TRANSPORTATION ELEMENT

05

TRANSPORTATION

Introduction

The Transportation Element of Plan 2040 draws from the Coastal Region Metropolitan Planning Organization's (CORE MPO) Total Mobility 2045 Plan to identify transportation-related issues and opportunities for quality growth. Pooler is a member of the CORE MPO, which is the entity responsible for transportation planning in the region.

As Pooler continues to grow in terms of population and employment, strategic transportation investments will be needed to handle and manage the additional traffic and congestion pouring into the city. While investments into the city's roadway infrastructure are necessary to increase capacity for vehicular users, other forms of infrastructure investment should be considered, including bike lanes, walking paths, and sidewalks, as well as bus service to create additional opportunities for connectivity to the region.

TRANSPORTATION CONDITIONS & TRENDS

Chatham County has long served as the regional center for Coastal Georgia and the Lowcountry of South Carolina for employment, shopping and recreation. In addition to serving as the regional center for residents, Savannah, with its Historic Landmark District, is host to over 14.8 million visitors each year spending $3.1 billion and has become one of the top tourist destinations, both nationally and internationally, according to Longswoods Travel USA Study via Visit Savannah.

Chatham County is also home to the Port of Savannah, which is the largest and fastest growing single-operator container terminal in North America and the fourth largest in total volume, according to the Georgia Ports Authority (GPA).

The port is a major economic engine for the region, as well as the State of Georgia. The CORE MPO region is also home to a number of other regional employment centers, including medical, military and educational institutions, port-related industries and manufacturing centers.

An efficient transportation system that effectively provides for the movement of people and goods is critical to the continued economic vitality of Pooler.

METROPOLITAN PLANNING ORGANIZATION

A Metropolitan Planning Organization (MPO), is responsible for developing a regional transportation vision, directing planning and implementation of projects, allocating federal funds, and gathering input from the public and stakeholders.

—Federal Transit Administration (FTA)

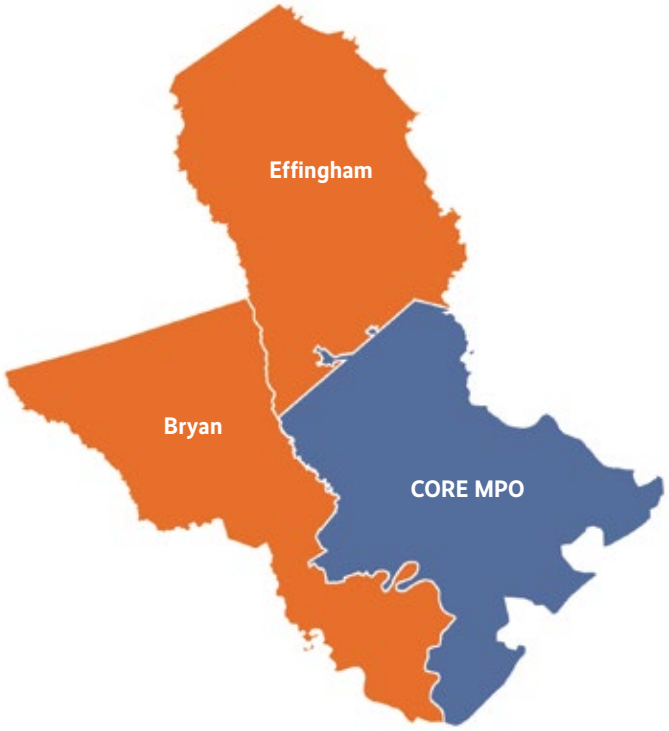


Figure 5.1–CORE MPO Boundary

Coastal Region MPO

The boundaries of the CORE MPO are smaller and fall within the larger Savannah MSA. The CORE MPO is a transportation policy-making and planning body with representatives of elected and transportation authorities from Chatham County and its municipalities, Bryan County, Effingham County and executives from local, state and federal agencies.

The CORE MPO is comprised of a policy board known as the Executive Board and four advisory committees including the Technical Coordinating committee (TCC), the Citizens Advisory Committee (CAC), the Advisory Committee on Accessible Transportation (ACAT) and the Economic Development and Freight Advisory Committee (EDFAC).

METROPOLITAN TRANSPORTATION PLAN

A Metropolitan Transportation Plan (MTP), is a long-range planning document that sets future goals and identifies transportation deficiencies, strategies, and projects over the next two decades.

—CORE MPO

The CORE MPO follows the 3-C transportation planning process: comprehensive, continuing, and cooperative. Through this planning process, the MPO coordinates policies, corridor studies, and plans such as the Metropolitan Transportation Plan. Pooler, being within the CORE MPO planning boundary, will also be subject to the long-term transportation development outlined in the MTP.

CORE MPO Statistics

Total Population in MPO*

276,406

Land Area (Square Miles)*

651

Year Established*

1983

*Metropolitan Planning Organization (MPO) Database

CORE COASTAL REGION MPO

TRAVEL CHARACTERISTICS

Regional Commuting Patterns

Chatham County and the city of Pooler are regional hubs for employment, shopping, recreation, medical and educational institutions, and other economic generators. Many residents of neighboring counties commute into Chatham County for work each day, greatly impacting the traffic patterns and overall efficiency of the transportation network flowing through Pooler.

The neighboring counties of Bryan and Effingham both have over 64% of their residents commuting outside the county for work each day, and 72% of Richmond Hill residents travel outside Bryan County for work. Other nearby counties also experience a significant out-commuting pattern. Liberty County has 18.6% and Bulloch County has 24% of their population working outside their county, and those workers have a typical commute time of about one hour each way.

COMMUTING PATTERN

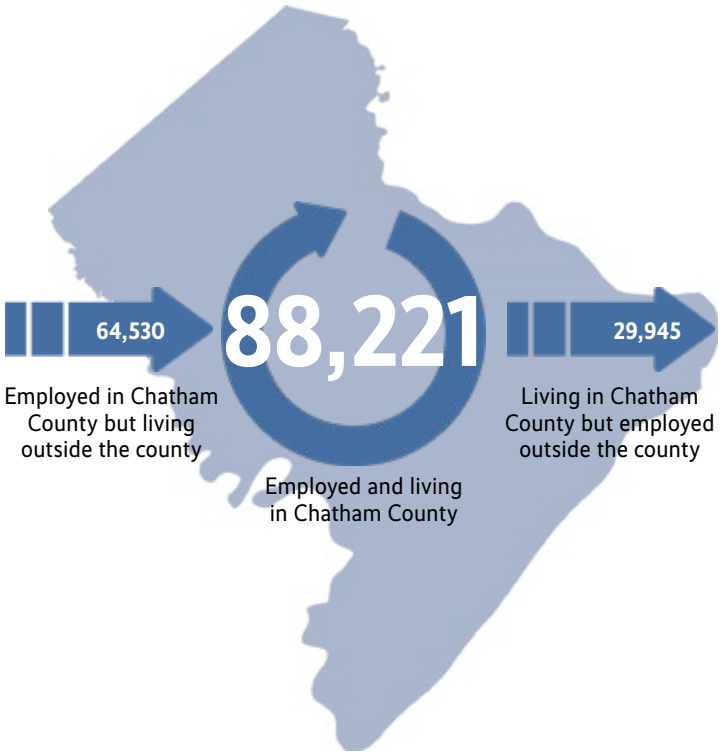
A commuting pattern is the journey to work and refers to groups of workers in a region, and the distances and directions they travel from home to work.

—Census Bureau

Commuting Patterns

	Work in County of Residence	Work Outside County of Residence
Chatham County	92.2%	4.9%
Savannah	94.1%	3.6%
Richmond Hill	26.2%	72.1%
Bryan County	27.5%	69.7%
Effingham County	31.1%	64.4%

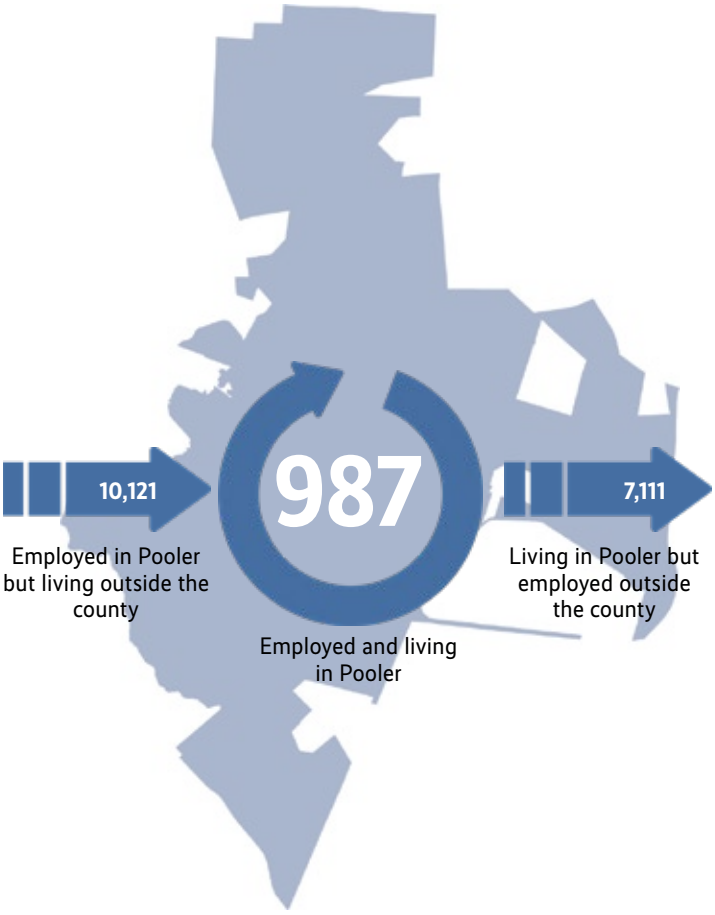
Figure 5.2–Regional Commuting Characteristics
U.S. Census Bureau: 2017 American Community Survey 5-Year Estimates



Map 5.1–Regional Commuting Pattern Flow, 2014–2018
U.S. Census Bureau: 2014–2018 American Community Survey

Local Commuting Patterns

Many local residents commute into the city of Pooler for both employment and leisure. Over 90% of people employed in Pooler live outside of the city, while 80% of people living in Pooler commute outside the city for employment. The high amount of commuting in and out of the city is evidenced by the high volume of traffic that often congests Pooler's roadways. Roughly, a typical commute time to work for Pooler residents is more than 20 minutes each way.



