31,300	29,470	(1,830)	-6%





associates, inc.

METROPOLITAN TRANSPORTATION PLAN 2050 UPDATE



Existing Conditions and Needs Assessment Technical Memo

		N7 1			D
Corridor	Segment	Volume (2022)	Volume (2050)	Change	Percent Change
	W Oglethorpe Blvd to W Gordon Ave	25,300	26,350	1,050	4%
	W Gordon Ave to W Oakridge Dr	12,600	15,420	2,820	22%
	W Oakridge Dr to Martin Luther King Jr Dr.	14,700	16,020	1,320	9%
	Martin Luther King Jr Dr. to Radium Springs Rd	20,300	21,020	720	4%
	Radium Springs Rd to US 19	14,400	16,890	2,490	17%
SR 32	East of Walnut Street	4,640	7,630	2,990	64%
	Walnut Street to James Pond Rd	4,450	7,640	3,190	72%
	West of James Pond Rd	1,440	2,580	1,140	79%
SR 133	US 19 to Holly Drive	14,000	12,960	(1,040)	-7%
	Southeast of Holly Drive	6,630	11,990	5,360	81%
SR 91	South of US 62	3,300	3,320	20	1%
	US 62 to W Oakridge Dr	8,330	10,180	1,850	22%
	W Oakridge Dr to S Jefferson St.	5,110	10,050	4,940	97%
	S Jefferson St to W Oglethorpe Blvd	8,400	13,120	4,720	56%
	W Oglethorpe Blvd to 7th Avenue	10,100	13,970	3,870	38%
	7th Avenue to US 19	15,900	24,860	8,960	56%
	US 19 to Forrester Parkway	13,700	24,130	10,430	76%
	Forrester Parkway to US 32	3,430	5,170	1,740	51%
SR 62	West of Tarve Rd/8 Mile Rd	2,050	2,560	510	25%





& associates, inc.

GTS

42



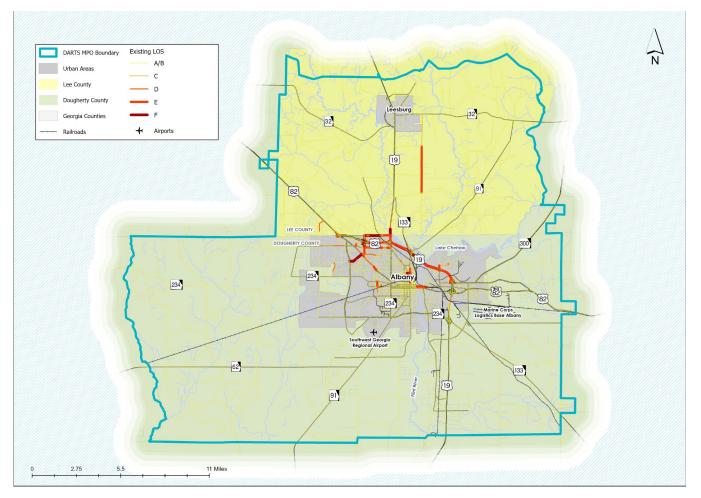
5.4 Congestion Management

Level of Service (LOS) is defined by the Highway Capacity Manual as a descriptive categorization of the quality or performance of a particular transportation asset, especially a roadway. LOS for a particular asset is graded on a scale of A-F based on factors such as congestion, travel time, safety, or comfort. A grade of A or B is considered good, generally meaning that the road has low congestion, high speeds, and short travel time. A grade of C is considered acceptable, meaning that a roadway may experience some congestion and slowdown but generally has a stable flow. A grade of D, E, or F is considered poor, meaning that the road is highly congested, has long travel times, and may be relatively dangerous. In other words, a poor LOS grade means that the capacity of the roadway is being exceeded. Figure 23 shows the existing Level of Service grades for roadways in the DARTS region, drawing data from DARTS Travel Demand Model. Analysis reveals that the poorest grading of roadways in the region is found in the City of Albany, where US 82/US 19 (Liberty Expressway) has a grading of F on all segments, which coincides with it being the most traveled roadway in the region for both freight trucks and overall vehicles. The segments of North Slappey Boulevard, Ledo Road, and Nottingham Way which interchange with the Liberty Expressway have similarly poor grading. Multiple roadways in and around downtown Albany have a grade of D, E, or F, including North Jefferson Street, West Society Avenue, and Broad Avenue over the Flint River (despite having low truck and traffic volumes). Most roadways in Lee County have acceptable-to-good grading, though a long segment of Lovers Lane Road (between Mayhaw Road and Forester Parkway) has an LOS grade of E.





Figure 23: Existing Level of Service (LOS) (2022)



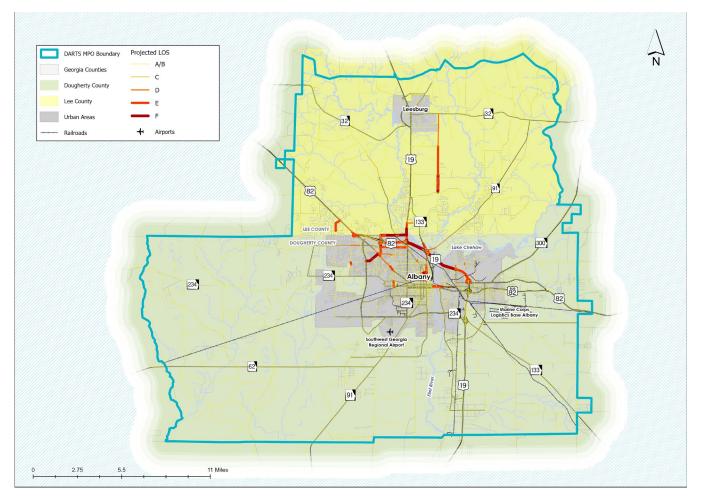
Source: DARTS Travel Demand Model (2024)

The DARTS Travel Demand Model was used to predict future conditions for roadways in the DARTS region. As shown in **Figure 24**, Level of Service is expected to remain mostly unchanged, though the flow and maneuverability of a few roadways are projected to diminish. These include the junction of US 82 and Dawson Road (from grade D to E), North Doublegate Drive in Lee County (from D to E), Lovers Land Road between East Century Road and Forester Parkway in Lee County (from E to F), a segment of Beattie Road in Albany (from D to E), and SR 133/North Jefferson Street leaving Albany (D to E).





Figure 24: Projected Level of Service (LOS) (2050)



Source: DARTS Travel Demand Model (2024)

5.5 Traffic Control System

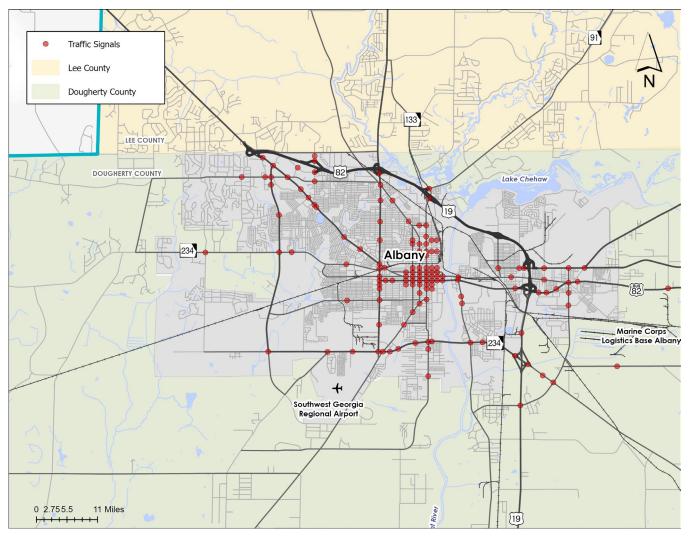
Traffic signals are critical for safety and effective traffic operations in transportation networks. They are typically installed at locations with high traffic volumes or safety requirements as identified by local and state government. **Figure 25** shows the distribution of traffic signals in Dougherty County according to data obtained from the City of Albany's GeoHub. There are 137 traffic signals in Albany, with a significant number of these located in the downtown area, especially on or within a block of Broad Avenue and Oglethorpe Boulevard. Though there are substantially less traffic signals in other parts of Albany and Dougherty County, major roadways such as SR 234/West Oakridge Drive (near ABY airport), Dawson Road in the northwest corner of Albany, US 82/East Oglethorpe Boulevard and Clark Avenue in East Albany, and Slappey Boulevard are also characterized by a distribution of traffic signals.

No official traffic signal data was identified for Lee County; however a review of Google Maps shows that there are very few traffic signals outside the City of Leesburg and US 82 northwest of Albany.





Figure 25: City of Albany Traffic Signals



Source: City of Albany, GA GeoHub

Additional information regarding Intelligent Transportation Systems (ITS) is catalogued and identified in Chapter **11** of this document.

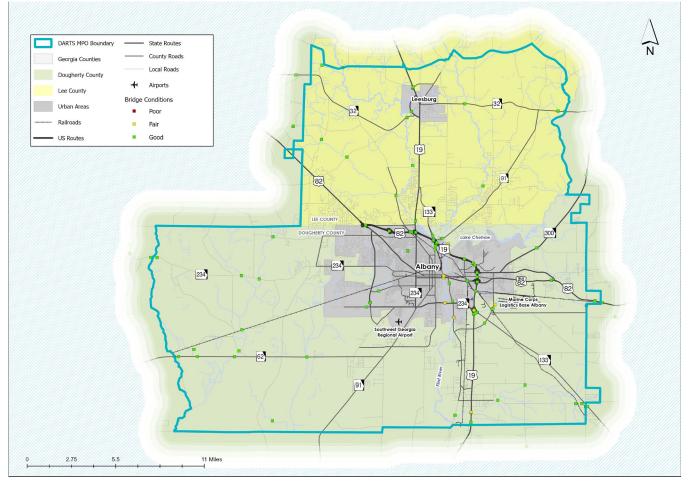




5.6 Bridge Inventory and Conditions

Data identifying bridge conditions in the region in shown in **Figure 26** based on data collected from National Bridge Inventory (NBI) Bridges are rated as good, fair, or poor by the NBI based on the state of their components, including deck, superstructure, substructure, channel, or culvert. This allows jurisdictions to assess the overall condition of a bridge for maintenance, repair, or replacement considerations. Most bridges in the DARTS region are rated as good, while some bridges (mostly in and around Albany) are rated as fair. There are no bridges in the area rated as poor.

Figure 26: Bridge Conditions



Source: National Bridge Inventory

The following bridges are rated "fair":

- The Liberty Expressway (US 82/US 19) over the Flint River
- Georgia Power Road going from the mainland over to the Flint River Hydroelectric Plant
- Broad Avenue over the Flint River
- Oglethorpe Boulevard over the Flint River



METROPOLITAN TRANSPORTATION PLAN 2050 UPDATE

Existing Conditions and Needs Assessment Technical Memo



- Radium Springs Road over a distributary of the Flint River
- US 19 over a distributary of the Flint River
- SR 133/Moultrie Road over US 19/Liberty Expressway
- Shaw Road over waterways within the Marine Corps Logistics Base
- Between Rankin Street and Shaw Road over waterways within the Marine Corps Logistics Base

5.7 Pavement Quality

This section examines current conditions of the roadways in the DARTS transportation network. Poor pavement conditions hinder mobility in a region, provide unsafe travel conditions for users, and risk potential property damage to vehicles and transportation infrastructure. A cursory review of data provided by the City of Albany in **Figure 27** indicates that a significant amount of the roadways in the City of Albany are rated in "Poor" to "Very Poor" condition with several roads noted as having "Base Failure". Primary roads that are identified to have insufficient pavement conditions are:

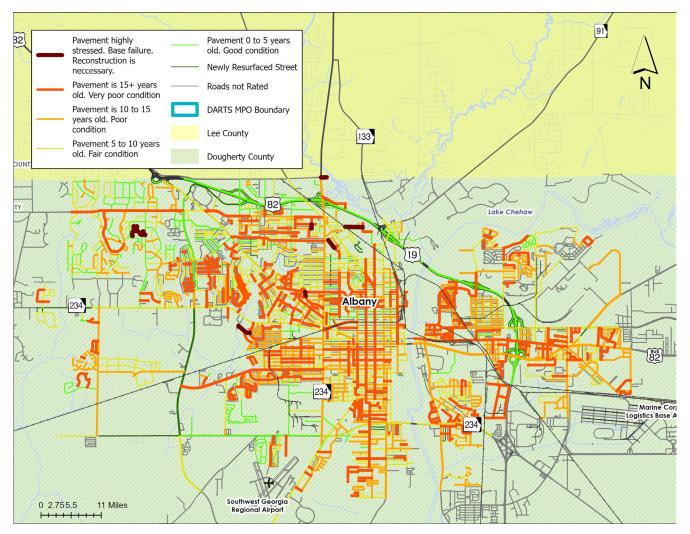
- Broad Avenue
- Gordon Avenue
- Oglethorpe Boulevard
- Radium Springs Road
- Clark Avenue
- Cordele Road
- Oakridge Road
- Martin Luther King Jr. Drive
- West 3rd Avenue
- Whispering Pines Road
- Stuart Avenue

Pavement conditions data for the remainder of Dougherty County and Lee County was not available for review at the time of this report.





Figure 27: City of Albany Pavement Conditions



Source: City of Albany

The pavement conditions data indicates there are numerous roadways within the City of Albany that are in desperate need of repair. An actionable plan to address pavement conditions within the City of Albany is necessary to begin addressing, at a minimum, the primary roadways that are in "Poor" or worse condition. For areas outside the city, a better inventory of roadway conditions within Dougherty and Lee counties is necessary to understand additional pavement condition needs. Addressing pavement condition needs as part of this MTP, will help provide better mobility and safer conditions throughout the DARTS region.





6. Traffic Safety

The safety analysis includes an overview of all crashes within the DARTS MPO including by type, lighting condition, road surface condition, crashes involving vulnerable roadway users, and by severity. The safety analysis then examines crashes resulting in fatalities and serious injuries to determine patterns and how they compare to overall crashes. Next is an overview of an intersection crash analysis that the team performed based on geospatial 300-foot buffers around all intersections with public streets in the DARTS MPO. Three rankings of intersections are included in this analysis – intersections by overall number of crashes, fatal crashes, and serious injury crashes. Lastly, the project team examined specific corridors that experienced higher crash densities to understand their crash rates in comparison to statewide average crash rates based on their functional classification.

6.1.1 Crash Summary

Within the DARTS MPO boundaries, there were 19,979 reported crashes which resulted in a total of 103 fatalities, 579 serious injuries, and 1,858 visible injuries. **Figure 28** provides a heatmap showing a clear picture of areas where the highest occurrence of crashes occurred in the DARTS planning area.

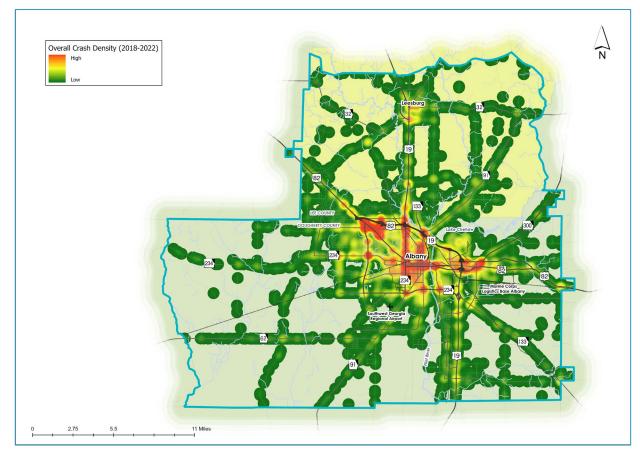


Figure 28: DARTS MPO Crash Density (2018-2022)





The highest crash concentrations are primarily within the City of Albany, with additional hotspots in unincorporated areas of Dougherty County, Lee County, and the City of Leesburg. In the City of Albany, the highest density of crashes was in the commercial area in northwest Albany near the Albany Mall along corridors such as Dawson Road, Old Dawson Road, Westover Boulevard, and Nottingham Way. Higher crash densities are along major state routes such as Slappey Boulevard and Oglethorpe Boulevard corridors throughout the city. There is also a high frequency of crashes near the Walmart shopping center along Cordele Road as well as the Clark Avenue and Sylvester Road corridors in eastern Albany.

Crash concentrations are sparser outside of the City of Albany, but there were several intersections that saw numerous crashes over the past five years such as US 82/SR 520 at North Double gate Drive and Sylvester Road (US 82/SR 520) at County Line Road, among others. Corridors with crash concentrations outside the City of Albany include the Liberty Expressway, US 82 in southwestern Lee County, and Walnut Street in the City of Leesburg.

Figure 29 displays the number of reported crashes by year. Crashes increased between 2018 and 2019 across the MPO before decreasing in 2020. The lower incidence of crashes in 2020 may be attributed to effects of the COVID-19 pandemic. In 2021, crash frequencies rose from above the frequencies of the three preceding years, then decreased in 2022 to 3,848 reported crashes.

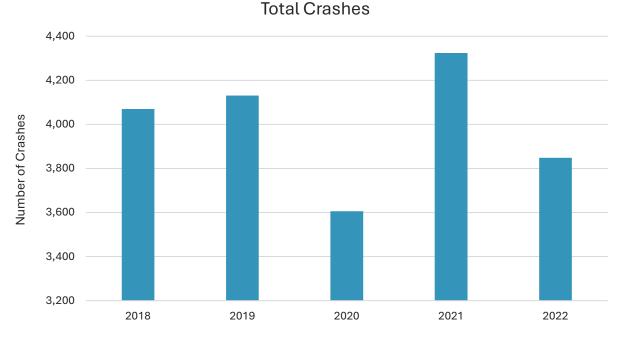


Figure 29: Number of Crashes in DARTS MPO (2018-2022)

Source: GDOT Numetric

A breakdown of crashes by type within the DARTS MPO is shown in **Table 6**. Collectively, over 63 percent of crashes within the MPO were either angle crashes (34 percent) or rear-end





crashes (29 percent). Sideswipe crashes represent approximately 13 percent of all crashes, 22 percent were single-vehicle crashes, and two percent were head on crashes. Single-vehicle crashes were with both fixed objects and non-fixed objects such as drainage ditches, deer, guardrails, and street curbs but there were also several crashes involving overturned vehicles.

Table 67: Crashes by Collision Type

Year	Crashes	s by Colli	son Type					Total
	Angle	Head On	Rear End	Sideswipe- Same Direction	Sideswipe- Opposite Direction	Not A Collision with Motor Vehicle	Not Specified	Crashes
2018	1,398	97	1,254	444	72	805	0	4,070
2019	1,411	93	1,263	442	69	851	2	4,131
2020	1,161	100	1,021	414	76	834	0	3,606
2021	1,518	120	1,202	474	82	925	3	4,324
2022	1,272	118	1,031	410	58	959	0	3,848
Total	6,760	528	5,771	2,184	357	4,374	5	19,979
	34%	2%	29%	11%	2%	22%	<1%	100%

Source: GDOT Numetric

6.1.2 Crashes by Lighting Condition

A breakdown of crashes by lighting condition within the DARTS MPO over the past five years is shown in **Table 7**. Approximately 72 percent of crashes within the MPO occurred in daylight conditions. 17 percent of crashes were in dark, lighted conditions, and nine percent occurred in dark, unlit conditions. The remaining two percent of crashes occurred at dawn or dusk.





