

2020



ALBANY TRANSIT DEVELOPMENT PLAN

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PREFACE

The Transit Development Plan is required by the Georgia Department of Transportation (GDOT) and the Federal Transit Administration (FTA). This plan is required to be fully updated every five years, along with annual updates to address changing conditions.

This Transit Development Plan for the Albany Transit System in Albany, Georgia, meets all federal and state requirements and is fully compliant.

The City of Albany, Georgia, the Albany Transit System, Dougherty County and the Dougherty-Albany Area Transportation Study (DARTS), which is the Metropolitan Planning Organization for the Albany region, are committed to the principle of affirmative action and prohibit discrimination against otherwise qualified persons on the basis of race, color, religion, national origin, age, physical or mental handicap, or disability, and where applicable, sex (including gender identity and expression), marital status, familial status, parental status, religion, sexual orientation, political beliefs, genetic information, reprisal, or because all or part of an individual's income is derived from any public assistance program in its recruitment, employment, facility and program accessibility or services.

These governments, agencies, and organizations are committed to enforcing the provisions of the Civil Rights Act, Title VI, and all the related requirements mentioned above, and are committed to taking positive and realistic affirmative steps to ensure the protection of rights and opportunities for all persons affected by its plans and programs.

The opinions, findings, and conclusions in this publication are those of the author(s) and not necessarily those of the Department of Transportation, State of Georgia, or the Federal Transit Administration. This document was prepared in cooperation and coordination with the Georgia Department of Transportation and the Federal Transit Administration.

1.0 INTRODUCTION

The City of Albany is the county seat of Dougherty County, Georgia and is renowned as a picturesque community with a strong industrial and commerce base. It is also home to significant historical resources associated primarily with the civil rights movement. The metropolitan population within the City of Albany is served by the Albany Transit System (ATS) providing fixed route service, as well as paratransit service for ADA eligible riders. ATS has operated as a department of the City of Albany for over 40 years offering safe and reliable service six days per week.

As a public transit provider and recipient of Federal Transit Administration (FTA) funding, Albany Transit is required to adopt and maintain a Transit Development Plan (TDP) that identifies transit service needs, prioritizes improvements, and determines the resources required for modifications of service or implementation of new service.

The Georgia Department of Transportation's Intermodal Department, along with the FTA, requires local transit agencies to reevaluate their TDPs every five years as a prerequisite for the receipt of Federal and State funding. The TDP update process provides transit agencies with the opportunity to define public transportation needs, solicit input from stakeholders and the public, identify capital and operational deficiencies, and define courses of action to advance the mission and goals of the transit agency.

In June of 2015, the City of Albany/Albany Transit System adopted 2015 - 2020 Transit Development Plan (TDP) which provides capital and operational goals and financial plans for the Albany Transit System.

Continuing the City's commitment to providing safe, reliable, and efficient transit service and in compliance with federal and state requirements, Albany Transit initiated an update to their Transit Development Plan with a targeted adoption date of March 2021. The following figure provides an overview of the TDP planning process.

Figure 1-1: Albany Transit Development Planning Process



The TDP document is organized to reflect the major elements of the planning process. The following description provides for quick reference for the TDP report organization:

- **Introduction** - TDP process overview
- **Existing Conditions and Analysis** - provides an overview of community characteristics including socioeconomic data, roadway and travel information, and key markets that impact public transit ridership opportunities.
- **Existing Transit Services and Performance Evaluation** - details the operational efficiency and effectiveness of Albany Transit's services and provides performance benchmarks and comparison with industry peers.
- **Albany Transit Mission, Goals, and Objectives** - defines the strategic vision for the transit system and details the supporting goals and objectives.
- **Performance Based Planning** - provides an overview of the new federal reporting requirements defined by the FAST Act and documents Albany Transit's compliance.
- **Service Alternatives** - details five (5) potential system and service alternatives and the associated pros and cons that support the identification of the preferred alternative.

- **TDP Recommendations** - provides detailed system and service recommendations for the preferred alternative including resources needed for implementation.
- **Associated Plans** - includes a detailed assessment of the ADA Paratransit demand response service provided to passengers with qualifying disabilities, and a Title VI assessment documenting the potential impacts to vulnerable and disadvantaged communities that reside within the study area. This section also evaluates the approach to prioritizing bus stop improvements throughout the study area and the associated criteria by which all stops will be evaluated.
- **Five Year Capital Financial Plan** - presents a capital and operating scenario that prioritizes funding needs from 2021 - 2025 as identified by the TDP recommendations and provides key strategies.

2.0 PUBLIC AND STAKEHOLDER ENGAGEMENT

A highly coordinated and participatory public engagement process enhances a study's success and timely implementation. The strategy to capture and disseminate information and engage the public during the Albany Transit Development System Plan included an active and committed leadership; multiple opportunities to capture community input; effective and diverse methods to disseminate information; and detailed documentation for future reference. Because of the COVID-19 pandemic, the Public Engagement Plan was developed to ensure recommendations adhered with the health and safety protocols implemented by the City of Albany, Georgia, and the Albany Transit System. Due to the pandemic, public involvement for this TDP was limited to virtual and over the phone methods.

2.1 Targeted Stakeholders

As a part of the public engagement process, a listing of key transit stakeholders was established in order to solicit input and guidance throughout the development of the TDP. These stakeholders were engaged throughout the planning efforts with targeted virtual meetings and workshops and email communication. The list was developed in partnership with the city, community organizations, and partners. The stakeholder groups included the following:

- City Departments
- Schools
- Non-Profits
- Churches
- Community Centers
- Recreation
- Hospitals/Urgent Cares
- Military Bases
- Neighborhood Groups/Organizations
- Social Groups/Organizations
- Professional Groups/Organizations & Volunteers

- Advocacy Groups
- Senior Living Facilities and Centers
- Local Businesses
- Elected Officials

2.2 Outreach Activities and Public Input

PUBLIC VIRTUAL WORKSHOPS

Due to COVID-19 and social distancing protocols put in place by the City of Albany, in-person public workshops were undertaken virtually. Public meetings were held on the following dates:

- October 20, 2020
- October 23, 2020

Using cutting edge technologies, the project team developed a virtual workshop environment for the dissemination of information and materials related to the TDP. This virtual meeting space included humanlike avatars, meeting stations, recorded explanations, and live staff attendees to address questions. To interact with attendees, the public meeting was held via Zoom and live streamed through Facebook Live and YouTube. The virtual meeting space was held at the following web address: <https://www.rsandh.com/collateral/transportation/albany-vpim/>

The following figures depict the content of the public workshop.

Figure 2-1: Virtual Room and Station Layout

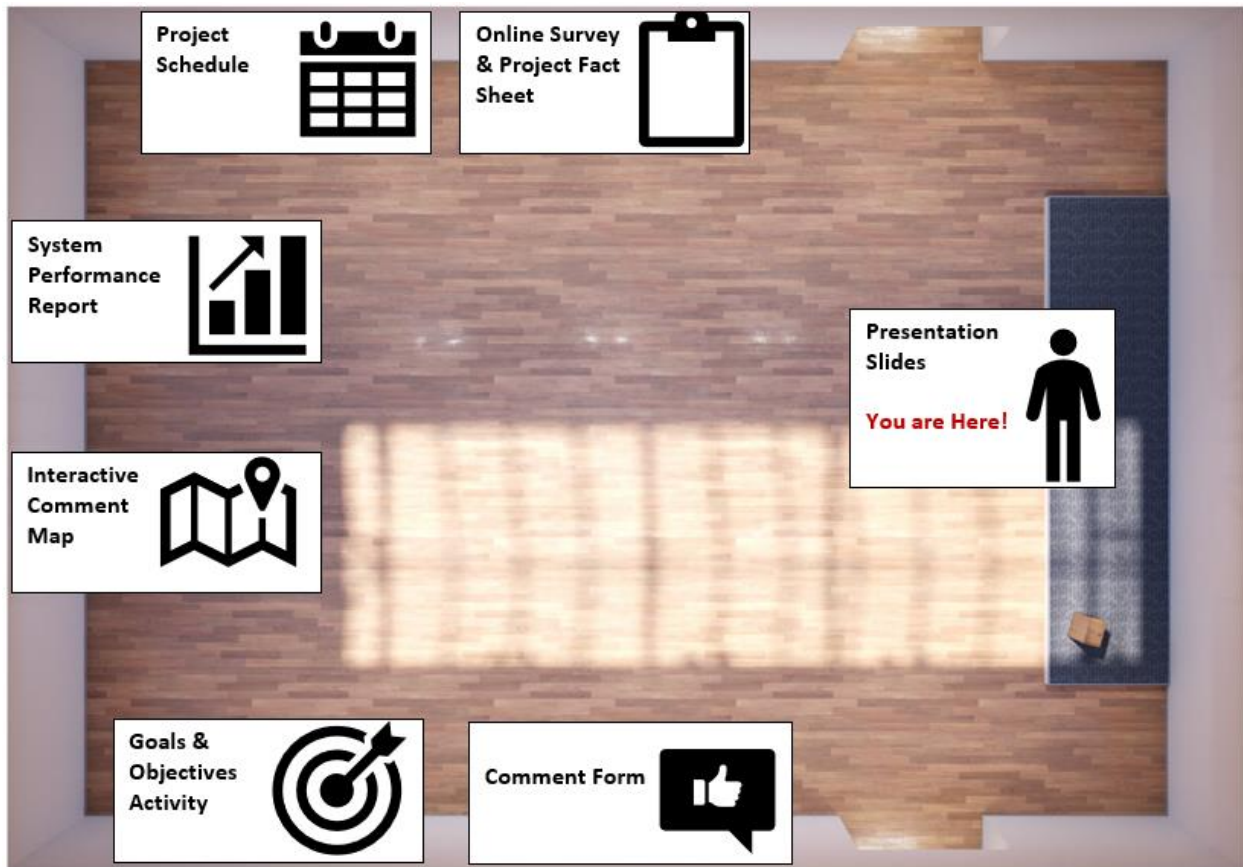


Figure 2-2: Virtual Meeting Instructions and Introduction Menu

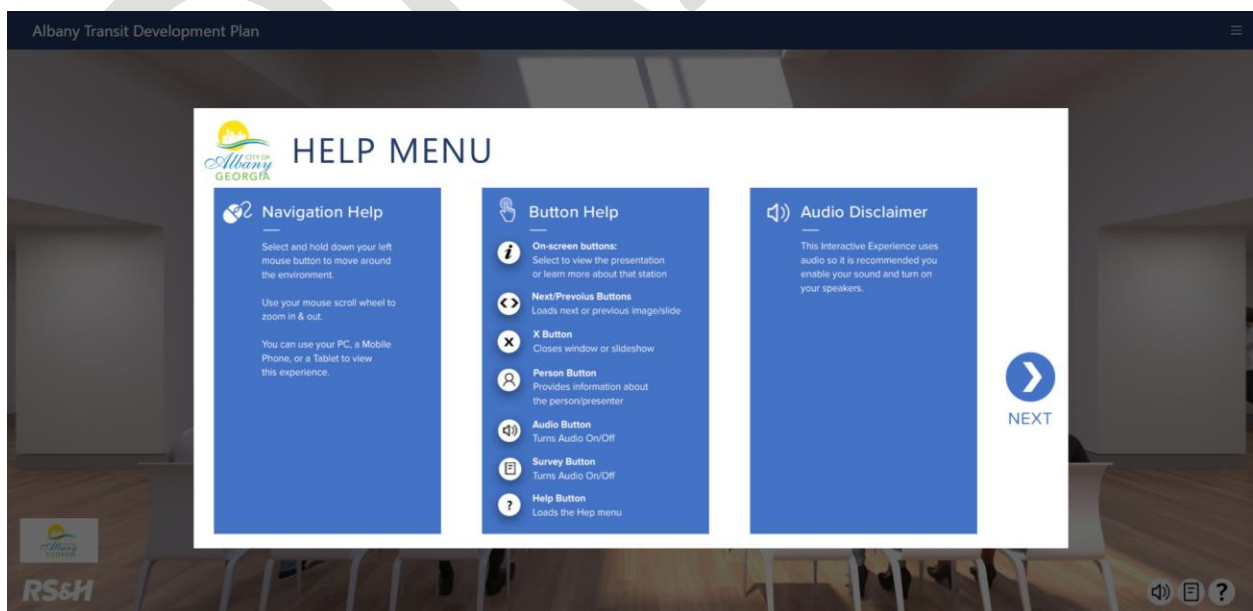


Figure 2-3. Virtual Meeting Space Workstation Examples

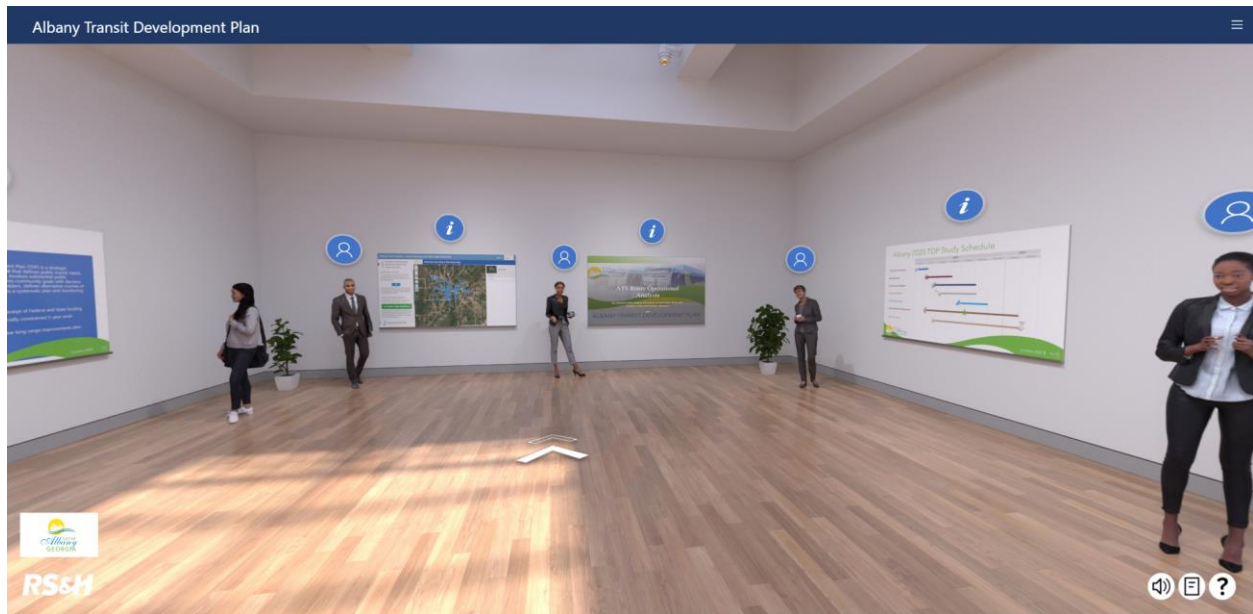
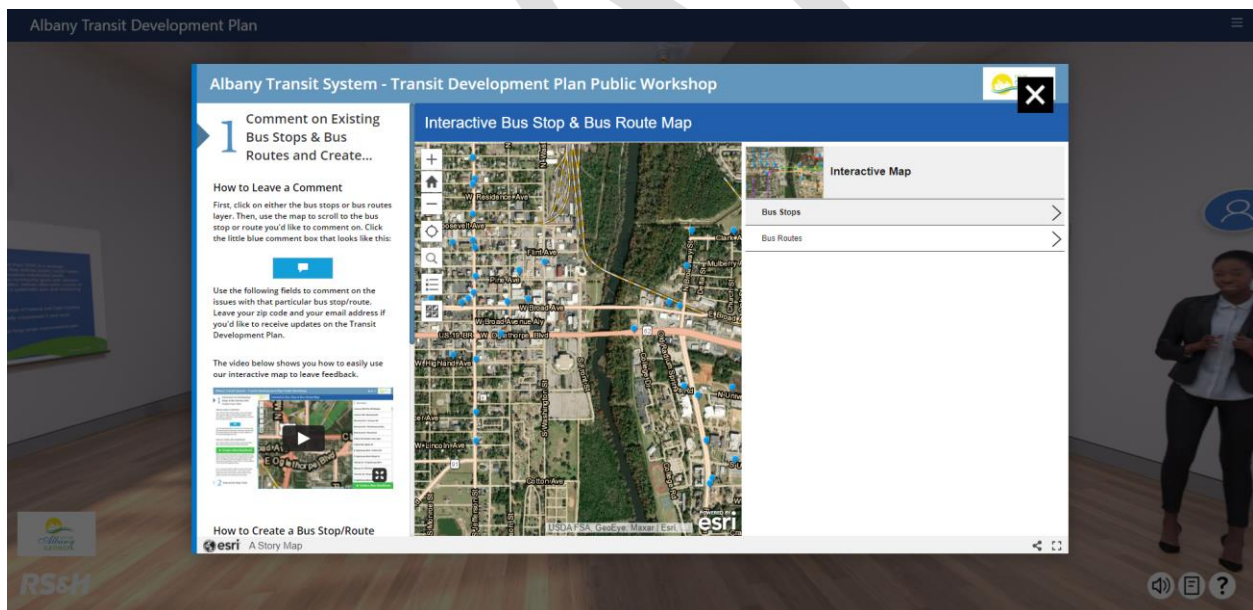


Figure 2-4. Virtual Meeting Interactive Station Example



CITIZEN SURVEY

In order to obtain the maximum amount of input and feedback from the public for the TDP, a community survey was also developed and administered.

This survey assessed the existing service, provided a better understanding of the public's perception of the transit system, and current and future utilization of the service. This feedback provided information to help develop service recommendations. The survey was produced in both English and Spanish and administered online via the Open House website or directly accessed from the URL <https://www.surveymonkey.com/r/AlbanyTDPSurvey>. For anyone with technology or internet limitations, the survey and the online Open House were accessible at any Dougherty County Public Library branch.

The survey had 29 questions, which were grouped into seven main categories as shown below:

- Transit utilization/ridership
 - How often do you use Albany Transit services?
- Origin/destination
 - What types of locations would you use transit for?
- Safety
 - Do you feel the transit system is safe?
- Covid-19
 - How does it impact your use of transit?
- Satisfaction concerns/reliability
 - What can be done to keep you satisfied?
- Bus rapid transit
 - Should it be considered?
- Demographic Questions
 - Tell us about yourself.

The results of the survey indicated that:

- Of the survey respondents, 31% ride the Albany Transit System.
- 23% identified the transit system as their primary form of transportation.
- 100% of the respondents walk from the bus to their destination, however there are no sidewalks.

- Despite COVID-19 concerns, 50% of the respondents noted that they feel safe riding Albany Transit System.
- 50% ride five or more days a week.
- The primary reason for trips is commuting to/ from work.
- If Albany Transit System were to offer Bus Rapid Transit (BRT), 43% of respondents would ride it.
- 71% of the respondents indicated they are undecided on whether they would move their home or office near a BRT station.
- 100% of respondents identified that more police, cameras, and onboard driver safety as extremely important safety improvements.

The results of the survey can be seen in Appendix A.

Additional outreach methods and resources used for the public and stakeholder engagement process included:

SOCIAL MEDIA

The Albany Transit System social media outlets were used to list project updates, upcoming virtual meetings or community forums, and contact information about the project. Appropriately formatted graphics/advertisements were provided by the planning team for distribution using these platforms.

City Website - www.albanyga.gov

Facebook - www.facebook.com/109231945769370/

Twitter - @CityofAlbanyGA

YouTube Channel - City of Albany, GA

LOCAL MEDIA

Press releases to local media outlets, such as local access television, were distributed and intended to reach a broader group of citizens and stakeholders. The local newspaper, The Albany Herald (<https://www.albanyherald.com/>) with a circulation of 21,701 on weekdays and 24,820 on Sundays, was also included.

EBLAST

Project information and announcements via the Albany Transit System and partner listservs were made.

E-NEWSLETTERS

Developed e-newsletters that were disseminated to stakeholder groups and the general public to provide project updates and milestones.

ALBANY TRANSIT SYSTEM WEBSITE

To help streamline the information disseminated to key stakeholders and the general public throughout the duration of the Transit Development Plan, content for the TDP was hosted on the City of Albany website.



Get Involved! Join the Conversation!
Albany Transit Development Plan 2020

Albany Transit System is conducting a Transit Development Plan to understand how the current transit system is functioning and operating today, and to set recommendations and goals for the future. There are multiple opportunities for you to review plan information and provide input.

For those who cannot access online, you can view the Live Meeting and the Virtual Open House at the following locations.
 All Dougherty County Public Library Branches

<p>1 Virtual Live Meeting October 22, 2020 • 1-3PM and 4-6PM</p> <p>Staff and the project team will be on hand at the Live Meeting to provide an overview of the Transit Development Plan and to answer your questions. <i>Registration is recommended and an email will follow with a link to the live meeting.</i></p> <p>Live Streamed from albanyga.gov</p> <p>Click to Register for 1 pm Meeting Click to Register for 4 pm Meeting</p>	<p>2 Virtual Open House October 22 – November 22, 2020</p> <p>Tour our virtual open house to learn more about the Transit Development Plan & Schedule, Plan Goal and Objectives, Interactive Mapping, take a Survey and more. <i>Navigate the room at your own pace and provide feedback at each station.</i></p> <p>www.rsandh.com/albany-vpim</p> <p>Click to visit the Virtual Open House</p>	<p>3 Community Survey October 22 – November 22, 2020</p> <p>Help develop a roadmap for increased transit access and connectivity to meet the growing demand in Albany. Support the Albany Transit System by taking the survey today.</p> <p>surveymonkey.com/r/AlbanyTDPsurvey</p> <p>Click to take the Survey</p>
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 **Contact us**
 Gwendolyn McDaniel
 Albany Transit Customer Service Manager / Planner | gmcDaniel@albanyga.gov | 229-302-1534

3.0 EXISTING CONDITIONS AND ANALYSIS

The Albany Transit Development Plan outlines the opportunities and challenges for Albany Transit over the next five years. The purpose of the TDP is to identify the current state of transit in the City of Albany and Dougherty County, the existing demographic and infrastructure conditions, identify issues, shortages, and gaps in transit service, and provide a framework for improving transportation options in the region.

The Existing Conditions Report summarizes the study area and transit services. Significant activity locations are identified, as well as the service providers in the study area. Current land use and socioeconomic conditions, commute times, and commute locations are analyzed to better understand the study area population. Countywide crash data and service characteristics of Albany Transit are assessed, including reviews of peer areas through data from the National Transit Database (NTD). Demand response (ADA paratransit service) is evaluated through different metrics and trends, and previous plans relevant to the TDP are reviewed and incorporated into the overall Transit Development Plan.

The Existing Conditions Report is arranged in the following sections:

- Review of Previous Plans & Reports
- Study Area
- Landmarks and Activity Hubs
- Land Use/Zoning
- Socioeconomic Conditions
- Roadway Conditions

3.1 Review of Previous Plans and Reports

Reviewing previous Transit Development Plans and comprehensive/transportation plans provide an understanding of the impacts of previous plans and the incorporation of successful measures and practices into this effort. These documents include the Albany Transit's previous Transit Development Plan, the Dougherty Area Regional

Transportation Study (DARTS) Metropolitan Transportation Plan, the Dougherty County and Albany City Comprehensive Plan, and GDOT's Statewide Transit Plan.

3.1.1 Albany Transit Development Plan (2015 - 2020)

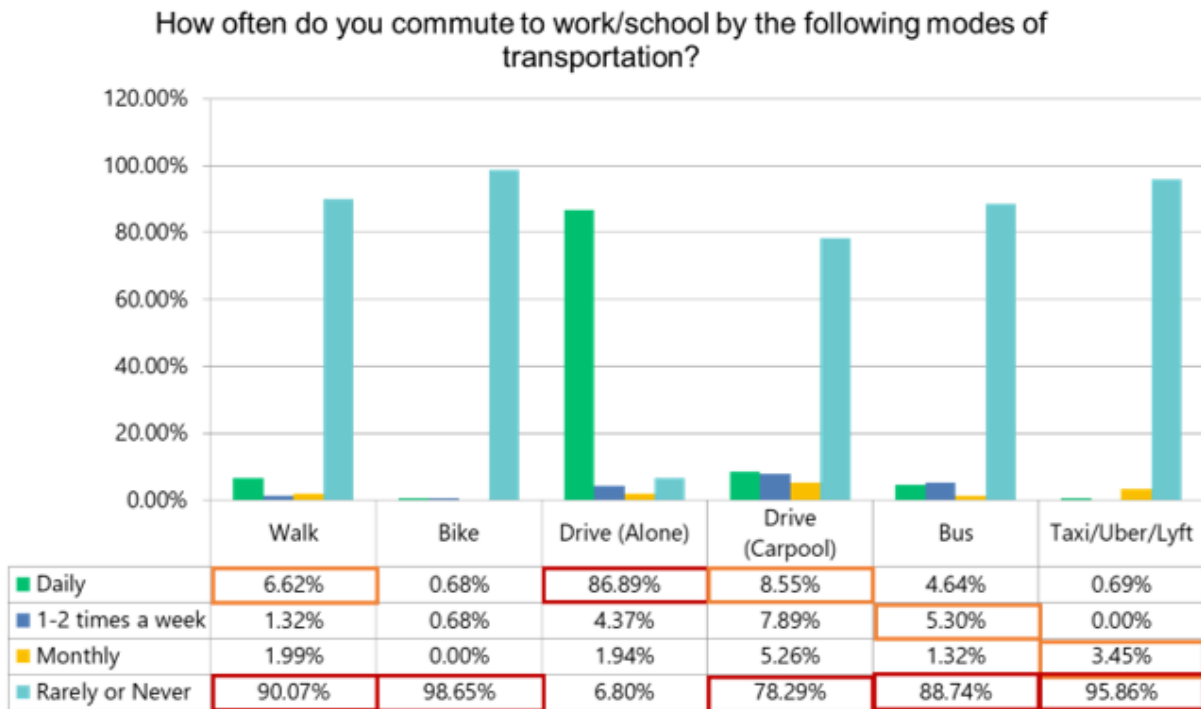
The Albany Transit System Transportation Development Plan (TDP) 2015 - 2020 is the most recent TDP for ATS. This TDP is fully compliant with the federal requirements found in the 'Moving Ahead for Progress in the 21st Century' (MAP-21) legislation, which was the current transportation legislation at the time of the TDP development. This TDP outlines the transit system's existing conditions, the public transit needs of the community, and identified goals and objectives for the system.

3.1.2 DARTS 2045 Metropolitan Transportation Plan

The DARTS 2045 Metropolitan Transportation Plan (MTP) is a federally mandated long-range transportation plan that outlines the MPO's future transportation initiatives over a 20-year period. To remain eligible for federal and state transportation funding, this plan is updated every five years. The MTP includes all modes of transportation in the DARTS planning area, which includes the City of Albany, Dougherty County, and a portion of Lee County. The MTP includes goals, objectives, and performance measures pursuant to national and state planning factors, and a list of prioritized transportation projects.

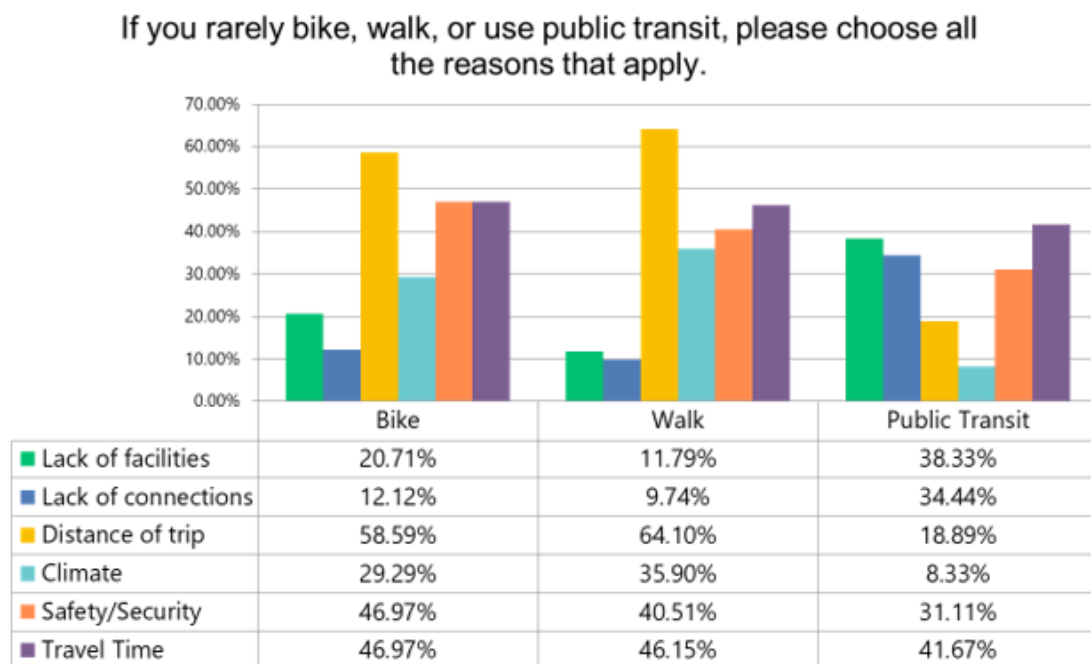
The DARTS MPO and Albany Transit collaborated closely on the development of the MTP. Transit oriented questions were included within the MTP survey process in order to determine transit usage and to discover why (if at all) users did not prefer transit services. Figure 3-1 depicts that the majority of commuters in the DARTS area drive alone, and Figure 3-2 depicts the reasons that individuals rarely use public transit.

Figure 3-1: Commuter Survey Responses



Source: DARTS 2045 MTP

Figure 3-2: Typical Reasons for Rarely Biking, Walking, or Using Public Transit



Source: DARTS 2045 MTP

The DARTS also collaborated with Albany Transit to identify current bicycle and pedestrian infrastructure gaps that present barriers to accessibility of transit stops and last mile connectivity. This effort resulted in documentation of priority bicycle and pedestrian infrastructure critical to advancing a multimodal transportation network.

The MTP includes existing and planned transit services as a key metric in the project prioritization process to ensure that roadway improvements that help facilitate enhancements to the operation and productivity of the transit system were prioritized for investments.

3.1.3 Dougherty County & Albany City Comprehensive Plan

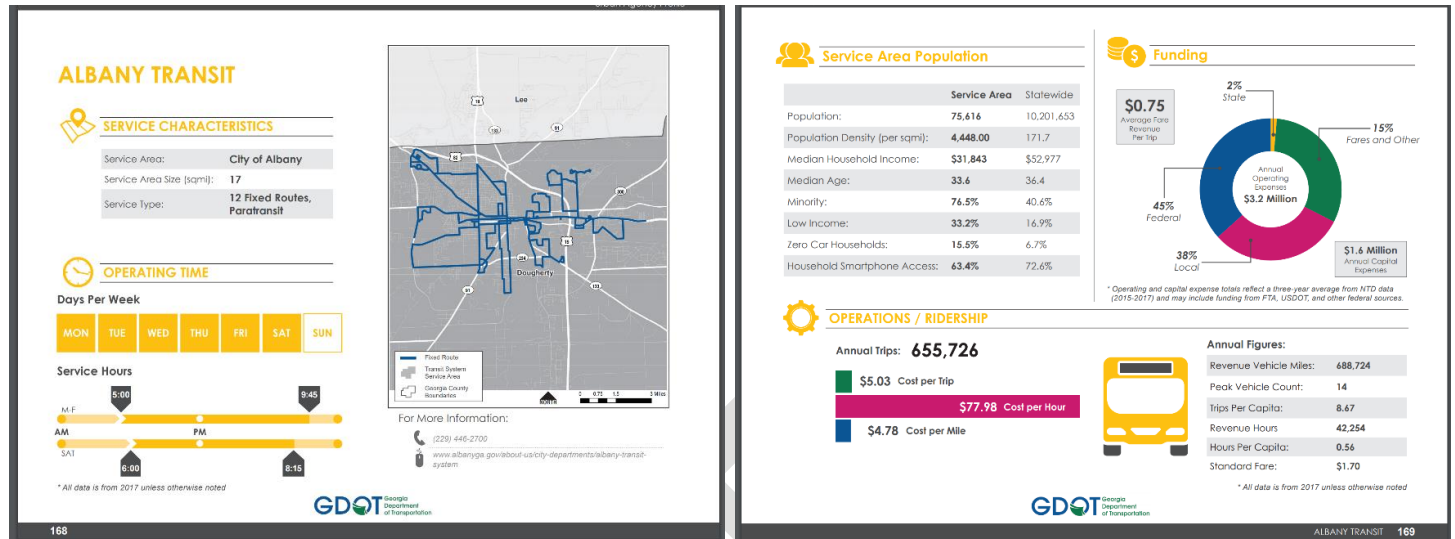
The Albany and Dougherty County Comprehensive Plan 2026, adopted in 2016, provides the framework of government policy towards building growth in the city and the county. Public participation was an integral portion of this plan development, and included citizen focus groups of all ages, a community survey, 'Mayor for the Day' (an exercise geared towards young children), and public meetings and hearings. By identifying community goals and examining current conditions, this comprehensive plan identifies a list of needs and opportunities for all elements of the community. Transportation goals include a review of the transit system's needs and utilizing mini surveys from ridership to identify and respond to issues in the system.

3.1.4 Georgia Statewide Transit Plan

The anticipated adoption date for the Georgia Statewide Transit Plan is April 2020 and at the time of this report is in the 30-day public comment period. The Statewide Transit Plan, developed by GDOT Intermodal, gathers information from transit agencies across the state and creates profiles for each operating system. The plan identifies both rural and urban transit needs and examines statewide and regional trends through analyzing socioeconomic data, stakeholder interviews and public surveys. By performing a Needs and Gaps Assessment, the Statewide Transit Plan provides recommendations for transit service expansion and enhancements.

The following figure depicts the Albany Transit Service Profile.

Figure 3-3: Albany Transit Service Profile



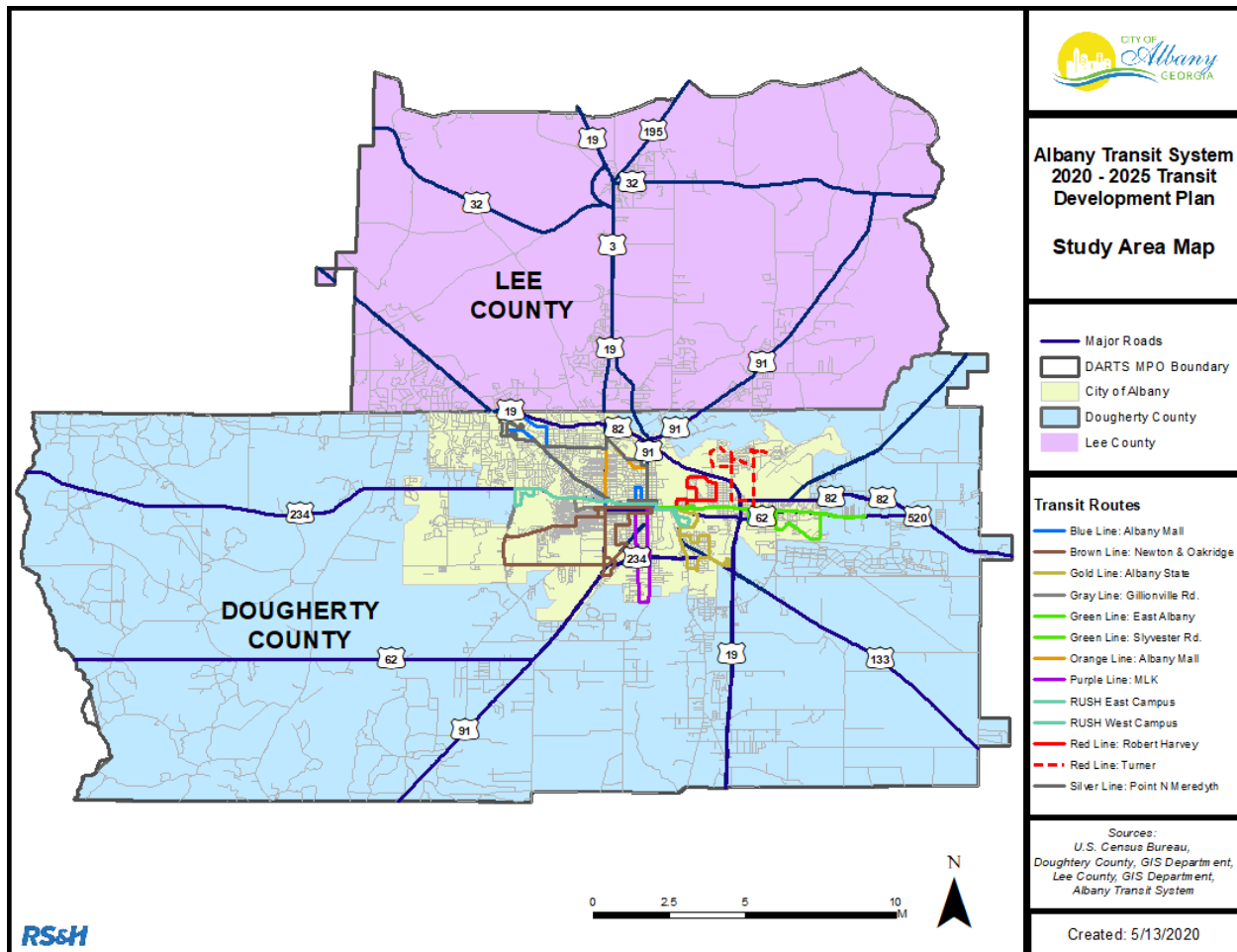
Source: Georgia Statewide Transit Plan, GDOT

3.2 Study Area

The City of Albany, located in Dougherty County in southwest Georgia, is approximately 150 miles south of Atlanta. There are no designated Interstate routes Dougherty or Lee County, however, there are intra-state multi-lane US and State routes, some of which have access control. These include US 19, US 82/SR 520, and SR 300. Other state routes include SR 3, SR 62, SR 91, SR 133, and SR 234.

The population in the metropolitan region is over 122,000, with over 93,500 residents in Dougherty County. The following map shows the TDP study area which includes the City of Albany, along with the urbanized areas of Dougherty and Lee Counties.

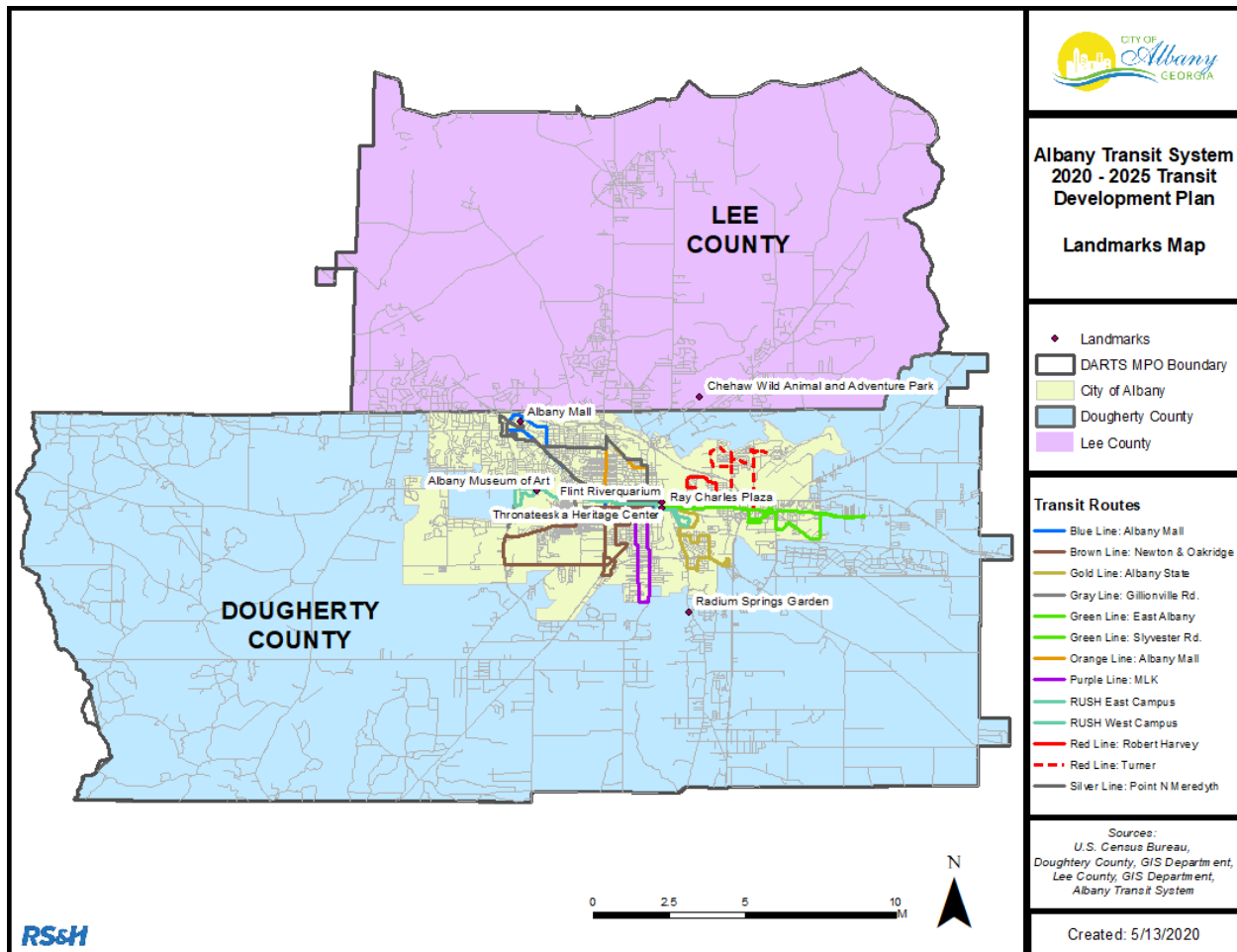
Figure 3-4: Albany TDP Study Area



3.3 Landmarks and Activity Hubs

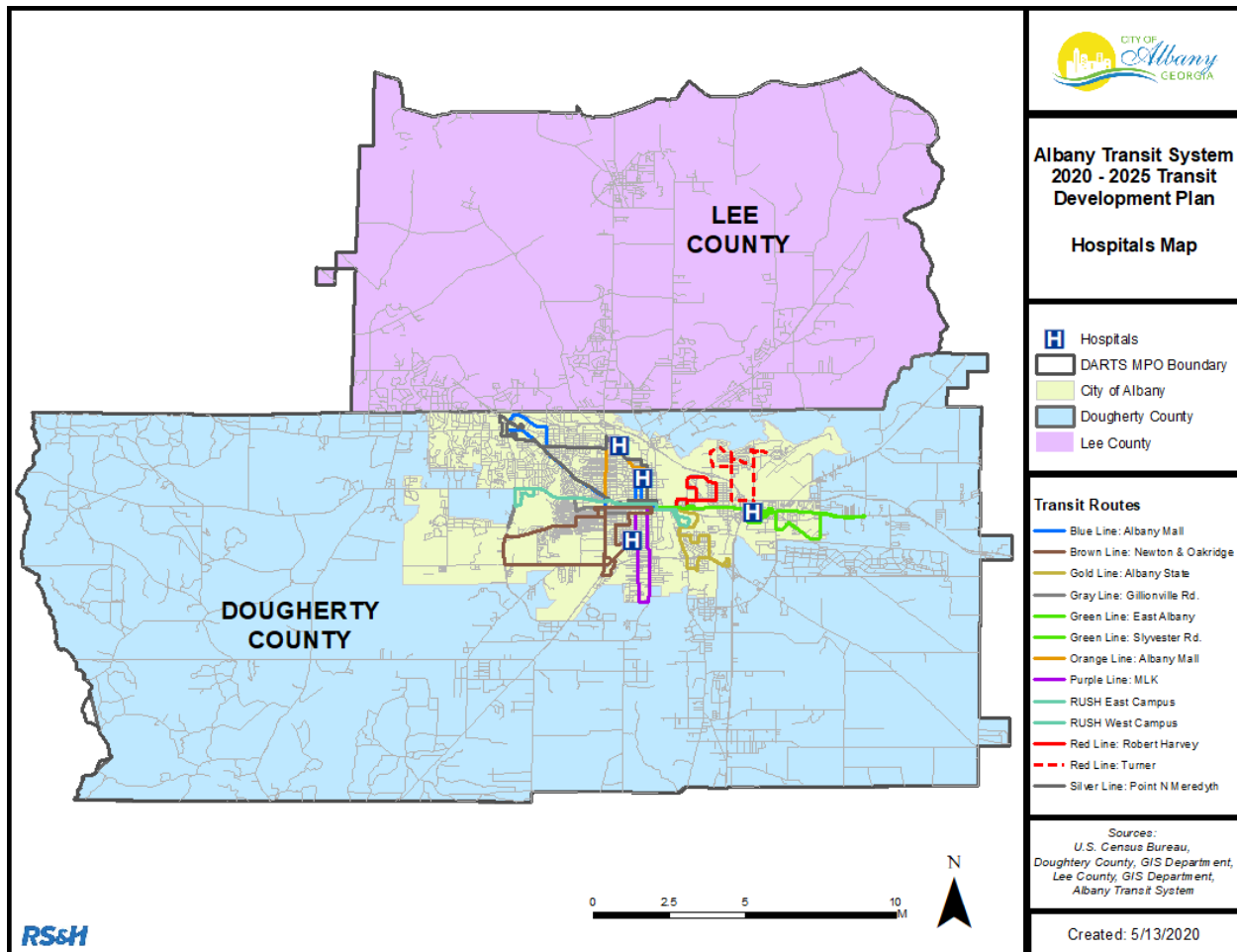
Albany has tourist attractions and landmarks located throughout the city. Ray Charles Plaza, a memorial dedicated to the late musician born and raised in Albany, is located downtown in Riverside Park. The Flint Riverquarium is a popular aquarium adjacent to Flint River. Chehaw Wild Animal and Adventure Park, one of two accredited zoos in the state of Georgia, is also in Albany. Other tourist sites include Radium Springs Garden, which is south of Albany, Thronateeska Heritage Center, and the Albany Museum of Art. The main shopping center in Albany is Albany Mall, with multiple bus lines providing service to the mall. Figure 3.5 displays relevant landmarks and activity hubs within the study area.

Figure 3-5: Landmarks and Activity Centers



In addition to the landmarks and historic sites, medical centers are also key activity centers. The Phoebe Putney Health System (PPHS), a southwest Georgia based health system, has two hospitals in the city of Albany. Phoebe Putney Memorial Hospital and Phoebe North Campus are the only surgical hospitals in the city, with East Albany and South Albany Medical Centers providing medical services as well. The following figure is a map of the hospital locations in Albany.

Figure 3-6: Hospital Locations



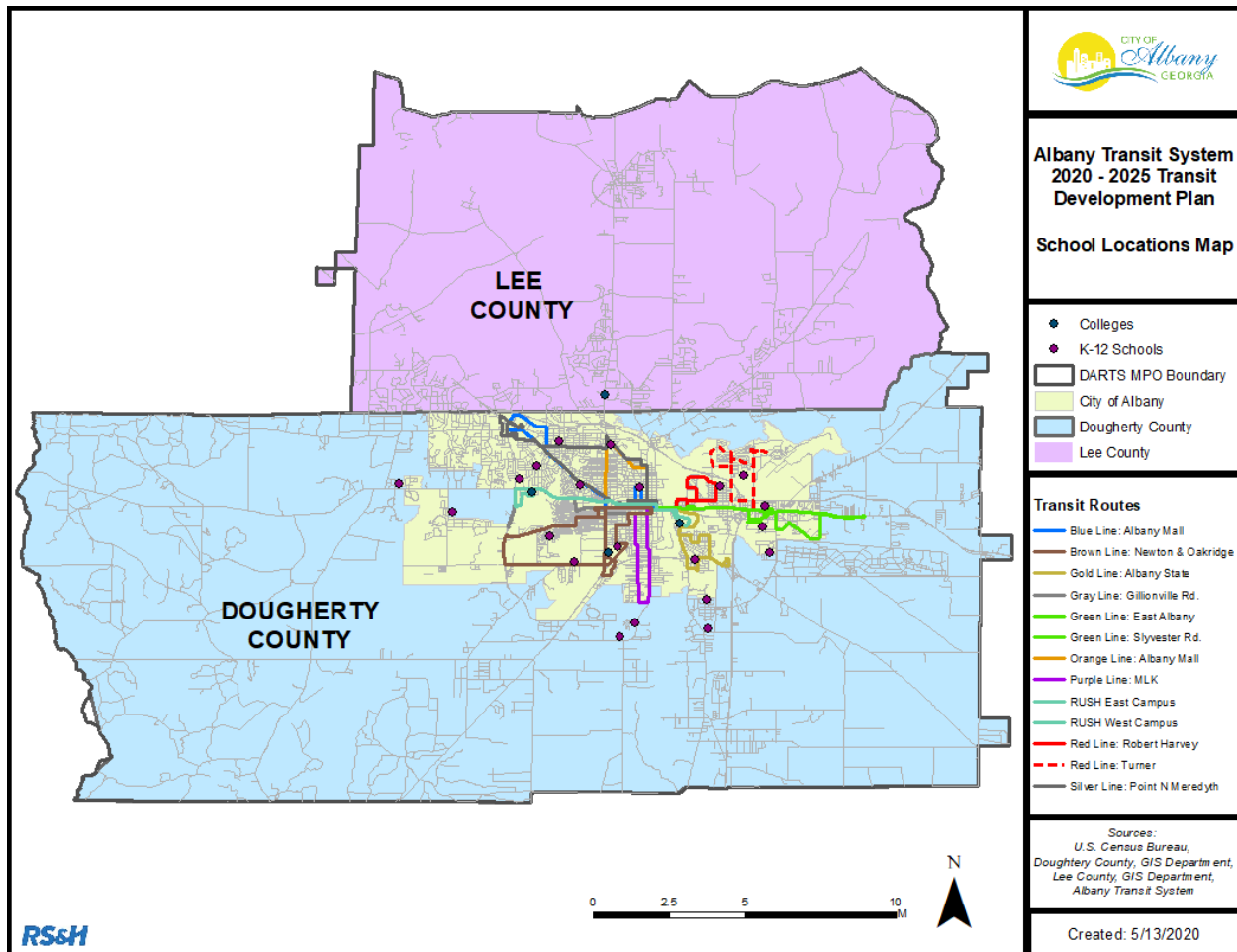
Schools are also key activity hubs. The Dougherty County School District served an average of 13,742 students during the 2019 school year in 21 different schools, including 13 elementary schools, four middle schools, three high schools, and a School of the Arts, which are spread across the area. For institutions of higher education, Albany State University is located southeast of downtown Albany and has an enrollment of over 6,000 undergraduate students and over 300 postgraduate students. The area community college, Albany Technical College, part of the Technical College System of Georgia, is also in Albany with a Fall 2019 enrollment of 5,124 students. Albany Tech is located on the southwest side of Albany. Troy University has a satellite location in Leesburg, Lee County. Table 3-1 shows all the schools in the Dougherty County School System and Figure 3-7 is a map of these schools, as well as the universities in Dougherty County/City of Albany.

Table 3-1: Dougherty County Schools

School Name	Fall Enrollment	Spring Enrollment	Average Enrollment	Address	Zip Code
Albany Middle School	982	994	988	1700 Cordell Ave	31705
Alice Coachman Elementary School	472	485	479	1425 W Oakridge Dr	31707
Dougherty Comprehensive High School	1,139	1,100	1,120	1800 Pearce Ave	31705
International Studies Elementary Charter School	400	407	404	2237 Cutts Dr	31705
Lake Park Elementary School	518	522	520	605 Meadowlark Dr	31707
Lamar Reese School of the Arts	485	479	482	1215 Lily Pond Rd	31701
Lincoln Elementary Magnet School	587	580	584	518 W Society Ave	31701
Live Oak Elementary School	662	677	670	4529 Gillionville Rd	31721
Martin Luther King, Jr. Elementary School	484	485	485	3125 Martin Luther King Jr Dr	31701
Merry Acres Middle School	685	697	691	1601 Florence Dr	31707
Monroe High School	1,089	1,081	1,085	900 Lippitt Dr	31701
Morningside Elementary School	428	429	429	120 Sunset Ln	31705
Northside Elementary School	346	339	343	901 14th Ave	31701
Radium Springs Elementary School	547	534	541	2400 Roxanna Rd	31705

Radium Springs Middle School	816	810	813	2600 Radium Springs Rd	31705
Robert A. Cross Middle Magnet	673	662	668	324 Lockett Station Rd	31721
Jackson Heights Elementary School	581	579	580	1305 E 2nd Ave	31705
Sherwood Acres Elementary School	628	611	620	2201 Doncaster Dr	31707
Turner Elementary School	477	457	467	2001 Leonard Ave	31705
West Town Elementary School	431	431	431	1113 University St	31707
Westover High School	1,357	1,338	1,348	2600 Partridge Dr	31707
TOTALS	13,787	13,697	13,742		

Figure 3-7: School Locations



3.4 Major Employers

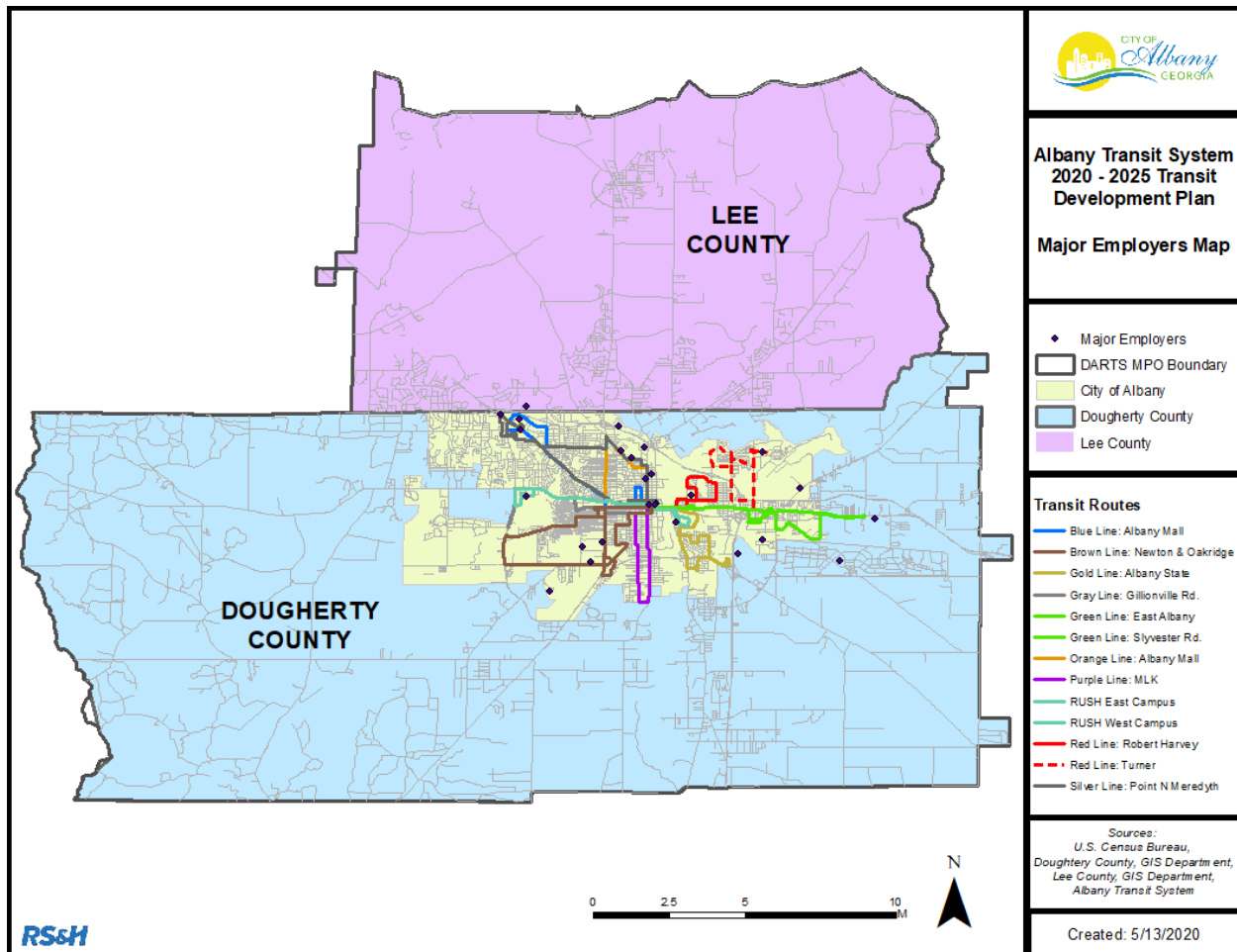
Albany/Dougherty County has a diversified economy, with major employers including the US military, manufacturing and distribution, and education/health care. With industry spread throughout the city, there are multiple employment opportunities for residents of Dougherty and Lee County. Table 3-2 lists major employers in the county and their NAICS Code and number of employees and Figure 3-8 shows the location of these employers.