Map 5.2–Local Commuting Pattern Flow, 2014–2018
U.S. Census Bureau: 2018 LEHD Origin-Destination Employment Statistics

Commute Mode Share

The proportion of travelers using a given method of transportation is called the "mode share" or the "mode split." Mode share is influenced by the types of facilities or services that have been emphasized in the past (i.e., provision of more and wider roadways and “free” parking, rather than transit service, bikeways, or sidewalks).

Data that is available from the U.S. Census Bureau regarding the various ways people choose to travel (e.g., driving, taking transit, walking, etc.) focuses on the trips to and from work, as this is one of the most predictable trip purposes. The picture of travel activity implied by this data is also limited by the fact that trips involving multiple modes are counted under whichever mode was used for most of the trip distance (e.g., a commute involving a short bicycle trip to and from the bus stop and longer ride on the bus is counted only as a bus commute).

As captured in Figure 5.3, most work trips in Pooler are by automobile, as is the case for the state and country overall. Workers living within Pooler are less likely to use alternatives to driving alone, because there is no transit service coverage available in the city. Pooler is a growing city and becoming a larger player in the region for employment, shopping, and recreation; to help balance out this growth pressure, alternative means of transportation need to be considered.

MODE SHARE

Mode Share (also called mode split, modes-share, or modal split) is the percentage of travelers using a particular type of transportation or number of trips using said trip.

—CORE MPO

According to American Community Survey estimates for 2014–2018, shown in Figure 5.3, 90% of workers living in Pooler drove alone to work and 78.5% of the workers in Chatham County drove alone to work, compared to 79.5% statewide and 76.4% nationally. About 85% of workers in Effingham County and Richmond Hill drove alone to work. In addition to having a higher percentage of workers commuting alone than neighboring communities, the state, and the U.S., Pooler also exhibits an extremely low percentage of walking (0.2%) and other means of travel to work (0.5%).

It is important to note that today’s observed travel behavior does not necessarily reflect the choices people would make if different transportation options were available and at a level to make them safe.

Transportation policy, funding, and design decisions in support of automobile travel initially created great gains in mobility, most notably for the middle and upper classes. These trends have also resulted in some unintended, negative consequences for individuals and society, such as pollution, contributions to the atmospheric greenhouse effect, contributions to obesity, damage to the natural environment and to community social fabric, as well as a high cost for individuals to enter fully into the normal activities of society (i.e., the need to buy a car to reliably get to a job).

In other words, although most people in the region today go everywhere by private automobile, there are good reasons to encourage interest in other modes within the community.

Most People in Pooler drive alone to work, *with only 10% of people carpooling, walking, biking, or telecommuting for their commute.*

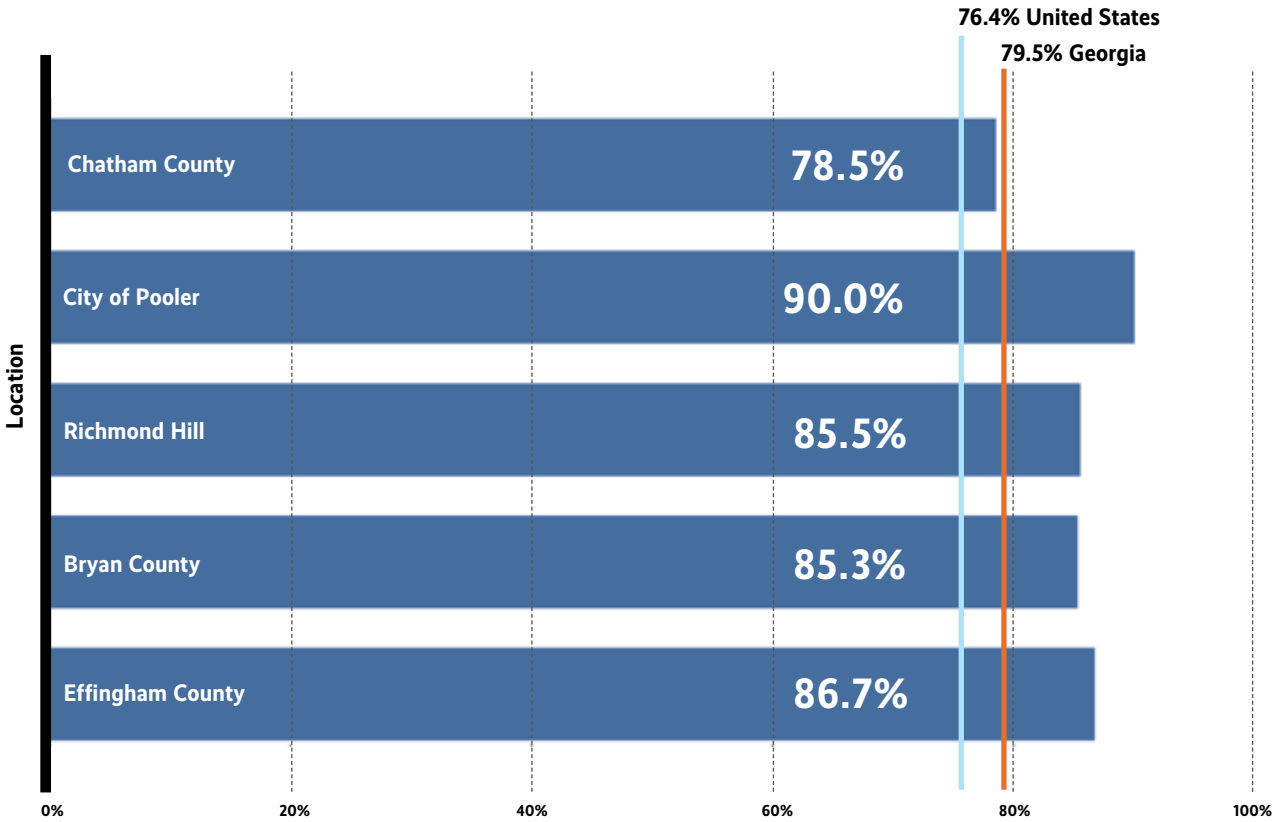


Figure 5.3–Percent of Commuters Who Drive Alone to Work
U.S. Census Bureau: 2014–2018 American Community Survey 5-Year Estimates

METROPOLITAN TRANSPORTATION PLAN

The Metropolitan Transportation Plan (MTP) is a multi-modal plan that is based on the socio-economic development of the Savannah region and is intended to provide efficient transportation services to all the residents in this area. Its multi-modal approach incorporates highway development, transit service, bike/pedestrian improvements, and other related transportation investments.

The MTP identifies the vision, goals and objectives, strategies and projects that promote mobility for both people and goods. The MTP is updated every five years, at which time the MPO reviews, revises, and recalibrates the travel demand model with updated demographic and socioeconomic characteristics. Updating the plan also allows for the MPO to incorporate results of any new or ongoing studies and any changes to federal regulations and guidance.

Mobility 2045

The CORE MPO recently prepared an update of its MTP called Mobility 2045. The Mobility 2045 Plan emphasizes a multi-modal performance-based approach to transportation planning to meet the travel demands over the next 26 years, while taking into consideration regional goals and financial capacity. Traditional transportation planning has focused on how quickly and efficiently vehicles can move from point to point. This approach typically has not considered the impacts on and relationships to land use, community character, and the quality of life.

The CORE MPO is committed to wisely investing in the transportation network to address the growth of the area while enhancing mobility for people and goods and ensuring a sustainable future. This commitment is incorporated in Mobility 2045 through a diverse and wide-ranging process, including an assessment of transportation needs in coordination with the future regional growth and anticipated future trends.

Mobility 2045 Goals

The overall goal of the Mobility 2045 Plan is to continue moving the planning process beyond a singular focus on moving motor vehicles and consider transportation issues from a comprehensive perspective that incorporates community values, needs, land use, and modal alternatives.

The Mobility 2045 Plan considers transportation issues from a comprehensive perspective that incorporates community values, needs, land use, and modal alternatives.

Mobility 2045 goals and objectives are targeted to ensure that the transportation system helps the region attain its overall vision for the future. Through public involvement, stakeholders and citizens helped identify these goals and objectives, which provide the framework for the provision of a safe, secure, and efficient multimodal transportation network that meets the mobility needs of both people and freight (Figure 5.4).

Figure 5.4–Mobility 2045 Goals

TRANSPORTATION INVESTMENT

Mobility 2045 provides a financially balanced list of projects where project costs must not exceed the $1.8 billion anticipated funding for the 25+ year planning period.

Federal funds provide the largest share of funding for transportation improvements in the CORE MPO Metropolitan Planning Area, followed by state funds. State funds mostly come from Georgia's motor fuel tax and House Bill 170 funds. Transportation funds are also generated by local sources. The local revenues come from local governments' general funds, Special Purpose Local Option Sales Tax (SPLOST), transit sales tax, transit fare box receipts, and transit district tax.

It is estimated there will be approximately $1.8 billion available in highway funds and $221 million in transit funds over the life of the plan. Projects totaling over $670 million are currently under development and will continue to move forward with Mobility 2045, leaving approximately $1.1 billion (of the $1.8 billion) to fund new projects.

Projects identified as "needs" but not included in Mobility 2045 are incorporated into the Vision Project List, an unfunded project list. Subsequent plan updates will utilize the Vision Plan for projects to include when funds become available.

