# Southern Georgia Regional Transit Development Plan

# **BOOK 3**

# Transit Recommendations Report Appendices August 2025





### **Appendices**

Appendix A: Transit Service Types and Demand Response Service Technologies

Appendix B: Funding Sources

Appendix C: Technical Needs Assessment Memorandum

Appendix D: Cost Estimates Technical Memorandum



# Southern Georgia Regional Transit Development Plan

# **BOOK 3**

Appendix A: Transit Service Types and Demand Response Service Technologies

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#### 1.1 Service Types Descriptions

Public transit service can be provided across a variety of service modes, each of which provides for specific needs. The selection of a mode that best serves a given area is primarily dependent on the projected amount of demand for transit in the area. This demand is correlated with the residential and employment density of the area. Other factors, such as land use composition, street grid connectivity, and demographic makeup, may also be significant factors in mode selection. The service modes most relevant to this plan are detailed below.

#### 1.1.1 Demand-Response Service

Demand-response transit services pick up riders from specified locations and drop them off at their requested destination within the service area. This type of service typically requires advanced reservations, although some providers can provide same day service on a case-by-case basis. Service providers will often work with the customer to schedule the ride based on other origin-destination pairings to maximize the number of riders per trip. Demand-response services are ideal for suburban to rural areas where population and employment densities are low. The vehicles used in demand-response services are typically cutaway buses seen in **Figure 1**.

Figure 1: SGRC Demand-Response Vehicle



According to the Population Density Threshold Analysis, demandresponse is the ideal transit service type for most of the Southern Georgia Region.

#### 1.1.2 Microtransit

Microtransit is an emerging transit mode that is experiencing growing popularity due to the flexibility it can offer in areas where fixed-route transit may not be well suited. Microtransit services use smaller transit vehicles, like cutaway buses or vans, to transport users that request a ride using a smartphone app. Like Uber or Lyft, the app provides the rider with a real-time estimate of their vehicle's arrival. Rides may be shared, with vehicles stopping to pick up additional riders along the trip.



Microtransit works best when limited to small zones centered around activity centers, such as smaller cities or suburban neighborhood clusters. Microtransit zones can also be used to offer first-and-last-mile connectivity for fixed route transit services. As zones get larger, hailing times for vehicles may increase to unacceptable levels. The City of Valdosta uses minivans, such as the one seen in **Figure 2** for their Valdosta On-Demand microtransit service and similar microtransit systems can be found in **Figure 3**.

Figure 2: Valdosta On-Demand Microtransit Minivan



Figure 3: Microtransit Peers for the City of Valdosta

#### Virginia Bay Transit on Northern Neck:

- Customers request rides on the Bay Transit Express app or the website (partnered with Via).
- Fares are \$1 per ride with service from 8:00 AM to 5:00 PM
- Funded by Virginia Department of Rail and Public Transportation (DRPT) with an Integrated Mobility Innovation Grant from FTA

#### Mountain Empire Transit (METGo) - Virginia

- Customers schedule rides on the METGo! app or by phone.
- Customers may bring up to 2 additional passengers and service runs weekdays between 7:00 AM to 5:00 PM
- Service is currently free due to Transit Rider Incentive Program grant from the Virginia DRPT with an Integrated Mobility Innovation Grant from FTA.

#### PICK Transportation - Oklahoma

- Customers book rides on the PICK Transportation OK app.
- Fares are \$3 per ride with service from 5:00 PM to 9:00 PM Monday to Thursday and 5:00 PM to 10:00 PM on Fridays. Saturday service runs from 10:00 AM to 2:00 PM
- Funded through an Integrated Mobility Innovation Grant from the FTA

Sources: https://virginiamercury.com/2023/08/29/new-microtransit-service-more-than-doubled-ridership-in-rural-regions/ and https://picktransportation.org/



#### 1.1.3 Fixed Route Service

Fixed route transit services follow a specified route and pick up riders at designated stops. Most fixed route services in the United States are provided by rubber tire vehicles such as buses or vans, though this service mode also includes rail service. Fares vary by provider but are typically required for riders to enter the vehicle. Schedules also vary by service provider and route, but in larger urban areas, service hours are typically early morning to late evening on weekdays and weekends. Paratransit is sometimes offered by fixed-route service providers as a supplement which provides vehicles that can accommodate people with disabilities that cannot board standard buses or trains.

The <u>Albany Transit System</u> operating in the City of Albany, Georgia represents a valuable example as Albany is slightly larger but has comparable demographic characteristics to the City of Valdosta.

#### 1.1.4 Vanpool Service

Vanpool service is another flexible commuter service which is like carpooling, but with larger vehicles. A group of people (typically five or more) with similar trip origins and destinations meet at a common location of their choosing, where a commuter vehicle (a van) is available for them to ride to work. Alternatively, a vanpool service system can be provided by third-party operators with drivers that pick-up riders and drop them off at their destination. Fares vary based on the vanpool system. By saving commuters money on gas, parking, insurance, and wear and tear associated with driving personal vehicles, vanpooling presents an affordable alternative. It can also reduce the stress associated with traveling to and from work.

Vanpool programs can be an effective solution in areas where major employers may not be located in traditional downtowns, or facilities that operate multiple shifts throughout the day. Large scale manufacturing facilities, logistical hubs, or major agricultural processing plants are all employers that may benefit from vanpool in comparison to traditional commuter bus service. Examples of different vanpool services in Georgia can be seen in **Figure 4**.

Figure 4: Examples of Vanpool Service in Georgia

#### **Cherokee County: Commute with Enterprise**

- Cherokee Area Transportation System partners with Commute with Enterprise to offer vanpool services
- This service provides a subsidy of 50% for vehicle lease and fuel costs, with the remainder divided among users.

#### **Douglas County: Connect Douglas**

- Previously operated daily vanpools to work locations from Douglas County to other locations in the metro Atlanta area
- Park and ride lots and carpool matching services help connect riders

#### Sources:

https://cherokeecountyga.gov/transportation/\_resources/documents/Cherokee%20County%20Vanpool%20Progam.pdf and https://douglascountyga.gov/495/Connect-Douglas



#### 1.1.5 Circulator / Special Event Shuttle Service

Circulator and special event service operates along a route or loop where high demand may be seasonal or short term, such as a festival or holiday events in a downtown square. The main goal of a circulator is to provide convenient, frequent, and reliable transportation for residents and visitors to travel within a defined loop or network of key destinations, such as commercial districts, residential areas, transit hubs, or popular public spaces. The circulators can also be used at special events such as summer or holiday festivals to move people between parking lots / park and ride areas to the event.

Hall Area Transit has a trolley service that serves the City of Gainesville that runs from May until September<sup>1</sup>. The hours of the service are 5:30 to 10:00 pm, Thursday to Saturday. The neighborhoods serviced include Dixon, Glenwood/Riverside, the Chattahoochee Golf Club, Midland, and Fair Street. There has also previously been a single shuttle bus route that services the downtown area to golf courses. The services provide people with additional means of transportation within the City of Gainesville.

#### 1.1.6 Future Trends

Emerging technologies such as autonomous vehicles are becoming more prevalent in society thanks to companies like Waymo and Zoox. While these are more urban solutions, their usage in more rural areas is possible and will become more likely as technology, and more importantly, charging infrastructure improves.

Autonomous transit shuttles are similar to autonomous vehicles except that they are more spacious and move more people.

The Curiosity Lab in the City of Peachtree Corners, Georgia has autonomous shuttles that serve fixed routes around the site<sup>2</sup>. This shuttle is pictured in **Figure 5**. Additionally, Gainesville, FL has a partnership with Transdev that provides Gainesville Autonomous Transit Shuttle (GAToRS)<sup>3</sup>, which connects the City of Gainesville Innovation District and the downtown Gainesville Area with the University of Florida campus. This shuttle is shown in **Figure 6**. These types of technologies will only become more prevalent in the future, and it is important to plan for these types of vehicles ahead of time.

<sup>3</sup>https://www.fdot.gov/traffic/teo-divisions.shtm/cav-mlstamp/cv/maplocations/gains-av.shtm



<sup>&</sup>lt;sup>1</sup> https://www.gainesville.org/973/Gainesville-Trolley

https://hypepotamus.com/feature/paul-shuttles-georgia/

Figure 5: Autonomous Transit Shuttle in Peachtree Corners, Georgia



Figure 6: Autonomous Shuttles (GAToRs) in Gainesville, Florida



# 1.2 Demand Response Service Technology Descriptions

#### 1.2.1 Scheduling and Payment Methods

Websites and Traditional Phone Systems: Websites serve as digital hubs, providing passengers with information about current services, schedules, and methods for scheduling and communication. Websites can provide the first stop for many SGRC customers to discover services and schedule a trip. Many customers may not have internet access and rely on traditional phone systems for inquiring about services and scheduling a trip. This customer base, frequently the most transit-dependent, discovers transit access methods and phone numbers from word-of-mouth and from marketing campaigns (flyers, advertising, etc.). These two technologies are the primary methods that customers currently interact with SGRC's transit service.

Automated Booking and Mobile Applications: Many demand response transit services provide automated booking through websites or mobile applications to improve customer experience and minimize staff time committed to scheduling. In 2023, GDOT released its "Let's Ride" mobile application for use by agencies within the states as an automated method for scheduling a future transit trip. Users must download the app to their phone and then request access from their region (by phone or email) before using the app. SGRC participates in the "Let's Ride" program but has yet to see significant use of the service. Over time, the number of users may increase through increased public exposure and from regular improvements and updates to the technology.



Fare Collection Systems: Fareboxes and Smart Cards: SGRC relies on cash fareboxes and prepaid fare cards for collecting fares from riders at the time of the ride. Cash fareboxes are the mainstay for most rural demand response transit agencies. As technology penetration into rural communities grows, and as the "Let's Ride" app grows riders may move away from cash dependence and into more prepayment methods such as fare cards.

Mobility-as-a-Service (MaaS): The Mobility-as-a-Service (MaaS) offers customers a seamless travel experience through tools and technology that enable trip planning and payment through mobile applications. This solution, used by Via Transportation in Valdosta and by most ride-hailing companies, could become relevant to SGRC in the next 5-10 years.

#### 1.2.2 Vehicle Communication Systems

On-Board Local Area Networks (LAN): The on-board local area networks (LAN) provide internet access on vehicles, facilitating communication and data exchange between the vehicle and central systems. This connectivity supports various applications, including real-time tracking and remote diagnostics. The connectivity can also be extended to riders, allowing access through a vehicle's internet connection and Wi-Fi signal. Some remote areas of Southern Georgia still have spotty reception, but all towns and major roads have at least 4G coverage.

Computer-Aided Dispatch (CAD) and Automatic Vehicle Location (AVL): Computer-Aided Dispatch (CAD) and Automatic Vehicle Location (AVL) systems track the location of vehicles in real-time and enable communication between dispatchers and operators, enhancing operational efficiency and service reliability. These systems can be useful in managing distributed fleet operations and possible re-routing. Technology has advanced in this area to make it relatively inexpensive to identify the location of a vehicle if it has an on-board LAN.

**Performance Monitoring Applications:** Performance monitoring applications display active vehicles on a map or route diagram and indicate on-time performance of each vehicle, providing valuable insights for operational adjustments.



# Southern Georgia Regional Transit Development Plan

# **BOOK 3**

Appendix B: Funding Resources

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#### 1.1 Financial Planning

#### 1.1.1 Federal Funding Sources

Contributions from the federal government make up the largest single source of funding for most transit agencies. Federal subsidies provide support for urban and rural transit nationwide through several programs authorized by the Infrastructure Investment and Jobs Act (IIJA) and the Transportation, Housing, and Urban Development and Related Agencies Appropriations Act. These are the nation's two most recent transportation appropriations bills. The major formula funding programs have been continued from previous appropriations bills, though with higher levels of available funds.

#### 1.1.1.1 FTA Section 5311 Funding for Rural Areas

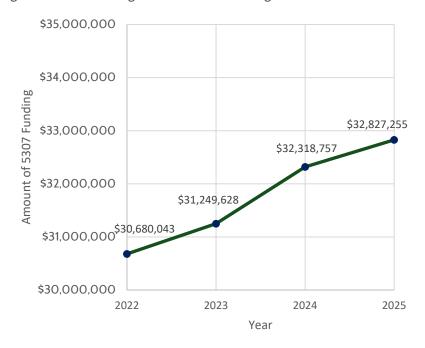
Supporting mobility for rural residents has remained a major priority for both the state and federal departments of transportation. For areas defined as rural (population less than 50,000) by the U.S. Census Bureau, the Federal Transit Administration's (FTA) Section 5311 program provides formula funding assistance for both operating and capital expenses. In the State of Georgia, all Section 5311 funds are appropriated to the Georgia Department of Transportation (GDOT), who then distributes these funds to rural transit providers through subrecipient agreements. **Table 1** shows the distribution of Section 5311 funding from 2022 to 2025, while **Figure 1** displays this information graphically.