Existing Conditions and Needs Assessment Technical Memo

Year	Crashes	s by Lightin	g Conditio	on			Total
	Dawn	Daylight	Dusk	Dark- Lighted	Dark-Not Lighted	Not Specified	Crashes
2018	35	2,990	75	619	351	0	4,070
2019	41	3,001	51	651	387	0	4,131
2020	39	2,594	46	636	290	1	3,606
2021	35	3,088	67	776	353	5	4,324
2022	38	2,711	59	688	351	1	3,848
Total	188	14,384	298	3,370	1,732	7	19,979
	1%	72%	1%	17%	9%	<1%	100%

Table 78: DARTS MPO Crashes by Lighting Condition

Source: GDOT Numetric

6.1.3 Crashes by Road Surface Condition

A breakdown of crashes by road surface condition within the DARTS MPO is shown in **Table 8**. Approximately 86 percent of crashes within the MPO occurred in dry conditions. Crashes in wet conditions represented approximately 13 percent of all crashes. Less than one percent of all crashes occurred in snow, ice, or other surface conditions.

Table 89: DARTS MPO Crashes by Road Surface Condition

Year	Crashes by	Road Surfa	ce Conditio	n		Total Crashes
	Dry	Wet	Snow/Ice	Other	Unknown	
2018	3,436	622	1	11	0	4,070
2019	3,586	536	1	8	0	4,131
2020	3,124	478	2	2	0	3,606
2021	3,682	636	1	5	0	4,324
2022	3,450	394	0	4	0	3,848
Total	17,278	2,666	5	30	0	19,979
	86%	13%	<1%	<1%	0%	100%







6.2 Fatal Crashes

A breakdown of crashes by severity within DARTS MPO is shown in **Table 9** The crash severity follows the KABCO Injury Classification scale, which includes fatal crashes (K), serious injury crashes (A), minor injury crashes (B), complaint of injury crashes (C), and property damage only crashes (O).

Most crashes resulted in property damage only (70 percent); however, 30 percent of crashes resulted in injuries, and less than one percent were fatal. Serious injury crashes comprised approximately two percent of all reported crashes within the DARTS MPO between 2018 and 2022. Fatal crashes have increased across all five years while serious injury crashes have remained relatively constant. Minor injury crashes increased from 2018 to 2021 before slightly decreasing in 2022.

Table 910: DARTS MPO Crashes by Severity

Year	Crashes	s by Seve	rity				Total
	Fatal	Injury			PDO	Unknown	Crashes
	К	А	В	С	0		
2018	9	87	222	820	2,930	2	4,070
2019	13	106	292	868	2,827	25	4,131
2020	18	92	277	709	2,453	57	3,606
2021	26	106	297	831	3,019	45	4,324
2022	31	74	235	708	2,769	31	3,848
Total	97	465	1,323	3,936	13,998	160	19,979
	<1%	2%	7%	20%	70%	1%	100%



Existing Conditions and Needs Assessment Technical Memo



As shown in **Table 10**, 31,658 reported crashes within the DARTS MPO between 2018 and 2022, there were 103 fatalities, 579 serious injuries, 1,858 visible injuries, and 9,139 complaints of injury. Like the number of fatal crashes, the number of fatalities has increased over time but injuries by year have fluctuated slightly between 2018 and 2022. Fatal and serious injury crashes are discussed in further detail in this section and are mapped in **Figure 30**.

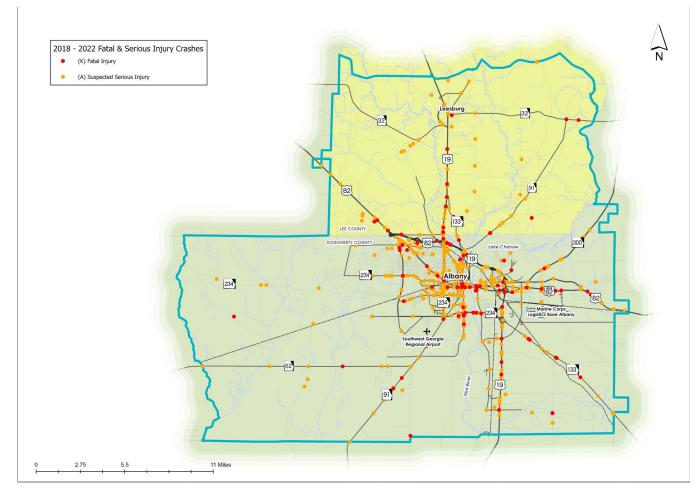
Table 1011: DARTS MPO Crashes by Number of Fatalities and Injuries

Year	Fatalities a	and Injuries									Total
	Fatal Crashes	# of Fatalities	Serious Injury Crashes	# of Serious Injuries	Minor Injury Crashes	# of Minor/Visible Injuries	Complaint of Injury Crashes	PDO Crashes	Unknown Crashes	Other Injuries	Crashes
2018	9	11	87	102	222	307	820	2,930	2	1,798	6,288
2019	13	13	106	143	292	416	868	2,827	25	2,061	6,764
2020	18	19	92	107	277	393	709	2,453	57	1,668	5,793
2021	26	29	106	125	297	427	831	3,019	45	1,991	6,896
2022	31	31	74	102	235	315	708	2,769	31	1,621	5,917
Total	97	103	465	579	1,323	1,858	3,936	13,998	160	9,139	31,658
	0.3%	0.3%	1.5%	1.8%	4.2%	5.9%	12.4%	44.2%	0.5%	28.9%	100%





Figure 30: DARTS MPO Reported Fatal and Serious Injury Crashes (2018-2022)







As shown in **Table 11**, there were 97 reported fatal crashes between 2018 and 2022, which resulted in 103 fatalities, 25 serious injuries, 28 minor/visible injuries, and 80 other injury complaints.

Year	Reported	Fatalities a	nd Injuries			Total
	Fatal Crashes	# of Fatalities	# of Serious Injuries	# of Minor/Visible Injuries	Other Injuries	Crashes
2018	9	11	0	6	7	9
2019	13	13	9	5	24	13
2020	18	19	4	4	13	18
2021	26	29	4	9	20	26
2022	31	31	8	4	16	31
Total	97	103	25	28	80	97

Table 1112: DARTS MPO Reported Fatalities and Injuries by Year from Fatal Crashes

Source: GDOT Numetric

6.2.1 Fatal Crashes by Type

A breakdown of fatal crashes by type within the DARTS MPO is shown in **Table 12.** The largest share of fatal crashes (53%) were single-vehicle crashes or crashes not with a motor vehicle (compared to 22 percent of all reported crashes within the DARTS MPO between 2018 and 2022). 21 percent of fatal crashes were angle crashes (versus 34 percent overall), and 10 percent were rear-ending crashes (versus 29 percent overall). Head on crashes comprised 8 percent of fatal crashes (compared to two percent overall). 7 percent of fatal crashes were sideswipe crashes (compared to 13 percent overall).





Existing Conditions and Needs Assessment Technical Memo

Year	Fatal C	rashes	by Type					Total
	Angl e	Hea d On	Rear End	Sideswipe -Same Direction	Sideswipe -Opposite Direction	Not A Collisio n with Motor Vehicle	Not Specifie d	Crashe s
2018	2	1	1	0	0	5	0	9
2019	3	0	2	1	1	5	1	13
2020	3	4	2	1	2	6	0	18
2021	7	1	0	0	0	18	0	26
2022	5	2	5	2	0	17	0	31
Total	20	8	10	4	3	51	1	97
	21%	8%	10%	4%	3%	53%	1%	100%

Table 1213: DARTS MPO Reported Fatal Crashes by Type

Source: GDOT Numetric

6.2.2 Fatal Crashes by Lighting Condition

A breakdown of fatal crashes by lighting condition within the DARTS MPO over the past five years is shown in **Table 13.** Nearly half of fatal crashes (45 percent) occurred in daylight conditions (compared to 72 percent overall). Crashes in dark-not lighted conditions represented approximately 31 percent of fatal crashes (compared to 9 percent overall). 23 percent of fatal crashes were in dark, lighted conditions (compared to 17 percent overall).

Table 1314: DARTS MPO Reported Fatal Crashes by Lighting Condition

Year	Fatal Ci	ashes by L	ighting C	ondition			Total
	Dawn	Daylight	Dusk	Dark- Lighted	Dark-Not Lighted	Not Specified	Crashes
2018	0	3	0	2	4	0	9
2019	0	9	0	0	4	0	13
2020	0	10	0	0	8	0	18
2021	0	14	0	8	4	0	26
2022	0	8	1	12	10	0	31
Total	0	44	1	22	30	0	97
	0%	45%	1%	23%	31%	0%	100%





6.2.3 Fatal Crashes by Road Surface Condition

A breakdown of fatal crashes by road surface condition within the DARTS MPO is shown in **Table 14**. Approximately 77 percent of fatal crashes within the MPO occurred in dry conditions (compared to 86 percent overall). Crashes in wet conditions represented approximately 20 percent of fatal crashes (compared to 13 percent overall). 3 percent of fatal crashes occurred in other conditions.

Year	Road Sur	face				Total	
	Dry	Wet	Snow/Ice	Other	Unknown	Crashes	
2018	8	0	0	1	0	9	
2019	10	2	0	1	0	13	
2020	14	4	0	0	0	18	
2021	18	7	0	1	0	26	
2022	25	6	0	0	0	31	
Total	75	19	0	3	0	97	
	77%	20%	0%	3%	0%	100%	

Table 1415: DARTS MPO Reported Fatal Crashes by Road Surface Condition

Source: GDOT Numetric

6.3 Serious Injury Crashes

According to **Table 15**, there were 465 reported serious injury crashes which resulted in 554 serious injuries, 124 minor/visible injuries, and 830 other injury complaints.

Table 1516: DARTS MPO Reported Fatalities and Injuries by Year from Serious InjuryCrashes

Year	Injuries by Type in Se	Total		
	# of Serious Injuries	# of Minor/Visible Injuries	Other Injuries	Crashes
2018	102	18	142	87
2019	134	23	205	106
2020	103	29	153	92
2021	121	25	186	106
2022	94	29	144	74
Total	554	124	830	465





6.3.1 Serious Injury Crashes by Type

A breakdown of serious injury crashes by type within the DARTS MPO is shown in **Table 16.** 37 percent of serious crashes were angle crashes (versus 34 percent overall) and 34 percent were single-vehicle crashes or crashes not with a motor vehicle (compared to 22 percent overall). 15 percent were rear-ending crashes (versus 29 percent overall) 7 percent of serious injury crashes were sideswipe crashes (compared to 13 percent overall), and head on crashes comprised 7 percent of fatal crashes (compared to 2 percent overall).

Year	Serious Injury Crashes by Type							Total
	Angl e	Hea d On	Rear End	Sideswipe -Same Direction	Sideswipe -Opposite Direction	Not A Collision with Motor Vehicle	Not Specifie d	Crashe s
2018	28	6	11	3	2	37	0	87
2019	51	3	17	5	2	28	0	106
2020	32	7	8	8	1	36	0	92
2021	36	7	23	4	3	33	0	106
2022	24	8	11	3	2	26	0	74
Tota l	171	31	70	23	10	160	0	465
	37%	7%	15%	5%	2%	34%	0%	100%

Table 1617: DARTS MPO Reported Serious Injury Crashes by Type





6.3.2 Serious Injury Crashes by Lighting Condition

A breakdown of serious injury crashes by lighting condition within the DARTS MPO over the past five years is shown in **Table 17**. Approximately 64 percent of serious injury crashes within the MPO occurred in daylight conditions (compared to 72 percent overall). Crashes in dark-not lighted conditions represented approximately 12 percent of serious injury crashes (compared to nine percent overall). Twenty-two percent of serious injury crashes were in dark, lighted conditions (compared to 17 percent overall).

Year	Serious	Total					
	Dawn	Daylight	Dusk	Dark- Lighted	Dark-Not Lighted	Not Specified	Crashes
2018	1	52	0	20	14	0	87
2019	2	74	0	22	8	0	106
2020	0	63	0	21	8	0	92
2021	0	68	3	22	13	0	106
2022	0	42	1	18	13	0	74
Total	3	299	4	103	56	0	465
	1%	64%	1%	22%	12%	0%	100%

Table 1718: DARTS MPO Reported Serious Injury Crashes by Lighting Condition





6.3.3 Serious Injury Crashes by Road Surface Condition

A breakdown of serious injury crashes by road surface condition within the DARTS MPO is shown in **Table 18**. Approximately 88 percent of serious injury crashes within the MPO occurred in dry conditions (compared to 86 percent overall). Crashes in wet conditions represented approximately 12 percent of serious injury crashes (compared to 13 percent overall).

Year	Road Sur	Road Surface					
	Dry	Wet	Snow/Ice	Other	Unknown	Crashes	
2018	75	12	0	0	0	87	
2019	92	14	0	0	0	106	
2020	79	12	0	1	0	92	
2021	93	13	0	0	0	106	
2022	70	4	0	0	0	74	
Total	409	55	0	1	0	465	
	88%	12%	0%	0%	0%	100%	

Table 1819: DARTS MPO Reported Serious Injury Crashes by Road Surface Condition





6.4 Pedestrian and Bicycle Crashes

Most roadway crashes within the DARTS MPO boundaries between 2018 and 2022 involved vehicles exclusively. However, travelers who do not drive or ride in vehicles are particularly vulnerable to severe injuries or death if involved in a roadway crash. The most vulnerable roadway users are pedestrians, bicyclists, motorcyclists, and scooter riders. The subset of crash types is analyzed in this section.

A breakdown of crashes involving vulnerable roadway users within the DARTS MPO is included in **Table 19**. There were 75 bicycle crashes, 184 pedestrian crashes, 130 motorcycle crashes, and 28 scooter crashes during this period. There were consistently 15 to 20 reported bicycle crashes across the MPO annually. Pedestrian crashes increased from 2018 to 2019 before decreasing in 2020 and then almost returning to 2019 levels by 2022. Motorcycle crashes, on the other hand, continued to decrease after the onset of the COVID-19 pandemic in 2020. Scooter crashes increased each year between 2018 and 2021 before decreasing in 2021.

Year	ar Crashes Involving Vulnerable Roadway Users					Total
	Bicycle	Pedestria	Motorcycl	Scooter	Other	Crashes
		n	е			
2018	14	29	24	1	4,002	4,070
2019	20	46	32	4	4,029	4,131
2020	16	37	27	8	3,518	3,606
2021	10	31	24	10	4,249	4,324
2022	15	41	23	5	3,764	3,848
Total	75	184	130	28	19,562	19,979
	<1%	1%	<1%	<1%	98%	100%

Table 1920: DARTS MPO Crashes Involving Vulnerable Roadway Users

Source: GDOT Numetric

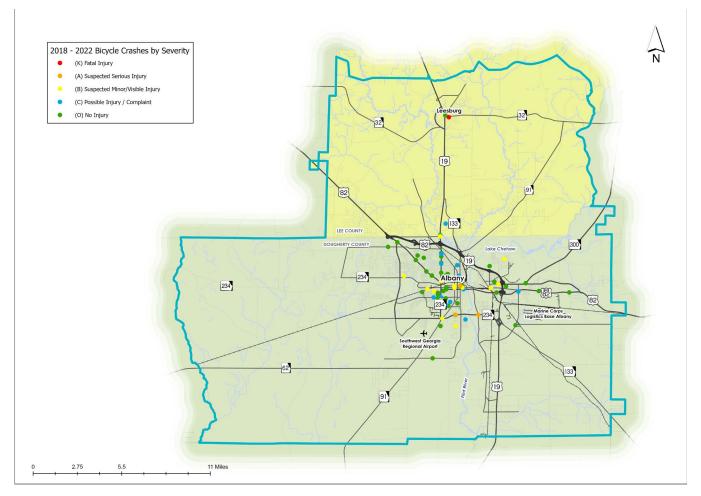
Bicycle, pedestrian, motorcycle, and scooter crashes are mapped in **Figure 31**, **Figure 32**, **Figure 33**, and **Figure 34** respectively. As shown, most vulnerable roadway user crashes occurred within the City of Albany, but there are also some in more sparsely developed areas of the MPO and in Leesburg. The next section includes a summary of fatal and serious injury crashes among vulnerable roadway users.





Figure 31 identifies locations of bicycle crashes within the DARTS planning area. It shows that only one fatal crash, and three serious injury crashes occurred with bicycles. Most of the injuries identified occurred within the Albany urban core. The single fatal accident occurred in Leesburg.

Figure 31: DARTS MPO Reported Bicycle Crashes by Severity (2018-2022)



Source: GDOT Numetric





Figure 32 shows a large number of fatal and severe crashes occurred primarily in the City of Albany. Several of the fatal crashes occurred along US 19, US 82 and in downtown Albany. Locations of serious injury accidents also primarily occurred within the City of Albany.

Figure 32: DARTS MPO Reported Pedestrian Crashes by Severity (2018-2022)

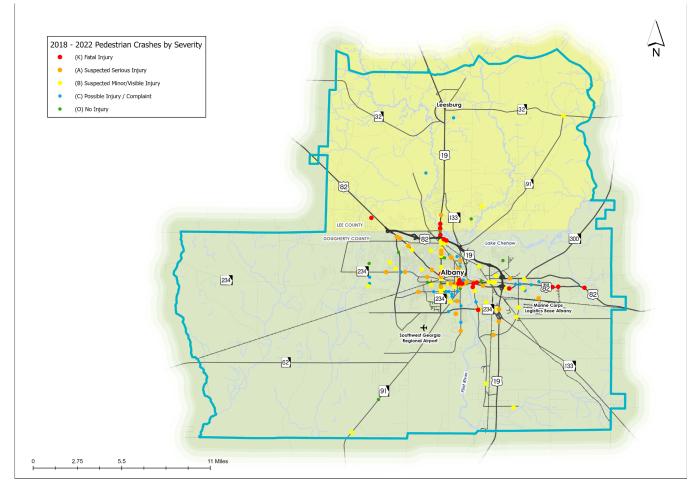
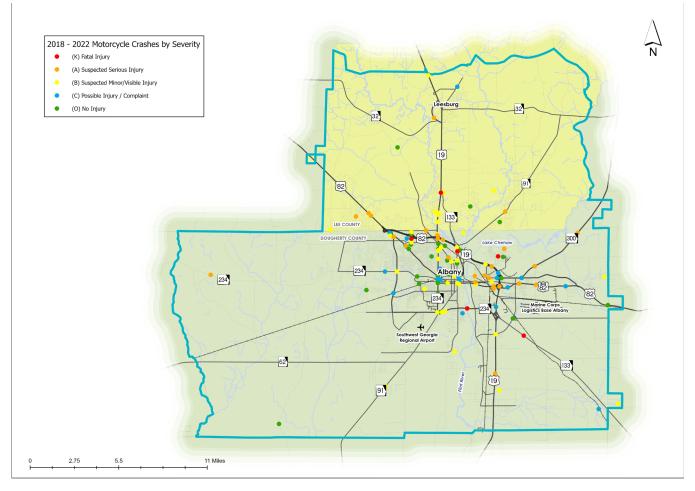






Figure 33 shows that fatal and serious injury motorcycle crashes again primarily in the urban core of Albany, but are more spread out across the city.