Total Funding Based on Project Type

Highway ($1.1 B)

- Roadway Widening ($470)
- Interchanges ($417.5)
- New Roadway ($155.3)

Preservation, Maintenance & Opt ($553 M)

- Maintenance ($232)
- Operations & Road Improvements ($161)
- Bridges ($160)

Non-Highway ($262 M)

- Transit Priority Projects (FHWA & FTA Funds) ($240)
- Non-Motorized ($22.4)

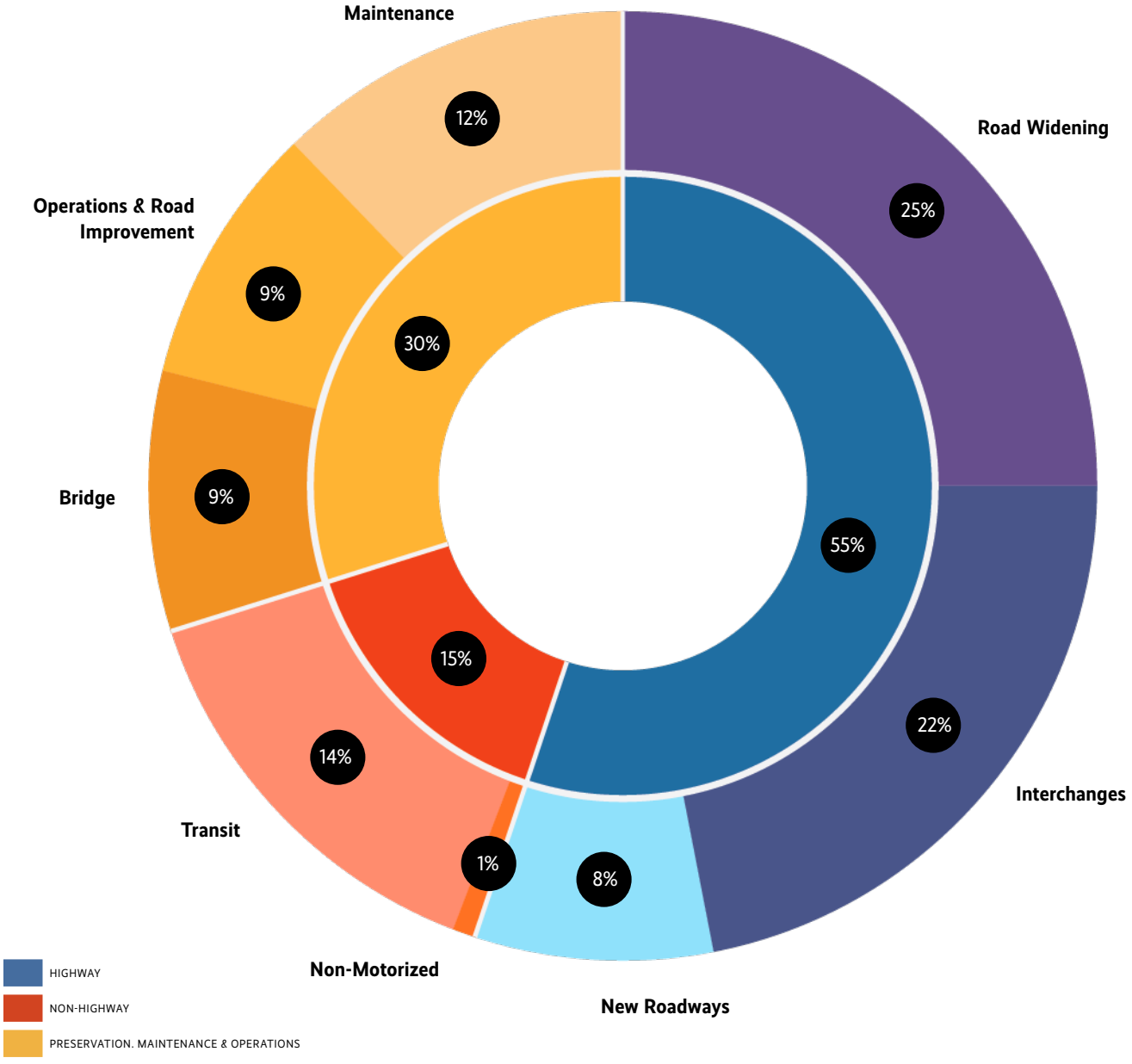


Figure 5.5–Funding for Transportation Projects
Coastal Region Metropolitan Planning Organization (CORE MPO)

ROAD NETWORKS

The Savannah Metropolitan Statistical Area (MSA) encompasses Bryan, Chatham, and Effingham Counties and has a total of more than 2,490 miles of roadways. These roadways are categorized by their use and the amount of traffic carried. These categories, as defined by the Federal Highway Administration (FHWA), are described on the facing page. Roadways in the region serve multiple purposes and accommodate different types of travel. Roadways range from local streets, which are designed for direct access to homes and businesses, to interstate highways, which are primarily for mobility and long distance travel.

Maps 5.3 and 5.4 depict the functional classification of the roadway network in the Savannah MSA and Pooler while Figure 5.6 shows the roadway miles by functional class. Local roads make up almost 70% of the total miles in the area. Collectors make up about 12.7% of the total roadway miles.

The interstates, freeway and arterials, though comprising only 17.28% of the total roadway mileage, carry most of the traffic. The interstates, freeways and principal arterials (about 9.49% of the total roadway mileage) also carry most of the freight traffic in the area.

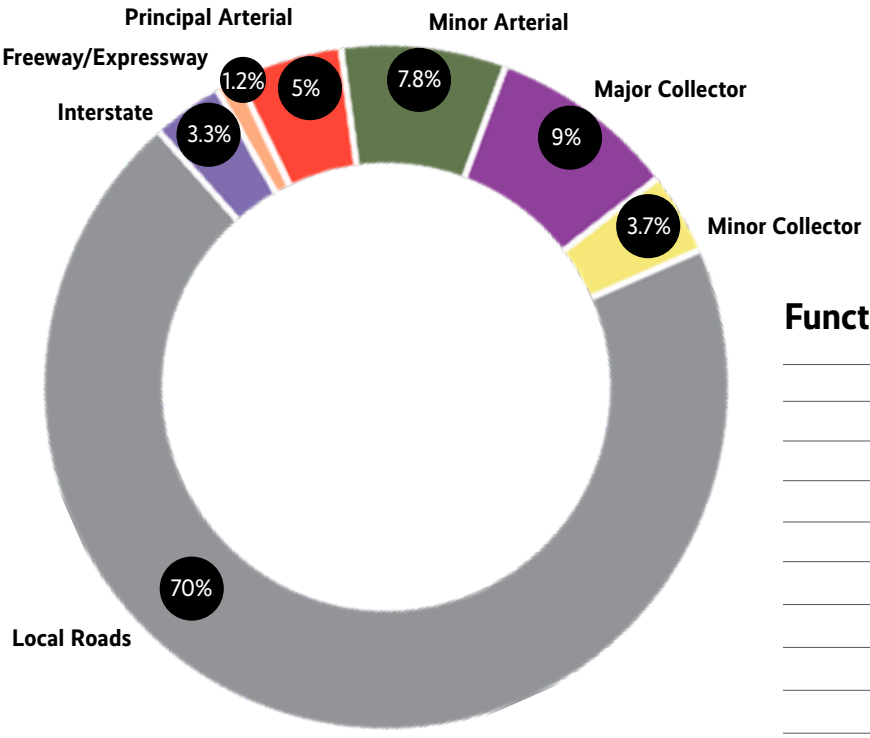


Figure 5.6–Percentage of Roadway in Region by Functional Classification
Coastal Region Metropolitan Planning Organization (CORE MPO)

Functional Classification

	Miles
Interstate	97.52
Freeway/Expressway	34.06
Principal Arterial	147.27
Minor Arterial	229.14
Major Collector	263.29
Minor Collector	108.83
Local Roads	2060.44
Total	2940.55

Figure 5.7–Miles of Roadway in Region, by Functional Classification
Coastal Region Metropolitan Planning Organization (CORE MPO)

DEFINING OUR ROADWAY NETWORK

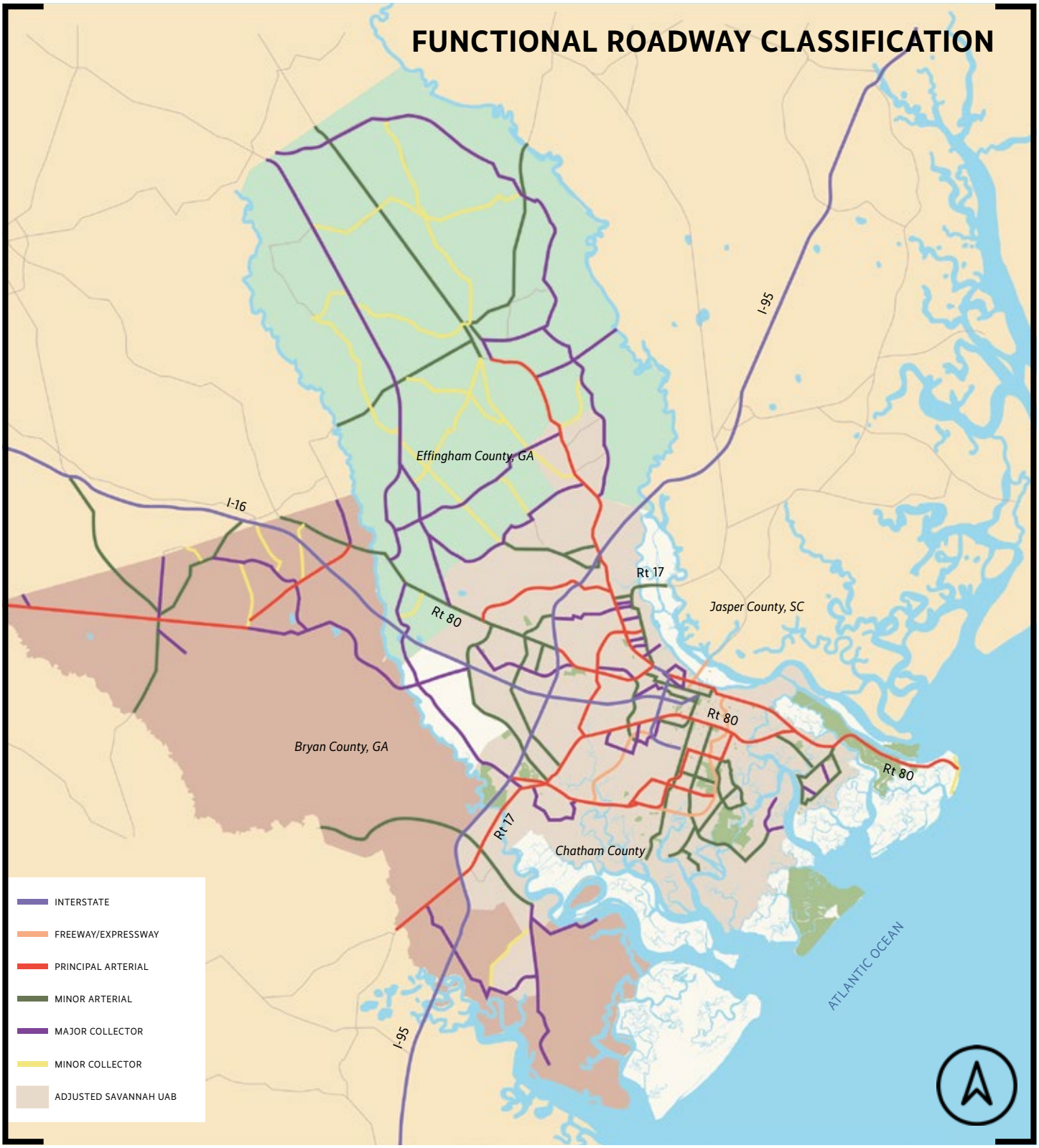
Interstate/Freeway
Roads that are fully accessed controlled and are designed to carry large amount of traffic at a high rate of speed; Examples include roadways such as I-16 and Harry Truman Parkway.