Table 1: State of Georgia Section 5311 Funding, 2022 - 2025

|                     | Section 5311 Apportionments |              |             |              |
|---------------------|-----------------------------|--------------|-------------|--------------|
|                     | 2022                        | 2023         | 2024        | 2025         |
| State of<br>Georgia | \$30,680,043                | \$31,249,628 | \$32,318,75 | \$32,827,255 |

Source: FTA archived-apportionment tables

Figure 1: State of Georgia Section 5311 Funding, 2022 - 2025



Source: FTA archived-apportionment tables

Section 5311 funds may be used by rural transit agencies to fund operational expenses such as driver and dispatcher salaries, licenses and insurance, or fuel costs. Up to 50 percent of operational costs may be derived from federal sources. Capital expenses, such as costs related to the acquisition of transit vehicles, may be comprised of up to 80 percent of federal funds. **Figure 2** lists additional goals of Section 5311 funding.



Figure 2: Section 5311 Program Goals

## **Section 5311 Program Goals**

- Enhancing access in rural areas to health care, retail, education, employment, public services and recreation
- Assisting in the maintenance, development, improvement, and use of public transit systems in rural areas
- Encouraging and facilitating the most efficient use of all transportation funds used to provide passenger transportation in rural areas through the coordination of programs and services
- Providing financial assistance to help carry out national goals related to mobility for all, including seniors, individuals with disabilities, and low-income individuals
- Increasing availability of transportation options through investments in intercity bus services
- Assisting in the development and support of intercity bus transportation
- Encouraging mobility management, employment-related transportation alternatives, joint development practices, and transit-oriented development
- Providing for the participation of private transportation providers in rural public transportation

#### 1.1.1.2 FTA Section 5307 Urbanized Areas Formula Grants

For areas defined as urbanized (population of 50,000 people or more), Section 5307 provides formula funds for operational and capital expenses. In the Southern Georgia Region, the Valdosta area is the only U.S. Census Bureau designated Urbanized Areas (UZA), with a population of 76,769. According to the 2020 U.S. Census, the City of Valdosta (Lowndes County) is the municipality in the UZA with 50,378 residents. The second largest city in the Southern Georgia Region is Waycross, located in Ware County, with a population of 13,942, according to the 2020 U.S. Census.

Section 5307 funds may be used for planning, operational, or capital projects. Capital projects under Section 5307 are eligible for an 80 percent federal maximum cost share. Under the current Section 5307 regulations, the federal maximum share for operating costs in urban areas with populations below 200,000 is 50 percent. The Valdosta On-Demand service commenced in 2021 with \$1,100,937 in 5307 funding. 2025 full-year funding is not yet available. **Table 2** includes funding allocations for 2022-2025 and **Figure 3** includes this information graphically.

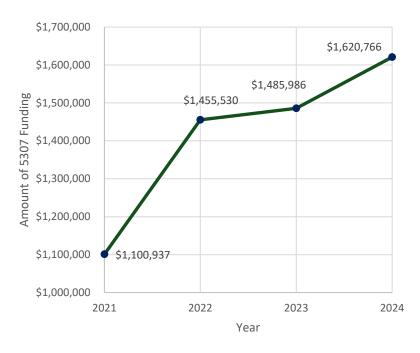
Table 2: City of Valdosta Section 5307 Funding, 2021 - 2024

|                     | Section 5307 Apportionments |             |             |             |
|---------------------|-----------------------------|-------------|-------------|-------------|
|                     | 2021                        | 2022        | 2023        | 2024        |
| City of<br>Valdosta | \$1,100,937                 | \$1,455,530 | \$1,485,986 | \$1,620,766 |

Source: FTA archived-apportionment tables



Figure 3: City of Valdosta Section 5307 Funding, 2022 - 2025



Source: FTA archived-apportionment tables

#### 1.1.1.3 Discretionary Funding Programs

Federal grant funding is also provided through discretionary or competitive grant programs. Transit agencies complete grant applications for each funding program, with funds awarded to select agencies through a defined set of selection criteria. Guidelines for eligible expenses are defined in each grant application, though most grant programs tend to focus on providing support for capital projects. Major discretionary grant programs administered by the United States Department of Transportation (USDOT) and the FTA include the following:

- Capital Investment Grant Program
- Section 5339 Bus and Bus Facilities Program
- Low- or No-Emission Vehicle Program
- Integrated Mobility Innovation Program
- All Stations Accessibility Program
- Rural Transit Assistance Program (RTAP)
- Areas of Persistent Poverty Grant Program



#### 1.1.1.4 USDOT Areas of Persistent Poverty Grant Program

Under the Areas of Persistent Poverty Program (AoPP)<sup>1</sup>, the FTA awards grants to applicants for eligible projects under Chapter 53 of title 49, United States code to assist Areas of Persistent Poverty or Historically Disadvantaged Programs. These grants do not require local matches and are useful for a range of activities targeted to transit-dependent populations. Eligible activities include planning, engineering, or development of technical or financing plans to improve transit service.

Some examples of eligible activities include plans to improve transit through new transit routes or planning for low or no emission buses. Other examples given include plans aimed at increasing access to environmental justice populations. Eligible applicants include state governments, local governments, private-sector applicants, federally recognized tribes and affiliated groups, and U.S. territories. The FTA's AoPP Program advances the goals of Executive Order 13985: Advancing Racial Equity and Support for Underserved Communities Through the Federal Government. This program has been funded by the Consolidated Appropriations Act of 2021 and makes available \$20,041,870 to award through grants to eligible plans. As of July 2023, the FTA announced support for 47 projects across 32 states.

SGRC is one of the only AoPP recipients within Georgia.

#### 1.1.2 State Transit Funding

In addition to its role in administering federal transit funds, the state of Georgia provides funding for several transit initiatives. When calculating federal share, state contributions count toward any required local match. Most significantly for the Southern Georgia Region, GDOT historically provides 10 percent of capital funds for the acquisition of rural transit vehicles under the Section 5311 program, reducing the local contribution for rural transit vehicles to 10 percent.

The distribution of funding for federal, state, and local matches in Georgia Section 5311 (**Table 3**) and Section 5307 (**Table 4**). For rural transit, GDOT only contributes to capital investment projects; however, GDOT provides other financial resources for rural transit agencies such as the Georgia Transit Trust Fund Program (TTFP). There are also state-level Section 5311 funds that SGRC can request from GDOT, such as the Rural Transit Assistance Program (RTAP), that help with targeted needs.

Table 3: Distribution of Funding for the Section 5311 Program

| Project Type | Federal Share | State Share | Local Share |
|--------------|---------------|-------------|-------------|
| Operating    | 50%           | 0%          | 50%         |
| Capital      | 80%           | 10%         | 10%         |
| Planning     | 80%           | 0%          | 20%         |

Source: GDOT Section 5311 Administrative Guide



<sup>&</sup>lt;sup>1</sup> https://www.transit.dot.gov/grant-programs/areas-persistent-poverty-program

Table 4: Distribution of Funding for the Section 5307 Program

| Project Type       | Federal Share | State Share | Local Share |
|--------------------|---------------|-------------|-------------|
| Operating          | Up to 50%     | 0%          | 50% or more |
| Capital            | 80%           | 10%         | 10%         |
| ADA Capital        | 90%           | 5%          | 5%          |
| CAA Capital        | 90%           | 5%          | 5%          |
| Bicycle Facilities | 90%           | 5%          | 5%          |
| Planning           | 80%           | 10%         | 10%         |

Source: GDOT Section 5307 Administrative Guide

#### 1.1.2.1 Georgia Transit Trust Fund

The Georgia TTFP, administered by GDOT, uses a population-based formula to distribute state funds to Georgia's counties that have existing transit service. Multi-county transit agencies also receive funding distributions based on population, and counties with household incomes below \$45,000 receive additional appropriations. The TTFP is funded through a tax levied on rideshare services and other for-hire ground transportation, as passed by the Georgia General Assembly in 2020. Georgia's fiscal year 2024 budget is the first budget to distribute these funds to transit agencies statewide, with funds eligible to be used to support both capital and operating expenses. Agencies must apply for these funds.

Fiscal year 2025 awards by multi-county agency and by comparable Georgia cities are shown in **Table 5** and **Table 6** respectively. As highlighted in these tables, the TTFP distributed \$1,287,382 to the SGRC and \$153,433 to the City of Valdosta. SGRC received the largest TTFP allocation in the multi-county group, and the City of Valdosta was at the higher end of the funding amounts in the single county/city category.

Table 5: GDOT Transit Trust Fund 5311 Peer Group Recipients - FY 2025 Allocation

| Multi-County Transit Agency                           | FY2O25 TFFP<br>Allocation |
|---|---------------------------|
| Coastal Region Commission                             | \$971,286                 |
| Lower Chattahoochee Regional Transportation Authority | \$294,151                 |
| North Georgia Community Action, inc.                  | \$579,099                 |
| Southern Georgia Regional Commission                  | \$1,287,382               |
| Southwest Georgia Regional Commission                 | \$1,025,267               |
| Three Rivers Regional Commission                      | \$1,005,295               |

Source: GDOT SFY2025 TTFP Allocation Table

Table 6: GDOT Transit Trust Fund 5307 Peer Group Recipients - FY 2025 Allocation

| Transit Agency               | FY2O25 TFFP<br>Allocation |
|------------------------------|---------------------------|
| Athens-Clarke County Transit | \$195,525                 |
| Cartersville-Bartow County   | \$141,301                 |
| City of Albany               | \$111,314                 |
| City of Brunswick            | \$109,639                 |
| City of Hinesville           | \$84,671                  |
| City of Rome                 | \$156,486                 |
| City of Valdosta             | \$153,433                 |
| Gainesville-Hall County      | \$263,573                 |
| Macon-Bibb County            | \$232,731                 |
| Peach County                 | \$36,306                  |
| Whitfield County             | \$133,468                 |

Source: GDOT SFY2025 TTFP Allocation Table



GDOT is looking to mobilize these funds, and the Southern Georgia Region should leverage this opportunity for many of the subsequent recommendations described in Section 3.0 Project ideas for transit trust funds are included in **Figure 4**.

More information about the TTFP program can be found here: <a href="https://www.dot.ga.gov/GDOT/Pages/TTFP.aspx">https://www.dot.ga.gov/GDOT/Pages/TTFP.aspx</a>

Figure 4: Georgia TTFP Funds Ideas for the Southern Georgia Region

Additional ideas for using the Georgia Transit Trust Funds in the Southern Georgia Region:

- WiFi service on buses
- Marketing/Advertising materials vehicle wraps, billboard signage, radio ads, social media content, flyers at churches, senior centers, restaurants, etc...
- Software/technology applications and implementations
- Retrofit buses for wheelchair lifts and other accommodations
- Retrofit buses to include storage shelves for personal/medical items in bus interiors
- Nets to hold groceries at the backs of buses
- Security cameras on buses
- Park and ride lot signage and shelters
- Pilot studies or feasibility studies to move recommendations forward.

SGRC applied for Georgia TTFP funds in FY24 and FY25 and in FY25 and FY26 as seen in **Table 7** and **Table 8** respectively.

Table 7: SGRC TTFP Proposed Projects for FY24 and FY25

| Project<br>Type | Project Name  | Projected<br>Cost |
|-----------------|---|-------------------|
|                 | Transit Mobility Coordinator                                  | \$181,802         |
| Operating       | Saturday Service Expansion                                    | \$222,000         |
| Operating       | Regional TDP  | \$20,000          |
|                 | Operating Total:  | \$423,802         |
|                 | Integration of Multiple Applications to Reduce<br>Labor Costs | \$5,500           |
|                 | Office Surveillance System                                    | \$5,500           |
|                 | Tablets and Mounts  | \$10,500          |
| Capital         | On-Board Camera Systems                                       | \$240,000         |
|                 | Small Capital   | \$5,443           |
|                 | Expansion   | \$130,000         |
|                 | Capital Total:  | \$396,943         |
| Grand Total:    |   | \$820,745         |

Source: SGRC Transit Trust Fund Program FY24 add FY25 Application

Table 8: SGRC TTFP Proposed Projects for FY25 and FY26

| Project<br>Type | Project Name                                  | Projected<br>Cost |
|-----------------|---|-------------------|
|                 | Mobile Mechanics                              | \$61,500          |
|                 | Employee Training Programs                    | \$41,000          |
| Operating       | Driver Surveying Project                      | \$6,150           |
|                 | Standard Operating Manual for Transit Program | \$10,250          |
|                 | Wheelchair Securement Validation Project      | \$6,150           |
|                 | Extended Hours Dispatch Call Center           | \$61,500          |
|                 | Safe Driver Rewards Program                   | \$410,000         |
|                 | Driver Hiring Commercial                      | \$32,820          |
|                 | Operating Total:                              | \$629,370         |



| Project<br>Type | Project Name  | Projected<br>Cost |
|-----------------|---|-------------------|
|                 | Informational Screens for Vehicles                  | \$67,650          |
|                 | Alternative Dispatch and Routing Software Solution  | \$129,150         |
|                 | Maintenance Shop Tools and Parts Inventory          | \$102,500         |
|                 | Website Remodel                                     | \$12,300          |
|                 | Auto Start-Stop Switches for Vehicles               | \$38,540          |
| Capital         | New Transit Systems Signs for Operations<br>Offices | \$14,760          |
| опр.т.п.        | Service Truck                                       | \$147,600         |
|                 | Cell Signal Broadcasters                            | \$1,025           |
|                 | Hardwired Office Phones                             | \$5,740           |
|                 | Large Monitors for Offices                          | \$28,700          |
|                 | Software Automations and Integration Projects       | \$114,263         |
|                 | Driver Equipment                                    | \$41,000          |
|                 | Capital Total:                                      | \$739,308         |
| Grand Total:    |   | \$1,368,678       |

Source: SGRC Transit Trust Fund Program FY25 and FY26 Application

#### 1.1.3 Local Transit Funding

Federal support is contingent on the presence of a local funding match for transit service. This local funding can come from several sources, including local general funds, special transportation taxes, fares, advertising revenue, or Purchase-of-Service (POS) income from other transportation programs. Local funds can also be in-kind.