Table 3-2: Major Employers

Employers	NAICS Code	Number of Employee
Phoebe Putney Health System	General Medical and Surgical Hospitals	3000
Dougherty County School System	Elementary and Secondary Schools	2500
Albany State University	Colleges, Universities, and Professional Schools	1264
Darton College	Colleges, Universities, and Professional Schools	775
City of Albany	Local Government	1000
United States Marine Corps	National Security	848
Springleaf Financials Holdings	All Other Professional, Scientific, and Technical Services	783
The Proctor & Gamble Company	Sanitary Paper Product Manufacturing	750
Dougherty County	Local Government	680
State of Georgia	State Government	677
JRN, Inc.	Limited-Service Restaurants	651
Walmart, Inc.	All Other General Merchandise Stores	650
MillerCoors	Breweries	600
Mars Chocolate North America	Confectionary Manufacturing from Purchased Chocolate	500
ESS	Other Communications Equipment Manufacturing	500
Coats & Clark	Textile and Fabric Finishing Mills	490
Metropower	Power and Communication Line and Related Structures Construction	425
Albany Area Community Service	Other Individual and Family Services	300
Southern AG Carriers	General Freight Trucking, Long-Distance, Truckload	300
Foxmar	Professional and Management Development Training	290

AT&T	Wired Telecommunications Carriers	285
United States Postal Service (USPS)	Postal Service	275
Gerdau Ameristeel US	Iron and Steel Mills and Ferroalloy Manufacturing	225
Palmyra Nursing Home (PruittHealth)	Nursing Care Facilities (Skilled Nursing Facilities)	210
Schneider National	General Freight Trucking, Long-Distance, Truckload	205
Dillard's	Department Stores	200
Thrush Aircraft	Aircraft Manufacturing	185
United Parcel Service	Courier Services, except by Air	158
Georgia-Pacific	Corrugated and Solid Fiber Box Manufacturing	150

Figure 3-8: Major Employers



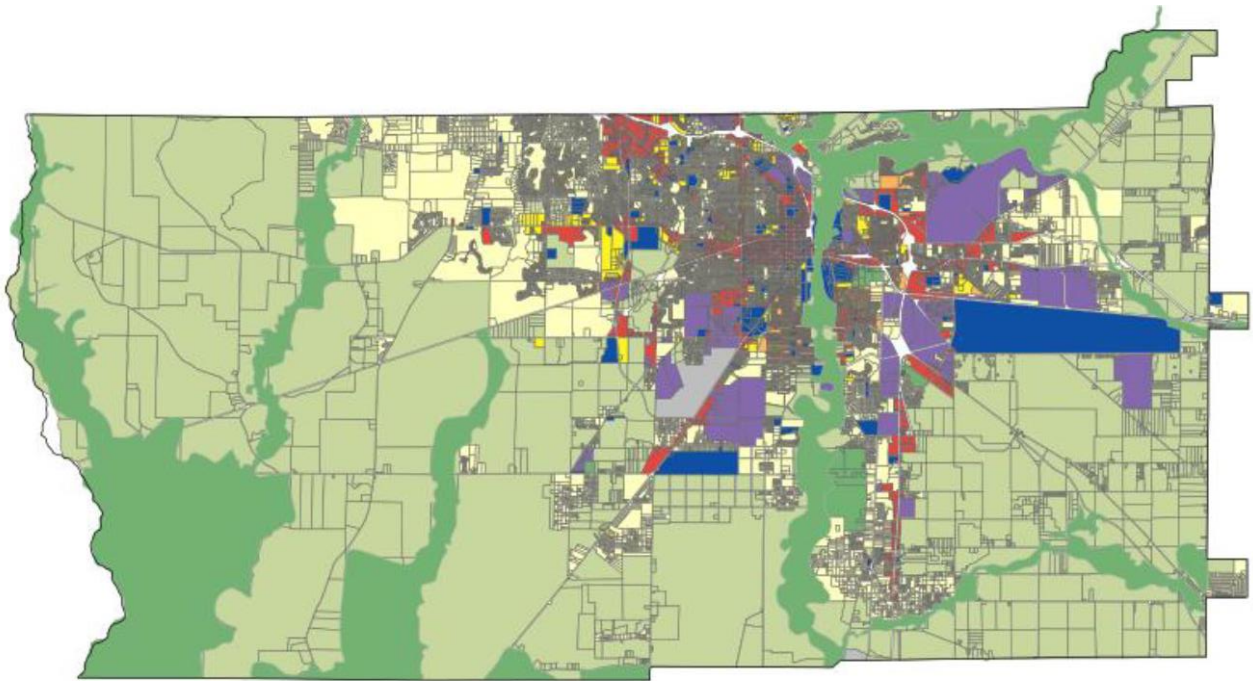
3.5 Land Use/Zoning

Albany is the only incorporated city in Dougherty County and is a regional commercial and employment center for southwestern Georgia. Commercial land uses are concentrated in the downtown core and along Slappey Boulevard and Oglethorpe Boulevard, major corridors in the city. Albany Mall, located in northwestern Albany on Dawson Road, is a regional commercial/shopping attraction. Anchor stores in the Albany Mall include Belk, Dillard's, and JCPenney.

The City of Albany has industrial parks spread throughout the city. Major corporations in Albany include Miller/Coors Brewing Company, Proctor & Gamble, and Georgia-Pacific, currently building a 320,000-square-foot lumber facility in East Albany on Sylvester Road. The US Marine Corps Logistics Base is also located in Dougherty

County. The following figure is a map of existing land uses from the Dougherty County and Albany City Comprehensive Plan showing the existing land uses found within the study area.

Figure 3-9: Comprehensive Plan Land Use Map



Source: Albany and Dougherty County Comprehensive Plan 2026

3.6 Socioeconomic Conditions

The populations that live in and work in Albany, Dougherty and Lee Counties comprise of a diverse mix of people across various demographic factors including age, ethnicity, gender, income, disabilities, and car ownership. By analyzing these factors and studying the accompanying density, the socioeconomic conditions of the study area can be used to determine transit supportive density and transit propensity. Since the adoption of the 2015-2020 TDP, the City of Albany has experienced a minor decrease in population due primarily to outmigration of residents to surrounding counties.

The US Census estimates that the City has seen a 2.8% reduction in population since 2010 with a 2019 population estimate of 75,249. The majority of Albany's citizens continue to reside in the central portion of the city, creating a blend of transit dependent and choice rider opportunities.

The existing population and employment density and other socioeconomic data that will affect ridership numbers must be critically analyzed. By evaluating where people live and where jobs are, Albany Transit can determine the best route for getting people where they need to go, whether for work, school, or recreation purposes. The socioeconomic analysis focuses not only on population density and employment density, but also includes other demographic factors. These factors include low-income, female populations, minority populations, zero-car households, and elderly people who are employed. These population groups typically have high rates of transit use and are critical in understanding existing and potential transit use.

3.6.1 Demographic Factors and Propensity to Use Transit

The demographic factors identified above are unique identifiers of population groups more likely to use public transportation. Areas that contain large concentrations of these populations are identified as having a high propensity for transit usage.

Composite Propensity consists of all these factors combined, with weights attached to each factor, depending on its relative importance in the overall propensity equation. The largest concentration of propensity in Albany is in the core downtown area, as well as South and East Albany. This propensity aligns with data from the US Department of Housing and Urban Development (HUD).

According to the Georgia Department of Community Affairs Office of Community and Economic Development, South Albany and Downtown (Enterprise) are recognized as Neighborhood Revitalization Strategy Areas (NRSA) and East Albany is a Local Target Area. These designations are Community Development Block Grant grantee areas targeted for revitalization, which is reviewed and approved by HUD. The figure below shows the NRSA and Local Target Areas.

Figure 3-10: Neighborhood Revitalization Strategy Areas and Local Target Areas

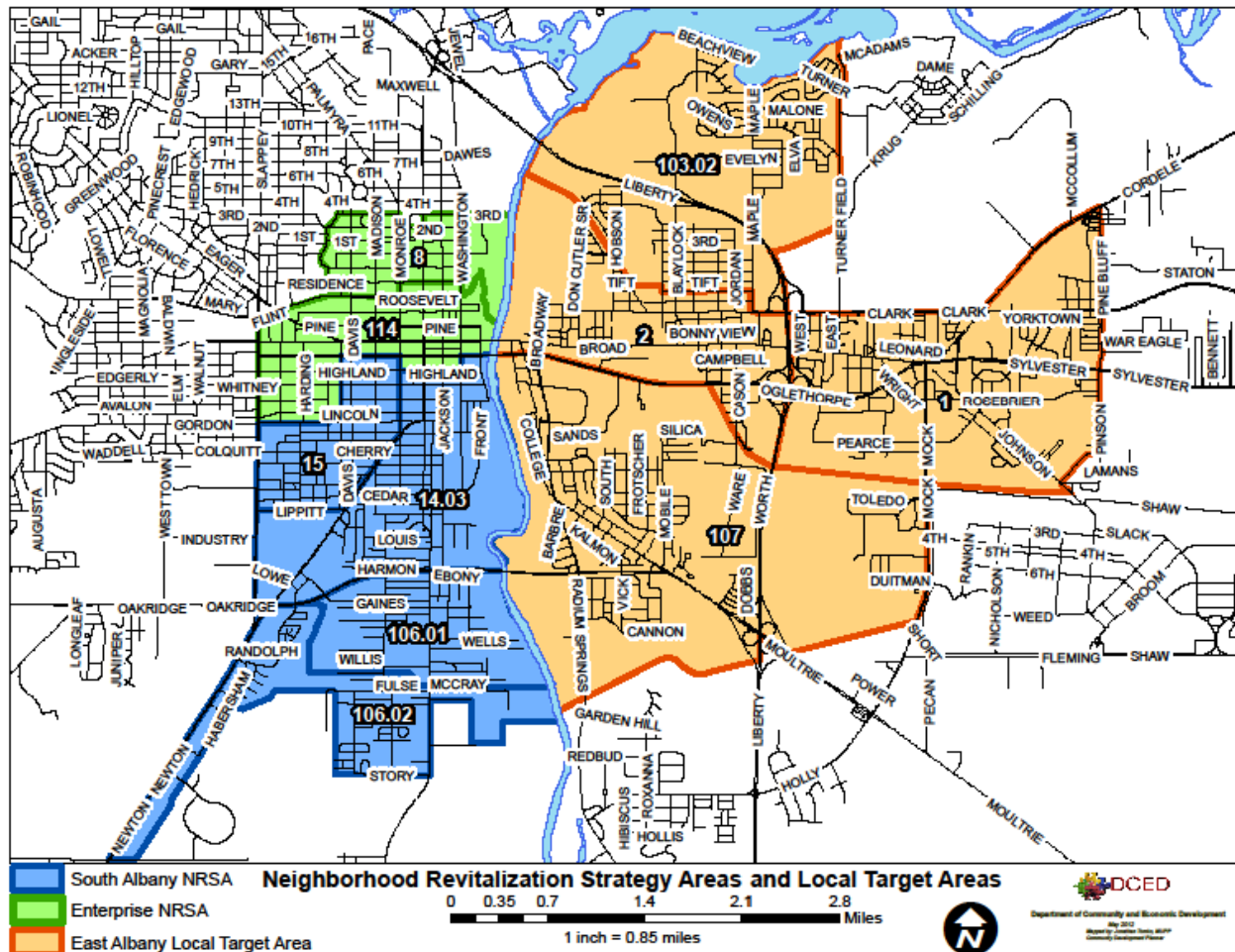
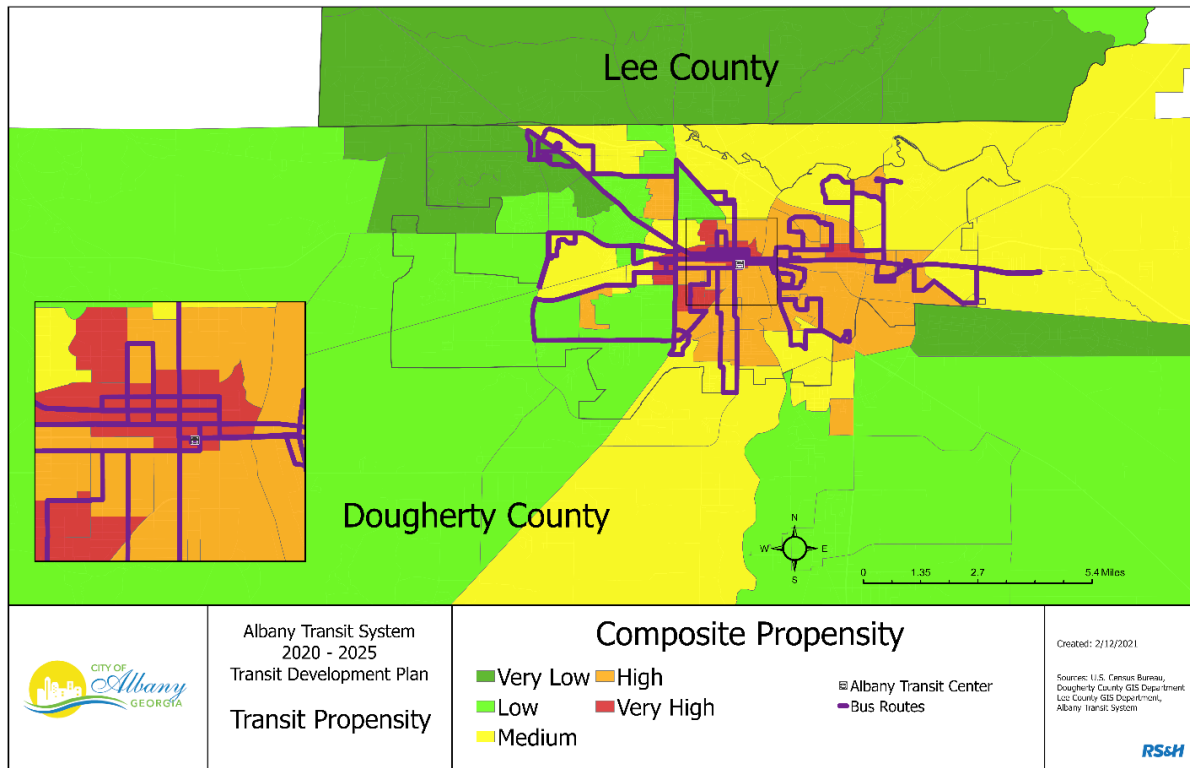


Figure 3-11 shows the composite transit propensity of the study area. Concentrations of very high transit propensity are shown in red, which fall within the NRSA and Local Target Areas. These areas include portions along Newton Rd. to the south, bordered by S. Slappey Road to the west, and a section bordered by E. Broad Avenue in East Albany.

Figure 3-11: Composite Transit Propensity

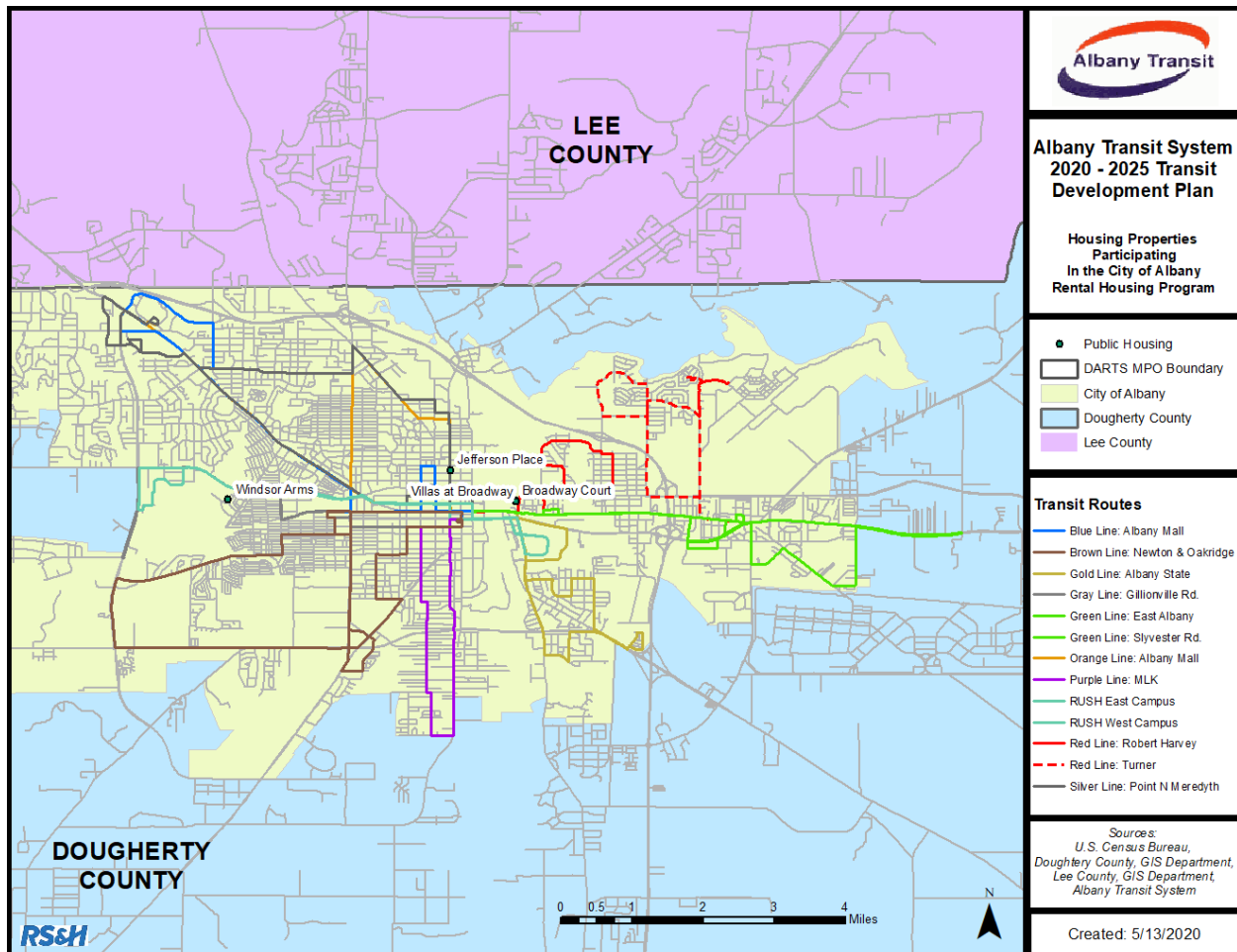


The City of Albany has a Rental Housing Program that allows for qualified households to live in affordable, quality, secure housing. Albany has over 185 rental units throughout the city and four apartment complexes:

- Broadway Court
- Jefferson Place
- Windsor Arms
- Villas at Broadway (a senior housing development)

Those apartment complexes are display in the figure below. With the exception of Windsor Arms, they all have direct access to a fixed transit route bus service.

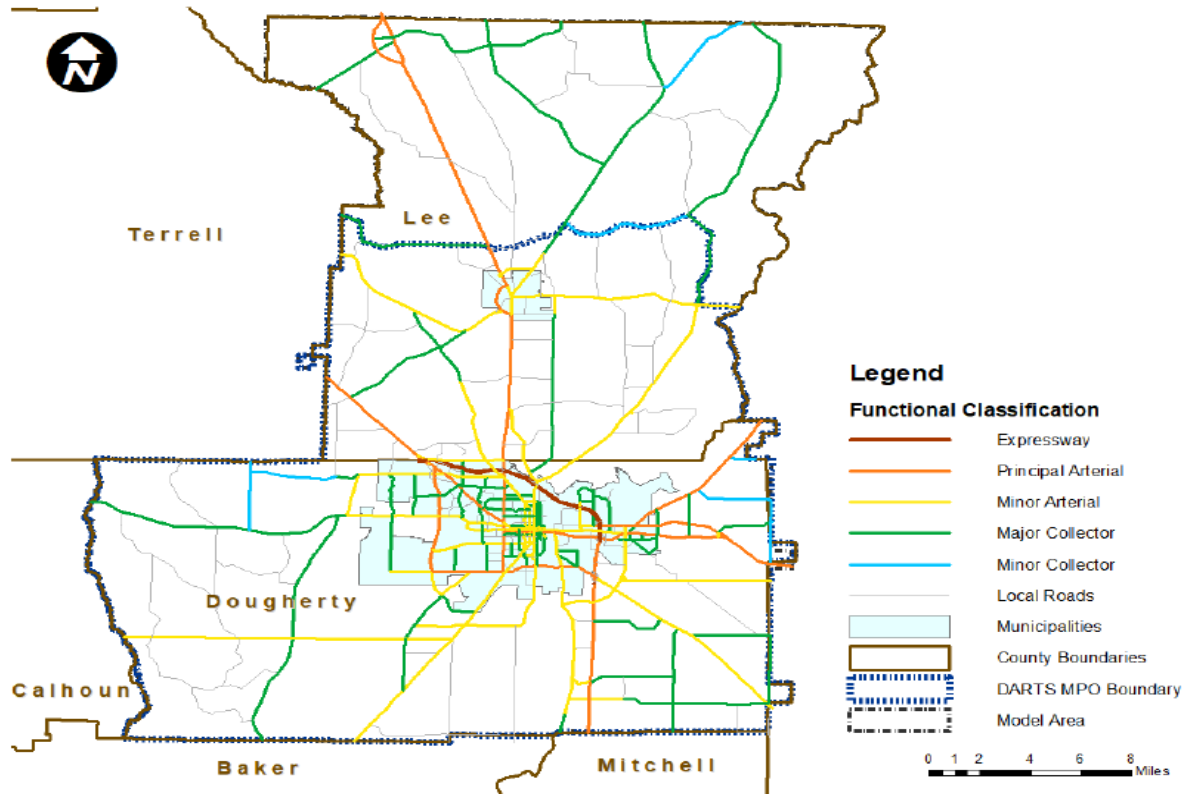
Figure 3.11: Public Housing Properties in Albany



3.7 Roadway Conditions

The roadway network consists of facilities that range from high volume arterials to local streets. Each of these roadways is classified based on their specific characteristics and the type of travel served and volumes and this Functional Classification system categorizes each of the roadways. The roadway network accommodates the different modes of transportation, including transit, and maintaining the network in good condition is important in providing an efficient and effective transportation system. The figure below shows the existing roadway network in the study area.

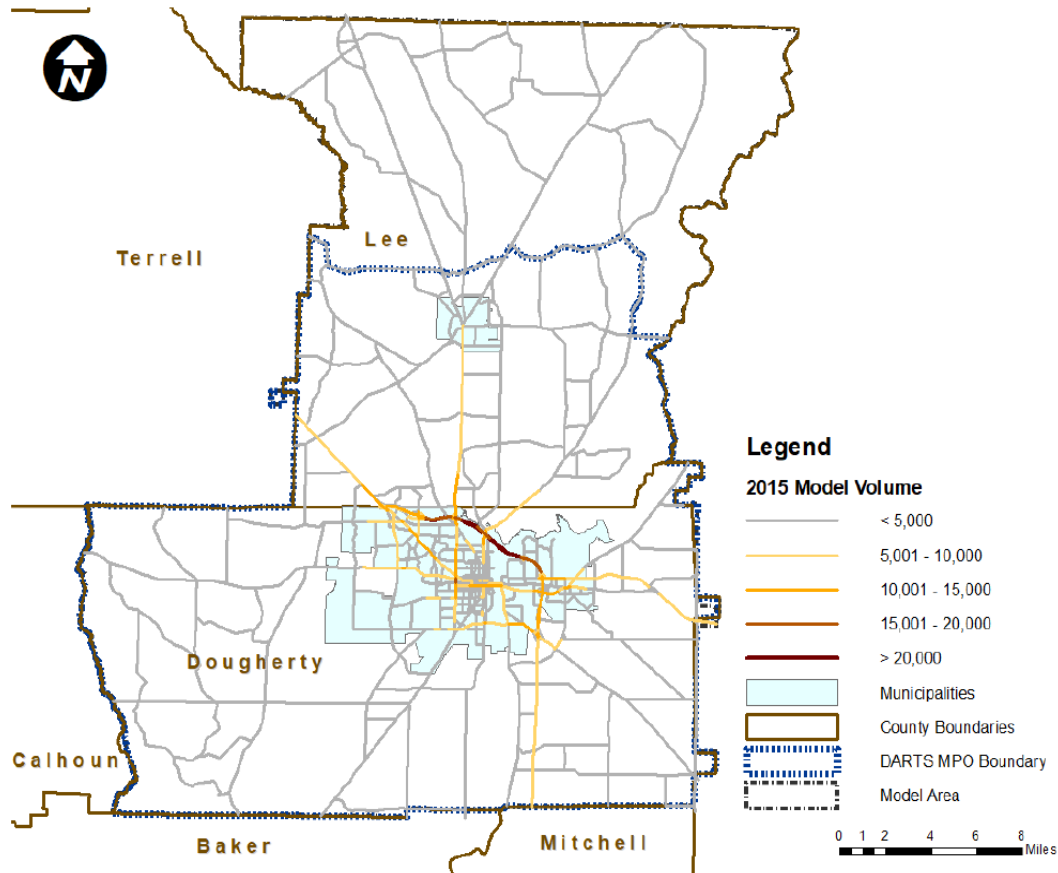
Figure 3-12: Roadway Network Functional Classification



Source: GDOT

Traffic conditions significantly affect the on-time performance of the transit system. Congestion directly affects transit with longer wait times and schedule delays. The facilities shown in dark red are those with volumes of greater than 20,000 vehicles per day. The dark orange depicts facilities that carry between 15,000 and 20,000 vehicles per day. The heaviest volumes are found along US 19/82 and at intersections throughout the urban area. The figure below displays the 2015 Annual Average Daily Traffic (AADT).

Figure 3-13: 2015 Total Daily Traffic Volumes

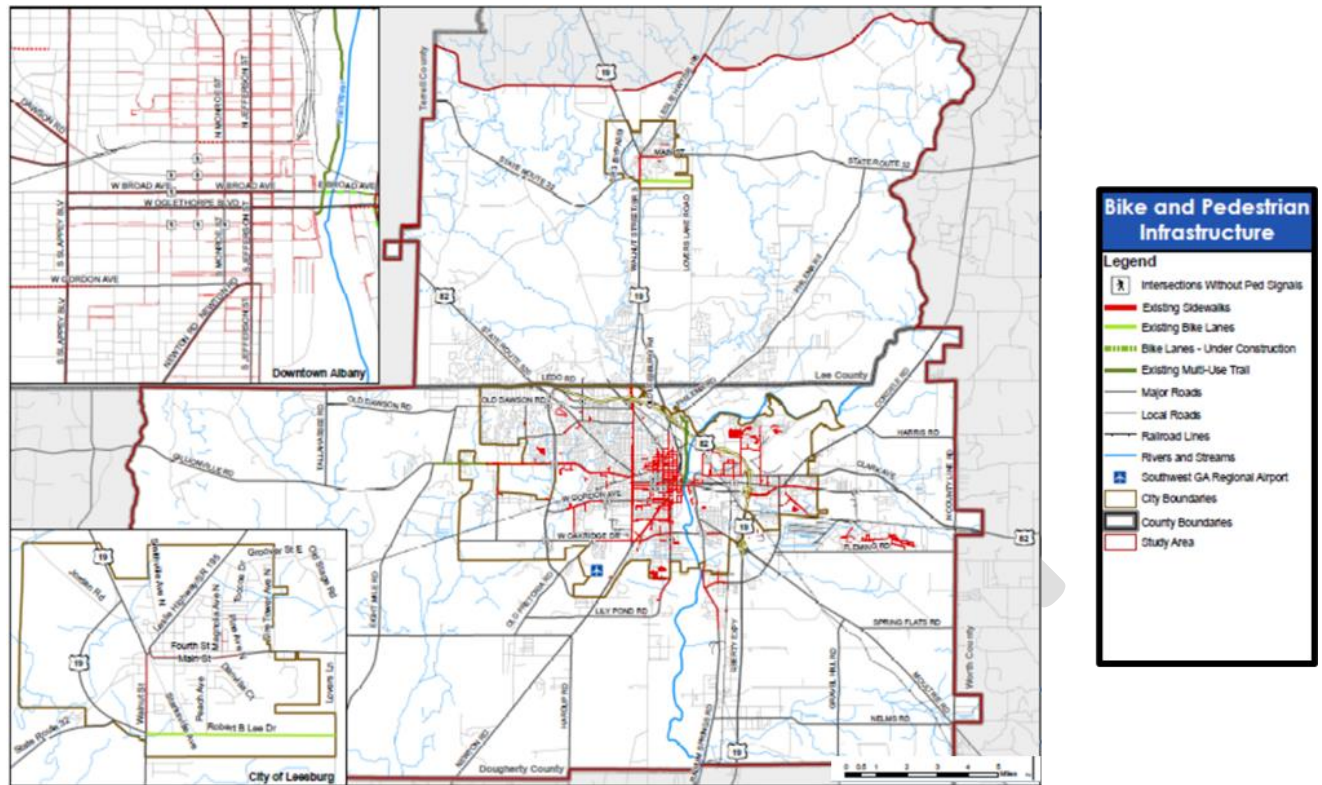


Source: GDOT

3.8 Bicycle and Pedestrian Infrastructure

Pedestrian facilities in the study area are primarily located in the central downtown area of Albany, as well as along some commercial corridors. Bicycle lanes are located on portions of Gillionville Road and along the Flint River as part of a multi-use trail. The DARTS MPO recognized the lack of pedestrian and bicycle infrastructure and undertook a bicycle and pedestrian plan in 2011. This plan identified key areas for additional and enhanced facilities, including improving accessibility to transit. The following figure shows the existing sidewalks and bike lanes, as well as bike lanes under construction in the study area.

Figure 3.14: Existing Bike and Pedestrian Infrastructure



Source: DARTS MPO Bicycle and Pedestrian Master Plan, 2011

Recognizing the challenges presented by lack of bicycle and pedestrian infrastructure and transit accessibility, a Bus Stop Improvement Program (BSIP) was incorporated into the TDP planning process to document conditions at each Albany Transit bus stop and identify gaps in the sidewalk and trail network. The details of the BSIP analysis can be found in Chapter 9.3 of this report.

3.9 Regional Travel Patterns

The Albany area is a regional employment hub and over 86% of the Dougherty County residents work in Dougherty County. Approximately 4% of Dougherty County residents work in Lee County, with 2.7% of residents working in nearby Mitchell County. No other county has more than 2.0% of Dougherty County residents working in those counties.

Residents from adjacent Lee County overwhelmingly work in Dougherty County. Over 66% of Lee County residents work in Dougherty County; approximately 21% of Lee County residents work in Lee County. The tables below show those figures.

Table 3-3: Where Dougherty County Residents Work

Where Dougherty County Residents Work			
	County of Work	Number of Dougherty County Residents	%
1	Dougherty	28936	86.2%
2	Lee	1374	4.1%
3	Mitchell	923	2.7%
4	Worth	502	1.5%
5	Terrell	414	1.2%
	Other	1426	4.2%
	Total	33575	100%

Source: U.S. Census Bureau, 2006-2010 American Community Survey Table 1. Residence County to Workplace County Flows for the United States and Puerto Rico Sorted by Residence Geography: 2011-2015

Table 3-4: Where Lee County Residents Work

Where Lee County Residents Work			
	County of Work	Number of Lee County Residents	%
1	Dougherty	8678	66.7%
2	Lee	2766	21.3%
3	Sumter	487	3.7%
4	Terrell	188	1.4%
5	Mitchell	134	1.0%
	Other	752	5.8%
	Total	13005	100%

Source: U.S. Census Bureau, 2006-2010 American Community Survey Table 1. Residence County to Workplace County Flows for the United States and Puerto Rico Sorted by Residence Geography: 2011-2015

3.10 Safety

Ensuring the safety of all users is a primary focus for all transportation providers. To fully understand the safety conditions, crash data was analyzed, including vehicular crashes, high crash intersections, bicycle, and pedestrian crashes. The DARTS 2045 Metropolitan Transportation Plan (MTP) identified corridors with a high number of crash incidents. Figure 3-14 displays all of the vehicular crashes in the study area from 2014 to 2018. Figure 3-15 shows the high crash intersections in the study area. Some of those key locations include:

- » US 82 (Jefferson Davis Highway) near Dawson Road
- » The area around the Albany Mall
- » US 19 (Walnut Street)/US 82 (Slappey Boulevard)
- » Downtown Albany
- » US 82 (Clark Avenue) at US 19 (Liberty Expressway)
- » Robert E Lee Drive at Walnut Street

The following table shows the ten intersections with the highest number of crashes.

Table 3-5: High Crash Intersections

Intersection	Total Crashes
Dawson Road (Westbound Approach) at North Westover Boulevard	131
Dawson Road at Old Dawson Road	126
Dawson Road (Eastbound Approach) at North Westover Boulevard	125
US 19 (Slappey Boulevard) at Palmyra Road	107
Dawson Road (Eastbound Approach) at US 19 (Slappey Boulevard)	84
Dawson Road at Westgate Drive	84
Westover Boulevard at Nottingham Way	82
SR 234 (Gillionville Road Eastbound Approach) at US 19 (North Slappey Boulevard)	79
US 82 (Jefferson Davis Memorial Highway) at Doublegate Drive	78
Pine Avenue (Westbound Approach) at US 19 (Slappey Boulevard)	76

Figure 3-14: All Crashes

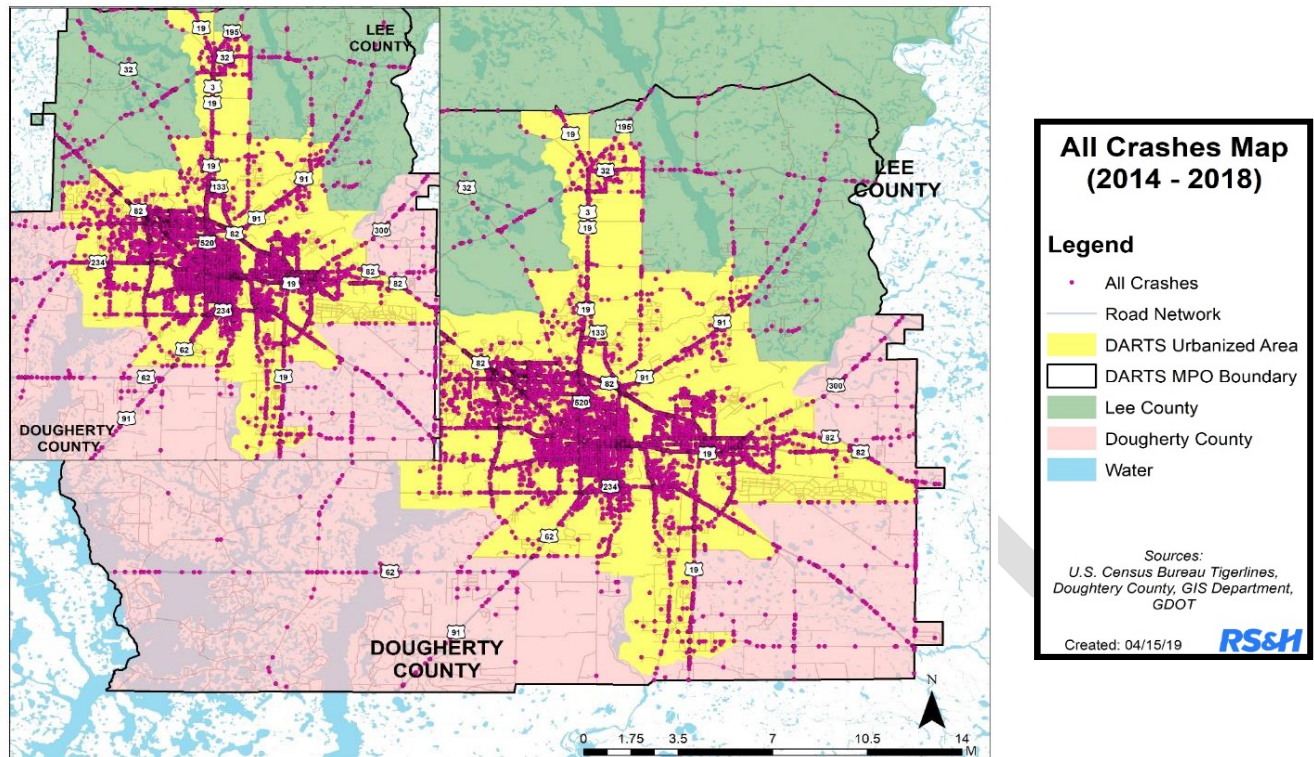
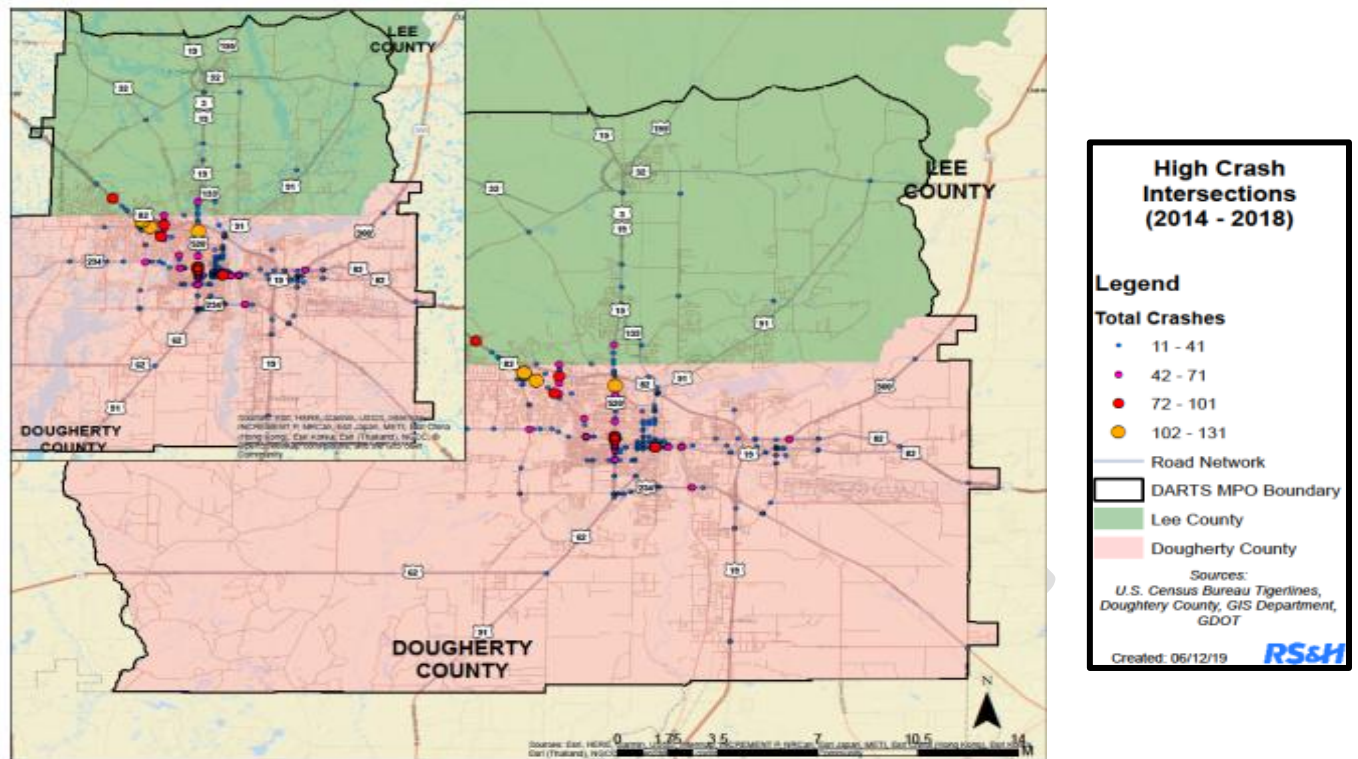
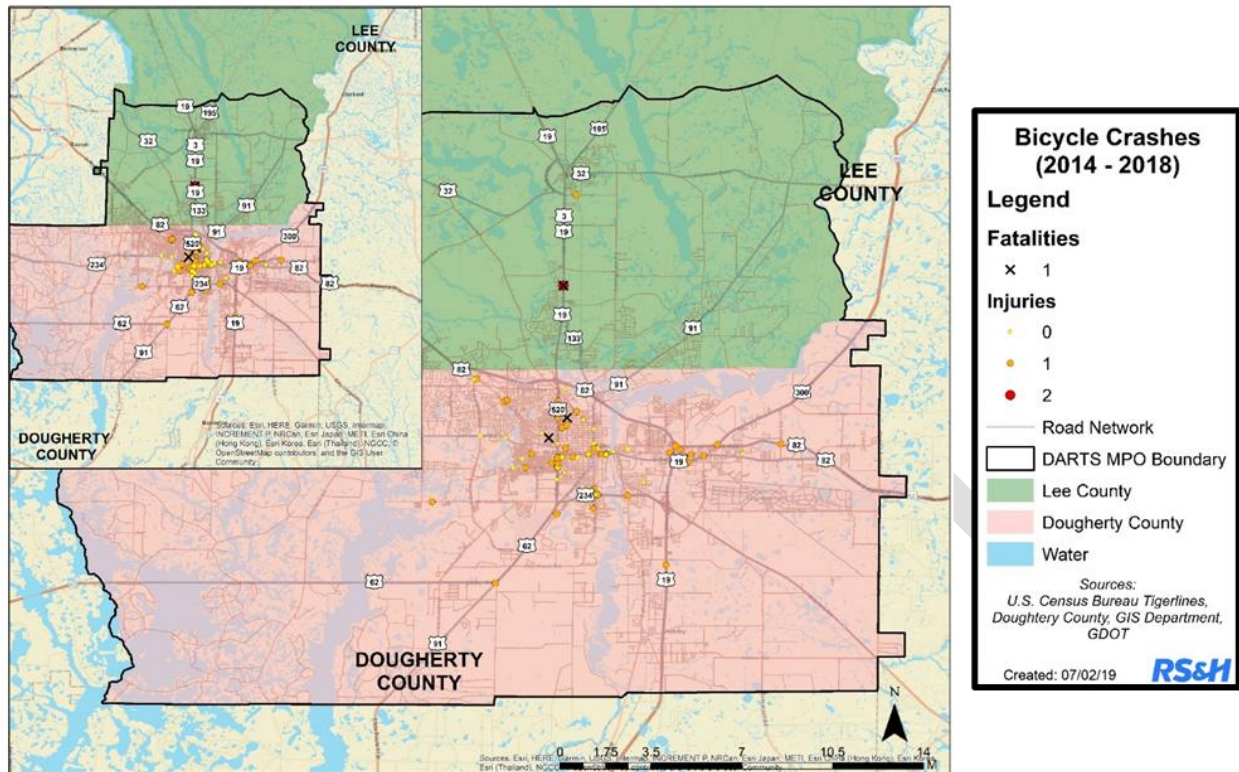


Figure 3-15: High Crash Intersections



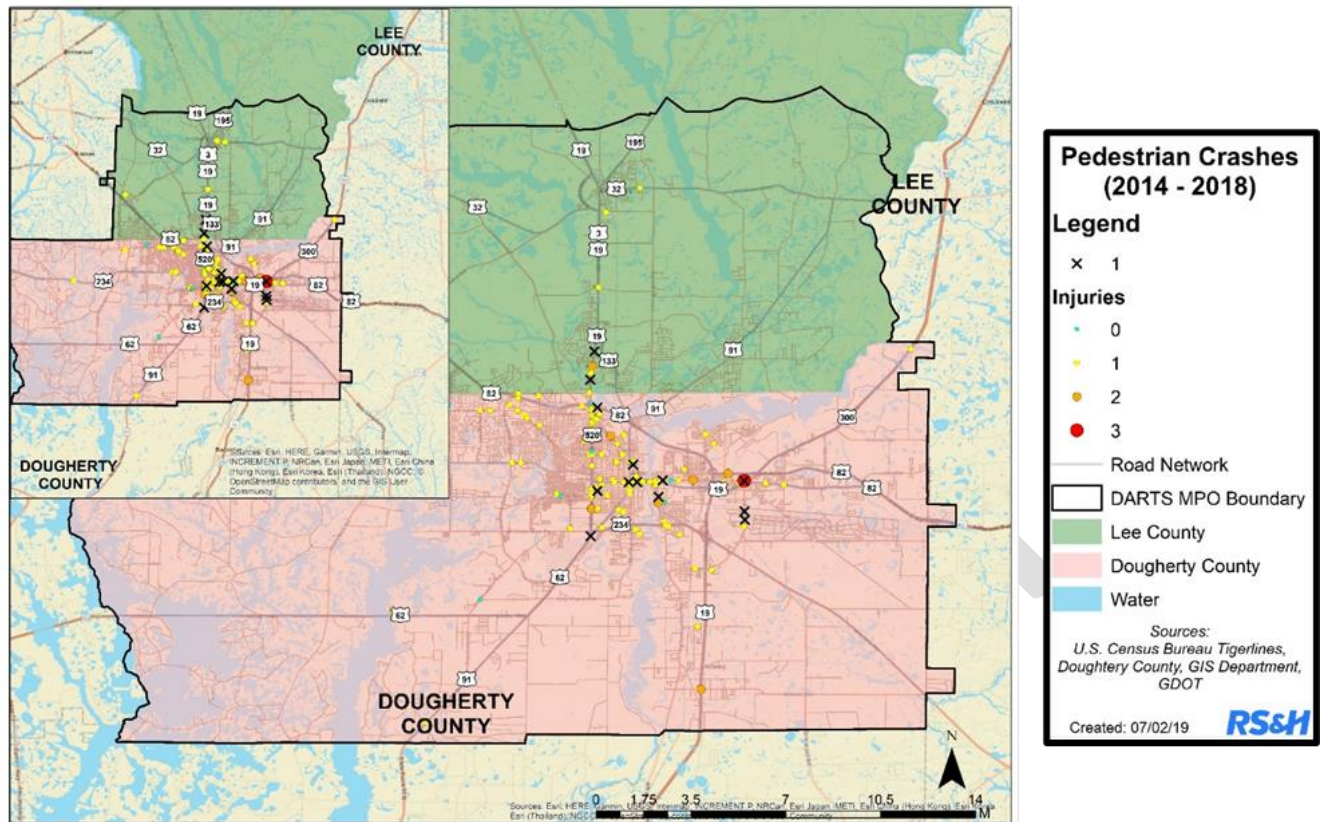
Analyzing pedestrian and bicycle crashes is essential to improving safety concerns for transit riders. Transit riders either walk or bike to from their trip origin to the transit stop and from the transit stop to the final destination. These trips to access the transit stops often requiring sharing the road with motorists, particularly where pedestrian facilities are non-existent or not connected. Transit agencies study crash data to determine the areas of concern and where efforts to improve safety for transit riders should be focused. Figures 3-16 and 3-17, developed as part of the DARTS 2045 MTP update, depict bicycle and pedestrian crashes in the study area from 2014 - 2018.

Figure 3-16: Bicycle Crashes (2014 - 2018)



During this period, there were a total of 82 crashes involving bicycles, with 51 of them injury crashes and three bicycle crashes resulting in fatalities.

Figure 3-17: Pedestrian Crashes (2014 - 2018)



There was a total of 137 pedestrian-involved crashes from 2014-2018, and 127 pedestrians were injured. There were thirteen pedestrian crashes that resulted in fatalities during this period. Table 3-6 shows the breakdown of pedestrian and bike crashes by month from 2014 - 2018. There are slight fluctuations throughout the year in the number of crashes, with a higher percentage occurring in the fall months. This could be related to higher numbers of students walking and biking in these months.

Table 3-6. Pedestrian and Bicycle Crashes by Month

Month	Total Crashes	Percent of Crashes	Bike Crashes	Percent of Bike Crashes	Pedestrian Crashes	Percent of Pedestrian Crashes
January	2,019	7.8%	2	2%	6	5%
February	2,126	8.3%	6	7%	9	7%
March	2,316	9.0%	9	11%	14	11%
April	2,239	8.7%	2	2%	11	8%
May	2,101	8.2%	9	11%	14	11%
June	1,909	7.4%	11	13%	8	6%
July	1,852	7.2%	8	10%	9	7%
August	2,120	8.2%	6	7%	8	6%
September	1,937	7.5%	4	5%	11	8%
October	2,371	9.2%	11	13%	20	15%
November	2,420	9.4%	5	6%	13	10%
December	2,343	9.1%	9	11%	7	5%

4.0 Existing Transit Services and Performance Evaluation

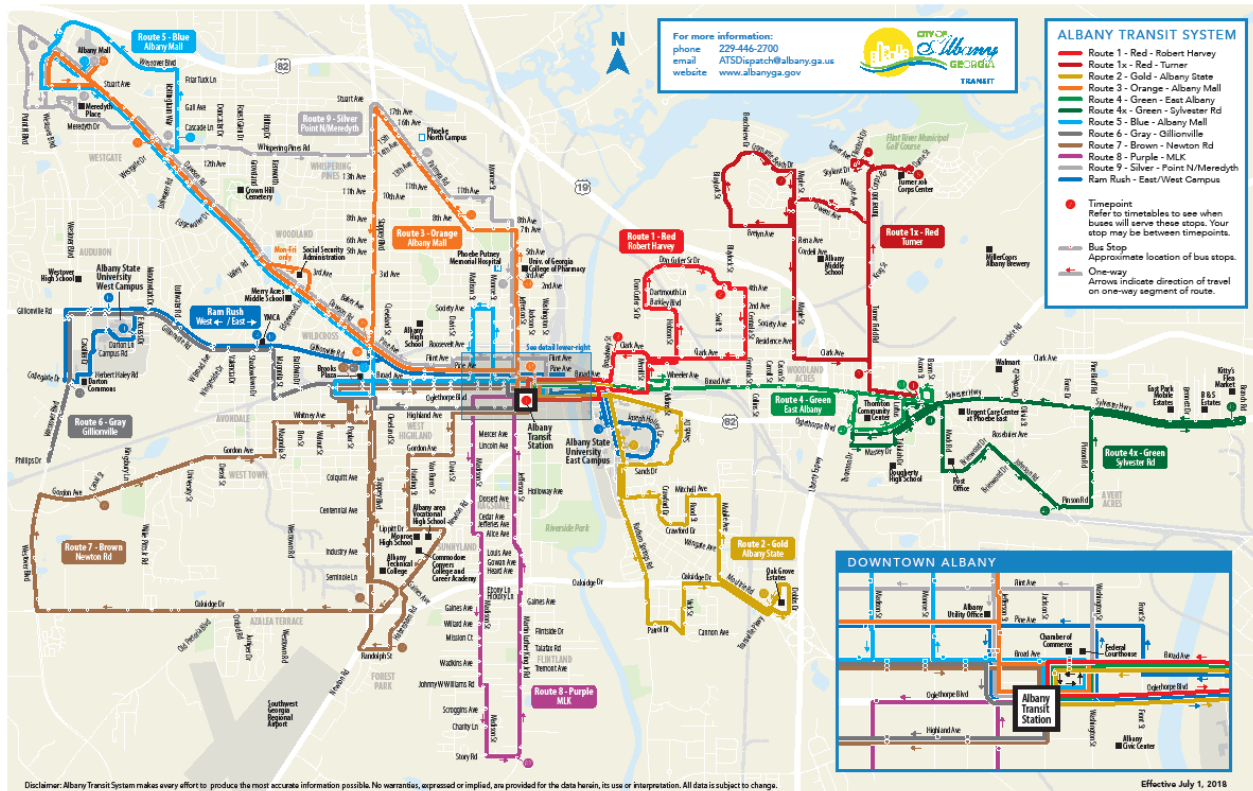
In Dougherty County, transportation options for residents include public and private options, each of which has differing service characteristics.

Southwest Georgia Regional Transit operates in thirteen counties in the southwest Georgia region, including Dougherty and Lee Counties. The service offers on-demand rides for residents providing transportation to residents to access needed services and activities.

The Albany Transit System is the only fixed route provider serving the City of Albany and portions of Dougherty County. Albany Transit has eleven routes, including an Albany State University route providing service to ASU students, staff, and campus visitors.

The following figure shows the Albany Transit System routes.

Figure 4-1: Albany Transit System



Source: Albany Transit System

There is no service that extends to adjacent Lee County. The service operates seven days a week, with a start time of 5:15am for the majority of the routes. The Albany State University Ram Rush bus service runs until 9:40, but no other routes operate later than 8:12 pm. All the routes run on a loop with the same start and end location. The majority of the ridership on all routes occurs during the week. Table 4-1 lists the weekday fixed route bus routes and operating schedule.

Table 4-1: Fixed Route Operating Schedules (Monday - Friday)

Route	Start Time	End Time	Start Location	End Location
1 Red - Jackson Heights	0515	2012	ATS Transfer Facility	ATS Transfer Facility
1X Red - Turner	0500	1830	Five Points Warehouse	Five Points Warehouse
2 Gold - Albany State	0545	1912	ATS Transfer Facility	ATS Transfer Facility
3 Orange - Albany Mall	0515	1910	ATS Transfer Facility	ATS Transfer Facility
4 Green - East Albany	0515	2012	ATS Transfer Facility	ATS Transfer Facility
4X Green - Sylvester Rd.	0530	1856	Five Points Warehouse	Five Points Warehouse
5 Blue - Albany Mall	0545	1843	ATS Transfer Facility	ATS Transfer Facility
6 Gray - Gillionville Rd.	0545	1915	ATS Transfer Facility	ATS Transfer Facility
7 Brown - Newton & Oakridge	0515	2012	ATS Transfer Facility	ATS Transfer Facility
8 Purple - MLK	0515	2011	ATS Transfer Facility	ATS Transfer Facility
9 Silver - Pointe N. Meredyth	0520	1910	ATS Transfer Facility	ATS Transfer Facility
10 and 30 - Albany State Univ. Ram Rush	0645	2140	ASU Student Center	ASU Student Center

Source: Albany Transit System

Table 4-2 describes the fare structure for Albany Transit. Fares are determined by age, with discounts for children and elderly passengers. There are limitations required for paratransit tickets, as well as for children ages five and under.

Table 4-2: Albany Transit Fare Structure

Fare Category	Fare	Limitations/Requirements
Fixed Route 1 Ride	\$1.70	
Fixed Route - Child	\$0.50	Age 6 - 12
Fixed Route - Child	Free*	Age 5 & Under (Child must not be taller than the height of the farebox)
Fixed Route Fare - Senior/Disabled	\$0.50	
Paratransit Ticket	\$2.50	Must be eligible for ADA paratransit service

Source: Albany Transit System

Albany Transit has several discounted multi-ride pass options for riders who frequently use the service. For both fixed route and paratransit services, there are passes that can be used for regular riders. Table 4-3 shows these fare options.

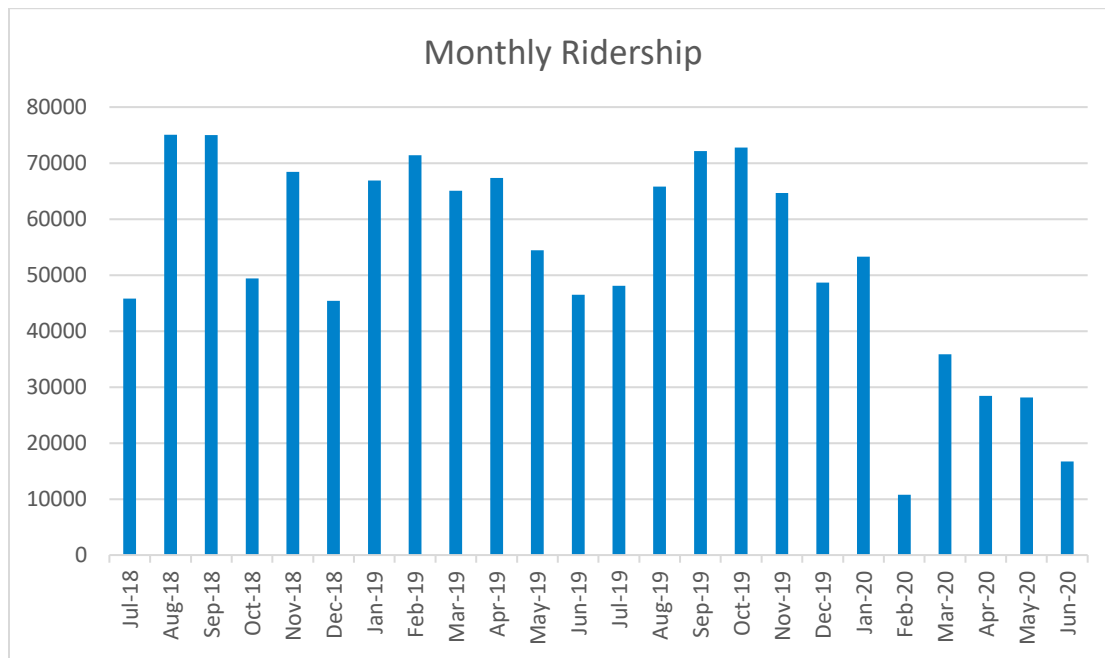
Table 4-3: Multi-Ride Fare Options

Fare Category	Fare
Paratransit Coupon Book (10-tickets)	\$25.00
Paratransit Monthly Pass (1mo. Unlimited)	\$90.00
Smart Card Surcharge	\$3.00
Weekly Pass	\$12.00
Regular Monthly Pass	\$45.00
Student Monthly Pass	\$35.00
Senior/Disabled Monthly Pass	\$20.00

Source: Albany Transit System

The ridership levels for Albany Transit typically drop in the summer, due to the class schedules for Albany State students and lower summer enrollment. In 2020, the ridership rates decreased significantly due to the COVID-19 Pandemic. Ridership information from the past two years is listed in the table below.

Figure 4-2: Monthly Ridership (July 2018 - June 2020)



Source: ATS Monthly Statistics, RY 2019 & RY 2020

The Albany Transit System has 21 vehicles ranging in size from 16 to 35 feet. The smaller vehicles are vans used for the demand response ADA paratransit service, while the longer vehicles are used for the fixed transit routes. Three buses were newly purchased in 2018. Table 4-4 shows the number of vehicles used by the demand response and fixed route systems.

Table 4-4: Transit Vehicle Inventory

Year of Manufacture	Number of Vehicles	Fixed Route or Demand Response	Vehicle Length (feet)	Seating Capacity	Standing Capacity	Average Lifetime Miles
2016	5	DR	25	12	3	97,364
2008	1	DR	16	4	0	110,144
2010	1	DR	17	4	0	65,873
2006	1	FR	29	28	18	586,751
2011	3	FR	30	30	20	332,437
2011	2	FR	35	32	22	364,656
2012	1	FR	30	30	20	391,996
2016	4	FR	35	31	19	116,064
2018	3	FR	35	31	19	8,540

Source: ATS NTD Report 2018

The Albany Transit System has a maintenance facility, as well as a vehicle washing facility, both located at 712 Flint Ave. These facilities are used primarily for the fixed route vehicles, offering secondary service to the demand response vehicles. Also located at this facility are the administration offices for ATS staff and personnel. There is also a bus transfer center at the Albany Transit Center located at 300 W. Oglethorpe Blvd.

Fixed route vehicles are either powered by natural gas or diesel, while the entire fleet of demand response vehicles use natural gas. The table below displays the annual fuel consumption for both transit service modes and the resulting miles per gallon for the previous fiscal year.

Table 4-5: Annual Fuel Consumption

Transit Service	Fuel (gallons)	Total Miles	Miles per Gallon
Fixed Route - Natural Gas	41,716	290,272	6.96
Fixed Route - Diesel	82,803	328,302	3.96
Demand Response - Natural Gas	22,551	181,229	8.04

Source: ATS NTD Report 2018

Albany Transit is in the process of developing a new Albany Transportation Center, at 300 West Oglethorpe Boulevard. This location is the current site of the intercity bus terminal, which services Greyhound buses. The purpose of this new Transportation Center is to provide multimodal connections between public transit, Greyhound, rideshare and local taxi services. This new Transportation Center will incorporate ADA accessible access.

Figure 4-3: Current Albany Transportation Center



Figure 4-4: Proposed Albany Transportation Center



Greyhound offers service seven days a week to cities throughout the US, including daily trips to Birmingham, Richmond, Greenville, Biloxi, Atlanta, and Charlotte. Departure and arrival occur at the Albany Bus Station at 110 Mercer Ave.