Arterials
Roads that are designed to carry large amounts of traffic at a relatively high speed, often over longer distances. Often some degree of access management is incorporated; Examples of arterials include Islands Expressway, SR 204 and U.S. 80.

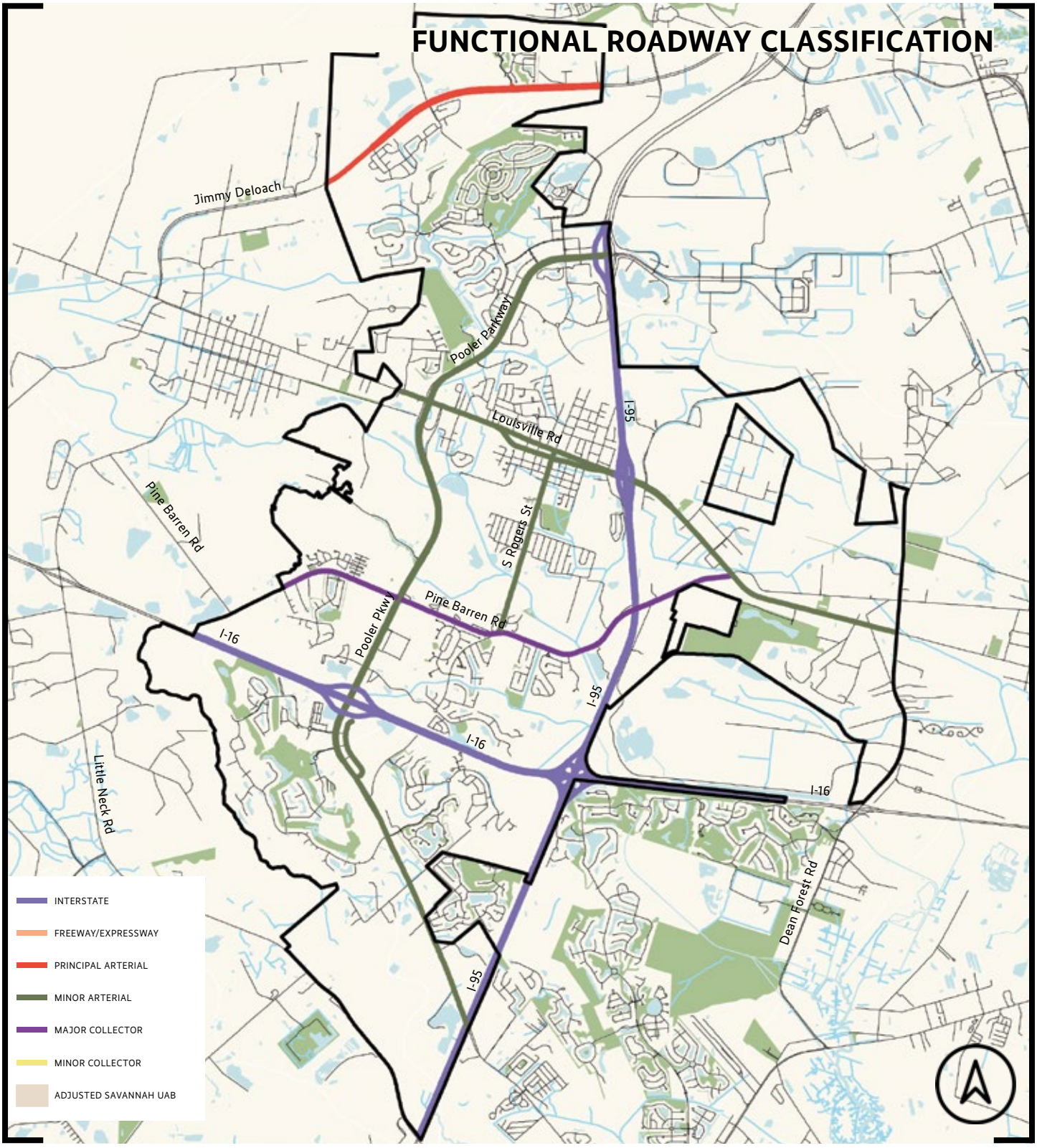
Collectors
Roads that are designed to carry less traffic at lower levels of speed for shorter distances. These roadways typically "collect" traffic from the local roadways and provide access to arterials. Examples of collectors include Habersham Street, LaRoche Avenue; and Old Louisville Road.

Local Roadways
Local roadways are those not otherwise classified and tend to serve short, local trips or connect with the collectors to access the broader roadway network.

—CORE MPO



Map 5.3–Savannah MSA Functional Roadway Classification, Savannah MSA
Georgia Department of Transportation, 2015



Map 5.4–Functional Roadway Classification, Pooler
Georgia Department of Transportation, 2015

Bridges

Due to the geography of the Pooler, it is important to have a good understanding of bridge conditions. This consideration will be necessary for safety, congestion and freight movements performance measures. Map 5.6 shows an inventory and conditions of the bridges in Pooler.

A bridge with fatigue damage may restrict what vehicle types and weights may cross it safely. A bridge with a "posted for load" posting has a weight limit capacity. All structurally deficient (SD) bridges are posted, but not all posted structures are (SD).A bridge is "load posted" when its capacity to carry heavy loads is diminished. The status of these bridges are described as acceptable or structurally deficient (SD).

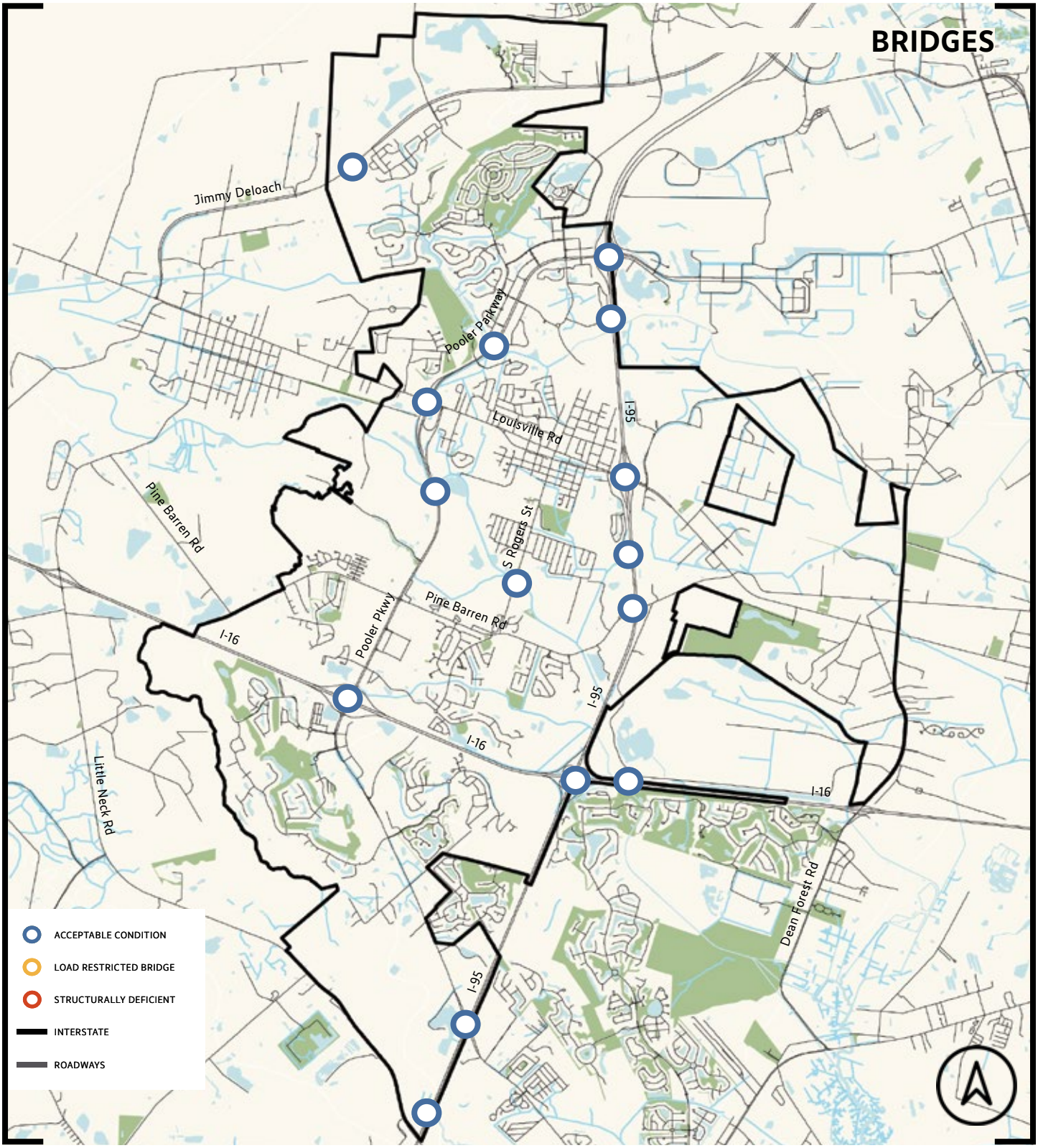
As shown by Map 5.5, there are currently no bridges in Pooler labeled structurally deficient.