#### 1.1.3.1 Purchase-of-Service Contracts

Section 5311 programs particularly can benefit from POS contracts when used in coordination with HST programs. Several of Georgia's regional rural transit providers have successfully leveraged these programs to provide close to half of their operational funds, nearly negating the need for local contributions from general funds or local sales taxes. The percentage of an agency's operating budget provided by the POS contracts is defined as the purchase-of-service ratio. **Table 9** provides these figures for regional rural providers in the state in 2023.

The chosen peers for this comparison are Southwest Georgia Regional Transit, Coastal Georgia Transit, and the Lower Chattahoochee Regional Transportation Authority. Southwest Georgia Regional Transit has demand-response bus service in 13 counties and has 76 vehicles. Coastal Georgia and the Lower Chattahoochee Transit System have similar systems that each serve 10 counties. The Southern Georgia Region has the highest POS ratio of these peer transit systems at 38 percent.

Table 9: Georgia Regional Rural Transit Systems' Operating Budgets

|                       | Regional Rural Transit Systems |                    |                                   |                     |
|-----------------------|--------------------------------|--------------------|-----------------------------------|---------------------|
| Costs                 | Southwest<br>Georgia           | Coastal<br>Georgia | Lower<br>Chattahoochee<br>Georgia | Southern<br>Georgia |
| Total<br>O&M<br>Costs | \$5,942,200                    | \$4,458,614        | \$1,316,493                       | \$3,949,888         |
| POS<br>Income         | \$2,488,874                    | \$1,072,617        | \$484,132                         | \$1,505,997         |
| POS<br>Ratio          | 42%                            | 24%                | 37%                               | 38%                 |

Source: The National Transit Database Agency Profiles



# Southern Georgia Regional Transit Development Plan

# **BOOK 3**

# Appendix C: Technical Needs Assessment Memorandum

August 2025



### **Table of Contents**

| 1.0 In | troduction1-2                                      |
|--------|--|
| 1.1    | Purpose and Content1-2                             |
| 1.2    | Current Public Transit Services1-2                 |
| 2.0 Fi | ndings   |
| 3.0 R  | ural Transit Demand Analysis                       |
| 3.1    | Methodology Overview3-1                            |
| 3.2    | Findings3-1  |
| 3.3    | Unmet Demand by Rural Transit Service Area3-5      |
| 3.4    | Unmet Demand by Unserved County3-5                 |
| 4.0 T  | ransit Propensity Analysis4-1                      |
| 4.1    | Methodology Overview4-1                            |
| 4.2    | Findings4-1  |
| 5.0 Ti | ransit-Supportive Residential Density Analysis 5-1 |
| 6.0 P  | opulation and Employment Centers 6-1               |
| 6.1    | Methodology Overview6-1                            |
| 6.2    | Findings6-1  |

## **List of Acronyms**

| ACS<br>GIS<br>FTA | American Community Survey Geographic Information System Federal Transit Administration |
|-------------------|--|
| HIFLD             | Homeland Infrastructure Foundation-Level Data  |
| HUD               | U.S. Department of Housing and Urban   |
|                   | Development  |
| GDOT              | Georgia Department of Transportation   |
| LEP               | Limited English Proficiency  |
| SGRC              | Southern Georgia Regional Commission   |
| TCRP              | Transit Collaborative Research Program   |
| TDP               | Transit Development Plan   |
| TRB               | Transportation Research Board  |
| UZA               | Urbanized Area   |
|                   |  |



### 1.0 Introduction

#### 1.1 Purpose and Content

The planning team for the Southern Georgia Regional Transit Development Plan (TDP) conducted several technical analyses to understand future transit service needs in the Southern Georgia Region. The four transit analyses conducted include:

- 1. Rural Transit Demand Analysis: Calculations that identify current and future (2050) rural transit demand estimates for each county and how much of the demand is unmet through current ridership
- **2. Transit Propensity Analysis**: GIS representation of the share of potential transit riders per census tract
- 3. Transit Supportive Residential Density Analysis: Geographic Information System (GIS) representation of residential densities throughout the region that portray where transit supportive densities are present
- 4. Transit Service Type Suitability Assessment: Geographic Information System (GIS) representation of transit service type compatibility based on both the transit propensity and the residential and employment densities

This memo includes a review of current transit services, transit needs analyses, and findings. Needs identification involves both technical and qualitative inputs. This memo focuses on the technical components. This analysis, along with input from stakeholders and the public, provides important guidance for exploring and, ultimately, the recommendation of transit strategies to advance vision and goals for transit within the Southern Georgia Region.

#### 1.2 Current Public Transit Services

Public transit services in the Southern Georgia Region include Southern Georgia Regional Commission (SGRC) Transit and Valdosta On-Demand. As described in the subsections that follow, the current transit services provide an essential service to transport people to jobs, appointments, shopping, and more. This needs assessment examines the most recent year's ridership patterns to inform how these transit services may be modified or enhanced to serve evolving needs during the planning horizon (through 2050).

#### **SGRC Transit**

SGRC Transit is the regional transit system administered by SGRC, with transit service currently provided through a third-party operator, RMS Inc. The regional transit service began in 2021, serving 15 of the region's 18 counties. Participating counties include Atkinson, Bacon, Ben Hill, Berrien, Brantley, Brooks, Charlton, Coffee, Cook, Irwin, Lowndes, Pierce, Tift, Turner, and Ware. Clinch, Echols, and Lanier counties have not participated in the regional system since its inception; however, in February 2025, Clinch, Echols, and Lanier counties all signed resolutions committing to join the regional system in the Fiscal Year 2026 (beginning July 2025).

- Demand-response service is provided on weekdays from 7:30 AM to 5:30 PM.
- Riders must be booked 24 hours in advance either by telephone or on mobile devices using GDOT's Let's Ride app.
- Fares are \$3.00 for trips up to 10 miles; for trips longer than 10 miles, \$0.50 per additional mile is added to the base fare.



#### Valdosta On-Demand

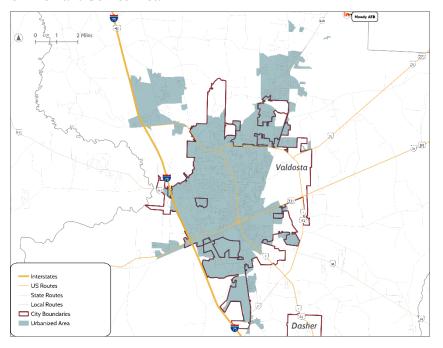
Since 2021, the City of Valdosta has administered an urban microtransit system called Valdosta On-Demand. Microtransit is a technology-enabled service that allows for close to immediate dispatching of transit vehicles once rides are booked. Transit service is currently provided through a third-party operator, Via. The service area is the Valdosta city limits.

- The Valdosta On-Demand service operates between 5:30 a.m. and 9:00 p.m., Monday through Friday.
- Riders may book by using the Via mobile application or by telephone.
- Fares are \$2 per trip and an additional \$1 for each extra passenger.
- The United Way of Greater Valdosta has partnered with the City to offer vouchers to social service agency clients who utilize Valdosta On-Demand.

As shown in Figure 1, the UZA boundary designated by the U.S. Census Bureau extends beyond the city limits, especially to the north. Additionally, there are portions of the City that are not within the UZA. These areas are primarily located to the east and north of the UZA.

A key transit funding source, the FTA, uses the population of the urbanized area to calculate its annual apportionments through the Section 5307 Formula Funds for Urbanized Areas Grant.

Figure 1: Urbanized Area Boundary in comparison to Current Valdosta On-Demand Service Area





# 2.0 Findings

Below are key findings from the needs analysis. The sections that follow provide more detail about the methodologies used to arrive at these findings.

- The total annual unmet rural transit demand for the region is estimated at **211,342** trips for 2025.
- By 2050, if transit service levels remain the same, the anticipated unmet rural transit demand is **243,588** trips.
- On a countywide level, the counties with the highest transit propensity are: Turner, Brooks, Atkinson, Clinch, and Charlton counties.
- Population groups most likely to use transit are present throughout the region.
  - Seniors (60+): The senior population is most heavily represented in the northern and eastern areas of the region in Charlton, Brantley, Ware, and Coffee counties. The senior share of the region's total population is anticipated to increase significantly by 2050.
  - Individuals with Disabilities: High concentrations of disabled individuals are found in central Charlton County, southern and eastern Brantley County, Bacon County, western Coffee County, Turner County, southern Berrien County, northern Clinch County, and Lowndes County.
  - Zero-Car Households: High concentrations of zero-car households are in northern Clinch County, central Brantley County, northern Turner County, northern Ware County, central Lanier County, southern Lowndes County, and Brooks County.
  - Low-Income Individuals: The highest concentration of lowincome people is in northern Clinch County; however, there

- are also high concentrations of low-income people in Brooks, Lowndes, and Ben Hill Counties.
- Minorities: The highest concentrations of minority populations are in Charlton County, northern Clinch County, central Lowndes County, central Brooks County, and central Atkinson County.
- Limited English Proficiency (LEP) Households: High concentrations of LEP populations can be found in the center of the region, through Coffee, Atkinson, and Clinch counties.
- Youth (15 to 19 year-olds): The highest concentrations of 15 to 19 year-old youth in the region is in the northern portion of the City of Valdosta (Lowndes County), Tift County, northern Clinch County, Charlton County, central Atkinson County, and eastern Irwin County.
- The relatively low residential density throughout most of the Southern Georgia Region is most compatible with demandresponse transit service.
- Some areas of Valdosta could be compatible with moderate or higher frequency fixed-route service based on their density of households and jobs.
- While a couple other population centers in the region have a level of density that may be supportive of fixed-route services (Tifton and Waycross), the areas are not large, and they are not contiguous. Microtransit may be more appropriate in Tifton and Waycross.
- Douglas and Fitzgerald have fewer areas that currently meet the suitability criteria for microtransit, but these areas should continue to be monitored for future microtransit service potential.



# 3.0 Rural Transit Demand Analysis

#### 3.1 Methodology Overview

The planning team utilized the Federal Transit Administration (FTA)/Transportation Research Board (TRB) Transit Cooperative Research Program (TCRP) Report 161: Methods for Forecasting Demand and Quantifying Need for Rural Passenger Transportation "non-program demand method" to estimate trip demand for rural public transit services. This methodology estimates the demand for public transit trips in rural areas. It does not include demand for Human Services Transportation programs, which are often coordinated with rural transit providers. This non-program demand method estimates trip demand by synthesizing three specific demographic factors that are strong indicators of transit demand:

- Population age 60+,
- Mobility-limited population age 18-64, and
- Households without vehicle access.

This data is sourced from the U.S. Census Bureau ACS 5-year estimates. After extracting the relevant ACS data, these data points are applied to the weighted, non-program demand formula:

**2025 Non-Program Demand (trips per year)** =  $(2.20 \times Population Age 60+) + (5.21 \times Mobility-Limited Population Age 18-64) + <math>(1.52 \times Population Age 18-64)$  +  $(1.52 \times Population Age 18-64)$ 

This plan estimates non-program demand for a base year of 2025, along with a plan horizon year of 2050. Mobility-limited populations and households without vehicle access are assumed to grow based on the general population growth rates. The 2050 population over age 60 is estimated using the age-specific growth rate. Both growth rates are taken from the Georgia Governor's Office of Planning and Budget's county-specific population projections. The formula for 2050 Non-Program Demand is:

2050 Future Demand (trips per year) = (2.20 x Population Age 60+) x (1 + Age 60+ Population Growth Rate [2025 to 2050]) + [5.21 x Mobility-Limited Population Age 18-64) + (1.52 x Households Without Vehicle Access)] x (1 + Overall Population Growth Rate [2025 to 2050])

Using this methodology, the planning team calculated estimated rural transit demand for each county in the Southern Georgia Region (and a cumulative total for the Region) for 2025 and 2050.