Figure 4-5: Greyhound Station, Albany, GA



Atlanta Hound is an intercity transportation service with a direct bus route between Albany and Atlanta. There are two pickup and drop-off locations located in Albany, including the Albany Ride-share located on N. Slappy Boulevard and Security check point at Albany State University, located at 504 College Drive. Drop off and pickup in Atlanta are located at the South Lake Mall and the College Park Marta train station.

There are three local taxicab services offered in Albany and Dougherty County. Table 4-6 shows the taxi services.

Figure 4-6: Taxicab Services

Taxicab Services			
Cab Company	Fleet Size	Service Area	Years in Service
Albany Veteran Cab	3 vehicles	Albany City and Dougherty County	20+ Years
Friendly Cab	1 vehicle	Albany City and Dougherty County	20+ Years
Albany Quality	1 vehicle	Albany City and Dougherty County	10+ Years

In addition to the taxi services, Albany and Dougherty County are also served by rideshare services of Uber and Lyft.

4.1 Fixed Route Performance Evaluation

Benchmarks are used to evaluate the performance and effectiveness of Albany Transit. This benchmarking process is found In the *Transit Cooperative Research Program (TCRP) Report 141 - A Methodology for Performance Measurement and Peer Comparison in the Public Transportation Industry* and is described as systematically seeking out best practices to emulate¹. These benchmarks are industry-wide and provide a consistent method for comparing system performance over a set period of time. Data from the National Transit Database (NTD) was used to perform this analysis, with transit industry standards utilized to understand how Albany Transit has performed over the past five years. The general indicators used are shown in Table 4-6.

Table 4-6: Albany Transit System Fixed Route - General Indicators

General Indicator	2014	2015	2016	2017	2018	Percent Change 2014-2018
Service Area Population	75,616	75,616	75,616	75,616	75,616	0.0%
Service Area Size (sq miles)	17	17	17	17	17	0.0%
Passenger Trips	1,036,749	712,590	674,473	642,719	767,110	-26.0%
Passenger Miles (000's)	5,074.7	3,488.0	2,864.4	2,729.5	4,052.5	-20.1%
Revenue Miles	572,117	600,107	592,032	595,628	632,877	10.6%
Revenue Hours	35,164	35,095	34,538	33,953	36,591	4.1%
Route Miles	96.9	96.9	130	130	159	64.1%
Total Employee FTEs	26.1	23.10	12.3	21.1	29.4	12.6%
Vehicles Operated in Maximum Service	8	8	8	8	11	37.5%

¹ (TCRP) Report 141 - A Methodology for Performance Measurement and Peer Comparison in the Public Transportation Industry

Spare Ratio (%)	42.9%	0.0%	14.3%	14.3%	54.6%	27.3%
Total Gallons Consumed	137,039	172,020	141,514	140,841	124,519	-9.1%

Source: ATS NTD Report, RY 2014- 2018

The service area population and service size have not been updated in the NTD server, so no growth or decrease is shown in those figures. Passenger trips and passenger miles have decreased by percentage change, with fluctuation in the years between 2014 and 2018. These numbers correlate with each other; with passengers taking fewer overall trips, the annual passenger miles will decrease as well.

Total revenue miles and hours have both increased, with the number of route miles increasing as well. The amount of Vehicles Operated in Maximum Service (VOMS) increased by three in 2018, with previous years remaining steady at eight fixed route vehicles. The spare ratio has increased due to a recent acquisition of revenue fleet vehicles, with overall gallons consumed decreasing, even with an increase in revenue miles and route miles.

The Effectiveness Measures for Albany Transit System Fixed Route service is shown in Table 4-7. The amount of vehicle miles increased which has led to an increase in vehicle miles per capita rate from 2014 to 2018. Because of a decrease in passenger trips, the performance measures in the service consumption category have all decreased by sizeable margins. The number of vehicle system failures increased, likely due to the number of older vehicles in the fleet, with seven vehicles out of fourteen being older than six years.

Table 4-7: Effectiveness Measures

Effectiveness Measure	2014	2015	2016	2017	2018	Percent Change 2014-2018
SERVICE SUPPLY						
Vehicle Miles Per Capita	7.7%	8.1%	7.9%	7.9%	8.5%	10.4%
SERVICE CONSUMPTION						
Passenger Trips Per Capita	13.71	9.42	8.92	8.50	10.14	-26.3%
Passenger Trips Per Revenue Mile	1.81	1.19	1.14	1.08	1.21	-33.1%
Passenger Trips Per Revenue Hour	29.48	20.30	19.53	18.93	20.96	-28.9%

QUALITY OF SERVICE						
Average Speed (RM/RH)	15.64	17.10	17.14	17.54	17.30	10.6%
Average Age of Fleet (in years)	5.5	5.5	7.4	4.6	4.4	-20%
Number of Vehicle System Failures	101	265	326	407	343	239.6%
Revenue Miles Between Failures	5665	2265	1816	1463	1845	-67.4%
AVAILABILITY						
Weekday Span of Service (in hours)	10.25	10.25	10.5	9	10.5	2.4%

Source: ATS NTD Report, RY 2014- 2018

The Efficiency Measures, sorted by Cost Efficiency, Operation Ratio, and Vehicle Utilization categories are listed in Table 4-8. Because of the increase in operating expenses, every cost efficiency performance measure has increased except for Maintenance Expense Per Operating Expense. Farebox recovery slightly decreased, along with decreases in vehicle miles and hours per peak vehicle, and revenue miles and hours per total vehicles. The average fare has increased by 96%, from \$0.52 in 2014 to \$1.02 in 2018.

Table 4-8: Efficiency Measures

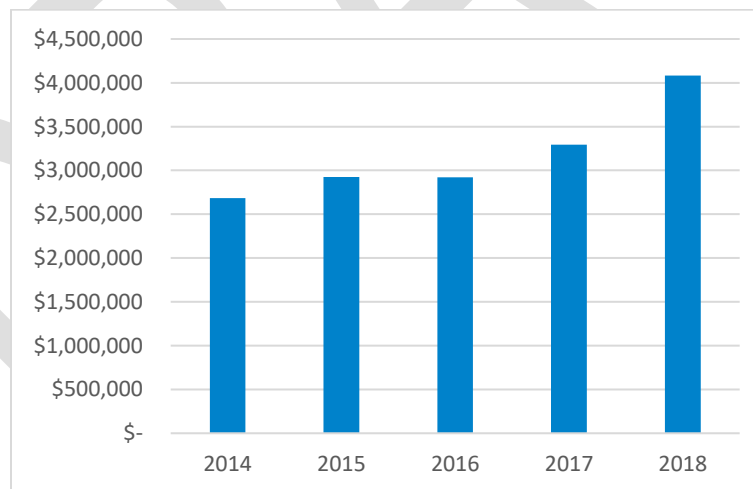
Efficiency Measure	2014	2015	2016	2017	2018	Percent Change 2014-2018
COST EFFICIENCY						
Operating Expense Per Capita	\$35.49	\$38.70	\$38.65	\$43.58	\$53.99	52.1%
Operating Expense Per Peak Vehicle	\$335,469	\$365,830	\$365,296	\$411,879	\$340,197	1.4%
Operating Expense Per Passenger Trip	\$2.23	\$3.52	\$3.72	\$4.31	\$4.41	97.8%
Operating Expense Per Passenger Mile	\$0.45	\$0.72	\$0.88	\$1.01	\$0.84	86.7%
Operating Expense Per Revenue Mile	\$4.03	\$4.18	\$4.23	\$4.65	\$5.35	32.8%
Operating Expense Per Revenue Hour	\$65.62	\$71.49	\$72.58	\$81.52	\$92.54	41.0%
Maintenance Expense Per Revenue Mile	\$0.88	\$0.57	\$0.82	\$0.94	\$1.03	17.0%
Maintenance Expense Per Operating Expense	\$21.71	\$13.58	\$19.41	\$20.27	\$19.22	-11.5%

OPERATING RATIO						
Farebox Recovery (%)	23.22	21.62	16.86	17.81	23.01	-0.90%
VEHICLE UTILIZATION						
Vehicle Miles Per Peak Vehicle	73,215	76,107	75,087	75,366	53,536	-26.9%
Vehicle Hours Per Peak Vehicle	4,716	4,466	4,401	4,278	3,079	-34.7%
Revenue Miles Per Vehicle Mile	.98	.99	.99	.99	.99	1.0%
Revenue Miles Per Total Vehicles	52,011	75,013	53,821	45,818	42,192	-18.9%
Revenue Hours Per Total Vehicles	3,197	4,387	3,140	2,612	2,439	-23.7
FARE						
Average Fare	\$0.52	\$0.76	\$0.72	\$0.73	\$1.02	96.2%

Source: ATS NTD Report, RY 2014- 2018

Albany Transit has seen a significant increase in operating expenses since 2014 that increased gradually over the years, from approximately \$2.6 million in 2014 to over \$4 million in 2018. The figure below shows that data.

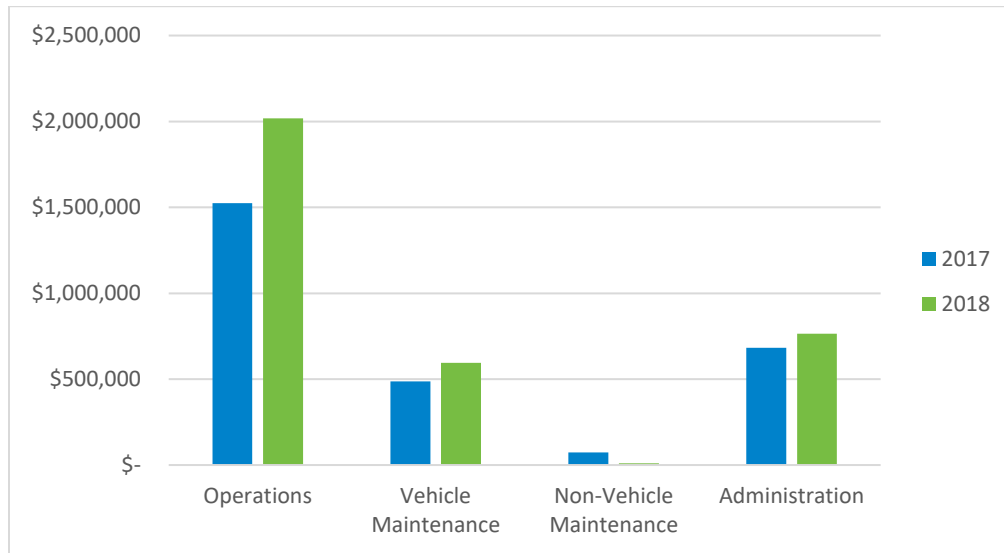
Figure 4-7: Total Operating Expenses



Source: ATS NTD Report, RY 2014- 2018

Additional operating expense information is shown in Figure 4-8 and separates operating expense by functional classification over the past two years. Each category except for non-vehicle maintenance has seen an increase in the past year.

Figure 4-8: Operating Expense by Functional Classification



Source: ATS NTD Report, RY 2014- 2018

Financial indicators for ATS are shown in Table 4-9. These indicators show the source and use of funding and the percent change over the analysis period.

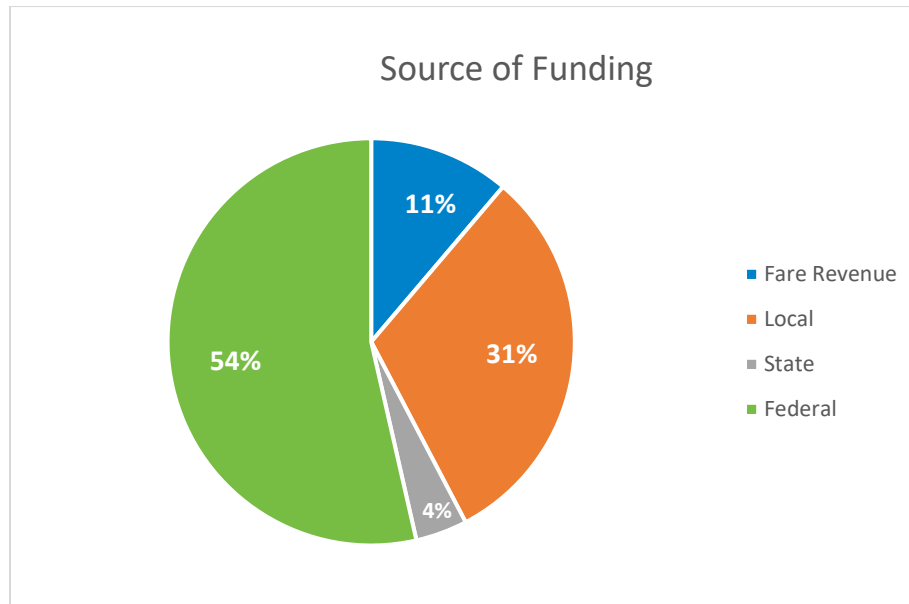
Table 4-9: Financial Indicators

Financial Indicator	2014	2015	2016	2017	2018	Percent Change 2014 - 2018
LOCALLY GENERATED FUNDS						
Fare Revenue (000's)	\$577.10	\$581.50	\$522.50	\$493.00	\$654.70	13.4%
GOVERNMENT SOURCES OF FUNDS						
Local (000's)	\$1,104.00	\$1,470.30	\$1,316.50	\$1,650.10	\$2,305.20	108.8%
State (000's)	\$80.90	\$61.00	\$76.60	\$357.10	\$462.70	471.9%
Federal (000's)	\$2,160.50	\$1,476.70	\$1,853.00	\$4,271.10	\$3,750.50	73.6%
USE OF FUNDS						
Operations (000's)	\$2,722.10	\$3,163.90	\$2,922.40	\$3,404.40	\$4,183.90	53.7%
Capital (000's)	\$1,200.50	\$435.70	\$766.40	\$3,461.30	\$3,168.00	163.9%

Source: ATS NTD Report, RY 2014- 2018

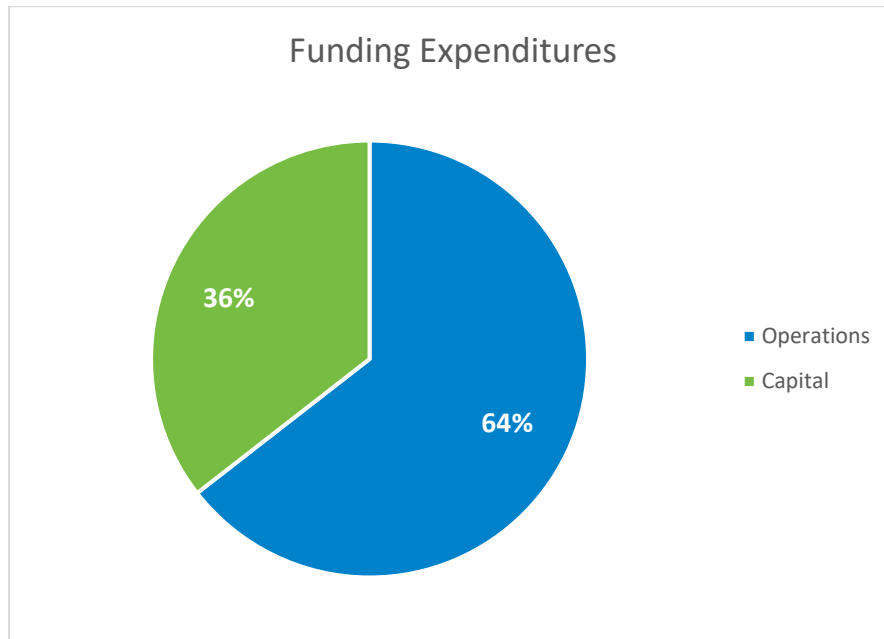
Figures 4-9 and 4-10 are visual representations of the funding information displayed in the table. Figure 4-9 displays the composite total of sources of funding from 2014 - 2018, and Figure 4-10 shows total funding expenditures from that same period, categorized by operations and capital.

Figure 4-9: Funding Sources



Source: ATS NTD Report, RY 2014- 2018

Figure 4-10: Funding Expenditures



Source: ATS NTD Report, RY 2014- 2018

4.1.1 Operational Analysis

A thorough service performance evaluation and operational analysis was conducted during the development of the TDP, analyzing performance and trends at both the route and overall service levels. The assessment performed looked at the past three fiscal years of ridership, revenue, and on-time performance for both Fixed-Route and Demand Response services and evaluated the entire service in comparison to peer transit systems. The findings from the operational analysis highlights current transit successes as well as opportunities to improve existing service. The figures and tables in this section provide an overview of the ATS system, along with statistics of key performance measures collected from the National Transit Database for ATS. Additionally, the operational analysis resulted in route profiles, which provides both operational and financial summary. The route profiles are provided in the Appendix.

The Albany Transit System operates 13 fixed routes, including 2 university routes and 2 express routes, carrying over half of million customers each year in the City of Albany. ATS also provides more than 19,000 trips annually to persons who are eligible for the paratransit service under the ADA regulations.

According to the ATS's FY 2019 operating statistics, the system spent \$5.66 per revenue mile and \$97.33 per revenue hour to provide fixed route services, while generating \$1.20 per revenue mile and \$20.68 per revenue hour. These figures indicate overall minimal system productivity. For the Demand Response service provided, service efficiency in 2019 was \$5.72 per revenue mile and \$71.40 per revenue hour, while generating \$0.34 per revenue mile and \$4.30 per revenue hours, which also indicates overall system inefficiencies.

Additional service assessments indicate that routes 3, 4, 7, 20 and 30 combined make up more than half of all the passenger trips. On a systemwide basis, service levels do not match ridership patterns along other routes.

RIDERSHIP

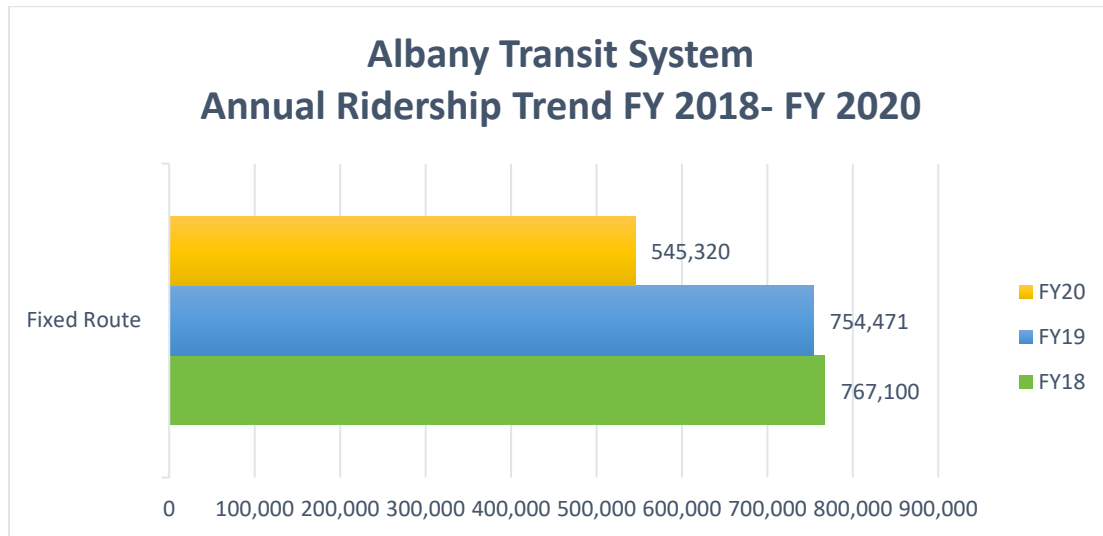
Fixed route service forms the bulk of Albany Transit's operation accounting for approximately 81% of systemwide operating expenses, total revenue hours, miles, and ridership. Fixed route ridership is directly related to, and affected by, four major factors, which include:

- Services Operated (Days)
- Services Supplied (Total actual vehicle miles and hours)
- Periods of service (Time service begins and ends)
- Maximum Service Vehicles (Vehicles in operation)

Of the four factors, service days operated is considered the most significant driver of ridership and is attributed to the total actual service days in a month, weather conditions, seasonal travel behaviors, events, employment, and school year calendars.

Over the past three fiscal years, the City of Albany has experienced severe weather conditions including hurricanes and tornadoes, as well as the impacts from the pandemic which has drastically impacted the total number of service days operated, maximum vehicles in operation, periods of service, overall ridership, and performance for the system. The figure below provides an overview of the trend in annual ridership from fiscal year 2018 through fiscal year 2020.

Figure 4-11: Overall Annual Ridership Trend



As shown in the figure, ATS fixed route transit ridership has been steadily decreasing over last three service years. The most recent decrease in ridership, however, from a total of 754,471 unlinked passenger trips in FY 2019 to 545,320 in FY 2020 or 25% decrease, is in part a result of the Covid-19 global pandemic that exhibiting effects beginning in February of FY 2020.

Additionally, monthly ridership data for fixed route was examined to better understand the seasonal variations in transit ridership and trends across the system. The monthly ridership data indicates that ridership is at a peak in the months of August, September, and October each service year, with the exception of FY 2019 where the agency also observed similar ridership numbers in the month of February. In contrast, the months of June, July and December are less productive for Albany Transit. This ridership data is a direct result of school calendars and the winter and summer holidays. Other fluctuations in monthly ridership numbers correspond with natural disaster timelines. The figures below show a comparison in monthly ridership data across FY 2018 - FY 2020 and separately for each year.

Figure 4-12: Monthly Ridership (2018 - 2020)

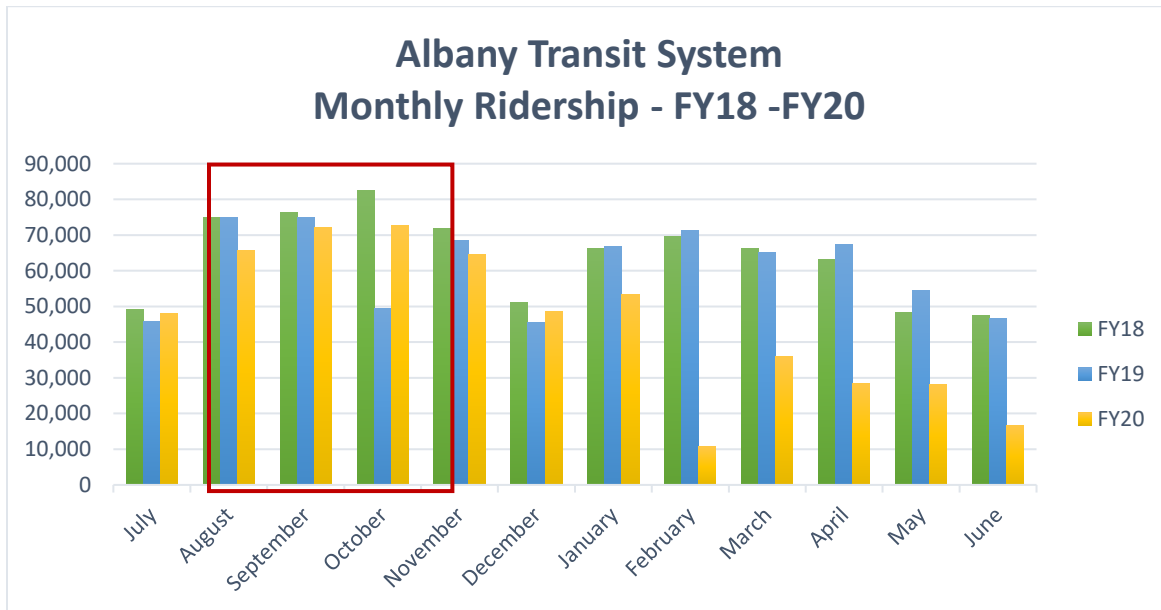


Figure 4-13: Monthly Ridership (2020)

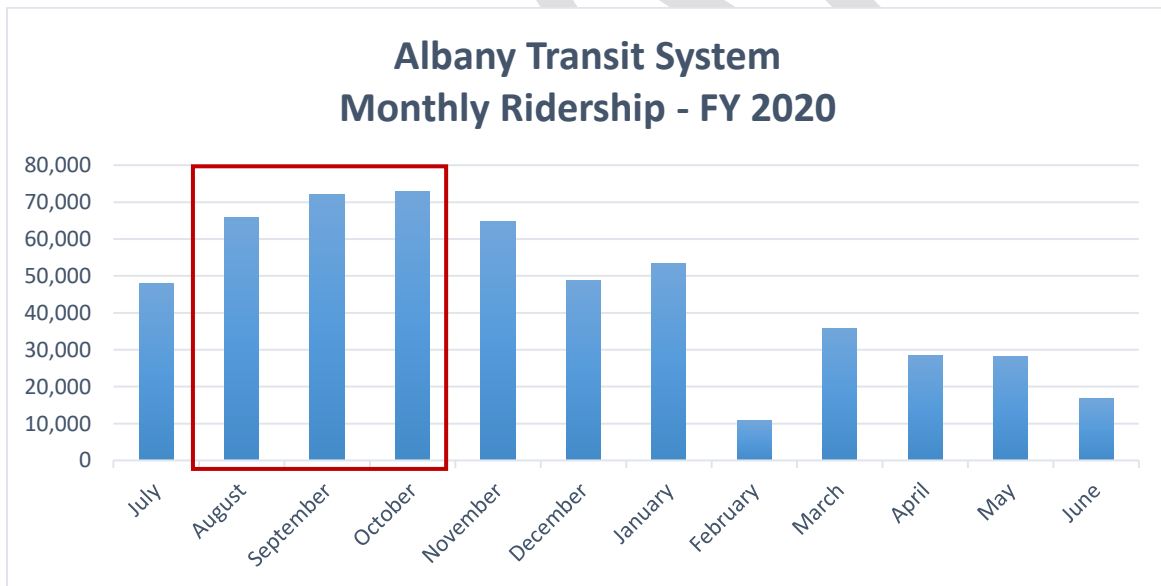


Figure 4-14: Monthly Ridership (2019)

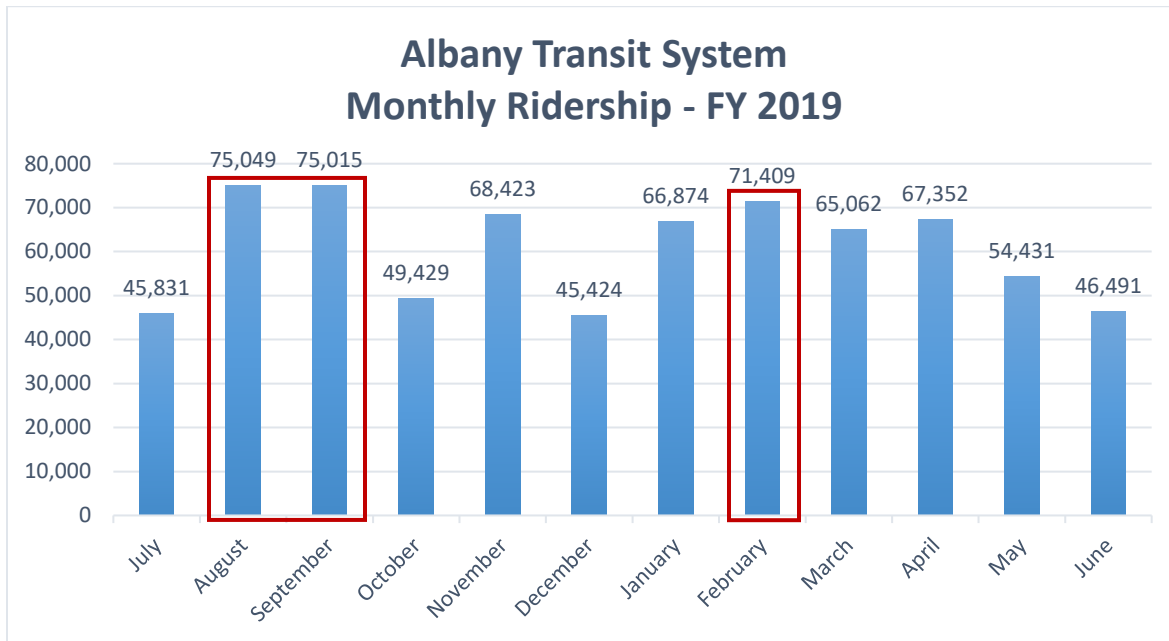
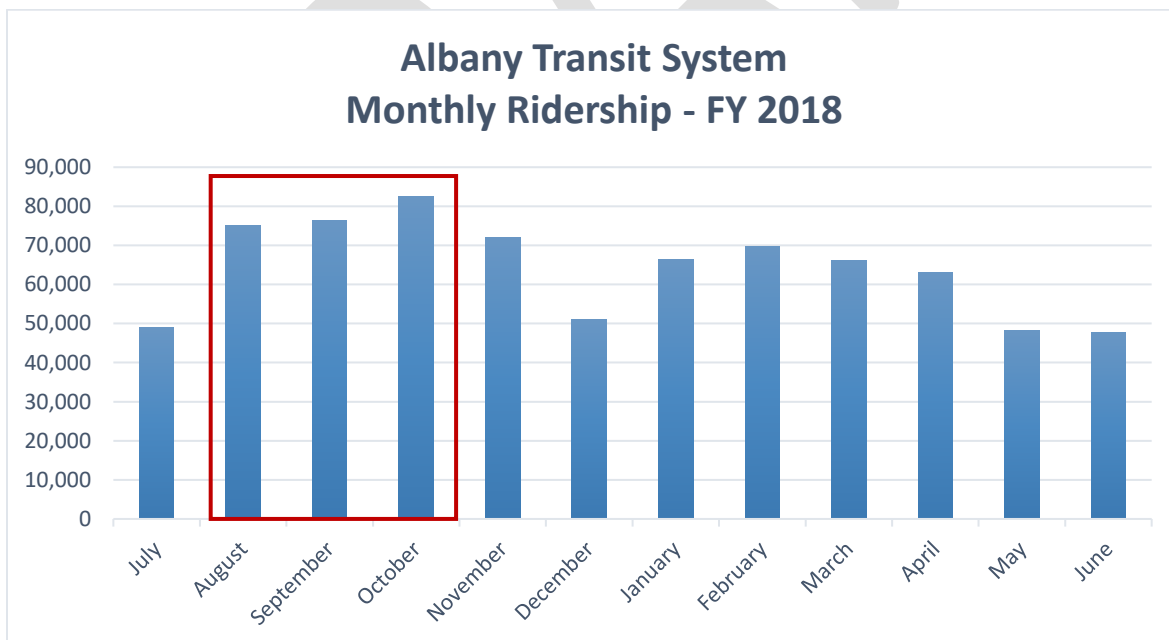


Figure 4-15: Monthly Ridership (2018)



Albany Transit supplied on average approximately 20.08 unlinked passenger trip per hour prior to the COVID-19 pandemic. Most recent statistics indicates the fixed route system is supplying in average 14.61 unlinked passenger trips per hour. The analysis indicates that routes, 2, 4, 8, and 20 are the routes most productive in in time and distance, while routes 1, 6, and 30 are the least productive in the system in time and distance. Tables 4-10 and 4-11 provide a summary of the ATS Fixed Route performance and key ridership statistics.

DRAFT

Table 4-10: Route Productivity

Route	Daily Boardings	Daily Revenue Service Hours	Daily Revenue Service Miles	Passenger per Revenue Service Hour	Passenger per Revenue Service Mile	Time Productivity Rank	Distance Productivity Rank
1 Red	98	9	111	10.89	0.88	11	8
2 Gold	213	5	151	42.60	1.41	2	4
3 Orange	297	13	277	22.85	1.07	6	6
4 Green	387	15	269	25.80	1.44	4	3
5 Blue	186	13	220	14.31	0.85	8	9
6 Gray	86	7	182	12.29	0.47	10	11
7 Brown	287	14	285	20.50	1.01	7	7
8 Purple	179	7	130	25.57	1.38	5	5
9 Silver	167	12	241	13.92	0.69	9	10
1X Red	50	7	136	7.14	0.37	12	12
4X Green	749	6	132	124.83	5.67	1	1
20 RAM Rush East	882	27	503	32.67	1.75	3	2
30 RAM Rush West	93			3.44	0.18	13	13
Ram Rush	975			36.11	0.06	3	13

Data for the RAM Rush Route was combined in the table above to show overall productivity based on the variation in the agency's data tracking for this route. This would move route 9 Silver into 10th place for distance productivity.

Table 4-11: Fixed Route Ridership Statistics (2019 - 2020)

Existing ATS Routes	Total Ridership / Fiscal Year			Percentage Change in Ridership	Passenger per Mile	Passenger per Hour	Revenue per Mile	Revenue per Hour
	FY 2018	FY 2019	FY 2020	% Change (FY18-FY20)	FY 2020	FY 2020	FY 2020	FY 2020
1 Red - Jackson Heights	21,840	18,270	14,109	-35%	1.46	6.49	\$0.88	\$3.93
1X Red - Turner	40,214	42,390	29,443	-27%	3.48	13.93	\$1.69	\$6.76
2 Gold - Albany State	26,891	30,280	27,924	4%	3.30	14.68	\$1.37	\$6.08
3 Orange - Albany Mall	79,886	69,423	51,755	-35%	6.12	13.85	\$2.38	\$5.39
4 Green - East Albany	117,072	110,336	90,080	-23%	4.97	22.09	\$1.83	\$8.14
4X Green - Sylvester Rd.	32,654	26,286	20,698	-37%	2.45	11.29	\$1.16	\$5.37
5 Blue - Albany Mall	57,143	57,186	43,604	-24%	5.55	11.30	\$2.72	\$5.54
6 Gray - Gillionville Rd.	26,553	28,678	20,457	-23%	2.42	9.68	\$1.01	\$4.05
7 Brown - Newton & Oakridge	85,016	70,532	49,056	-42%	5.41	11.40	\$2.36	\$4.97
8 Purple - MLK	45,564	38,468	33,430	-27%	3.46	21.83	\$1.72	\$10.87
9 Silver - Pointe N. Meredyth	57,330	54,746	38,890	-32%	4.60	24.76	\$2.35	\$12.66
20 - Albany State Univ. Ram Rush	88,335	97,824	52,954	-40%	2.92	6.50	\$0.04	\$0.08
30 - Albany State Univ. Ram Rush	76,182	83,435	66,692	-12%	7.89	16.32	\$1.16	\$2.41

The key performance indicators highlighted above shows that ATS is cost effective. This is a key component of the system's financial effectiveness.

ATS FARE REVIEW

Another key component of a transit system's financial effectiveness is its fare structure. While reviewing the existing fare structure for ATS, special attention was paid to both the actual fare prices, as well as the uses and multipliers. Multipliers represent the factor that determines a multi-use fare price. For example, the current monthly pass is priced at \$45, which represents a multiplier of 26 of the full cash fare (\$45/\$1.70).

Likewise, the Senior/Disabled monthly pass represents a multiplier of 40 (\$20.00/\$0.50). Multipliers are a good determinant of how many rides on average a customer will take utilizing the specific fare type. Properly pricing fares will allow ATS to better address demand of the existing customer base and associated future growth. The current fare structure is shown in Table 4-12.

Table 4-12: Current Fare Structure - Fixed Route

Fares	Full Fare	Discount Fare
Cash Fare/Ticket	\$1.70	\$ 0.50 (Children age 5 & under ride free)
Transfers	\$0.00	\$0.00
Weekly Pass	\$12.00	N/A
Monthly Pass	\$45.00	\$20.00

Table 4-13 represents the comparison between the priced multiplier and the estimated actual use for ATS. ATS operates 6 days per week Monday through Saturday and assuming each rider will make a round trip to and from a destination with the purchase of a weekly or monthly pass, the existing fare structure is not accurately priced.

The issue facing most transit agencies is the "double-dipping" related to discounts. Unlimited ride passes provide customers with the convenience of not having to have the exact change and receiving a discount for being a frequent rider. The issue arises when this frequency discount is combined with other discounts such as free transfers or age-based discounts. It is further compounded when transit agencies do not receive the full dollar value of their base fare as is the case for ATS.

Table 4-13 depicts the true level of discounts offered to customers by way of an unlimited ride pass. The "Difference" column represents the difference between the priced multiplier and the actual estimated uses.

Table 4-13: Unlimited Ride Pass Analysis

	Price	Multiplier	Actual Estimated	Difference
Full Fares				
• Monthly Pass	\$45.00	26.47	52	-25.53
• Weekly Pass	\$12.00	7.05	12	-4.95
Discounted Fares				
• Monthly Pass	\$20.00	40	52	-12

Additionally, the fare review conducted as a part of the operational analysis indicates that ATS charges above average fare per ride amongst its peers, however passenger subsidy is comparable at an average of \$0.53. The results of this peer review are displayed in Table 4-14.

Table 4-14: Fixed Route Fare - Peer Review

Transit Agency	Full Fare	Discount Fare	Transfer Fare	Monthly Pass
Augusta Richmond County Transit Department (APT)	\$1.25	\$0.60	0.50	\$50.00
Metra Transit System (METRA)	\$1.30	\$0.65	N/A	\$53.00
City of Huntsville, Alabama - Public Transportation Division	\$1.00/ One way	\$0.50	Free	\$30.00
High Point Transit (Hi Tran)	\$1.25	0.60	Free	\$40.00
City of Alexandria (Atrans)	\$0.75	0.35	N/A	
Albany Transit System (ATS)	\$1.70	\$0.50	Free	\$45.00

ATS should consider the development of a long-term fare policy. Utilizing industry best practices to price fare will provide the Albany Transit with a long-term revenue projection as well as better addressing demand of the existing customer base and future growth. However, before considering any new fare strategy, ATS should review the basic structure of the fare system in addition to how those fare revenues are being utilized. After correcting the structure and pricing fares properly, ATS can adjust other fares as needed.

TRANSFER ANALYSIS

With the exception of the Albany State University/ Ram Rush, Route 1X, and 4X, all fixed routes operate under a pulse system design, where trips begin and end at the multimodal transportation center.

This transfer analysis was conducted to further assess individual route performance beyond ridership and revenue generation. While ridership data provides an overview of daily service performance for each route, it does not capture essential roles performed by other routes to support those higher performance routes. These are referred to as feeder routes and there are a number of them within the system. Routes 4 and 7 connect or “feed” passengers in lower-density neighborhoods to the integration points where they can transfer to other routes, such as 3, 5 and 9. The table below provides an overview of which ATS routes accepts the most transfers.

Table 4-15: Transfer Analysis

Annual Transfer Analysis by Type				
Route	TTP 4 /LA4 Issue Transfer	TTP 9 Transfer Rec'd	Key 6 - Old Transfer	Totals
1	5390	2816	139	8,345.00
2	9350	5375	305	15,030.00
3	10683	15161	16	25,860.00
4	51691	31210	63	82,964.00
5	13525	12176	203	25,904.00
6	7041	5013	165	12,219.00
7	18262	12689	533	31,484.00
8	12264	5662	316	18,242.00
9	16632	6631	349	23,612.00
1X Red (10)	12188	5822	144	18,154.00
Ram Rush East (20)	280	120	0	400.00
Ram Rush West (30)	174	54	2	230.00
4X Green (40)	6518	5211	188	11,917.00

The ATS transfer analysis was based on data retrieved from monthly fare collection route summary reports. The analysis also highlighted that limited transfer opportunities

exist for routes 1, 2 and 6 which impacts the potential for growth as seen in the current ridership trends for these routes.

ON-TIME PERFORMANCE

On-time performance is a leading indicator of service reliability and is most valuable as a measure of customer experience and satisfaction. According to this metric, a bus is "on time" when it arrives at a bus stop within a certain range of its scheduled arrival. However, if the bus arrives outside of that range, it is considered either early or late. There are many factors that can affect the on-time performance of any given bus or route and some of the more common factors that impact on-time performance for fixed route transit service include:

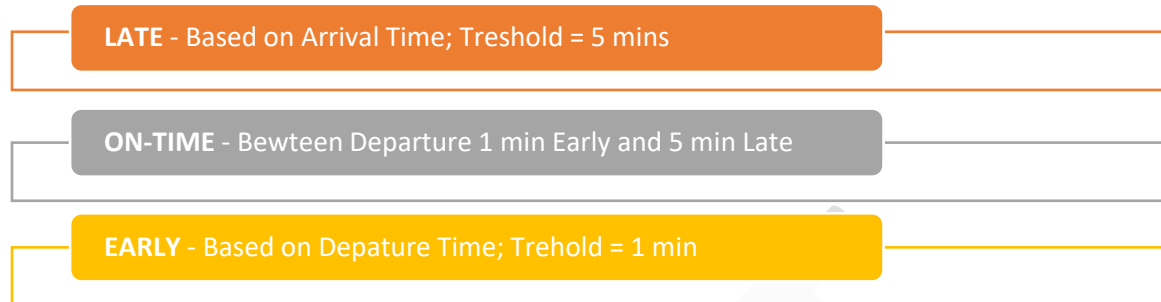
- Weather
- Traffic
- Passenger transit experience
- Vehicle load factors
- Bike rack usage

There is no standard across the country for on time performance so ATS has developed their metric for determining the on-time range. The current ATS on-time performance metric states that based on the scheduled arrival and departure time for each route, a bus is consider late, on-time or early if the bus:

1. Arrives 5 minutes outside the scheduled arrival time.
2. Arrives between 1 minute early and 5 minutes late.
3. Arrives within 1 minute of the scheduled arrival time.

Figure 4-16 shows the existing ATS on-time performance metric.

Figure 4-16: On-Time Performance Metric



Educating passengers on the proper and efficient boarding and alighting practices, including the use of the on-vehicle bike rack, can help to improve the on-time performance of the system. The ATS service reliability is average with system wide on-time performance at approximately 55.56%. When not on-time, services were typically early rather than late along most routes.

One of the major factors impacting on-time performance for Albany Transit in FY 2017- FY 2019 was number of vehicle maintenance/mechanical road calls and accidents the system experiences. Albany Transit's frequent experience of accidents and mechanical breakdowns were likely due to aged revenue fleets in service years 2017- 2019.

Table 4-16: Fixed Route Maintenance Calls and Collisions

Category	Fiscal Year				% Change
	FY 2017	FY 2018	FY 2019	FY 2020	
Mechanical Road Calls	326	305	677	384	-96%
Collision Accidents	6	16	27	6	-350%

The agency has taken corrective action to replace older fleet vehicles with new Compressed Natural Gas (CNG) vehicles, resulting in a 96% decrease in overall mechanical/road call failures.

Other factors affecting on-time performance for ATS is ongoing road construction, traffic at peak operating times of the day that impacts travel speed, as well as travel signals without priority for buses. Travel speeds vary across the system, depending on where in the service area the route is operating. Routes that operate through

Downtown Albany operate at a slower average speed than routes that do not serve the downtown area.

Having poor on-time performance can subsequently result in a diminished ridership base. The table below shows the trend in on-time performance of the Albany Transit System by route over the last three fiscal years.

Table 4-17: On-Time Performance by Route (2018 - 2020)

Route	On-Time Percentages: Trips			% Change
	FY 2018	FY 2019	FY 2020	
1 Red - Robert Harvey	59.45 %	53.95%	55.29%	-7.00%
1X Red - Turner	59.16 %	56.94%	52.55%	-11.17%
2 Gold - Albany State	82.20 %	79.03%	78.75%	-4.20%
3 Orange - Albany Mall	47.15%	43.44%	43.37%	-8.02%
4 Green - East Albany	69.58%	76.75%	78.37%	12.63%
4X Green - Sylvester Rd.	53.73%	59.09%	54.84%	2.07%
5 Blue - Albany Mall	49.52 %	47.88%	48.71%	-1.64%
6 Gray - Gillionville Rd.	44.21 %	47.63%	45.41%	2.71%
7 Brown - Newton & Oakridge	42.53 %	44.31%	46.33%	8.93%
8 Purple - MLK	64.67 %	65.37%	68.49%	5.91%
9 Silver - Pointe N. Meredyth	23.94 %	25.20%	24.62%	2.84%
20 - Albany State Univ. Ram Rush	68.69%	62.64%	58.06%	-15.48%
30 - Albany State Univ. Ram Rush	53.65%	57.64%	47.50%	-11.46%

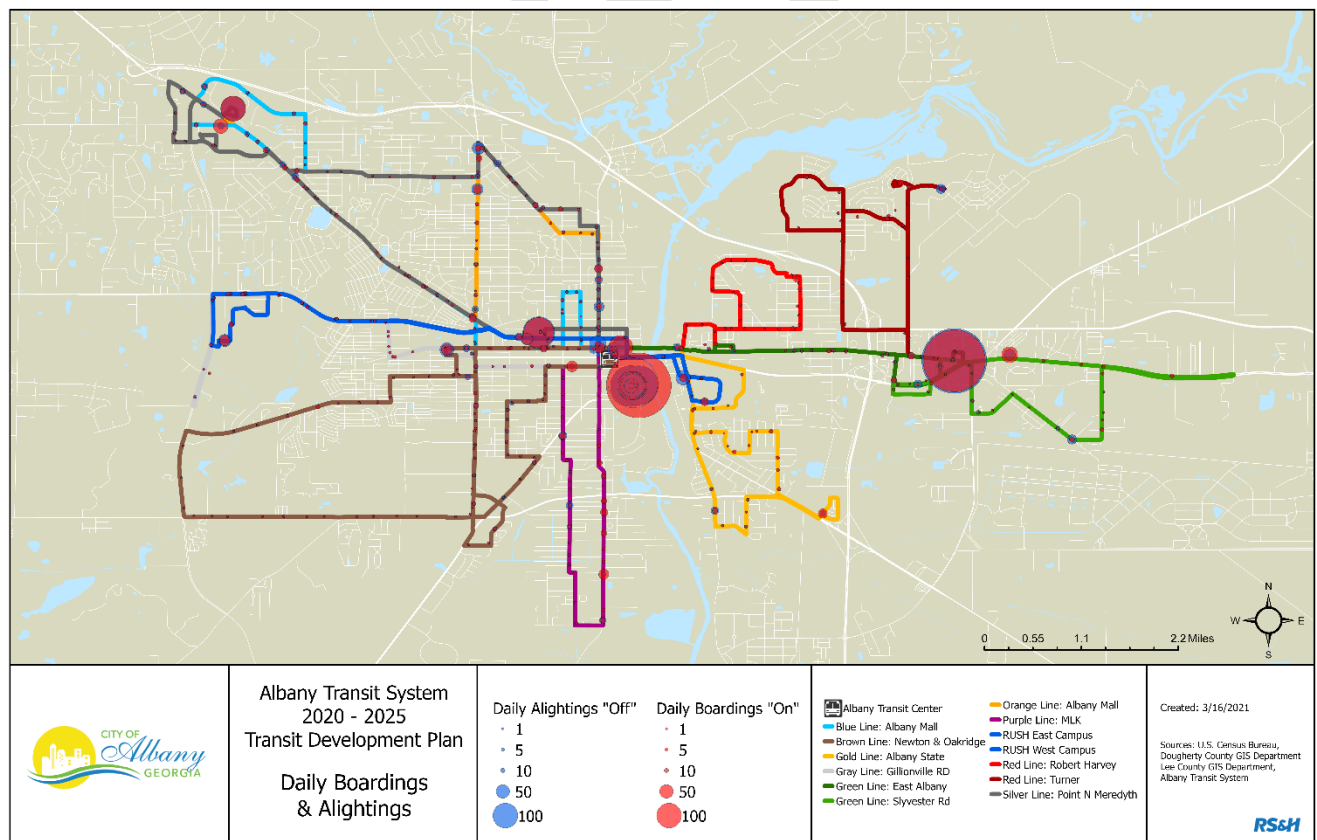
ATS routes 4, 7, and 8 have seen the most improvement in on-time performance since FY 2018, however, these routes are still experiencing on-time performance issues where vehicles operating along these routes are arriving within the threshold of early more often than late. Routes 4X and 6 have somewhat improved in on-time performance when percentage of runs that arrived on the scheduled time are reviewed, however the analysis also indicates that percentage of runs that depart before the scheduled time also outweigh those trips that depart after the scheduled time. Routes 1, 1X, 2, 3, 5, 20 & 30 (Ram Rush) have seen decrease in on-time performance since FY 2018 with significantly more early trips that late trips. Route 9

has seen a 2.84% improvement in on time performance since FY 2018, however, only 24.62 % of the trips along this route arrive on the scheduled time indicating that over 75% of the trips are not on-time.

BUS STOPS PERFORMANCE ANALYSIS

Understanding stop level data along each transit route is an integral part of analyzing the transit system performance prior to making any changes at the route, trip, and stop levels to ensure that the service provided matches the demand. Albany Transit has approximately 400 bus stops within its service area, some of which support more than one route along the network. During the development of the TDP update, a Bus Stop Improvement Program (BSIP) Assessment was conducted to determine the need for improvements regarding safety and accessibility at each stop. During this assessment ridership level data at each stop along each route was gathered and analyzed to better understand the usage by passengers. The findings from the BSIP assessment are shown in the Appendix. The average bus stop weekday boardings and alightings were also assessed and the results are shown in Figure 4-17.

Figure 4-17: Bus Stop Average Weekday Boardings and Alightings



4.1.2 Peer Analysis

Another method of assessment for transit agencies is comparing levels of service to a group of peer agencies. The peer agencies used were from the previous TDP due to their similarities in community size/makeup and transit performance. These agencies include the following systems:

- Augusta-Richmond County Transit, Augusta, Georgia
- Metra Transit System, Columbus, Georgia
- City of Huntsville, Huntsville, Alabama
- High Point Transit, High Point, North Carolina
- City of Alexandria, Alexandria, Louisiana

The following table displays the peer agencies chosen for this evaluation.

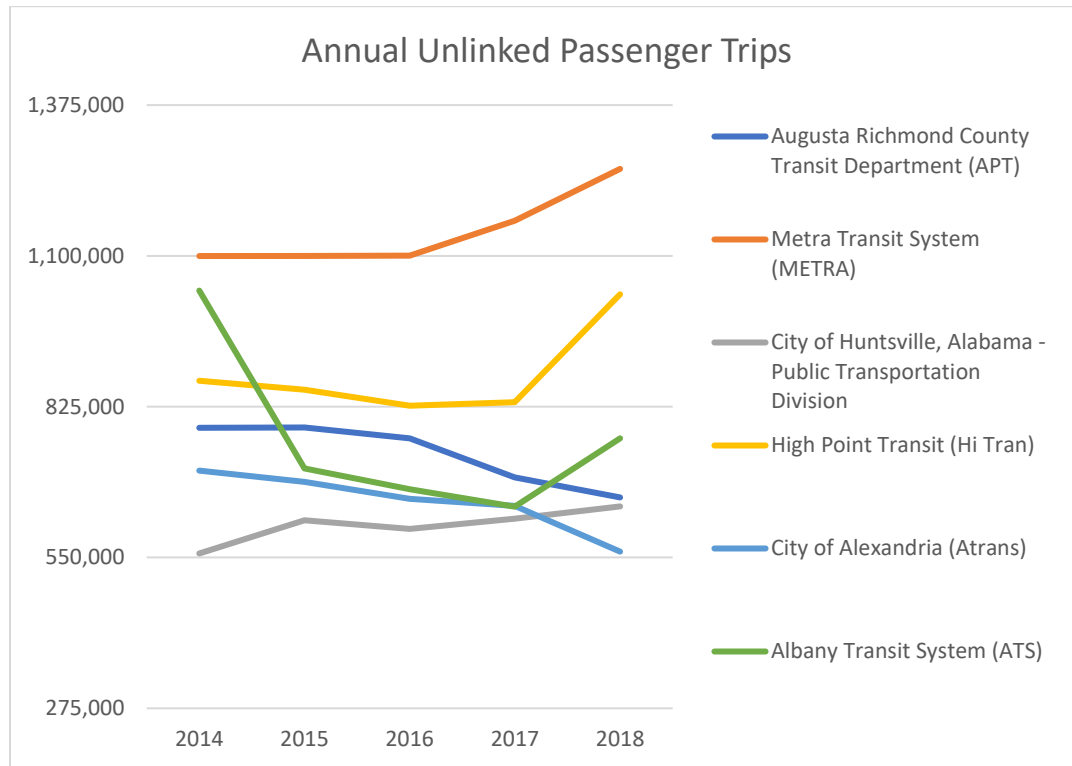
Table 4-18: Peer Agencies

Transit Agency	Service Area (sq miles)	Service Area Population	Service Area Density (pop/sq mile)
Augusta Richmond County Transit Department (APT)	25	201,793 (.6%)	8,072 (.6%)
Metra Transit System (METRA)	132	230,208	1,744
City of Huntsville, Alabama - Public Transportation Division	66	137,693 (8.4%)	2,086.26 (8.4%)
High Point Transit (Hi Tran)	95 (82.7%)	113,125 (8.4%)	1,191
City of Alexandria (Atrans)	28	62,924	2,247.29
Albany Transit System (ATS)	17	75,616	4,448

Source: NTD Transit Agency Profiles, 2018

In the figure below, the comparison of the unlinked passenger trips for the peer agencies is displayed. METRA and Hi Tran are both showing similar numbers of growth to Albany Transit in annual unlinked passenger trips in the past two years.

Figure 4-18: Peer Agencies - Annual Unlinked Passenger Trips



Source: NTD Reports, RY 2014- 2018

Albany Transit is performing in the middle of the peer transit agency group with a low percent change in annual revenue miles and hours. METRA has the highest growth in both of these indicators that is an indication of it being an outlier. The table below lists 2018 Revenue Miles and Hours, and the percent change from 2014 to 2018 for all of the peer transit agencies.

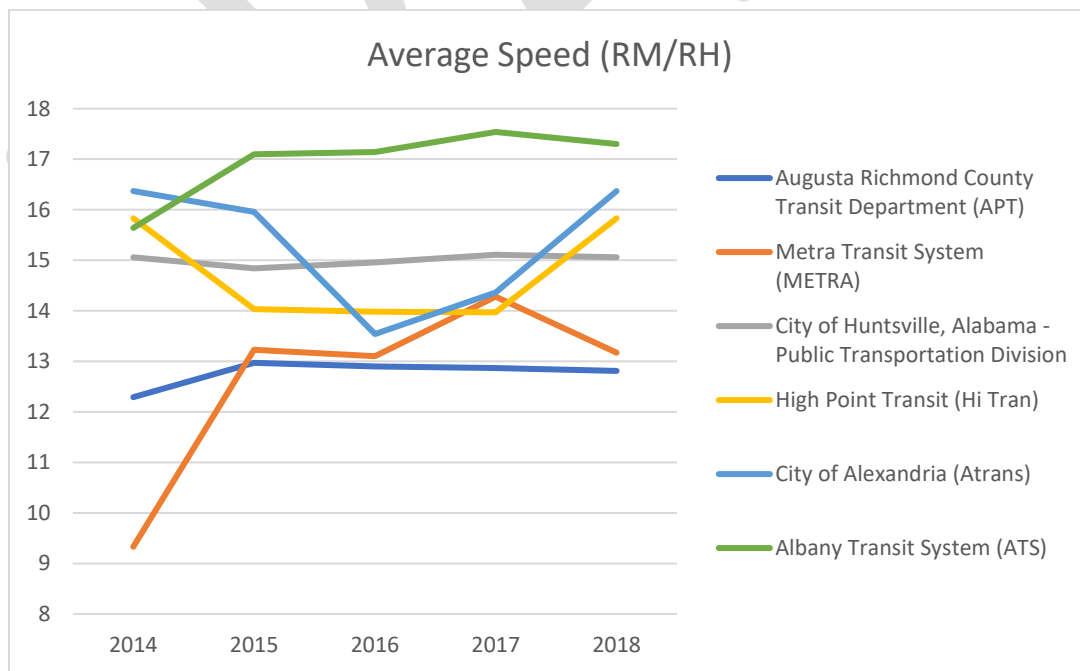
Table 4-19: Peer Agencies - Annual Revenue Miles and Hours

Transit Agency	2018 Revenue Miles	Percent Change 2014-2018	2018 Revenue Hours	Percent Change 2014-2018
Augusta Richmond County Transit Department (APT)	545,666	4.2	42,593	1.3
Metra Transit System (METRA)	1,266,807	41.1	96,207	46.1
City of Huntsville, Alabama - Public Transportation Division	569,392	0.1	37,771	0.2
High Point Transit (Hi Tran)	445,993	-3.6	29,238	-11.5
City of Alexandria (Atrans)	470,525	-15.0	33,825	-1.3
Albany Transit System (ATS)	632,877	10.6	36,591	4.1

Source: NTD Reports, RY 2014- 2018

Albany Transit has historically had a high average speed compared to the peer agencies. Similar to Augusta and Huntsville, Albany Transit's numbers have not shown much change since 2015. Hi Tran and Alexandria have seen sharp increases in average speed in the past two years. The average speed is shown in Figure 4-19.

Figure 4-19 : Peer Agencies - Average Speed



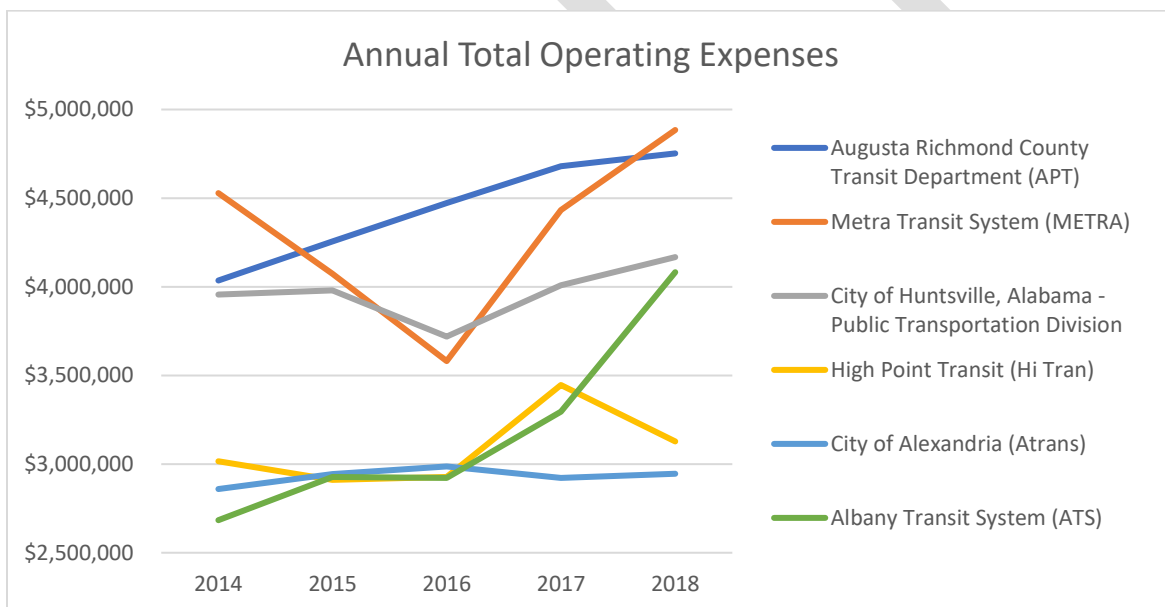
Source: NTD Reports, RY 2014- 2018

Total operating expenses include the following expenditure categories:

- Operations
- Vehicle Maintenance
- Non-Vehicle Maintenance
- Administration

Operations expenses are usually the largest expense for a transit agency and can change drastically depending on increases or decreases in one of the sub-categories. Every transit agency except for Alexandria and Augusts experienced a sharp increase or decline in operating expenses in the past two years. Figure 4-20 shows the comparison of operating expenses among the peer agency group.