Figure 33: DARTS MPO Reported Motorcycle Crashes (2018-2022)



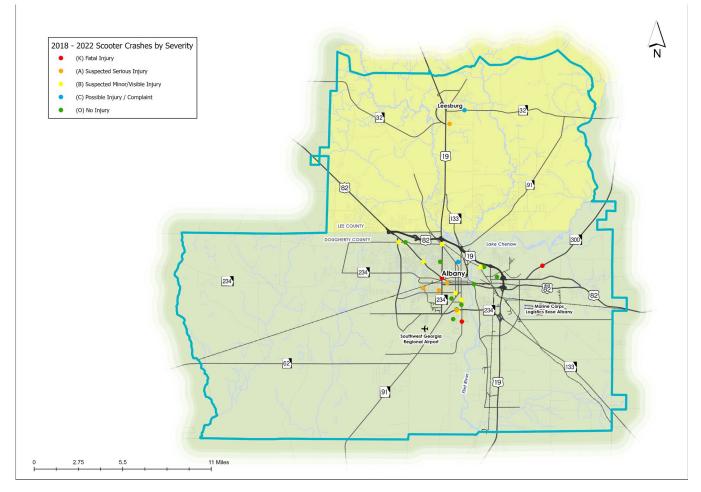




Existing Conditions and Needs Assessment Technical Memo

Figure 34 illustrates the locations of scooter involved crashes. Three fatal scooter crashes were recorded over the five-year period. Scooter crashes also appear to be concentrated in the City of Albany.

Figure 34: DARTS MPO Reported Scooter Crashes (2018-2022)







6.4.1 Fatal Crashes Involving Vulnerable Roadway Users

A breakdown of fatal crashes involving vulnerable roadway users within the DARTS MPO is included in **Table 20**. There were 19 fatal pedestrian crashes (10 percent of all reported pedestrian crashes), six fatal motorcycle crashes (5 percent of all reported motorcycle crashes), three fatal scooter crashes (21 percent of all reported scooter crashes), and one fatal bicycle crash during this time.

Year	Crashes	Crashes Involving Vulnerable Roadway Users						
	Bicycle	Pedestrian	Motorcycle	Scooter	Other	Crashes		
2018	0	2	0	0	7	9		
2019	0	1	1	0	11	13		
2020	1	2	2	0	13	18		
2021	0	6	2	1	17	26		
2022	0	8	1	2	20	31		
Total	1	19	6	3	68	97		
	1%	20%	6%	3%	70%	100%		

Table 2021: DARTS MPO Reported Fatal Crashes Involving Vulnerable Roadway Users





6.4.2 Serious Injury Crashes Involving Vulnerable Roadway Users

A breakdown of serious injury crashes involving vulnerable roadway users within the DARTS MPO is included in **Table 21**. There were 43 pedestrian crashes (23 percent of all reported pedestrian crashes), 28 fatal motorcycle crashes (22 percent of all reported motorcycle crashes), 6 scooter crashes (21 percent of all reported scooter crashes), and three bicycle crashes (4 percent of all reported bicycle crashes) that resulted in serious injuries.

Table 2122: DARTS MPO Reported Serious Injury Crashes Involving Vulnerable RoadwayUsers

Year	Crashes	Crashes Involving Vulnerable Roadway Users							
	Bicycle	Pedestrian	Motorcycle	Scooter	Other	Crashes			
2018	2	9	7	0	69	87			
2019	0	12	5	0	89	106			
2020	1	11	6	2	72	92			
2021	0	6	4	3	93	106			
2022	0	5	6	1	62	74			
Total	3	43	28	6	385	465			
	0.65%	9%	6.02%	1.29%	83%	100%			





6.5 High Crash Intersections and Highway Links

6.5.1 Highest Intersection Crash Locations

High-crash intersections were identified by creating a 300-foot radius around each roadway intersection in the DARTS MPO area and enumerating the number of crashes within each 300-foot radius through geospatial analysis.

Table 22 shows a ranking of the top 20 intersections by the number of overall crashes. The highest ranked location within the DARTS MPO is at the intersection of Nottingham Way and North Westover Boulevard/Liberty Expressway (US 82/SR 520) Eastbound Ramp, located to the east of Albany Mall, with 298 crashes. These top 20 locations are almost all exclusively within the City of Albany. The high-crash intersections are mapped and labeled by rank in **Figure 35**.

Table 2223: Top 20 Intersections by Overall Crashes Within DARTS MPO (2018-2022)

Rank	Location (locations outside City of Albany)	# of Crashes	Fatal Crashes	Serious Injury Crashes
1	Nottingham Way @ N Westover Blvd/Liberty Expwy (US 82/SR 520) EB Ramp	298	1	4
2	Dawson Rd @ N Westover Blvd	242	0	4
3	Dawson Rd @ Westgate Rd/Whispering Pines Rd	224	0	2
4	N Slappey Blvd (US 19 Bus/US 82 Bus/SR 520 Bus) @ Palmyra Rd	200	0	1
5	Slappey Blvd (US 19/US 82/SR 520 Bus/SR 234) @ E Oglethopre Blvd (US 19/US 82/SR 520 Bus)	195	0	1
6	N Slappey Blvd (US 19 Bus/US 82 Bus/SR 520 Bus) @ Dawson Rd/Pine Ave	186	1	2
7	S Westover Blvd @ Gillionville Rd (SR 234)	164	1	1
8	E Oglethorpe Blvd (US 19 Bus/US 82 Bus/SR 520 Bus) @ Radium Springs Rd/N Broadway St	158	2	4
9	N Slappey Blvd (US 19 Bus/US 82 Bus/SR 520 Bus/SR 234) @ W Broad Ave	148	0	2
10	W Oglethorpe Blvd (US 19 Bus/US 82 Bus/SR 520 Bus) @ S Jefferson St (SR 91)	144	0	3
T11	Dawson Rd @ Old Dawson Rd/Stuart Ave	142	0	2







METROPOLITAN TRANSPORTATION PLAN 2050 UPDATE



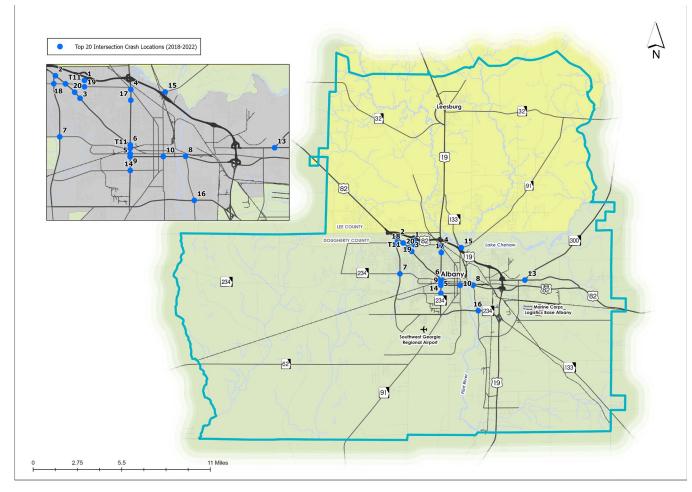
Existing Conditions and Needs Assessment Technical Memo

Rank	Location (locations outside City of Albany)	# of Crashes	Fatal Crashes	Serious Injury Crashes
T11	N Slappey Blvd (US 19 Bus/US 82 Bus/SR 520 Bus/SR 234) @ Gillionville Rd (SR 234)	142	0	0
13	Clark Ave (US 82/SR 520) @ Cordele Rd (SR 300)	133	0	2
14	S Slappey Blvd (SR 234) @ W Gordon Ave	131	0	0
15	N Jefferson St (SR 91) @ Philema Rd (SR 91)/Liberty Expwy (US 82/SR 520/US 19/SR 3)	123	0	1
16	E Oakridge Dr (SR 234) @ Radium Springs Rd	115	1	4
17	N Slappey Blvd (US 19 Bus/US 82 Bus/SR 520 Bus) @ Whispering Pines Rd	110	0	2
18	N Westover Blvd @ Old Dawson Rd	103	0	3
19	Nottingham Way @ Stuart Ave	100	0	1
20	Dawson Rd @ Meredyth Dr	99	0	3





Figure 35: Top 20 Intersections by Overall Crashes Within DARTS MPO (2018-2022)



Source: GDOT Numetric

6.5.2 High Fatal Crash Locations

Across the DARTS MPO, there were two intersections with more than one reported fatal crash from 2018 to 2022:

- Gravel Hill Road at Nelms Road
- E Oglethorpe Boulevard (US 82 Bus/SR 520 Bus/US 19 Bus) at Radium Springs Road/Broadway Street

The second of these intersections is the eighth ranked intersection overall for number of reported crashes. In addition to these two locations, there were 58 intersections with one fatal crash across the MPO, most of which were in the City of Albany.

6.5.3 High Serious Injury Crash Intersections

Table 23 shows a ranking of the 21 intersections with at least three serious injury crashes reported between 2018 and 2022. Illustrated by Figure 36, the intersections with the highest number of serious injuries are spread more widely throughout the MPO – in addition to the City





of Albany, they include locations in the City of Leesburg and unincorporated portions of Dougherty and Lee counties. Of the 21 intersections, the intersection of Liberty Expressway (US 19/SR 3/SR 300) at Nelms Road has the highest number of serious injury crashes (7), followed by Moultrie Road (SR 133) at County Line Road (5). Both are unsignalized intersections. There are also six intersections with four serious injury crashes each, and thirteen intersections with three serious injury crashes each.

Rank	Location (locations outside City of Albany)	# of Crashes	Fatal Crashes	Serious Injury Crashes
1	Liberty Expwy (US 19/SR 3/SR 300) @ Nelms Rd	35	1	7
2	Moultrie Rd (SR 133) @ County Line Rd	24	0	5
Т3	Nottingham Way @ N Westover Blvd/Liberty Expwy (US 82/SR 520) EB Ramp	298	1	4
Т3	Dawson Rd @ N Westover Blvd	242	0	4
Т3	E Oglethorpe Blvd (US 19 Bus/US 82 Bus/SR 520 Bus) @ Radium Springs Rd/N Broadway St	158	2	4
Т3	E Oakridge Dr (SR 234) @ Radium Springs Rd	115	1	4
Т3	N Slappey Blvd (US 19/SR 3) @ Ledo Rd	96	0	4
Т3	E Oglethorpe Blvd (US 82 Bus/SR 520 Bus) @ Loftus Dr/Rosebrier Ave	58	0	4
Т9	W Oglethorpe Blvd (US 19 Bus/US 82 Bus/SR 520 Bus) @ S Jefferson St (SR 91)	144	0	3
Т9	N Westover Blvd @ Old Dawson Rd	103	0	3
Т9	Dawson Rd @ Meredyth Dr	99	0	3
Т9	W Oakridge Dr @ Martin Luther King Jr Dr	91	0	3
Т9	E Oglethorpe Blvd (US 19 Bus/US 82 Bus/SR 520 Bus) @ Cason St	72	1	3
Т9	N Jefferson St (SR 91) @ W Pine Ave	65	1	3
Т9	E Broad Ave @ N Broadway St	61	1	3
T 9	Sylvester Rd (US 82 Bus/SR 520 Bus/SR 300) @ Cordele Rd (SR 300)	48	0	3
T 9	Sylvester Rd (US 82/SR 520) @ County Line Rd	39	0	3

Table 2324: Intersections With at Least Three Serious Injury Crashes (2018-2022)







METROPOLITAN TRANSPORTATION PLAN 2050 UPDATE

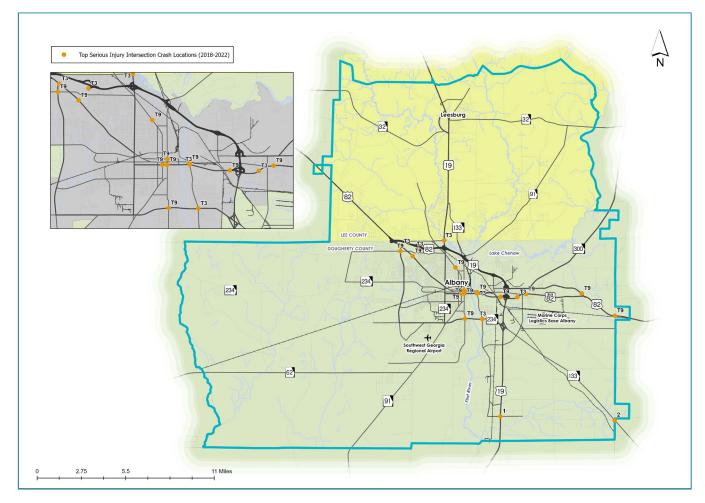


Existing Conditions and Needs Assessment Technical Memo

Rank	Location (locations outside City of Albany)	# of Crashes	Fatal Crashes	Serious Injury Crashes
Т9	W Oglethorpe Blvd (US 19 Bus/US 82 Bus/SR 520 Bus) @ Monroe St	38	0	3
Т9	Clark Ave (US 82/SR 520) @ Hill Rd	28	0	3
Т9	US 82/SR 520 @ Oakland Rd	23	0	3
Т9	Palmyra Rd @ 9th Ave/10th Ave	12	0	3

Source: GDOT Numetric

Figure 36: Intersections With at Least Three Serious Injury Crashes (2018-2022)







6.6 Corridor Crash Analysis

According to the FHWA Highway Safety Manual (HSM), crash rates are defined as the number of crashes that occur at a given site during a certain time in relation to a particular measure of exposure. It is typically measured as crashes per million vehicle miles (MVM) traveled for a roadway segment. Crash rates normalize the number of crashes that take place along a corridor within a certain period based on the length of the corridor and average annual daily traffic (AADT).

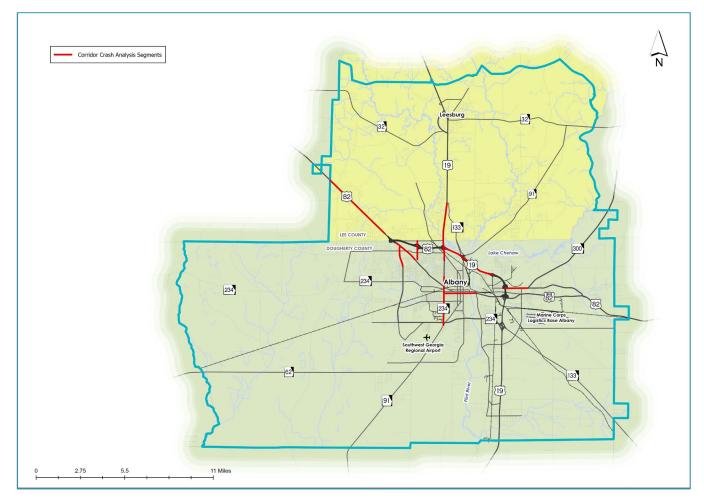
This section of the crash analysis examines all crashes that occurred on major corridors across the MPO. The corridor crash analysis was conducted for roadways that carry substantial volumes of traffic and have higher crash densities across the DARTS MPO area. This includes two urban freeway segments, nine principal arterial segments, and one urban major collector segment. Corridor crash rates are listed and compared to the statewide average crash rate for that corridor's functional classification as designated by GDOT. Statewide average crash rates utilized for this analysis do not account for 2022 statewide crash rates which were unavailable at the time of the analysis. Corridors which were examined as part of this analysis are shown in **Figure 37**.





Existing Conditions and Needs Assessment Technical Memo

Figure 37: Corridor Crash Analysis Locations



Source: GDOT Numetric

6.6.1 Urban Freeways

The project team analyzed two urban freeway segments that have high crash concentrations: Liberty Expressway from Blaylock Street to Jefferson Street, and Liberty Expressway from Jefferson Street to Slappey Boulevard. The project team elected to not analyze Oglethorpe Boulevard and Blaylock Street due to low reported crash frequency compared to the portion of the corridor between Slappey Boulevard (US 19/SR 3) and Blaylock Street. The section between Dawson Road and Slappey Boulevard (US 19/SR 3) was not considered due to the then-ongoing interchange project to extend Westover Boulevard across the Liberty Expressway northward towards Ledo Road.

The results of the corridor crash analysis are shown in **Table 24**. Between Blaylock Street and Jefferson Street, the total crash rate on Liberty Expressway is comparable to the statewide average but exceeds the statewide average for both injury and fatal crashes. Between Jefferson Street and Slappey Boulevard, the total crash rate is slightly below the statewide average, but





the injury and fatal crash rates both exceed the statewide average for urban freeways. In particular, the fatal crash rates exceed the statewide average by a magnitude of 5.6 to 7.4.

Table 2425: Urban Freeway Corridor Average Annual Crashes and Crash Rates (2018-2022)

Corridor	Average Annual Crashes			Crashes Per 100 million Vehicle Miles ¹		
	Total	Injury	Fatal	Total	Injury	Fatal
Liberty Expwy (Blaylock St to Jefferson St)	55	18	1	170 (172)	55 (44)	3.08 (0.55)
Liberty Expwy (Jefferson St to Slappey Blvd)	35	12	1	142 (172)	49 (44)	4.05 (0.55)

¹The number in parentheses is the statewide average for urban freeways.

Source: GDOT Numetric

6.6.2 Urban Principal Arterials

The project team analyzed nine urban principal arterial segments across the MPO that have high crash concentrations compared to other corridors. These nine segments include portions of Clark Avenue (US 82/SR 520), Dawson Road in the vicinity of Albany Mall and adjacent retail and commercial land uses, Oglethorpe Boulevard (US 82 Bus/US 19 Bus/SR 520 Bus) within Downtown Albany, Slappey Boulevard (US 19 Bus/SR 3 Bus) throughout the City of Albany, and North Westover Boulevard, US 19 in southern Lee County, and US 82 in southwestern Lee County.

Table 25 shows results of this crash rate analysis for the select urban principal arterials. One of the segments, Oglethorpe Boulevard (US 19 Bus/SR 234/SR 520 Bus) between Slappey Boulevard (US 19 Bus/SR 234/SR 520 Bus) and Radium Springs Road, has crash rates that exceed the statewide average for total crashes, injury crashes, and fatal crashes.

One segment, US 19 in Lee County from Ledo Road to Forrester Parkway (SR 133), has a fatal crash rate that exceeds the statewide average.

There are five corridors with total and injury crash rates that exceed the statewide average for urban principal arterials:

- Dawson Road between Westgate Dr/Whispering Pines Road and Pointe North Boulevard
- South Slappey Boulevard (SR 234) between Newton Road (SR 91) and Oglethorpe Boulevard (US 82 Bus/US 19 Bus/SR 520 Bus)
- Slappey Boulevard (US 19 Bus/SR 234/SR 520 Bus) between Oglethorpe Boulevard (US 82 Bus/US 19 Bus/SR 520 Bus) and West 3rd Avenue
- Slappey Boulevard (US 19 Bus/SR 234/SR 520 Bus) between Whispering Pines Road and Ledo Road
- Westover Boulevard from Westgate Drive to Dawson Road





Of these, Slappey Boulevard from Newton Road to Oglethorpe Boulevard has the highest injury crash rate, which is over twice the statewide average. Similarly, Slappey Boulevard from Whispering Pines Road to Ledo Road has a total crash rate that is nearly twice that of the statewide average.