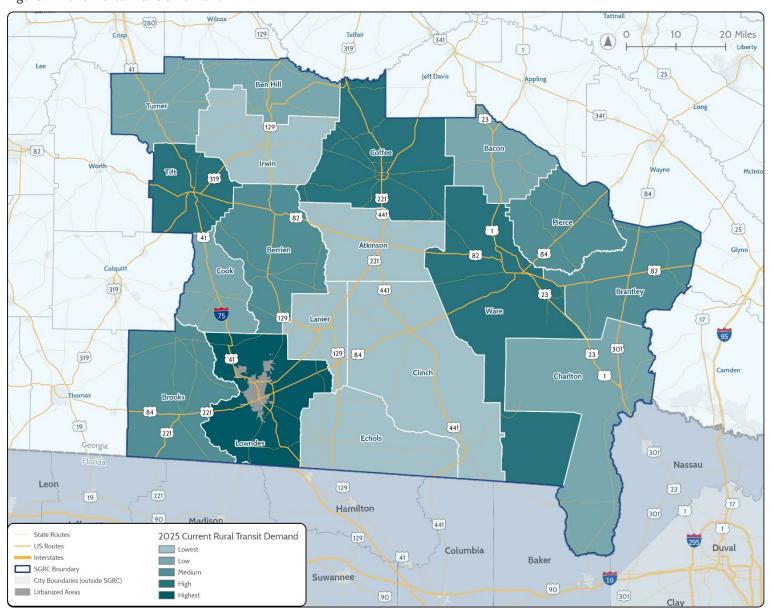
#### 3.2 Findings

Figure 2 and Figure 3 reflect these demand calculations geographically, and Table 1 documents the specific estimates by county. The Valdosta Urbanized Area (UZA) has been excluded from this analysis, which focuses on rural transit demand.

A comparison of the 2025 and 2050 rural transit demand indicates that the total demand is increasing in most counties, but the pattern of demand remains similar across the region.



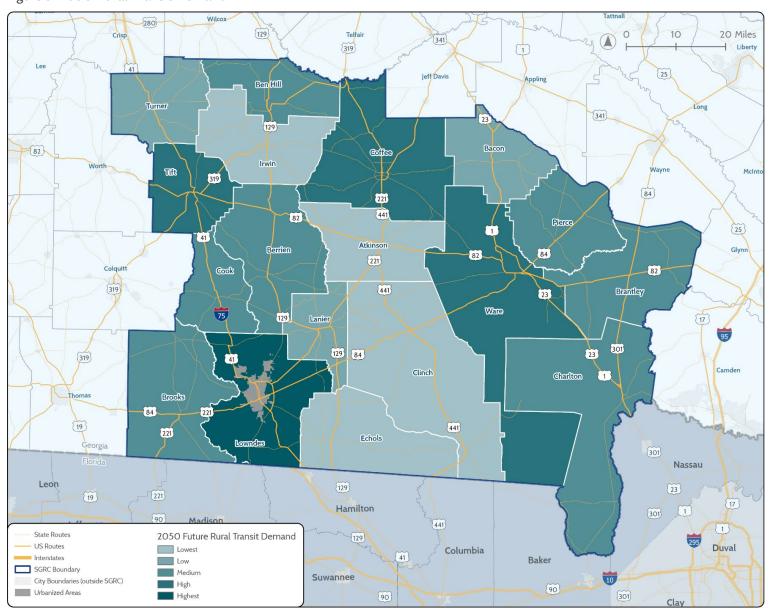
Figure 2: 2025 Rural Transit Demand



Source: U.S. Census Bureau 2022 American Community Survey 5-Year Estimates (Census Tracts), Georgia Governor's Office of Planning and Budget 2023 Population Projections



Figure 3: 2050 Rural Transit Demand



Source: U.S. Census Bureau 2022 American Community Survey 5-Year Estimates (Census Tracts), Georgia Governor's Office of Planning and Budget 2023 Population Projections



Table 1: Current and Future Rural Transit Demand by County

| County                                      | 2025 Rural Transit<br>Demand | 2050 Rural Transit<br>Demand |
|---|------------------------------|------------------------------|
| Atkinson                                    | 6,815                        | 8,210                        |
| Bacon                                       | 12,020                       | 12,233                       |
| Ben Hill                                    | 14,698                       | 15,549                       |
| Berrien                                     | 17,681                       | 20,041                       |
| Brantley                                    | 19,728                       | 22,017                       |
| Brooks                                      | 17,986                       | 17,451                       |
| Charlton                                    | 13,405                       | 15,278                       |
| Clinch                                      | 6,404                        | 6,595                        |
| Coffee                                      | 38,645                       | 42,825                       |
| Cook  | 15,240                       | 16,855                       |
| Echols                                      | 2,296                        | 2,866                        |
| Irwin                                       | 7,620                        | 7,991                        |
| Lanier                                      | 8,519                        | 10,173                       |
| Lowndes (only area outside of Valdosta UZA) | 31,112                       | 36,934                       |
| Pierce                                      | 16,312                       | 19,264                       |
| Tift  | 31,094                       | 35,700                       |
| Turner                                      | 11,018                       | 10,474                       |
| Ware  | 33,614                       | 35,926                       |

Sources: U.S. Census Bureau 2022 American Community Survey 5-Year Estimates, Georgia Governor's Office of Planning and Budget 2023 Projection Series



#### 3.3 Unmet Demand by Rural Transit Service Area

The current and future demand calculations for SGRC Transit are based on the county participants of the rural transit system as of February 2025. These figures are based on the countywide demand totals for Atkinson, Bacon, Ben Hill, Berrien, Brantley, Brooks, Charlton, Coffee, Cook, Irwin, Pierce, Tift, Turner, and Ware, as well as the non-program demand calculated for the area of Lowndes County outside of the Valdosta Urbanized Area.

Table 2: SGRC Transit Current and Future Transit Demand

| 2023<br>Unlinked<br>Passenger<br>Trips | 2025 Demand | Current<br>Unmet<br>Demand | 2050<br>Demand | Future<br>Unmet<br>Demand |
|--|-------------|----------------------------|----------------|---------------------------|
| 92,865                                 | 286,988     | 194,123                    | 316,819        | 223,954                   |

Sources: National Transit Database 2023 Transit Agency Profile, U.S. Census Bureau 2022 American Community Survey 5-Year Estimates, Georgia Governor's Office of Planning and Budget 2023 Projection Series

#### 3.4 Unmet Demand by Unserved County

As of winter 2025, Clinch, Echols, and Lanier counties do not participate in the SGRC Transit regional service. Individual county-level rural transit demand values (for the base year of 2025 and planning horizon year of 2050) are shown in Table 3, Table 4, and Table 5 for each of these counties.

Table 3: Clinch County Current and Future Transit Demand

| 2023<br>Unlinked<br>Passenger<br>Trips | 2025 Demand | Current<br>Unmet<br>Demand | 2050<br>Demand | Future<br>Unmet<br>Demand |
|--|-------------|----------------------------|----------------|---------------------------|
| 0                                      | 6,404       | 6,404                      | 6,595          | 6,595                     |

Sources: U.S. Census Bureau 2022 American Community Survey 5-Year Estimates, Georgia Governor's Office of Planning and Budget 2023 Projection Series

Table 4: Echols County Current and Future Transit Demand

| 2023<br>Unlinked<br>Passenger<br>Trips | 2025 Demand | Current<br>Unmet<br>Demand | 2050<br>Demand | Future<br>Unmet<br>Demand |
|--|-------------|----------------------------|----------------|---------------------------|
| 0                                      | 2,296       | 2,296                      | 2,866          | 2,866                     |

Sources: U.S. Census Bureau 2022 American Community Survey 5-Year Estimates, Georgia Governor's Office of Planning and Budget 2023 Projection Series

Table 5: Lanier County Current and Future Transit Demand

| 2023<br>Unlinked<br>Passenger<br>Trips | 2025 Demand | Current<br>Unmet<br>Demand | 2050<br>Demand | Future<br>Unmet<br>Demand |
|--|-------------|----------------------------|----------------|---------------------------|
| 0                                      | 8,519       | 8,519                      | 10,173         | 10,173                    |

Sources: U.S. Census Bureau 2022 American Community Survey 5-Year Estimates, Georgia Governor's Office of Planning and Budget 2023 Projection Series



# 4.0 Transit Propensity Analysis

#### 4.1 Methodology Overview

Transit propensity measures the likelihood of transit use by various population groups. The planning team utilized the FTA / TRB TCRP Report 161 Methodology to quantify transit propensity at the census tract level within the Southern Georgia Region. The Georgia Department of Transportation (GDOT) utilized the same methology to calculate transit propensity in the Georgia Statewide Transit Plan. The formula synthesizes the following seven demographic categories into a transit propensity score, utilizing U.S. Census Bureau American Community Survey (ACS) 5-year estimates:

- 1. Zero-car individuals
- 2. Individuals with disabilities
- 3. Seniors (ages 60+)
- 4. Low-income individuals
- 5. Minority individuals
- 6. Individuals with limited English proficiency
- 7. Youth (ages 15-19)

The aggregate score ranges between 0 and 3. Each census tract is classified into one of the following transit propensity categories based on the natural breaks distribution method:

- Lowest (O 1.25)
- Low (1.26 1.53)
- Medium (1.54 1.75)
- High (1.76 2.11)
- Highest (2.12 3.0)

#### 4.2 Findings

Table 6 summarizes the average level of propensity by county, and Figure 4 shows the aggregated transit propensity score for each census tract in the Southern Georgia Region. The locations with the highest transit propensity are the western half of Turner County, the southern portion of Ben Hill County, central Lowndes County, and central Brooks County. These areas contain the census tracts with the highest transit propensity values in the region. On a countywide level, the counties with the highest transit propensity are: Turner, Brooks, Atkinson, Clinch, and Charlton counties.

Seniors (60+): The senior population is most heavily represented in the northern and eastern areas of the region in Charlton, Brantley, Ware, and Coffee Counties.

Individuals with Disabilities: High concentrations of disabled individuals are found in central Charlton County, southern and eastern Brantley County, Bacon County, western Coffee County, Turner County, southern Berrien County, northern Clinch County, and Lowndes County.

**Zero-Car Households:** High concentrations of zero-car households are located in northern Clinch County, central Brantley County, northern Turner County, northern Ware County, central Lanier County, southern Lowndes County, and Brooks County.

**Low-Income Individuals:** The highest concentration of low-income people is in northern Clinch County; however, there are also high concentrations of low-income people in Brooks, Lowndes, and Ben Hill Counties.



Minorities: The highest concentrations of minority populations are located in Charlton County, northern Clinch County, central Lowndes County, central Brooks County, and central Atkinson County.

**Limited English Proficiency (LEP) Households:** High concentrations of LEP populations can be found in the center of the region, through Coffee, Atkinson and Clinch Counties.

**Youth:** The highest concentrations of youth in the region are in northern Lowndes County, Tift County, northern Clinch County, Charlton County, central Atkinson County, and eastern Irwin County.

Table 6: Average Transit Propensity Score per County

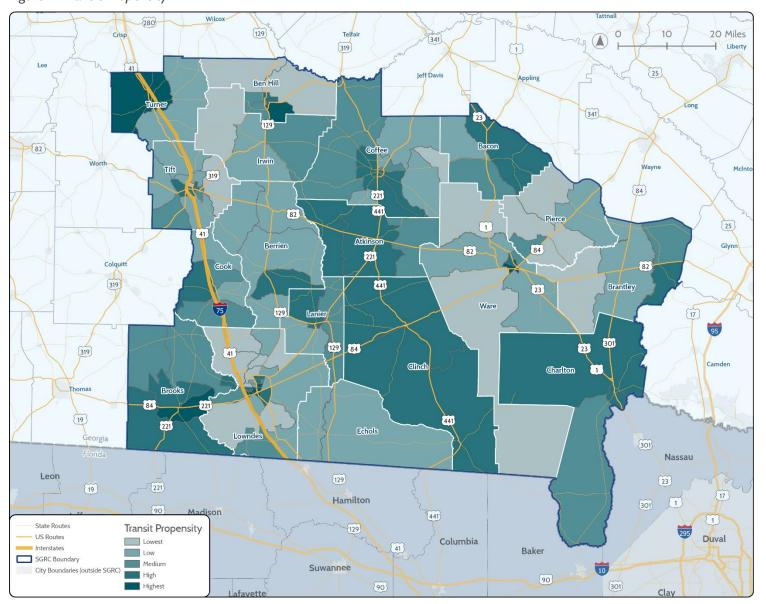
| County                                      | Average Propensity<br>Score* | Corresponding Level of Propensity |
|---|------------------------------|-----------------------------------|
| Atkinson                                    | 1.77                         | High                              |
| Bacon                                       | 1.68                         | Medium                            |
| Ben Hill                                    | 1.66                         | Medium                            |
| Berrien                                     | 1.48                         | Low                               |
| Brantley                                    | 1.47                         | Low                               |
| Brooks                                      | 1.87                         | High                              |
| Charlton                                    | 1.75                         | Medium                            |
| Clinch                                      | 1.78                         | High                              |
| Coffee                                      | 1.61                         | Medium                            |
| Cook  | 1.58                         | Medium                            |
| Echols                                      | 1.32                         | Low                               |
| Irwin                                       | 1.43                         | Low                               |
| Lanier                                      | 1.63                         | Medium                            |
| Lowndes (only area outside of Valdosta UZA) | 1.59                         | Medium                            |
| Pierce                                      | 1.21                         | Lowest                            |
| Tift  | 1.55                         | Medium                            |
| Turner                                      | 2.12                         | Highest                           |
| Ware  | 1.73                         | Medium                            |

Source: U.S. Census Bureau 2022 American Community Survey 5-Year Estimates



<sup>\*</sup>Scores range between 0 and 3. The following values are used for the level thresholds: Lowest (0 - 1.25), Low (1.26 - 1.53), Medium (1.54 - 1.75), High (1.76 - 2.11), and Highest (2.12 - 3.0).