Figure 4-20: Peer Agencies - Operating Expenses



Source: NTD Reports, RY 2014- 2018

The following table shows how incremental changes operating expenses can affect the cost per revenue mile and cost per revenue hour performance measure. Because Albany Transit had the greatest increase from 2014 to 2018, the percent change for both performance measures is in the double digits.

Table 4-20 : Peer Agencies - total Operating Expenses Per Revenue Mile and Hour

Annual Total Operating Expenses	2018 Cost Per Revenue Mile	Percent Change 2014-2018	2018 Cost Per Revenue Hour	Percent Change 2014-2018
Augusta Richmond County Transit Department (APT)	\$6.60	7.1%	\$84.60	10.4%
Metra Transit System (METRA)	\$4	-21.2%	\$48.51	-23.8%
City of Huntsville, Alabama - Public Transportation Division	\$3.99	-1.2%	\$60.16	-1.4%
High Point Transit (Hi Tran)	\$5.81	8.8%	\$88.55	18.4%
City of Alexandria (Atrans)	\$5.39	29.6%	\$74.99	4.0%
Albany Transit System (ATS)	\$5.35	32.8%	\$92.54	41.0%

Source: NTD Reports, RY 2014- 2018

The financial indicators for FY 2018 are listed in Table 4-21, along with percentages that represent the change from the 2014 funds amount. These financial indicators vary across the peer transit group, but all transit agencies have seen an increase in funding from local government sources, as well as usage of funds for operations expenses.

Table 4-21: Peer Agencies: Financial Indicators (2018)

Financial Indicator	Augusta Richmond	METRA Transit	Huntsville, Alabama	High Point Transit	Alexandria	Albany Transit
LOCALLY GENERATED FUNDS						
Fare Revenue (000's)	\$640.20 (-18.5%)	\$1,059.50 (-2.2%)	\$851.20 (75.7%)	\$427.70 (-21.9%)	\$433.50 (-2.7%)	\$654.70 (13.4%)
GOVERNMENT SOURCES OF FUNDS						
Local (000's)	\$5,035.20 (100.6)	\$3,817.40 (7.2%)	\$1,708.80 3.6%)	\$747.30 (239.1%)	\$1,678.90 (38.7%)	\$2,305.20 (108.8%)
State (000's)	\$747.50	\$34.24 (-38.4%)	\$0.00	\$457.10 (5.5%)	\$126.05 (-37.1%)	\$462.80 (471.4%)
Federal (000's)	\$8,177.70 (12,359.4%)	\$1,392.70 (45.2%)	\$1,834.70 (-31.8%)	\$1,392.90 (-9.6%)	\$1,610.50 (62.8%)	\$3,750.50 (73.6%)
USE OF FUNDS						
Operations (000's)	\$4,752.50 (17.8%)	\$4,884.50 (7.8%)	\$4,167.50 (5.3%)	\$3,127.20 (3.7%)	\$2,946.40 (3.0%)	\$4,183.90 (53.7%)
Capital (000's)	\$9,848.00 (11,903.5%)	\$1,484.40 (26.6%)	\$227.20 (-79.8%)	\$0.00 (-100%)	\$902.50 4,333.5%)	\$3,168.00 (163.9%)

Source: NTD Reports, RY 2014- 2018

4.2 Demand Response Service Evaluation

Albany Transit System provides an Americans with Disabilities paratransit system that serves people within the jurisdictional limits of the city of Albany. This service operates six days a week with no service on Sunday. Riders must apply to become eligible to use the paratransit services, and that certification lasts two years and re-certifications are not automatic. Indicators and performance measures of the demand response service are listed in the Table 4-22, along with growth percentages between 2014 and 2018.

Table 4-22: Demand Response Performance Trends

		2015	2016	2017	2018	2019	Percent Change
General Indicators	Annual Passenger Miles Traveled (PMT)	84,110	80,138	70,713	74,097	124,722	48.3%
	Annual Vehicle Revenue Miles	95,234	100,151	93,096	94,987	122,323	28.4%
	Annual Unlinked Passenger Trips (UPT)	14,837	14,812	13,007	13,422	19,286	30.0%
	Annual Vehicle Revenue Hours	7,052	8,231	8,301	8,035	8,373	18.7%
Financial Indicators	Operating Expenses	\$417,847	\$415,526	\$527,155	\$696,324	696,649	66.7%
	Fare Revenues	\$39,173	\$33,843	\$26,419	\$31,235	\$42,116	7.5%
	Uses of Capital Funds	\$0	\$0	\$795,375	\$29,853	\$0	n/a
Fleet Data	Vehicles Available for Maximum Service	7	7	7	11	8	14.3%

	Vehicles Operated in Maximum Service	6	6	6	5	5	-16.7%
	Percent Spares	14.3%	14.3%	14.3%	54.6%	37.5%	162.2%
Service Efficiency	Operating Expense per Vehicle Revenue Mile	\$4.39	\$4.15	\$5.66	\$7.33	\$5.70	29.8%
	Operating Expense Per Vehicle Revenue Hour	\$59.25	\$50.48	\$63.50	\$86.66	\$79.59	34.3%
Cost Effectiveness	Operating Expense Per Passenger Mile	\$4.97	\$5.19	\$7.45	\$9.40	\$5.59	12.5%
	Operating Expense Per Unlinked Passenger Trip	\$28.16	\$28.05	\$40.53	\$51.88	\$36.12	28.3%
Service Effectiveness	Unlinked Passenger Trips per Vehicle Revenue Mile	0.2	0.2	0.1	0.1	0.2	0%
	Unlinked Passenger Trips Per Vehicle Revenue Hour	2.1	1.8	1.6	1.7	2.3	9.5%

Source: ATS NTD Reports, RY 2015- 2019

The amount of annual unlinked trips has varied during this period, with a slight decrease of 3.7%. Vehicle revenue hours increased by double digits, with a slight decrease from 2017 to 2018. The demand response service did not receive capital funds from 2014 to 2016, and the percentage change is indicative of that lack of capital

funding. Operating expenses increased significantly between 2014 and 2018, while fare revenues decreased by 24.3%. The fleet size increased with the purchase of new vehicles in 2018, and all of the percentages in the fleet data category thus increased. The demand response service experienced such a significant increase in operating expenses, the service efficiency and cost effectiveness performance measures all increased by 50% at the minimum. Unlinked passenger trips per vehicle revenue mile remained constant, while unlinked passenger trips per vehicle revenue hour decreased by 15% due to a decrease in annual unlinked passenger trips. Table 4–23 displays the average supply and consumption of services.

Table 4-23: Average Service Supplied and Service Consumed

	2015	2016	2017	2018	2019	Percent Change from 2015 - 2019
Average Weekday Service						
Service Supplied (PMT)	326	287	259	271	465	42.6%
Service Consumed (UPT)	52	53	47	49	71	36.5%
Average Saturday Service						
Service Supplied (PMT)	42	126	102	106	157	273.8%
Service Consumed (UPT)	31	24	19	19	27	-12.9%

5.0 MISSION, GOALS AND OBJECTIVES

Mission statements summarize the values and focus for the organization and provides a framework for aligning initiatives and investments to drive current and future success. The mission statement for the Albany Transit System is:

"Our mission is to improve the quality of life for City of Albany residents by providing reliable, safe and economical public transportation."

During the initial stages of the planning process, draft goals and objectives were established. The 2015 Albany TDP goals and objectives served as the foundation, while recent state, federal and local transportation plans were used to inform the 2020 goals. The recently completed DARTS 2045 MTP, GDOT Statewide Transit Plan, and FTA Performance Measures served as key resources to ensure the Albany TDP goals and objectives support the State and Federal transit priorities and the regional transportation program. The draft goals and objectives were included in the public and stakeholder outreach program to ensure feedback was received and incorporated into the final goals and objectives. The following table includes the 2020 Albany Transit Development Plan Goals and Objectives.

Table 5-1: Albany TDP Goals and Objectives

Goals	Objectives
Safety: Provide a safe and sustainable transit network for residents and visitors in the Albany region.	<ol style="list-style-type: none"> 1. Reduce accident/incident rates. 2. Reduce service calls for major failures. 3. Reduce crash rates.
Infrastructure: Ensure mobility and accessibility while stimulating economic growth.	<ol style="list-style-type: none"> 1. Identify underserved areas with high transit propensity and prioritize system and service enhancements to meet the demand. 2. Develop a bus stop improvement program and assess existing conditions to establish a prioritized program of projects. 3. Identify candidate corridors for enhanced transit infrastructure such as Bus Rapid Transit (BRT) or BRT Light.

<p>Efficiency: Maximize efficiency and system productivity to enhance and expand service.</p>	<ol style="list-style-type: none"> 1. Reduce headways and minimize round-trip route lengths for routes that demonstrate propensity and unmet demand. 2. Increase trips per revenue service hour and mile for Fixed Route Bus Service and ADA Paratransit System. 3. Evaluate the Albany Transit Service Area and identify opportunities for expansion.
<p>Innovation: Leverage technology and innovation to improve safety and performance of the transit system.</p>	<ol style="list-style-type: none"> 1. Assess existing technology platforms and identify opportunities for advancement and improvement. 2. Evaluate technological capabilities and utilization of these assets.

6.0 Performance Based Planning

Since the adoption of the 2015 TDP, the Fixing America's Surface Transportation Act (FAST Act) was established as the authorizing legislation funding transportation programs in the US. This new legislation included changes to funding programs including introduction of new programs, modifications, and consolidations to existing programs.

In addition to funding changes, the FAST Act also created new requirements for performance-based planning and the establishment of performance targets with associated reporting. The first key deliverable for Georgia transit agencies was the establishment of a Transit Asset Management Plan (TAM). Albany Transit joined the GDOT group TAM Plan and continues to work with the GDOT Intermodal Division to maintain reporting requirements.

6.1 Transit Asset Management (TAM) Plan

Under the FAST Act, public transit providers are required to develop and adhere to transit asset management targets to maintain a state of good repair. To assist small urban and rural transit agencies, GDOT developed the Georgia Department of Transportation Group Transit Asset Management Plan (TAM Plan) to aid these smaller agencies in the compliance with these federal regulations.

Albany Transit elected to participate in the GDOT group TAM Plan and committed to maintaining compliance with annual updates and coordination with DARTS, the regional Metropolitan Planning Organization, to incorporate performance targets into required planning documents. The asset management targets are shown in Table 6.1. The DARTS Policy Committee agreed to incorporate the FY 2019 performance targets from the TAM Plan into the 2045 Metropolitan Transportation Plan and 2018 - 2021 Transportation Improvement Program documents as presented below in Figure 6.1.

Table 6-1: Transit Asset Management Targets (2019)

Asset Category / Class	Total Number	Useful Life Benchmark / 3.0 TERM Rating*	Number Exceeding ULB /3.0 TERM Rating*	% Exceeding ULB / 3.0 TERM Rating*	FY 2019 Targets
Rolling Stock	775		96	12.4%	
BU- Bus (35'-40')	82	14 years	8	9.8%	15%
BU- Bus (29'-30')	54	12 years	21	38.9%	35%
CU-Cutaway bus	539	7 years	52	8.8%	10%
MV-Minivan	1	8 years	1	100%	50%
SB-School bus	33	15 years	8	24.2%	50%
VN-Van	12	8 years	6	50%	50%
Equipment	55		23	42.6%	
Automobile	18	8 years	11	61.1%	55%
Truck and other Rubber Tire Vehicles	31	10 years	11	35.5%	55%
Equipment > \$50,000	6	14 years	N/A	N/A	N/A
Facilities	83		7	8.4%	
Administration	62	N/A	2	3.2%	25%
Maintenance	11	N/A	5	45.5%	25%
Passenger/Parking Facilities	10	N/A	0	0%	10%

*TERM scale is used for asset condition assessment for facilities. There are 5 ratings (1-5) where 5 is in excellent condition and 1 is in poor condition.


Figure 6-1: Performance Based Transit Planning Agreement (Signed 2019)

Performance-Based Transit Planning Agreement

On May 27, 2016, the final rule for statewide and metropolitan transportation planning was published, based on 2012's Moving Ahead for Progress in the 21st Century (MAP-21) Act and 2015's Fixing America's Transportation System (FAST) Act. As part of this final rule, 23 CFR 450.314 (h) requires the metropolitan planning organizations (MPO), State(s), and the providers of public transportation (referred to here as "providers") to jointly agree upon and develop specific written provisions for cooperatively developing and sharing information related to transportation performance data, the selection of performance targets, the reporting of performance targets, and the reporting of performance to be used in tracking progress toward attainment of critical outcomes for the region of the MPO.

The Georgia Department of Transportation (GDOT), the MPO, and provider(s) hereby agree to share transit asset management data, targets, and plans as follows:

- Providers will share their Transit Asset Management (TAM) Plan, and TAM targets with the MPO and GDOT and report to the National Transit Database.
- Providers will coordinate with the MPO and GDOT during the development of their TAM Plan and targets.
- The MPO will set TAM targets for their planning area in coordination with providers in their planning area and share those targets with providers and GDOT.
- GDOT sponsors a Group TAM Plan for participating Tier 2 transit providers, collects inventory information from these providers, sets targets in coordination with the providers, and shares the TAM Plan with providers and MPOs statewide.
- MPOs will reflect TAM targets in their short range and long range planning documents, and share with GDOT and providers in their planning area.
- GDOT will provide a Statewide Transportation Improvement Program (STIP) Performance Report, reflecting TAM targets set by the GDOT Group Plan, and will share this report with MPOs and transit providers statewide.

 12/2/19
MPO Signature Date
Sharon D. Subadan, City Manager

Print Name and Title
City of Albany

Organization Name

6.2 Public Transit Agency Safety Plan (PTASP)

On July 19, 2018, the Federal Transit Administration developed 49 C.F.R. Part 673 - Public Transportation Agency Safety Plan (PTASP) which requires recipients of FTA Chapter 5307 funds to develop and implement a safety plan based on Safety Management Systems (SMS) principles and methods. On June 23, 2020, the City of Albany adopted, by resolution, the Albany Transit System Safety Plan fulfilling the FTA requirements. The following table is sourced from Albany Transit's Public Transit Agency Safety Plan (PTASP) showing the FY 2021 Safety Performance Measures and Targets endorsed by the transit agency.

Table 6-2: FY 2021 Safety Performance Measures and Targets

Mode of Transit Service	Fatalities (total)	Fatalities (per 100,000 VRM)	Injuries (total)	Injuries (per 100,000 VRM)	Safety Events (total)	Safety Events (per 100,000 VRM)	System Reliability - MDBF (VRM/Failures)
Fixed Route Bus	0	0	0	0	3	0.5	6,506
ADA Paratransit (Demand Response)	0	0	0	0	0	0	5.000

The Albany Transit Public Transit PTASP can be found in the Appendix.

7.0 Service Alternatives

The service alternative scenarios are a compilation of recommended changes to individual routes and segments that puts ATS on a path for operational and financial effectiveness and lays the groundwork for growth. The recommendations are based on meeting the ATS's service goals of safety, efficiency, innovation, and infrastructure.

The ridership numbers, transit propensity update, and survey responses provided essential data highlighting ridership patterns. These patterns include origins, destinations, and transfers, as well as productivity of routes and route segments, demographic data of the customer base, customer attitudes regarding the services provided, and unserved areas where service is desired.

This scenario analysis seeks to address any on time performance issues, duplicative service, inefficient or unproductive service, and unmet service needs.

1. Fix Critical Problems: No new system investments, fixing schedules and on-time performance to increase efficiency within existing routes.
2. Geographical Service Expansions: No improvements in frequency.
3. Improve frequency: No geographical service expansion. Realignment within the existing service boundaries.
4. Hybrid: Fix critical problems, geographical service expansion, improve frequency.
5. BRT: High quality bus service that provides faster, more reliable, and more convenient service.

7.1 Scenario 1 – Fix Critical Problems

This scenario recommendation requires no new system investments, but rather focusing on fixing existing route schedules and on-time performance to increase efficiency within existing routes. The changes recommended for this scenario include:

Operations:

- Relaxing the schedule along routes
- No changes in routes

- Extending layover time
- Pushing run times back
- Cycle times: 40, 60, 70 minutes
- On-time performance software upgrades or changes

Establish/Communicate Policies:

- On-time performance threshold for arrivals and departures communicated to operators and strictly enforced.

Update ATS Literature:

- Adopt consistent terminology for bus routes. ATS is currently using route name, number, and color interchangeable for each route, such as Route 9, Silver, Pointe N. Meredyth. Having a consistent use of the route name will eliminate confusion when communicating system information to passengers.
- Update information posted on agency's website to reflect system map updates for new route alignments and name transfer point changes when they occur, for example Five Point stops is now PicNSave.
- Develop and update individual route maps

This scenario also incorporates the addition of a bus to Route 4 East Albany to resolve current capacity issues on that route. Based on analysis of daily boarding per weekday/ridership data and survey feedback, overcrowding on Route 4 is an issue. Providing additional service along this corridor will address any capacity issues.

Scenario 1 - Advantages

- Better on-time performance
- Increase rider confidence and ridership
- Increase route productivity.
- Staying in compliance with Federal and State capacity weight regulations for transit vehicle.

Revised route timetables for runs departing from the ATS Multimodal Transportation Center (MMTC) are shown below in Table 7-1.

Table 7-1: Revised Route Timetables

Run	3 Orange	5 Blue	7 Brown	1 Red	2 Gold	6 Gray	8 Purple	9 Silver
1	5:00 AM	5:40 AM	5:10 AM	5:10 AM	5:40 AM	5:40 AM	5:10 AM	5:20 AM
2	6:10 AM	6:50 AM	6:20 AM	6:20 AM	6:50 AM	6:50 AM	6:20 AM	6:30 AM
3	7:20 AM	8:00 AM	7:30 AM	7:30 AM	8:00 AM	8:00 AM	7:30 AM	7:40 AM
4	8:30 AM	9:10 AM	8:40 AM	8:40 AM	9:10 AM	9:10 AM	8:40 AM	8:50 AM
5	9:40 AM	10:20 AM	9:50 AM	9:50 AM	10:20 AM	10:20 AM	9:50 AM	10:00 AM
6	11:50 AM	11:30 AM	11:00 AM	11:00 AM	11:30 PM	11:30 PM	11:00 AM	11:10 AM
7	1:00 PM	12:40 PM	12:10 PM	12:10 PM	12:40 PM	12:40 PM	12:10 PM	12:20 PM
8	2:10 PM	1:50 PM	1:20 PM	1:20 PM	1:50 PM	1:50 PM	1:20 PM	1:30 PM
9	3:20 PM	3:00 PM	2:30 PM	2:30 PM	3:00 PM	3:00 PM	2:30 PM	2:40 PM
10	4:30PM	4:10 PM	3:40 PM	3:40 PM	4:10 PM	4:10 PM	3:40 PM	3:50 PM
11	5:40 PM	5:20 PM	4:50 PM	4:50 PM	5:20 PM	5:20 PM	4:50 PM	5:00 PM
12	6:50 PM	6:30 PM	6:00 PM	6:00 PM	6:30 PM	6:30 PM	6:00 PM	6:10 PM
13	8:00 PM	7:40 PM	7:10 PM	7:10 PM			7:10 PM	7:20 PM
14							8:20 PM	8:30 PM

Table 7-2: Example Route: Route 4 Green, 4X Green, and 1X Red Timetables

Run	4 Green	4X Green	1X Red
1	5:00 AM	5:30 AM	5:20 AM
2	5:40 AM	6:40 AM	6:30 AM
3	6:20 AM	7:50 AM	7:40 AM
4	7:00 AM	9:00 AM	8:50 AM
5	7:40 AM	10:10 AM	10:00 AM
6	8:20 AM	11:20 AM	11:10 AM
7	9:00 AM	12:30 PM	12:20 PM
8	9:40 AM	1:40 PM	1:30 PM
9	10:20 AM	2:50 PM	2:40 PM
10	11:00 AM	4:00 PM	3:50 PM
11	11:40 AM	5:10 PM	5:00 PM
12	12:20 PM	6:20 PM	6:10 PM
13	1:00 PM	7:30 PM	7:20 PM
14	1:40 PM		
15	2:20 PM		
16	3:00 PM		

17	3:40 PM		
18	4:20 PM		
19	5:00 PM		
20	5:40 PM		
21	6:20 PM		
22	7:00 PM		
23	7:40 PM		

7.2 Scenario 2 - Improve Frequency

This scenario recommends no geographical service expansion, but rather reroutes and realigns routes within existing boundaries and adds vehicles to improve frequency. Based on the data collected in the existing service analysis, Albany Transit service levels do not match demand. The current route frequencies resulted from past ridership demands and service expansions implemented since 2015 as part of the TDP. Overall, ridership demand has changed significantly since the last TDP update in the areas of peak and non-peak service times. Addressing the misalignment in service levels will enable savings or the reallocation of funds and vehicles to invest in new services in the future.

Additionally, all ATS routes were reviewed in their entirety, which enabled the identification of route segments for evaluation for productivity independent of the remaining routes. This scenario recommendation addresses specific route segments and provides recommendations for segment rerouting and simplification.

- Reroute Route 9 to increase productivity in time and distance providing a more direct service to the Albany Mall via Palmyra/Whispering Pine Road and not along Dawson Rd. on the inbound
- Increase frequencies from 60 to 30 minutes.
 - Adding one bus each to Routes 3 Orange, 4 Green and 7 Brown

- Based on survey responses from public workshop, ridership, transfer analysis, reliability (on-time performance)
- Extend service span by ending 1 hour later
- Increase operating speed through traffic signal priority for buses

Scenario 2 Advantages

- Reduce wait time for riders
- Improve ability to transfer between routes
- Increase trip reliability
- Improve experience for transit riders

With more reliable and frequent transit service, coupled with a positive experience, transit ridership will increase.

As a part of the system operational analysis for the proposed reroute of Route 9, stop level data generated from the agency's Automated Passenger Counters (APCs) was incorporated to avoid the elimination of service at high performing bus stops along the existing and proposed network.

The APC systems are electronic machines near the doors of a transit vehicle that count the number of passengers that enter and exit at every transit stop. Figure 7-1 shows the proposed reroute for Route 9 Silver. Figure 7-2 shows the reroute of Route 9 Silver with the stop performance data. These boarding and alighting data indicate that the proposed changes to Route 9 will not eliminate service from any existing high performing stops.

Figure 7-1: Route 9 Siler - Proposed Reroute

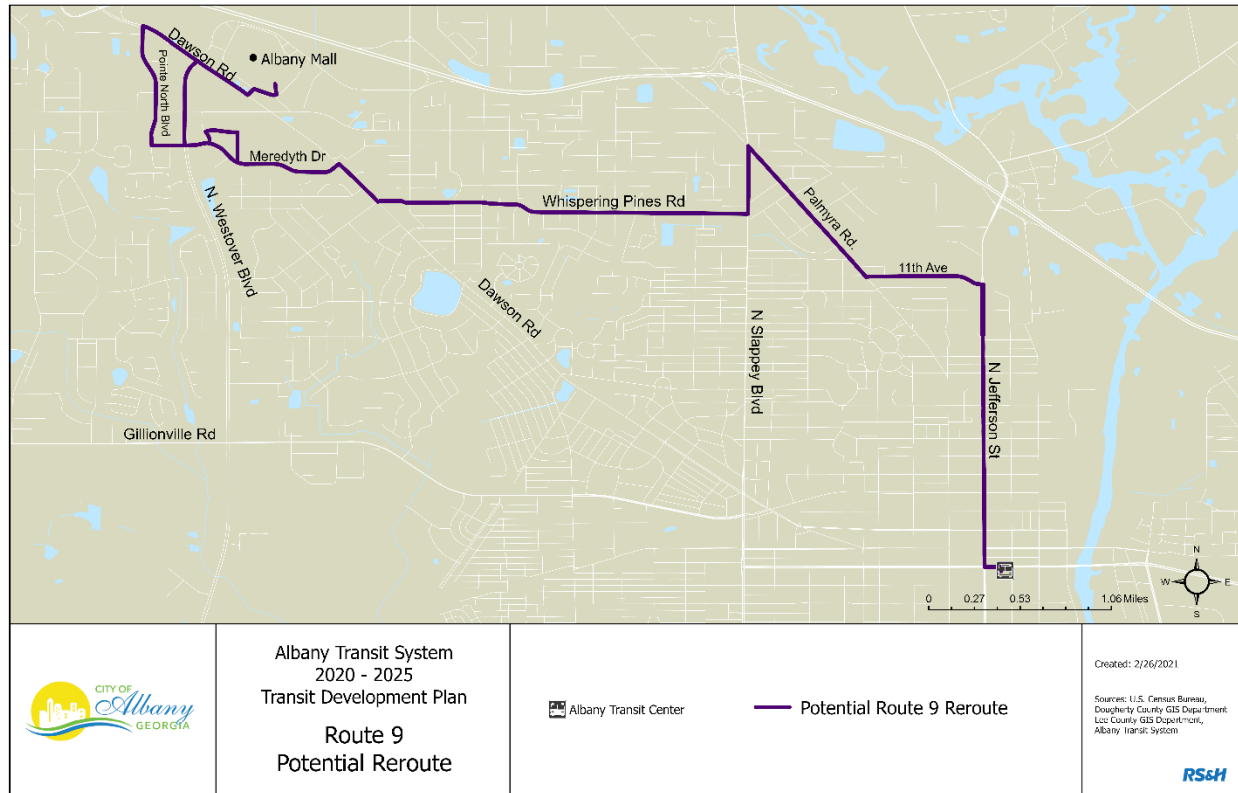
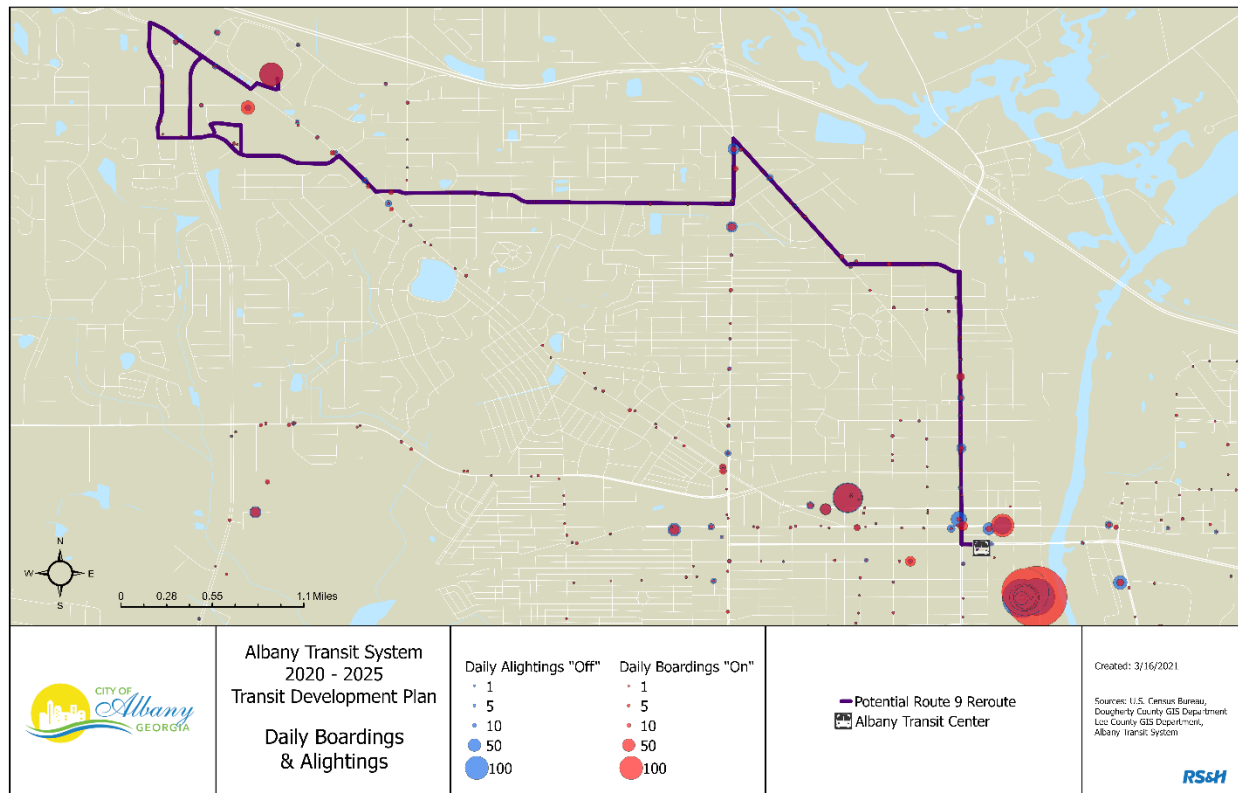


Figure 7-2: Route 9 Silver - Proposed Reroute with Stop Performance Data



7.3 Scenario 3 - Geographical Service Expansions

This scenario recommends geographical service expansion with no improvements in frequency. The ATS updated transit propensity conducted during the development of this study was layered with existing and future land use data for the City to visualize where current and existing demand for transit exists and where the potential for service expansion to meet unmet transit demand exists. This scenario also incorporates feedback gathered from current transit riders during the public workshops conducted through a combination of virtual workshops and surveys.

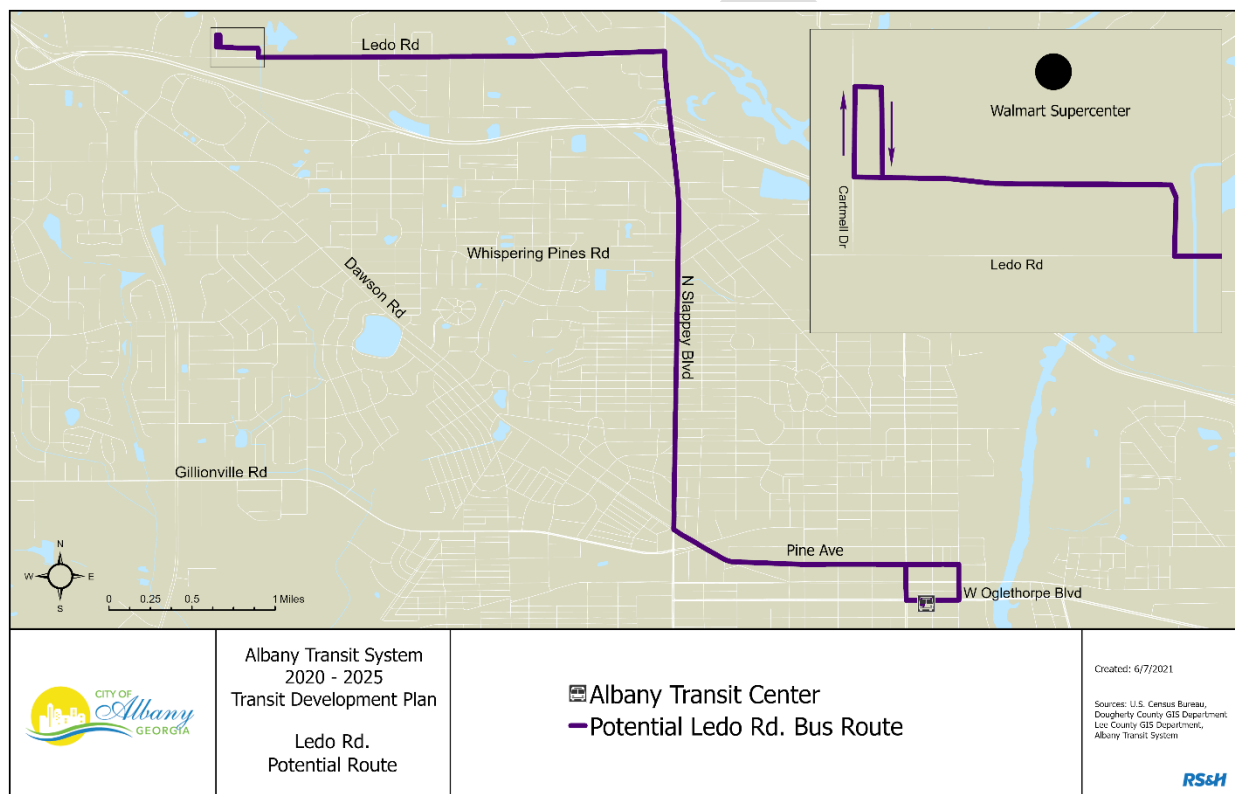
Recommendations for service expansion include:

- Route 11 Ledo Rd. via N. Slappey Blvd
- Route 12 Eastside MillerCoors-Walmart Circulator

- North Slappey Blvd – Newton Rd – with potential for service expansion to the airport

Increasing the service area to include these locations will provide service to new and ongoing developments along Ledo Rd and dense blocks along old Cordele Road and Newton Road as well as foster Transit Oriented Development (TOD). However, increasing service also comes with increased operating cost and capital for the agency. Figure 7-3 displays the proposed route alignment for Ledo Road service.

Figure 7-3: Proposed Route Alignment for Service to Ledo Road



Coverage statistics for the proposed route include:

- Trip Length: 14.15 miles roundtrip
- Run Time: 41.7 mins
- Stops: 8 inbound, 8 outbound
- Headway: 30 mins
- Service Time: 5:00am – 7:40pm

- Vehicle Revenue: \$401.8k /year
- Population Served: 4,600

The transit propensity for the proposed route serving Ledo Road is shown in Figure 7-4.

Figure 7-4: Proposed Service to Ledo Road with Transit Propensity

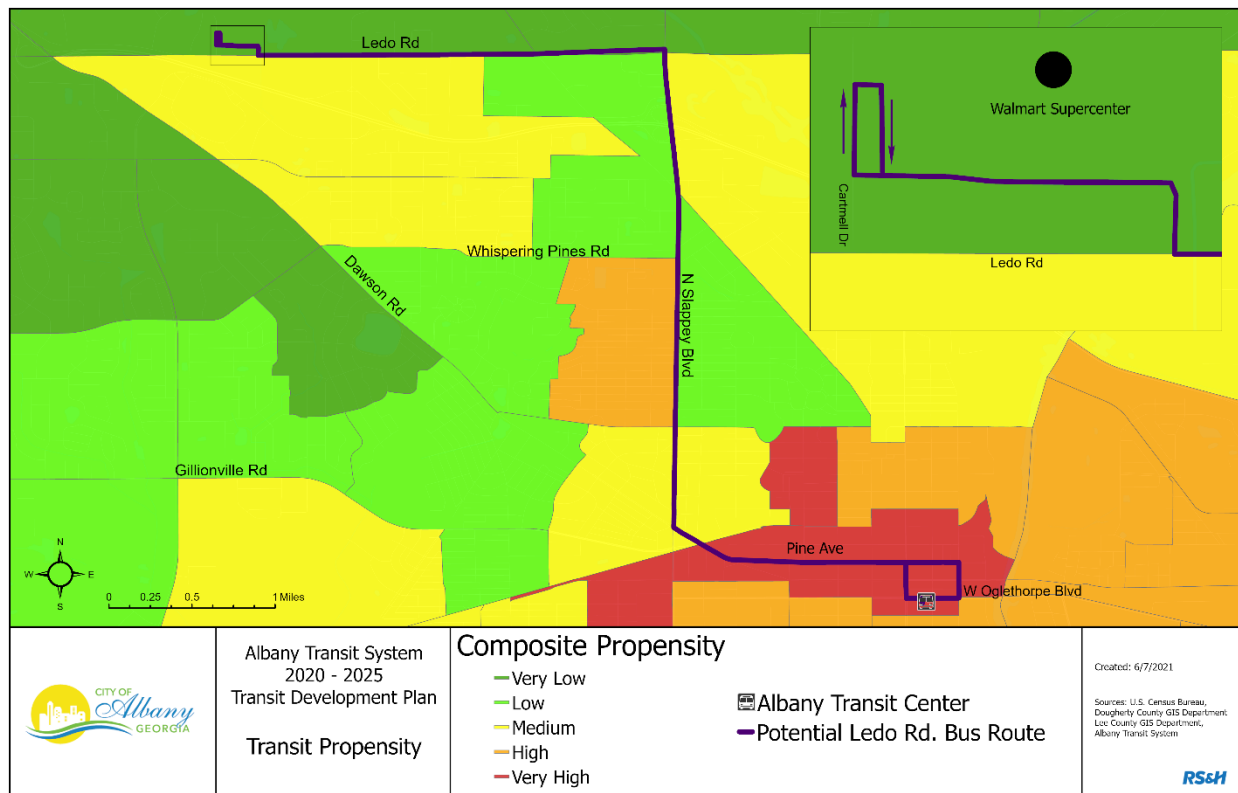


Figure 7-5 displays the existing land use along the proposed route serving Ledo Road and Figure 7-6 displays the future land use. These maps show the potential for TOD within the new service coverage.

Figure 7-5: Proposed Service to Ledo Road - Existing Land Use

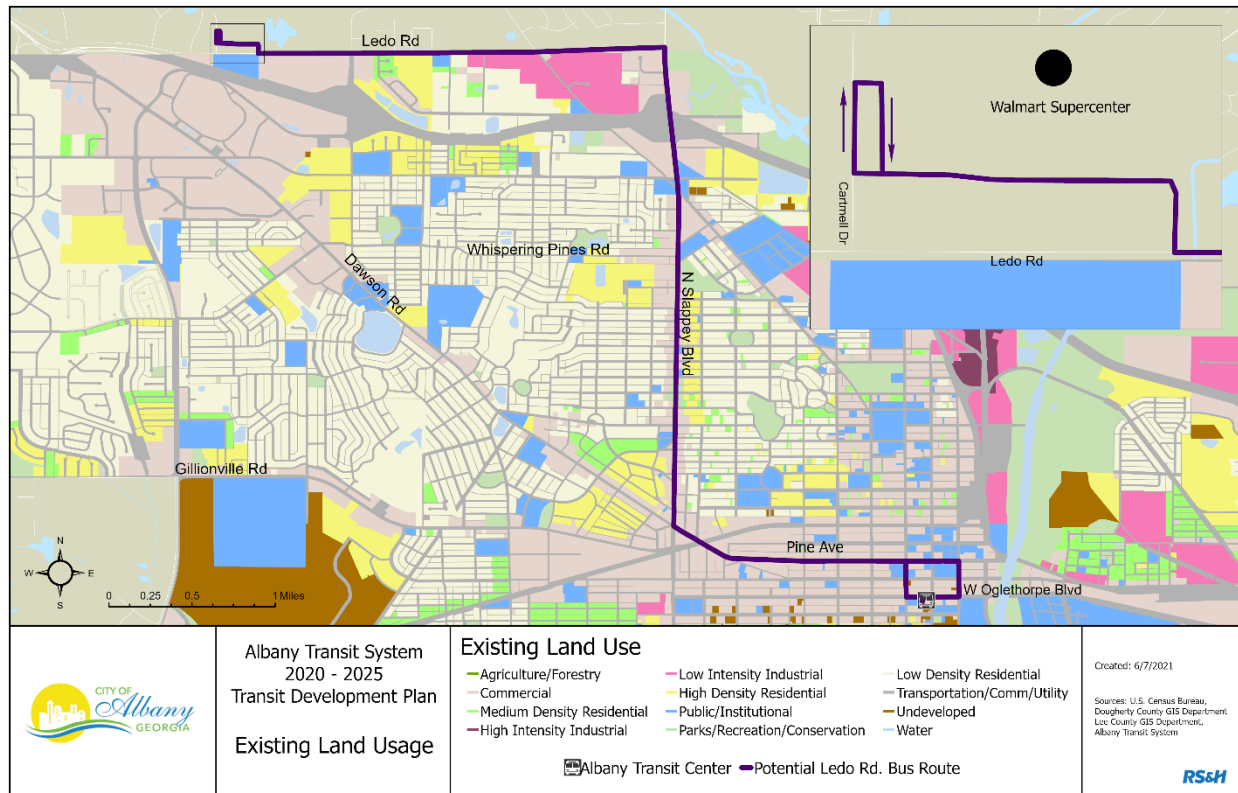


Figure 7-6: Proposed Service to Ledo Road - Future Land Use

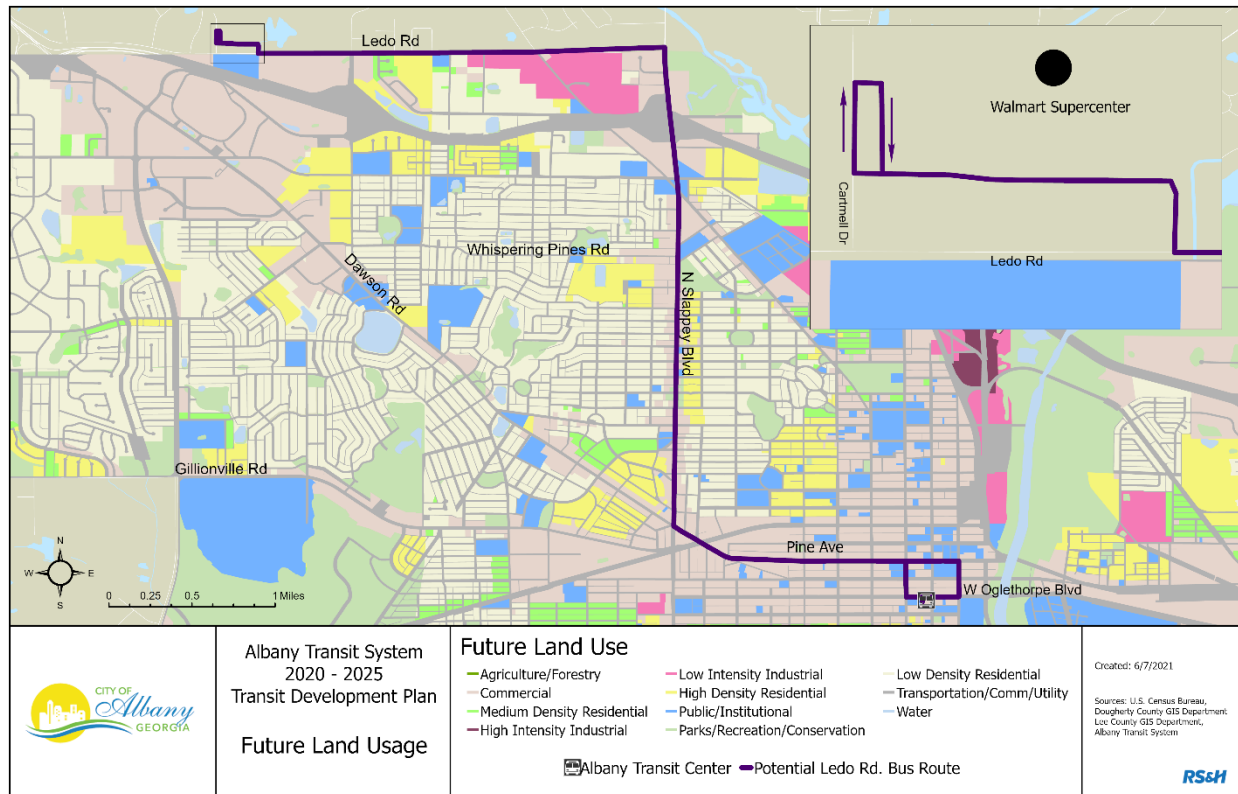
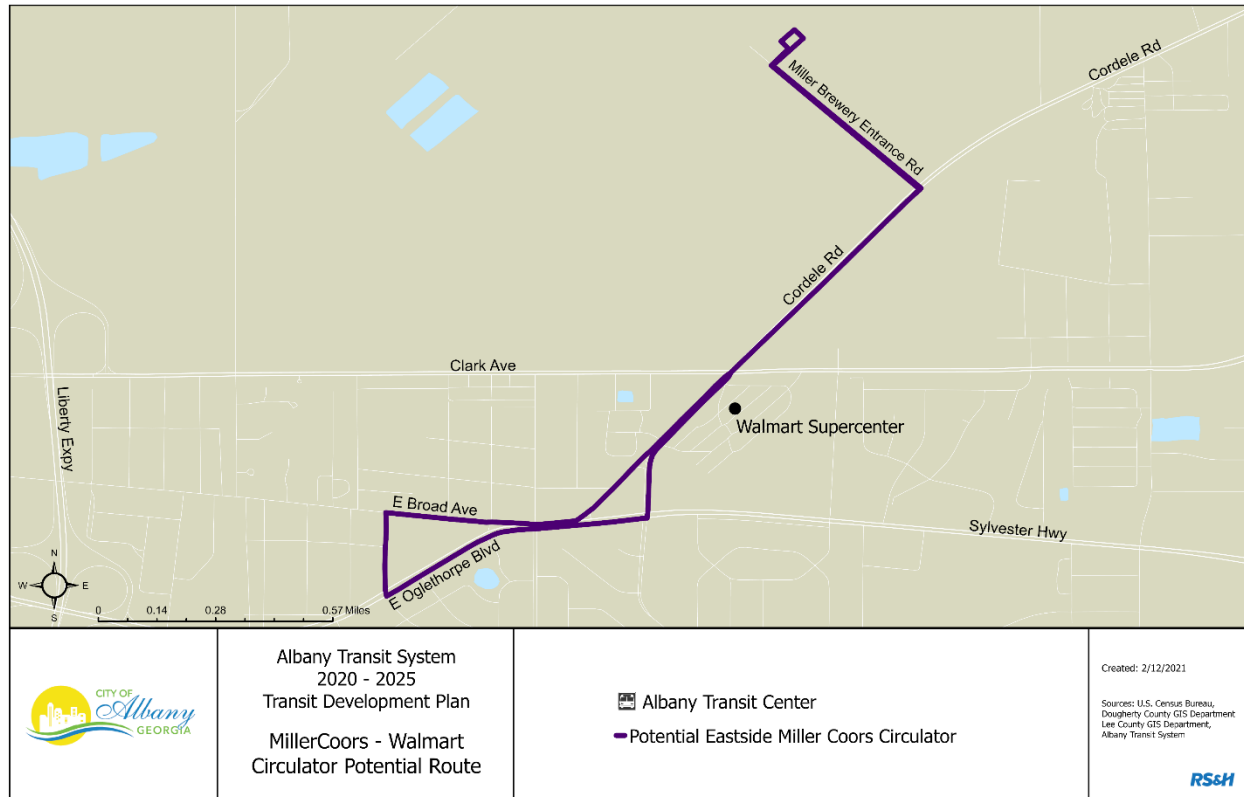


Figure 7-7 displays the proposed service to Eastside MillerCoors - Walmart Circulator.

Figure 7-7: Proposed Service to Eastside MillerCoors - Walmart Circulator



Coverage statistics for the proposed route include:

- Trip Length: 4.27 miles roundtrip
- Run Time: 13.0 mins
- Stops: 3
- Headway: 15 mins
- Vehicle Revenue: \$348.8k /year
- Population Served: 507

The proposed service is shown in Figure 7-8 with transit propensity.

Figure 7-8: Proposed Service to MillerCoors-Walmart Circulator with Transit Propensity

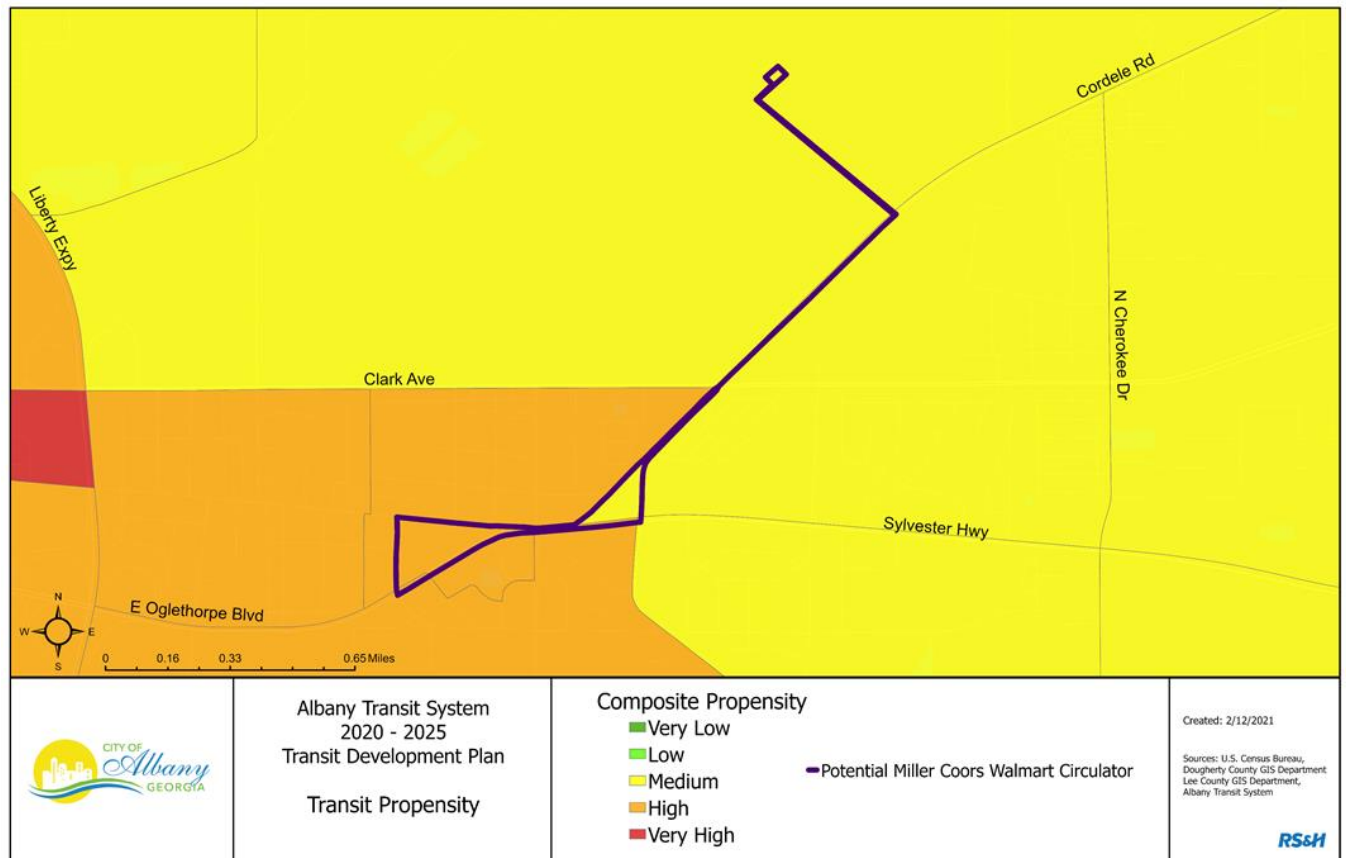


Figure 7-9 displays the existing land use along the proposed route serving MillerCoors and Walmart and Figure 7-10 displays the future land use. These maps show the potential for TOD within the new service coverage.

Figure 7-9: Proposed Service to MillerCoors-Walmart Circulator - Existing Land Use

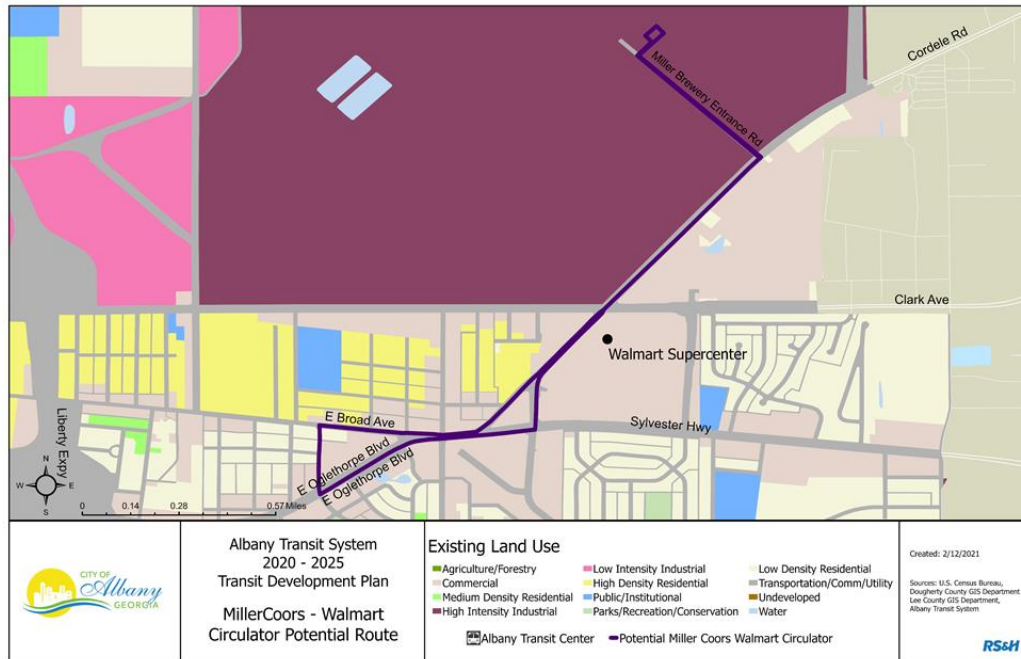


Figure 7-10: Proposed Service to MillerCoors-Walmart Circulator - Future Land Use

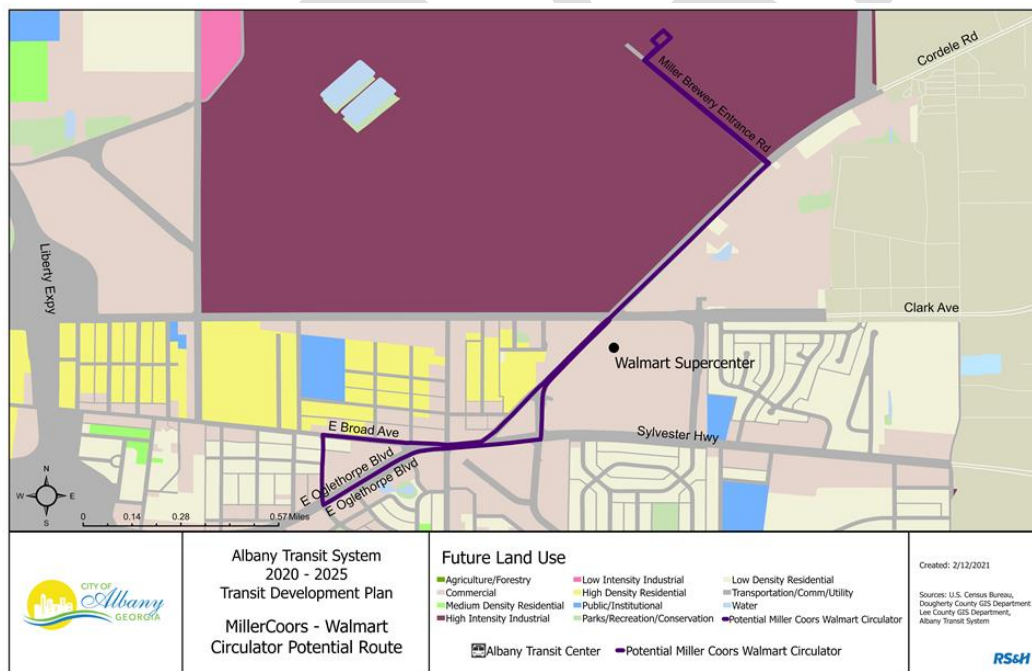


Figure 7-11 displays the proposed service along North Slappey Blvd to Newton Rd. with the potential for expansion to the airport. ATS has looked at the potential service expansion along these corridors in past planning efforts with this proposed alignment also servicing as a relief to the existing Route 7 Brown.

Figure 7-11: Proposed Service to along North Slappey Blvd. - Newton Rd.