 Table 2526: Urban Principal Arterial Average Annual Crashes and Crash Rates (2018-2022)

Corridor	Average Annual Crashes		Crashes Per 100 million Vehicle Miles ¹			
	Total	Injury	Fatal	Total	Injury	Fatal
Clark Ave (Liberty Expwy to Cordele Rd)	49	12	0	437 (538)	107 (136)	0.00 (1.60)
Dawson Rd	110	29	0	815	215	0.00
(Westgate Dr/Whispering Pines Rd to Pointe North Blvd)				(538)	(136)	(1.60)
Oglethorpe Blvd (Slappey Blvd to Radium Springs Rd)	131	40	1	755 (538)	231 (136)	5.77 (1.60)
Slappey Blvd (Newton Rd to Oglethorpe Blvd)	79	28	0	868 (538)	307 (136)	0.00 (1.60)
Slappey Blvd (Oglethorpe Blvd to 3 rd Ave)	111	29	0	943 (538)	246 (136)	0.00 (1.60)
Slappey Blvd (Whispering Pines Rd to Ledo Rd)	116	32	0	1,059 (538)	292 (136)	0.00 (1.60)
US 19 in Lee County (Ledo Rd to Forrester Pkwy)	48	20	1	286 (538)	119 (136)	5.96 (1.60)
US 82 in Lee County	52	22	0	125	53	0.00
(Ledo Rd to Terrell County Line)				(538)	(136)	(1.60)
Westover Blvd (from Westgate Dr to Dawson Rd)	67	21	0	724 (538)	227 (136)	0.00 (1.60)

¹The number in parentheses is the statewide average for urban principal arterials.





6.6.3 Urban Major Collectors

One urban collector corridor had a high crash concentration across the MPO, and this was along Nottingham Way between Whispering Pines Road and Ledo Road in northwestern Albany. According to **Table 26**, the total and injury crash rates for Nottingham Way far exceed the statewide average crash rates for urban major collectors.

Table 2627: Urban Collector Average Annual Crashes and Crash Rates (2018-2022)

Corridor	Average Annual Crashes			Crashes Per 100 Million Vehicle Miles ¹		
	Total	Injury	Fatal	Total	Injury	Fatal
Nottingham Way (Whispering Pines Rd to Ledo Rd)	66	16	0	930 (397)	226 (105)	0.00 (1.14)

¹The number in parentheses is the statewide average for urban major collectors.



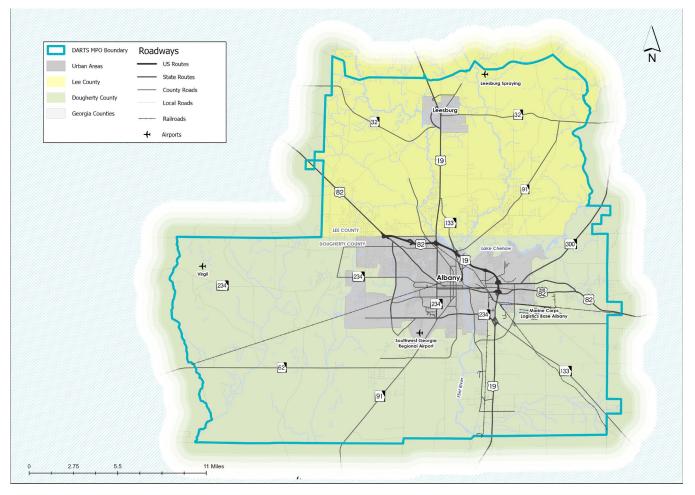


7. Aviation and Air Cargo

7.1 Overview of Regional Airports

Southwest Georgia Regional Airport (ABY) is a commercial service airport in Dougherty County, southwestern Georgia. It supports a variety of aviation activities, including commercial services, recreational flying, and air cargo operations. The airport has two runways and is identified by critical aircraft as an Airbus 300-600F. UPS and Delta Air Lines are the major operators, with UPS handling a significant portion of the air cargo through a dedicated facility. Major destinations for the UPS air cargo operations include Jacksonville, Louisville, Orlando, Pensacola, and Philadelphia.

Figure 38: Airports



Source: Bureau of Transportation Statistics





7.2 Air Cargo Facilities and Trends

The primary air cargo operator at ABY is UPS, which utilizes its own aircraft and those of Martinaire Aviation LLC. The airport has a dedicated air cargo facility operated by UPS, indicating a specialized focus on cargo operations. UPS operates daily flights connecting ABY with key locations, showcasing the airport's role in regional and national logistics networks.

- Facilities: ABY hosts a dedicated UPS cargo facility with a concrete apron of approximately 362,262 square feet, supporting day and night shifts. The cargo apron and facility face capacity challenges, with plans for expansion to meet growing demand.
- Operations and Trends: ABY has a significant role in e-commerce as the primary generator of air cargo, followed by urgent medical and legal shipments. The pandemic has notably increased e-commerce levels, affecting off-season volumes and challenging capacity forecasting.
- Future Plans: Expansion plans include doubling the cargo apron space to accommodate increased operations, alongside marketing 85 acres of land for aeronautical development.

Figure 39 illustrates the hypothetical trend of air cargo volume at Southwest Georgia Regional Airport (ABY), showing a consistent increase in cargo volumes over the years, with a notable rise in recent years, likely reflecting the impact of e-commerce growth and the pandemic's influence on shipping volumes.

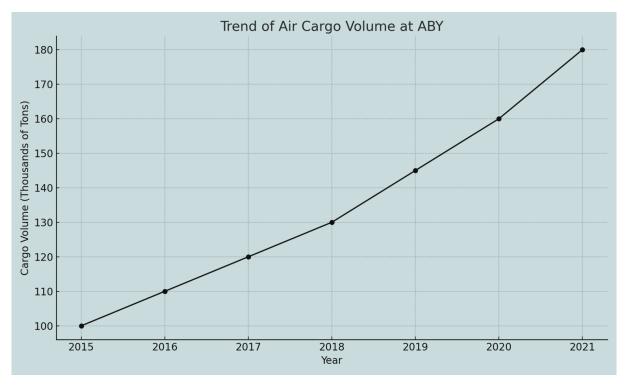


Figure 39: Trend of Air Cargo Volume

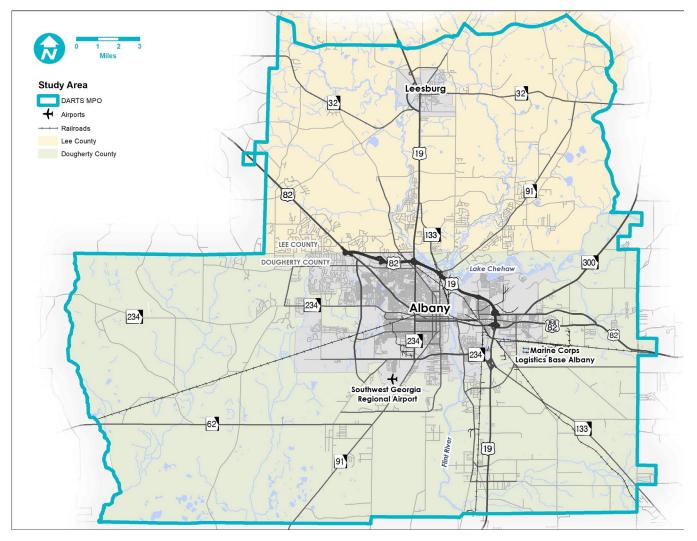




8. Freight

The DARTS study area's freight network is composed of a primarily 4-lane highway system (utilized for commodity flow via truck movement), around 310 miles of railroad track, and the Southwest Georgia Regional Airport (ABY). See **Figure 40** for the full freight network.

Figure 40: DARTS Freight Network



Source: DARTS Freight Plan 2022

8.1 Truck Movements

Data provided by GDOT's Traffic Analysis and Data Application (TADA) highlights the truck AADT by roadway in the DARTS region for 2020 as shown in **Figure 41**.

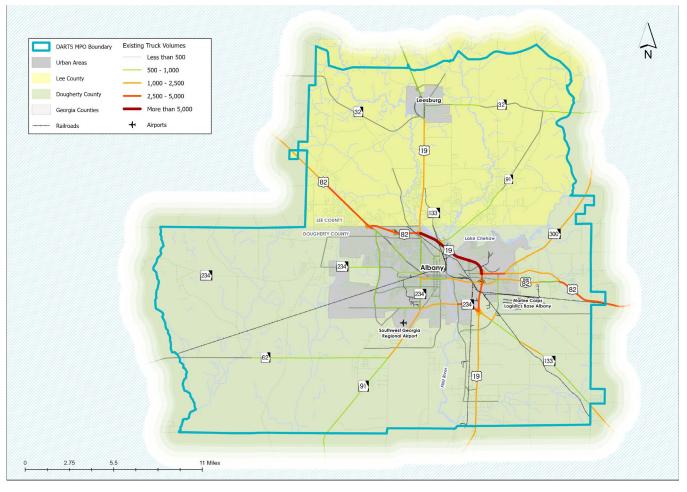
Analysis reveals that truck movement in the DARTS study area is dominated by the Liberty Expressway in Dougherty County, where US 19 and US 82 run concurrently between the North Slappey Boulevard Interchange in North Albany and the Clark Avenue Interchange in East Albany; the expressway averages over 5000 truck per day, and both Interstates on their own





(within Albany city limits) get between 2500 and 5000 vehicles per day. Truck movement on these interstates, and on the overall road network, is significantly lower in Lee County than in Dougherty County. The roadway with the largest truck volumes in Lee County is US 82, due to its overall prevalence for interregional freight movement. Other major highways in the region for truck movement include SR 300/Cordele Road (1000 to 2500 trucks per day), US 82 exiting the region to the east in Dougherty County (2500 to 5000 trucks per day), US 19 between Leesburg and Albany (1000 to 2500 trucks per day), and the segment of SR 91/Newton Road adjacent to ABY airport.

Figure 41: Existing Truck AADT (2022)



Source: GDOT Traffic Analysis and Data Application (TADA) (2020)

Figure 42 forecasts future truck AADT in the DARTS region based on predictions from the DARTS Regional Travel Demand Model. As shown below, freight truck volumes will increase particularly in the City of Albany, where roadways such as North Slappey Boulevard, Dawson Road, Oglethorpe Boulevard (particularly over the Flint River bridge) and North Westover Boulevard are expected to have substantially greater truck volumes than they currently do, with numerous accompanying arterial and collector roads in the city experiencing a similar increase. US 19 directly north of Albany will experience an increased truck volume range of 2500 to 5000





trucks per day, similar to North Slappey Boulevard (which it interchanges with at the northern perimeter of Albany's city limits). The Liberty Expressway will maintain its dominance over the region's truck movements with over 5000 trucks per day. Some other major highways are projected to go relatively unchanged (such as SR 133 in Dougherty County and US 19 south of Albany) while others are projected to decrease along certain roadway segments, such as US 82 in Lee County, SR 91/Newton Road in Dougherty County, SR 300/Cordele Road in Dougherty County exiting the region, and US 82 exiting the region in Dougherty County.

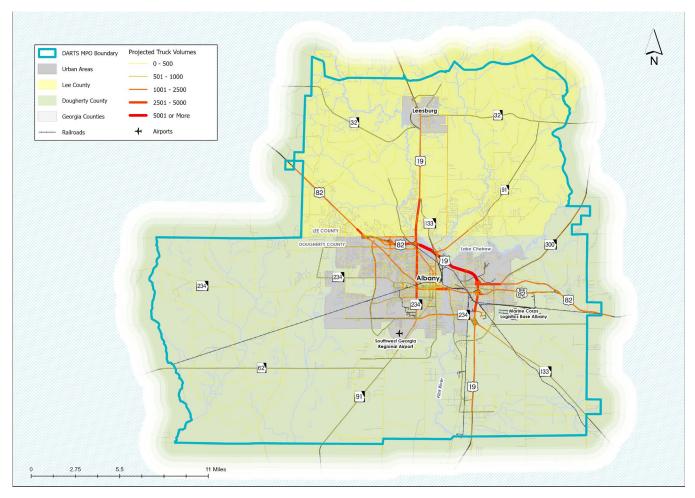


Figure 42: Projected Truck AADT (2050)

Source: DARTS Travel Demand Model (2024)





8.2 Truck Parking

The DARTS study area currently does not have any state sponsored truck parking or rest areas in the region. This is likely because an interstate does not pass through the DARTS study area. The nearest interstate to the region is I-75, which passes through the nearby municipalities of Tifton, Ashburn, and Cordele, which are accessible via US 82 (41.3 miles), US 82 and SR 112 (36.9 miles), and SR 300 (38.5 miles) respectively.

There are however four commercial travel centers that provide services to heavy commercial vehicles, including the following:

- Love's Travel Stop, 1737 Clark Avenue
- 3105 Ledo Road Parking
- Bloc Stop Travel Center, 1400 Moultrie Road
- Pilot Travel Center, 310 Cordele Road

With few locations available for truck drivers to stop, truckers are forced to either move on to somewhere outside the study area or potentially be forced to choose to park in an unauthorized location such as a highway ramp or a roadway not suitable for heavy vehicles. Unauthorized truck parking can be the cause of both congestion and potentially unsafe roadway conditions for other drivers. In addition, unauthorized truck parking can be the cause of damage to roadways and curbs that are not suited for heavy vehicle usage.

Because of this apparent gap in truck parking facilities, potential truck parking solutions should be identified later in this study to accommodate truck drivers in the region. Providing them safe locations to park their vehicles while resting will foster safer driving conditions throughout the region, and potentially save local maintenance funds due to roadway damage by unauthorized truck parking.

8.3 Freight Rail

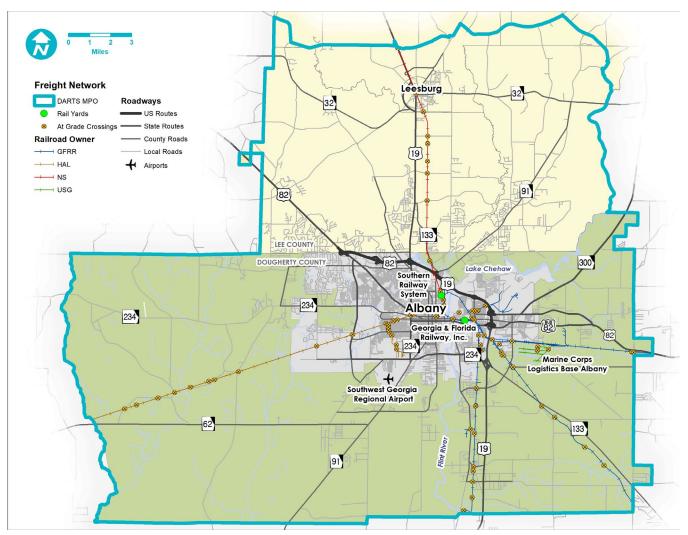
The DARTS study area is served by four railroads that total 310 miles of track (see **Figure 43** for a visualization of railroads by owner). The foremost of these is the Georgia and Florida Railway (GFRR), which is a Class III (or "Short Line") rail that extends 222 miles between Albany and northwestern Florida. Within the study area, GFRR has three tracks which exit the study area to the east, southeast, and south along US 82, SR 133, and US 19 respectively. Another Short Line in the region is the Hilton and Albany Railroad (HAL) which is 60 miles and exits the study area to the southwest toward Hilton, GA. In downtown Albany, adjacent to the Flint River, both Short Lines interchange with one another and with Norfolk Southern (NS), the only Class I railroad company operating in the study area, at two respective rail yards (see





Figure 43). The NS rail extends 22 miles through Lee County and Leesburg and exits the study area to the north. The US Marine Corps also operates 6 miles of track east of Albany.

Figure 43: Rail yards, at-grade crossings, and railroads by owner in DARTS region



Source: DARTS Freight Profile 2022

The DARTS region's freight rail operations are critical for supporting its forest products industrial sector, which is a major component of the local economy. The consulting team has identified connectivity to the Georgia and Florida Railway terminal in East Albany to be critical for improved freight rail movement in the region. Specifically, connectivity between East Oglethorpe Boulevard and the Georgia and Florida Railway terminal should be enhanced.

8.4 Intermodal Facilities

The DARTS study area features truck-to-air capabilities via the Southwest Georgia Regional Airport (ABY), which is the second-largest cargo airport in Georgia and serves as a sorting facility for the United Parcel Service (UPS). The interchange of Norfolk Southern, GFRR, and HAL





in downtown Albany is critical for interregional transport and intermodal truck-to-rail capabilities. The region sports various intermodal facilities that provide truck-to-rail and truck-to-last mile connection services, including XPO Logistics, FedEx Freight, Estes Express Lines, and the Marine Corps Logistics Base. Intermodal Rail Yards, ABY, and the Marine Corps Logistics are shown on **Figure 44**.

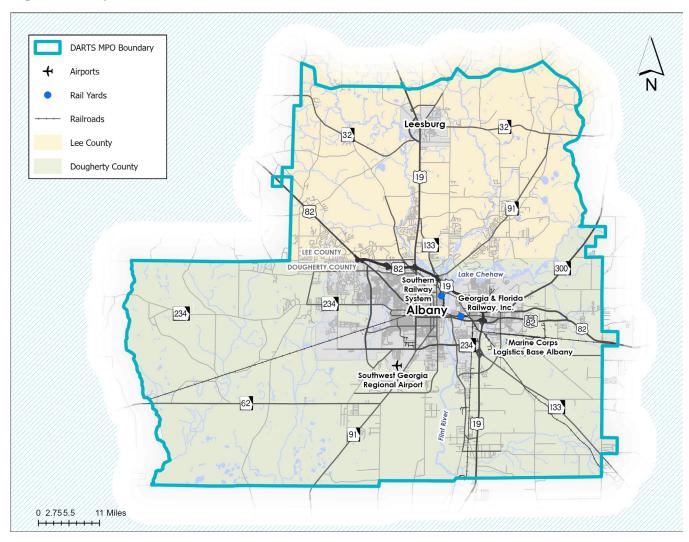


Figure 44: Key Intermodal Facilities

Source: DARTS, BTS, Google

Modal connections between ABY and the region's freight rail network and truck network are critical for supporting the economic development of existing and targeted industries. The consulting team has identified roadways critical for intermodal connectivity and should be prioritized for maintenance; they include Slappey Boulevard, Oakridge Drive, Newton Road, and East Oglethorpe Boulevard. Also, given the presence of industrial employers and special economic development zones in East Albany, there is great potential for the neighborhood to





become a freight and logistics hub with additional investment and access management strategies.

9. Transit

9.1 Existing Transit Service

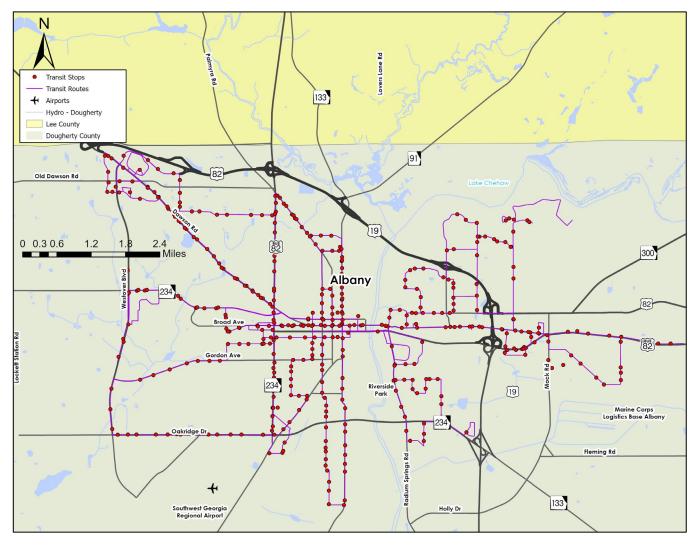
The Albany Transit System (ATS) manages the public transportation of fixed route bus services and paratransit services for ADA-eligible riders for the City of Albany. The fleet managed by ATS consists of 18 fixed route guideway vehicles, 6 ADA paratransit vehicles, and 2 ADA electric vans. Both the fixed route and paratransit services are wheelchair accessible, equipped with bicycle racks, and allow service animals in compliance with the Americans with Disabilities Act of 1990. They offer a "Passenger of the Quarter" program which allows patrons to become eligible for a monthly transit pass. Fixed route services offer free tickets for children under 5 and discounted tickets for seniors, disabled people, and children aged 6-12. Discounted monthly passes are offered for seniors, disabled people, and students. ATS services are generally offered from 6:15 AM – 5:15 PM Monday-Friday and 6:15 AM – 2:15 PM on Saturday. Tickets and passes are sold at the Transfer Station at 300 West Oglethorpe Avenue and the Transit Office at 712 Flint Avenue. Paratransit services can also be arranged over the phone, with customers being able to schedule up to three roundtrips with one phone call. There does not appear to be any online or app-based access to the ATS system.