Figure 4: Transit Propensity



Source: U.S. Census Bureau 2022 American Community Survey 5-Year Estimates, Georgia Governor's Office of Planning and Budget 2023 Population Projections



# 5.0 Transit-Supportive Residential Density Analysis

Land use patterns, such as housing and job densities, are important considerations for transit planning, particularly in deciding the transit service type that is most cost-effective and efficient to serve the needs of a community. This needs assessment defines transit-supportive density based on the suggested density thresholds in Table 7, where low-density areas are most compatible with demand-response transit. Progressively higher residential and employment densities can provide a basis for consideration of other transit service types, including microtransit and fixed-route transit. Section 5 of this memo only looks at residential densities; employment density is accounted for in Section 6.

There is low residential density (less than 4 households per gross acre) throughout much of the Southern Georgia Region (Figure 5). This level of density is compatible with the demand-response transit service type. A demand-response transit system is one where passenger trips are generated by calls from passengers or their agents to the transit operator, who then dispatches a vehicle to pick the passengers up and transport them to their destinations.

The City of Valdosta (Figure 6) exhibits a patchwork of census block groups that meet the minimum residential density threshold for fixed-route bus service (greater than 6 households per gross acre), as well as some census block groups where either demand-response or fixed-route transit may be appropriate (between 4 and 6 households per gross acre).

In Tift and Ware counties, less than five census block groups in Tifton area (Figure 7) and Waycross area (Figure 8) are currently supporting population densities in the "demand response or fixed route" category (between 4 and 6 households per gross acre).

Table 7: Suggested Transit-Supportive Densities

| Transit Service   | Minimum Residential Density   |
|---|-------------------------------|
| Demand Response   | Up to 6 households/gross acre |
| Local fixed-route bus, 60-minute peak headway           | 4 households/gross acre       |
| Local fixed-route bus, 20 to 30-<br>minute peak headway | 7 households/gross acre       |
| Local fixed-route bus, 10 to 15-<br>minute peak headway | 15 households/gross acre      |

Source: Transit Cooperative Research Program, Transit Capacity and Quality of Service Manual, 2nd Edition



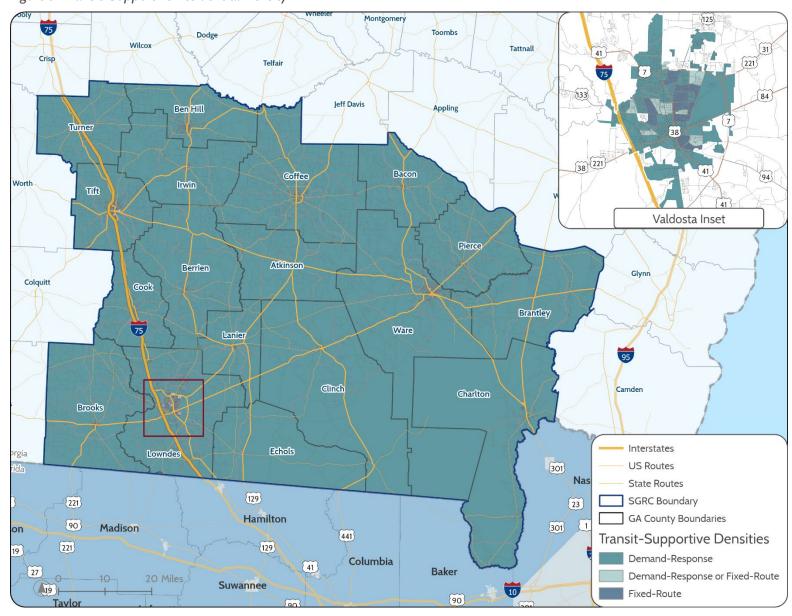


Figure 5: Transit-Supportive Residential Density

Source: U.S. Census Bureau 2022 American Community Survey 5-Year Estimates





Figure 6: Valdosta Area Transit-Supportive Residential Density







Figure 7: Tifton Area Transit-Supportive Residential Density





Figure 8: Waycross Area Transit-Supportive Residential Density



Source: U.S. Census Bureau 2022 American Community Survey 5-Year Estimates



## 6.0 Population and Activity Centers

This section provides a closer look at the transit needs of population centers in the Southern Georgia Region, including one urbanized area (Valdosta) and four urban clusters. Urban clusters are more densely settled than surrounding areas, and their total populations are between 2,500 and 50,000, according to the U.S. Census Bureau. Unlike urbanized areas, urban clusters are not eligible for funding through the FTA Section 5307 Formula Funding for Urbanized Areas Grant; however, creative funding solutions and public/private partnerships can be considered to meet unique transit needs of these areas.

### 6.1 Methodology Overview

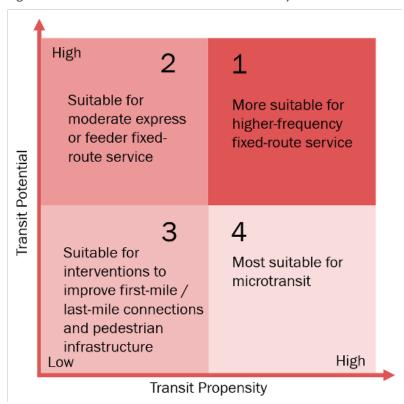
The analysis in this section builds on the findings of the preceding sections. Based on the methodology from the National Center for Applied Technology that is depicted in Figure 9, transit potential (transit-supportive residential and employment densities) and transit propensity should be analyzed in tandem to make an informed decision about the transit service types that are most suited to an area. Table 8 provides the thresholds of combined households and jobs that are compatible with different transit service types.

Table 8: Suggested Transit-Supportive Residential and Employment Densities

| Transit Service         | Household and Job Density Tiers        |  |
|-------------------------|--|--|
| Demand Response         | 0 - 1 households + jobs per gross acre |  |
| Microtransit            | 1 - 4 households + jobs per gross acre |  |
| Fixed-Route Bus Service | 5+ households + jobs per gross acre    |  |

Source: Richmond Region Micro-transit Study, January 2023

Figure 9: Microtransit and Fixed-Route Suitability Matrix



Source: National Center for Applied Transit Technology, <a href="https://n-catt.org/guidebooks/on-demand-transit-and-microtransit-where-and-why/where-does-microtransit-work-best/">https://n-catt.org/guidebooks/on-demand-transit-and-microtransit-where-and-why/where-does-microtransit-work-best/</a>



## 6.2 Findings

The suitability analysis for microtransit and fixed-route service, detailed in Table 9 and depicted in Figure 10, indicates that there are limited locations across the region where a transit service change would be warranted at this time (2025).

- The Valdosta UZA exhibits a high number of areas where fixedroute transit service should be considered based on the high transit propensity and high density of households and jobs.
- There are many potential transit origins and destinations that coincide with these areas (see 6.2.1 Valdosta Lowndes County).
- While a couple other population centers show a level of density that may be supportive of fixed-route services (Tifton and Waycross), the areas are not large and are not contiguous.
- Microtransit may be more appropriate in Tifton and Waycross.
- Douglas and Fitzgerald have fewer areas that currently meet the suitability criteria for microtransit, but these areas should continue to be monitored for the potential to support a microtransit service in the future.

Table 9: Results of Microtransit and Fixed-Route Suitability Analysis

| Population<br>Center | Number of<br>Census Block<br>Groups Suitable<br>for Microtransit | Number of Census Block<br>Groups Suitable for Moderate<br>or Higher-Frequency Fixed-<br>Route |
|----------------------|--|---|
| Valdosta             | 8  | 19  |
| Douglas              | 5  | 0   |
| Fitzgerald           | 5  | 0   |
| Tifton               | 9  | 4   |
| Waycross             | 14   | 2   |



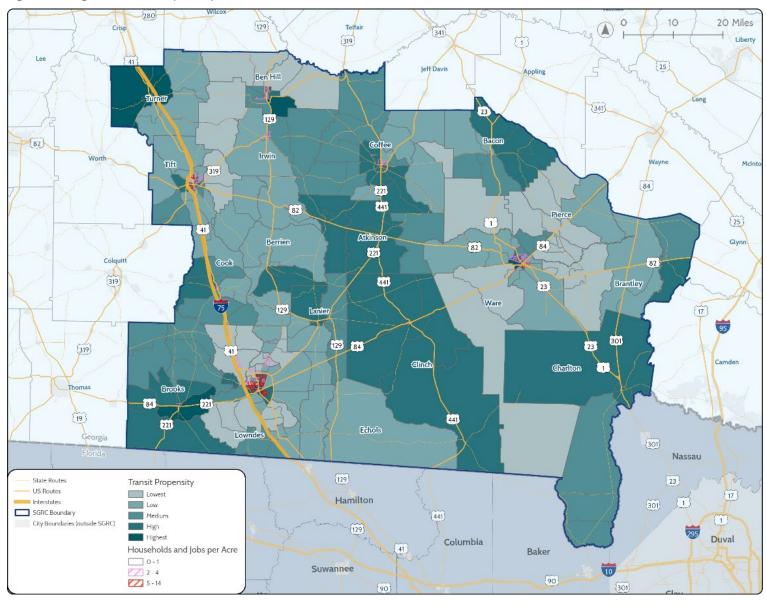


Figure 10: Regional Suitability Analysis for Microtransit or Fixed-Route Service





#### 6.2.1 Valdosta - Lowndes County

The City of Valdosta (Lowndes) is the region's most populous area, and as discussed in previous sections, it contains the only urbanized area in the region, meaning it is eligible to apply for federal funding from a different funding source than the rural counties.

Table 10 provides a breakdown of populations within Lowndes County that are more likely to be transit dependent. Figure 11 shows the compatible transit service types by census block group, as well as potential transit origins and destinations.

Valdosta On-Demand, the microtransit service operating throughout the city, has ten top transit destinations:

- Walmart on Inner Perimeter Road
- South Georgia Regional Library
- South Georgia Medical Center
- Castle Park Shopping Center
- Valdosta State University
- Valdosta Mall
- Downtown Valdosta
- Mildred Hunter Community Center
- Walmart on Norman Drive
- Azalea Business Park

These destinations, other potential transit origins, including denser and/or low-income housing areas, and transit destinations, are shown in Figure 12.

Table 10: Lowndes County 2025 and 2050 Populations with Transit Needs

| LOWNDES COUNTY                            | 2025    | 2050    | % Change |
|---|---------|---------|----------|
| Total Population                          | 121,364 | 144,657 | 19.2%    |
| Total Youth Population (Ages 15 - 19)     | 8,927   | 10,640  | 19.2%    |
| Total Population Age 60+                  | 20,584  | 27,498  | 33.6%    |
| Mobility Limited Populations Ages 18 - 64 | 6,936   | 8,267   | 19.2%    |
| Households without Vehicle Access         | 3,290   | 3,921   | 19.2%    |
| Minority (non-white) Population           | 56,671  | 67,546  | 19.2%    |
| Low-Income Population (Below Poverty)     | 23,507  | 28,018  | 19.19%   |
| Limited English Proficiency Individuals   | 2,452   | 2,923   | 19.19%   |

Sources: U.S. Census Bureau 2022 American Community Survey 5-Year Estimates, Georgia Governor's Office of Planning and Budget 2023 Projection Series

\*2050 is an estimate based on the 2025 population and the growth rate factor for Lowndes County (19.2%)



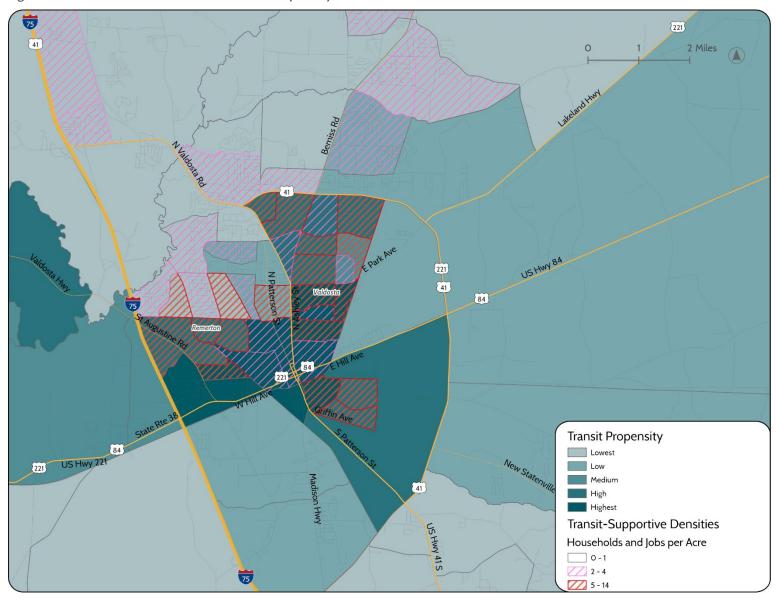


Figure 11: Microtransit and Fixed-Route Suitability Analysis for Valdosta Area





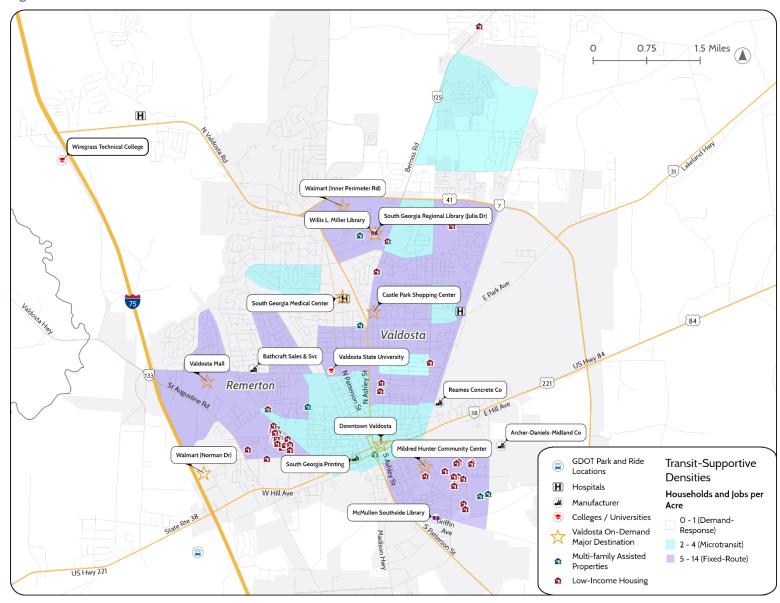
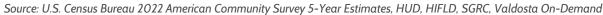


Figure 12: Potential Transit Service Areas in Valdosta Area





#### 6.2.2 Douglas - Coffee County

Douglas (Coffee County) is in the north, central area of the region. It is home to one major employer (Coffee Regional Medical Center), as well as a higher education institution (South Georgia State College) that has about 1,500 students enrolled.