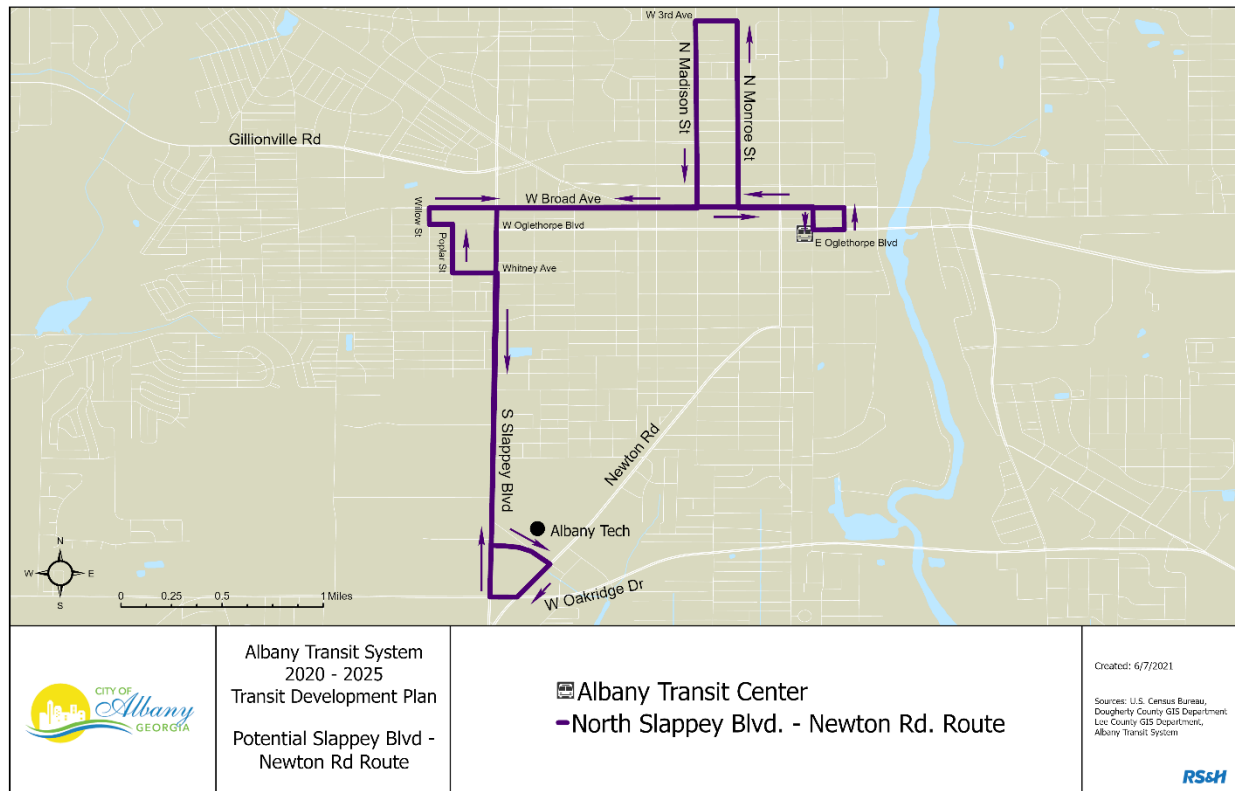


Figure 7-12: Proposed Service to along North Slappey Blvd. - Newton Rd. with Transit Propensity

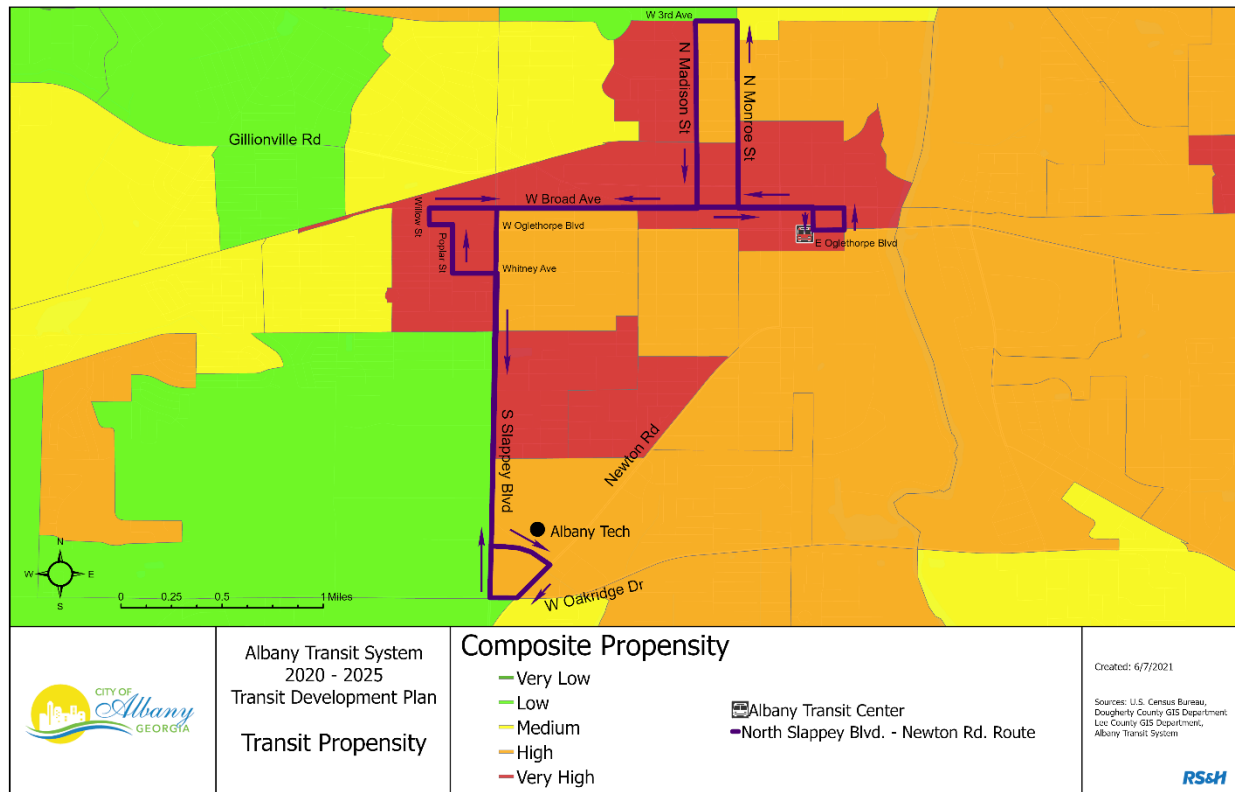


Figure 7-13 displays the existing land use along the proposed route serving North Slappey Blvd to Newton Rd and Figure 7-14 displays the future land use. These maps show the potential for TOD within the new service coverage.

Figure 7-13: Proposed Service to along North Slappey Blvd. - Newton Rd. Existing Land Use

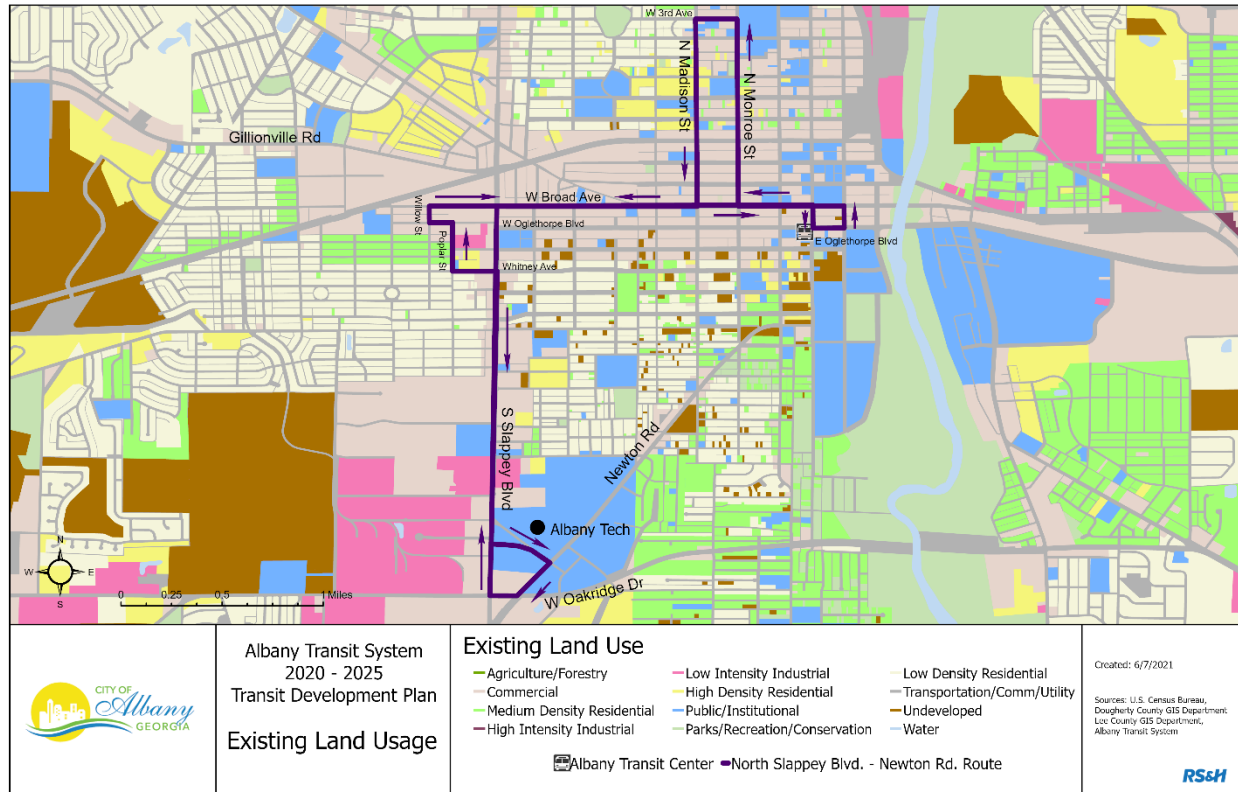
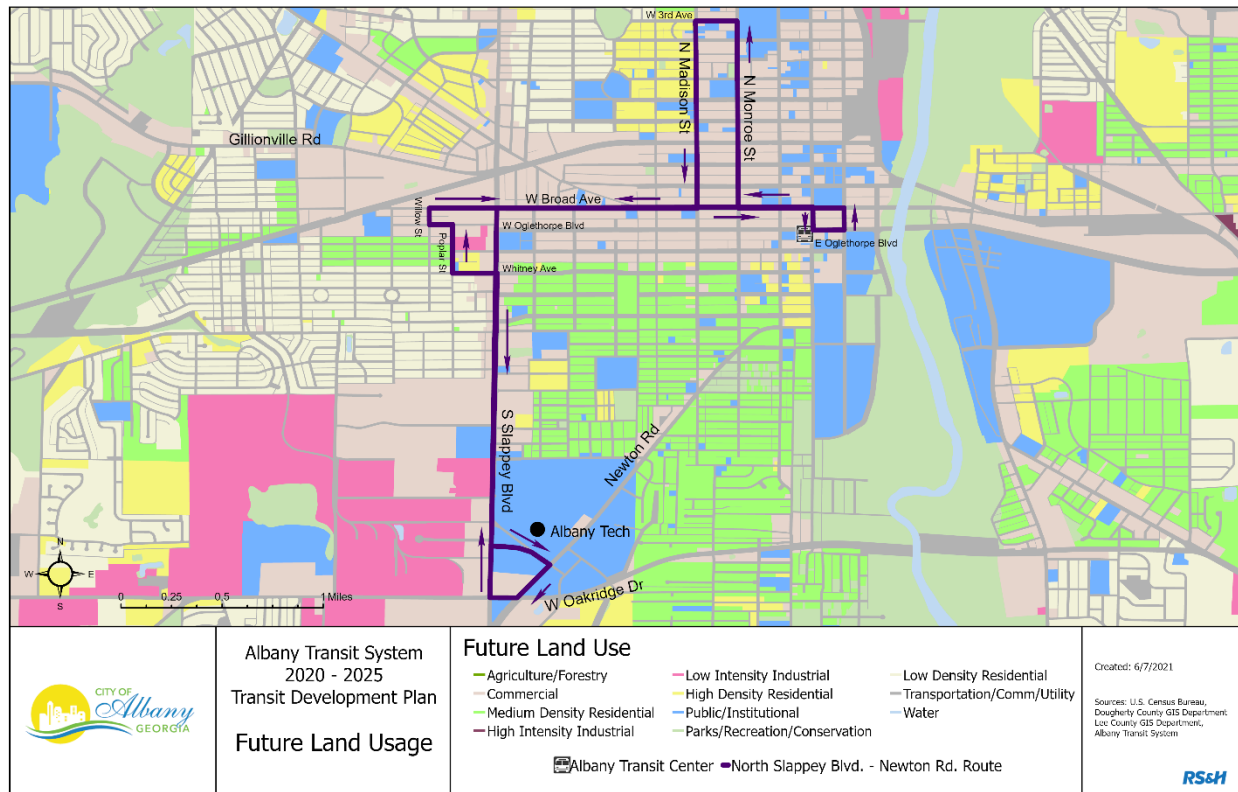


Figure 7-14: Proposed Service to along North Slappey Blvd. - Newton Rd. Future Land Use



Additionally, prioritizing sidewalk investment near transit supports a more accessible transportation system. It is recommended that ATS work closely with other intergovernmental departments to ensure sidewalk expansions are happening simultaneously with proposed service expansions. The BSIP document completed as an element of the TDP update will be useful in identifying areas where sidewalk additions are most needed in order to improve pedestrian access to transit. Sidewalks have the most significant impact when they connect transit with existing amenities and in areas with higher density population and/or employment.

7.4 Scenario 4 - Hybrid

This scenario is a combination of scenarios 1, 2 and 3. This recommendation includes addressing all critical problems, improving frequency, and geographical service expansion.

Advantages

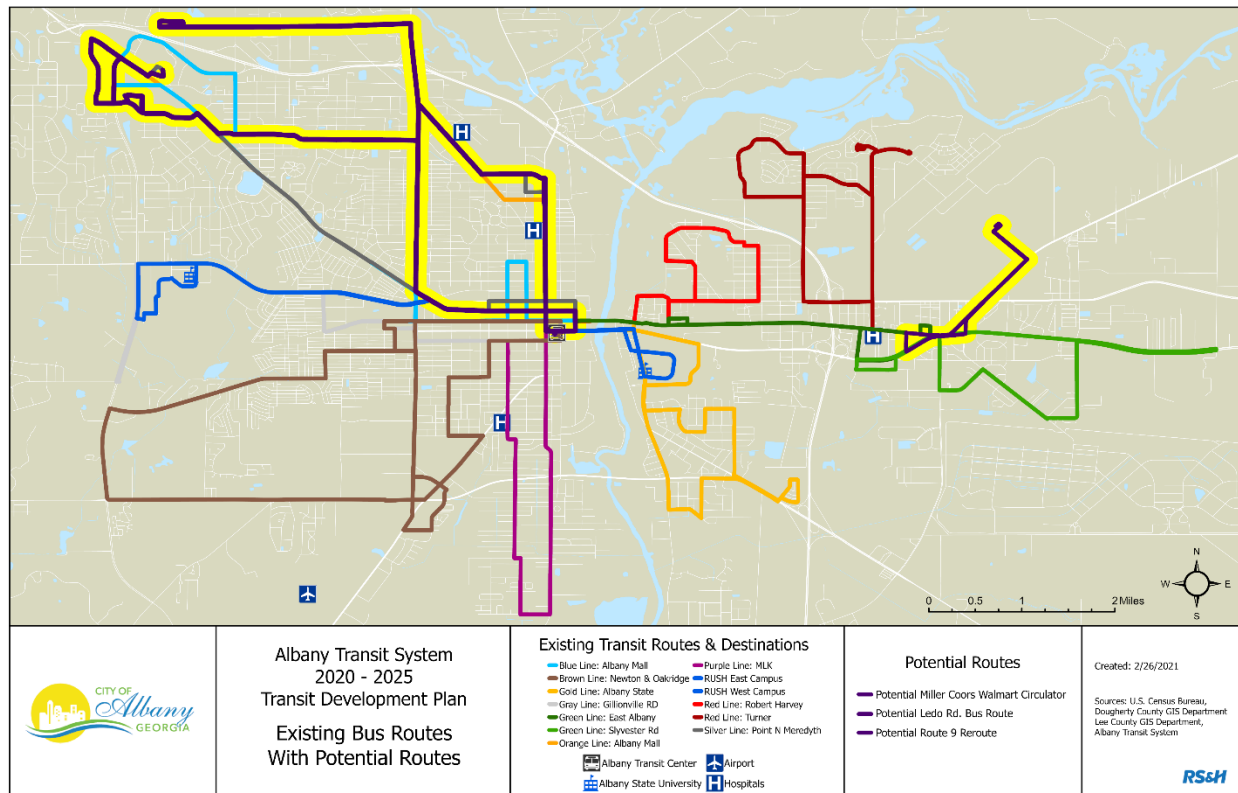
- Improved on-time performance
- Simplified, more direct routes
- Service available to development along Ledo Road and old Cordele Road
- Shorter wait times
- Trips possible later in the day
- Shorter routes

Disadvantage

- Increased operating and capital cost
- Increased walking distance (or eliminated access) for some riders
- Time required for riders to adjust to new changes

Figure 7-15 shows the new transit service area coverage with proposed recommendation.

Figure 7-15: Proposed Hybrid Scenario Service Modifications



7.5 Scenario 5 – Bus Rapid Transit (BRT)

Albany Transit is focused on providing fast, reliable, and convenient transportation for all users. As a result, Albany Transit conducted a thorough Bus Rapid Transit (BRT) screening during the development of the TDP update. BRT is a term applied to a variety of bus service designs that provide faster, more efficient, and more reliable service than an ordinary bus service. This improvement is often achieved by making improvements to existing street and traffic signal infrastructure. BRT routes can function and are developed in a similar fashion to light/commuter rail opportunities, providing connections between major nodes, have high ridership, and promote development nearby the transit stations.

Generally, BRT is related to the development of enhanced bus stops with larger (typically articulated) buses with limited stop locations at designated areas of growth or existing development. The BRT routes are generally much more restrictive in their routing with a heavy emphasis on more linear routes and a reduction in potential loops.

These BRT lines are also typically relegated to major roadways which allow for the ease of movement of large buses and offer the potential for enhanced stop locations. These stop or station locations are often chosen due to features identifying them as transit-oriented developments or areas that have been identified for TOD. The City of Albany has expressed an interest in the development of BRT and the future development of TOD areas to promote growth within the area.

7.5.1 Bus Rapid Transit Elements and Components

Bus Rapid Transit is typically associated with substantial capital cost and supporting infrastructure. Though BRT can vary substantially, it is typically used for substantial populations and ridership numbers similar to what would be moved through passenger rail systems. Elements of a typical BRT system are outlined below:

- To get riders to their destinations quickly and on schedule
 - Bus-only lanes
 - Transit Signal Priority
 - Limited stops
- To make it easy to board and keep the bus moving
 - Fares paid at the station before boarding
 - Wide doors and/or multiple doors
 - Level boarding between bus and curb
- To improve the customer and pedestrian experience
 - Stations with enhanced shelters and amenities
 - Real-time bus arrival signs
 - Streetscaping

HOW DOES BRT DIFFER FROM EXPRESS BUS SERVICE?

Though they can function similarly, BRT is intentionally different than a typical express bus service. Typically, express bus services will cover similar distances and potentially at similar speeds; however, express buses will not often require the same capital

investment. The following features are typically associated with BRT systems that may be different than express routes.

- Prominent stations with more amenities
- Large distances between stations ($1/3^{\text{rd}}$ of a mile) when comparing to standard transit but may have more stops than an express bus service
- Larger vehicles (often articulated buses) which accommodate significantly more riders per bus
- Offboard pay systems (typically kiosks or mobile applications) located at the bus stations to increase loading efficiency

TRANSIT SIGNAL PRIORITY (TSP)

Similar to emergency vehicle signal preemption, transit signal priority technology is incorporated into the BRT vehicles to reduce dwell times at the signals along the route. Transit Signal Priority differs from the emergency vehicle system because it does not trigger an immediate cycling of the signal phase. The TSP technology shortens the signal phase times, thereby shortening bus dwell times at signalized intersections. Implementation typically requires additional resources including physical devices on the vehicles and signals (if not already installed), and software updates to ensure functionality. The implementation of this technology could also be implemented on BRT Light or express bus systems where limited stops and efficiency are being prioritized.

ENHANCED AND MODIFIED TRAINING

Depending upon the type of transit vehicles, the capital improvements to the stop locations and planned routes, new training may be necessary for the BRT drivers. In some cases, the existing transit staff may be trained to operate on the new BRT routes, while in other cases it may be more appropriate for select staff to be trained solely for BRT routes. The need for BRT route training to ensure safe operations will be directly related to the differences in the BRT and fixed route systems features such as enhanced stations, larger vehicles, dedicated lanes, and TSP systems.

Training decisions will need to be developed by Albany Transit; however, the following options should be considered:

- All Staff Can Participate/Work on BRT Routes
 - Larger pool of qualified drivers
 - More time and resources will be spent on staff training
- Select Staff to Participate/Work on BRT Route

- Smaller pool of qualified drivers
- Less time and resources spent on staff training
- Potential features to be included within the specialized training (dependent upon final buildout of the BRT network)²
 - Transit signal priority
 - Block signaling
 - Queue jump lanes
 - Dedicated lanes
 - Modified turning radius (for different vehicles)
 - Technological changes
 - General ITS network enhancements
 - Infrastructure training (changes to the roadway/dedicated BRT areas)

BUS STOP LOCATIONS AND POSITIONING

The development of a BRT or BRT Light system is reliant on higher speed and increased amenities when compared to a standard transit bus system. Typically, BRT systems will nearly mimic the development styles of light rail systems with significant distances between stops and with highly developed facilities. When planning the BRT stops, a focus must be on the major trip generators (existing or planned), such as development zones, colleges, and commercial areas. Once approximate locations have been identified, the location of the stops along the road, facilities at the stops, and how the buses will interact with general vehicle traffic should be developed.

BUS STOP LOCATIONS

As described above, the location of bus stops is an important feature of the BRT system and is necessary for an effective network. In addition to the general location of the stops, specific strategies should be considered that will best align with the goals of the system. Generally, stop locations are described as nearside, far side, and midblock. Advantages and disadvantages of the station locations are listed in Table 7-3, with an example of a midblock (standard transit) station depicted within Figure 7-12.

² https://www.apta.com/wp-content/uploads/Standards_Documents/APTA-BTS-BRT-RP-007-10.pdf

Figure 7-16: Example of Pedestrian Mid-Block Crossing Behind Bus



Table 7-3: Comparative Analysis of Stop Locations

Stop Type	Advantages	Disadvantages
Near Side	<ul style="list-style-type: none"> Minimizes interference when traffic is heavy on the far side of the intersection Passengers access buses closest to crosswalk Intersection available to assist in pulling away from curb No double stopping Buses can service passengers while stopped at a red light Provides driver with opportunity to look for oncoming traffic including other buses with potential passengers 	<ul style="list-style-type: none"> Conflicts with right turning vehicles are increased Stopped buses may obscure curbside traffic control devices and crossing pedestrians Sight distance is obscured for crossing vehicles stopped to the right of the bus. The through lane may be blocked during peak periods by queuing buses Increases sight distance problems for crossing pedestrians
Far Side	<ul style="list-style-type: none"> Minimizes conflicts between right turning vehicles and buses Provides additional right turn capacity by making curb lane available for traffic Minimizes sight distance problems on approaches to intersection Encourages pedestrians to cross behind the bus Requires shorter deceleration distances for buses Gaps in traffic flow are created for buses re-entering the flow of traffic at signalized intersections 	<ul style="list-style-type: none"> Intersections may be blocked during peak periods by queuing buses Sight distance may be obscured for crossing vehicles Increases sight distance problems for crossing pedestrians Stopping far side after stopping for a red light interferes with bus operations and all traffic in general May increase number of rear-end accidents since drivers do not expect buses to stop again after stopping at a red light
Mid block	<ul style="list-style-type: none"> Minimizes sight distance problems for vehicles and pedestrians Passenger waiting areas experience less pedestrian congestion 	<ul style="list-style-type: none"> Requires additional distance for no-parking restrictions Encourages patrons to cross street at mid block (jaywalking) Increases walking distance for patrons crossing at intersections

An important feature when considering the development of stop locations is the most appropriate way for the buses to reenter the traffic flow. As with a standard transit service, merging delay can become a significant factor in the planning for BRT systems. As such, the following three strategies could be employed to reduce this delay:

- Queue Jump Lanes
- Right Lane Stops/Bus Bulb outs
- Local Law and Policy Changes

QUEUE JUMP LANES

Queue jump lanes will likely require the most significant infrastructure changes because they require additional signal enhancements and may require the addition of a bus specific lane. The effect of the queue jumper lane creates an opportunity for buses to receive an advance signal prior to the prevailing general traffic. By getting an advance green signal, the bus can slip ahead (queue jump) the general traffic and reach the next station without being caught behind the general traffic. These lanes can be created as part of an existing right turn lane or as a specific bus only lane. In cases with a shared right turn lane, the advance green signal should allow for the entire right turn queue space to clear the intersection to ensure the bus is able to utilize the space effectively. Dedicated queue jump lanes function in the same way with the exception that normal right turn traffic is not permitted/allowed in these lanes.

RIGHT LANE STOPS/BUS BULB OUTS

As is typical with a standard transit system, BRT may utilize right lane stops or potentially add bulb outs to serve the riders more effectively. In both cases, the bus remains in the right-hand travel lane, thereby eliminating merging delay. Bulb outs are concrete extensions of the sidewalk space that extend outward (bulb) to allow the bus to remain in the travel lane without a turnout. These bulb outs provide additional sidewalk space, clearing room for passing pedestrians and increase the potential footprint for station amenities. Though bulb outs do not typically alter transportation patterns in the area, they have the potential to increase congestion as one lane will be stopped behind the bus. Where implemented, these strategies should be considered against potential traffic flow interruptions and will likely be only utilized in areas with less congestion issues. The figures below display examples of bulb out configurations.

Figure 7-17: Bus Bulb Out Example³



Photo Credit: Michael Hintze

Figure 7-18: Far Side Bus Bulb and Dedicated Bus Lane⁴



LOCAL LAW AND POLICY CHANGES

Though not a physical solution, the passage of bus priority laws offers the opportunity to require bus priority in the traffic column. Typically, these laws are intended to decrease merge delays through the mandate that buses have the right-of-way when entering the travel lanes. The creation of these laws will not ensure that all motorists will allow buses back into the travel lanes, but the laws will increase chances of

³ http://www.pedbikesafe.org/PEDSAFE/countermeasures_detail.cfm?CM_NUM=16

⁴ <https://nacto.org/publication/urban-street-design-guide/street-design-elements/curb-extensions/bus-bulbs/>

motorists giving the transit vehicles room to merge. These changes should be accompanied by an educational campaign and potentially display the law on the buses. By making these efforts, the local community will become more aware of the bus priority and decrease the expected merge delay times. Though this strategy is more of a state level requirement, local officials may choose to support its development within Georgia.

7.5.2 Bus Rapid Transit Peer City/Region Reviews

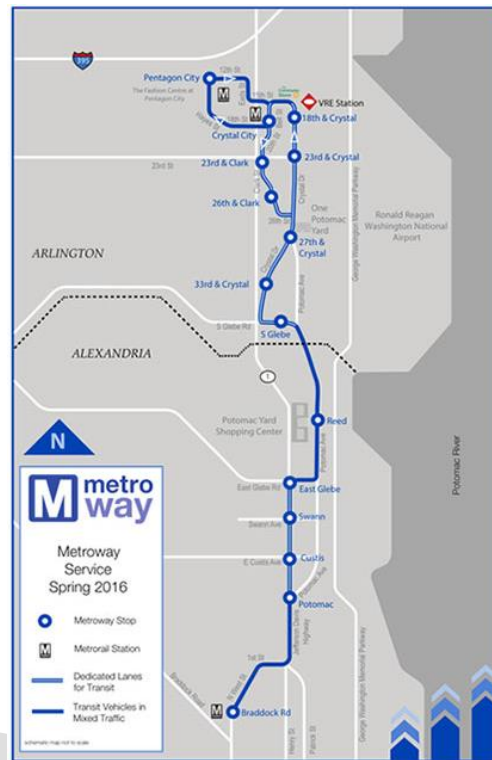
Bus Rapid Transit is a service that has been provided in many cities across the US and has been considered in even more areas. As part of this review, several peer agencies have been reviewed.

ARLINGTON AND ALEXANDRIA VIRGINIA - METROWAY⁵

Operating under the Washington Metropolitan Area Transit Authority (WMATA), the Metroway is an existing north/south BRT route connecting two Metro stations and growth areas. This BRT was developed to reduce travel times between major Metro stations (subway) in the area through a combination of mixed use and dedicated bus travel lanes. The BRT corridor is approximately 3.5 miles long with 23 stations in this urbanized area. The intent of this BRT system is focused primarily on the reduction of existing commute times and for the provision of another option outside of standard buses or the Metro system. Both termini of this BRT coincide with Metro stations, creating an enhanced link to the overall transit network. Several of the stop locations are located nearby to the Ronald Reagan Washington National Airport, however the BRT does not provide direct access to the airport. Figure 7-15 displays the Metroway5 BRT route.

⁵ <http://metrowayva.com/>

Figure 7-19: Metroway Route⁶



BIRMINGHAM ALABAMA⁷

The Birmingham Jefferson County Transit Authority (BJCTA) and the surrounding community have recently committed to the development of the Birmingham Express (BX) a new BRT service. This service will service an approximately 10-mile long corridor with a focus on the following developments:

- Employment Centers
- Educational Centers (UAB)
- Healthcare Centers
- Historic/Cultural Locations
- Transit Center

⁶ <http://metrowayva.com/route/>

⁷ <https://www.birminghamal.gov/brt>

This system plans includes upgraded buses and stations with the intent to operate in both mixed traffic and dedicated lanes. The planned system will have 32 stops and will connect with two transit centers in the identified corridor. The BX system plans to meet its objectives using the following features:⁸

- Dedicated Busway and Alignment
- Intersection Treatments (Signal Priority)
- Vehicle Design
- Platform-Level-Boarding Stations
- Off-board Ticketing/Fare Collection
- Enhanced Transit Service
- Rider Appeal (Branding)
- Land Use Coordination (TOD)

The groundbreaking for this system was held in December of 2020, and construction is anticipated to be completed in 2022.

EUGENE OREGON, LANE TRANSIT DISTRICT (LTD)⁹

Beginning in 2007, the Emerald Express (EmX) was developed to serve the Eugene-Springfield metropolitan area. The EmX serves approximately 28 system miles and averages 12,000 passengers on weekdays. The following features are included in this route:

- 10-15 minute headways during weekdays and 15-30 on weekends/evenings
- Bus only signals and lanes
- Improved shelters/stops
- Same level boarding and wheelchair ramps as needed
- Inside bicycle storage

As mentioned above, the EmX utilizes bus only lanes referred to as Business Access and Transit Lanes (BAT Lanes). The Bat Lanes limit use to buses and turning vehicles, thereby reducing congestion impacts upon the bus route. LTD created a fact sheet for users to understand how to use the BAT Lanes, shown in Figure 7-16.

⁸ <https://www.birminghamal.gov/brt>

⁹ <https://www.ltd.org/elements-emx-service/>

Figure 7-20: LTD BAT Lane Guidelines¹⁰

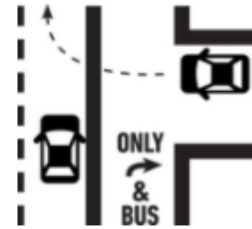
Bus Access Only

Unless when entering a business or making a turn.



Turning onto the Street from a Business

Cars should be turning into the nearest through traffic lane.



Bus Only Lane

Only buses are permitted to use this lane.



Look For Signage Indicating Lane Use

Painted words on the road or overhead signs.



Do Not Travel In the BAT Lane

Travel in this lane is limited to one city block and should be used for right turn access only.



Do Not Park in the Bus Only Lane



Watch For Buses

Braking distances for buses take longer than general vehicles. A bus traveling at 35 mph takes 243 feet to come to a complete stop. Please watch for buses before turning into the lane.



Garfield Includes Bus Only Lane

The bus lanes on Garfield are bus only unless accessing a business. There is a dedicated turn lane at 11th and Garfield and at 7th and Garfield. The lanes are bus only within one block of these intersections.



¹⁰ <https://www.ltd.org/business-access-transit-lanes/>

METROPOLITAN ATLANTA RAPID TRANSIT AUTHORITY (MARTA), GEORGIA


Voters in Atlanta GA approved an additional ½ penny sales tax for transit in 2016, which led to the development of the “More MARTA Atlanta” transit improvement program. Within this program both arterial regional transit (ART) and BRT are planned for implementation. Though not yet implemented, Figure 7-17 depicts the proposed BRT routes (blue) within the urban center and the ART routes (red) north and south of the downtown area. Once implemented this network will mesh with the existing transit system to provide a more complete network through the Atlanta metropolitan area. This will be the first BRT system in the region.

Figure 7-21: More MARTA Atlanta Projects

More MARTA Atlanta Program

- | | |
|---|-------------------------------------|
| A BeltLine Northeast LRT | L Peachtree Road ART |
| B BeltLine Southwest LRT | M Cleveland Avenue ART |
| C BeltLine West LRT | N Metropolitan Parkway ART |
| D BeltLine Southeast LRT | O Frequent Local Bus Service |
| E Campbellton Road LRT | P Greenbriar Transit Center |
| F Clifton Corridor LRT | Q Moores Mill Transit Center |
| G Streetcar East Extension | R MARTA Stations |
| H Streetcar West Extension | |
| I Capitol Avenue BRT | |
| J North Ave - Donald L. Hollowell Pkwy BRT | |
| K Northside Drive BRT | |

LEGEND

- | |
|--|
|  Light Rail Transit LRT |
|  Bus Rapid Transit (BRT) |
|  Arterial Rapid Transit (ART) |
|  Frequent Local Bus |
|  Station Improvements |



FOLLOW US:   

Visit www.itsmarta.com/moremarta for updates on the program.

Source: MARTA

NASHVILLE METROPOLITAN TRANSIT AUTHORITY, TENNESSEE

The Nashville Metropolitan Transit Authority (MTA) conducted their Strategic Master Plan in 2009 which outlined the planned development of a BRT lite system.¹¹ Since the 2009 study, Nashville MTA has implemented BRT Lite on several of the more popular and congested routes within the region.¹² Generally, these routes are serviced by 60 ft. hybrid buses with stop locations approximately every 1/3 mile (1/2 as many stops as a standard transit bus). BRT stops are uniquely designed to separate them from the standard bus service, though fares are purchased through similar online and kiosk services that are already provided.

TAMPA BAY AREA, FLORIDA ^{13 14}

The Tampa Bay Area Regional Transit Authority (TBARTA) is in the process of conducting a Regional Rapid Transit (RRT) report that will identify a desired route between the three county Tampa Bay Area (Hillsborough, Pasco, Pinellas counties). The proposed route will run approximately 41 miles through the major urban areas and activity centers in the region. The development of this two-year study is ongoing but is scheduled begin design in spring of 2021. The factsheet from the study is depicted in Figure 7-18.

In addition to the regional BRT proposed, the Hillsborough Area Regional Transit Authority (HART) has commissioned a BRT study. This BRT study is focused on the connection between the University of South Florida Tampa Campus with Downtown Tampa, along a series of previously identified corridors. The BRT study was completed in 2020. Proposed partial transit only lanes would connect with the streetcar service with planned headways under 15-minutes. The recommended alignment for this project is depicted in Figure 7-19.

¹¹ <https://www.nashville.gov/Metropolitan-Transit-Authority/Strategic-Transit-Master-Plan.aspx>

¹² <https://www.nashvillemta.org/News/pub162.pdf>

¹³ <https://www.tbarta.com/en/planning-programs/regional-rapid-transit/documents-and-materials/>

¹⁴ <http://gohart.org/Pages/brt-arterial.aspx>

Figure 7-22: TBARTA Regional Rapid Transit Factsheet

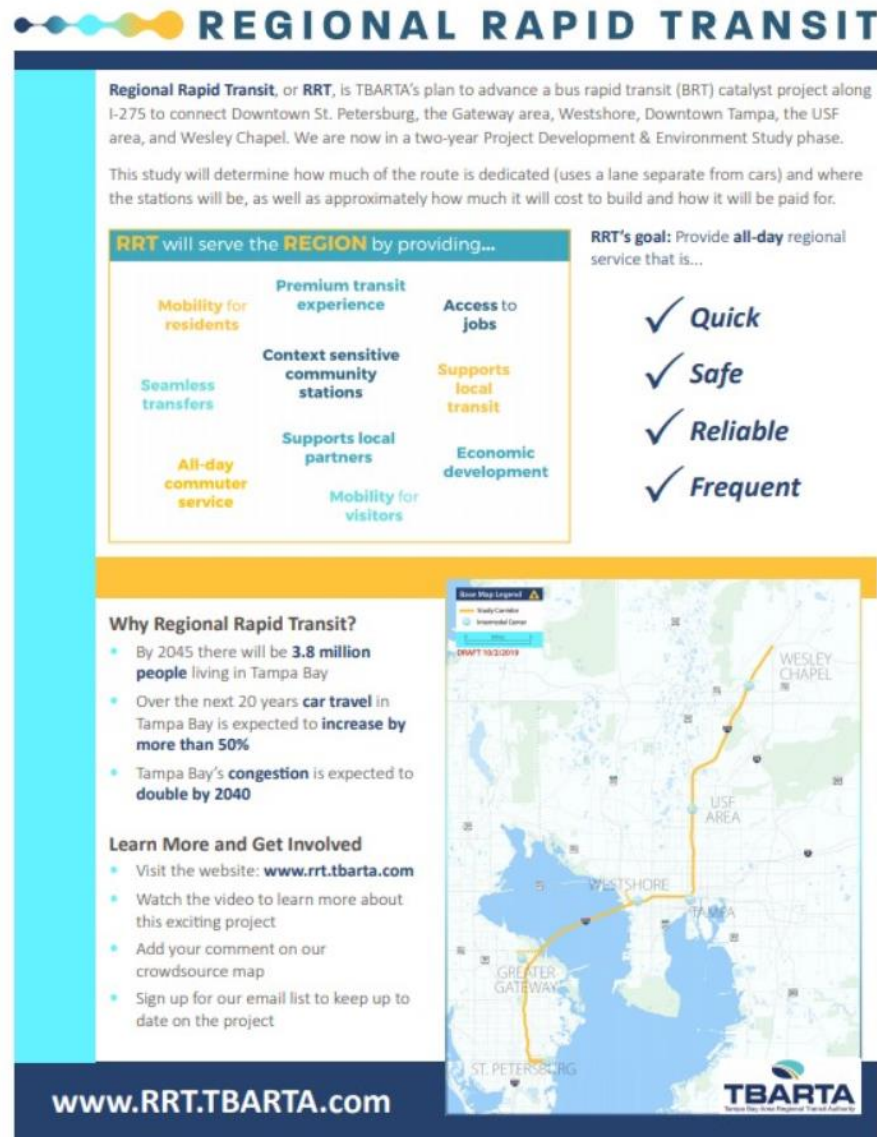
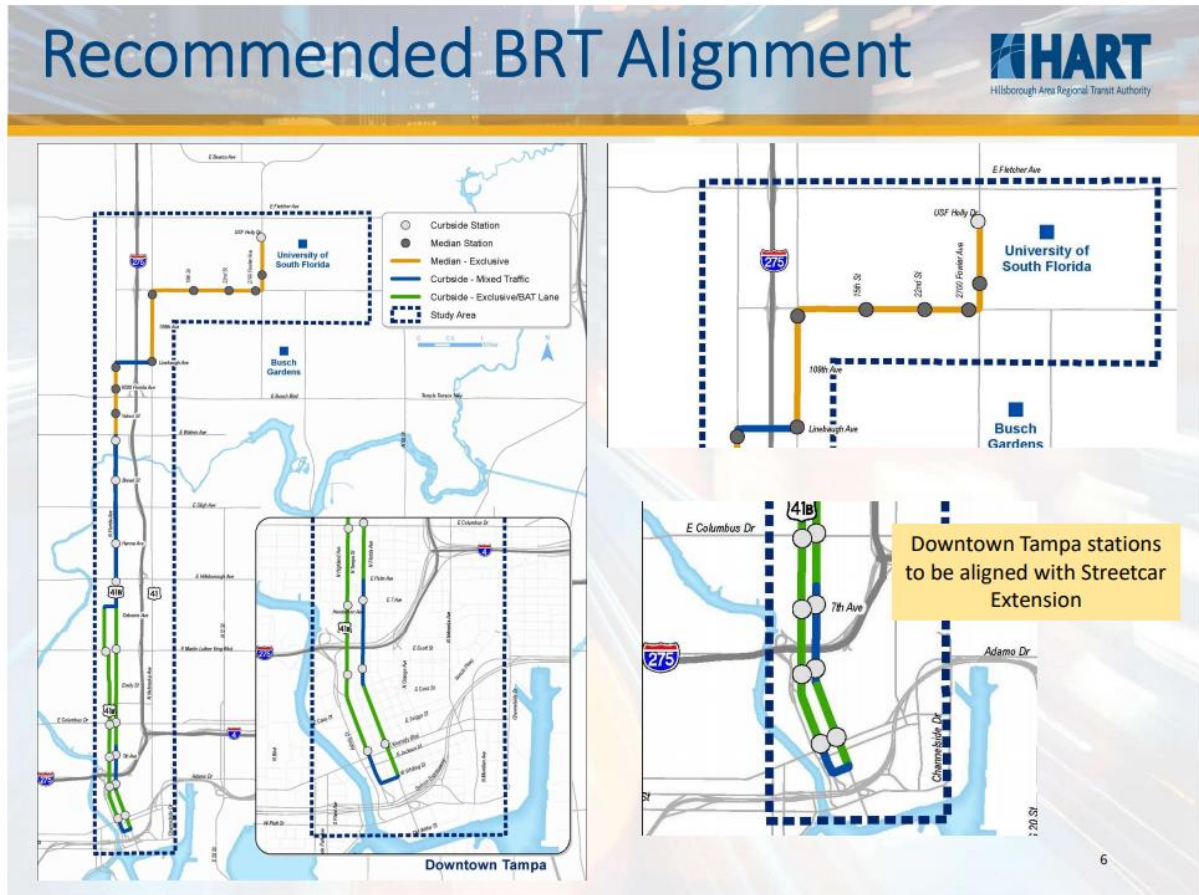


Figure 7-23: HART Recommended BRT Alignment¹⁵



7.5.3 Bus Rapid Transit Goals and Objectives

Though the goals and objectives of the TDP will generally guide transit development, these specific BRT related goals have been generated to supplement the TDP goals and objectives:

- Promote local and regional growth through the development of a BRT service
 - Identify existing areas of growth for infill development

¹⁵ <http://gohart.org/Board%20PDFs/BRT%20presentation.pdf>

- Identify underdeveloped or underdeveloped areas for new development.
- Enhance the character of the downtown area through the development of complete streets features
 - Improve bus stop locations and stations
 - Improve roadway geometries to allow for BRT vehicles
 - Add safety improving and aesthetic features
- Enhance the existing transit network through the development of high-speed BRT routes
 - Identify a series of route alternatives to improve the transit system throughout Albany
- Promote future development within Albany through transit-oriented development (TOD) principles
 - Focus route and station locations in areas that will support existing and encourage new growth

Moving forward, the development of a BRT program will follow the goals and objectives outlined with the TDP and these BRT specific goals. Figure 7-20 depicts an enhanced bus stop location.

Figure 7-24; Enhanced Bus Stop Location¹⁶



¹⁶ http://www.pedbikesafe.org/PEDSAFE/countermeasures_detail.cfm?CM_NUM=14

7.5.4 Bus Rapid Transit Study Area

The study area for this BRT analysis is the Albany urbanized area. The development of BRT requires a regional look into the potential stop nodes and existing passenger boarding's to identify high priority routes.

EXISTING TRANSIT NETWORK AND HIGH PERFORMING ROUTES

The first operation in the development of this screening study was understanding of the existing transportation network and transit routes. The first step was the identification of high performing transit routes that provide an indication of areas with an inherent demand for transit. The steps in this identification included:

- Identification of the current high ridership routes/corridors in ATS
- Display/Comparison of 2 years of NTD ridership data across all current ATS routes

With the identification of the above transit routes, the next step in the analysis was the identification of land uses and population areas supportive of increased transit service.

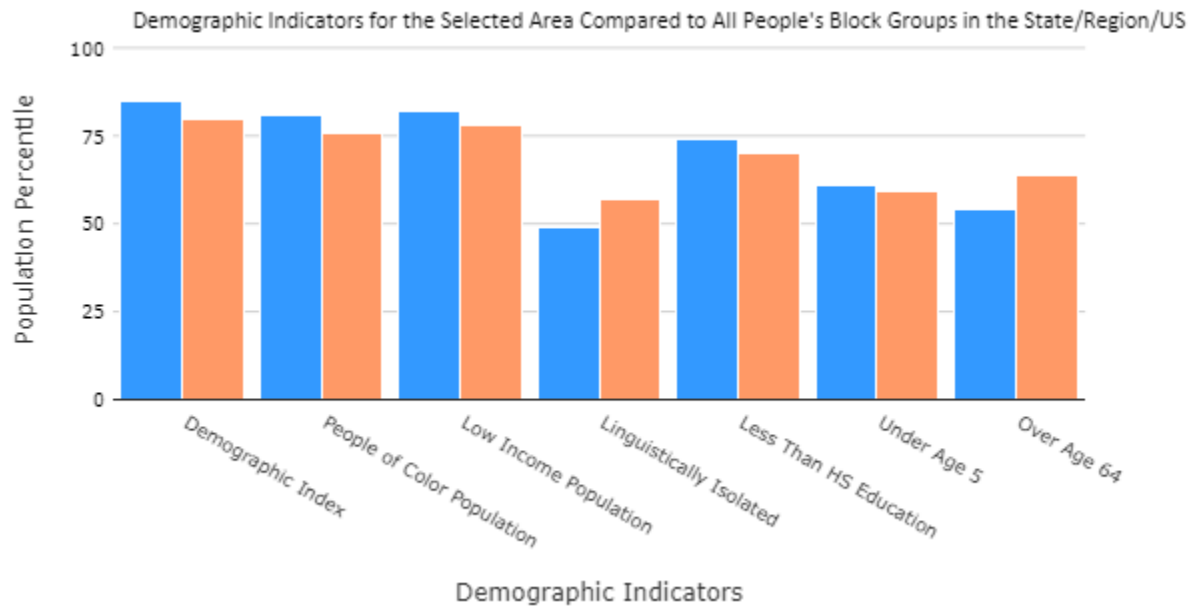
LAND USE AND POPULATION ANALYSIS

After the identification of existing high transit usage, a review of the county's land uses and population was conducted to determine areas of interest and potential TOD sites. The first step in the analysis was the identification of environmental justice populations in the area.

Environmental Justice

In order to limit undue disruption to environmental justice populations, a planning level environmental justice evaluation was conducted using the Environmental Protection Agency (EPA) screening tool. The screening tool identifies population characteristics and compares them with national and state statistics. Figure 7-21 depicts some of the population statistics of Dougherty County with orange representing state percentiles and blue representing national percentiles.

Figure 7-25: Dougherty County Demographic Indicators (ACS 2014-2018)¹⁷



Using the indicators identified above, areas with the County with significant environmental justice populations can be identified. Figures 7-22, 7-23, 7-24, and 7-25 depict people of color, low-income populations, linguistically isolated populations, and elderly (over 64) populations, and compared against the state of Georgia.

As depicted in the figures below, two of the environmental justice factors (people of color and low income) are located in higher densities closer to the downtown area. There were relatively few linguistically isolated populations and the elderly populations generally are aggregated outside of the downtown area (with a small area near downtown). With this information, the development of a BRT route should consider the areas near downtown with high concentrations of historically underrepresented populations.

¹⁷ <https://www.epa.gov/ejscreen>

Figure 7-26: EJ Screen People of Color Population Percentiles

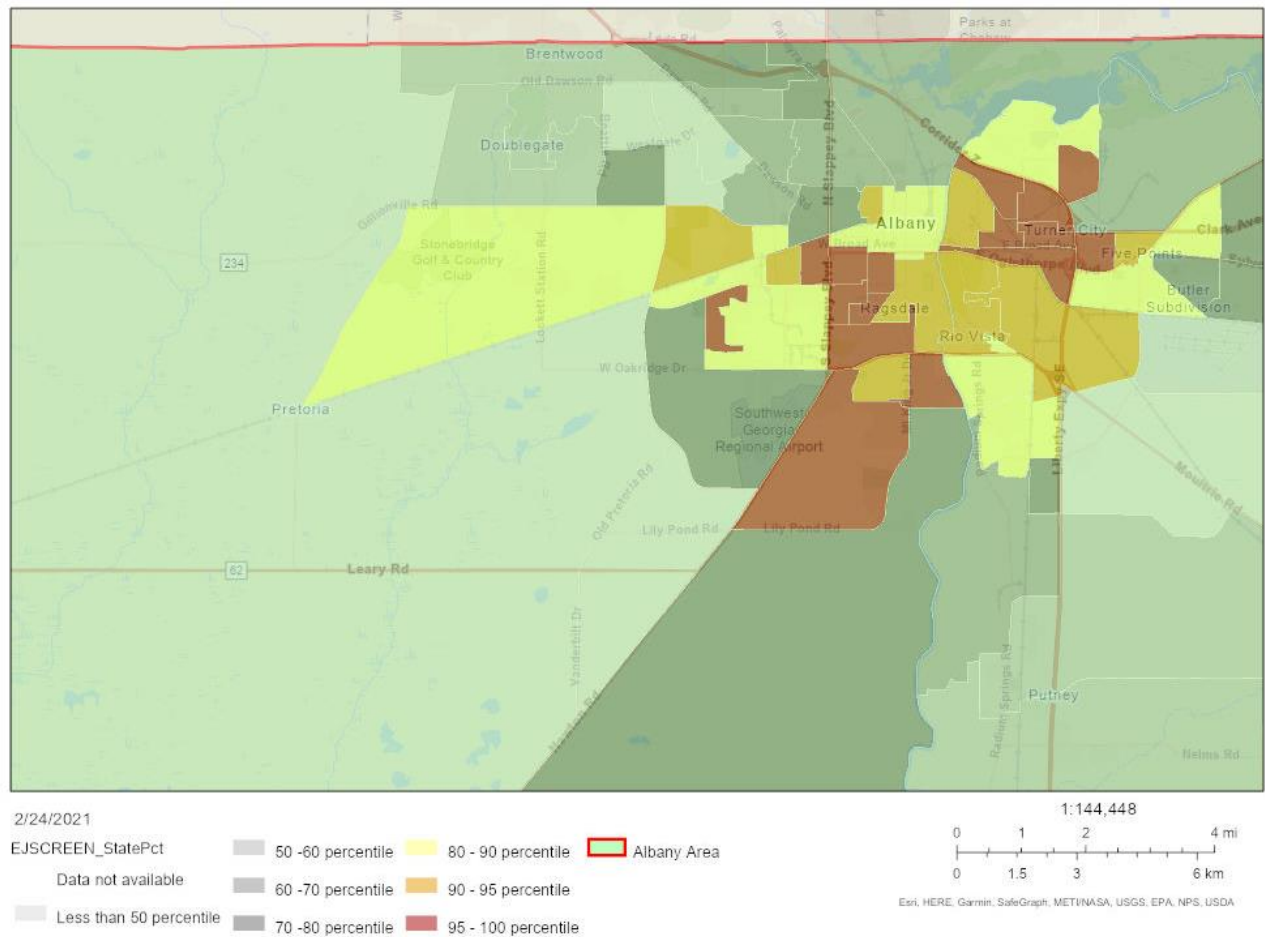


Figure 7-27: EJ Screen Low Income Population Percentiles

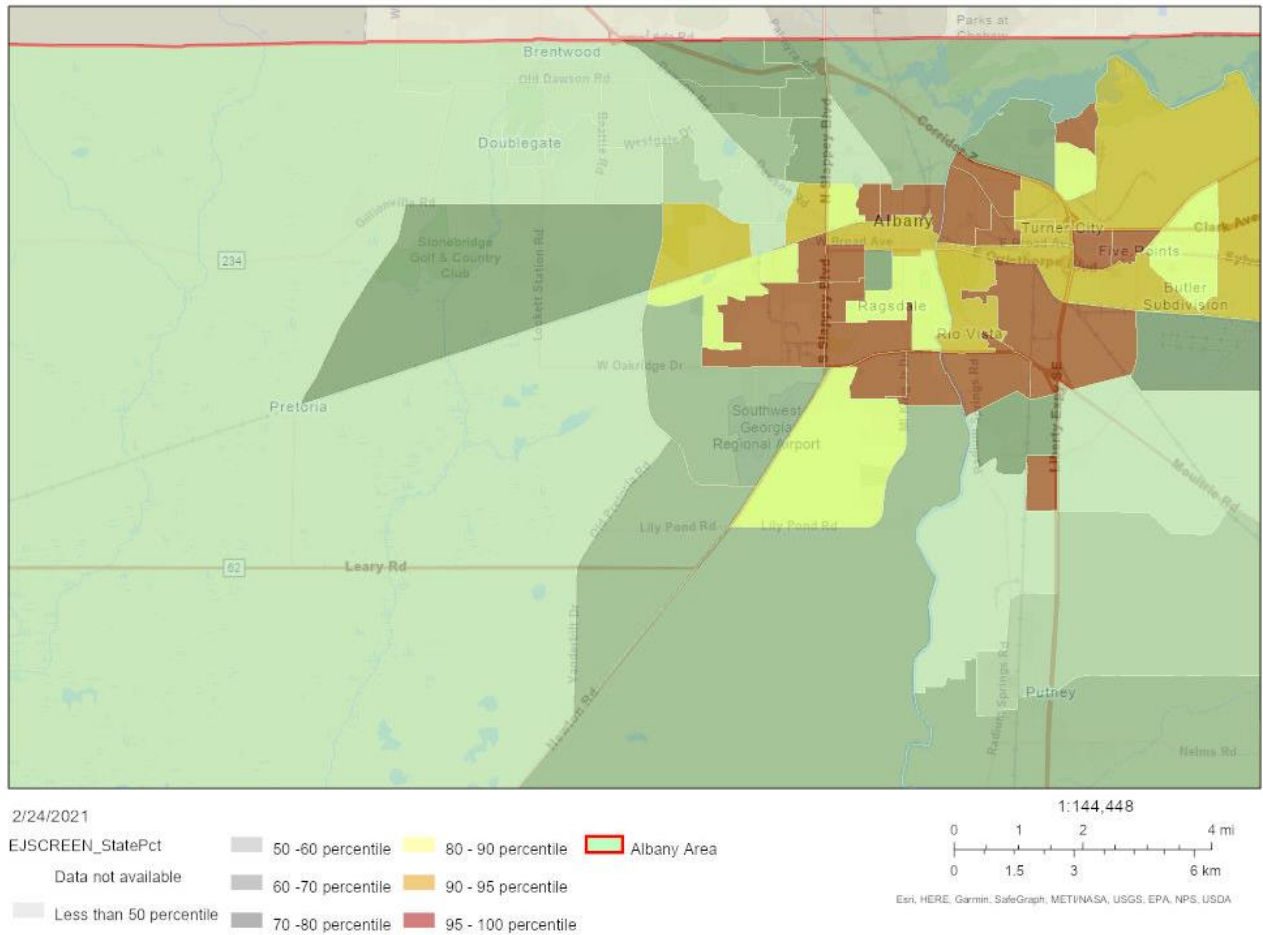


Figure 7-28: EJ Screen Linguistically Isolated Population Percentiles

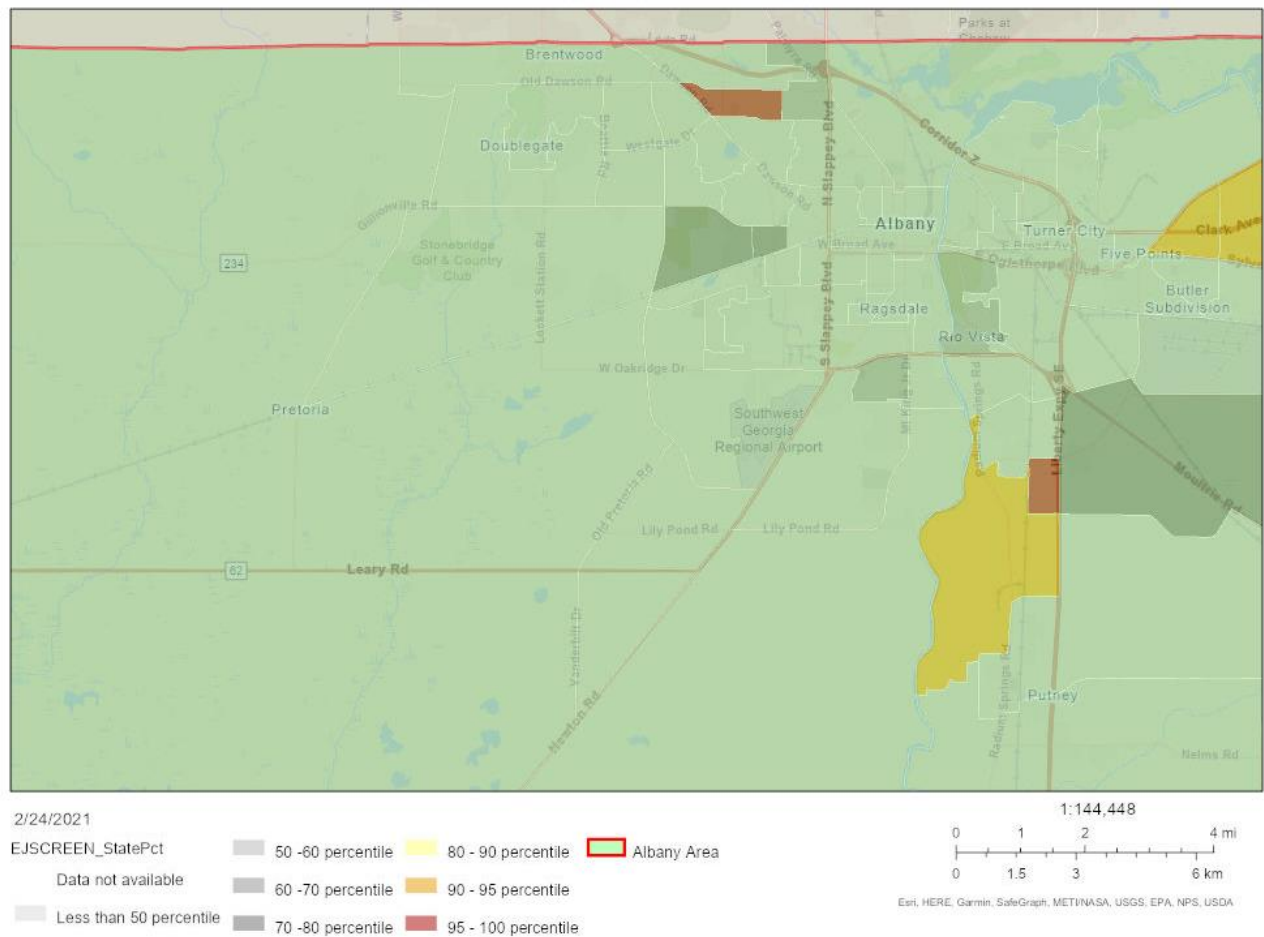
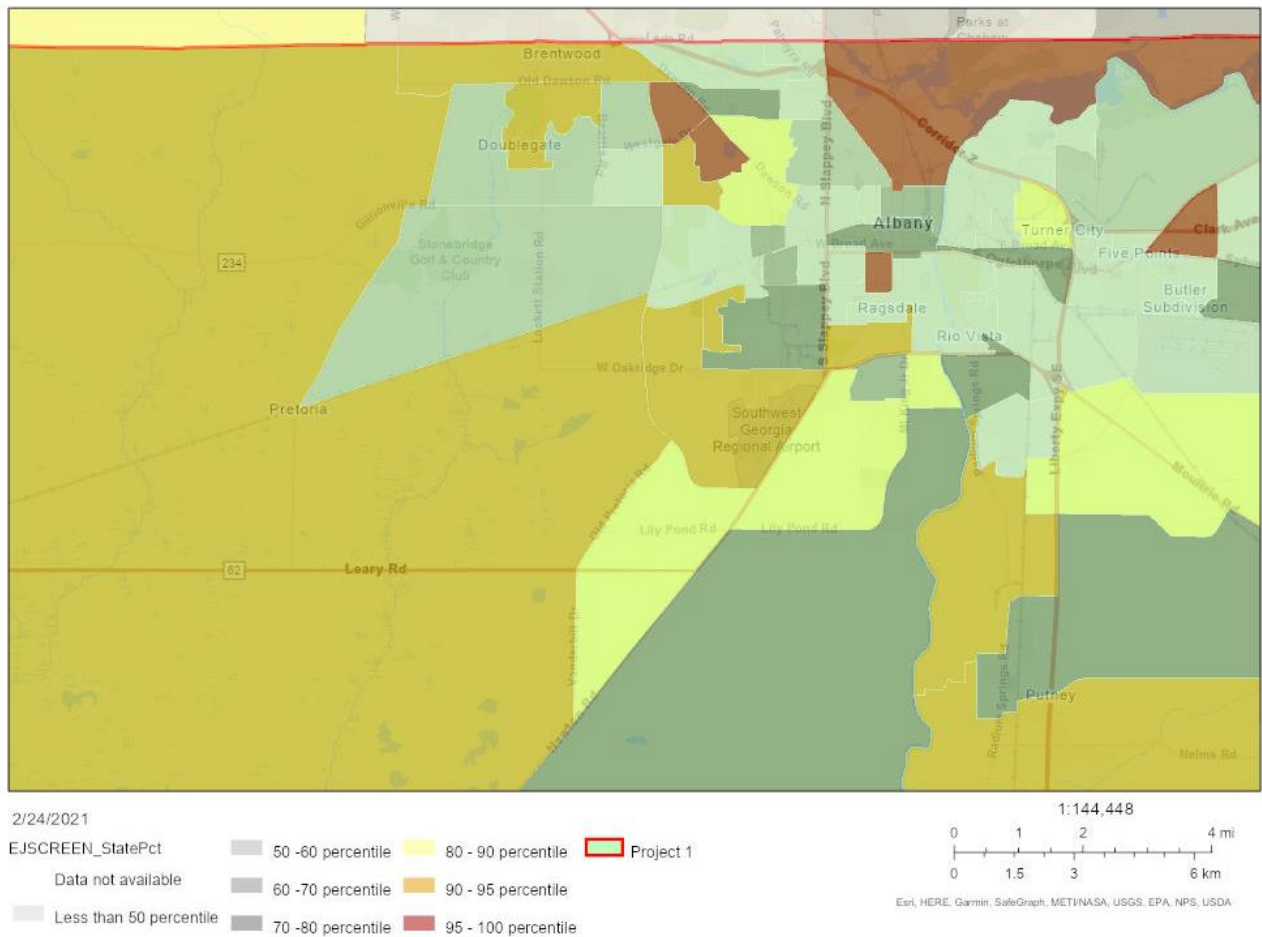
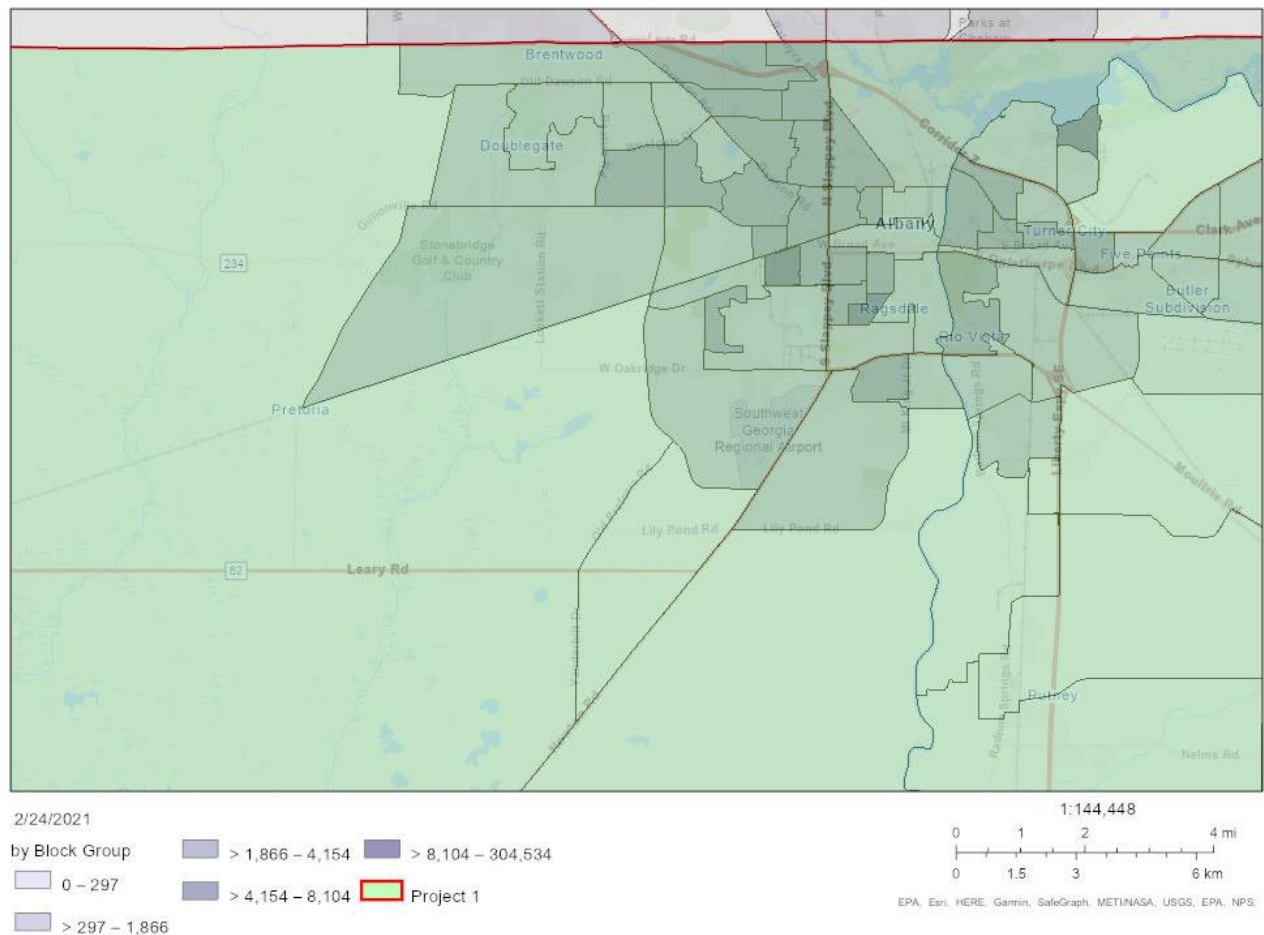


Figure 7-29: EJ Screen Elderly Population Percentiles (Over 64)



In addition to the environmental justice populations who are typically more reliant on transit systems, BRT routes should take into consideration high densities of population. By focusing on these areas, BRT systems can maximize ridership and improve demand through desirable stop locations. Figure 7-26 depicts the population density within the area.