Figure 45 provides a comprehensive overview of the fixed routes and bus stops contingent to the ATS public transport system. As shown in **Figure 46**, there are 12 fixed routes anchored by the Albany Transit Station in downtown Albany, which was completed in June 2022.





Figure 45: Albany Transit System Routes and Stops





<complex-block><complex-block><complex-block>

Figure 46: Albany Transit System Route Map

Source: Albany Transit System (2018)

9.2 Microtransit and Other Transit Providers

As mentioned, ATS offers ADA On-Demand paratransit services for patrons unable to use the fixed route bus system due to a disability-related impairment. ADA On-Demand is only required to be provided within ³/₄ of a mile from the farthest point of each fixed route, though ATS states that the service area extends through the jurisdictional limits of Albany. For disabled patrons, On-Demand goes beyond the ADA-required curb-to-curb service to ensure these patrons reach their destinations. Unlike with ATS fixed route services, paratransit tickets and monthly passes are only sold at the Transit Office at 712 Flint Avenue.

9.3 Intercity Bus Service

The DARTS region is served by Greyhound Lines, the largest intercity bus provider in North America. There is one Greyhound bus stop in the region, located at 1629 Clark Avenue in Albany. The nearest stop to this is in Moultrie, GA, about 33 miles away.





9.4 Future Transit Planning

In accordance with the Congress of the Moving Ahead for Progress in the 21st Century (MAP-21) Act, the Albany Transit System and local transit service providers like it were required to establish plans for maintaining assets in what is legally defined as "State of Good Repair" (SGR). As such, ATS joined with other small transit providers and utilized its state funding sources to form a Group Transit Asset Management Plan, which was ratified in 2018. Transit Asset Management plans for small transit providers have four distinct elements:

- Inventory of Capital Assets
- Condition Assessment of the capital assets
- Description of Decision Support Tools which define the needed amount of capital investment and determine when assets are to be replaced.
- Prioritized list of investments

Using these tools, the DARTS Transportation Improvement Plan (TIP) outlines a capital schedule for the Albany Transit System for the fiscal years 2024-2027, which entails funding allocation for and implementation of the following elements:

- Preventive Maintenance
- Miscellaneous Support Equipment
- Bus Route Signage/Passenger Shelters/Misc Bus Station Equipment
- ADP Software/Mobile Survey/ Security Equip
- Security/Surveillance Equip./Upgrade
- Fareboxes & Related Equipment
- Office Equipment & Furniture
- Training
- ADP Hardware
- Planning (procuring consulting services for marketing)





10. Active Transportation

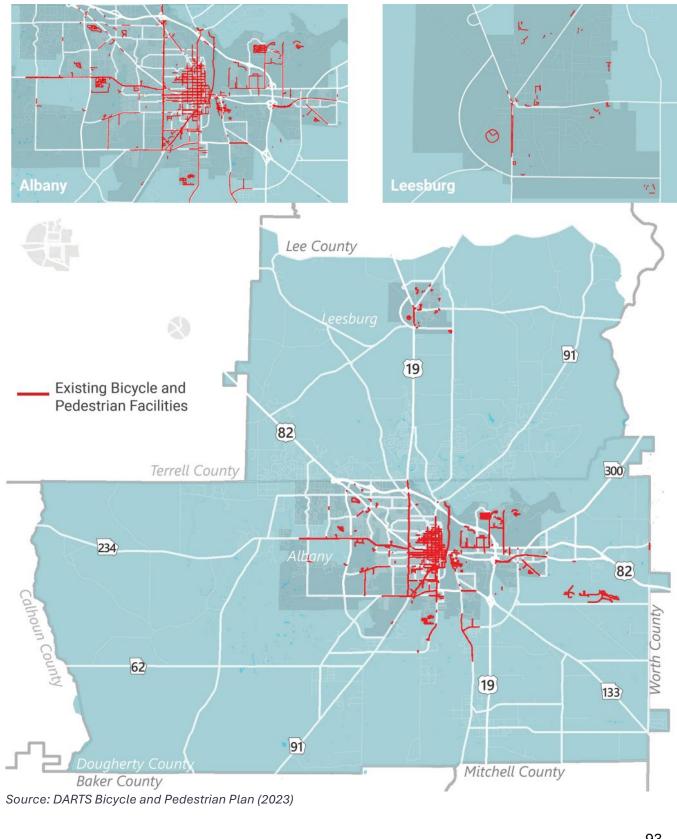
Modes of transportation which rely on human-powered, self-propelled movement are known as active transportation. These modes include walking, biking, wheelchair transport, and small wheel transport (skates, scooters, etc.). In the development of comprehensive multimodal transportation networks, it is critical to consider active transportation infrastructure such as sidewalks, bike lanes, and green spaces. These are highly important for pedestrian safety and reducing conflicts between pedestrians and vehicles. The proliferation of active transportation infrastructure in urban or suburban areas has further potential implications for reducing the number of vehicles on the road and reducing congestion. This is especially true for facilities that cater to pedestrians and other non-motorized traffic, such as schools, recreation facilities, mixed-use commercial centers, or libraries.

As shown by **Figure 47**, pedestrian facilities in the DARTS region are concentrated in urban areas and commercial corridors within the City of Albany and City of Leesburg.





Figure 47: Existing Bicycle and Pedestrian Infrastructure



Gresham

Smith

ANALYTICS

M-P-H

GTS



Most sidewalks in both Dougherty and Lee County are in and around downtown areas and major amenities such as the Albany Mall and the Albany Riverfront Park. In the City of Albany, bicycle lanes are incorporated along portions of Gillionville Road and along a multi-use trail along the Flint River. In Leesburg, bicycle lanes are mainly on parts of Robert B. Lee Drive from Walnut Street/US 19 to Lovers Lane Road.

10.1 Sidewalks and Bike Lanes

Previous plans have made recommendations for achieving safer, more complete infrastructure conducive to walking and biking in the DARTS region. The Bicycle and Pedestrian Master Plan created by the DARTS MPO outlines several policies and programs and denotes the respective roles of DARTS, local municipalities, and other stakeholders in accomplishing specific strategic goals for implementation of these programs. These include walk and bike friendly pedestrian programs, safe routes to school, adoption of a complete streets policy, bike facility maintenance programs, and pedestrian/driver safety programs. The Southern Georgia Regional Commission's Southern Georgia 2014 Bicycle and Pedestrian Plan recommended an expansion of state bike routes to promote connectivity between various towns and cities in South Georgia. To implement these plans more effectively, SGRC recommended combining bicycle and pedestrian projects with other types of projects (streetscape improvements, road projects, bridge repair, etc.), stating that combining projects yields a more efficient use of resources; this plan also recommended using performance measures in bike-ped projects to verify that a project is meeting community needs. The GDOT Statewide Strategic Transportation Plan (SSTP) and Statewide Transportation Plan (SWTP), which identified the transportation needs of Georgia through the year 2040, recommended allocating 2% of transportation funding to pedestrian and bicycle projects.

Figure 48 provides an overview of all currently proposed bicycle and pedestrian projects in the DARTS region by priority. The prioritization model considers the following elements:

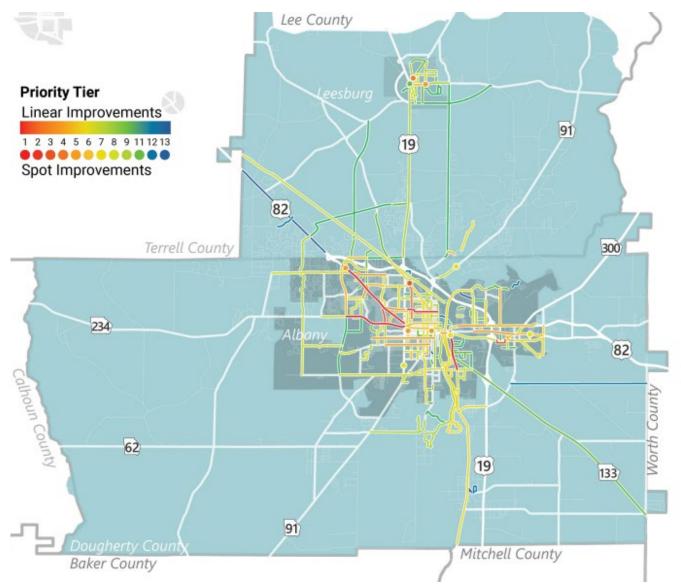
- Connections to Schools
- Connections to Community Facilities
- Connections to Transit
- Within Downtown/ Activity Center
- Low-Cost Solutions
- Connections to Activity Centers, Major Employers, and Neighborhoods
- Primary Trail Network
- Connections to Historically Underserved Communities
- Community Input
- Crossing Enhancements





Existing Conditions and Needs Assessment Technical Memo

Figure 48: Bicycle and Pedestrian Projects by Priority Tier



Source: DARTS Bicycle and Pedestrian Plan (2023)



Existing Conditions and Needs Assessment Technical Memo



Table 27 depicts a list of the highest priority tiered projects (tiers 1-5 out of 13).

 Table 2728: Prioritized Bicycle and Pedestrian Project Tier (Tiers 1-5)

Priority Tier	Name	Description	Network Category	Location/Extents	Priority Score	ID	Length (feet)
1	Gillionville Road	Bike Lanes (Lane Diet)	Network Expansion	From Pine Avenue to Westover Boulevard	13	19	14,025
1	Radium Springs Road	Bike Route	Network Expansion	From Broad Avenue to ASU	13	269	6,175
1	Dawson Road	Sidewalk (both sides)	Network Expansion	From Slappy Boulevard to Point North Boulevard	13	42	39,002
1	Radium Springs Road	Sidewalk (both sides)	Regional Corridors	From Oglethorpe Boulevard to Oakridge Drive	13	68	17,190
2	2nd Avenue (east of Van Buren)/3rd Avenue (west of Van Buren)	Shared Lane Markings	Network Expansion	From Front Street to Slappy Boulevard	12	16	7,197
3	Library Lane/Massey Drive/Thornton Drive	Sidewalk (one side)	Neighborhood Connections	From Rosebrier Avenue to Oglethorpe Boulevard	11	40	3,151
3	Magnolia Street	Sidewalk (one side) with Bike Lanes (Lane Diet) with Enhanced Crosswalks at Gillionville Road	Network Expansion	From Dawson Road to Gillionville Road	11	20	3,785





METROPOLITAN TRANSPORTATION PLAN 2050 UPDATE

Existing Conditions and Needs Assessment Technical Memo



Priority Tier	Name	Description	Network Category	Location/Extents	Priority Score	ID	Length (feet)
4	Palmyra Road	Pedestrian Crossing Beacon and Refuge Island	Network Expansion	at 14th Avenue	10	7	N/A
4	N. Harding Street	Shared Lane Markings	Network Expansion	From 3rd Avenue to 14th Avenue	10	18	8,729
5	3rd Avenue	Bike Lanes (Road Diet) with Enhanced Crosswalks at Dawson Road and Slappy Boulevard - Add sidewalk (one side) from Slappy Blvd. to Taft St. (685 ft) and west of Edgewood Ln (1,400 ft)	Network Expansion	From Slappy Boulevard to Dawson Road	9	128	4,857
5	Clarke Avenue	Bike Lanes	Network Expansion	From Maple Street to Merritt Street	9	31	6,531
5	Stuart Avenue	Shared Lane Markings	Network Expansion	From Hilltop Drive to Nottingham Way	9	27	4,433
5	W. Whitney Avenue	Shared Lane Markings	Network Expansion	From Front Street to South Valencia Drive	9	29	14,470
5	Broad Avenue	Sidewalk (both sides) and Bike Lanes	Network Expansion	From Blaylock Street to N. Mock Road	9	80	18,934
5	Gordan Avenue	Sidewalk (one side) and Bike Lanes	Network Expansion	From Bay Street to Monroe Street	9	77	10,235







METROPOLITAN TRANSPORTATION PLAN 2050 UPDATE

Existing Conditions and Needs Assessment Technical Memo



Priority Tier	Name	Description	Network Category	Location/Extents	Priority Score	ID	Length (feet)
5	Leslie Highway	Intersection Improvement with Enhanced Crosswalks (consider Roundabout)	Other Improvements	At Smithville Avenue/2nd Street (six-legged intersection)	9	6	N/A
5	Oglethorpe Boulevard	Provide fencing along outside edges of bridge to enhance pedestrian safety	Other Improvements	at Flint River Bridge	9	5	1,226
5	Stuart Avenue	Sidewalk (both sides) and Bike Lanes Enhanced Crosswalks at Dawson Road	Network Expansion	From Nottingham Way to Dawson Road	9	59	7,510
5	Lullwater Road/12th Avenue	Sidewalk (one side) with Shared Lane Markings with Enhanced Crosswalks at Dawson Road	Neighborhood Connections	From Kenilworth Drive to Nottingham Way	9	87	3,632

Source: DARTS Bicycle and Pedestrian Plan (2023)

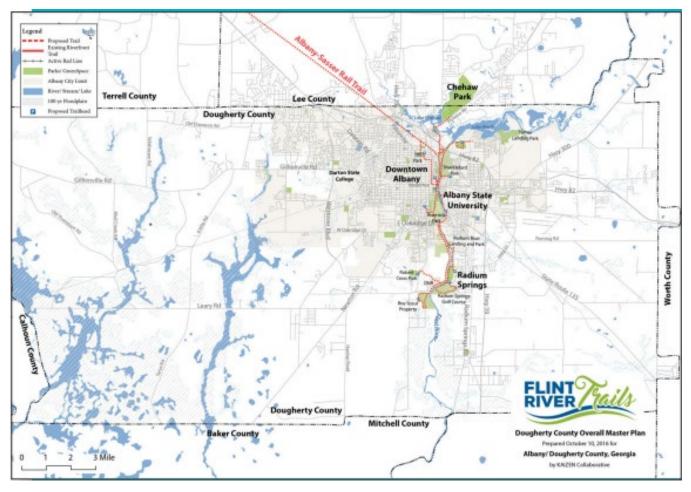




10.2 Trails and Greenways

The Flint River Trails Master Plan was developed to create an interconnected trail system through Dougherty and Lee County that bridges existing parks and green spaces such as Chehaw Park, Radium Springs, and Riverside Park adjacent to Albany State University. It consists of over 21 miles of greenway trail, 11 water trail access points, and over 600 acres of available land for additional mountain biking and equestrian trail opportunities. **Figure 49** below provides a complete picture of the updated trail system.

Figure 49: Flint River Trail System



Source: Flint River Trails Master Plan (2016)

10.3 Safe Routes to School

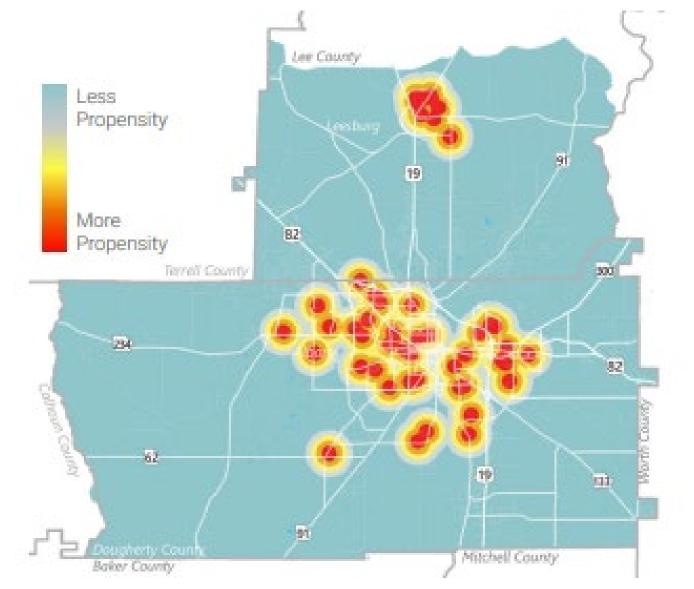
Safe Routes to School (SRTS) is a national effort to encourage students and families to walk and bicycle to school. It aims to improve transportation safety through targeted infrastructure improvements and enforcement, walking and biking safety education, and encouragement programs. **Figure 50** shows hotspots in the region with high school propensity, which are ideal locations for expanding the local SRTS program. The DARTS MPO intends to establish a Safe Routes to School Task Force that will coordinate school administrators, GDOT, enforcement



officials, and city and county staff. Additionally, DARTS can facilitate regional support for SRTS using the following strategies:

- Coordinating efforts between jurisdictions and districts, helping practitioners build on lessons learned from work being done in similar communities
- Developing a central repository of information (mapping, planning efforts, funding to participation in activities)
- Providing guidance for consistent SRTS data collection and reporting
- Promoting SRTS (regular progress report, outreach/informational materials, campaign materials)

Figure 50: Propensity Attraction for Bicycle and Pedestrian Projects – Schools



Source: DARTS Bicycle and Pedestrian Plan (2023)





10.4 Complete Streets

Complete Streets policies address the need to standardize the governmental practice of creating safe environments for all users. Complete Streets create livable spaces for all ages to enjoy, with wide sidewalks, safe crossings, abundant bicycle facilities, and easy transit access. GDOT adopted a Complete Streets policy in 2012, which affects new construction, alteration and maintenance of state roads and any federally funded transportation project in the state, including those projects programmed for the DARTS region. The DARTS MPO can act at the regional level by prioritizing funding to project sponsors that have their own Complete Streets policies, or by requiring that project sponsors implement the project with respect to Complete Streets principles. Additionally, DARTS can provide technical assistance to sponsors in creating Complete Streets policies.

Safe Streets and Roads for All is a newly created discretionary program funding regional and local initiatives through grants to prevent roadway deaths and serious injuries. There are two SS4A grants: Action Plan Grants and Implementation Grants. Implementation Grants activities can include infrastructure, behavioral, and operational safety identified in an Action Plan.