Table 11 provides a breakdown of populations within Coffee County that are more likely to be transit dependent. Figure 13 shows the compatible transit service types by census block group, as well as potential transit origins and destinations

Table 11: Coffee County 2025 and 2050 Populations with Transit Needs

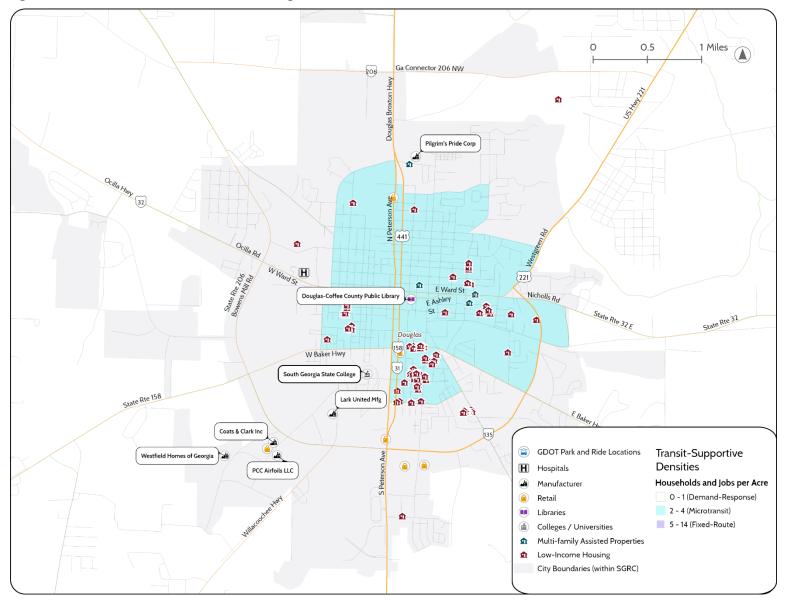
| COFFEE COUNTY                             | 2025   | 2050    | % Change |
|---|--------|---------|----------|
| Total Population                          | 43,682 | 46,396  | 6.2%     |
| Total Youth Population (Ages 15 - 19)     | 3,291  | 3,495*  | 6.2%     |
| Total Population Age 60+                  | 9,177  | 11,147  | 21.5%    |
| Mobility Limited Populations Ages 18 - 64 | 3,484  | 3,700*  | 6.2%     |
| Households without Vehicle Access         | 947    | 1,006*  | 6.2%     |
| Minority (non-white) Population           | 18,583 | 19,737* | 6.2%     |
| Low-Income Population (Below Poverty)     | 8,063  | 8,564*  | 6.2%     |
| Limited English Proficiency Individuals   | 2,336  | 2,481*  | 6.2%     |

Sources: U.S. Census Bureau 2022 American Community Survey 5-Year Estimates, Georgia Governor's Office of Planning and Budget 2023 Projection Series

\*2050 is an estimate based on the 2025 population and the growth rate factor for Coffee County (6.2%)



Figure 13: Potential Transit Service Areas in Douglas



Source: U.S. Census Bureau 2022 American Community Survey 5-Year Estimate, HUD, HIFLD, SGRC



#### 6.2.3 Fitzgerald - Ben Hill County

Fitzgerald (Ben Hill County) is in the northwestern area of the region. Fitzgerald is smaller than the other urban clusters in the region. It is home to one hospital (Dominy Medical Center), which serves a regional population.

Table 12 provides a breakdown of populations within Ben Hill County that are more likely to be transit dependent. Figure 14 shows the compatible transit service types by census block group, as well as potential transit origins and destinations.

Table 12: Ben Hill County 2025 and 2050 Populations with Transit Needs

| BEN HILL COUNTY                           | 2025   | 2050   | % Change |
|---|--------|--------|----------|
| Total Population                          | 17,509 | 16,941 | -3.2%    |
| Total Youth Population (Ages 15 - 19)     | 1,110  | 1,075* | -3.2%    |
| Total Population Age 60+                  | 4,209  | 4,924  | 17%      |
| Mobility Limited Populations Ages 18 - 64 | 835    | 808*   | -3.2%    |
| Households without Vehicle Access         | 716    | 693*   | -3.2%    |
| Minority (non-white) Population           | 7,819  | 7,569* | -3.2%    |
| Low-Income Population (Below Poverty)     | 4,442  | 4,300* | -3.2%    |
| Limited English Proficiency Individuals   | 337    | 326*   | -3.2%    |

Sources: U.S. Census Bureau 2022 American Community Survey 5-Year Estimates, Georgia Governor's Office of Planning and Budget 2023 Projection Series

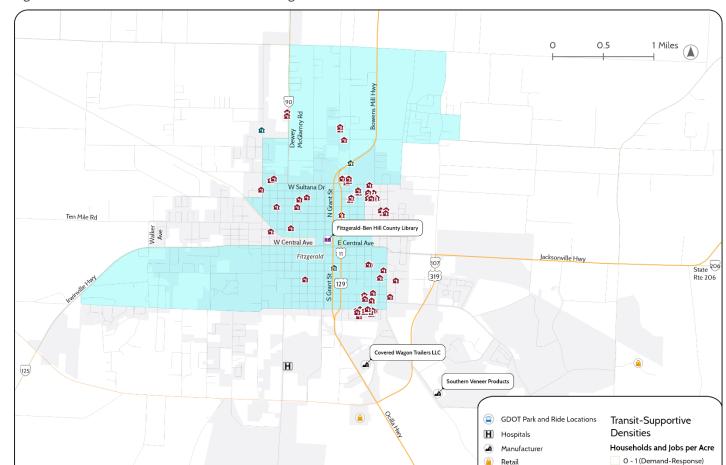
\*2050 is an estimate based on the 2025 population and the growth rate factor for Ben Hill County (-3.2%)



2 - 4 (Microtransit) 5 - 14 (Fixed-Route)

Colleges / Universities

Multi-family Assisted Properties Low-Income Housing City Boundaries (within SGRC)



Modern Dispersions South Inc

Figure 14: Potential Transit Service Areas in Fitzgerald

Source: U.S. Census Bureau 2022 American Community Survey 5-Year Estimates, HUD, HIFLD, SGRC



#### 6.2.4 Tifton – Tift County

Tifton (Tift County) is in the northwestern portion of the region, and Interstate 75 runs directly through the middle of the city. Tifton has a large medical center (Tift Regional Medical Center), as well as a higher education institution (Abraham Baldwin Agricultural College) with over 3,000 students.

Table 13 provides a breakdown of populations within Tift County that are more likely to be transit dependent. Figure 15 shows the compatible transit service types by census block group, as well as potential transit origins and destinations.

Table 13: Tift County 2025 and 2050 Populations with Transit Needs

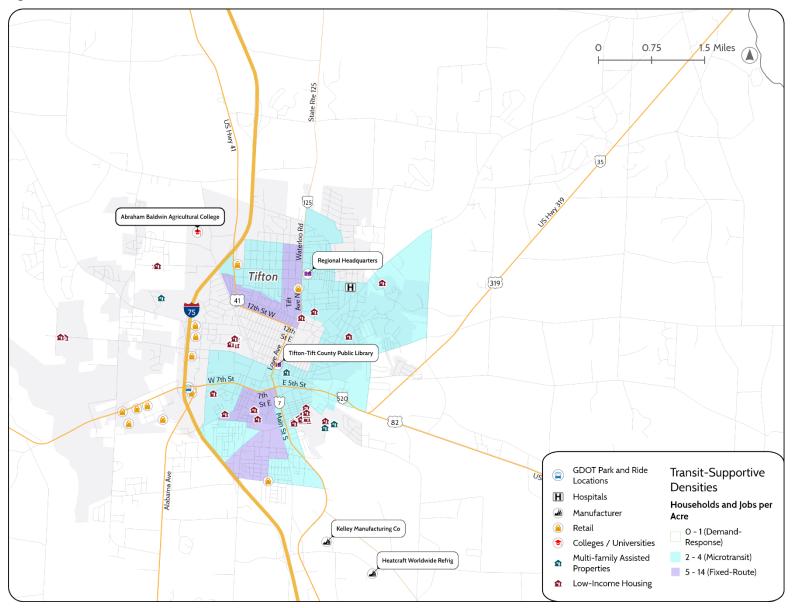
| TIFT COUNTY                               | 2025   | 2050    | % Change |
|---|--------|---------|----------|
| Total Population                          | 42,003 | 43,615  | 3.8%     |
| Total Youth Population (Ages 15 - 19)     | 3,372  | 3,502*  | 3.8%     |
| Total Population Age 60+                  | 9,595  | 11,958  | 24.6%    |
| Mobility Limited Populations Ages 18 - 64 | 2,068  | 2,147*  | 3.8%     |
| Households without Vehicle Access         | 1,261  | 1,309*  | 3.8%     |
| Minority (non-white) Population           | 18,934 | 19,661* | 3.8%     |
| Low-Income Population (Below Poverty)     | 8,245  | 8,562*  | 3.8%     |
| Limited English Proficiency Individuals   | 1,390  | 1,443*  | 3.8%     |

Sources: U.S. Census Bureau 2022 American Community Survey 5-Year Estimates, Georgia Governor's Office of Planning and Budget 2023 Projection Series

 $^*2050$  value is an estimate based on the 2025 population and the projected growth rate factor for Tift County (3.8%)



Figure 15: Potential Transit Service Areas in Tifton



Source: U.S. Census Bureau 2022 American Community Survey 5-Year Estimates, HUD, HIFLD, SGRC



#### 6.2.5 Waycross - Ware County

Waycross (Ware County) is found on the eastern side of the region, situated west of Brantley County, southwest of Pierce County, south of Bacon County, north of Charlton County, northeast of Clinch County, and due east of Atkinson County. A regional higher education institution (Coastal Pines Technical College) is located in Waycross. Medical facilities in the area include the Mayo Clinic Health System and the Satilla Park Hospital.