Figure 7-30: EJ Screen Population Density (ACS 2014 - 2018)

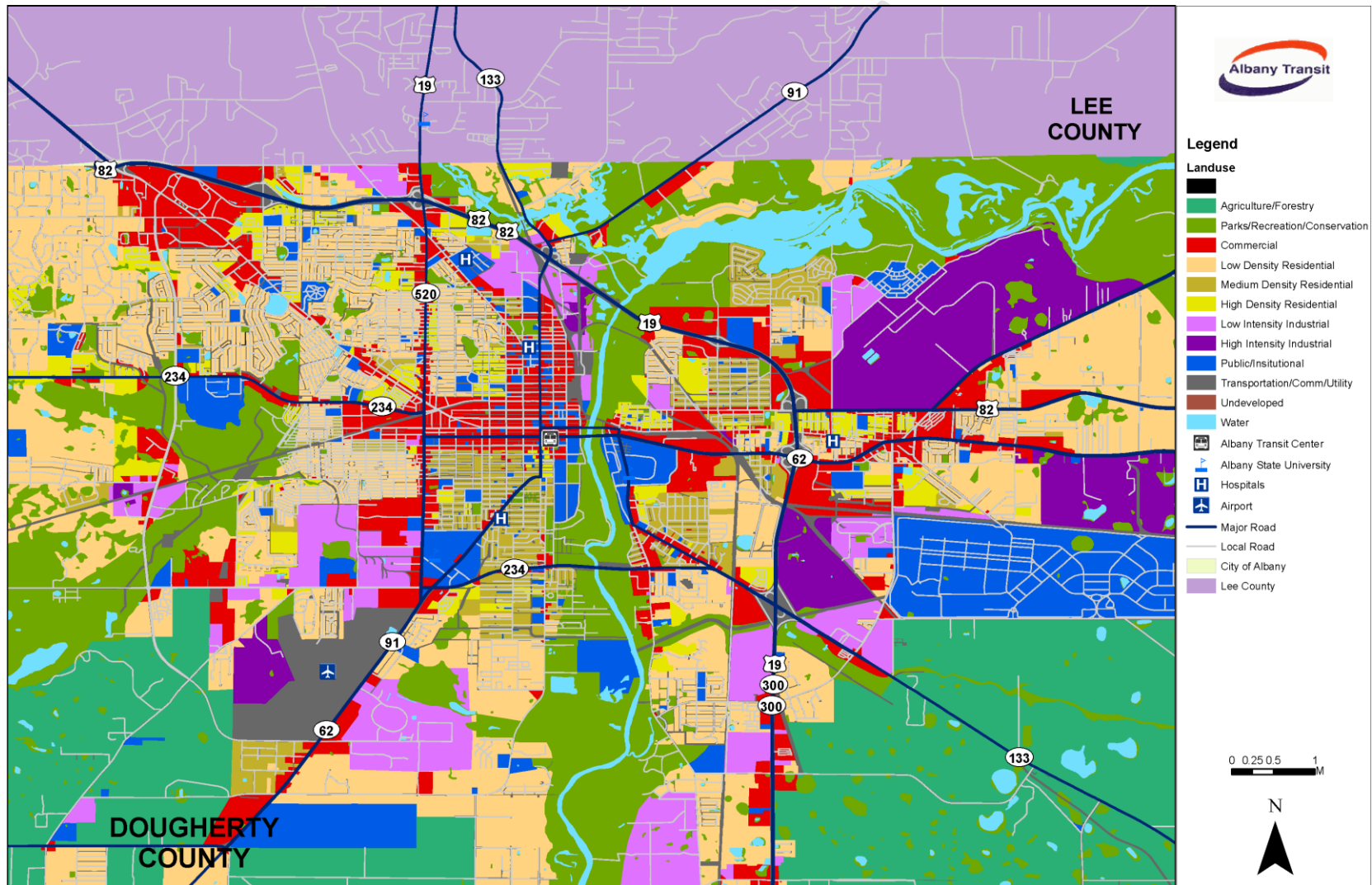


Future Land Use Considerations

Land use consideration is a major facet of BRT development. Existing and planned areas for growth are high priority areas and targeted for BRT stations and TOD nodes. As part of this analysis, the future land uses of Dougherty County were considered and nodes were identified for potential BRT routes.

In addition to the analysis of the future land use information, a planning meeting was held with City and Regional Planning staff to discuss areas of planned growth throughout the region. Figure 7-27 displays the future land use for Dougherty County.

Figure 7-31: Dougherty County Future Land Use



7.5.5 Cooperation with Local Planning Efforts

Planned and existing efforts to improve the local community can significantly guide the development of BRT systems. As such, various activities and endeavors within the community were considered in this analysis.

The Downtown Development Authority and Albany Development Authority will be incorporating the TDP recommendations into their future efforts. Though these efforts have not been completed by the time of this analysis, the following activities have the potential to significantly benefit and enhance the transit system:

- The Albany Downtown Master Plan update is being conducted which will include interviews of government agencies and stakeholders in the area
- A new downtown streetscape project is currently underway which will include aesthetic and transportation modifications for the betterment of the area
- The Regional Commission is working on an update to the Urban Development Plan which will include a new tax credit program
 - The implementation of a new tax credit program will help spur development and offers the opportunity to promote TOD features
- Downtown Welcome kits are being developed for investors and visitors with the intent to showcase the features of Albany while promoting new growth
 - These kits will also be geared toward college students to encourage their involvement within the community

These developments and efforts are anticipated to be of substantial benefit to Albany and may lead to the creation of favorable TOD practices.

7.5.6 Typical Stop Locations

Bus Rapid Transit systems favor TOD land uses while focusing on high ridership and efficient movement. These TOD areas can be described as medium to high density residential, commercial, and retail areas that will serve as nodes for the BRT system. These TOD nodes rely heavily on mixed land uses to promote increased ridership when comparing to a standard transit system. Through involvement with the City, MPO, and Albany Transit, potential TOD categories have been identified. As part of this study, Albany area planning staff were consulted to determine areas that would be vital for infill and green fill development. The areas benefiting from BRT identified within these discussions are outlined below.

EXISTING AREAS AND INFILL DEVELOPMENT

Bus Rapid Transit stop, or station, locations are typically larger and include more amenities than traditional bus stops. Because of the increased size of these locations, the development of these stops in densely developed areas can be difficult. In addition to serving the current development, BRT stations can promote additional infill development or increase densities in these already developed areas. Areas within the region identified for infill and BRT station development include the following:

- Downtown Albany
- Albany State University Campuses
- N Slappy Blvd/US 19 (Downtown to Lee County)
- The Albany Mall

Each of the areas have significant development already in place or planned for the future. The implementation of enhanced stations and the provision of the right-of-way necessary to develop a full BRT system may be difficult due to existing density and structures.

NEW AREAS AND GREENFIELD DEVELOPMENT

In addition to the areas in the region with existing development, several areas have been identified as future growth area. These areas have lower development densities or are underdeveloped with the possibility of significant improvements. Three areas have been identified in this analysis that may be benefited for the development of BRT nodes and include the following:

- Ledo Road corridor along the Dougherty and Lee county line
- Gillionville Rd/SR 234 Corridor
 - Redevelopment and new development opportunities
- Southwest Georgia Regional Airport surrounding area

If a greenfield prioritization strategy is implemented, the ability to focus on the TOD and complete streets development becomes more feasible. With greenfield development, less existing development will be impacted to enhance the space and create new growth centers.

COMPLETE STREETS AND BRT STATIONS

In support of future development within the Albany area and existing plans for roadways, BRT systems are typically paired with complete streets initiatives. Building

upon the existing streetscape initiatives, complete streets represent a paradigm shift from focusing primarily on the automobile when designing street infrastructure to a more complete cross-section supporting multiple modes. In ideal conditions, complete streets will share focus among the following:

- Personal and commercial vehicles
- Transit
- Pedestrians
- Cyclists

Complete streets and BRT facilities benefit from being implemented simultaneously. By paring these developments, a cohesive aesthetic brand can be created and the need for redevelopment is lessened. Though important, the development of these principles will be reliant on significant capital funding.

Figure 7-32: Complete Streets Example¹⁸



The development of complete streets also typically includes aesthetic improvements such as adding trees, benches, widened sidewalks, enhanced transit stations and pedestrian crossing areas.

¹⁸ <https://nacto.org/publication/urban-street-design-guide/streets/downtown-thoroughfare/>

The implementation of complete streets within an area is typically conducted at the city and county level with directed funding toward development districts or select roadways. Though not the only impetus for complete streets development, transit serves as a major feature of complete streets within urbanized areas. If revitalization and complete streets are being considered within the area, BRT stations and standard transit stops should be included within the overall design and be built with consideration of the new space.

7.5.7 Potential BRT Routes

As part of this BRT analysis, DARTS and Albany Transit provided feedback on potential nodes that beneficial for future development throughout the area. The development of a BRT system can be a costly endeavor and it is likely that only one of these proposed routes could feasibly be implemented in the near future. If successful, other routes could potentially be implemented in the future. The following four routes have the potential to promote growth in the region and reach the previously identified development areas:

- Albany State University (ASU) E to ASU W
- Transit Center to Ledo Road
- Transit Center to Airport
- Transit Center to Mall area

ALBANY STATE UNIVERSITY (ASU) E TO ASU W

This proposed BRT route provides an enhanced connection between the two campuses of Albany State University. This route is roughly served by the “Ram Route” and, if implemented, would likely replace this existing transit service. This route benefits from the inherent demand created by the students traveling between the two campuses and the heavily developed corridors in between. In addition to the improved campus connectivity, this route provided the downtown area access including the Civic Center and Transit Center for connecting trips. Table 7-4 lists the land uses within one mile of the ASU route.

Table 7-4: Dougherty County Future Land Use within One Mile - ASU Route

Future Land Use	Number of Land Uses	Sum of Acres
Transportation/Communications/Utility	844	3537.1
Low Density Residential	714	1873.9
Parks/Recreation/Conservation	279	1705.4
Commercial	577	1664.8
Water	31	1129.8
Public/Institutional	168	907.7
Medium Density Residential	382	782.1
High Density Residential	190	643.2
Low Intensity Industrial	6	76.0
High Intensity Industrial	3	5.9

Nearby Population

- Population within 0.25 mile of stops: 4,217
- Population in poverty: 35.5%
- Population people of color: 80.6%
- Households with no vehicle: 16.1%
- Population with disabilities: 16.2%
- Population driving alone to work: 74.8%

Anticipated Route Statistics

- Trip Length: 11.24 miles roundtrip
- Trip Time: 25 mins inbound, 20 mins outbound
- Stops: 13 inbound, 10 outbound
- Headways:
 - 5 mins, 6:00am – 9:00am

- 20 mins, 9:00am – 4:00pm
- 15 mins, 4:00pm – 7:00pm
- Vehicle Revenue: \$1.07 million a year

TRANSIT CENTER TO LEDO ROAD

This proposed route connects a series of existing and potential development areas between Downtown Albany and the Dougherty/Lee County line at Ledo Road. This route creates a four-block loop through the downtown area, provides access along N Slappy Blvd/US 19, and terminates on the northern side of Ledo Road within Lee County. Transit ridership is high within this area due to retail, restaurant, hotels, and big box development which could translate into ridership for the BRT. Though the northern terminus is not currently heavily developed, this route provides an opportunity for planned growth between Dougherty and Lee Counties through increased TOD opportunity in this lightly developed area. Table 7-5 lists the future land uses within one mile of the proposed route.

Table 7-5: Dougherty County Future Land Uses within One Mile - Ledo Road Route

Future Land Use	Number of Land Uses	Sum of Acres
Transportation/Communications/Utility	997	3030.8
Commercial	708	2107.4
Low Density Residential	654	1735.8
Water	221	1149.4
Parks/Recreation/Conservation	378	1078.3
Public/Institutional	202	826.2
High Density Residential	209	625.7
Medium Density Residential	302	501.7
Low Intensity Industrial	15	364.9

Nearby Population

- Population within 0.25 mile of stops: 5,029
- Population in poverty: 32.5%
- Population people of color: 72.5%
- Households with no vehicle: 15.4%
- Population with disabilities: 16.6%
- Population driving alone to work: 76.8%

Anticipated Route Statistics

- Trip Length: 13.80 miles roundtrip
- Trip Time: 28 mins inbound, 27 mins outbound
- Stops: 13 inbound, 11 outbound
- Headways:
 - 15 mins, 6:00am – 9:00am
 - 25 mins, 9:00am – 4:00pm
 - 15 mins, 4:00pm – 7:00pm
- Vehicle Revenue: \$1.16 million a year

TRANSIT CENTER TO AIRPORT

This proposed route makes a connection between the transit center/eastern downtown area with the Southwest Georgia Regional Airport (ABY). The airport currently offers limited commercial air travel through Delta Connection; however, the facility boasts significant private, military, and UPS freight usage. With ABY being separated from the downtown area, the opportunity for new or greenfield development is more feasible. The future land use designations for the area surrounding the airport are primarily commercial and industrial. Of the four routes under consideration, this route would likely have lowest levels of activity until development increases along the route. Table 7-6 lists the future land uses within one mile of the proposed route.

Table 7-6: Dougherty County Future Land Uses within One Mile - Airport Road Route

Future Land Use	Number of Land Use	Sum of Acres
Transportation/Communications/Utility	465	2772.0
Low Intensity Industrial	22	1275.4
Commercial	381	1266.7
Water	22	1100.0
Parks/Recreation/Conservation	175	1094.0
Low Density Residential	106	1016.6
Public/Institutional	181	914.9
Medium Density Residential	337	811.0
High Density Residential	124	309.7
High Intensity Industrial	2	270.4

Nearby Population

- Population within 0.25 mile of stops: 1,776
- Population in poverty: 41.8%
- Population people of color: 93.8%
- Households with no vehicle: 29.1%
- Population with disabilities: 21.4%
- Population driving to work alone: 65.7%

Anticipated Route Statistics

- Trip Length: 8.76 miles roundtrip
- Trip Time: 15 mins inbound, 20 mins outbound
- Stops: 6 inbound, 9 outbound
- Weekday Headways:
 - 20 mins, 6:00am - 9:00am

- 30 mins, 9:00am – 4:00pm
- 20 mins, 4:00pm – 7:00pm
- Vehicle Revenue: \$638,500 a year

TRANSIT CENTER TO MALL AREA

This proposed BRT route makes a connection between the Transit Center and the Albany Mall to the northwest. The route includes the majority of the eastern and northern downtown areas with existing commercial development, connects two major hospitals, and promotes growth in the existing mall area. This route has more opportunity for infill development near the mall and downtown area and could potentially increase densities along the corridor. Table 7-7 lists the future land uses within one mile of the proposed route.

Table 7-7: Dougherty County Future Land Uses within One Mile - Mall Area Route

Number of Land Uses	Number of Land Use	Sum of Acres
Transportation/Communications/Utility	989	2852.4
Low Density Residential	597	1950.1
Commercial	627	1808.8
Parks/Recreation/Conservation	679	1426.3
Water	381	1218.1
Public/Institutional	208	792.6
High Density Residential	187	656.5
Low Intensity Industrial	35	490.4
Medium Density Residential	226	385.0
High Intensity Industrial	6	44.1

Nearby Population

- Population within 0.25 mile of stops: 4,295

- Population in poverty: 28.6%
- Population people of color: 69.6%
- Households with no vehicle: 14.4%
- Population with disabilities: 15.3%
- Population driving to work alone: 78.1%

Anticipated Route Statistics

- Trip Length: 12.77 miles roundtrip
- Trip Time: 28 mins inbound, 23 mins outbound
- Stops: 14 inbound, 10 outbound
- Headways:
 - 25 mins, 6:00am – 9:00am
 - 15 mins, 9:00am – 4:00pm
 - 25 mins, 4:00pm – 7:00pm
- Vehicle Revenue: \$1.17 million a year

Figures 7-29 through 7-32 graphically display the proposed routes and the future land uses within one mile.

Figure 7-33: ASU East to ASU West Land Uses within One Mile

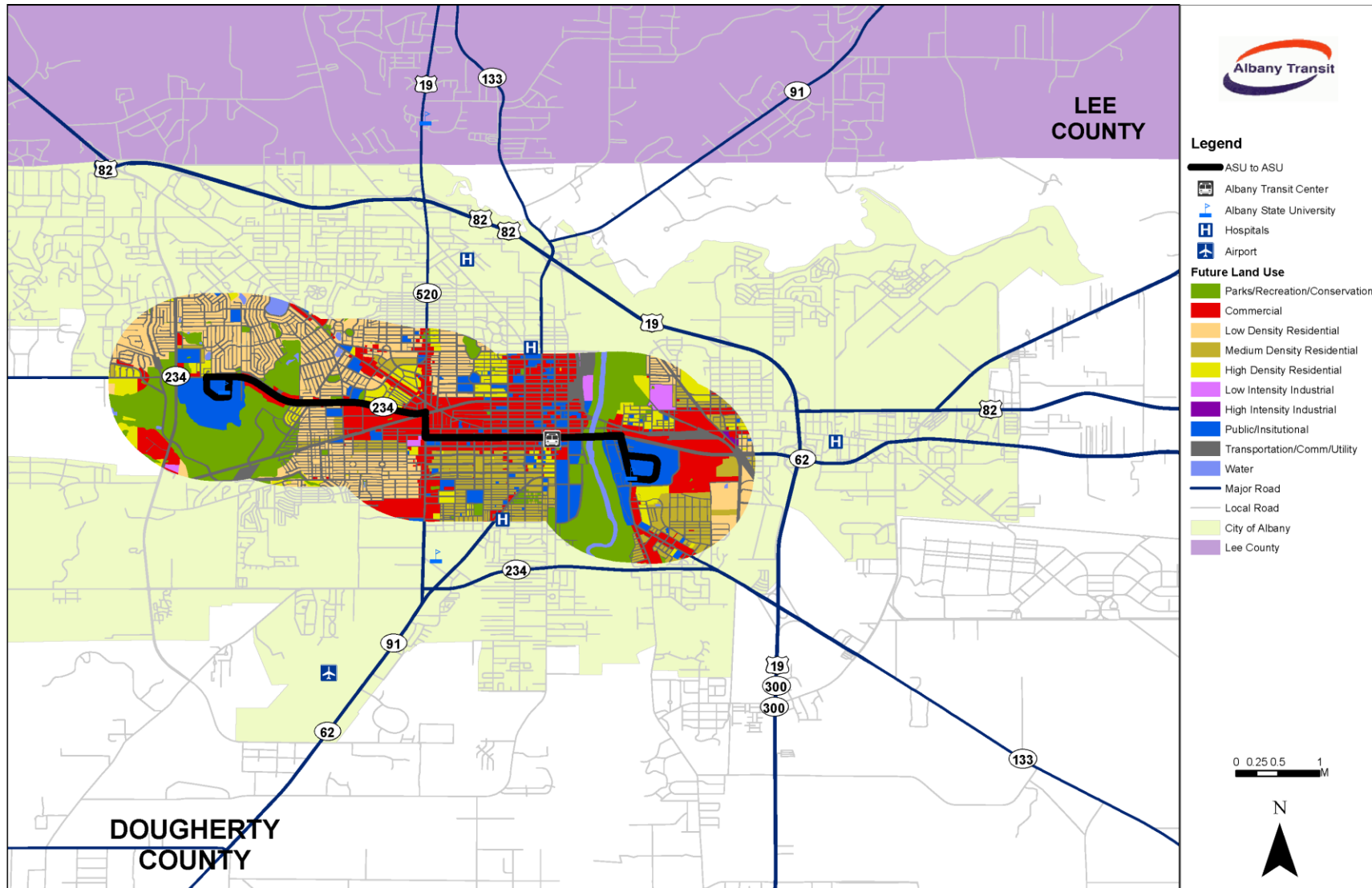


Figure 7-34: Ledo Road to Transit Center Future Land Uses within One Mile

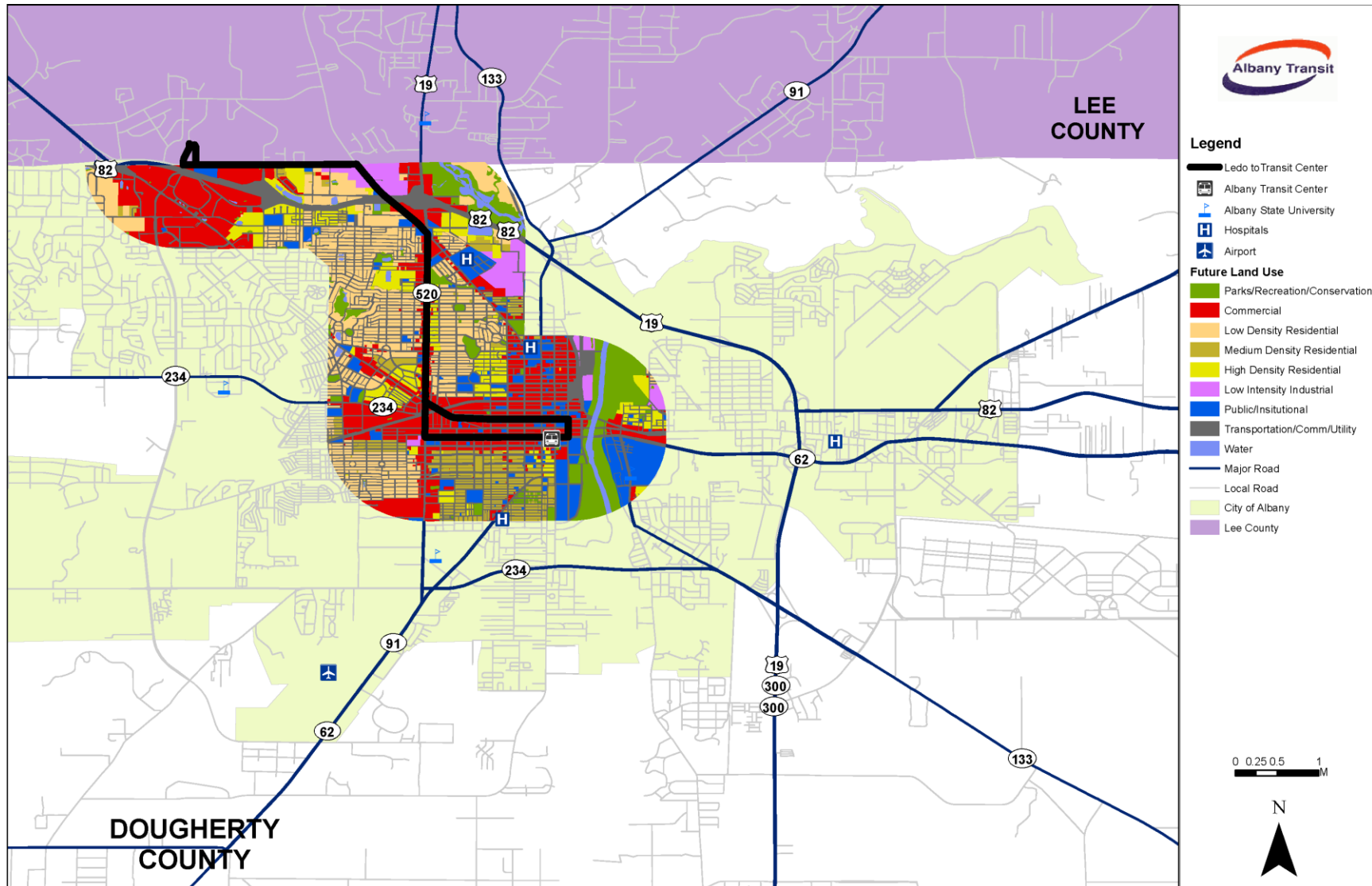


Figure 7-35: Airport to Transit Center Future Land Uses within One Mile

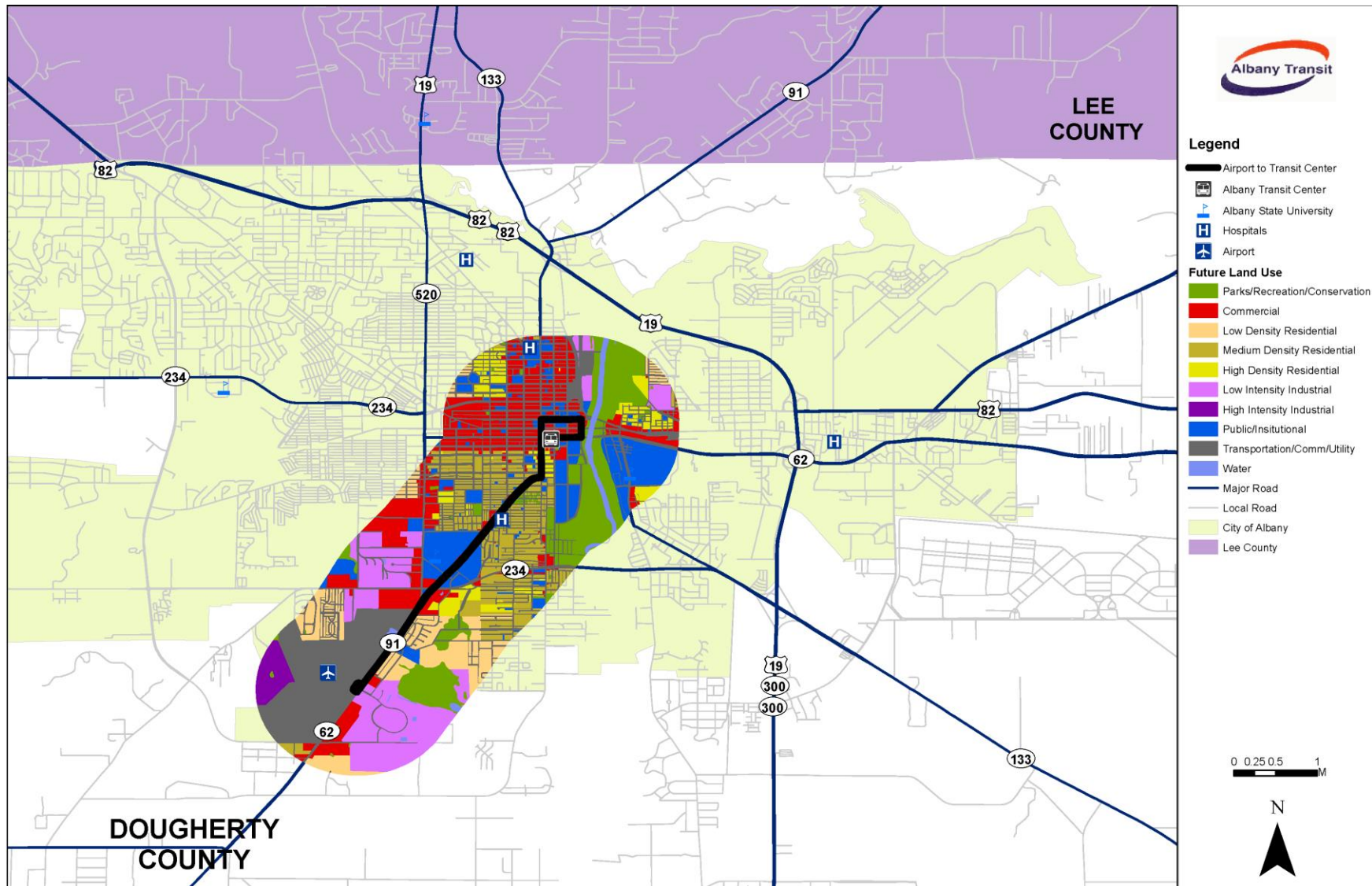
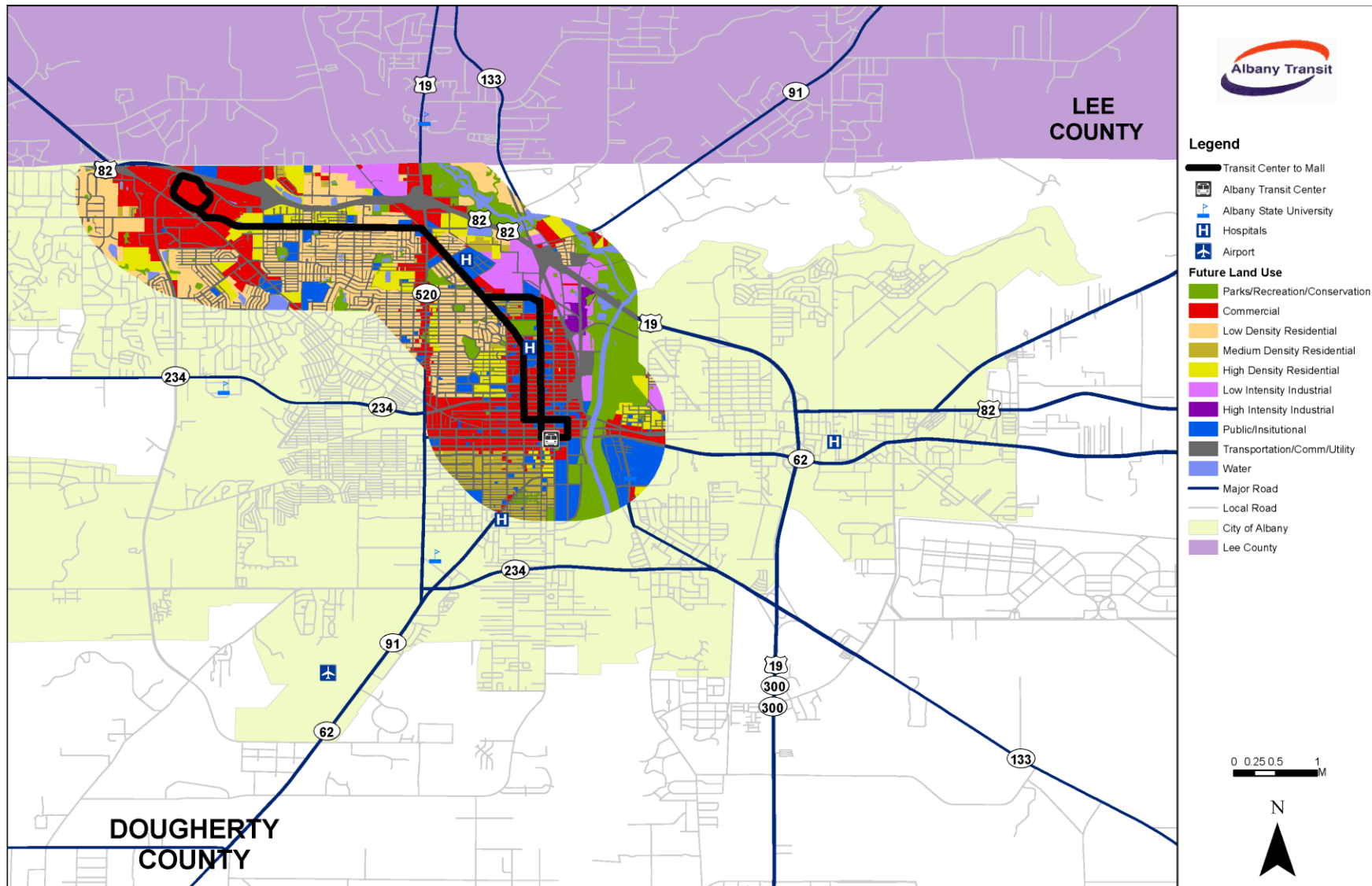


Figure 7-36: Transit Center to Mall Future Land Uses within One Mile



7.5.8 Screening Criteria and Matrix

The screening process for the development of BRT within the Albany area will be a two-phase process. Phase 1 will be the comparison and high-level evaluation of the four proposed BRT Routes. This comparison will identify the top two corridors that most align with the BRT goals and will have the most significant positive impact on the region. Phase 2 will be a comparison of the proposed BRT system with the Institute for Transportation & Development Policy's (ITDPs) BRT Standard. This comparison will show how the proposed system will compare against other providers across the world. The existing conditions within the area, are more conducive to a "BRT Light" system which will not meet many of the criteria established within the BRT Standard.

Phase 1 Route Comparison

In order to determine the most effective of the four potential routes identified for BRT, the four were compared against each other. This comparison included the development of a matrix of opportunities and assumed conditions, which allowed for an objective scoring of the routes. The screening matrix criteria that are grouped into three main categories, which are as follows:

- **Important Connections:** The proposed BRT service should provide access to both existing and potential development within the community.
- **Improved Operations:** The proposed BRT service should provide a faster and enhanced experience when compared to the existing transit routes.
- **Infrastructure Conditions:** The proposed BRT service should provide an improved experience for the rider and will require significant capital investment to separate this service from standard transit.

Based on the results of the matrix evaluation, the top performing routes were the ASU and Ledo Road Routes, followed closely by the Mall Route. The ASU and Ledo Road Routes show a high potential for success within the region based on the data presented within the matrix. The Airport Route would require significant development of both residential and commercial uses to score higher within this evaluation. The screening matrix and the resulting scoring are shown in Table 7-8.

Table 7-8: Phase 1 Screening Matrix

Metric	Metrics Notes	Measure and Score		Routes			
		Measure	Max Score	ASU	Airport	Mall	Ledo
Important Connections							
Provides access to a planned growth area (Old Northside, Opportunity Zone, Dtnw Redevelopment Area, Enterprise District)		Y/N	10	10	10	10	10
Provides access to an existing development area	Provides a connection to previously developed areas.	Y/N	5	5	5	5	5
Orientation with Central Business District	Miles within the CBD, (scored against the other 3 routes)	Highest 8/Lowest 2	8	2	6	8	4
Geographic distribution	Total Route Distance Covered	Highest 6/Lowest 0	6	0	2	4	6
Provides Access to a Possible New Growth Area (possibility to induce demand as identified by planning staff)		Y 15/Somewhat 5/No 0	15	15	5	0	15
Inherent Demand (existing transfers between College Campus, commercial areas, etc.)		Y 10/Somewhat 5/No 0	10	10	0	5	5
Medium Residential Future Land Use	Highest nearby acreage (scored against the other 3 routes)	Highest 6/Lowest 0	6	4	6	0	2
Commercial Future Land Use	Highest nearby acreage (scored against the other 3 routes)	Highest 8/Lowest 2	8	4	2	6	8
Institutional Future Land Use	Highest nearby acreage (scored against the other 3 routes)	Highest 8/Lowest 2	8	6	8	2	6
Is the Route Providing Service to an Area Previously Identified for a Fixed Route	Replace a planned/existing route?	Y/N	5	5	0	5	0
Estimated Population within .25 mile of stops	(scored against the other 3 routes)	Highest 8/Lowest 2	8	4	2	6	8
Improved Operations							
Assumed Vehicle Revenue	(Scored against the other 3 routes)	Highest 8/Lowest 2	8	4	2	8	6
Located Along Top Ten Corridors	Servicing 1 or more of the top 3 fixed route corridors in the region	Y/N	10	10	0	10	0
Planned Mid-day Headways	Lowest headway between 9am and 4pm (Scored against the other 3 routes)	Highest 8/Lowest 2	8	6	2	8	4
Infrastructure Conditions							
Number of Proposed Stations	(Scored against the other 3 routes)	Highest 6/Lowest 0	6	4	0	6	6
Integration with Other Public Transport	Will the route provide connections to other transit routes?	Y/N	3	3	3	3	3
		Total Possible	124	92	53	86	88

Phase 2 The BRT Standard

As described above, the BRT Standard is a tool created by the Institute for Transportation and Development Policy (ITDP) to compare BRT systems across the world.¹⁹ It is important to note that this standard is meant to depict and rank full scale BRT systems that have been implemented in typically very dense and populous areas. As such many of the criteria included within this standard are not applicable or feasible within Albany. Although many of the criteria listed within the BRT Standard are likely unattainable within Albany, the scorecard criteria used to add points and their applicability to the Albany area are included in Table 7-9.

While there are factors to add points, there are also factors that can deduct points from the scoring. These factors and their applicability to Albany are shown in Table 7-10.

¹⁹ <https://www.itdp.org/library/standards-and-guides/the-bus-rapid-transit-standard/about-the-brt-standard/>

Table 7-9: BRT Standard Factors Used to Add Points

Group	Criteria	Application to Albany
The BRT Basics	Dedicated Right of Way Along Route	Unlikely to be applied within Albany, however, this may be modified to include stopping or passing lanes.
	Busway Alignment	Unlikely to have separated alignments from traffic.
	Off-board Fare Collection	Recommended
	BRT Oriented Intersection Treatments	Recommended
	Platform-level Boarding	Recommended
Service Planning	Multiple Routes	Possible
	Express, Limited, and Local Services	Possible
	Control Center 1) automated dispatch, 2) active bus control, and 3) AVL	Possible
	Located in Top Ten Corridors	Possible
	Demand Profile	Possible
	Hours of Operations	Possible
	Multi-corridor Network	Possible
Infrastructure	Passing Lanes at Stations	Unlikely to have dedicated passing lanes. Some stations may have a pull off or signal priority
	Minimizing Bus Emissions	Possible
	Stations Set Back from Intersections	Possible
	Center Stations	Unlikely to be implemented in the area.
	Pavement Quality	Possible
Stations	Distances Between Stations	Recommended between .2 and .5 miles apart.
	Safe and Comfortable Stations - 1. Wide, 2. Weather Protected, 3. Safe, 4. Attractive	Recommended
	Number of Doors on Bus	Possible, Albany may implement 3 door buses
	Docking Bays and Sub-stops	Possible, Albany may consider the development of sub stops at high demand stations.
	Sliding Doors in BRT Stations	Possible
Communication	Passenger Information	Recommended, real time passenger information
	Branding	Recommended, the branding should be unique to the BRT buses and routes.
Access and Integration	Universal Access (accessible to all special needs customers)	Recommended
	Integration with Other Public Transport	Recommended
	Pedestrian Access and Safety	Recommended
	Secure Bicycle Parking	Recommended, will support complete streets efforts
	Bicycle Lanes	Recommended, will support complete streets efforts
	Bicycle-Sharing Integration	Possible

Table 7-10: BRT Standard Factor Used to Deduct Points

Deductions	Applicability to Albany
Commercial Speeds	Possible - Speed above 12 mph
Peak Passengers per Hour Per Direction (pphd) Below 1,000	Likely
Lack of Enforcement of Right-Of-Way	Unlikely to apply unless dedicated lanes are developed
Significant Gap Between Bus Floor and Station Platform	Will be based on bus and station design
Overcrowding	Possible
Poorly Maintained Busway, Buses, Stations, and Technology Systems	Possible
Low Peak Frequency	Unlikely to provide 8 buses per hour in peak
Low Off-Peak Frequency	Unlikely to provide 4 buses per hour in off peak
Permitting Unsafe Bicycle Use	Unlikely to be an issue
Lack of Traffic Safety Data	Unlikely to be an issue
Buses Running Parallel to the BRT Corridor	Possible to have parallel buses using the corridor
Bus Bunching	Unlikely to experience bus bunching along the corridor.

The intent of the BRT Standard is to compare worldwide, fully implemented BRT systems against each other and to create a standard of achievement. Within Albany, many of the features of a BRT system are not necessary nor would the capital expenditure be feasible. To meet the foreseen demand within the community, the implementation of a BRT Light or Express bus service may be more beneficial. Therefore, the BRT standard can be used as a tool or reference but does not represent an effective measure for a BRT system in this area.

7.5.9 Benefit Cost Analysis

Anticipated Project Costs

Due to the planning level analysis, general cost estimates were developed, however, more detailed costs will be developed when specific route feasibility studies are undertaken.

There are typical transit related costs likely incurred during the development of a BRT or BRT Light System²⁰. The estimated costs listed below were developed from a series of case studies across the nation provided by Pedbikesafe.org.

- Transit Shelters: \$5,000 - \$24,000
- Bus Bulb Outs: \$15,000 - \$70,000 per bulb
- Transit Access Improvements
 - Sidewalk: \$50 per square yard
 - Curb Ramps: \$500 - \$5,000
 - Mid-Block Crossings: \$2,500 - \$20,000
 - Curb Extensions: \$2,000 - \$20,000
- Complete Streets Improvements
 - Street Trees: \$430 average
 - Benches: \$1,550 average
 - Trash/Recycling: \$1,420
- Articulated Bus: \$375,000

The cost estimates listed above are highly variable and will also depend on the type of investment Albany Transit is desiring to make in the development of a BRT system. A fully built out BRT system requires the implementation of dedicated lanes (cost not included above), larger buses, and general enhancements that are likely to be on the higher end of the cost ranges identified above. The development of a BRT Light system will have significantly lower costs than the full BRT system but will still require more investment than a standard fixed route system.

²⁰ <http://www.pedbikesafe.org/PEDSAFE/countermeasures.cfm>

Potential Impacts to Traffic

Due to the existing and future conditions of traffic and land uses within Albany, the majority of the BRT stations will likely be located in a configuration similar to the existing fixed route stops. With these locations, the impacts to traffic will be minimal and similar to those from the existing fixed route system.

Alternatively, if significant investment into the BRT system is made, such as dedicated and queue jump lanes and off board ticketing, the implementation of the BRT system may improve traffic conditions.

7.5.10 Bus Rapid Transit Recommendations and Strategies

Possible Implementation within Albany

The implementation of a full BRT system does not appear feasible in the near future for Albany; however, a BRT Light system may be a more viable approach. To determine whether a BRT Light system or express bus service would be more effective, a full feasibility analysis is recommended.

Albany Area BRT Limitations

The current population and development densities are not sufficient to support the capital improvements necessary for the implementation of a true BRT system. The following factors limit the feasibility of implementation of a full BRT system in the Albany area.

Funding

The implementation of a BRT system requires significant funding for the development of enhanced stations, buses, and dedicated right-of-way. Federal funding (5307) is not anticipated to increase in the near future, leading to a potential deficit when considering the cost of implementing a BRT system. If considered, more local match funding would be necessary.

Current Zoning and Land Use Strategies

BRT systems generally require TOD styles and very specific nodal development to be successful. Though several development zones and tax allocation districts have been identified in the downtown area, a study to determine if these current approaches would create the densities necessary to support BRT. A proactive approach for creating the development zones to support BRT is needed by the local governments.

Existing Infrastructure

The development pattern within Albany will both support and limit the development of a BRT system. Much of the downtown area has a higher density of commercial/retail development which is supportive of BRT; however, the available right of way restricts,

or inflates the costs for the creation of bus only lanes or significantly enhanced boarding zones. Outside of the downtown area, several potential growth nodes present opportunities for expansion without the same right of way concerns. In addition to the right of way costs of implementation, BRT vehicles and routes require the presence of technology to function. These technologies will require upgrades to existing systems and/or the purchase and installation of additional technology, further increasing the costs of implementation.

Alternatively, Albany should consider the development of a BRT Light or a modified express bus program in lieu of a full BRT system. By adopting one of these methods in a pilot program, Albany will be able to avoid the larger capital expenses while providing a scaled down, yet similar service quality to BRT. Due to the right of way and density limitations, the development of an enhanced route with specific branding is recommended if moving forward with an enhanced service. Through this pilot program, the BRT concept can be tested, adjusted in necessary, and then fully implemented.

Bus Rapid Transit Recommendations and Next Steps

This study focused on the planning-level identification of corridors within Albany that have the potential for BRT improvements. The following recommendations provide Albany with a path for evaluating and, if desired, implementing a BRT or similar system. The recommendations have been stratified into short term (0-5years), mid-term (5-10 years), and long term (10 or more years) strategies.

Short Term Recommendations (0-5 years)

- Development of a Transportation Development Committee comprised of local government agencies, transportation officials, community development organizations and members of the public
 - This Committee should identify specific goals and formalize the regional need for BRT
- Identify potential funding sources
 - The Federal 5307 funding is not anticipated to increase resulting in the need for increased local match
- Conduct a BRT feasibility study in coordination with the Committee
 - Using the potential routes identified in this effort as a baseline, a more detailed study should be conducted to determine the feasibility of a BRT or BRT Light system.

Mid Term Recommendations (5-10 years)

- Modify local planning and development policies to be more conducive for BRT development
 - Identify priority zones for higher densities based on TOD principles
 - Develop BRT positive screening processes which help prioritize TOD principles
- Development of Memorandums of Understanding (MOUs) between partner agencies and organizations pending the future development of a BRT system
 - The BRT system may cross city and county lines, indicating a need for formalized agreements
 - These MOUs may also contain funding agreements for the agencies that will be supporting or benefiting from BRT
- Potential development of a Pilot BRT Light transit system with upgraded stations and branding
 - This pilot program serves as a proof of concept and act as the first stages of BRT service in the region

Long Term Recommendations (10 or more years)

- Potential improvement of BRT service
 - Inclusion of additional amenities to existing service
 - Expand or modify routes

8.0 TDP Recommendations

The recommendations identified in the assessment are short-term recommendations and are listed in the section below.

8.1 Fixed Route Recommendations

There are no recommendations for the elimination of any routes. However, recommendations include discontinuing certain route segments that either are duplicated by other routes or have low productivity. The elimination of overlapping or duplicative service results in transit investment savings and provides the ability to reallocate resources to new areas. These recommendations are made to improve the overall productivity of the Albany Transit service.

ROUTE 1 - RED LINE / ROBERT HARVEY

This route services Clarke Avenue/N Broadway as well and areas around Jackson Heights, Colonial Village, Elon Village, Mulberry Heights, Northend and East Towne.

Annual ridership is down 16% on this route.

Recommendation:

Based on the ridership numbers collected from the GFI data and current on time performance of 55.29%, no recommendations are made to restructure routing or service levels. It is recommended to adjust the time of the trips provided to improve connections with the express routes servicing East Albany and on-time performance issues.

Schedule Time	Weekdays	Saturdays
Existing	5:15	6:15
Proposed	5:00	6:00

ROUTE 2 - GOLD LINE / ALBANY STATE UNIVERSITY

This route services Albany State University and areas along Pecan Park Road and Oak Grove Estates Mobile Home Park. Annual ridership is up 13% on this route.

Recommendation:

Based on ridership numbers collected from the GFI data and current on time performance of 78.75%, no recommendations are made to restructure routing or service levels. It is recommended to adjust the time of the trips provided to further improve on-time performance issues.

Schedule Time	Weekdays	Saturdays
Existing	5:45	6:45
Proposed	5:40	6:40

ROUTE 3 - ORANGE LINE - ALBANY MALL

This route services areas along Dawson Road, N Slappey Boulevard, Palmyra Road, and Jefferson Street. Annual ridership is down 13% on this route.

Recommendation:

Since FY 2018, this route has experienced an 8% decrease in ridership. Based on ridership numbers collected from the GFI data and current on time performance of 43.37%, which is a decrease of 8% since 2018, it is recommended to adjust the time-of-day trips provided to improve on-time performance issues.

Schedule Time	Weekdays	Saturdays
Existing	5:15	6:15
Proposed	5:00	6:00

It is also recommended service levels be restructured on this route to reflect the current demand. Service should be restructured to operate every 30 minutes instead of 60 minutes during the weekdays, with frequency on Saturdays remaining the same.

Frequency	Weekdays	Saturdays
Existing	60	60
Proposed	30	60

ROUTE 4 - GREEN LINE / EAST ALBANY

This routes services the Mulberry Heights, East Albany, and Pecan Haven neighborhoods. Annual ridership is down 6% on this route.

Recommendation:

Based ridership numbers collected from the GFI data and current on time performance of 78.37%, which is a 12.63% increase since 2018, it is recommended to adjust the time-of-day trips are provided to further improve on-time performance, as well as add a new bus to this route to address current capacity issues.

Schedule Time	Weekdays	Saturdays
Existing	5:15	6:15
Proposed	5:00	6:00

ROUTE 5 - BLUE LINE / ALBANY MALL

This route provides service along W. Broad, North Monroe Street, and Dawson Road to the Albany Mall. Annual ridership is consistent on the route over the past two years.

Recommendation:

Based on ridership numbers collected from the GFI data and current on time performance of 48.71%, which is a 1.64% decrease since 2018, it is recommended to adjust the time-of-day trips are provided to improve on-time performance and maintain ridership.

Schedule Time	Weekdays	Saturdays
Existing	5:45	6:45
Proposed	5:40	6:40

It is also recommended service levels be restructured on this route to reflect the current demand. Service should operate every 30 minutes instead of 60 minutes during the weekdays, with Saturday frequency remaining the same.

Frequency	Weekdays	Saturdays
Existing	60	60
Proposed	30	60

ROUTE 6 - GREY LINE / GILLIONVILLE ROAD

This route services the Winterwood and Avondale Acres neighborhoods, as well as areas along West Oglethorpe Boulevard. Annual ridership is down 8% on this route.

Recommendation:

Based on ridership numbers collected from the GFI data and current on time performance of 45.41%, which is a 2.7% increase since 2018, it is recommended to adjust the time-of-day trips are provided to improve on-time performance and increase rider confidence to boost ridership.

Schedule Time	Weekdays	Saturdays
Existing	5:45	6:45
Proposed	5:40	6:40

ROUTE 7 - BROWN LINE / NEWTON & OAKRIDGE

This route provides services to West Town, Country Club Estates Avenue, and Azalea Terrace neighborhoods. Annual ridership is down 17% on this route.

Recommendation:

Based ridership numbers collected from the GFI data and current on time performance of 46.33%, which is an 8.9% increase since 2018, it is recommended to adjust the time-of-day trips are provided to further improve on-time performance and increase rider confidence to boost ridership.

Schedule Time	Weekdays	Saturdays
Existing	5:15	6:15
Proposed	5:00	6:00

It is also recommended service levels be restructured on this route to reflect the current demand and operate service every 30 minutes instead of 60 minutes during the weekdays, with frequency on Saturdays remaining the same.

Frequency	Weekdays	Saturdays
Existing	60	60
Proposed	30	60

ROUTE 8 - PURPLE LINE / MLK

This route provides service to the neighborhoods of Sunny Acres, Washington Heights, Sunnyland and Riverview. Annual ridership is down 16 % on this route.

Recommendation:

Based on ridership numbers collected from the GFI data and current on time performance of 68.49%, which is a 5.91% increase since 2018, it is recommended to adjust the time-of-day trips are provided to further improve on-time performance and increase rider confidence to boost ridership.

Schedule Time	Weekdays	Saturdays
Existing	5:15	6:15
Proposed	5:00	6:00

ROUTE 9 - SILVER LINE / POINTE N MEREDYTH

This route currently services areas in and around Pointe North, Dawson Heights, Murray Hill, Merry Acres and Groveland. Annual ridership is down 5% on this route.

Recommendation:

Based on ridership numbers collected from the GFI data, the running times and current on time performance of 24.62%, it is recommended that Route 9 be restructured

through rerouting and simplifying its routing through Palmyra Avenue and Pointe North. This rerouting will decrease the travel time for customers riding through the neighborhood and increase the overall route productivity. The reroute eliminates inbound service along Dawson Road and provides more direct service to and from the Albany Mall for riders along Palmyra Road and Whispering Pines Road. It is also recommended that the current schedule be relaxed for this route to improve on-time performance and rider confidence. The proposed reroute changes are shown in the Appendix.

Schedule Time	Weekdays	Saturdays
Existing	5:20	6:20
Proposed	5:00	6:00

ROUTE 1X - RED LINE / TURNER

This route provides services to areas in and around Turner City, Sylvandale, and segments of East Albany. Annual Ridership is up 5% on this route.

Recommendation:

Based on ridership numbers collected from the GFI data and the current on time performance of 52.55%, which is an 11.17% decrease since 2018, it is recommended to adjust the time-of-day trips are provided to improve on-time performance and increase rider confidence to boost ridership.

Schedule Time	Weekdays	Saturdays
Existing	5:00	6:00
Proposed	5:20	6:20

ROUTE 4X - GREEN LINE / SYLVESTER RD.

This route provides service along East Oglethorpe Boulevard., South Mock Road, and Brierwood Drive, as well as to the Butler Subdivision. Annual ridership down 20% on this route.