The following are examples of applications of SS4A grant funding:

- Identifying and correcting common risks such as improving pedestrian crosswalks
- Installing pedestrian safety enhancements and closing network gaps with sidewalks, rectangular flashing beacons, signal improvements, and audible pedestrian signals for people walking, rolling or using mobility devices
- Conducting education campaigns to accompany new infrastructure such as pedestrian beacons or pedestrian-only zones





11. ITS and Emerging Technologies

This section contains a baseline assessment of the current conditions and needs regarding Intelligent Transportation Systems (ITS) in the DARTS region. An ITS is a comprehensive system for managing urban mobility, integrating advanced technologies into transportation infrastructure and vehicles to enhance safety, efficiency, and productivity. Examples of ITS systems include, information collection systems, analytic and decision support systems, communication systems, and automation and control systems that make transportation smarter, safer, and more responsive. The baseline assessment includes an overview of ITS stakeholders, an overview of existing data sources relevant to ITS, and a summary of existing ITS infrastructure. This is followed by a summary of regional aspirations with regard to ITS, an overview of statewide initiatives, and an assessment of ITS system needs from existing plans and studies.

Figure 51: EV Charging locations in downtown Albany







11.1 Stakeholders

The following stakeholder entities and organizations are relevant to ITS in the DARTS region:

- City of Albany manages traffic operations within the City's jurisdiction, including traffic signal systems, automated traffic enforcement, and public transit.
- Dougherty County and Lee County responsible for road networks and traffic operations within unincorporated areas.
- Cities of Leesburg and Smithville responsible for road networks and traffic operations within their jurisdictional boundaries.
- Georgia Department of Transportation responsible for state transportation facilities. Operates traffic cameras at several locations on state routes in the DARTS area.
- Georgia Southwestern Railroad, Georgia and Florida Railway/Omnitrax, and Norfolk Southern Railway private railroad companies that operate freight rail in the region.
- Southwest Georgia Regional Airport origin and destination point for passenger and cargo air travel.
- Major employers Marine Corps Logistics Base Albany, Albany State University, and Phoebe Putney Memorial hospital, among others, are major employers that generate a significant number of trips.
- Albany Civic Center an event venue with over 10,000 seats, capable of hosting major (traffic-generating) events.

11.2 Existing Data Sources

The following existing sources provide data related to ITS in the DARTS region.

- City of Albany, Traffic Division. The Traffic Division of the City of Albany conducts traffic counts and speed zone analysis, maintains the computerized traffic signal system, and conducts parking and access studies, among other functions. Link: https://www.albanyga.gov/about-us/city-departments/engineering-department/traffic-division
- Dougherty County Public Works Department.
 https://www.dougherty.ga.us/government/departments/public-works/
- DARTS MPO. <u>http://dartsmpo.org</u>
- **The Georgia Department of Transportation** maintains statewide data on traffic volumes, collisions, operations, and infrastructure.

11.3 Existing ITS Infrastructure

This section contains a summary of existing ITS infrastructure in the DARTS region. This section also discusses how that infrastructure relates to systems beyond the region, as applicable.

- Automated Enforcement / Speed cameras: The City of Albany operates speed cameras at 17 locations in school zones.
 - <u>https://www.walb.com/2023/04/06/albany-speed-cameras-have-collected-over-</u> <u>4m-citations-heres-which-cameras-have-issued-most-citations/</u>





520 82 520 19 91 ő Øé ra D Ø 5 5 133 ŵ ő ê é 0 82 -19 0 62 52 (234) 300 91 52 82 19 Legend ñ Speed Cameras K-12 Schools 10 Local Roads ģ 91 300 State Routes ãO **US Routes** (3) City of Albany 133) 0.5 Dougherty County 0 Water

Figure 52: Locations of Speed Cameras in the DARTS Region

11.4 Transportation System Management and Operations (TSMO)

The goal of TSMO strategies is to maintain and improve the performance of an existing transportation system adding capacity. Instead of road widening, additional lanes, and other capacity-increasing projects, TSMO focuses on solutions that maximize the efficiency of existing capacity while minimizing costs of implementing improvements. TSMO is applicable not only to large urban areas that experience daily traffic congestion as part of regular traffic patterns, but also to smaller urban areas and rural areas that may see congestion due to crashes, special events, extreme weather, road construction, or seasonal travel.

When successfully implemented, a TSMO approach can result in:

- Reduced congestion, due to improved traffic operations.
- Cleaner air and less wasted fuel, due to reduced stop-and-go traffic and reduced idling time.
- Improved mobility for all users of the transportation system, with a wider range of travel mode choices.
- Funding resources that are not dedicated to capital-intensive capacity-adding projects and are hence available for other initiatives.





TSMO is undertaken at a system-wide level, coordinating strategies across jurisdictions, agencies, and travel modes. This means that individual strategies and projects work towards improving efficiency in the system as a whole. Due to the need for effective data sharing and integration and the interrelatedness of the various components of regional transportation systems, ITS plays a fundamental role in TSMO.

11.5 Regional Aspirations

The following is a high-level summary of regional aspirations with regard to ITS and smart transportation in the DARTS region. This list is a synthesis of goal and policy statements in existing plans and documents including the DARTS 2045 Metropolitan Transportation Plan, the Dougherty and Lee County Comprehensive Plans, and strategic plans for the City of Albany.

- There is an overall aspiration to improve safety, security, and efficiency for all transportation modes in the DARTS region.
- There is an aspiration to improve mobility options, especially for vulnerable road users such as pedestrians and cyclists.
- Improvements in the public transit system are desired with regard to fare payment, apps, and frequency and reliability of service.
- Improved air freight to rail connectivity is desired, given that there is no intermodal freight hub in the DARTS region currently, while the Southwest Georgia Regional Airport sees a significant amount of air cargo traffic.
- Aspirations for improvements in the transportation system often relate to the desire for economic development and expanded tourism.

11.6 Statewide ITS and Smart Transportation Initiatives

The following statewide initiatives are relevant to ITS in the DARTS region:

- GDOT Connected Data Platform: This project includes a new platform to collect GDOT data and provide for data fusion and analysis.
- GDOT Connected Vehicle Applications: GDOT would like to deploy connected vehicle applications on the highways (and arterials).
- GDOT DMS Device Updates: This project will upgrade and install new dynamic message sign devices along the highways.
- GDOT Expanded Private Sector Data Input: Currently private sector data comes from HERE as vehicle probe data source for congestion/speed/travel time data; HERE Probe Data is a dataset list of probe points and comes with vehicles with GNSS or GPS systems installed. GDOT also partners with WAZE for incident data. GDOT would like to expand effort to include other connected vehicle applications
- GDOT Regional Traffic Operations Program (RTOP) Expansion: This project will continue the expansion of RTOP to additional agencies and corridors.
- GDOT RWIS Device Updates: This project will upgrade and install new RWIS (Road Weather Information System) devices along the highways.





• GDOT Traffic Device Updates: This project will upgrade and install new CCTV and Detectors along the highways.

11.7 System Needs

The following excerpts from existing plans discuss the region's identified needs with respect to ITS.

- 1. Albany-Dougherty County 2026 Comprehensive Plan
 - a. Needs and Opportunities (p. 20)
 - i. **Review transit system** needs including hours of operation, route changes, bus stop improvements and safety/security improvements.
 - b. Transportation Element (p. 128-133)
 - i. **Intermodal rail service**, which would allow containers to be shipped out of the region by rail rather than truck, is not available in Albany/Dougherty County.
- 2. Strategic Plan for Downtown Albany
 - a. **Fiber optic network:** As mentioned in the strategic plan for Downtown Albany, expansion of a robust and capable fiber optic network will be essential for future ITS development.

11.8 Potential for Expanded Technology Development

Analysis of transportation networks and technological trends in the DARTS region has led to the identification of the following target ITS technologies as having the greatest potential for improving transportation in the DARTS region during the Metropolitan Transportation Plan timeframe:

- **Fiber optic network:** As mentioned in the strategic plan for Downtown Albany, expansion of a robust and capable fiber optic network will be essential for future ITS development. Expanding fiber optics will provide a more integrated traffic management system that can provide improved situational awareness, coordinate traffic management strategies, and provide opportunities to integrate other city functions such as street lighting, parking, transit, etc.
- Smart public transit system: The need for an upgraded public bus system with integrated fare payment, route and schedule data, and live transit vehicle location data has been expressed in existing plans. In tandem with the operations of the new transit center, there is great potential to upgrade the existing service to a fully integrated "smart" transit system, with a single app allowing users to pay fares, find optimal routes, view schedules, view bus stop locations, and connect to other modes (such as micromobility).
- **Traffic Signal Synchronization:** Traffic signal synchronization is made possible through coordinating adjacent traffic signal control systems to improve corridor progression. Synchronization techniques can include time-based coordination strategies, traffic-responsive traffic signal control systems, and adaptive signal control. Traffic detection





systems can also provide additional capabilities to sense prevailing conditions and optimize traffic signals.

- **Truck Signal Priority:** As noted in the Regional Freight Profile, freight signal priority could help to reduce stops and delays for freight traffic.
- **Connected and Autonomous Vehicles:** As noted in the Regional Freight Profile, CAVs have potential for reducing crashes and improving system efficiency. This technology is still very nascent but holds great potential for the DARTS region.
- **Electric Vehicles:** EV charging stations are already established in the DARTS region (in Downtown Albany among other locations) and this technology is expected to gain a vastly increased market share in the coming years.

11.9 Goals, Objectives, and Measures of Effectiveness

11.9.1 Existing Goals and Objectives

The primary purpose of Intelligent Transportation Systems is to improve safety, efficiency, conveniency, and mobility for all users and all modes in the transportation network. The following table lists goals and objectives from existing plans and indicates their relevance to a selection of current ITS technologies. The selection of ITS technologies is based in part on the GDOT ITS Design Guidelines Manual, Revision 1.3, 11/11/2020.

The following relevant plans and documents were consulted:

- DARTS 2045 Metropolitan Transportation Plan (MTP) Update
- Albany-Dougherty County 2026 Comprehensive Plan (2021)
- A New Day in Albany Strategic Plan (2023)
- Downtown Albany Master Plan (2022)
- Lee County Comprehensive Plan (2019)



🚯 🧐 🤤	😑 😑	9 🔞	
DA	R	79	5
SERVING THE CITY OF A	ALBANY, CITY 44 LEE BOOCHI	168084, 1877 COURTY AND LE	B CO3NT7

Goal DARTS 2045 MTP	Objectives	Traffic signal detection systems	Traffic Camera System	Environmental sensor stations	Dynamic lane control signs	Variable speed limit signs	ITS safety systems	Connected vehicle equipment	Real-time transit vehicle location	Integrated transit fare payment
Safety/Security: Maintain and improve transportation system safety and security for motorists, pedestrians, and bicyclists.	 Minimize frequency and severity of crashes Reduce modal conflicts Prioritize transportation improvements that reduce fatalities and serious injuries Utilize design strategies to reduce potential crashes 		~		*	~	~	~		
Accessibility and Mobility: Provide a transportation system that affords sufficient mobility to accommodate the travel demands of Dougherty and South Lee County residents and businesses	 Maximize efficient mobility Ensure accessibility to employment and services to meet the needs of the region's population Minimize delays due to congestion 	~	~		✓	✓	~	~	✓	~





Goal	Objectives	Traffic signal detection systems	Traffic Camera System	Environmental sensor stations	Dynamic lane control signs	Variable speed limit signs	ITS safety systems	Connected vehicle equipment	Real-time transit vehicle location	Integrated transit fare payment
Enhanced System Integration and Connectivity: Provide a multimodal transportation system which offers cost- effective alternatives to the automobile, supports efficient freight movement, provides for bicyclists and pedestrians, and encourages continued use and development of air transportation facilities.	 Maximize efficient mobility for freight movement Encourage and provide adequate facilities for the use transit and non-motorized modes Maximize efficient transit service Provide a safe, interconnected, multimodal network 	✓	✓		~	✓	~	✓	~	✓
Environment and Quality of Life: Limit and mitigate adverse environmental impacts associated with traffic and transportation system development through facilities design and system management	 Minimize adverse impacts to environmental, historic, cultural and community resources Minimize destruction of environmental assets through appropriate facility design 			✓				~	~	~
System Preservation and Maintenance: Maintain an efficient transportation system within Dougherty and South Lee Counties for residents and businesses	 Maintain acceptable bridge ratings Maintain acceptable levels of maintenance for roadways Maintain multimodal transportation facilities at an acceptable level 	~	~		~	v	~	~	*	✓



Goal	Objectives	Traffic signal detection systems	Traffic Camera System	Environmental sensor stations	Dynamic lane control signs	Variable speed limit signs	ITS safety systems	Connected vehicle equipment	Real-time transit vehicle location	Integrated transit fare payment
System Management and Operation: Encourage the implementation of TSM and TDM to reduce traffic congestion and promote low cost solutions of road capacity	 Maximize efficiency of the network through optimized signalization Minimize vehicular congestion delays Incorporate the use of technology to enhance efficiency where feasible 	×	✓		~			✓	~	~
Reliability and Resiliency: Improve livability and the quality of the transportation system	 Maximize livability by addressing recurring and non-recurring congestion Promote secondary access for large scale development Determine vulnerable areas that impact the transportation network and target investments to mitigate Coordinate with local emergency management agencies Identify deficiencies in stormwater infrastructure related to transportation and develop mitigation strategies 	✓	~	✓	~	✓	~	~	~	✓





Goal	Objectives	Traffic signal detection systems	Traffic Camera System	Environmental sensor stations	Dynamic lane control signs	Variable speed limit signs	ITS safety systems	Connected vehicle equipment	Real-time transit vehicle location	Integrated transit fare payment
Travel and Tourism: Provide a transportation network that enhances regional accessibility for travel and tourism	 Promote investments in transportation facilities that provide access to tourist attractions Promote investments in multimodal transportation facilities that encourage use by visitors Promote investments in transportation facilities that support/provide greater accessibility to public airport 	✓	✓	✓	✓	✓	✓	✓	✓	✓
Albany-Dougherty County 2026 Comprehensive Plan										







Goal	Objectives	Traffic signal detection systems	Traffic Camera System	Environmental sensor stations	Dynamic lane control signs	Variable speed limit signs	ITS safety systems	Connected vehicle equipment	Real-time transit vehicle location	Integrated transit fare payment
Transportation Options: Address the transportation needs, challenges, and opportunities of all residents. This may be achieved by fostering alternatives to transportation by automobile, including walking, cycling, and transit; employing traffic calming measures throughout the community; requiring adequate connectivity between adjoining developments; strengthening public participation in the planning process; or coordinating transportation and land use decision making within the community.	 Review transit system needs including hours of operation, route changes, bus stop improvements and safety/security improvements Utilization of mini surveys from ridership to identify and respond to issues quickly and appropriately Sidewalks and bike lanes are needed at locations throughout town that need to be identified and prioritized for implementation We need to improve the safety or the feeling of safety of our off- street trail system. 	~	~	✓	~	~	✓	~	~	✓
A New Day in Albany Strategic Plan 2023										
Enhance aviation and transit to improve the customer experience.	 Construct a new general aviation terminal and improve hangars. Expand ridership to include new transportation routes for Albany State University's East and West Campuses by way of downtown. 							~	✓	✓





Goal	Objectives	Traffic signal detection systems	Traffic Camera System	Environmental sensor stations	Dynamic lane control signs	Variable speed limit signs	ITS safety systems	Connected vehicle equipment	Real-time transit vehicle location	Integrated transit fare payment
Be recognized as the regional technology leader.	 Implement P25. The P25 Radio system is a joint effort between Albany, Dougherty County, Lee County, Grady County, and Thomasville/Thomas County built to expand our public safety communication while enhancing performance, efficiency, coverage, and quality. Expand Wi-Fi capabilities to public transportation. Expand high-speed fiber optics. Evaluate plans to implement a public Wi-Fi initiative downtown. Research the feasibility of installing E-Car ports/charging stations downtown. Research the feasibility of a rideshare program. 	✓	~	✓	~	~	~	~	~	✓
Downtown Albany Master Plan 2022										
Improve pedestrian and bicycle facilities		~					✓			
Lee County Comprehensive Plan										





Goal	Objectives	Traffic signal detection systems	Traffic Camera System	Environmental sensor stations	Dynamic lane control signs	Variable speed limit signs	ITS safety systems	Connected vehicle equipment	Real-time transit vehicle location	Integrated transit fare payment
Provide a proper environment for economic development to grow and flourish with regards to healthcare, transportation, education, and public safety.		~	✓	✓	✓	✓	✓	✓	✓	~





11.10 Plan Development and Documentation

11.10.1 Existing and Emerging ITS Applications Most Appropriate for the DARTS Region

The following ITS applications have been selected as being most relevant for the DARTS region. These applications are not currently deployed in the region but have been selected for their potential to resolve existing issues, increase efficiency, and leverage technology for a safer and more convenient multimodal transportation system.

From the Regional Freight Profile:

- Adaptive traffic control systems/Traffic Signal Synchronization
- Truck signal priority
- Connected and autonomous vehicles
- Electric vehicles

Other suggested applications:

- Advance warning / traffic rerouting for at-grade railroad crossings (the success of this will depend on the ability to detect the train's travel direction and reroute vehicles accordingly).
- Dynamic message signs for certain locations (Liberty Expressway and Jefferson interchange, and potentially for Civic Center event traffic), coupled with camera surveillance.
- Unified micromobility/transit platform.
- Groundwork for connected and autonomous vehicles, including supporting curbside environment to support autonomous vehicle operations.
- Real-time transit info (bus arrival, location) on screens at bus stops and via apps. <u>Albany Transit</u> is listed as a user of the RouteShout 2.0 app, but it is not mentioned on the website. When tested, the app had poor functionality (latency, nonresponsiveness to user inputs, and a confusing interface). The user reviews are also generally negative (for example, the app has 1.6 stars out of 5 on the iOS app store). Consider switching to a better app that allows for bus info plus fare payment and advertising it.
- The HMP calls for 20 warning sirens throughout the community for severe weather events. Coordination of this early warning system with road closure advisory systems could be beneficial for community resiliency.

11.10.2 Funding Opportunities for Smart Technology

The following is an overview of selected federal grant programs with the greatest potential to fund Intelligent Transportation Systems deployment in the DARTS region.



11.10.2.1 SMART Program

The Bipartisan Infrastructure Law (BIL) established the Strengthening Mobility and Revolutionizing Transportation (SMART) discretionary grant program with \$100 million appropriated annually for fiscal years (FY) 2022-2026. The SMART program was established to provide grants to eligible public sector agencies to conduct demonstration projects focused on advanced smart community technologies and systems in order to improve transportation efficiency and safety. MPOs and public transit agencies are eligible to apply for funds.

Eligible projects demonstrate the following technologies:

- Coordinated automation
- Connected vehicles
- Sensors
- Systems integration
- Delivery/logistics
- Innovative aviation
- Smart grid
- Traffic signals

11.10.2.2 Safe Streets and Roads for All (SS4A) Program

The SS4A grant is another discretionary grant funding program associated with the BIL which will appropriate \$5 Billion in funding between (FY) 2022-2026. Within the SS4A grant program, demonstration activities that are eligible for funding include new technology pilot programs that demonstrate safety benefits. Example technologies include, but are not limited to, variable speed limit systems, adaptive signal timing, emergency vehicle preemption systems, and connected vehicle technologies. Political subdivisions of a State, which includes counties, cities, towns, transit agencies, and other special districts, as well as MPOs are eligible to apply for the SS4A program.