Table 14 provides a breakdown of populations within Ware County that are more likely to be transit dependent. Figure 16 shows the compatible transit service types by census block group, as well as potential transit origins and destinations

Table 14: Ware County 2025 and 2050 Populations with Transit Needs

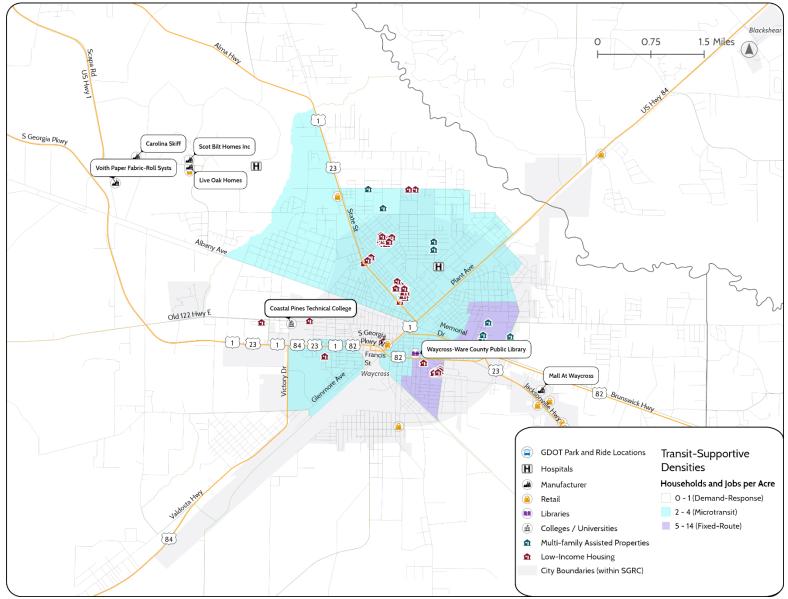
| WARE COUNTY                               | 2025   | 2050    | % Change |
|---|--------|---------|----------|
| Total Population                          | 35,487 | 36,253  | 2.2%     |
| Total Youth Population (Ages 15 - 19)     | 2,479  | 2,533   | 2.2%     |
| Total Population Age 60+                  | 8,962  | 10,048  | 12.1%    |
| Mobility Limited Populations Ages 18 - 64 | 2,455  | 2,508*  | 2.2%     |
| Households without Vehicle Access         | 1,391  | 1,421*  | 2.2%     |
| Minority (non-white) Population           | 13,506 | 13,798* | 2.2%     |
| Low-Income Population (Below Poverty)     | 7,920  | 8,091*  | 2.2%     |
| Limited English Proficiency Individuals   | 698    | 713*    | 2.2%     |

Sources: U.S. Census Bureau 2022 American Community Survey 5-Year Estimates, Georgia Governor's Office of Planning and Budget 2023 Projection Series

\*2050 is an estimate based on the 2025 population and the growth rate factor for Ware County (2.2%)



Figure 16: Potential Transit Service Areas in Waycross



Source: U.S. Census Bureau 2022 American Community Survey 5-Year Estimates, HUD, HIFLD, SGRC



# Southern Georgia Regional Transit Development Plan

## **BOOK 3**

# Appendix D: Cost Estimates Technical Memorandum

August 2025



## In partnership with



Blue Cypress Consulting & Spatial Plans

## **Table of Contents**

| 1.0 | Overview  | <b>1</b> -1 |
|-----|---|-------------|
| 1.1 | Cost Tables & Cost Share  | 1-1         |
| 1.2 | Parameters Utilized in Cost Estimate Calculations                                     | 1-2         |
| 2.0 | Rural Expansion Cost Estimates  | 2-1         |
| 2.1 | Expand Regional Service to Clinch, Echols, and Lanier Counties Error! Bookmark not de | fined       |
| 2.2 | Establish Microtransit Service in Tifton and Waycross                                 | 2-3         |
| 2.3 | Increase Size of SGRC Transit Fleet   | 2-4         |
| 2.4 | Expand SGRC Transit's Service Hours   | 2-5         |
| 2.5 | Establish Commuter Vanpools   | 2-6         |
| 2.6 | Establish Long-Distance Shuttles to Destinations Extern Region                        |             |
| 2.7 | Seasonal Circulator Shuttle for Special Events in Downton SGRC's Rural Service Area   |             |
| 3.0 | Urban Expansion Cost Estimates  | 3-1         |
| 3.1 | Increase Valdosta On-Demand's Fleet to Better Serve Demand                            | 3-1         |
| 3.2 | Expand Valdosta On-Demand Service Hours   | 3-2         |
| 3.3 | Expand Valdosta On-Demand Service Area to Include Unserved Portions of UZA            | 3-3         |
| 3.4 | Establish Fixed Routes in Valdosta  | 3-4         |

## **Acronyms**

| O&M  | Operations and Maintenance           |
|------|--------------------------------------|
| POS  | Purchase-of-Service                  |
| SGRC | Southern Georgia Regional Commission |
| TDP  | Transit Development Plan             |
| UZA  | Urbanized Area                       |
| VOD  | Valdosta On-Demand                   |
| VRH  | Vehicle Revenue Hours                |
| VRM  | Vehicle Revenue Miles                |



## 1.0 Overview

Table 1 summarizes the transit recommendations for which the planning team calculated cost estimates. The **Recommendations Report** provides details about these and other recommendations.

Table 1: Transit Recommendations with Cost Estimates

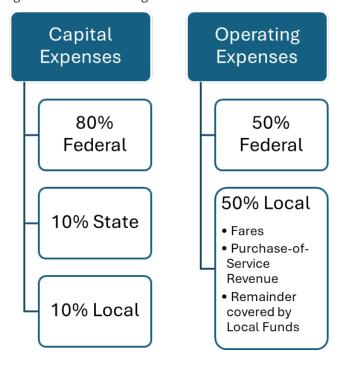
| Category           | Recommendation   |  |
|--------------------|--|--|
| Rural Expansion    | Incorporate Clinch, Lanier, and Echols counties into the regional transit service area                                     |  |
| Rural Expansion    | Establish Microtransit service in Tifton and Waycross  |  |
| Rural Expansion    | Increase size of SGRC Transit fleet (cost per vehicle added)   |  |
| Rural Expansion    | Expand SGRC Transit hours (additional hour per weekday)  |  |
| Rural Expansion    | Establish commuter vanpools  |  |
| Rural Expansion    | Establish long-distance shuttles to destinations external to region (Valdosta to Tallahassee and Folkston to Jacksonville) |  |
| Rural Expansion    | Establish seasonal circulator shuttle for special events in downtowns in SGRC's service area                               |  |
| Urban<br>Expansion | Increase Valdosta On-Demand (seven additional vehicles based on unmet demand)  |  |
| Urban<br>Expansion | Expand Valdosta On-Demand hours (additional hour per weekday)  |  |
| Urban<br>Expansion | Expand Valdosta On-Demand service area (to cover unserved areas of Urbanized Area)   |  |
| Urban<br>Expansion | Establish Fixed-route bus service in Valdosta (two routes)   |  |

The remainder of this memorandum provides the cost estimates for each recommendation in table format along with supporting inputs used in the calculations.

#### 1.1 Cost Tables & Cost Share

Each cost table includes the cost share between federal, state, and local agencies. Figure 1 demonstrates the funding share for each level of government based on current regulations. Costs recovered through fares and purchase-of-service revenue are also estimated-these recovered costs are eligible to help meet the required local match.

Figure 1: Cost Share Diagram





# 1.2 Parameters Utilized in Cost Estimate Calculations

Performance metrics from the National Transit Database transit agency reports underly all cost estimates. Along with each cost table, there is a list of inputs that clarifies whether the estimated operating costs are derived from SGRC Transit and Valdosta On-Demand's performance metrics or peer agencies' performance metrics. Some of the calculations are drawn from historical data for the single-county rural transit providers that operated in the region prior to SGRC Transit's regionalization of service.

#### Important Note on Local Match:

Since SGRC Transit's inception, the agency has had a surplus of purchase-of-service (POS) revenue, which offsets the amount of funding contributions needed from the local counties. In fact, the county partners have not had to pay into the system at all, as the POS revenue and fare revenue have sufficiently covered the local cost share.

#### **Key Terms**

- Vehicle revenue miles (VRM) refers to the number of miles a transit vehicle travels while available for the public to ride.
- Vehicle revenue hours (VRH) refers to the number of hours that a transit vehicle operates while available for the public to ride.
- Deadhead refers to the miles and hours that a vehicle travels when out of revenue service. Deadhead includes leaving or returning to the garage or yard facility, and time when there is no expectation of carrying revenue passengers.
- Fare recovery ratio is the percentage of operating costs that is recovered in the form of fares.
- Purchase-of-service (POS) revenue is funding received by a transit agency for providing transportation services to other entities, like human service agencies, under a contract agreement.
- **POS ratio** is the percentage of operating costs that is recovered in the form of revenue from POS contracts.

Definitions derived from National Transit Database



## 2.0 Rural Expansion Cost Estimates

## 2.1 Cost Estimates to Add Service in Clinch, Echols, and Lanier Counties

Table 2: Cost Estimates for Adding Clinch, Echols, and Lanier Counties to SGRC Transit's Service Area

|                              | Clinch County     | Echols County     | Lanier County     | Total Costs for Adding Three<br>Counties |
|------------------------------|-------------------|-------------------|-------------------|--|
| Fare                         | \$3.00            | \$3.00            | \$3.00            | \$3.00                                   |
| Days                         | Mon-Fri           | Mon-Fri           | Mon-Fri           | Mon-Fri                                  |
| Hours                        | 7:30 AM - 5:30 PM                        |
| Vehicles                     | 2                 | 1                 | 3                 | 6  |
| Annual Vehicle Revenue Miles | 53,508            | 29,419            | 82,904            | 165,831                                  |
| Annual Vehicle Revenue Hours | 2,990             | 1,644             | 4,633             | 9,267                                    |
| Annual O&M Costs             | \$100,000         | \$54,000          | \$155,000         | \$309,000                                |
| Fares                        | \$2,000           | \$1,000           | \$4,000           | \$7,000                                  |
| Federal Share                | \$50,000          | \$28,000          | \$78,000          | \$156,000                                |
| Purchase-of-Service          | \$34,000          | \$18,000          | \$52,000          | \$104,000                                |
| Local Share                  | \$14,000          | \$7,000           | \$21,000          | \$42,000                                 |
| One-Time Capital Costs       | \$227,000         | \$125,000         | \$354,000         | \$706,000                                |
| Federal Share                | \$183,000         | \$101,000         | \$284,000         | \$568,000                                |
| State Share                  | \$22,000          | \$12,000          | \$35,000          | \$69,000                                 |
| Local Share                  | \$22,000          | \$12,000          | \$35,000          | \$69,000                                 |



#### Inputs Utilized in Table 2 Cost Estimates

- Fare recovery ratio of 3 percent is based on the average fare recovery ratio of single-county rural transit agencies in the Southern Georgia Region in 2019 (prior to regionalization of service).
- Purchase-of-service (POS) recovery ratio of 34 percent is based on the average POS ratio of single-county rural transit agencies in the Southern Georgia Region in 2019 (prior to regionalization of service).
- Capital cost of light-duty cutaway vehicle is \$115,000 based on 2024 Statewide Contract Vehicle Availability Report, median price for light-duty cutaway vehicles.
- Contingency, included in capital costs, is 20 percent.



### 2.2 Establish Microtransit Service in Tifton and Waycross

Table 3: Microtransit Service Cost Estimates

|                                 | Tifton            | Waycross          |
|---------------------------------|-------------------|-------------------|
| Fare                            | \$3.50            | \$3.50            |
| Days                            | Mon-Fri           | Mon-Fri           |
| Hours                           | 7:30 AM - 5:30 PM | 7:30 AM - 5:30 PM |
| Vehicles                        | 2                 | 2                 |
| Annual Vehicle Revenue<br>Miles | 50,677            | 68,219            |
| Annual Vehicle Revenue<br>Hours | 3,580             | 3,580             |
| Annual O&M Costs                | \$325,000         | \$388,000         |
| Fares                           | \$69,000          | \$84,000          |
| Federal Share                   | \$142,000         | \$173,000         |
| Purchase-of-Service             | \$14,000          | \$17,000          |
| Local Share                     | \$100,000         | \$114,000         |
| One-Time Capital Costs          | \$216,000         | \$216,000         |
| Federal Share                   | \$173,000         | \$173,000         |
| State Share                     | \$21,500          | \$21,500          |
| Local Share                     | \$21,500          | \$21,500          |

#### **Inputs Utilized in Table 3 Cost Estimates**

- Average annual trips per capita of microtransit peers (Valdosta On-Demand, Hall Area Transit, and RIDE Wilson) is 2.3.
- Estimated annual trips per proposed microtransit areas are:
  - Tifton: 19,723 trips based on the total population of Census block groups with microtransit-supportive densities (8,720) multiplied by 2.3 trips per capita.
  - Waycross: 24,050 trips based on the total population of Census block groups with microtransit-supportive densities (10,633) multiplied by 2.3 trips per capita.
- Average Vehicle Revenue Miles (VRM) per square mile of microtransit peers: 9,745.5
- Estimated VRM of proposed microtransit areas:
  - o Tifton (5.2 square miles): 50,677 VRM
  - O Waycross (7.0 square miles): 68,219 VRM
- The average cost per trip of microtransit peers is \$14.37.
- Annual operating and maintenance (O&M) sub-total estimated by multiplying the service's derived trips by average cost per trip of microtransit peers.
- Technology fees of \$42,000 added to O&M sub-totals based on peer research.
- Fare recovery is based on \$3.50 fare for all trips:
  - Tifton: \$69,000 (\$3.50 multiplied by 19,723 trips)
  - Waycross: \$84,000 (\$3.50 multiplied by 24,050 trips)
- POS ratio is 5 percent.



#### 2.3 Increase Size of SGRC Transit Fleet

Table 4: Capital and Operating Expenses per Vehicle

|                              | Costs per Vehicle  |  |
|------------------------------|--------------------|--|
| Fare                         | \$3.00             |  |
| Days                         | Mon-Fri            |  |
| Hours                        | 7:30 AM – 5:30 PM  |  |
| Vehicles*                    | 1                  |  |
| Annual Vehicle Revenue Miles | 35,268             |  |
| Annual Vehicle Revenue Hours | 1,772              |  |
| Annual O&M Costs             | \$89,000           |  |
| Fares                        | \$2,000            |  |
| Federal Share                | \$44,000           |  |
| Purchase-of-Service          | \$32,000           |  |
| Local Share                  | \$11,000           |  |
| One-Time Capital Costs       | \$138,000          |  |
| Federal Share                | \$110,000          |  |
| State Share                  | ate Share \$14,000 |  |
| Local Share                  | \$14,000           |  |

<sup>\*</sup>This information is presented on a per-vehicle basis so that SGRC can scale these numbers based on its capacity to expand. It is not meant to suggest that only a single vehicle is needed.