Recommendation:

Based on ridership numbers collected from the GFI data and the current on time performance of 54.84%, which is a 2.07% increase since 2018, it is recommended to adjust the time-of-day trips are provided on a 40, 60, 70 minutes cycle to further improve on-time performance and increase rider confidence to boost ridership.

Schedule Time	Weekdays	Saturdays
Existing	5:30	6:30
Proposed	5:30	6:30

ROUTE 20 AND 30 - RAM RUSH EAST AND WEST CAMPUS

RAM Rush services the East and West campuses of Albany State University.

Annual ridership is up 11% on Route 20 East Campus and up 10% on Route 30 West Campus.

Recommendation:

Based on ridership numbers collected from the GFI data and current on time performance of 58.06% and 47.50% respectively, which is a 15.48% and 11.46% decrease respectively since 2018, it is recommended to adjust the time-of-day trips are provided to further improve on-time performance and increase rider confidence to boost ridership.

Schedule Time	Weekdays	Saturdays
Existing	6:45	8:15
Proposed	6:40	8:20

8.2 Additional Study Recommendations

SERVICE PERFORMANCE MONITORING EVALUATION

Service performance evaluations are essential to the planning process and ensuring agency investments are targeted to maximize effectiveness. Service performance monitoring is used to ensure that all services are meeting expectations for the transit network. Performance is measured before each service modification in order to establish the existing conditions and provide a baseline to assess if the changes improve performance over time and provide information for additional adjustments if necessary. These performance monitoring evaluations ensure that services provided are meeting the needs of customers, as well as providing cost-effective solutions for the agency.

Albany Transit currently monitors system ridership along each route. Ongoing monitoring of the system will help to identify high and low performing routes that may be candidates for restructuring or changes in service investment.

PERFORMANCE MONITORING RECOMMENDATIONS

Albany Transit's service performance should be reviewed on a regular ongoing basis and expanded to include additional key performance indicators per the National Transit Database key statistic indicators, which include:

- Passengers Boardings per Revenue Hour
 - Measures the number of passenger boardings every hour of service on the street for fixed- route local services
- Passenger Boardings per Trip
 - Measures the number of passenger boardings for every trip for fixed- route services
- Passenger Boardings per Revenue Mile
 - Measures the number of passenger boardings per mile of service
- Subsidy per Passenger Boarding
 - Measures the difference between fare revenue collected and the cost of providing the service

Service performance should be monitored and reviewed regularly and updated before and after each service change. This monitoring provides the ability to view changes over time, assess how newly implemented services are progressing, and address unproductive services at regular intervals throughout the year.

The monitoring process can point to the consideration of eliminating unproductive routes. However, before discontinuing a route or segment, all other options should be exhausted, with the result that the route or segment was unable to raise productivity to an acceptable level. If possible, discontinuing unproductive segments is preferred to discontinuing an entire route, particularly if no other alternative is available for impacted customers.

Albany Transit currently utilizes Routematch software for scheduling and monitoring of daily ridership. Peer transit agencies that also utilize the Routematch software utilize other scheduling platforms to supplement the tracking of the key performance metrics and stay in compliance with National Transit Database annual reporting.

ATS could supplement their current scheduling software with additional platforms that run both buses and schedules. For example, the myAvail Platform allows the agency to harness the power of Enterprise Transit Management Software (ETMS) to support all

aspects of their agency, from buses and dispatch to finance and administration, while all information is in one place for ease of analysis and reporting. The primary features include the provision of data and information for fleet management and maintenance, collecting data from all features to support operations and compliance, and the provision of real-time information for riders.

DRAFT

9.0 Associated Plans

9.1 ADA Paratransit

Albany Transit System offers an Americans with Disabilities Act (ADA) regulated paratransit service that services people with disabilities within the jurisdictional limits of the city of Albany.

Paratransit service is required by the ADA, which states that public transit agencies must provide complimentary paratransit services to people with disabilities who are unable to ride fixed-route public transportation. Paratransit is a specialized, door-to-door service for customers whom ADA regulations define as a population who are entitled to this service as a civil right, and who are unable to ride fixed-route public transportation, which may include the inability to:

- board, ride or disembark independently from any readily accessible vehicle on the regular fixed-route system
- access existing accessible fixed-route transportation because that transportation is not available at the needed time on that route
- get to boarding/alighting locations of regular public transportation

The ADA has three categories of eligibility for paratransit services. Not everyone with a disability qualifies for paratransit services. These three eligibility categories determine who is eligible for paratransit services:

- Category 1: A person with a disability who cannot navigate the transit system without assistance. Individuals in this category are unable, as the result of a disability, and without the assistance of another individual (except the operator of a wheelchair lift or other boarding assistance device), to board, ride, or disembark from any vehicle on the system which is readily accessible to and usable by individuals with disabilities. People in Category 1 can use paratransit for all trips that they make.
- Category 2: A person with a disability who requires an accessible vehicle when one is not available. Individuals in this category need the assistance of a wheelchair lift or other boarding assistance device and are able to use accessible fixed-route service, but the available fixed-route service is not accessible. Examples include the accessible vehicle is down for maintenance, or

the vehicle has no functional wheelchair lift, or the boarding or disembarking location (bus stop) is inaccessible and the lift or ramp cannot be deployed there. The number of people eligible in this category should decrease as ATS becomes more accessible.

- Category 3: A person with a disability who is unable to reach the transit stop. Individuals in this category have a specific impairment-related condition which prevents the individual from traveling to or from a bus stop in the fixed-route system. An individual's specific impairment-related condition is a key factor, significant inconvenience or difficulty is not enough. Architectural or design barriers, such as steps or curbs or environmental conditions such as distance, terrain, and weather do not by themselves form a basis for eligibility under this category. These situations must be examined on a case-by-case basis.

Once an individual completes the application process for eligibility for ADA paratransit service, Albany Transit determines if that individual is eligible. After this determination, a rider's eligibility can be classified in one of three ways:

- Unconditional: the rider needs ADA paratransit for all trips or "ADA Paratransit Eligible"
- Conditional: the rider needs ADA paratransit for some trips but can use fixed-route service for other trips or "ADA conditional Paratransit Eligible"
- Temporary: eligibility is short-term for the length of time the rider is unable to use fixed route.

The certification period for eligibility is two years, and recertification is not automatic.

In addition to eligibility criteria, the ADA contains regulations for paratransit service's comparability to fixed-route bus service. The six criteria for ADA complementary paratransit are:

- Hours and days of service: ADA complementary paratransit service must be provided on the same days and during the same hours as the fixed-route service for the comparable trip.
- Service area: ADA complementary service must be provided within $\frac{3}{4}$ mile on either side of each fixed route, as well as a $\frac{3}{4}$ mile radius at the end of each fixed route, and within a $\frac{3}{4}$ mile radius of rail stations.
- Response time: The transit agency must schedule and provide paratransit service to any ADA complementary paratransit eligible person at any requested

time (on a particular day) in response to a request for service made the previous day (i.e., next-day service). The transit agency must accept reservations during normal business hours on all days preceding a service day.

- Fare: The one-way paratransit fare may be no more than twice the full fixed-route fare for a similar trip, exclusive of discounts. A rider's personal care attendant (PCA) may not be charged a fare.
- Trip purpose: There may be no restrictions or priorities based on trip purpose. Service must be provided regardless of the nature of the trip.
- Capacity constraints: Entities must plan, budget, and implement their paratransit systems to meet all of the anticipated demand. The transit agency must have enough paratransit vehicles, drivers, reservations staff, and reservations capacity available to ensure that eligible demand for service does not exceed supply of service on a regular basis.

This paratransit service is complimentary to the fixed-route service ATS provides. Paratransit buses operate six days a week, with no service on Sunday or holidays. The fare per one-way trip is \$2.50, compared to the \$1.70 per one ride ticket for fixed-route bus service. There are two additional paratransit ticket options, including a coupon book with ten tickets for \$25 and a monthly unlimited pass for \$90.

Albany Transit currently has eight vehicles for paratransit services, which are Ford - Champion paratransit buses. Based on 2019 NTD Data, ATS used five vehicles in maximum service daily. Below is a table showing fleet characteristics over the past five years.

Table 9-1: Fleet Characteristics

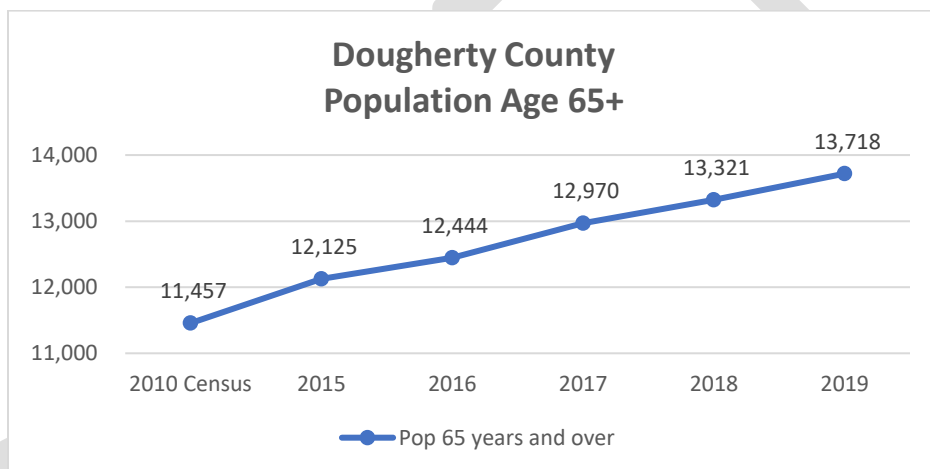
FLEET CHARACTERISTICS	2015	2016	2017	2018	2019
Vehicles Available for Maximum Service (VAMS)	8	7	7	11	8
Vehicles Operated in Maximum Service (VOMS)	8	6	6	5	5
Percent Spare Vehicles	0.0%	14.3%	14.3%	54.5%	37.5%
Average Fleet Age in Years	5.5	9.0	3.0	4.0	2.7

Based on NTD Agency Profiles, 2015 - 2019

Recent capital purchases in 2018 and 2019, including the purchase of new paratransit buses, have decreased the average fleet age over the past five years.

High demand paratransit destinations include medical facilities throughout the city, with a significant portion of trips for medical purposes. The population aged 65 years and older has been increasing since the 2010 Census, and according to the US Census Bureau publication *An Aging Nation: The Older Population in the United States*, this trend is anticipated to continue in the upcoming decade. The graph below shows American Community Survey (ACS) population data for Dougherty County from the 2010 Census through 2019.

Figure 9-1: Dougherty County Population 65+



Albany Transit uses Routematch scheduling software to assist with scheduling paratransit trips. This software has been in use since the previous TDP effort, with training and onboarding provided to new and existing dispatchers. Routematch can access real-time performance and operations data, including runs, trips, and routes. Dispatchers are able to input requests for demand and regular subscription trips into the software, which is designed to schedule trips as efficiently as possible.

9.1.1 Operational Assessment

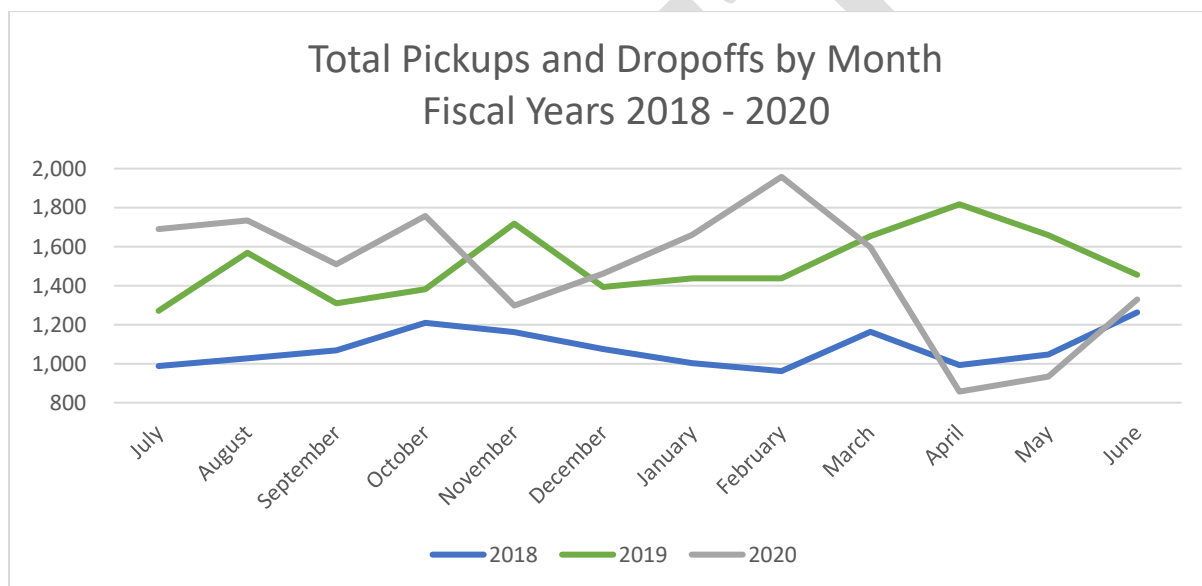
Performance measures are classified into five functional areas, which include: service effectiveness, service efficiency, labor utilization, safety, and asset management. Evaluated in this system performance review are general performance measures,

service effectiveness, and service efficiency. These performance measures are also compared to peer transit agencies with comparable ADA paratransit service.

GENERAL PERFORMANCE MEASURES

ADA paratransit ridership is evaluated differently than fixed-route ridership. Pickups and drop-offs are measured and added together for ridership totals, also known as unlinked passenger trips (UPT). Those totals are listed in the graph below.

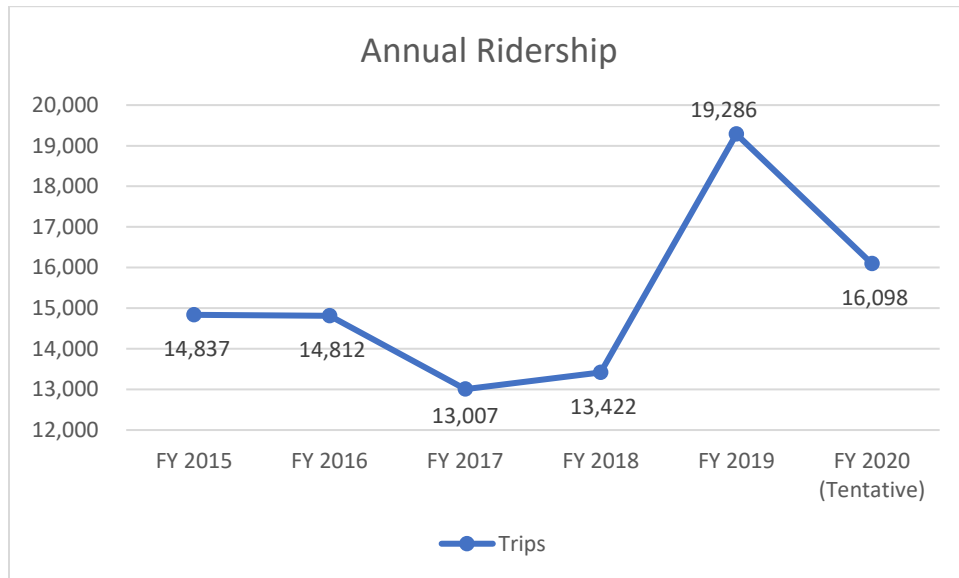
Figure 9-2: ADA Paratransit Monthly Ridership Totals



Ridership increased every fiscal year listed above, except for a decline in November 2019, and at the onset of the COVID-19 pandemic in March 2020. Ridership levels fell below 2018 levels and began to rebound slightly in May 2020, with a positive increase in June.

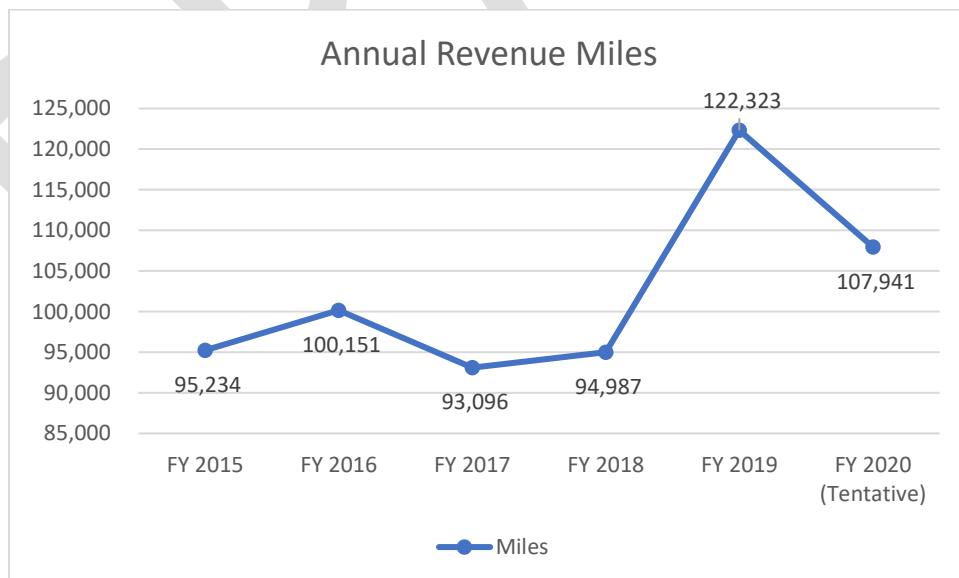
The graph below shows annual ridership levels from FY 2015 through FY 2020 (tentative because the ridership numbers are not finalized in the National Transit Database). Ridership levels over the previous six fiscal years show a modest decrease in FY 2017, with a significant increase in FY 2019. Ridership numbers for FY 2020 declined concurrently with the onset of COVID-19 and statewide Public Health State of Emergency and local shelter-in-place guidelines.

Figure 9-3: ADA Paratransit Annual Ridership



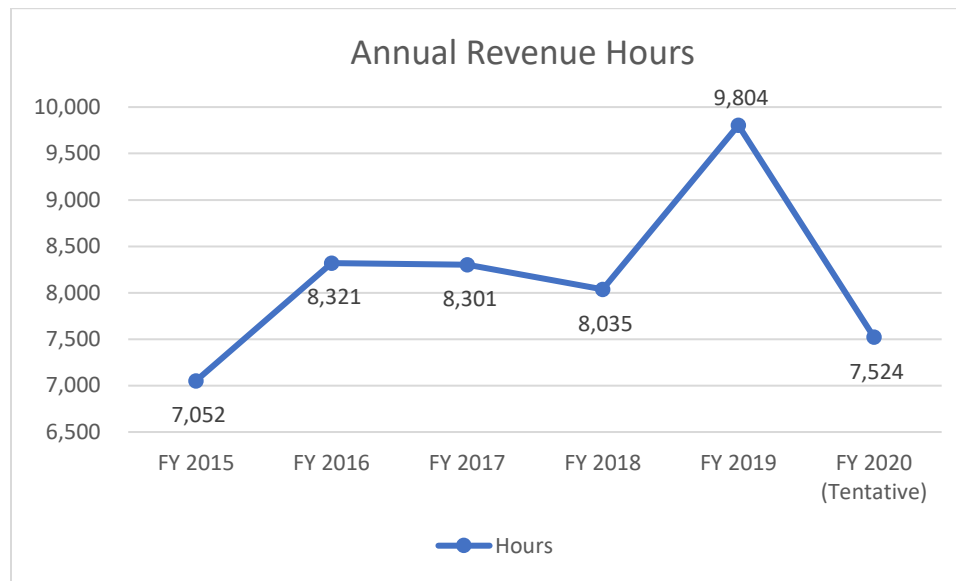
Annual revenue miles showed a 12% increase from FY 2015 through FY 2020, even with a decrease in the latter half of FY 2020 (a decline in revenue miles began in March 2020).

Figure 9-4: ADA Paratransit Annual Revenue Miles



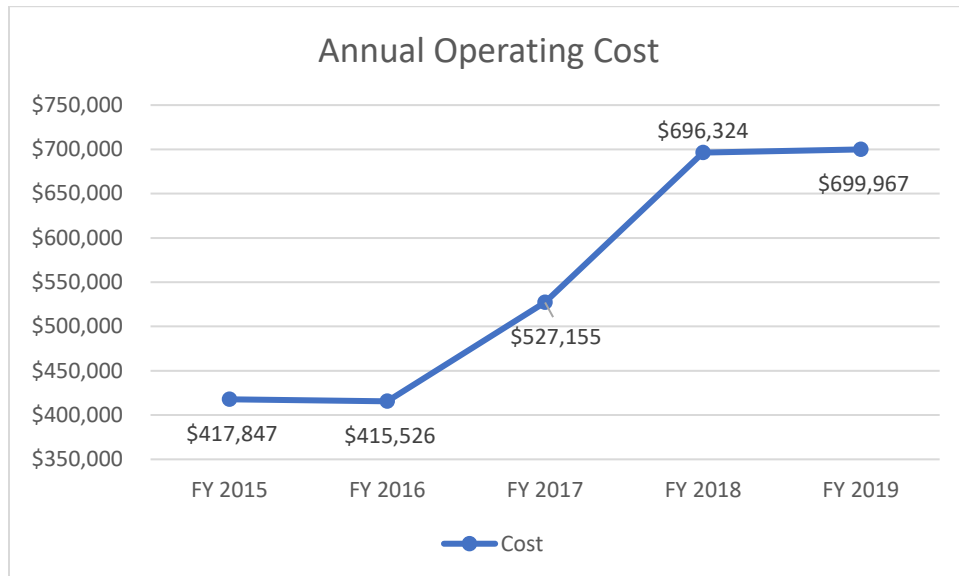
Annual revenue hours increased by 6% over the study period. The trends visible in the annual revenue miles are also included in the annual revenue hours.

Figure 9-5: ADA Paratransit Annual Revenue Hours



Annual operating expenses increased only marginally in the past year, after seeing a year over year increase starting in FY 2016. The plateau in the operating expenses can be attributed to the COVID-19 pandemic.

Figure 9-6: ADA Paratransit Annual Operating Cost



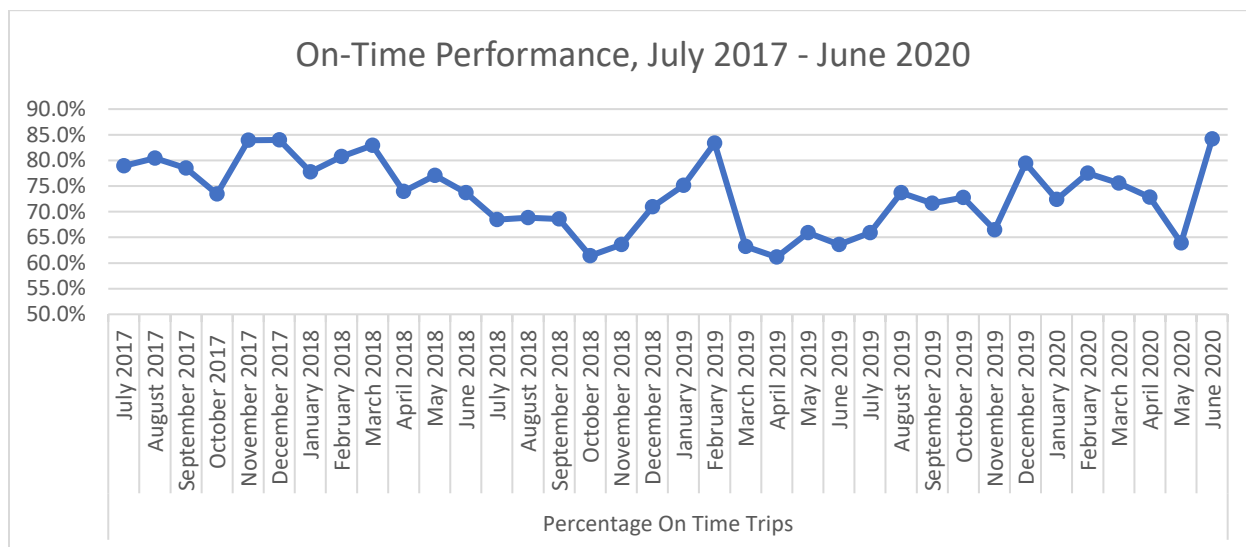
9.1.2 Service Effectiveness Measures

Passenger trips per revenue mile and passenger trips per revenue hour are two ratios used to evaluate service effectiveness, as well as on-time performance. There are different performance measures used industry-wide to evaluate paratransit level-of-service. There are no set benchmarks for these performance measures, but by evaluating year over year data, performance trends can be analyzed and addressed. On-time performance is a key indicator of how a transit agency is performing, as it is one of the biggest challenges in ADA paratransit. ADA regulation regards illegal capacity constraints as substantial numbers of

- Significant untimely pickups, drop-offs, or arrivals
- Trip denials
- Trips missed by the transit agency
- Trips with excessive lengths

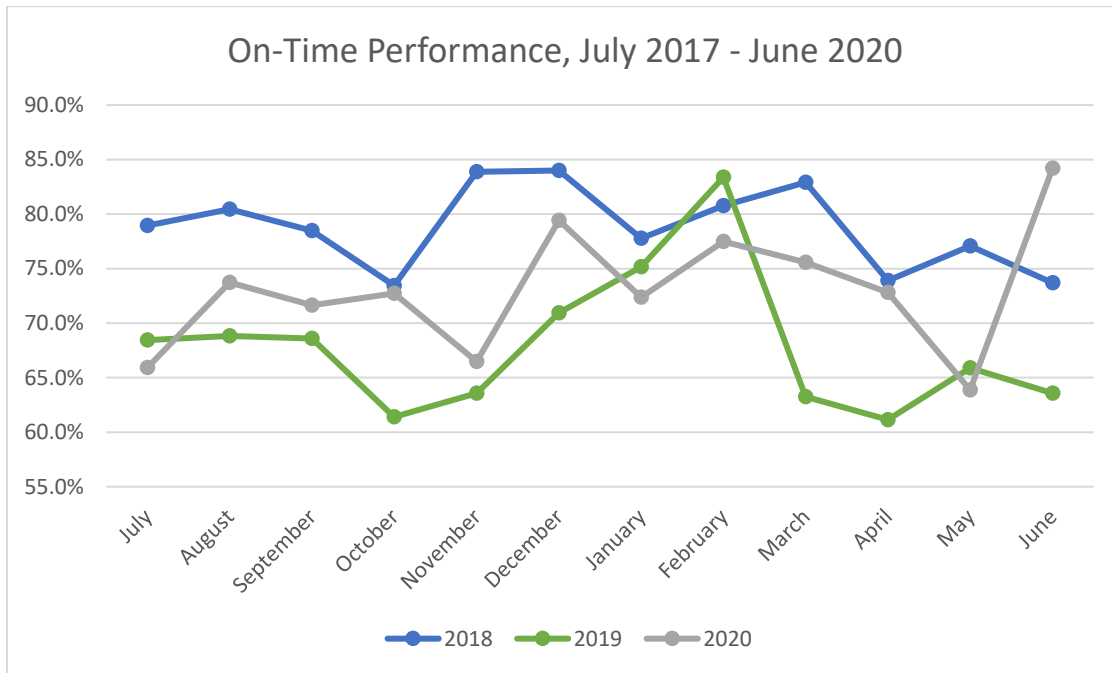
as well as any other operational pattern or practice that significantly limits the availability of service to people who are eligible for ADA paratransit. The following graphs show on-time performance from July 2017 to June 2020.

Figure 9-7: ADA Paratransit On-Time Performance



In the past three years, on-time performance has not reached the 90% threshold that peer transit agencies consider a standard for a well performing ADA paratransit service. As ridership has increased from FY 2018 to FY 2020, on-time performance has not increased, with the exception of June 2020. Late trips are an indicator of problems with adhering to schedule on either the passenger's or operator's side. In FY 2018, 24% of all late trips were late by 30 mins or more. This percent decreased to 22% in FY 2019 and increased in FY 2020 to 23%.

Figure 9-8: ADA On-Time Performance (2018 - 2020)

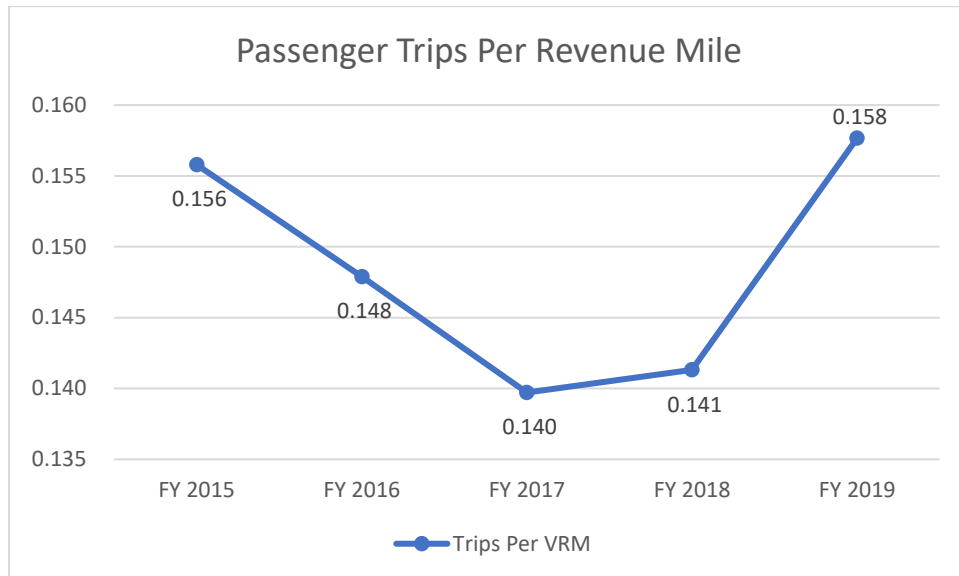


It is not possible to look at the on-time performance data and determine what is affecting on-time performance. Albany Transit drivers and dispatchers state that unscheduled stops and a change in return trip pickup times can affect the day's paratransit schedule. If a passenger requests to make an unscheduled stop, this can have a cascading effect on the rest of the day's trips. Drivers and dispatchers attempt to accommodate the passengers when requests for unscheduled stops or an earlier pickup time are made.

Dispatchers encourage riders to give an accurate return trip time, so that on-time performance and rider satisfaction are improved. On-time performance data from the previous three fiscal years show that passenger pickup trips occur at a higher on-time percentage than passenger drop-off trips. Routematch can also affect on-time performance. If the software is not functioning properly, or dispatchers are unable to use the software to its full capability, trips are not scheduled as efficiently as possible. Dispatcher trainings are frequently held by Albany Transit to improve dispatcher knowledge and trip scheduling abilities.

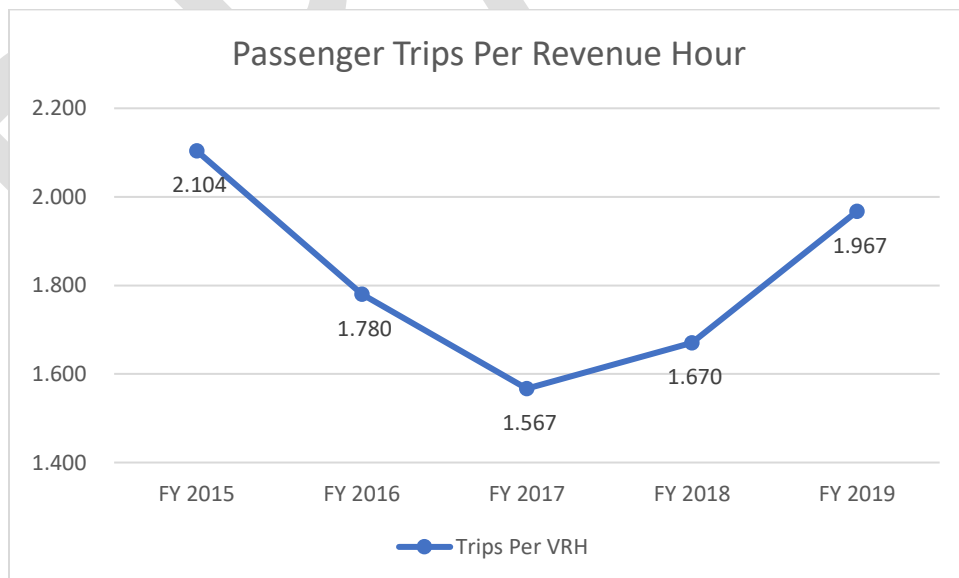
Passenger trips per revenue mile decreased at a steady rate until FY 2017, when it began to increase. From 2015 through 2019, this ratio increased by 1.2%.

Figure 9-9: ADA Passenger Trips per Revenue Mile



Passenger trips per revenue hour followed the same trajectory as passenger trips per revenue mile, with a low of 1.567 trips per VHR in 2017. By 2019, this ratio has not increased to the previous 2015 high.

Figure 9-10: ADA Passenger Trips per Revenue Hour



9.1.3 Service Efficiency Measures

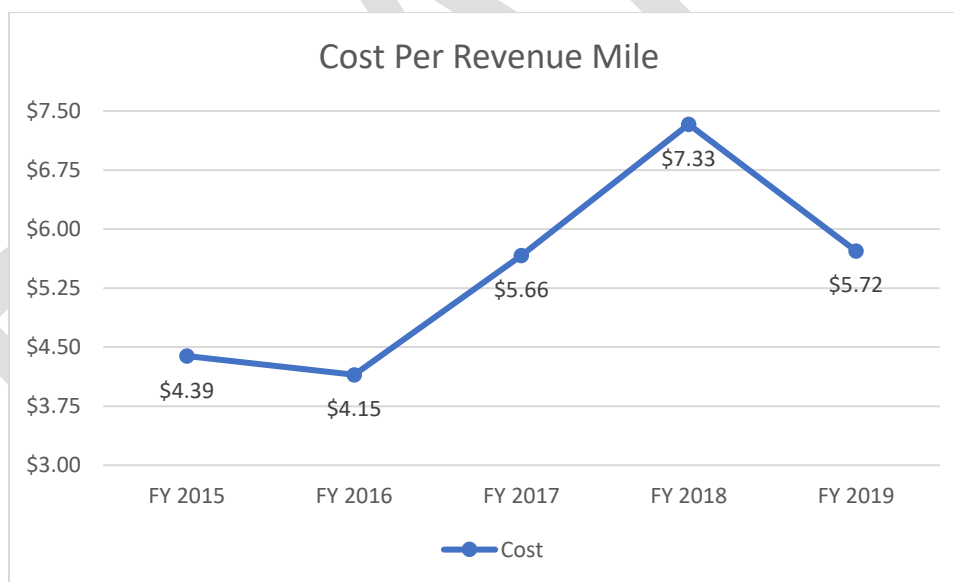
The top four performance measures used to evaluate service efficiency are:

- Operating Expenses per Passenger Trip
- Farebox Recovery
- Operating Expense per Revenue Mile
- Operating Expense per Revenue Hour

Service efficiency contains the economic, availability, service delivery, travel time, community, and maintenance and construction categories used to evaluate ADA paratransit service. These performance measures allow for transit agencies to enhance overall efficiency by maximizing transit service efficiency and minimize operation costs.

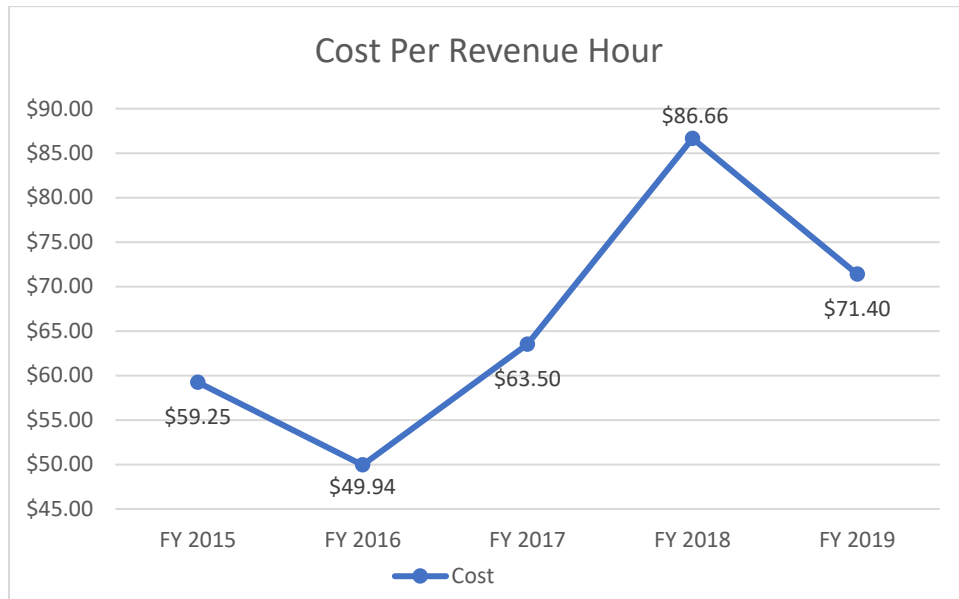
Cost per revenue mile increased from 2016 through 2018, with a drop in 2019.

Figure 9-11: ADA Paratransit Cost per Revenue Mile



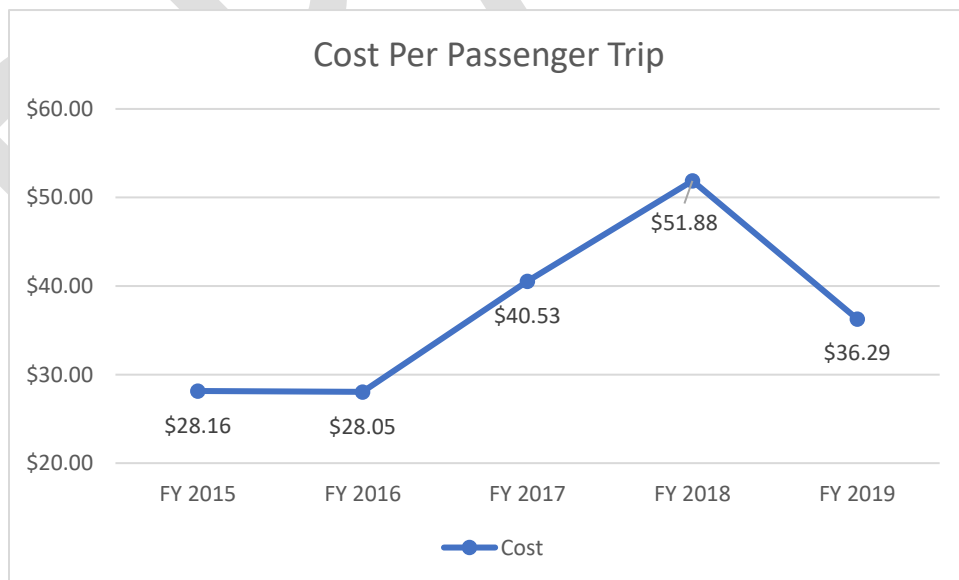
Cost per revenue hour experienced a similar trajectory to the cost per revenue mile ratio. This ratio peaked in 2018 at \$86.66.

Figure 9-12: ADA Paratransit Cost per Revenue Hour



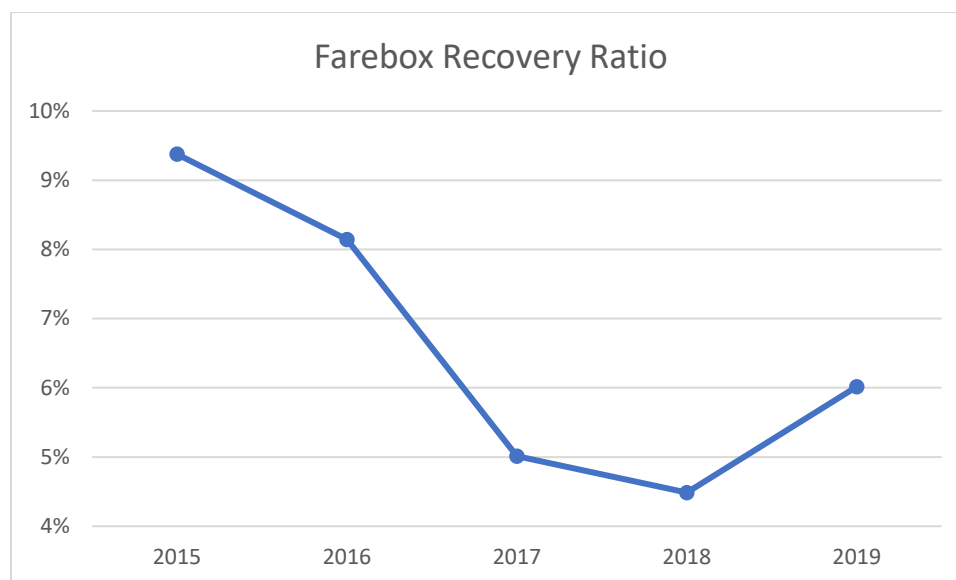
Cost per passenger trip increased for two straight years, ending with a decrease in 2019. From 2015 through 2019, this ratio increased 22.4%.

Figure 9-13: ADA Paratransit Cost per Passenger Trip



The farebox recovery ratio decreased for four consecutive years, with a slight increase in 2019, at 6%. This ratio is the percentage of operating costs that are recovered through ridership fares.

Figure 9-14: ADA Paratransit Farebox Recovery



9.1.4 Peer Analysis

Peer analyses are performed to help transit agencies evaluate their performance and allow them to identify and correct problem areas for management actions. By accurately identifying peer agencies (agencies that share similar characteristics and are comparable) transit agencies can understand trends through general performance indicators. Effectiveness measures and efficiency measures are both used to further understand and compare transit agency performances.

For this peer review analysis, the Urban Integrated National Transit Database (Urban iNTD) was used to find peer transit agencies. The Urban iNTD was developed by the Florida Department of Transportation to facilitate the process of analyzing trends and NTD variables. Their methodology considers seventeen factors to identify similar agencies to serve as potential peers. These include three screening factors, and up to fourteen peer-grouping factors that include five service characteristics and nine urban area characteristics. The screening factors include Rail, Rail Only, and Heavy Rail. The five service characteristics are:

- Total Vehicle Miles Operated
- Total Operating Budget
- Percent Demand Response
- Percent Service Purchased
- Service Area Type

The nine urban area characteristics are:

- Urban Area Population
- Population Growth Rate
- Population Density
- State Capital
- Percent Population with College Degree
- Percent Poverty
- Annual Delay (Hours) Per Auto Commuter (used only for large urban areas)
- Freeway Lane-Miles Per Capita (only used for large urban areas)
- Distance (distance in miles between target and peer agencies)

The peer agencies identified for this assessment include:

- Monroe Transit System, Monroe, Louisiana
- Anderson Transit System, Anderson, Indiana
- Battle Creek Transit, Battle Creek, Michigan
- Kingsport Area Transit Service, Kingsport, Tennessee
- Decatur Public Transit, Decatur, Illinois
- City of Alexandria, Alexandria, Louisiana
- Macon-Bibb County Transit Authority, Macon-Bibb County, Georgia

The comparison among these peer systems with Albany Transit is shown in Table 9-2.

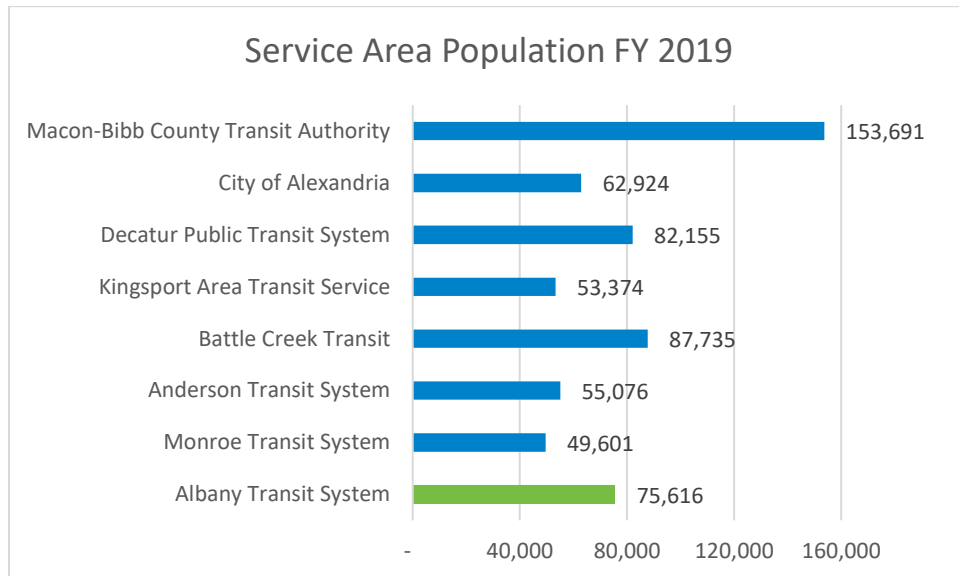
Table 9-2: Albany Transit System - ADA Peer Systems

Name	Service Area Population	Population Density	Vehicles Operated in Maximum Service	Total Operating Expenses	Revenue Miles	Revenue Hours	Passenger Trips	Service Area Size - Sq. Miles
Albany Transit System	75,616	4,448	5	\$699,967	124,722	9,804	19,286	17
Monroe Transit System	49,601	1,600	3	\$436,193	57,451	5,163	10,248	31
Anderson Transit System	55,076	1,224	8	\$686,407	99,657	8,487	22,879	45
Battle Creek Transit	87,735	1,202	7	\$1,285,245	113,189	11,131	23,927	73
Kingsport Area Transit Service	53,374	988	6	\$663,454	114,888	10,659	18,631	54
Decatur Public Transit System	82,155	1,550	5	\$1,213,042	106,391	8,970	19,385	53
City of Alexandria	62,924	2,247	2	\$406,703	68,436	6,415	21,317	28
Macon-Bibb County Transit Authority	153,691	2,196	6	\$677,438	291,758	19,871	33,226	70

Based on 2019 NTD Data

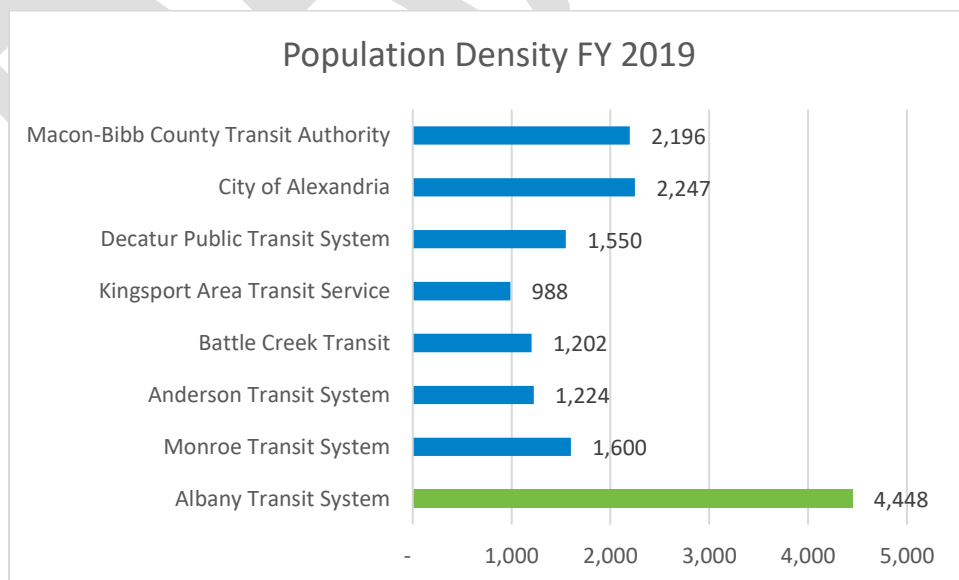
The comparison among the peer group shows that Albany Transit's service area population is 2.8% lower than the peer group average. Service area populations are shown in Figure 9-15.

Figure 9-15: ADA Peer Systems - Service Area Population



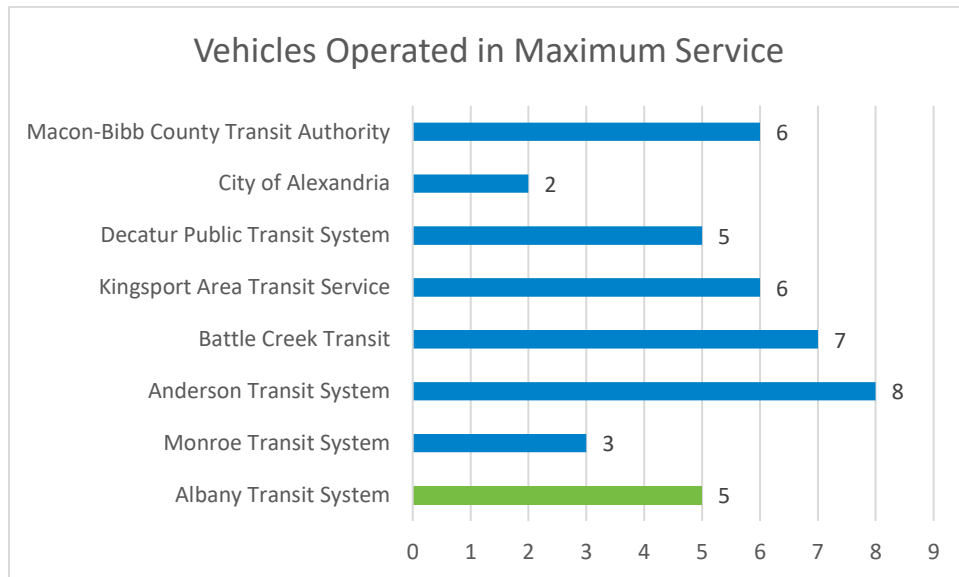
Albany Transit's population density is 182.9% higher than the peer group average, which is due to the comparatively small size of Albany Transit's service area. The peer group service area population density is shown in Figure 9-16.

Figure 9-16: ADA Peer Systems - Population Density



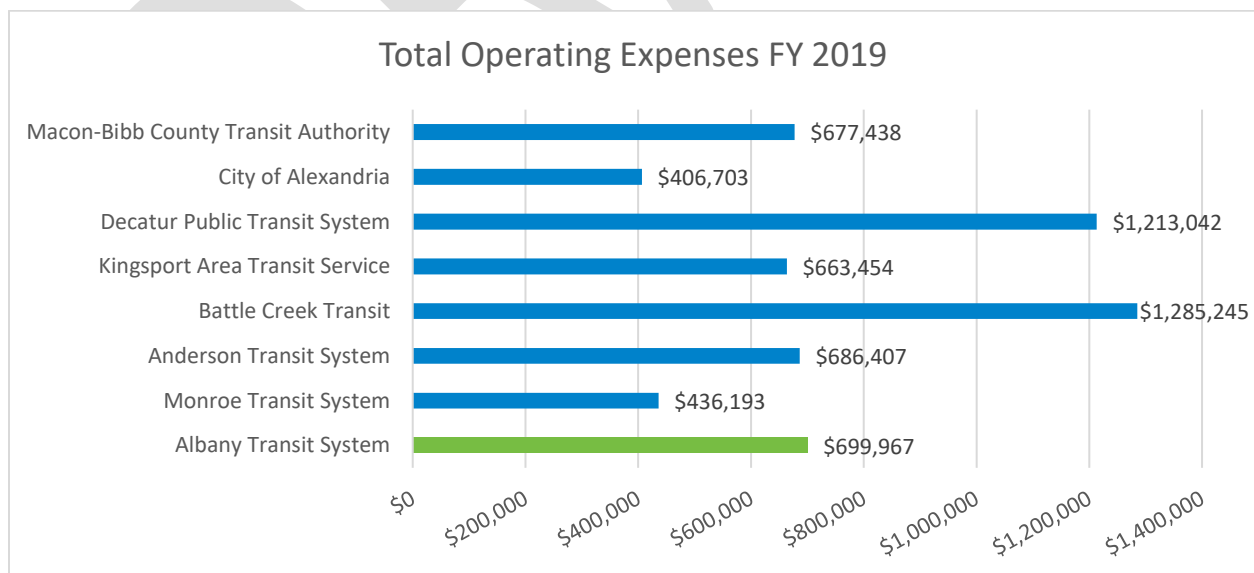
The vehicles operated in maximum service (VOMS) for Albany Transit is 5.4% lower than the peer group average. The VOMS comparison is shown in Figure 9-17.

Figure 9-17: ADA Peer Systems - VOMS



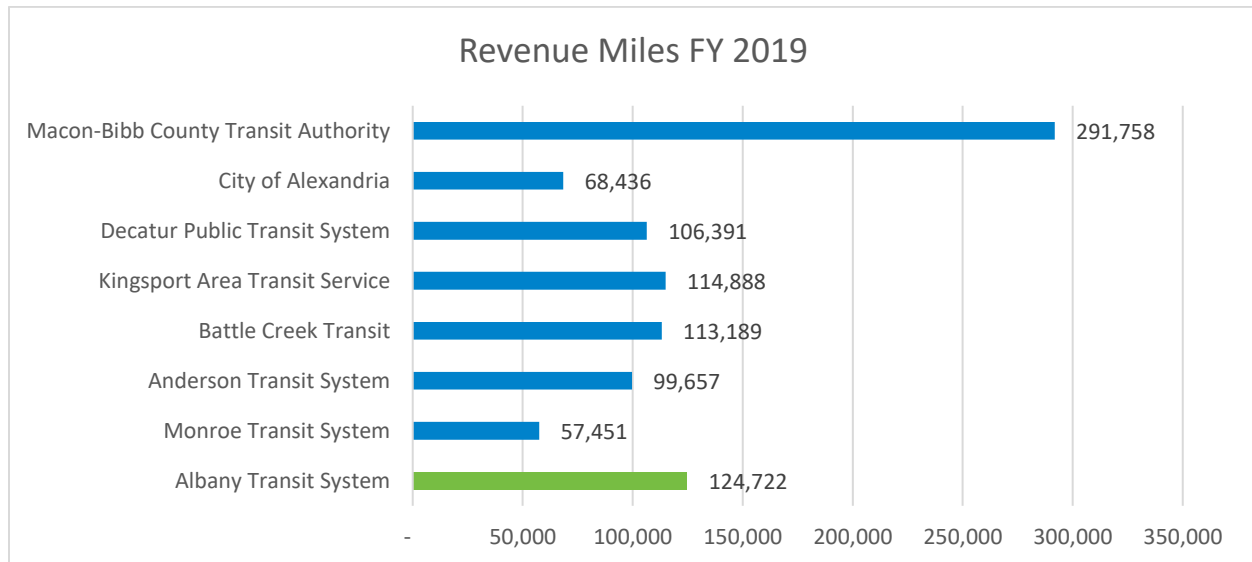
Albany Transit operating expenses are 8.7% lower than the peer group average. The comparison is shown in Figure 9-18.

Figure 9-18: ADA Peer Systems - Operating Expenses



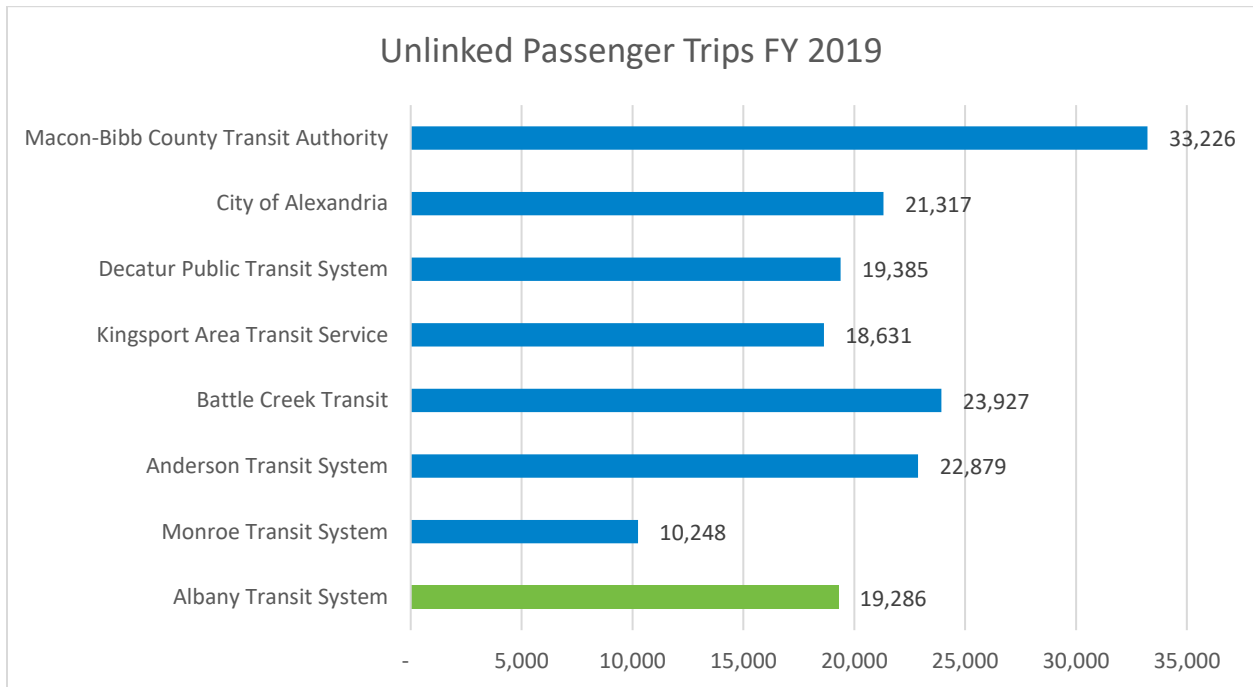
Total revenue miles for Albany Transit are 2.5% higher than the peer group average. The comparison of total revenue miles is shown in Figure 9-19.

Figure 9-19: ADA Peer Systems - Total Revenue Miles



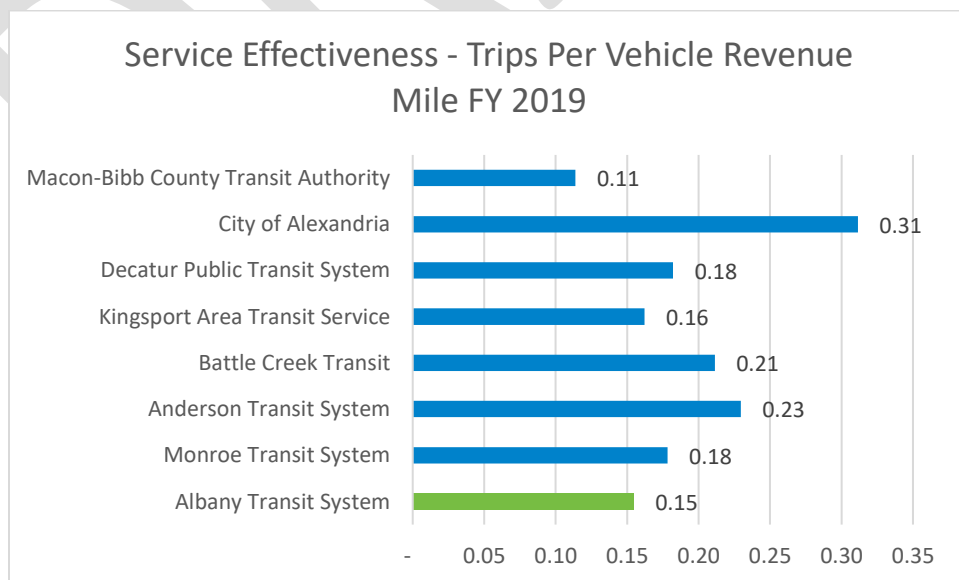
Unlinked passenger trips for Albany Transit are 9.8% lower than the peer group average. The unlinked passenger trips comparison is shown in Figure 9-20.