ARE YOU LOOKING FOR MORE INFORMATION?

More information on bridges can be found in the U.S. 80 Bridges Study.

See...

https://www.thempc.org/Core/Studies#gsc.tab=0



Map 5.5–Bridge Locations and Conditions, Pooler
Coastal Region Metropolitan Planning Organization (CORE MPO)

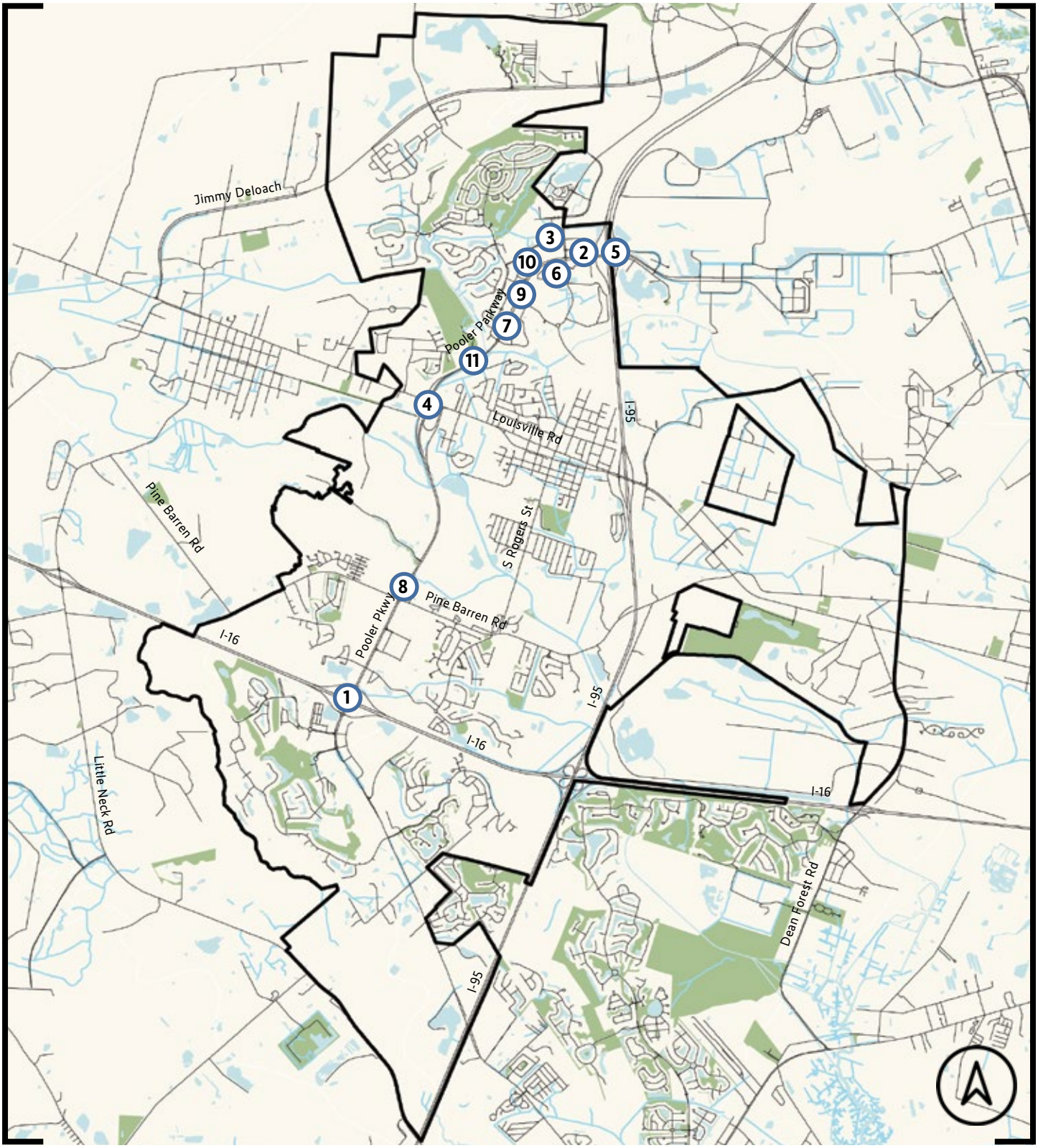
VEHICULAR ACCIDENTS

According to Pooler Police data from 2014–2019, vehicle wrecks have increased year after year. According to data, from January 1, 2014 to September 24, 2019, there were 2,541 vehicle wrecks.

This information reveals a major need for alternative solutions to accommodating traffic and congestion on Pooler's roadways. While public safety is most often a reactive measure to an issue, solving the issue of traffic and, in turn, traffic accidents, will require a proactive approach in which Pooler rethinks its roadway design, transportation planning, and land use.

	Intersection	Vehicular Wrecks
1	Pooler Parkway & I-16	525
2	Pooler Parkway & Mill Creek Circle	260
3	Pooler Parkway & Benton Boulevard	256
4	Pooler Parkway and US 80	236
5	Pooler Parkway & I-95	177
6	Pooler Parkway & Tanger Outlets Boulevard	170
7	Pooler Parkway & Godley Station Boulevard	126
8	Pooler Parkway & Pine Barren Road	104
9	Pooler Parkway & Park Avenue	89
10	Pooler Parkway & Maxwell Drive	52
11	Pooler Parkway & Issac G. Laroche Drive	35
	Vehicular Wrecks with No Intersections	511

Figure 5.8–Major Vehicular Wrecks by Roadway Intersection, 2014–2019
Police Department, Pooler



Map 5.6–Vehicular Wrecks by Roadway Intersection, 2014–2019
Police Department, Pooler

TRANSPORTATION IMPROVEMENT PROJECTS

As required by federal law each MPO must develop a Transportation Improvement Program (TIP). A TIP is essentially a list of upcoming transportation projects, covering a period of at least four years. The list below consists of programmed and conceptual infrastructure projects throughout Pooler.

The Pine Barren Road Corridor Traffic Study and the Quacco Road Widening Study, listed in Figure 5.10, have been developed such that the pertinent findings will be taken into account when land development decisions are being made by the City's Planning and Zoning Board as well as the Pooler City Council.

Information presented in these two studies include trip generation, trip distribution, capacity analyses, and recommendations for transportation improvements required to mitigate anticipated traffic demands produced by the potential development along the various roadway corridors.

Additional Projects

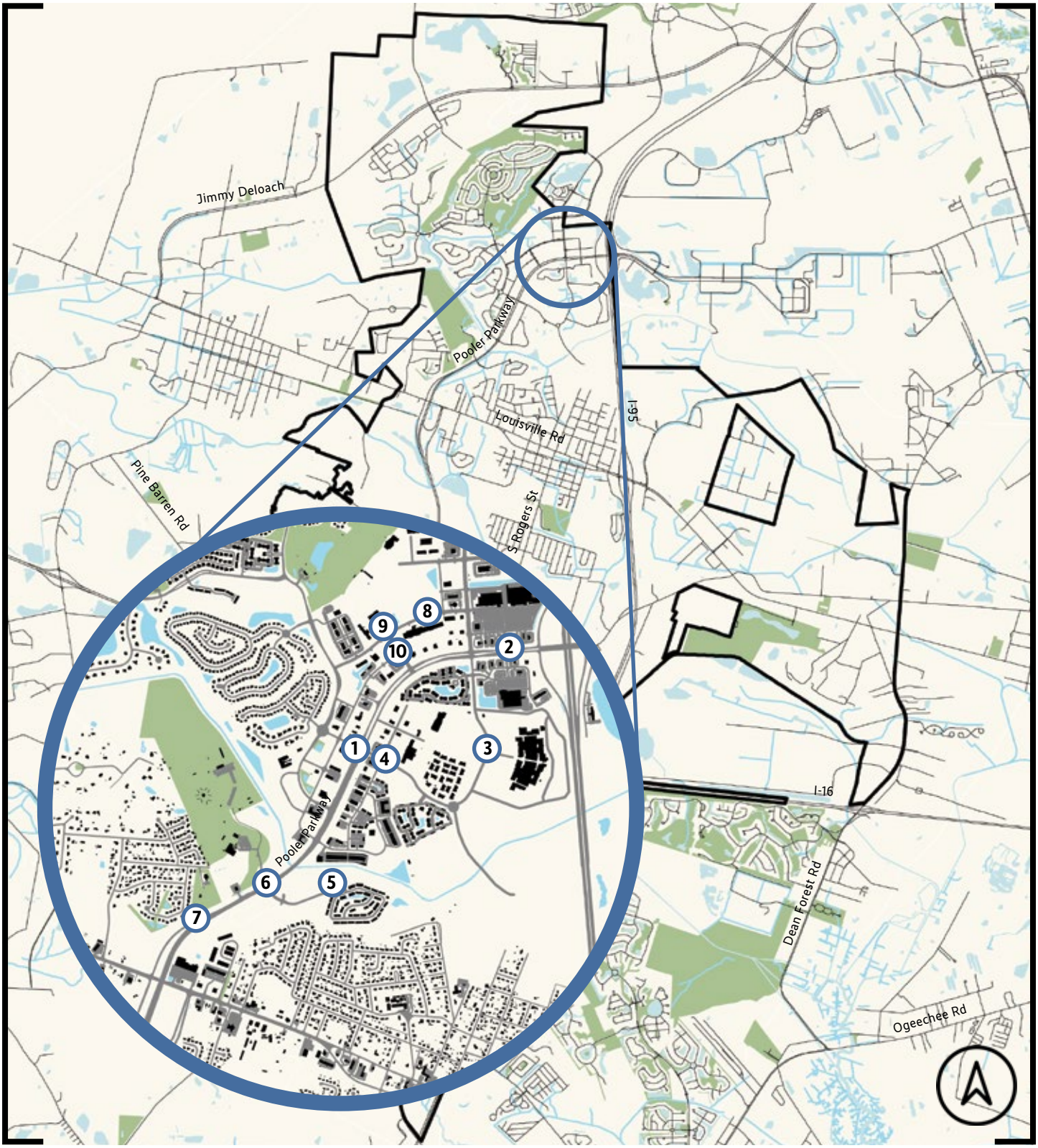
	Project	Investment
1	Dual Left Lanes on Park Avenue at Pooler Parkway	$800,000
2	I-95 to Benton Boulevard	$5,300,000
3	Roundabout at Tanger Outlets Boulevard and Tanger Outlets Main Entrance	$2,000,000
4	Roundabout at Park Avenue and Canal Street	$1,550,000
5	Extension of Durham Park Boulevard from Pooler Parkway	$440,000
6	Intersection Improvements at Pooler Parkway and Durham Park Boulevard Road Extension	$4,300,000
7	US 80 Road Connection with two Mini Roundabouts	$4,300,000
8	Closing Median Breaks Along Town Center Boulevard	$3,100,000* (8-10)
9	Town Center Boulevard and Maxwell Drive	$500,000
10	Maxwell Drive and Traders Way (Mini)	$500,000