11.10.2.3 Advanced Transportation Technology and Innovation (ATTAIN) Program

The BIL also established the ATTAIN program which provide a competitive grant funding source to deploy, install, and operate advanced transportation technologies to improve safety, mobility, efficiency, system performance, intermodal connectivity, and infrastructure return on investment. Between FY 2022 and 2023, \$60 million will be awarded under this program. Examples of eligible technologies include, but are not limited to:

- Integration of transportation service payment systems
- Integrated corridor management systems (ICMS)
- Connected vehicle technologies
- Shared-use mobility applications

Eligible applicants for ATTAIN include state or local government, transit agencies, MPOs or multijurisdictional groups including a combination of the eligible applicants.



11.10.2.4 RAISE Grants

RAISE grants are awarded on a competitive basis for planning or constructing surface transportation infrastructure projects that will improve safety; environmental sustainability; quality of life; mobility and community connectivity; economic competitiveness and opportunity including tourism; state of good repair; partnership and collaboration; and innovation.

11.10.2.5 CRISI Program

The Consolidated Rail Infrastructure and Safety Improvements (CRISI) Program funds projects that improve the safety, efficiency, and reliability of intercity passenger and freight rail. Eligible projects include deployment of railroad safety technology, highway-rail grade crossing improvement projects, and research, development, and testing to advance and facilitate innovative rail projects, among other eligible activities.

11.10.3 Expected Development Trends in the DARTS Region

The following development trends may influence the region's needs regarding ITS:

- As the population continues to grow, traffic congestion may become a more pressing issue than it is today.
- Commuting trends have changed since the COVID-19 pandemic. At a national level, there has been an increase in remote work. This may influence commuting patterns and communications infrastructure needs and demand in the DARTS region.
- Mode shift depending what travel options are available
- The growing need for improved traffic safety countermeasures as traffic collisions and fatalities are on the rise.
- The availability of transportation data and advanced computing systems, such as artificial intelligence, makes it possible for practitioners to understand network performance and optimize transportation systems.

To provide better and more accurate insights into developing trends, the DARTS region can acquire traffic data from third-party traffic data providers. Data from third-party traffic data providers can provide a comprehensive understanding of both historical and present-day conditions on a variety of traffic-related dataset such as speeds, travel times, travel patterns, which can be helpful for TSMO planning efforts.

11.10.4 Emergent Technologies

It is recommended that the DARTS region build its capabilities in ITS and TSMO through incremental improvements that begin with a baseline foundation towards more complex and future-looking technologies. Foundational technologies such as a fiber optic network, centralized traffic signal control, and traffic camera system will provide new capabilities for DARTS to manage traffic more efficiently. These technologies are also supportive of future-looking technologies such as ITS safety systems, connected vehicles and variable speed limit



systems, which all rely on a networked environment which fiber optic can provide. These foundational technologies can be categorized in the following near to mid-term deployment timeframes:

Near-term:

- **Communications System.** Begin strategic planning efforts to map out the future connectivity needs in the DARTS region and align these needs with respect to future Capital Improvement Projects, to encourage a phased implementation. Building an expansive fiber optic system requires careful coordination with other projects and long-term planning. The most optimal way to accomplish widespread connectivity is to integrate fiber optic infrastructure within other corridor improvement projects. Also consider wireless network technologies that can help provide connectivity where fiber optic deployments can be challenging.
- **Centralized Traffic Signal Control System.** Evaluate the capabilities of the current traffic signal control system and plan for a phased replacement to a centralized system. The new centralized system should be capable of network and corridor-based optimization through coordination strategies and should be capable of supporting an Advanced Traffic Management System (ATMS) and future connected-vehicle applications. Complementing a centralized traffic signal control system is additional system detection to support actuated traffic signal control, versus time-based traffic signal control system which have very little flexibility. This effort should include the deployment of new traffic signal controllers, vehicle detection, pedestrian pushbuttons, and modern traffic signal controller cabinets. Additionally, DARTS should consider the implementation of a Traffic Management Center (TMC) that can be a facility used to coordinate corridor operations, incident response and event management.
- **Traffic Camera System.** Leverage the communications systems to deploy traffic cameras that will provide the DARTS staff with situational awareness to manage real-time traffic conditions because of congestion, events, construction, collisions, etc.
- Integrated Transit Fare Payment Systems (Smart Public Transit System). An integrated transit fare payment system makes it more seamless for the public to utilize the transit system. Mobile ticketing is another technology within integrated transit fare payment systems that makes it easier for travelers with mobile devices to pay for transit usage. Many systems also allow customers to book multiple services on one platform to encourage greater uptake in transit ridership. An integrated transit fare payment system can also help to provide integration with other future micromobility and shared-used mobility services and platforms.
- Electric vehicle infrastructure. Electric vehicle infrastructure is expected to grow significantly in the future years. Providing more charging facilities will encourage faster EV adoption and remove the barrier for many that do not currently have access to charging infrastructure at home or work. Strategic placement of Electric Vehicle Supply Equipment (EVSE) can also be accomplished through private-public partnership, where charging facilities are installed at high trip generation locations.



Existing Conditions and Needs Assessment Technical Memo

Mid-term:

- **ITS Safety Systems.** Traffic safety can be better understood through the deployment of near-miss detection technology and third-party traffic safety software data platforms. The objective is to deploy systems that provide a local understanding of potential traffic safety risks. Many of these systems utilize video analytics or crowdsourced data to provide traffic safety insights, which can allow DARTS to prioritize safety improvements.
- Real-time Transit Location Data (Smart Public Transit System). A real-time transit location data system provides real-time location of transit vehicles in the region. This data can be shared with the public to provide improved traveler information. Data can be made universally accessible through the General Transit Feed Specification (GTFS), which allows third party applications to build upon the data that is available. Additionally, real-time transit location data can enable future transit enhancements such as transit signal priority.
- Variable Speed Limit Signs. Variable speed limit signs can be strategically deployed in areas that are prone to recurring congestion (congestion-responsive application) or deployed in response to weather-related events. These are the two main applications of variable speed limits signs that adjust the speed limit to a safe operating speed, given the prevailing traffic or road conditions.
- **Dynamic Lane Control Signs.** Dynamic lane control signs can provide variable lane usage in the DARTS region. Most commonly, dynamic lane control signs are used to manage incidents and recurring congestion. In some cases, it is deployed to provide additional lane usage flexibility, such as converting a turn lane to provide through and turn lane usage where the alternate lane use helps to alleviate congestion.
- Environmental Sensors. Environmental sensors can measure air quality which is a key measure of pollutants and emissions from transportation. Environmental sensors can help the DARTS region understand whether emission reduction and climate action goals are being met.
- **Truck Signal Priority.** Truck signal priority can be beneficial in areas of high freight activity and movement. Frequent stops in freight traffic can add congestion within a transportation system as well as contribute to greater emissions. Reducing the number of stops on identified freight corridors with high freight volumes should be considered.
- Update and standardize infrastructure for compatibility with CAV technologies. CAVs rely on roadway infrastructure, such as pavement markings, signs, and traffic signals. These features of the transportation network are essential for the performance of automated functions. Standardized infrastructure allows for the safe and efficient operation of CAVs, and also helps traditional drivers. Consistent and well-maintained signs, signals, and pavement markings make roads safer for all users.
- Ensure compatibility with connected vehicle standards. In the past decade, the communication technologies for CAV have evolved and continue to evolve. The DARTS region should stay informed on the latest standards for CAV such applications of



connected vehicles using Cellular Vehicle-to-Everything (C-V2X) technology over the 5.9GHz band.

• **Participate in CAV pilot projects and test deployments.** As new aspects of CAV technology reach the point of test deployment, the DARTS region may benefit from working with the CAV industry as a living laboratory for associated technologies. An example CAV application includes truck-platooning which has the potential of improving freight efficiency in the DARTS region.

11.10.5 List of Needed Actions Related to ITS in the DARTS Region

The following ITS-related action items are recommended based on the existing conditions, adopted plans, available data and studies, stakeholder input, regional aspirations, system needs, and emerging technologies that are described earlier in this section.

Action Item	Responsible Parties	Funding Sources	Timeframe
Develop and deploy an improved app for Albany Transit which integrates fare payment, trip planning, and real-time transit information.	Albany Transit	Grants, public- private partnerships	Short- term (1-2 years)
Expand EV charging stations and infrastructure to proactively meet the expected demand associated with an anticipated 32% EV market share by 2030.	All DARTS jurisdictions	Grants, public- private partnerships	Medium- term (3-5 years)
Deploy solutions, such as dynamic message signs, to advise/reroute traffic in response to congestion at key locations such as the Liberty Expressway/Jefferson interchange, key railroad crossings (mainly the Roosevelt corridor), and potentially for special-event congestion.	City of Albany in cooperation with GDOT and Dougherty County	State/local funds, grants	Medium- term (3-5 years)
Continue to expand the reach and capacity of the existing fiber optic network, designing for redundancy, resiliency, and further expandability.	City of Albany, Dougherty County	Public-private partnerships	Medium- term (3-5 years)



Action Item	Responsible Parties	Funding Sources	Timeframe
Expand the synchronized traffic signal system to keep pace with urban growth and changing traffic patterns.	City of Albany in cooperation with GDOT and Dougherty County	Grants, local funds	Medium- term (3-5 years)
Implement ITS-related projects from the DARTS MTP, Comprehensive Plans, A New Day In Albany Strategic Plan, and Downtown Albany Master Plan.	All DARTS jurisdictions	Various	Timeframe consistent with adopted plans



Existing Conditions and Needs Assessment Technical Memo

12. Previous Studies

12.1 Statewide Recommendations: Georgia

12.1.1 2021 Statewide Strategic Transportation Plan (SSTP)/2050 Statewide Transportation Plan (SWTP)

Policy framework which establishes performancedriven and fiscally constrained priorities and investment opportunities through the year 2050. It has the stated priorities of investing in statewide freight and logistics,

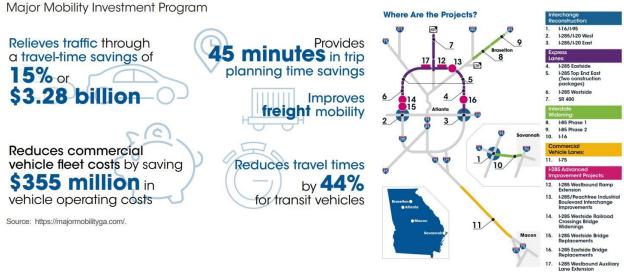


enhancing mobility of people in Metro Atlanta, and enhancing the mobility of people in emerging metros and rural Georgia. For each of these goals, the document proposes multiple investment strategies and advanced planning strategies (specifically plans, programs, partnerships, and performance), and justifies the investment scenario with projections of how these investments and strategies will improve safety, improve bridge and pavement quality, improve operations/roadway service, and increase capacity.

Some of the investment strategies for freight and logistics include, but are not limited to 1) enhancing its Rail Safety Program; 2) creating a Freight Operations Lump Sum program to target freight-specific operational solutions, such as improving turning lanes or enhancing signal timing at key intersections on freight-heavy facilities; 3) implementing capacity investments in Georgia's most heavily traveled transportation corridors through the Major Mobility Investment Program (shown in **Figure 53**); 4) enhancing intermodal connections; 5) implementing rail capacity projects consistent with the 2020 Georgia Rail Plan; 6) developing and deploying new technologies such as real-time information sharing, freight vehicle technologies and supply chain management systems.



Figure 53: Major Mobility Investment Program



Source: 2021 Statewide Strategic Transportation Plan (SSTP)/2050 Statewide Transportation Plan (SWTP)

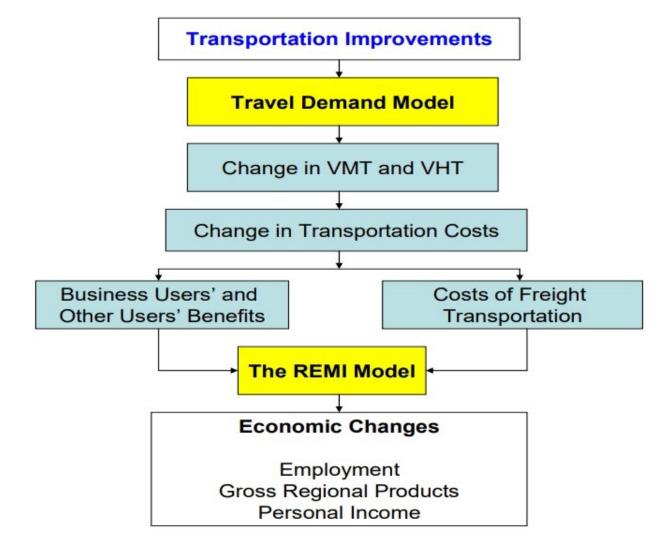
12.1.2 Georgia Statewide Freight and Logistics Plan

This report uses a multistep process to make recommendations for freight improvement projects in the State of Georgia. The steps used in this report are as follows: identifying potential freight improvement projects, project evaluation, grouping priority freight projects into packages (including description of selection process), estimating economic benefits of previously identified freight packages (in terms of economic output and/or increased jobs and returns on investment are generated), and discussion of funding options for the freight program operational programs that support the effectiveness of existing transportation infrastructure in increasing the safety and efficiency of goods movement in Georgia. A representation of this framework and process is shown in **Figure 54**. The plan provided data and information for the freight analysis within the DARTS region.



Existing Conditions and Needs Assessment Technical Memo

Figure 54: Analytical Framework for Benefit-Cost and Total Economic Impact Analyses for Proposed Corridor Investments



Source: Statewide Freight and Logistics Plan



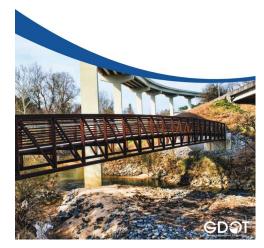
Existing Conditions and Needs Assessment Technical Memo

12.1.3 GDOT Transportation Asset Management Plan

Describes Georgia's current bridge and pavement asset management processes for improving and preserving the condition of the National Highway System (NHS) for the fiscal years 2022 through 2031. The Transportation Asset Management Plan (TAMP) develops an asset management plan to improve or preserve the condition of the assets and improve the performance of the NHS in accordance with federal requirements. A TAMP has the following federally required elements: asset management objectives and measures, inventory and condition, lifecycle planning, risk management analysis, financial plan and investment strategies, and performance gap analysis. A summary of the GDOT's implementation framework in alignment with their transportation asset management (TAM) policies and goals, objectives, and strategies from their Strategic Plan are displayed in Figure 55. The plan was a critical part of the framework for the MTP update.

Transportation Asset Management Plan FY 2022 - 2031

GEORGIA DEPARTMENT OF TRANSPORTATION



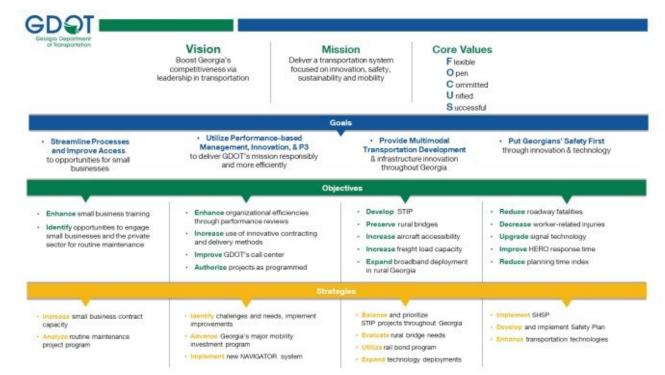


Figure 55: GDOT Strategic Vision

Source: GDOT Transportation Asset Management Plan

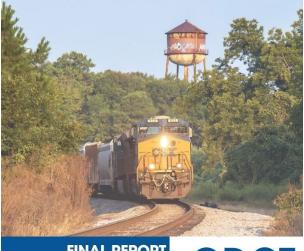


Existing Conditions and Needs Assessment Technical Memo

12.1.4 Georgia State Rail Plan 2021

The Georgia State Rail Plan articulates the state's vision for freight and passenger rail services. It includes a comprehensive inventory of Georgia's rail network, its related transportation and economic impacts, and a proposed program of investments. The plan aligns with the goals set by the SWTP/SSTP, which are in turn aligned with the FAST Act. These goals include improved freight and economic development, improved reliability, reliving congestion, and improving the environment. Its content encompasses analysis of the current conditions of Georgia's rail system, including past and future economic and environmental impacts, and proposes improvements and investments for both passenger and freight rail. A summary of the rail investment program is shown in Figure 56. The plan also details the projects and strategies aligned with GDOT's vision for railroad transportation, complete with impact analysis and

GEORGIA STATE RAIL PLAN



FINAL REPORT



financing scenarios. The plan provided information for the modal analysis of the MTP.

Figure 56: Summary of Rail Service and Investment Program

Project Type	Total Number of Projects	Total Estimated Cost (YOE\$)							
Short-Range Projects									
Short-Range Projects on State-Owned Railroads (2021-2022)	7	\$71.1 M							
Short-Range Projects on State-Owned Railroads (2023-2025)	24	\$92.2 M							
Short-Range Crossing Projects (2021-2025)	66	\$51.3 M							
Short-Range Crossing Needs Shortfall	N/A	\$96.6 M							
Short-Range Passenger Rail Improvements (Amtrak)	1	\$55.4 M							
TOTAL: Short-Range	98	\$366.6 M							
Long-Range Projects									
Passenger Rail Studies	6	\$25.5 M							
Projects on State-Owned Rail Lines	23	\$112.3 M							
Ongoing Maintenance of GDOT-owned short line railroads	N/A	\$319.8 M							
Track and Bridge Upgrade of GDOT-Owned short line railroads to carry 286,000 lb railcars	N/A	\$453.2 M							
Projects on Privately-Owned Rail Lines	22	\$193.7 M							
Inland Ports	3	\$217.3 M							
Blocked Crossing Projects	6	\$586.6 M							
TOTAL: Long-Range	60	\$1,908.4 M							
TOTAL: Short-Range and Long-Range	158+	\$2,275.0 M							

Source: Georgia State Rail Plan (2021)



Existing Conditions and Needs Assessment Technical Memo

12.1.5 2022-2024 Georgia Strategic Highway Safety Plan

A data-driven, comprehensive, multidisciplinary plan developed by GDOT in cooperation with the Governor's Office of Highway Safety. It establishes safety performance measures and goals (a summary of which is shown by **Figure 57**), with results for reducing fatalities and injuries across various causes. It develops a "Safe System" approach and defines emphasis areas to address goals. These emphasis areas include pedestrian safety, motorcycle safety, impaired driving, protecting older drivers, distracted driving, and others. The plan defines specific countermeasures and strategies to address these. The plan played a key role in the framework for the MTP update.