Figure 9-20: ADA Peer Systems - Unlinked Passenger Trips



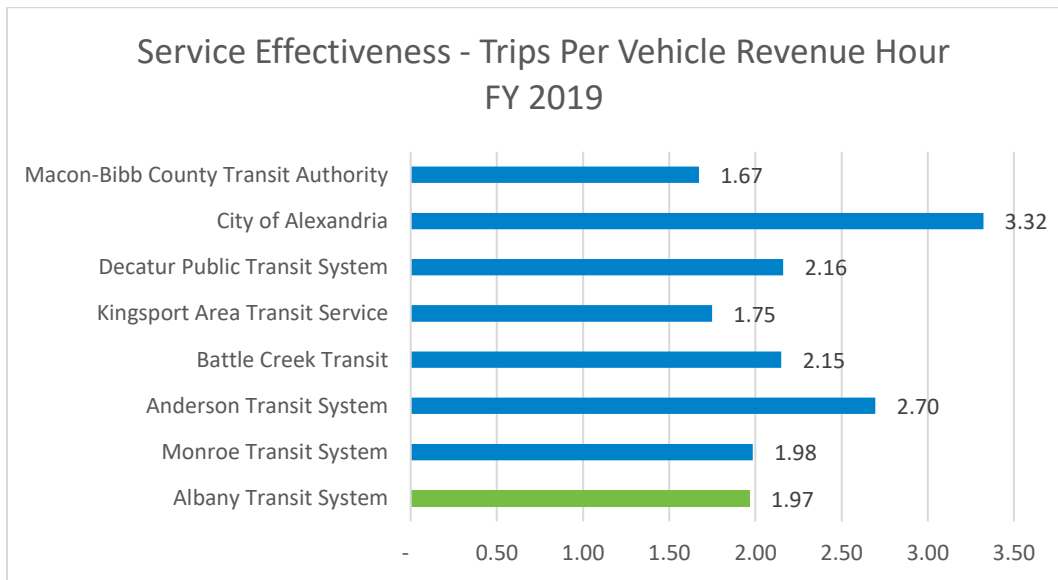
Passenger trips per vehicle revenue mile for Albany Transit are 22.1% lower than the peer group average. The trips per revenue service mile are shown in Figure 9-21.

Figure 9-21: ADA Peer Systems - Trips per Revenue Service Mile



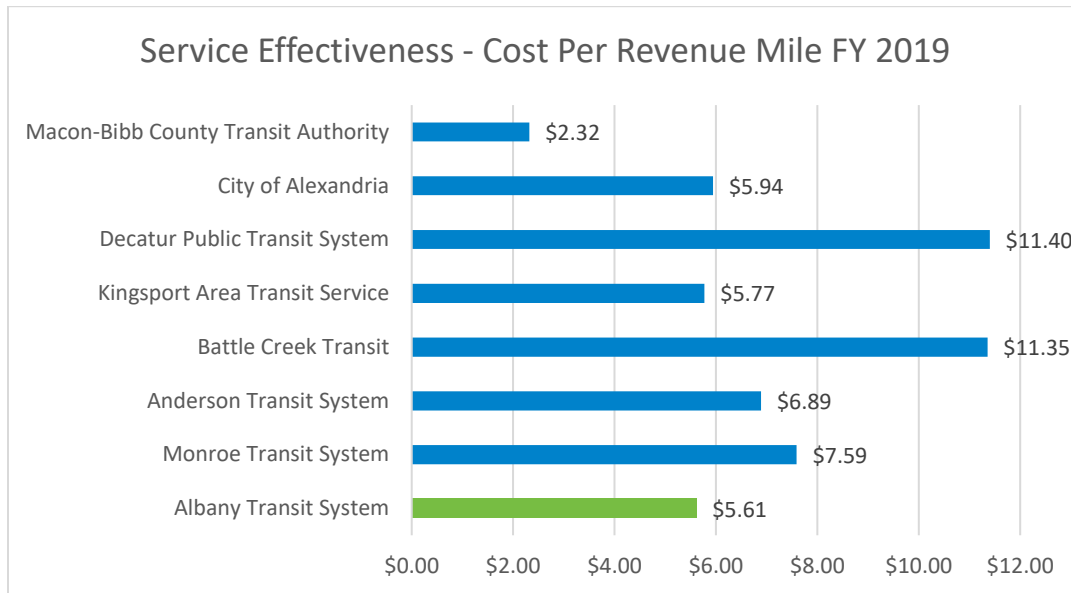
Passenger trips per vehicle revenue hour for Albany Transit are 12.5% lower than the peer group average. The trips per vehicle revenue hour comparison is shown in Figure 9-22.

Figure 9-22: ADA Peer Systems - Trips per Revenue Service Hour



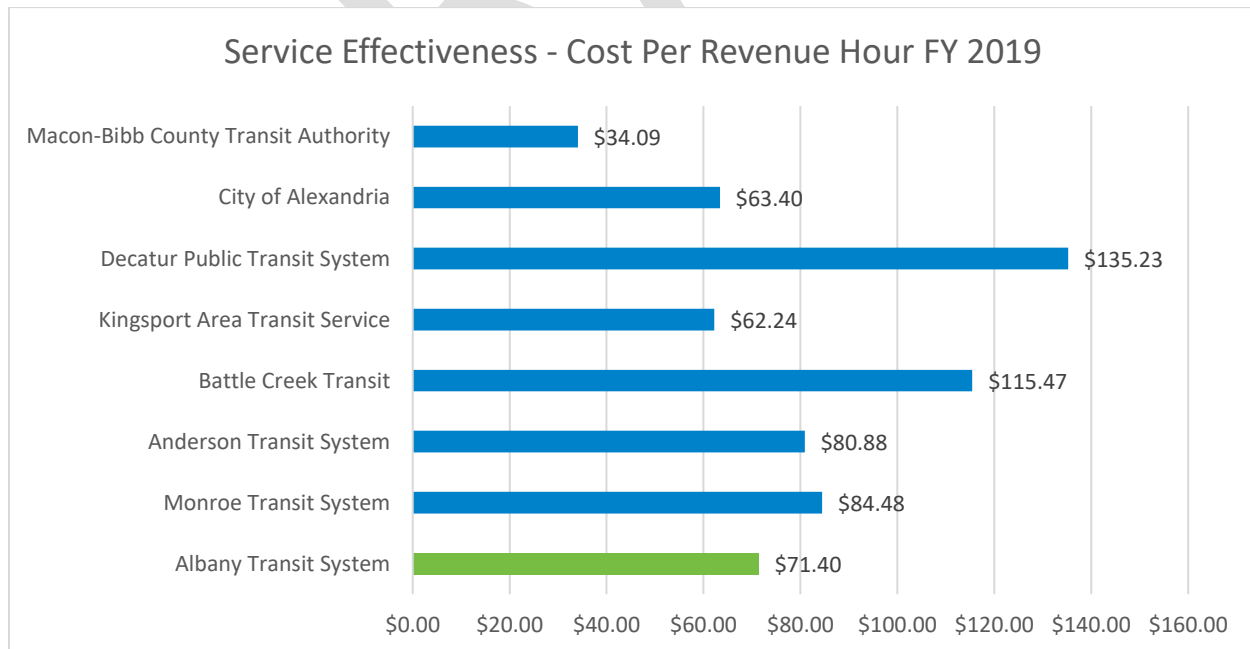
The cost per vehicle revenue mile for Albany Transit is 23.4% lower than the peer group average. The comparison of cost per vehicle revenue mile is shown in Figure 9-23.

Figure 9-23: ADA Peer System - Cost per Revenue Mile



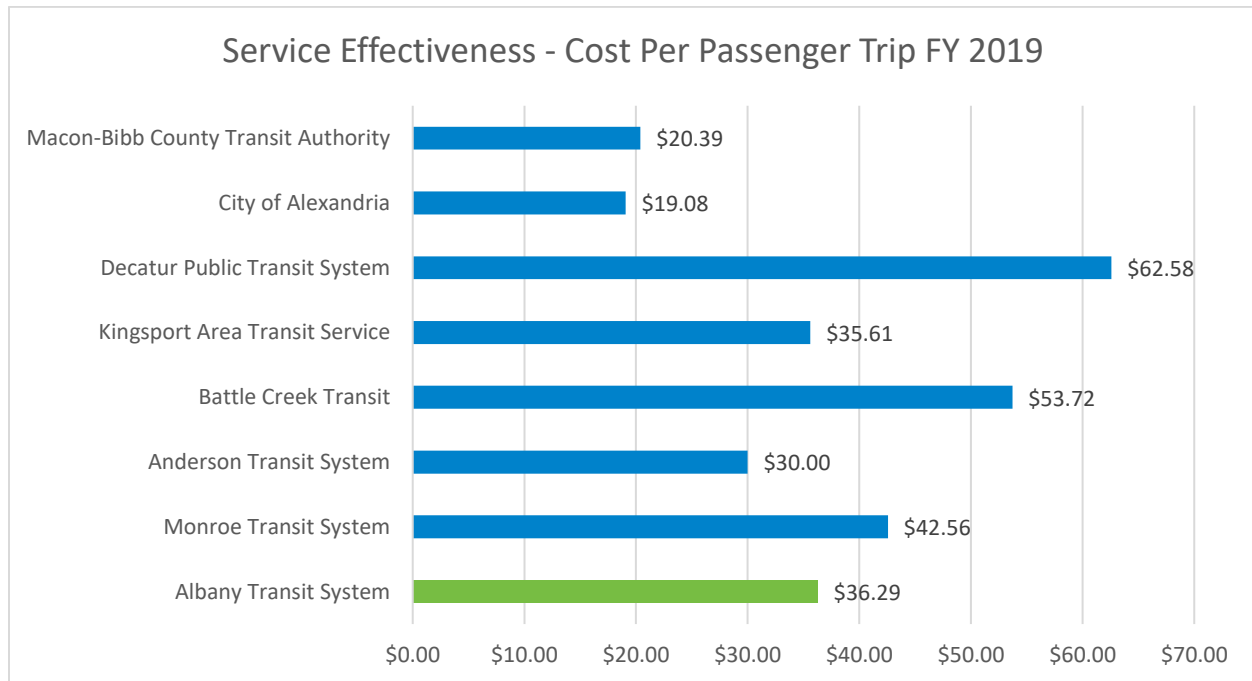
The cost per vehicle revenue hour for Albany Transit is 13.2% lower than the peer group average. The comparison of cost per vehicle revenue hour is shown in Figure 9-24.

Figure 9-24: ADA Peer Systems - Cost per Revenue Hour



The cost per passenger trip for Albany Transit is 3.7% lower than the peer group average. The comparison for cost per passenger trip is shown in Figure 9-25.

Figure 9-25: ADA Peer Systems - Cost per Passenger Trip



In the previous TDP, Routematch was identified as an issue for the Albany Transit paratransit services. Major concerns included trip scheduling inefficiencies that did not maximize vehicle utilization and cost effectiveness. Additionally, training in the software by staff was also identified as a concern. The recommendation was made for ATS staff to meet with Routematch representatives to discuss software performance. After meeting with Routematch, modifications were made that made only negligible improvements in the efficiency of the service.

Other transit systems across the state use a variety of scheduling software, including Routematch for paratransit services. The following is a list of select systems and the dispatching services used:

- Chatham Area Transit (CAT): CAT Mobility uses Routematch software for paratransit scheduling services.
- Athens Transit: Athens uses Routematch software for paratransit scheduling services as well as Avail Technologies, which is a unified transit agency software.

- Augusta Public Transit: Augusta uses Trapeze software for ADA paratransit scheduling services and uses QRyde Essentials for rural dispatching services.
- Hall Area Transit (Gainesville): Routematch is used for fixed route transit service.
- Lower Savannah Council of Governments (LSCOG): Best Friends Express uses Routematch for their paratransit scheduling services.

Some of these systems have identified problems with Routematch's ability to schedule trips efficiently. Buses are being underutilized and trips are not cost-effective.

Other systems outside of the state have also experienced similar problems with Routematch. The Regional Transportation Agency (RTA) in Howard County, Maryland uses Routematch to capture and calculate missed trip data, and in a Maintenance Audit in August 2019, stated:

"Unfortunately, due to persistent errors within the system and its many components, as well as relatively cumbersome processes necessary by dispatch and operations staff to validate and correct missing data, the Routematch system has not proven to be a reliable Office of the County Auditor's data source to date. RTA continues to work on internal processes as well as working with Routematch to address system issues."

FREDericksburg Regional Transit in Fredricksburg, Virginia noted in a Public Transit Advisory Board meeting in December 2017 their difficulties in working with Routematch and its support team, stating they were unable to update their RouteShout module due to unresolved issues with the vendor, and a continued lack of response from the Routematch support team.

At a Joint Meeting of the Central Maryland Transportation and Mobility Commission and the Central Maryland Transportation and Mobility Consortium in July 2019, the Regional Transportation Agency of Central Maryland noted that there were periodic issues with Routematch and RouteShout 2.0, and they were exploring other options for the future.

In the Transit Development Plan from 2016, Oregon's Tillamook County Transportation District (TCTD) stated that they use a basic application for dispatching that they personally developed, and that they previously used Routematch. They noted that Routematch is expensive and did not "fully meet their needs for trip management and reporting."

The above issues from numerous transit agencies highlight the need for Albany Transit to move away from Routematch and utilize another scheduling and tracking software company or combination of software companies. Pantonium, Trapeze, Syncromatics, TripMaster, TripSpark, are all viable alternatives to Routematch. Athens Transit finds that using Routematch in conjunction with Avail Technologies works when analyzing data and gathering ridership data. By using multiple software platforms as well as performing manual tabulation, Athens Transit is prepared when Routematch malfunctions. Albany Transit should fully investigate the options to determine which approach will best serve their needs.

9.1.5 ADA Paratransit Service Recommendations

The following recommendations were formulated based on the evaluation and assessment of the current service and input from ATS staff.

- Partner with medical transport service providers to improve on-time performance by shifting non-emergency medical transportation passengers towards those medical transport service providers
- Remind passengers of their responsibility in ensuring service stays on time:
 - Cancel if the trip will not be taken as soon as possible
 - The pickup window lasts for a set amount of time, and the driver may arrive at any time during the window
 - Passengers should be ready to leave during the defined pickup window
 - Paratransit is a shared-ride experience and the vehicle may not take a direct route to the destination
- Create a separate customer service position that is distinct from paratransit dispatcher to guarantee that passengers can schedule trips in a timely fashion and have issues addressed promptly
- Establish a transit log with explanations for trips that are 20+ minutes late. This log will help dispatchers and supervisors understand when and why trip drop-offs and pickups are late and can address those issues in the future
- Avoid fulfilling requests for unscheduled trips, especially in the morning and during peak operating hours
- Expand paratransit service to accommodate growing ridership numbers
- Introduce fare savings programs to incentivize ADA paratransit riders to transition back to fixed route bus service

- Identify areas with limited ADA accessible sidewalk infrastructure and seek partnerships and funding to make needed first and last mile improvements to facilitate transit accessibility for Category 2 paratransit riders
- Perform cost benefit analysis for new trip dispatching software and evaluate additional training opportunities.

9.2 Title VI Plan

Title VI states that “No person in the United States shall, on the ground of race, color, or national origin, be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any program or activity receiving Federal financial assistance.”

Albany Transit maintains a strong commitment to inclusion in the planning process and identification of potential impacts to protected populations. The Transit Development Plan includes a Title VI screening to ensure recommended improvements do not negatively impact disadvantaged members of the community disproportionately. The following maps show transit service routes in comparison to concentrations of the Title VI population. The 2020 TDP does not recommend a discontinuation of any services currently provided within these areas and recommends enhanced frequencies and service extensions that will provide improved connectivity to jobs, goods, and services.

Figure 9-26: Title VI - Minority Populations

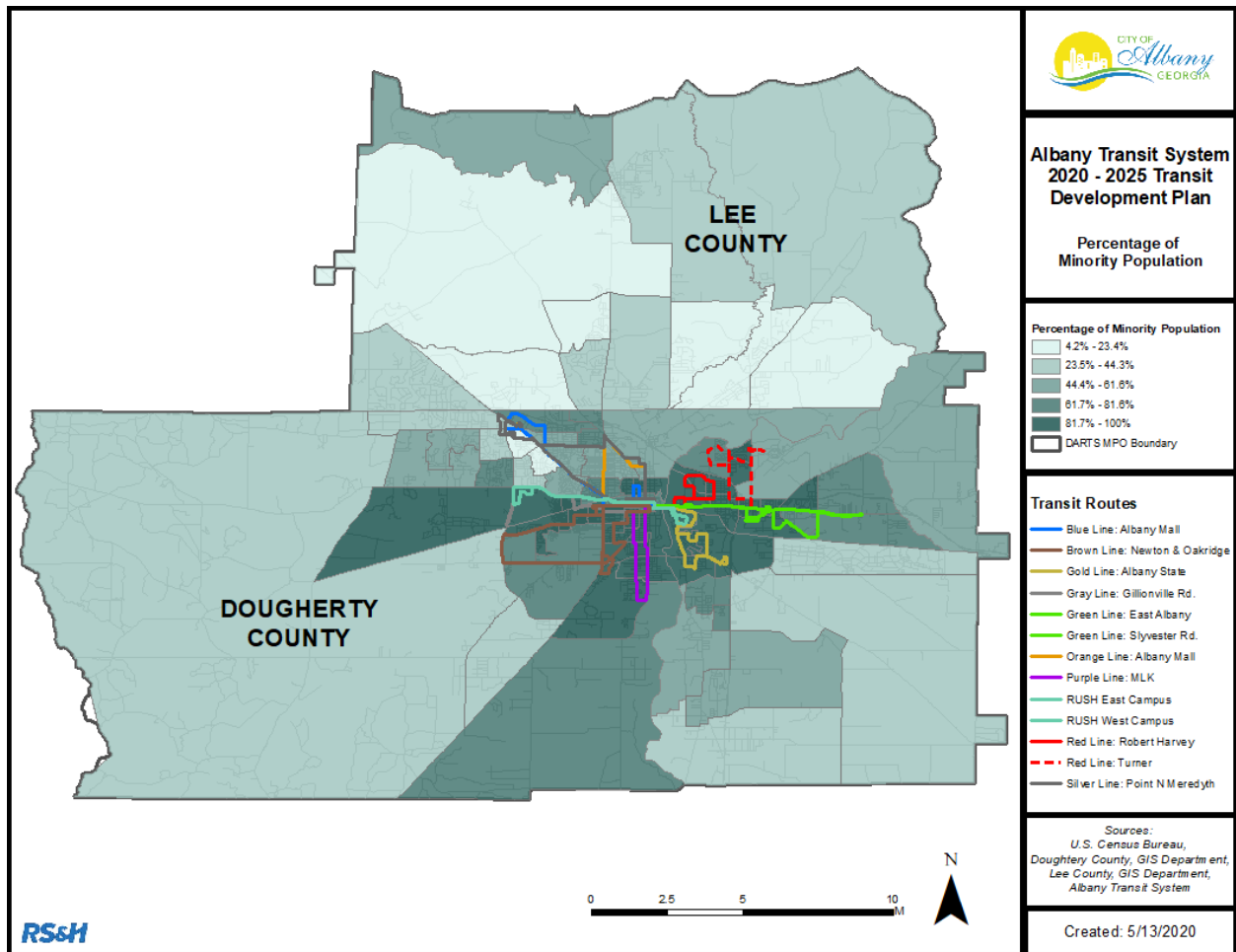


Figure 9-27: Title VI - Mobility Limitations / ADA

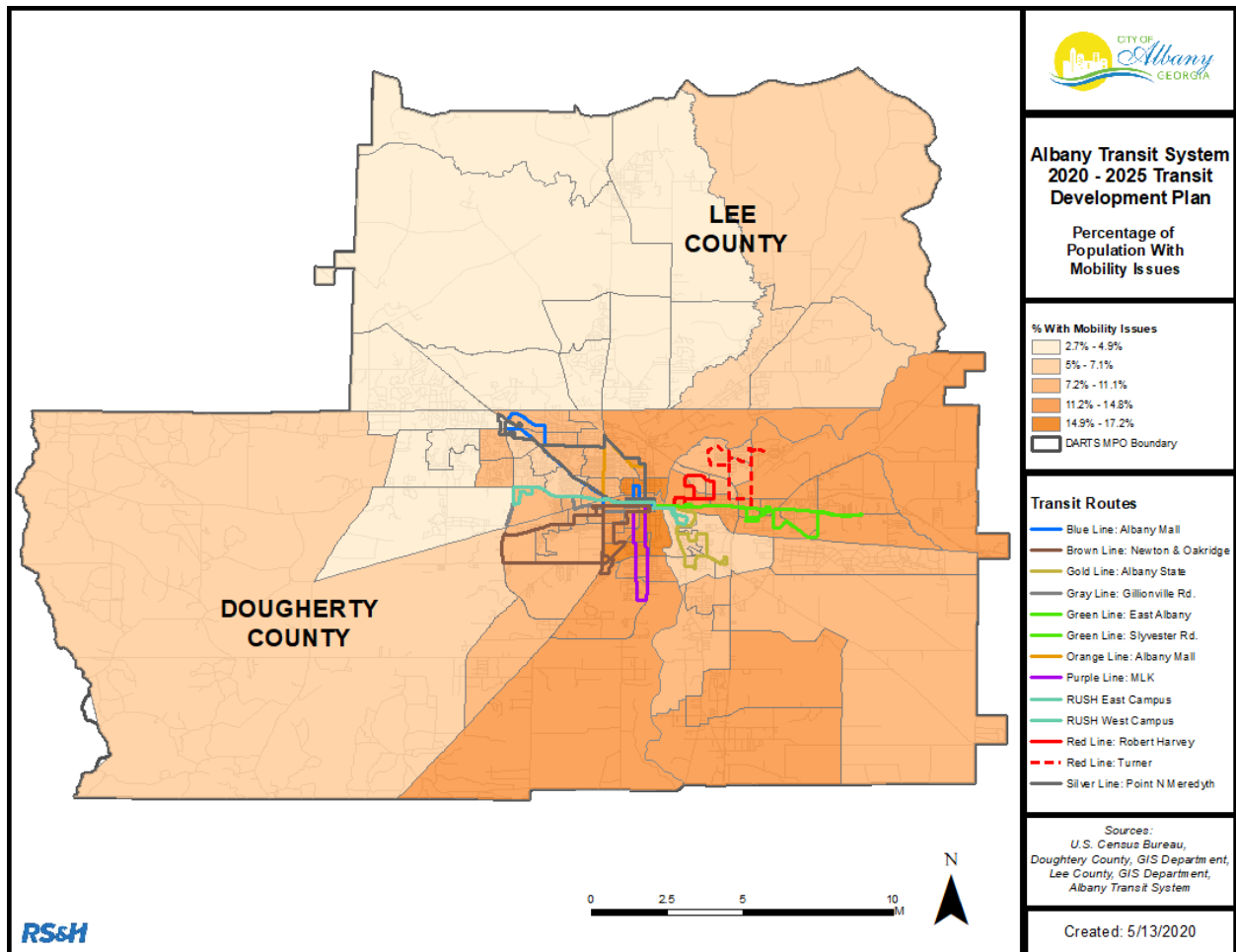


Figure 9-28: Title VI - Poverty

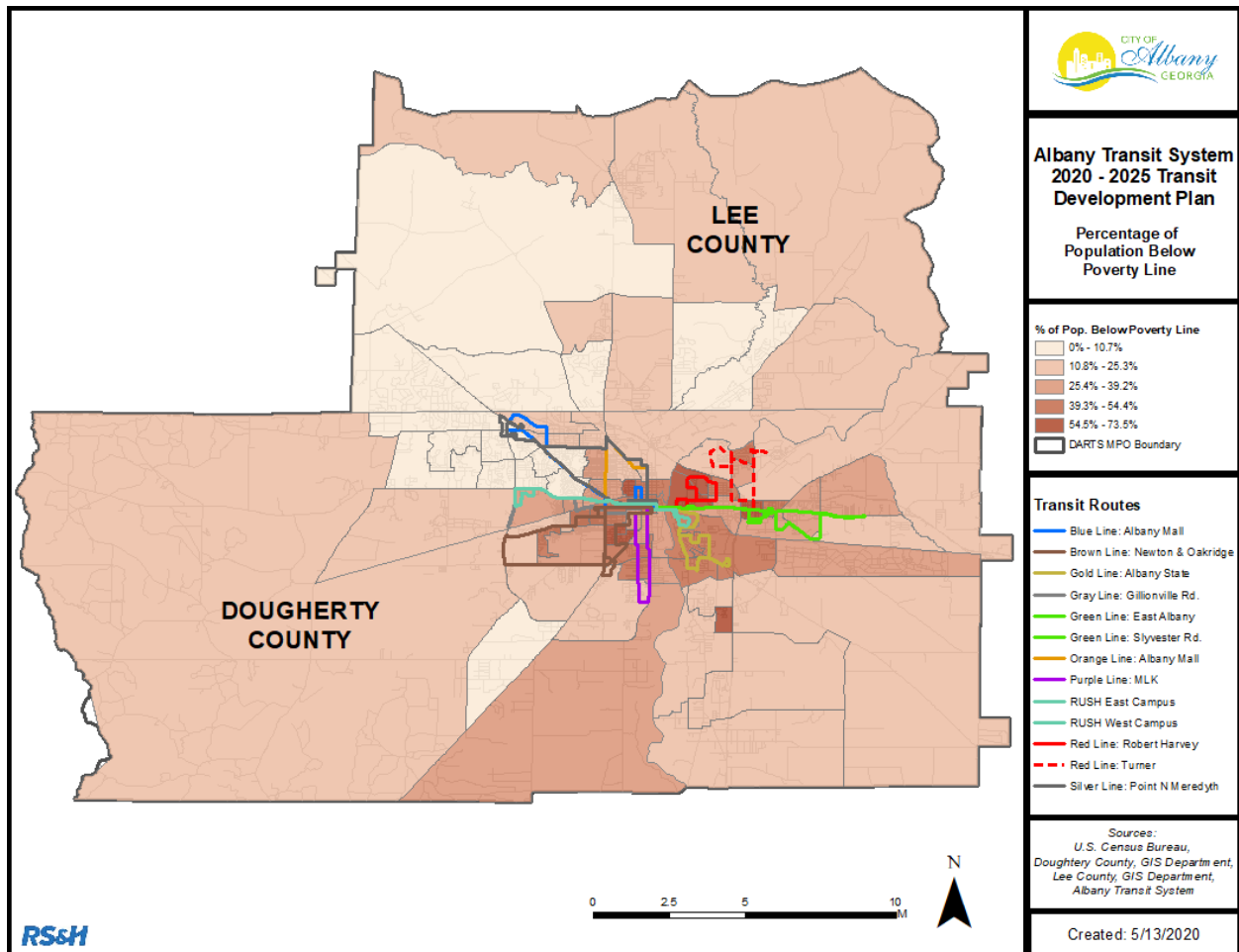
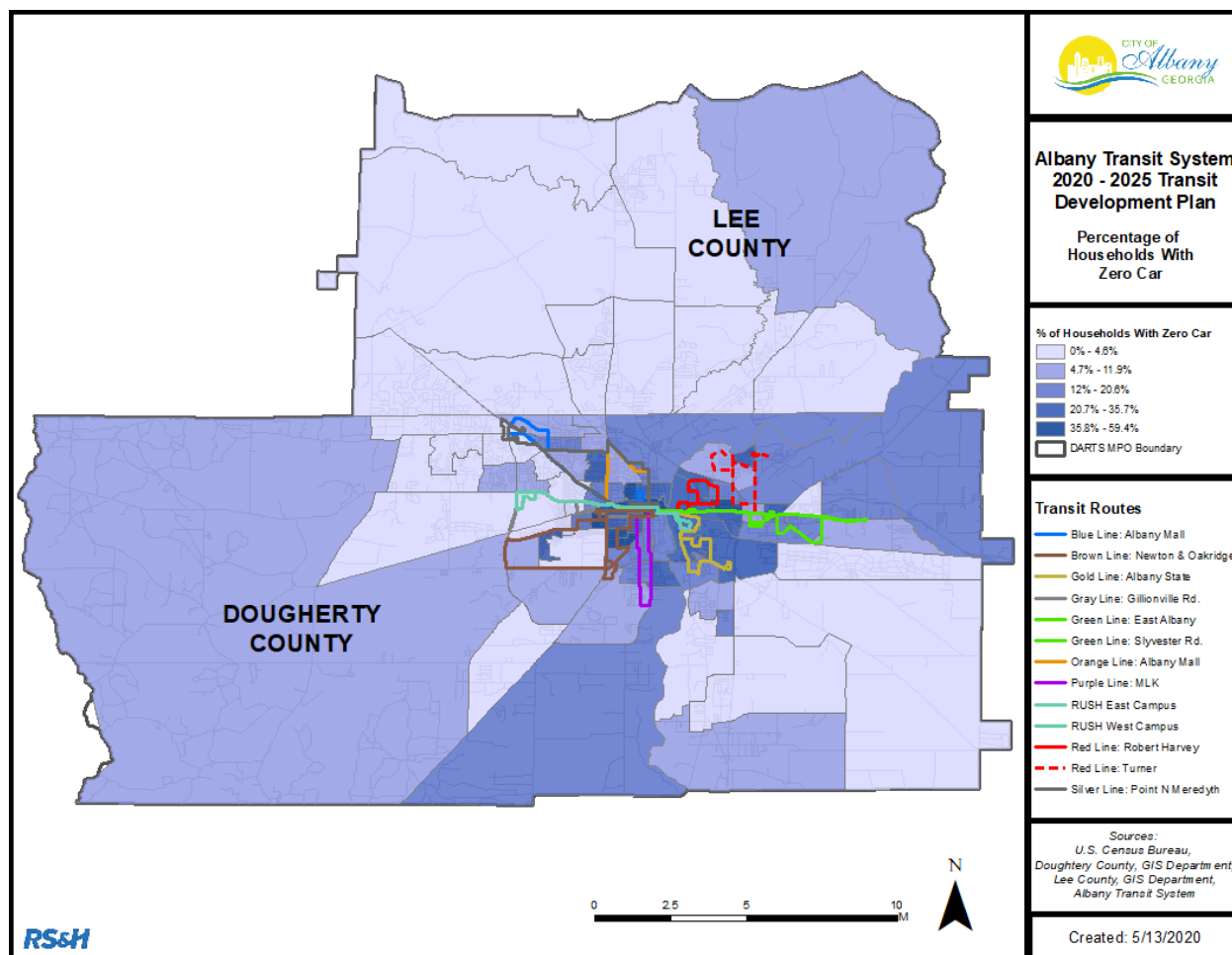


Figure 9-29: Title VI - Zero Car Households



9.3 Bus Stop Improvement Program

Bus stops are a key link in the journey of a bus rider and serve as the first point of contact between the customer and the service. Many of Albany Transit's bus stops have safety, security, or right-of-way deficiencies since they are located on roads lacking pedestrian accommodations. Problems include lack of sidewalk facilities and connections, lack passenger standing areas or pads, poor lighting, and unsafe crossings to get to the bus stop. This Bus Stop Improvement Program identifies these deficiencies at the stop level and includes recommended improvements to address significant bus stop safety issues and eliminate barriers to transit service.

Inaccessible bus stops can be the weak link in the transit system and can effectively prevent the use of fixed-route bus service. Correction of these deficiencies and elimination of barriers will result in improved accessibility to the system, increased attractiveness of transit as a means of transportation, enhanced safety, and increased ridership. Providing riders with good access to the bus stops and an adequate and safe waiting area supports achieving the goals and objectives of the TDP. Albany Transit has approximately 400 bus stops. A systemwide inventory and assessment of each bus stop was completed and used to determine what is needed at each location to render the stop safe and accessible to all transit passengers.

The Bus Stop Improvement Program (BSIP) for Albany Transit includes prioritization for bus stops and their amenities²¹, including shelters, bench seating, trash cans, landing pads and lighting. Creating a bus stop inventory allows for the prioritization and ranking of bus stop infrastructure improvement projects that will best support the goals and objectives of the agency. The following section defines the strategies and priorities applied to the bus stop assessment used to identify the highest priority projects for implementation.

9.3.1 Bus Stop Improvement Program Goals and Objectives

The goals and objectives of the BSIP create measurable and definable targets for bus stop improvements. These include:

- Every bus stop will be easily identifiable and consist of an accessible paved or grass area
 - Establish a photographic inventory of every bus stop that is reviewed and updated bi-annually
 - Evaluate every bus stop to ensure they comply with the ATS Bus Stop Classification and Recommended Amenities Guide
- Bus stops will be located for roadway safety and convenience of customer. Stops will be visible, near crosswalks when applicable and well lit
 - Evaluate bus stops in relation to crash rates for those stops near intersections and on high-traffic corridors, and relocate stops that are near high crash areas
 - Review ATS crash log for bus stops that are near frequent ATS bus crashes/incidents, and relocate stops that are near high crash areas

²¹ All ATS bus stops include a pole with an Albany Transit roundel and route number identifier label.

- Evaluate every bus stop to ensure they comply with the ATS Bus Stop Classification and Recommended Amenities Guide
- Bus stop shelters and other amenities will be provided consistent with the ATS approved bus stop development criteria and design
 - Evaluate every bus stop to ensure they comply with the ATS Bus Stop Classification and Recommended Amenities Guide
- Bus stops will be accessible
 - Ensure bus stops are ADA accessible and follow prioritization criteria to update stops not meeting ADA standards
- Bus stops will be spaced to maximize the efficient operation of transit service while not requiring riders to walk more than a quarter mile to the bus stop
 - Review bus stops in Remix and GIS to ensure they have the proper spacing
 - Research areas for new bus stops on routes where stop gaps exist
- Bus stops will be well maintained and free of trash and vandalism
 - Weekly cleaning and trash can pick-up of Class I bus stops (> 20 daily boardings)
 - Monthly cleaning of Class II bus stops (10 to 20 daily boardings)
 - Bimonthly or quarterly trash/litter pickup of bus stops that are Class III (< 20 daily boardings)
- Bus stop features will be repaired or replaced in a timely manner as they become worn and/or damaged.
 - Create bus stop repair log where bus stop amenity repairs are tracked
 - Review patterns to detect stops with frequent repairs and determine if bus stop amenities should be removed or downgraded based on classification
- Albany Transit will be open to public feedback on potential stop changes
 - Create informational channels and avenues for transit riders to provide feedback regarding bus stops
 - Follow ATS Bus Stop Improvement Guidelines to evaluate public feedback

The following table provides an overview of the recommended bus stop amenities for Class I, II, and III stops.

Table 9-3 : Recommended Bus Stop Amenities

Bus Stop Classification and Recommended Amenities			
Amenities	Class I <i>21+ daily boardings</i>	Class II <i>10 to 20 daily boardings</i>	Class III <i>< 10 daily boardings</i>
Pole with Bus Stop Sign and Route Number	Required at all stops		
Red Curb or No Parking Restriction			
Lighting	Recommended at all stops		
Bench (Seating for 2 people)	Provide*	Recommended	Optional
Concrete Pad	Provide	Recommended	Optional
Trash Can	Provide	Provide	Optional
Shelter	Provide*	Optional	Optional
Bike Rack	Recommended	Optional	Optional
*Stops with 50 or more daily boardings may require more than one shelter and bench			

9.3.2 Prioritization, Program Design, Accessibility, and Equity

The prioritization model created for the BSIP is based off models from peer agencies, ADA requirements, and internal bus stop design guidelines. The bus stop inventory is a list categorizing bus stops by amenities and provides a roadmap for prioritizing bus stop infrastructure improvements. The stops that are identified as having the highest priority for infrastructure and amenity improvements are based on criteria sorted into ten categories: ridership, surrounding trip generators, safety, accessibility, density, connectivity, demographics, customer complaints and public requests, and existing infrastructure. Each category is worth ten points, and each bus stop can be scored up to a total of 100 points. The top bus stops are identified based on the highest scores and stops can be manually removed by ATS staff if their infrastructure does not need to be improved. The criteria are scored below:

- **Ridership:**
 - Class I (21+ daily boardings): 10 points
 - Class II (10 to 20 daily boardings): 7 points
 - Class III (< 10 daily boardings): 4 points
- **Surrounding trip generators:**
 - Stops adjacent to any of the following: large apartment buildings or complexes, colleges, universities, technical schools, government centers,

hospitals, major clinics, major shopping, department stores or major discount stores, or park and ride lots: 10 points

- Stops adjacent to any of the following: small apartment buildings, human service agencies, neighborhood shopping center (with grocery or drug stores), office buildings or major employment, high schools, senior centers, or town homes: 6 points
- Stops adjacent to any of the following: churches, day cares, libraries, nursing homes/assisted living, recreation centers, or middle schools: 3 points
- All other stops: 0 points

▪ **Safety:**

- Bus stop within 50 feet of a crosswalk: 2 points
- Waiting passengers are hidden from view of approaching bus: 2 points
- Bicycle or pedestrian accidents at site of stop in past two years: 2 points
- No lighting at bus stop: 2 point
- There are no traffic controls at the nearest intersection: 2 point

▪ **Accessibility:**

- Landing area is not at least 5'x8': 3 points
- Landing area surface is uneven: 3 points
- Problems with adjacent sidewalk: 2 points
- Problems with access between bus and landing area: 2 points

▪ **Density:**

- Block group has $\geq 4,500$ people per sq mile: 10 points
- Block group has 3,100 to 4,500 people per sq mile: 7 points
- Block group has 2,500 to 3,100 people per sq mile: 6 points
- Block group has 1,800 to 2,500 people per sq mile: 5 points
- Block group has 1,100 to 1,800 people per sq mile: 4 points
- Block group has 349 to 1,100 people per sq mile: 3 points
- Block group has ≤ 349 people per sq mile: 1 point

▪ **Connectivity:**

- Bus stop connects to three or more bus routes: 10 points
- Bus stop connects to two bus routes: 5 points
- Bus stop connects to one bus route: 1 point

▪ **Demographics:**

- Block group has higher percentage of people below the regional average poverty rate: 2 points
- Block group has 50% or more of minority population: 2 points
- Block group has higher percentage of senior population than regional average: 2 points

- Block group has higher percentage of disabled population than regional average: 2 points
- Block group has higher percentage of car free households than regional average: 2 points
- **Customer complaints and public requests:**
 - Stop has received customer complaints and/or public requests: 10 points
 - All other bus stops: 0 points
- **Existing infrastructure:**
 - Bus stop has no shelter: 2 points
 - Bus stop has no bench seating: 2 points
 - Bus stop has no trash cans: 2 points
 - Bus stop has no landing pads: 2 points
 - Bus stop has no lighting features: 2 points

Priority weighting factors were established and applied to the quantitative data inputs. These weighting factors were discussed and ranked by their importance with the goal of supporting existing and induced ridership demand for Albany Transit. The following table shows the Priority Weighting Factors used in this prioritization process.

Table 9-4: BSIP Priority Weighting Factors

	Initial Ranking
Missing Infrastructure	9
Accessibility (Sidewalks and Landing Area)	5
Safety	8
Demographics (Title VI, EJ)	2
Surrounding Trip Generators (Destinations)	1
Population Density (Origins)	3
Connectivity (Number of routes served)	6
Customer Complaints	4
Ridership	7

Accessibility and equity needs are factored into the prioritization scoring criteria. These factors have their own category (accessibility, demographics), but can also fall under the customer complaints and public requests category if these needs are brought to the attention of Albany Transit staff. The Paratransit Advisory Group meets once a month to facilitate discussion between Albany Transit System, its employees, and its passengers with disabilities. Passengers with disabilities who use Albany Transit can bring forth complaints and requests at PAG meetings.

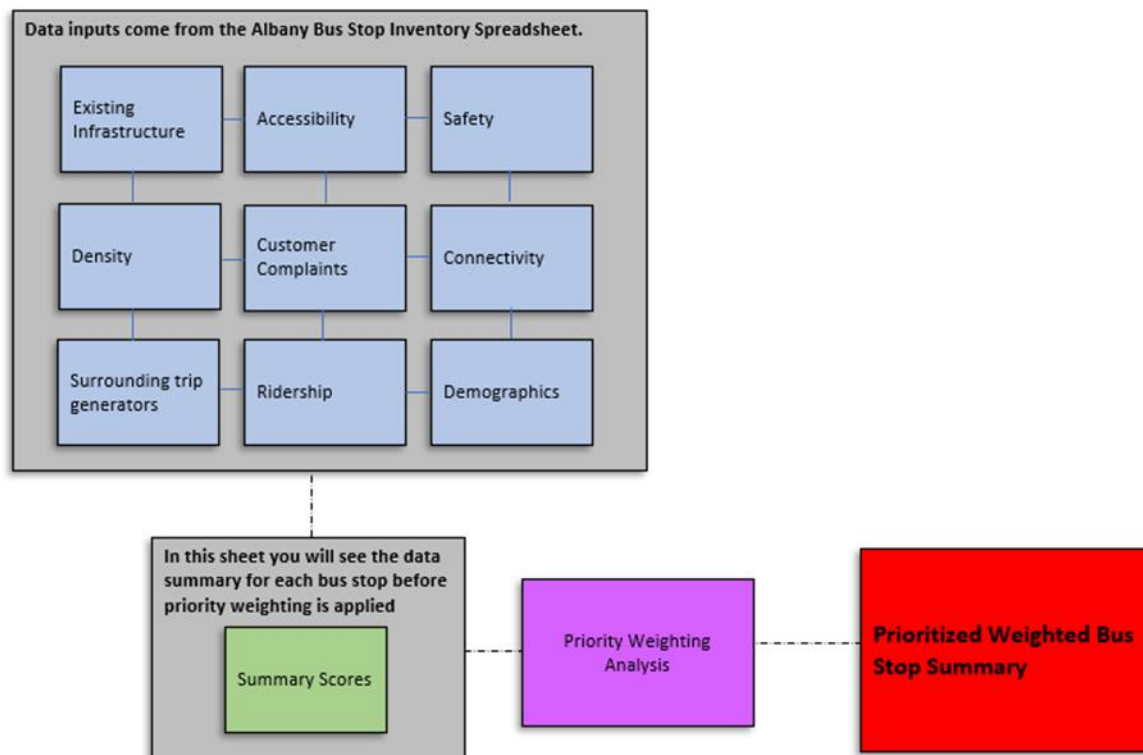
New bus stops follow the prioritization scoring criteria and are placed in a separate list for new bus stops, which will be prioritized ahead of existing bus stops. This process ensures that new bus stops will receive amenities at their creation instead of being placed in backlog with bus stops that need improvements.

The results of the BSIP inventory and assessment showed that 60% of ATS stops are not connected to an existing sidewalk, 93% of all stops have safety issues, 88% of stops have inadequate lighting, and 62% of Class I stops do not currently have a shelter. With this magnitude of backlog, it is critical to have a prioritization process in place and a method for documenting and maintaining a database for improvements.

A key element of the BSIP assessment was the development of a screening tool. The tool was used to assess each bus stop and develop a prioritized list of improvements and planning level cost estimates. The following diagram provides an overview of the inputs used in the assessment tool and the associated outputs.



Figure 9-30: Bus Stop Inventory Prioritization Tool Functional Diagram



Once the scores were recalculated based on their priority weighting scores, they were ranked and sorted based on the aggregate scores to show the bus stops most in need of infrastructure improvement. The stops were sorted based on their scores to identify the top ten infrastructure improvement locations to create a final list. These top ten locations were then closely examined to ensure that the recommended infrastructure improvements match their class level.

The top ten priority bus stops were identified and are listed in the following table.

Table 9-5: Priority Bus Stop Improvement Locations

Stop ID	Stop Name
ATS008	Albany Mall
ATS381	W Broad Avenue @ Chamber of Commerce
ATS343	Sylvester Highway / Harvey's Grocery Store
ATS185	N Jefferson Street / W Broad Avenue
ATS213	N Slappey Boulevard @ Red Lobster
ATS426	N Jefferson Street and W Tift Avenue - Outbound
ATS129	Highland Avenue / Westbrooke Street
ATS190	N Jefferson Street / Pine Ave
ATS230	Oakgrove Center
ATS050	Dawson Road / Slappey Boulevard

The Albany Transit bus stop inventory, analysis, and prioritized project list can be found in the Appendix.

9.3.3 Implementation and Maintenance Strategies

Coordination between agencies within the City of Albany is vital for infrastructure improvements throughout the city. Albany Transit is responsible for the installation and maintenance of their own facilities and amenities, including shelters, bench seating, trash cans, landing pads, and lighting features. The Street Division of the Public Works Department for the City of Albany is responsible for the maintenance and construction of streets, alleys, and sidewalks. The Asphalt Subdivision of the Street Division works on new street, sidewalks, curbs, gutters, driveway installation and maintenance projects.

Implementation of these bus stop improvements will be dictated by the availability of capital and maintenance funding. Potential sources for BSIP implementation include:

- U.S.C 5307 Federal Transit Formula Funds
- 49 U.S.C. 5339 Grants for Buses and Bus Facilities Program
- Transportation Alternative Program (TAP) Funding
- Transportation Special Purpose Local Option Sales Taxes (TSPLOST)
- Special Purpose Local Option Sales Taxes

- Local Government “General Funds”
- Public Private Partnerships (PPP)

Public-private partnerships can change which bus stops receive infrastructure and amenity improvements. If private organizations or businesses put funding towards a bus stop improvement project, that bus stop is taken off the list for improvements because SPLOST and other federal, state, and local funding sources will not be used for those enhancements. Examples of partnerships include shopping plazas or malls, hospitals, or residential complexes. Branding opportunities exist for bus stops located in the vicinity of city destinations and trip generators.

IMPLEMENTING BUS STOP IMPROVEMENTS

The decision to take fixed-route transit relies on many factors including the conditions at the origin, transfer point, and destination. Poor conditions at any one of these locations could affect both the ability and inclination to use fixed-route transit. The purpose of the Bus Stop Improvement Assessment was to evaluate the existing conditions of the bus stop facilities and identify needed improvements to enhance accessibility and safety.

The specific bus stop improvements identified may be implemented individually or as part of a greater project. Although this report focused on the top ten priority stops, there are many more stops in the Albany transit network that also need infrastructure improvements. The BSIP assessment tool data will be a valuable resource as improvements are undertaken. This data will be useful for identifying suitable locations for various stop amenities.

MAINTENANCE OF BUS STOPS AND SHELTERS

Maintenance is crucial for ensuring a barrier free bus stop environment. Additionally, a poorly maintained stop presents an unfavorable image of the agency and lack of maintenance may invite unwanted activity by sending a message that no one is managing or monitoring the bus stops.

Bus stop maintenance can be costly and time-consuming. Amenities should be designed to minimize these costs, as well as life cycle maintenance costs. Working agreements with local businesses or commercial centers can reduce the financial responsibilities of the transit agency or public works department. For stops next to convenience stores, the transit or public works agency should try to obtain a working agreement with the local store or businesses to provide trash removal and general maintenance at the bus stop. Funding from ad placement/advertising can also be used to aid with the maintenance of ATS bus stops.

10.0 Financial Plan

Annual capital and operating funding for the Albany Transit System is derived from four sources including the City of Albany General Fund revenues, Federal Transit Administration funding, Georgia Department of Transportation (GDOT) Intermodal Division funding, and farebox revenues.

As a department of the City of Albany, the capital and operating budget for the system is established concurrently with the City's annual budget. Without a dedicated funding source for the transit agency, the ATS must compete with other City departments for a portion of the General Fund revenues. While this financial structure typically results in a lack of funding stability, ATS has sustained a stable financial commitment from the City of Albany and continues to effectively advance and grow the system.

The Federal Transit Administration oversees the distribution of Urbanized Area Formula Funds (49 U.S.C. 5307 grant) to transit providers in urbanized areas of the United States. An urbanized area is an incorporated area with a population of 50,000 or more that is designated as such by the U.S. Census Bureau.

For urbanized areas under 200,000 in population, the federal funds are apportioned to the governor of each state for distribution. The distribution of these funds is overseen by the Georgia Department of Transportation, Intermodal Division. For urbanized areas with 200,000 in population and over, funds are apportioned and flow directly to a designated recipient selected locally to apply for and receive federal funds. The 2020 estimated population for the Dougherty Urbanized Area is below the 200,000 population threshold, therefore Albany Transit is a subrecipient to GDOT for all Federal Transit apportionments.

In addition to these formula funding sources, recent legislative actions have established a new state funding mechanism for ongoing investment in capital projects. The Georgia Legislature took action on March 3, 2021 establishing a mechanism to annually fund capital transit projects that support economic development priorities throughout the state. The Georgia Senate unanimously passed HB 511, which establishes nine Trust Funds to ensure that fees collected for a stated purpose are spent on that purpose. This includes the Georgia Transit Trust Fund, which will hold the \$.50/ride fees established by HB 105 in 2020 for the Governor and Legislature to

appropriate to capital transit projects.²² At the time of this report, no HB 105/511 capital funding has been allocated to Georgia transit agencies for capital projects.

The DARTS approved 2018 – 2021 Transportation Improvement Program (TIP) includes current and projected funding amounts for the Albany Transit system. These figures were used to establish baseline and projected capital and operational funding levels for the five-year implementation plan. This constrained financial plan was developed based on the identified recommendations and the anticipated revenues and costs. The following table shows the anticipated operating and capital revenues and projected expenditures over the planning period.

Table 10-1: Albany Transit Existing Financial Conditions and Projections

Year	Estimated Ridership		Administrative Costs	Operating Costs*	Capital Cost**	Total Cost	Fare Revenue	Federal Share	State Share	Total Subsidy	Local Share
	Daily	Annual***									
2019	2,566	754,471	\$ 639,757	\$ 2,880,264	\$ 516,511	\$ 4,036,532	\$ 423,196	\$ 380,182	\$ 136,329	\$ 516,511	\$ 3,096,825
2020	2,099	617,039	\$ 718,904	\$ 2,555,116	\$ 7,473,869	\$ 10,747,889	\$ 411,349	\$ 7,256,653	\$ 747,387	\$ 8,004,040	\$ 2,332,500
2021	2,036	598,528	\$ 733,282	\$ 2,606,218	\$ 7,623,346	\$ 10,962,846	\$ 419,576	\$ 7,401,786	\$ 762,335	\$ 8,164,121	\$ 2,379,150
2022	2,342	688,585	\$ 678,915	\$ 3,056,559	\$ 548,126	\$ 4,283,600	\$ 439,265	\$ 1,966,780	\$ 54,813	\$ 2,021,593	\$ 1,822,742
2023	2,272	667,928	\$ 762,907	\$ 2,711,509	\$ 559,088	\$ 4,033,504	\$ 444,756	\$ 1,803,025	\$ 55,909	\$ 1,858,934	\$ 1,729,814
2024	2,204	647,890	\$ 778,165	\$ 2,765,739	\$ 570,270	\$ 4,114,174	\$ 450,315	\$ 1,839,086	\$ 57,027	\$ 1,896,113	\$ 1,767,746
2025	2,138	628,453	\$ 793,728	\$ 2,821,054	\$ 581,675	\$ 4,196,458	\$ 455,944	\$ 1,875,867	\$ 58,168	\$ 1,934,035	\$ 1,806,478

*INCLUDES: VEHICLE OPERATIONS, VEHICLE MAINTENANCE, AND FACILITY MAINTENANCE SOURCED FROM ALBANY NTD 2020 INFO

**INCLUDES: PASSENGER STATIONS, ADMIN BUILDINGS, MAINTENANCE, REVENUE VEH, COMMUNICATION SYSTEMS, AND OTHER CAPITAL EXPENSES

***Estimated based on projections of 2019 Ridership

Note: Due to the COVID-19 pandemic data points reflecting 2020 were used to forecast projections for 2021 only. All other years followed 2019 base values for estimation.

The preferred alternative identified for the 2020 Transit Development Plan includes a number of route improvements, system and service expansions, and capital improvements. The following tables detail the capital and operational improvements included in the proposed operating and capital projections.

²² House Bill 511- <https://www.legis.ga.gov/api/legislation/document/20192020/195249>

Table 10-2: Albany Transit Capital Budget

Capital Budget	QTY (#)
CNG Gillig Bus	3
Base Radio	3
Computer System	3
3"-6" Lettering	3
Bike Rack	3
Bus Stop Pole and Sign	3

Table 10-3: Albany Transit Operating Budget

Operating Budget	QTY (#)
Driver Salary (PT per Driver)	3
Fringe Benefits (per driver)	3
SERVICES	3
Fuel (per Veh)	3
Tires & Tubes (per Veh)	3
Fringe Benefits (per driver)	3
SERVICE EXPANSION - ROUTE 11 (BUS STOPS +1)	4
SERVICE EXPANSION - ROUTE 12 (BUS STOPS +1)	4
EXTENDING SERVICE (1-HR)	1

Table 10-4: Albany Transit System - Preferred Alternative Cost Assessment

Year	Estimated Ridership		Administrative Costs	Operating Costs*	Capital Cost**	Total Cost	Fare Revenue	Federal Share	State Share	Total Subsidy	Local Share
	Daily	Annual									
2020	350	102,900	\$ 4,079	\$ 347,334	\$ 1,746,600	\$ 2,098,013	\$ 68,598.28	\$ 1,570,947	\$ 174,660.00	\$ 1,745,607	\$ 283,807.89
2021	354	104,186	\$ 4,161	\$ 354,280	\$ 1,781,532	\$ 2,139,973	\$ 69,455.76	\$ 1,590,584	\$ 176,843.25	\$ 1,767,427	\$ 303,090.59
2022	359	105,489	\$ 4,244	\$ 361,366	\$ 1,817,163	\$ 2,182,773	\$ 70,323.95	\$ 1,610,466	\$ 179,053.79	\$ 1,789,520	\$ 322,929.02
2023	363	106,807	\$ 4,329	\$ 368,593	\$ 1,853,506	\$ 2,226,428	\$ 71,203.00	\$ 1,630,597	\$ 181,291.96	\$ 1,811,889	\$ 343,336.43
2024	368	108,142	\$ 4,416	\$ 375,965	\$ 1,890,576	\$ 2,270,957	\$ 72,093.04	\$ 1,650,979	\$ 183,558.11	\$ 1,834,537	\$ 364,326.35
2025	372	109,494	\$ 4,504	\$ 383,485	\$ 1,928,388	\$ 2,316,376	\$ 72,994.20	\$ 1,671,617	\$ 185,852.59	\$ 1,857,469	\$ 385,912.60

10.1 Implementation Strategies

Albany Transit should continue ongoing efforts to access discretionary grant funding in order to offset local taxpayer contributions needed to enhance system services and capital investments.

A number of service-related modifications have been recommended. To prepare for these service changes, the Albany Transit system must conduct internal implementation tasks, while following all Federal and State mandates for Title VI and public engagement. During the development of this TDP, a thorough assessment of impacts to the Title VI and Environmental Justice populations was conducted. This analysis found that all service-related recommendations offered equitable service to disadvantaged populations and expanded the service area to underserved areas of the community. The internal implementation tasks for completing short-term service recommendations include the following:

- Establish detailed roles and responsibilities for the system implementation effort
- Identify a target start date and develop a detailed implementation schedule to ensure all interim targets are met
- Advertise and host public meetings
 - Provide opportunities for disadvantaged community members to participate in the comment period, by seeking accessible locations for public meetings, and making translated materials available, if requested, to persons with Limited English Proficiency
 - Coordinate with local advocacy groups to ensure limited disruption to the transit dependent populations
- Identify capital items needed to support the service changes and begin procurement process to acquire these items. Close coordination with the TSPLOST administrator will be required to ensure funding is available for earmarked capital items
- Hire any additional staff needed to operate the new/modified routes, and conduct driver training for each route
- Update service-related public information materials including, but not limited to, route maps and schedules on transit website, signage posted at bus stops, printed route maps/ride guides, and update mobile app

Implementation of route changes should be closely coordinated with the DARTS MPO and municipal agencies to ensure planned roadway improvements will not impede or impact the implementation process.

11.0 Policy and Non-service Recommendations

The Albany Transit Development Plan recommends a number of non-service improvements that will help to support the continued success of the system. Implementation of these policy changes and/or non-service related investments should be prioritized based on available funding for each fiscal year. Albany Transit administration should assess the list of non-service recommendations to determine if any should be prioritized based on operational feasibility.

INTERGOVERNMENTAL AGREEMENTS

A number of the service options recommend linkages of current bus service to activity centers located outside the Albany municipal boundary. The Albany Transit system is owned and operated by the City of Albany and does not currently have agreements with adjacent municipalities to facilitate multi-jurisdictional service. Service expansion recommendations of the TDP are constrained to the municipal boundary, until such time that officials seek to extend the service area and reach agreement with adjacent municipalities. Public interest in a regional transit service, within the Urbanized Areas of adjacent counties, should continue to be monitored and updates provided to local government officials for consideration.

PERFORMANCE BASED PLANNING

As part of this performance-based approach, recipients of federal funds are required to link investment priorities from their Statewide Transportation Improvement Program (STIP) and Transportation Improvement Program (TIP), develop Transit Asset Management plans (TAMS), and develop and maintain Public Transit Agency Safety Plans (PTASP). Albany Transit has worked closely with the DARTS MPO to ensure all requirements have been met and are included in the Metropolitan Transportation Plan and TIP. Resources should be made available to ensure ongoing compliance with the Final Rule and associated deadlines for all performance-based planning requirements.

Albany Transit administrators and planning staff should continue to monitor the Performance Based Planning Program by subscribing to email notifications offered by the FTA, in addition to attending training opportunities and information sharing forums such as the Georgia Transit Association conference and GDOT Intermodal annual training forums.

12.0 Appendices

A. Public and Stakeholder Engagement

B. Bus Stop Improvement Program

C. Performance Based Planning Documents

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