Figure 5.9–Additional Transportation Improvement Projects
Coastal Region Metropolitan Planning Organization (CORE MPO)

Infrastructure Project Studies

Project
Parkway at Benton Boulevard and Tanger Outlet East to Bridge at I-95
Dual Turn Lanes from Park Avenue
I-95 and US Highway 80
Sangrena and US Highway 80
Mosaic Circle Street System Modification at Blue Moon Crossing & Westbrook Lane
Pine Barren Road Corridor Traffic Study
Quacco Road Widening Study

Figure 5.10–Conceptual Infrastructure Projects
Coastal Region Metropolitan Planning Organization (CORE MPO)



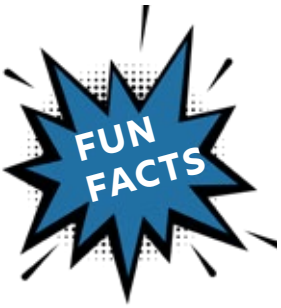
Map 5.7–Transportation Improvement Projects (TIP), Pooler
Coastal Region Metropolitan Planning Organization (CORE MPO)

INTERMODAL TRANSPORTATION

Port of Savannah

Chatham County has two modern, deepwater terminals on the Savannah River that are collectively known as the Port of Savannah: Garden City Terminal and Ocean Terminal. Both facilities are run by the Georgia Ports Authority (GPA), which is a state-level quasi- governmental organization. The Port of Savannah is the largest single container terminal in North America and the fourth busiest container exporter in the United States, moving 4.5 million twenty-foot container units in FY 2019.

Ocean Terminal, Savannah's dedicated breakbulk and roll-on/roll-off facility, covers 200.4 acres and handles forest and solid wood products, steel, automobiles, farm equipment, and heavy-lift cargoes. The Port is a major economic engine for Pooler as well as the State of Georgia.



3rd

busiest container gateway in the nation

INTERMODAL TRANSPORTATION

The term "Intermodal" is used to describe the mass transportation of freight or human passengers, usually over long distances, and via more than one mode of transportation. There are three types of intermodal facilities are discussed in this section: ports, railroads, and airports.

—CORE MPO

The Port of Savannah is currently in the final stages of the Savannah Harbor Expansion Project. This project supports jobs and commerce throughout the nation, and allows newer, larger freighters to navigate the river with greater flexibility.

The Georgia Ports Authority, which also operates port facilities in Brunswick, has a huge impact on economics and trade in Georgia. As one of the state's largest public employers, the GPA directly employs almost 1,000 trained logistics professionals. The GPA, however, is responsible for generating far more employment throughout the state.

The total economic impact of Georgia's deep water ports on Georgia's economy is $84 billion. The Georgia Ports Authority supports more than 369,000 jobs and approximately $20.4 billion in personal income annually.

As port operations grow and intensify, the surrounding transportation infrastructure in Pooler and beyond will need to support that growth. Mobility 2045 includes numerous projects that will help support port operations.

Savannah/Hilton Head International Airport

Savannah/Hilton Head International Airport is a commercial and military-use airport positioned between Pooler, Garden City and Savannah. Owned by the City of Savannah and managed by the Savannah Airport Commission, the airport is located about eight miles northwest of the Savannah Historic District.

The Airport's passenger terminal is directly accessible to Interstate 95 between Savannah and Pooler. Savannah/Hilton Head International is the chief commercial airport for Savannah, the Coastal Empire region of southeast Georgia and the Lowcountry of South Carolina, where the resort town of Hilton Head accounts for some 40% of total airport passenger traffic.

It is second only to Hartsfield–Jackson Atlanta International Airport as Georgia's busiest commercial airport. The Airport is currently served by Delta (and Delta Connection carrier Shuttle America), JetBlue, United Airlines, American Airlines, Air Canada, Allegiant Air, Frontier, Southwest, Silver Airways and Sun Country Airlines.

The first regularly scheduled international flight by a major air carrier launched when Air Canada began service to Toronto in 2017. The Airport also serves as world headquarters for Gulfstream Aerospace. The Georgia Air National Guard's 165th Airlift Wing is also based at Savannah/Hilton Head International.

In 2018, the Airport handled a record 2,799,526 commercial airline passengers (1,395,040 enplanements and 1,404,486 deplanements), a 13.4% increase over 2017. The Airport has also begun a comprehensive capital expansion program with the construction of a new Federal Inspection Station, a terminal apron expansion and the southeast quadrant redevelopment project and began design on a new air cargo complex; all scheduled for completion in the coming years.

NON-MOTORIZED TRANSPORTATION

While the automobile is the primary mode of transportation in Pooler, bicycling and walking are also important modes. The CORE MPO and the other local jurisdictions have a strong commitment to the provision of safe, connected facilities for pedestrians and bicyclists. (There are some major gaps in sidewalk, trail, and bike connections in the city of Pooler).

The Non-motorized Transportation Plan, as part of Mobility 2045, is a plan that addresses the needs of pedestrians, and other self-powered travelers. The Plan:

- Identifies needed improvements for the non-motorized modes
- Identifies areas for amenities to help create a human-scaled environment that encourages use of physically active modes
- Prioritizes improvements and identifies funding opportunities

Pedestrian Network

CORE MPO adopted the Non-motorized Transportation Plan in 2014 and later updated it in 2020. CORE MPO's Non-Motorized Transportation Plan contains extensive lists of recommended pedestrian and bicycle projects, which may be implemented with or without federal funds. The plan was developed with several methods of public participation: public mapping exercises, public online surveys, and periodic presentations of draft networks and lists.

Map 5.8, from the MPO-adopted plan, shows existing and recommended improvements in the Pooler planning area.

NON-MOTORIZED TRANSPORTATION

Non-motorized transportation includes walking or using a wheelchair, bicycling, skating, and using pedicabs.