#### **Inputs Utilized in Table 4 Cost Estimates**

- SGRC Transit 2023 performance metrics were utilized to derive the operating expenses associated with this recommendation.
- \$115,000 cost of a light-duty cutaway vehicle is based on the median price for light-duty cutaway vehicles in the 2024 Statewide Contract Vehicle Availability Report.
- Contingency for capital costs is 20 percent.



### 2.4 Expand SGRC Transit's Service Hours

Table 5: SGRC Transit's Operating Expenses per Vehicle Hour

| 11 Hour/Day Weekd<br>Service |                   |
|------------------------------|-------------------|
| Fare                         | \$3.00            |
| Days                         | Mon-Fri           |
| Hours                        | 7:30 AM - 6:30 PM |
| Vehicles                     | 44                |
| Annual Vehicle Revenue Hours | 85,747            |
| Annual O&M Costs             | \$4,344,000       |
| Fares                        | \$124,000         |
| Federal Share                | \$2,172,000       |
| Purchase-of-Service          | \$1,532,000       |
| Local Share                  | \$516,000         |

#### **Inputs Utilized in Table 5 Cost Estimates**

- SGRC Transit 2023 performance metrics were utilized to derive the operating expenses associated with this recommendation.
- Total annual VRH per Vehicle of 1,772.
- Current operating hours of 2,550 (255 days x 10 hours per day).
- Based on the current proportion of vehicle revenue hours (1,772) to Total Operating Hours (2,550), SGRC Transit's service has an average deadhead ratio of 31 percent.
- Total operating hours with One Additional Hour Per Workday: 2,805 (255 days, 11 hours per day)
- Expected revenue-hours per vehicle is based on increasing hours by 1 hour per weekday:
  - o Calculated by applying 69 percent of 2,805
- Expected annual VRH for full fleet: 85,747



### 2.5 Establish Commuter Vanpools

Table 6: Cost Estimates for Vanpool Service to Two Sites

|                                 | Employment Site #1   | Employment Site #2   |
|---------------------------------|--|--|
| Days                            | Mon-Fri  | Mon-Fri  |
| Hours                           | 5:00 AM - 8:00 AM,<br>4:00 PM - 7:00 PM,<br>11:00 PM - 2:00 AM | 5:00 AM - 8:00 AM,<br>4:00 PM - 7:00 PM,<br>11:00 PM - 2:00 AM |
| Vehicles                        | 2  | 2  |
| Annual Vehicle Revenue<br>Miles | 51,000   | 20,400   |
| Annual Vehicle Revenue<br>Hours | 2,295  | 2,295  |
| Annual O&M Costs*               | \$59,000   | \$45,000   |
| One-Time Capital Costs*         | \$102,000  | \$102,000  |
| Federal Share                   | \$82,000   | \$82,000   |
| State Share                     | \$10,000   | \$10,000   |
| Local Share                     | \$10,000   | \$10,000   |

<sup>\*</sup>Thes cost estimates assume that the SGRC Transit would pay for the capital cost of the vehicles, and a private entity would pay for the operating costs.

#### Inputs Utilized in Table 6 Cost Estimates

- Route for employment site #1 is estimated to be a 25-mile distance (one-way).
- Route for employment site #2 is estimated to be a 10-mile distance (one-way).
- Annual vehicle trips of 510.
- Average cost per VRM of vanpool peers (Connect Douglas and Cherokee Area Transit System): \$0.88
- Average cost per VRH of vanpool peers (Connect Douglas and Cherokee Area Transit System): \$31.62
- Capital cost of standard van is \$90,000.
- Contingency for capital costs of 20 percent.



# 2.6 Establish Long-Distance Shuttles to Destinations External to Region

Table 7: Cost Estimates for External Access Shuttles

|                                 | Valdosta-Tallahassee             | Folkston-Jacksonville            |
|---------------------------------|----------------------------------|----------------------------------|
| Days                            | Monday, Wednesday                | Monday, Wednesday                |
| Hours                           | 7:00 AM Pickup<br>7:00 PM Return | 7:00 AM Pickup<br>7:00 PM Return |
| Vehicles                        | 1                                | 1                                |
| Annual Vehicle Revenue<br>Miles | 15,600                           | 9,360                            |
| Annual Vehicle Revenue<br>Hours | 1,248                            | 1,248                            |
| Annual O&M Costs                | \$36,000                         | \$30,000                         |
| Fares                           | \$1,000                          | \$500                            |
| Federal Share                   | \$18,000                         | \$15,000                         |
| Purchase-of-Service             | \$O                              | \$O                              |
| Local Share                     | \$170,000                        | \$14,500                         |
| One-Time Capital Costs          | \$138,000                        | \$138,000                        |
| Federal Share                   | \$110,000                        | \$110,000                        |
| State Share                     | \$14,000                         | \$14,000                         |
| Local Share                     | \$14,000                         | \$14,000                         |

#### **Inputs Utilized in Table 7 Cost Estimates**

- The Valdosta-Tallahassee route is estimated to be 75 miles oneway. Google Maps estimates this trip to take 90 minutes.
- The Folkston-Jacksonville route is estimated to be 45 miles oneway. Google Maps estimates this trip to take 60 minutes.
- Annual operating costs are based on the average cost per VRM and cost per VRH of the single-county rural transit agencies that operated in the Southern Georgia Region prior to regionalization of service. Establish Long-Distance Shuttles to Destinations External to Region



# 2.7 Establish Seasonal Circulator Shuttle for Special Events in Downtowns in SGRC's Rural Service Area

Table 8: Cost Estimates for Seasonal Shuttles

|                                 | Downtown Seasonal<br>Shuttle |
|---------------------------------|------------------------------|
| Fare                            | \$1.00                       |
| Days                            | 24                           |
| Hours                           | 5:30 PM - 9:30 PM            |
| Vehicles                        | 1                            |
| Annual Vehicle Revenue<br>Miles | 3,456                        |
| Annual Vehicle Revenue<br>Hours | 96                           |
| Annual O&M Costs                | \$4,950                      |
| Fares                           | \$300                        |
| Federal Share                   | \$2,475                      |
| Purchase-of-Service             | \$O                          |
| Local Share                     | \$2,175                      |

<sup>\*</sup>This recommendation assumes that SGRC Transit vehicles would be utilized for special event service during an evening or weekend when the vehicles would not otherwise be in use. These operations would add to the wear and tear on the current fleet of transit vehicles, but at this time, the recommendation does not include the purchase of any new vehicles.

#### **Inputs Utilized in Table 8 Cost Estimates**

- The Seasonal Shuttle is anticipated to operate twice per month for 4-hour periods.
- The estimated round-trip mileage is 12 miles, and the estimated round-trip time is 20 minutes.
- The estimated number of daily trips is 12 (based on a 4-hour service span and three round trips occurring per hour).
- Annual operating costs are based on the average cost per VRM and cost per VRH of the single-county rural transit agencies that operated in the Southern Georgia Region prior to regionalization of service.



## 3.0 Urban Expansion Cost Estimates

# 3.1 Increase Valdosta On-Demand's Fleet to Better Serve Demand

Table 9: Cost Estimates for Expansion of Valdosta On-Demand Fleet by Seven Vehicles

|                              | VOD Fleet Expansion     |  |
|------------------------------|-------------------------|--|
| Fare                         | \$2.00                  |  |
| Days                         | Mon-Fri                 |  |
| Hours                        | 5:30 AM - 9:30 PM       |  |
| Vehicles                     | 7                       |  |
| Annual Vehicle Revenue Miles | 233,102                 |  |
| Annual Vehicle Revenue Hours | 22,372                  |  |
| Annual O&M Costs             | \$809,000               |  |
| Fares                        | \$96,000                |  |
| Federal Share                | \$405,000               |  |
| Purchase-of-Service          | \$O                     |  |
| Local Share                  | \$308,000               |  |
| One-Time Capital Costs       | Capital Costs \$720,000 |  |
| Federal Share                | \$576,000               |  |
| State Share                  | ? Share \$72,000        |  |
| Local Share                  | \$72,000                |  |

#### Inputs Utilized in Table 9 Cost Estimates

- The current transit demand capture rate is 60 percent based on historic ridership and trip request data discussed at stakeholder meetings. Using this assumption, the total current demand for Valdosta On-Demand is calculated at 167,615 annual trips. This means there is currently an unmet demand of 67,046 trips.
- Average total trips per vehicle is 10,057.
- \$90,000 is used for capital cost of standard microtransit van.
- Contingency for capital costs is 20 percent.



### 3.2 Expand Valdosta On-Demand Service Hours

Table 10: Cost Estimates for Expanding Valdosta On-Demand's Weekday Operating Hours by One Hour

|                                 | 17-Hour/Day<br>Weekday Service |
|---------------------------------|--------------------------------|
| Fare                            | \$2.00                         |
| Days                            | Mon-Fri                        |
| Hours                           | 5:30 AM - 10:30 PM             |
| Vehicles                        | 10                             |
| Annual Vehicle Revenue<br>Hours | 33,810                         |
| Annual O&M Costs                | \$1,220,000                    |
| Fares                           | \$150,000                      |
| Federal Share                   | \$610,000                      |
| Purchase-of-Service             | \$O                            |
| Local Share                     | \$460,000                      |

#### Inputs Utilized in Table 10 Cost Estimates

- Valdosta On-Demand's total annual VRH per vehicle is 3,196.
- Current operating hours are 4,080 (255 days x 16 hours per day).
- Based on the current proportion of VRH (3,196) to total operating hours of 4,080, Valdosta On-Demand's service has an average deadhead ratio of 22 percent.
- Total operating hours are 4,355 (255 days x 17 hours per day).
- Expected revenue-hours per vehicle (3,381) is calculated by applying 78 percent of 4,335 and based on increasing each vehicle's operating hours by 1 hour per weekday.
- Expected annual VRH for full fleet is 33,810.



## 3.3 Expand Valdosta On-Demand Service Area to Include Unserved Portions of UZA

Table 11: Cost Estimates for Expansion of Valdosta On-Demand Service Area to Include Unserved Portions of Urbanized Area (UZA)

|  | VOD Service Area<br>Expansion |
|--|-------------------------------|
| Fare                                       | \$2.00                        |
| Days                                       | Mon-Fri                       |
| Hours                                      | 5:30 AM - 9:30 PM             |
| Vehicles                                   | 10                            |
| Additional Annual Vehicle<br>Revenue Miles | 16,650                        |
| Additional Annual Vehicle<br>Revenue Hours | 0                             |
| Additional Annual O&M Costs                | \$30,000                      |
| Fares                                      | \$4,000                       |
| Federal Share                              | \$15,000                      |
| Purchase-of-Service                        | \$O                           |
| Local Share                                | \$11,000                      |

#### Inputs Utilized in Table 11 Cost Estimates

- This estimate shows the impact of expanding the service area on operating costs and assumes that the Valdosta On-Demand's fleet size and service hours do not need to increase.
- The addition of the unserved areas of the UZA to the Valdosta On-Demand service area increases the total service area's size by approximately 23 percent.
- Assuming most trips will still originate and end within City of Valdosta limits, the service area expansion is assumed to impact the total annual vehicle miles by a five-percent increase.



#### 3.4 Establish Fixed Routes in Valdosta

Table 12: Cost Estimates for Two Fixed-Route Bus Routes in Valdosta

|                                 | North-South Route | East-West Route   |
|---------------------------------|-------------------|-------------------|
| Fare                            | \$2.00            | \$2.00            |
| Days                            | Mon-Fri           | Mon-Fri           |
| Hours                           | 7:30 AM - 7:30 PM | 7:30 AM - 7:30 PM |
| Vehicles                        | 2                 | 2                 |
| Annual Vehicle Revenue<br>Miles | 91,800            | 66,764            |
| Annual Vehicle Revenue<br>Hours | 3,060             | 3,060             |
| Annual O&M Costs                | \$351,000         | \$284,000         |
| Fares                           | \$15,000          | \$13,000          |
| Federal Share                   | \$176,000         | \$142,000         |
| Purchase-of-Service             | \$O               | \$O               |
| Local Share                     | \$160,000         | \$129,000         |
| One-Time Capital Costs          | \$432,000         | \$432,000         |
| Federal Share                   | \$346,000         | \$346,000         |
| State Share                     | \$43,000          | \$43,000          |
| Local Share                     | \$43,000          | \$43,000          |

Note: These are planning-level estimates. A more detailed feasibility study is needed to determine route lengths, stops, and other implementation considerations.

#### Inputs Utilized in Table 12 Cost Estimates

- A preliminary concept for a north-south route, from Wiregrass Technical College to Gil Harbin Industrial Boulevard, is estimated at 10 miles (one-way). Google Maps estimates that this round-trip would take 40 minutes.
- A preliminary concept for an east-west route, including five to eight stops at locations such as Walmart on Norman Drive, Valdosta Mall, and N Ashley Street & Interstate-75 Business, is estimated to be an 8-mile loop. Google Maps estimates that this round-trip would take 22 minutes.
- Service span is 12 hours (operating hours from 7:30 a.m. to 7:30 p.m.)
- Total operating days per year are 255.
- Fare recovery ratio of 4 percent is based on average fare recovery ratio of selected fixed-route transit peers
- Capital cost of medium-duty cutaway bus is \$180,000 based on the median price for medium-duty cutaway vehicles documented in the 2024 Statewide Contract Vehicle Availability Report.
- Contingency for capital costs is 20 percent.