GEORGIA STRATEGIC HIGHWAY SAFETY PLAN





Figure 57: Safety Performance Measures & Goals

CORE OUTCOME	PERFORMANCE MEASURE			GOALS
TRAFFIC FATALITIES	To maintain traffic fatalities under the projected 1,770 (2020-2024 rolling average) by 2024.	BASELINE 2019 1,505	ESTIMATE 2020 2021 1,559 1,617	TARGET 2022 2023 2024 1,671 1,722 1,770
FATALITIES/ 100M VMT	To maintain traffic fatalities per 100M VMT under the projected 1.22 (2020-2024 rolling average) by 2024.	BASELINE 2019 1.19	ESTIMATE 2020 2021 1.20 1.21	TARGET 202 2023 2024 1.21 1.22 1.22
SERIOUS INJURIES IN TRAFFIC CRASHES	To maintain serious injuries in traffic crashes under the projected 11,069 (2020-2024 rolling average) by 2024.	BASELINE 2019 5,836	ESTIMATE 2020 2021 6,518 7,393	TARGET 2022 2023 2024 8,443 9,669 11,069
SERIOUS INJURIES IN TRAFFIC CRASHES/ 100M VMT	To maintain serious injuries in traffic crashes per 100M VMT under the projected 7.68 (2020-2024 rolling average) by 2024.	BASELINE 2019 4.61	ESTIMATE 2020 2021 4.97 5.46	TARGET 2022 2023 2024 6.08 6.82 7.68
NON-MOTORIST SERIOUS INJURIES AND FATALITIES	To maintain non-motorist serious injuries and fatalities under the projected 1,025 (2020-2024 rolling average) by 2024.	BASELINE 2019 608	ESTIMATE 2020 2021 663 734	TARGET 2022 2023 2024 818 915 1,025
UNRESTRAINED PASSENGER VEHICLE OCCUPANT FATALITIES, ALL SEAT POSITIONS	To maintain the unrestrained traffic fatalities under the projected 440 (2020-2024 rolling average) by 2024.	BASELINE 2019 434	ESTIMATE 2020 2021 442 445	TARGET 2022 2023 2024 446 445 440
ALCOHOL-IMPAIRED DRIVING FATALITIES	To maintain alcohol-related fatalities under the projected 415 (2020-2024 rolling average) by 2024.	BASELINE 2019 365	ESTIMATE 2020 2021 377 389	TARGET 2022 2023 2024 399 408 415
SPEEDING-RELATED FATALITIES	To maintain speeding-related fatalities under the projected 326 (2020-2024 rolling average) by 2024.	BASELINE 2019 262	ESTIMATE 2020 2021 275 288	TARGET 2022 2023 2024 301 313 326

Source: 2022-2024 Strategic Highway Safety Plan (2021)

Existing Conditions and Needs Assessment Technical Memo

12.2 Regional Recommendations: DARTS

12.2.1 DARTS 2045 MTP

In accordance with federal regulations, the DARTS 2045 Metropolitan Transportation Plan (MTP) updates the previous plan from 2014 to address changing conditions within the study area and changes in projected future conditions. The document establishes existing conditions in the region based on resources from various agencies and organizations and utilizes these to develop and assess the current and future transportation needs. A key element of this is the review of previous plans and program completed for the DARTS region (15 in total), including the 2040 GDOT Statewide Strategic Transportation Plan (SSTP)/Statewide Transportation Plan (SWTP), the Albany and Dougherty County Comprehensive Plan 2026, and the Georgia Statewide Freight and Logistics

DARTS 2045 METROPOLITAN TRANSPORTATION PLAN (MTP) UPDATE





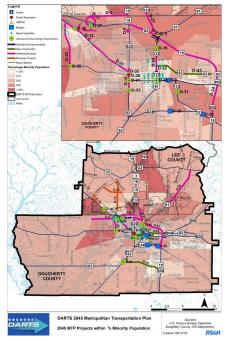
<u>www.dartsmpo.org</u> 240 Pine Avenue Suite 300 Albany, Georgia 31701

Plan. The MTP incorporates 2015 Census data and projected future socioeconomic data into a Travel Demand Model to understand the region's travel patterns, and plan for future transportation in the region; modal analysis, including analysis of traffic volumes and level of roadway service (LOS) is also used for the Travel Demand Model. To accompany this, this plan incorporates existing and projected future land use data, identification of vulnerable and marginalized communities (and an impact assessment of DARTS projects on these communities), criteria for prioritizing projects that address known safety issues, and assessment of existing and future freight conditions in accordance with the Statewide Freight Plan.



Existing Conditions and Needs Assessment Technical Memo

Figure 58: Project Impact Analysis: MTP Projects within % Minority Population



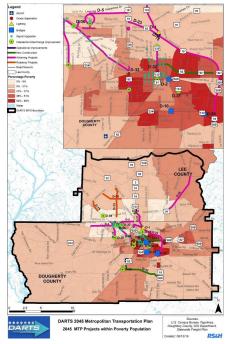


Figure 59: Project Impact Analysis: MTP

Projects within Poverty Population

Source: DARTS 2045 Metropolitan Transportation Plan (2014)

The 2045 plan was created using input from a local Stakeholder Committee and several rounds of public workshops. Using the input from this engagement process, the plan develops a series of goals, objectives, and performance measures to address federally required planning factors, national and state goals, as well as priorities identified in the stakeholder and public engagement process. Specifically, the plan aims to align with FAST Act national planning factors and goals and with the GDOT 2040 SSTP/2015 SWTP and create performance measures to reflect these goals. Some of the stated goals include safety/security, accessibility and mobility, enhanced system integration and connectivity, and system preservation and maintenance. The plan lists ongoing DARTS MTP projects (both with and without funding) and transit improvement projects in alignment with a prioritization and project assessment process.



Existing Conditions and Needs Assessment Technical Memo

12.2.2 **DARTS Regional Freight Profile**

This document uses a locally driven planning process focused on gaining consensus on freight priorities in the DARTS area to promote regional economic competitiveness. The study team was guided by a Freight Advisory Commission (FAC), which helped them collect quantitative data related to current and projected freight movement and qualitative input from local government and private system users. Major findings from study data collection efforts include demographic data, major employers, key transportation facilities, truck traffic estimates, truck and auto crashes, truck origins and destinations, and freight commodities. Input from the FAC and DARTS stakeholders allowed the study team to make various recommendations for freight needs and policy recommendations. The policy recommendations included the following:

- Identify Potential Truck Parking/Redevelopment Opportunities •
- Identify Alternative Fuel Corridors •
- Designate Resilience/Secondary Freight Corridors •
- Identify Truck Restrictions. •

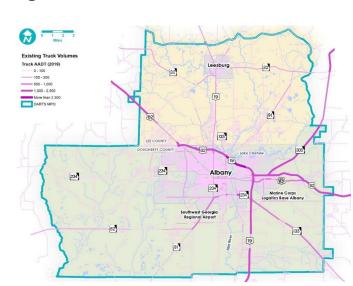
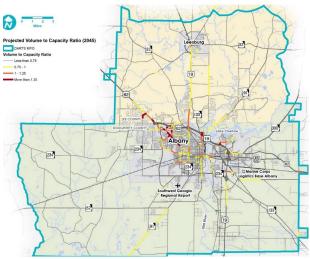


Figure 60: 2019 Truck Traffic Volumes

\RTS Regional Freight Profile



Figure 61: Year 2045 Projected **Volume/Capacity Ratios**



Source: DARTS Regional Freight Plan (2022)

Additionally, this study's findings have the following implications for the DARTS 2050 MTP update: 1) A focus on capacity improvements to help freight flow, taking into account both



Existing Conditions and Needs Assessment Technical Memo

capital costs as well as indefinite maintenance costs; 2) Need for coordination with local governments and GDOT to facilitate conversion to alternative and clean energy fuel in accordance with the BIL; 3) Opportunity to develop underutilized land ready for redevelopment to accommodate additional truck parking; 4) Potential to further develop East Albany into a freight and logistics hub, requiring additional investment in this area for operational improvements and access management strategies to facilitate efficient truck movement and greater maintenance needs; 5) Emphasizing intermodal connectivity through connections to the Southwest Georgia Regional Airport and the rail system, and maintaining freight mobility intermodal connectors; 6) Increasing coordination cooperation with GDOT (to access BIL funds through a State Plan, implement freight-related ITS strategies more effectively, etc.). The study also creates guidelines for project prioritization and lists potential funding sources for these.

12.2.3 DARTS Transportation Improvement Plan (TIP)

This is a prioritized list of funded transportation projects for the DARTS planning area for fiscal years 2024 through 2027. The TIP is used as an implementation guide by the federal, state, and local agencies. The Federal Highway Administration and the Federal Transit Administration require that the TIP be financially constrained by year and the Georgia Department of Transportation provided the federal and state project status, cost estimates, and available funds for the various projects. A summary of the budgeting process is shown by **Figure 62**. The TIP is made up of projects listed in the current 2045 MTP and was reviewed and used in the development of the project list for the MTP update.

DOUGHERTY AREA REGIONAL TRANSPORTATION STUDY							
FY 2024 – 2027							
TRANSPORTATION IMPROVEMENT PROGRAM							
In accordance with Title VI of the Civil Rights Act of 1964 and other nondiscrimination laws, public participation is solicited without regard to race, color, national origin, age, sex, religion, disability, familial, or income status.							
Prepared By							
Dougherty Area Regional Transportation Study Staff							
In Cooperation With: Georgia Department of Transportation Federal Highway Administration Federal Transit Administration							

Figure 62	: Total Expe	cted Highv	vay &	Transit S	STIP Fun	ds

											6/6/2023
				ALBANY							
		TOTA	L EXPE	CTED HIGH	NAY	& TRANSIT					
STIP FUNDS (MATCHED) FY 2024 - FY 2027											
										FUND	CODE
STBG	Y236	Louin Deboka not	\$		S	-	S		s	17,750,340	\$ 17,750,340
Carbon	Y606		\$	332,104	S	551,336	\$	551,336	s	551,336	\$ 1,986,111
Other	L490		\$	45,000	s	45,000	\$	45,000	\$	45,000	\$ 180,000
Transit	5303		\$	100,202	s	100,202	\$	100.202	S	100,202	\$ 400,808
Transit	5307	-	\$	2,660,252	s	3,965,872	\$	3,965,872	S	3,965,872	\$ 14,557,868
Transit	5311		\$		S		S		S		\$ 1,887,079
NHPP	Y001	LIGHTING	\$	10,000	S	10.000	S	10.000	S	10.000	\$ 40,000
NHPP/STBG	Various	BRIDGE MAINTENANCE	\$	445,000	\$	445,000	\$	445,000	\$	445,000	\$ 1,780,000
NHPP/STBG	Various	ROAD MAINTENANCE	\$	2,768,000	\$	2,472,000	\$	2,472,000	\$	2,472,000	\$ 10,184,000
STBG	Y240	LOW IMPACT BRIDGES	\$	208,000	\$	208,000	\$	208,000	\$	208,000	\$ 832,000
STBG	Y240	OPERATIONS	\$	119,000	\$	119,000	\$	119,000	\$	119,000	\$ 476,000
STBG	Y240	TRAF CONTROL DEVICES	\$	297,000	\$	297,000	\$	297,000	\$	297,000	\$ 1,188,000
STBG	Y240	RW PROTECTIVE BUY	\$	15,000	\$	15,000	\$	15,000	\$	15,000	\$ 60,000
HSIP	YS30	SAFETY	\$	989,000	\$	989,000	\$	989,000	\$	989,000	\$ 3,956,000
RRX	YS40	RAILROAD CROSSINGS	\$	114,000	\$	114,000	\$	114,000	\$	114,000	\$ 456,000
TOTAL			\$	9,989,637	\$	9,331,410	\$	9,331,410	\$	27,081,750	\$ 55,734,206

Source: DARTS Transportation Improvement Program (2023)



Existing Conditions and Needs Assessment Technical Memo

12.2.4 DARTS Bicycle and Pedestrian Plan

Adopted in 2023, this plan is a comprehensive review and update of the 2011 Bike and Pedestrian Plan for the DARTS MPO. It builds on data collected in 2011 by examining DARTS MPO's policies, projects, high-traffic areas, and community input to establish strategies and performance measures. The plan develops a project prioritization model for identifying infrastructure projects that will have the greatest benefit and alignment with community goals and expectations. Some of the criteria in the model include connections to historical underserved communities, connections to transit, connections to activity centers and major employers, low-cost solutions, and placement within the primary trail network. The prioritization model generates a list of bike-pedestrian improvement projects listed in tiers of priority, as shown in Figure 64. This plan was used to inform the multimodal elements of the MTP update.

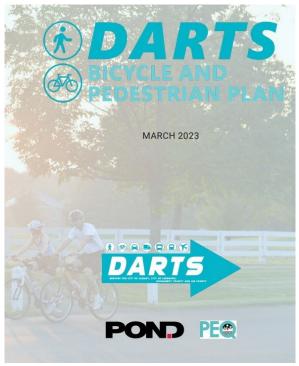
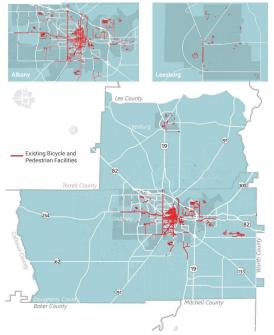
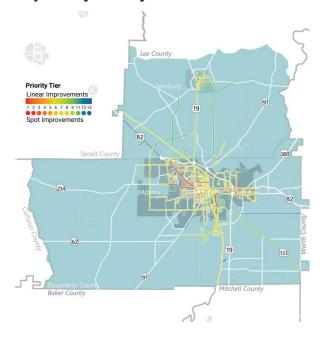


Figure 63: Map of Existing Bicycle and Pedestrian Facilities



Source: DARTS Bicycle and Pedestrian Plan (2023)

Figure 64: Bicycle and Pedestrian Projects by Priority Tier



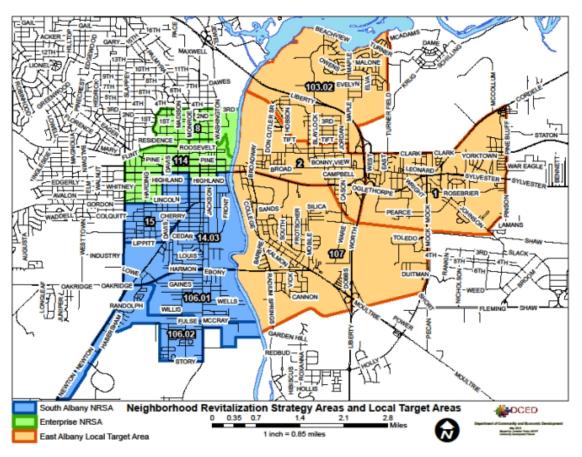


12.3 Local Recommendations: Cities and Counties

12.3.1 Albany & Dougherty County Comprehensive Plan 2026

This plan was adopted in June 2016 and addressed all required planning elements for Dougherty County and the City of Albany; these elements include economic development, natural and cultural resources, community facilities and services, economic development, housing, transportation and land use. To address these elements, a corresponding list of needs and opportunities was crafted based on the results of a SWOT (Strengths, Weaknesses, Opportunities, Threats) analysis. It used a community outreach and public participation process that consisted of public hearings, community surveys, and focus groups. The plan was used to inform the land use assessment and to provide additional insights through the transportation element.

Figure 65: Neighborhood Revitalization Strategy Areas and Local Target Areas



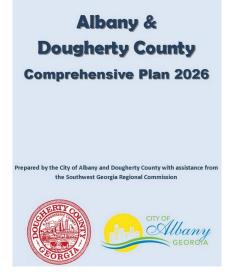
GTS M-P-H

Source: Albany & Dougherty County Comprehensive Plan 2026 (2016)

Gresham 🕂

Smith

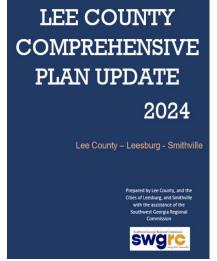
ANALYTICS



Existing Conditions and Needs Assessment Technical Memo

12.3.2 Lee County-Leesburg-Smithville Comprehensive Plan 2024

Completed in 2023, this comprehensive plan is intended to serve as local governments' guide for assessing development proposals, including rezoning applications and redevelopment plans. The public involvement process, guided by the Southwest Georgia Regional Commission, included raising public awareness through newspaper advertisements, social media platforms, public surveys, and local information notice boards, with the involved local governments facilitating the process in their respective jurisdictions. These governments held SWOT review meetings, while also reviewing community work programs, land use maps, transportation and demographic data. The plan also contains a joint economic development plan for Lee County and the cities of Leesburg and Smithfield. This plan was used to inform the land use assessment in Lee County, a



map for which is shown by **Figure 66**, and Leesburg and provide information related to mobility through the transportation element.

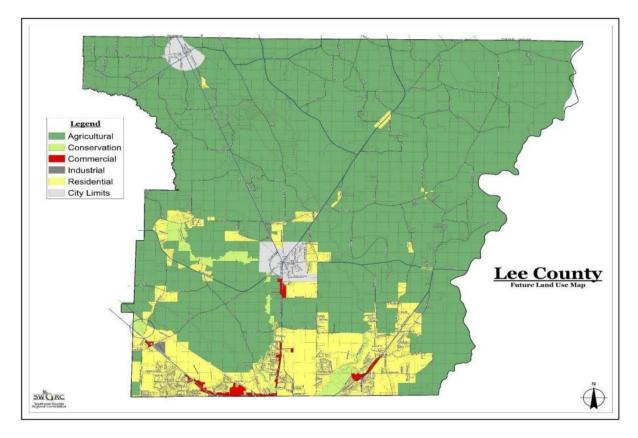


Figure 66: Lee County Future Land Use Map

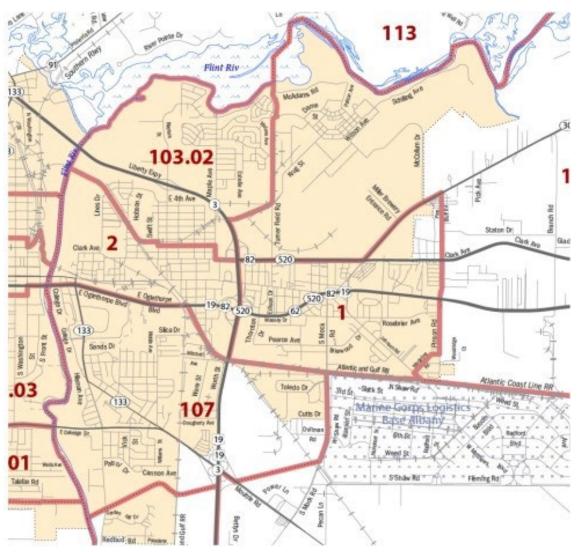
Source: Lee County-Leesburg-Smithville Comprehensive Plan 2024 (2023)



12.4 Area-Specific Recommendations: Corridors and Districts12.4.1 2017 East Albany Revitalization Plan

This is an implementation plan created by the City of Albany that is intended to guide effective community investment decisions and launch a planning process with diverse communitybased stakeholders and partnering agencies to strategically plan and concentrate resources and efforts in East Albany (the neighborhood and its census tracts are shown in **Figure 67**). The document includes strategic goals for a Neighborhood Revitalization Plan; these goals are 1) crime in neighborhoods, 2) infrastructure repair and maintenance, 3) housing and property issues, 4) encourage economic development, 5) reduce poverty. The document identifies projects which support these strategic goals. These projects were reviewed for relevant transportation projects to inform the MTP project list.

Figure 67: Study area map with census tracts



Source: East Albany Revitalization Plan (2017)



Existing Conditions and Needs Assessment Technical Memo

12.4.2 Flint River Trails Master Plan

This plan, jointly developed by the City of Albany and Dougherty County, was completed in 2016 and identified the master plan and implementation strategy for a network of over 21 miles of greenway trail, 11 water trail access points, and over 600 acres of available land for additional mountain biking and equestrian trail opportunities along the banks of the Flint River within Dougherty County, a map of which is



shown by **Figure 68**. The goal of the plan is to connect existing parks, recreation areas and greenspaces through a trail system, building on existing greenway and multi-use trails. This plan was used to inform the bicycle and pedestrian modal analysis.

Figure 68: Flint River Trails Greenway Master Plan



Source: Flint River Trails Master Plan (2016)