—CORE MPO

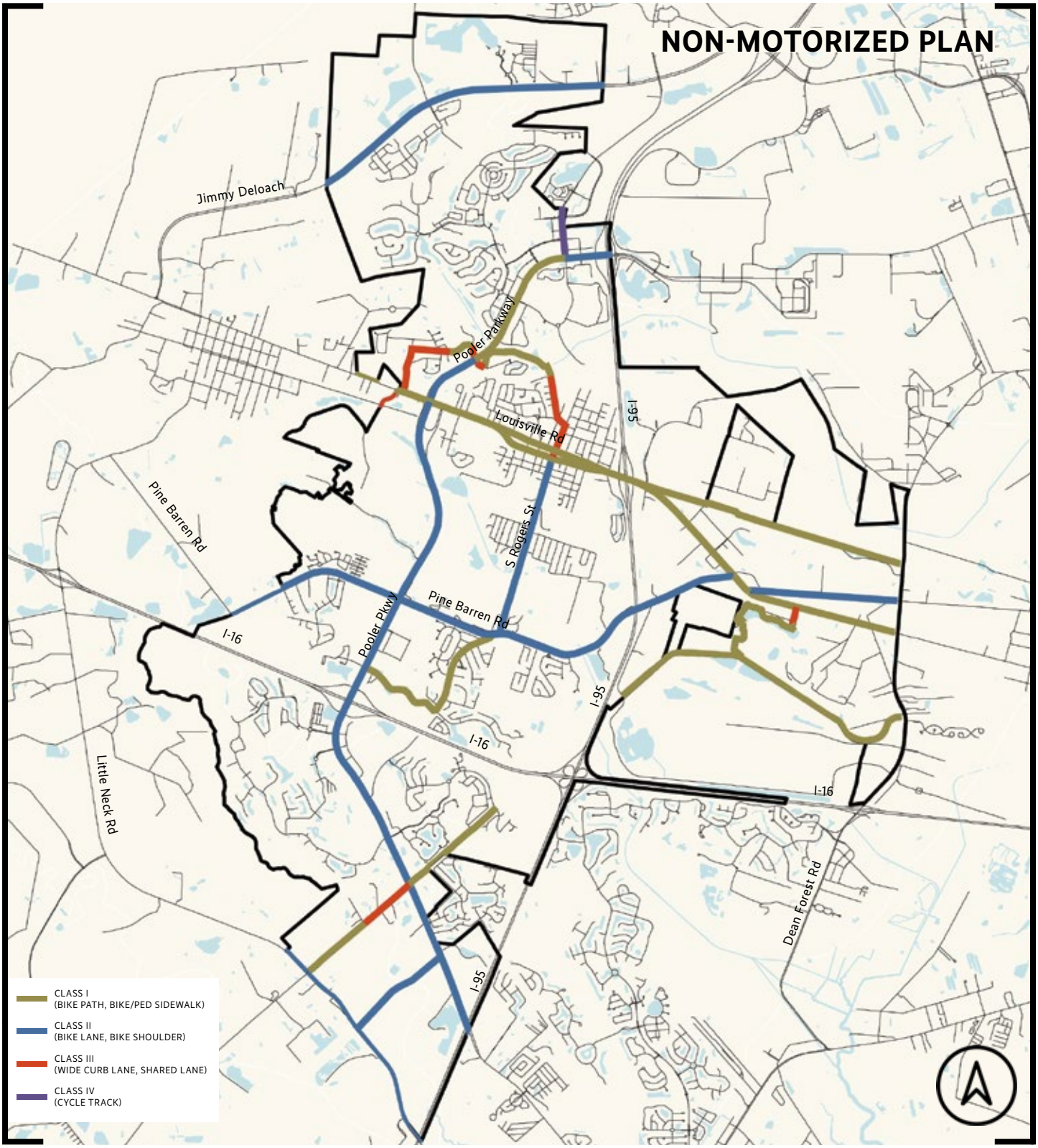
CHECK OUT CORE MPO'S INTERACTIVE MAP

For more details about individual projects on the Non-Motorized Transportation Plan follow this link...

www.thempc.org/Core/Bpp#gsc.tab=0

Priority National & Regional Non-Motorized Projects

Various studies or plans developed by CORE MPO, partner agencies, or informal groups since 2014 have included proposals that affect bicycle and pedestrian networks (e.g., Chatham County Greenways Implementation Plan). In addition, there are three new routing concepts in the region, Tide to Town, East Coast Greenway, and US1.



Map 5.8–2020 Non-Motorized Transportation Plan, Pooler
Coastal Region Metropolitan Planning Organization (CORE MPO)

Tide to Town

Following the lead of many communities across Georgia, Friends of Tide to Town, a coalition of citizens in Savannah, is coordinating an effort to create a branded urban trails system, "Tide to Town." Like Atlanta's Beltline and Carollton's Greenbelt, Tide to Town will be a network of protected walking and bicycling facilities connecting all of Savannah's neighborhoods with potential for reaching Pooler.

Tide to Town will link together existing and planned projects, including the Truman Linear Trail and the Springfield Canal Trail. The core of the system is a 30-mile route that encircles the city of Savannah. Additional miles of connector paths will connect to priority neighborhoods as the system grows. Spur trails to popular destinations will also be added as the system expands outside of Savannah and potentially to Pooler.

The system maximizes existing public rights-of-way along streets and canals, which significantly reduces the cost of implementation. The coalition formed in 2017 to lead the development of Tide to Town. The Tide to Town trail system has quickly become a regional priority and has garnered additional support through the special-purpose local-option sales tax (SPLOST) passed Savannah city council in 2019.

TIDE TO TOWN

East Coast Greenway

The 2014 Non-Motorized Plan includes the Coastal Georgia Greenway. The Coastal Georgia Greenway co-locates in many areas with the East Coast Greenway, an envisioned 3,000 mile network of trails spanning from Key West, Florida to Calais, Maine. The East Coast Greenway is designed to transform the 15 states and 450 communities it connects through active and healthy lifestyles, sustainable transportation, community engagement, climate resilience, tourism, and more. The Greenway offers a safe place for bicyclists, walkers, and runners of all ages and abilities to commute, exercise, and visit new destinations.

The nonprofit East Coast Greenway Alliance leads the development of the trail network working in collaboration with hundreds of volunteers, partner organizations, and officials at the local, state, regional, and national level to continue moving more of the route onto protected paths. The trail system connects people to nature and communities via a safe, accessible greenway.

The network links towns, attractions, recreational sites, historic and cultural sites, waterways, and natural habitats of the coast. The route consists of 165 miles, 14 of which are protected greenway. The Greenway will follow various north-south routes, including the U.S. Highway 17 corridor near Pooler, abandoned rail lines, and historic canal corridors, from which visitors can enjoy coastal vistas.

Most of the Georgia route is still on road, but a growing number of volunteers and municipal officials are working diligently to make an off-road trail a reality.

United States Bicycle Route System—US 1

The United States Bicycle Route System (USBRS) is the national cycling route network of the United States. It consists of interstate long-distance cycling routes that use multiple types of bicycling infrastructure, including off–road paths, bicycle lanes, and low-traffic roads. The USBRS is intended to eventually traverse the entire country.

Communities in Chatham County committed to the US 1 cycling route by passing a resolution in support of the national cycling route's development in 2019. The route generally follows along Highway 17 near Pooler, leading through Savannah's historic downtown district, then along Louisville Road before heading out Highway 25.

GREENWAYS

A greenway is a linear open space established along either a natural corridor, such as a riverfront, stream valley, or ridgeline, or overland along a railroad right-of-way converted to recreational use, a canal, scenic road or other route.

East Coast Greenway® ALLIANCE

US
USBRS
U.S. BICYCLE ROUTE SYSTEM

TRANSIT SYSTEMS

Chatham Area Transit Authority

Chatham Area Transit (CAT) is the agency responsible for the provision of public transit services to the Chatham County area, including fixed route and paratransit. CAT currently operates a fleet of 65 fixed route buses, six of which are electric, and 42 paratransit vehicles. The CAT service area includes unincorporated Chatham County, the city of Savannah, and portions of Garden City. Currently, there are no CAT service connections in Pooler.

The CAT bus network has served the region since 1987. While individual transit routes have been added or changed over the years, the overall design of the network has not been revised. To provide more efficient and accommodating services, CAT launched a full system redesign starting with a "blank slate" plan, to see what would be possible if the network were re-imagined for the people and places of today.

Some of CAT's near term priorities include:

- Vehicle replacement/expansion—fixed route & paratransit
- Intelligent Transit System (ITS)
- Upgrade farebox and payment systems
- Electric vehicle infrastructure
- Passenger amenities
- Facility improvements at downtown intermodal facilities
- Facility improvements at Gwinnett Street location
- Initiate vanpool/carpool program
- Initiate park and ride
- Facility construction for ferry maintenance and ferry docks
- Ferry boat construction

To meet the future needs of the growing community, CAT must look beyond the five-year planning horizon to identify projects and innovations that will provide access and opportunity for all. Some of these long-term projects include:

- Establish region-wide park and ride network
- Work with local partners on projects that incorporate Transit Oriented Development (TOD) principles
- Explore partnerships with fixed route cost benefits while serving private industry needs for transportation
- Coordinate with state and local government agencies to implement commuter services through dedicated or limited public access lanes for transit vehicles
- Work with surrounding county agencies to streamline passenger experience across multiple service alternatives
- Complete fleet conversion to low-to-no emissions vehicles
- Funding for bus replacements secured and incorporated into planning process
- Work with housing and other community partners to develop joint FTA/HUD grant funded projects
- Leverage improved cash position by becoming stronger financial partner for public/private ventures with focus on long term revenue producing opportunities
- Identify and develop satellite facilities to accommodate system growth
- Work with the agency partners to implement fixed guideway services

Routes and Facilities

CAT currently operates 20 routes, including one express route and three free shuttle services. The express route provides service from the Savannah Hilton Head International Airport near Pooler to the transit center in downtown Savannah. Currently, there are no bus routes directly serving the city of Pooler.

TRANSIT-ORIENTED DEVELOPMENT (TOD)

A transit-oriented development is a type of urban development that maximizes the amount of residential, business and leisure space within walking distance of public transportation.

It promotes a symbiotic relationship between dense, compact urban form and public transport use.

—Transit Oriented Development Institute

TRANSPORTATION TECHNOLOGY

Traditionally, congestion issues were primarily addressed by funding major capital projects, such as adding lanes or building new interchanges and roads, to address physical constraints, such as bottlenecks.

Today, transportation agencies are facing trends, such as increased urbanization, that create a growing demand for travel with less funding and space to work with. As a result, communities can no longer build their way out of congestion. Trends seen today include:

- Limited funds—The primary source of federal funding for the U.S. highway system is the federal gas tax, which has not changed since 1993. Since that time, the financial constraints for public agencies have increased.
- Inflation—The cost to build roads and bridges has increased.
- Fuel efficiency—Vehicles today can travel farther with fewer trips to the gas pump, decreasing revenue. The growing use of electric and plug-in hybrid cars has also reduced the purchase of fuel.
- Advances in technology—Transportation agencies can leverage technology to develop solutions to address congestion issues. However, given the advancement in consumer technologies (smart phones, apps, GPS, etc.), privately owned mobility services (Uber, Lyft, etc.), and the availability of more information, the traveling public expects that the products they use and the technologies they encounter will be "smart" and will ultimately improve their travel experience. They also expect that the information received will be accurate and reliable. This creates an added responsibility for the transportation community to provide the best customer service. Technology will likely have an even greater impact on the transportation network in the future with automation, connectivity, and big data.

Automated Vehicle Technology

Automated vehicle technology has made changes to intelligent transportation systems (ITS) and will likely continue to do so in the future. ITS helps advance safety and mobility by integrating communications technology into transportation infrastructure and vehicles. Automated vehicles communicate to other vehicles and infrastructure through ITS. This emerging technology has prompted the United States Department of Transportation (USDOT) to release a policy statement providing guidance on implementation. The USDOT promotes research and has made recommendations on achieving safe operations during testing. However, predicting any unintended consequences of this emerging technology on the transportation system, infrastructure, and society is difficult.

The automated nature and vehicle-to-vehicle communications could increase capacity of a given number of lanes by reducing average following distance between vehicles (currently needed for human reaction time), while still improving safety. The increased capacity also has negative impacts as it requires more maintenance, installation, and redesign of infrastructure to accommodate the increase and technology required.

Traffic Operations

Transportation improvements that focus on operations and technology can maintain and even restore the performance of the existing transportation system before extra capacity is needed. The goal here is to get the most performance out of the transportation facilities we already have. Operations projects may enable transportation agencies to "stretch" their funding to benefit more areas and customers.

The benefits of operations projects can include:

- Improved quality of life
- Smoother and more reliable traffic flow
- Improved safety
- Reduced congestion
- Less wasted fuel
- Cleaner air
- Increased economic vitality
- More efficient use of resources (facilities, funding)

Regional Traffic Operations Programming

Operational projects provide agencies with the tools to manage and operate what they already own more efficiently and effectively before making additional infrastructure investments.

GDOT has expanded the Regional Traffic Operations program to the Chatham County area. This was their first expansion outside the Atlanta area. The Savannah Regional Traffic Operations Program (SRTOP) is managed by GDOT and is a regional effort between local jurisdictions and GDOT in Chatham County. The program provides:

- Weekly AM, Midday, and PM drive through of the corridors to monitor signal timing adjustment needs, congestion, and any other traffic operation deficiencies.
- Routine preventative maintenance (PM) activities to ensure all equipment and communications are operational.
- Upgraded traffic signal software to current statewide platform.
- The new software provides more functionality, as well as remote monitoring capabilities.
- Assisted managing traffic operations during St. Patrick's Day festivities.
- Responded to emergency situations that required signal timing adjustments to accommodate shift in traffic patterns.
- Monitor operations after storms to ensure signals are operational.
- Repaired items, such as, malfunctioning detection (vehicle, pedestrian), pull boxes, replaced cabinets, etc.

Specifically, GDOT monitors Highway 21 and Highway 80 via the Regional Operations Plan.

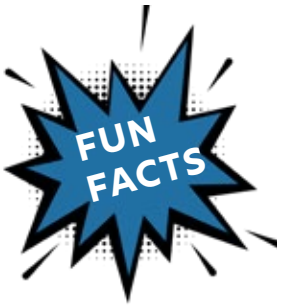
There are plans to expand SRTOP to include the intersections in Pooler on the following corridors:

- SR 26 between Pooler Parkway and Jimmy DeLoach
- Pooler Parkway between Durham Park and Lowes and I-16 ramps
- SR 307 at Jimmy De Loach and Commerce
- SR 21 between Rice Hope and Fort Howard

The long-range expansion of the SRTOP program may include additional locations. The City of Pooler has also installed an adaptive signal program on Pooler Parkway at I-95 that interconnects signals along the corridor with "smart" signal technology by Rhythm Engineering allowing the signals to adapt to changes in traffic patterns rather than remain on fixed timing sequence.

Automated Vehicles/Self-Driving Cars

Automated vehicles, also known as self-driving cars, are still an emerging technology and it is difficult to determine how they will affect the transportation system and when. There are six levels of automation, with level zero being no automation and level five being full automation (autonomous). The State of Georgia has passed legislation allowing the testing, operation, and deployment of automated vehicles (AV) and is the third U.S. state to allow autonomous (level five) cars to operate on roadways. While fully autonomous cars are allowed to operate in Georgia there currently are no vehicles available to the public past level three automation.



3rd

As of 2017, Georgia is the third state to allow for the operation of AVs without human operators present in the vehicle.

At this time there are only programs testing AV technology in the Atlanta area. The highest application and advancement of automated vehicles is in the trucking/freight industry. The Savannah metropolitan area is a large trucking region, which could provide Pooler with the opportunity to serve as a testing ground for the advancement of this technology.

Transportation Network Companies (TNCs) Ride-Hailing/Ride Share

Ride-hailing services use apps and websites to connect passengers with drivers to provide rides in their personal vehicles. These types of services offer the potential to expand transportation choices, increase carpooling and reduce vehicle miles traveled as well as car ownership.

Companies such as Uber and Lyft currently service Savannah and the surrounding area. In smaller populated areas such Pooler, ride-hailing services may be limited due to driver availability.

Ride-hailing trips are more likely to be made by segments of the population who are comfortable with smart phones, new mobile applications, and who have credit cards. Thus, it does not necessarily fill a gap for the traditionally underserved populations (e.g., low income, disabled, elderly).

Furthermore, while ridesharing may reduce parking, it may increase air pollution because rideshare drivers frequently circulate (similar to taxi operations) in hopes of a trip assignment via the mobile application. The use of ride sharing may also require infrastructure and streetscape redesign since there will be a higher demand for pick-up and drop-off areas.

Like the trucking/freight industry, TNCs are exploring opportunities and the applications of self-driving cars in their ride-hailing/ride share services.

Shared Vehicles

Car sharing is an emerging trend that can help curtail CO_2 output because, according to research, a single shared on-demand driven car can replace about eight private cars. Companies are allowing users to reserve a vehicle or other means of transportation when they need it, by the hour or day, and only pay for the time the vehicle is used. Plans for expansion could include aspects such as:

- A community storage/corral
- Charging stations
- Preferred parking for shared vehicles, etc.

Considerations for public transportation grants and public/private partnerships to quickly implement and manage the programs should be promoted.

Photo Credit: SCAD District

Bike & Scooter Share

Bike and scooter share systems offer fleets of bicycles and scooters for short term rental within a defined service area. Micromobility programs offer both benefits and challenges for cities. The benefits of shared bikes and scooters includes first mile/last mile connections, flexible mode of travel, reduction in vehicle emissions and fuel consumption, health benefits, and positive economic impacts for businesses near docking stations and within the service area.

While there are benefits to shared micromobility, cities have encountered challenges such as maintenance and safety concerns. Some cities have found that without docking stations, scooters and other shared-use electric devices are often abandoned by users. These abandoned scooters can become hazards for motorists and pedestrians when left on sidewalks and in roadways. Maintenance costs for running shared micromobility are high and create a long backlog of needed repairs for some programs. Another challenge for cities with shared micromobility programs is equitable use; many programs require mobile phone apps and credits cards.

To date, the city of Pooler has not participated in any shared micromobility programs. The city should consider a feasibility study or pilot program to determine if the application of shared micromobility can benefit the community.

Parking

Most drivers prefer to park as close to their destination as possible, which creates parking challenges for downtowns and dense areas. These areas have high concentrations of activity resulting in increased parking demand often when parking availability is low.

A parking study can often identify the demand for parking and identify potential parking solutions. The study area for parking studies can be based on specific attractors, such as a mall, or could include an entire region such as a central business district.

Situations that may indicate parking issues include:

- Excessive illegal and overtime parking
- Excessive cruising to find parking
- Congestion in traffic flow due to cars attempting to find parking
- Drivers frequently park more than 650 feet from the desired destination

Pooler should survey community members and stakeholders to identify potential issues and evaluate the need for a parking study.

ADDITIONAL CONSIDERATIONS

Public Health & Mobility

The approach to community and public health spans a number of disciplines including transportation planning especially as it relates to policy and infrastructure.

The considerations for public health in transportation planning should include:

- The promotion of active transportation and ensuring that the necessary facilities are in place
- Developing strategies and projects to enhance the safety of pedestrians and bicyclists
- Reducing the negative impacts on the environment by increasing the number of active transportation users

The CORE MPO recognizes and has implemented strategies and plans to promote a healthy community. The development of non–motorized and thoroughfare plans, the long standing commitment to complete streets and context sensitive design principles, and a focus on accessible transportation for all populations provides the policy framework for the promotion of health considerations in Pooler's transportation planning.

Pooler is cognizant of the interconnectedness between land use and public health. For example, bus transit systems are often routed through areas challenged with high poverty, unemployment, or low workforce participation rates. As such, programs and policy changes will continue to be implemented to improve public health and economic mobility show commitment to continuing these efforts into the future.

Climate Change, Sea Level Rise, & Resiliency

A highly discussed topic at the national and local level is climate change and its effects, which include sea level rise and nuisance flooding, and how to become more resilient to these events. There has been an increased focus at the federal level, with the FHWA completing research and providing best practices for MPOs to develop policies and strategies that address impacts from the changing climate.

With its coastal location, Pooler recognizes the need for understanding any potential impacts on the existing and future transportation infrastructure and for developing an approach to address and/or mitigate these impacts.

Plan 2040 Survey

Twenty-three percent (23%) of the respondents strongly agree that if it were safer, they would bike/walk to frequent destinations more often.

A full copy of the survey and the results can be found in the Pooler 2040 Appendix.

Stormwater Management

Stormwater has long been a concern in the city due to its negative impacts on water quality in communities, including Pooler. Efforts to deal with stormwater impacts as they relate to the transportation system are focused mainly on protecting water quality and road or roadway runoff. Roadways move goods, people, and services but also can carry stormwater runoff and pollutants from the vehicles traveling on them and adjacent land—including heavy metals from tires, brakes, and engine wear, and hydrocarbons from lubricating fluids.

If pollutants are not properly controlled they can cause water to no longer support its designated uses and biotic communities.

In recent years stormwater management efforts have expanded due to increased frequencies of extreme weather events, resulting in impassible roadways. Efforts are underway to protect transportation systems from the negative impacts of stormwater runoff and to improve their resiliency and reliability during these extreme events.

Accommodating Growth Around Transit

Transit-oriented development (TOD) is defined as a moderate-to high-density mix of uses—such as residences, retail shops, offices, and civic and entertainment uses—located within one-half mile of a transit station and designed to support transit use. The typical "station area" is considered to be a half-mile radius, which is an acceptable 10-minute walking distance for most transit users if the area contains a destination, provides dedicated walking routes, and is safe and visually appealing. Within the U.S., TOD is typically associated with rail transit; however, locally, TOD could occur with other fixed guideway transit services, such as bus rapid transit, if they provide facilities and service levels similar to rail transit. Benefits of a TOD Ordinance include:

- Reducing greenhouse gas emissions
- Increasing transit ridership
- Increasing pedestrian access
- Providing long-term return on investment for landowners
- Providing easy access to goods and services for families, seniors, and people with disabilities
- Creating vibrant centers and corridors for pedestrians