

DOUGLAS COUNTY TRANSIT MASTER PLAN

December 2023



A LETTER FROM THE DIRECTOR



Dear Commissioners and Citizens of Douglas County,

It is my honor to present to you this Transit Master Plan and vision within for the expansion of service for all of Douglas County. In this year long effort I have been blessed to work with a terrific team of collaborators and stakeholders to produce this document that outlines a bold vision for an expansion of service, not only within Douglas County, but into contiguous transit systems that we feel will help provide enhanced transit service to those who already participate and those that need public transportation.

Connect Douglas began service in June of 2019 and was given the ultimate test during the Covid-19 crisis. County leadership showed the path forward for resiliency and continuation of services countywide and that included the operations of Connect Douglas. Given the many changes in our world and the way in which we commute, it was time for a deep dive into our transit agency, its routing and its potential to evolve and grow. As the 18th most populated county out 159 counties, Douglas County is on the cusp of tremendous growth due to its proximity to Atlanta. It has been a fortuitous coincidence that the Comprehensive Land Use Plan update preceded this study by a couple of months, allowing a deeper analysis of our County's growth and development in relation to the transit recommendations proposed herein.

Through this extensive planning process, we have heard from our stakeholders and citizens their needs and desires for public transportation. This document reflects the feelings, concerns and hope that we have heard this year. This effort would not be possible without the support that the Douglas County Board of Commissioners has provided my staff and I as we have navigated, with the help of our consultant team, to produce this direction and vision for seamless mobility solutions for the young, the senior, the disabled, the work force and those seeking to utilize alternative transportation options for entertainment. We have heard them all! And we believe that this document accurately reflects the direction and future of how Connect Douglas needs to grow.

Our regional partners have shown great support throughout this planning process, including representatives from the Atlanta-Region Transit Link Authority (ATL), Federal Transit Administration (FTA), Atlanta Regional Commission (ARC), Georgia Department of Transportation (GDOT), CobbLinc, MARTA, State Road and Toll Authority (SRTA). With the Board of Commissioners and citizen support you can count on the visions and direction of this document to be implemented and executed. I want to thank again the BOC, stakeholders, external agencies, our consultant team and, most importantly, the citizens of Douglas County for their support in our growth and vision.

In Community,

Ronald M. Roberts, Jr
Connect Douglas Director





CERTIFICATIONS

Douglas County Multi-Modal Transportation Services Division, Connect Douglas, operates its transit service subject to the non-discrimination requirements under Section 601 of Title VI of the Civil Rights Act of 1964 and applicable regulations from the U.S. Department of Transportation, U.S. Department of Justice and other applicable Federal laws and regulations.

The ATL and Connect Douglas utilizes their Title VI Plan to ensure that its programs and services are conducted in a nondiscriminatory manner, without regard to race, color, national origin.

For a copy of the ATL's Title VI Plan, please visit ATL's website at:

<https://atltransit.ga.gov/accessibility-and-civil-rights/> .

Additional information can also be found at:

[//www.celebratedouglascounty.com/731/Title-VI-Information](http://www.celebratedouglascounty.com/731/Title-VI-Information)

Title VI Information | Douglas County, GA ([celebratedouglascounty.com](http://www.celebratedouglascounty.com))

The ATL and Connect Douglas are committed to ensuring that no person is excluded from participation in, or denied the benefits of, its services based on the qualities protected under Title VI, whether or not those programs or activities are federally funded.

The Atlanta-Region Transit Link Authority 2023

Charlie Sutlive, Chairman

Felicia Franklin-Warner, Vice Chair

Connect Douglas 2023

Ron Roberts, Director

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References:

Federal Transit Laws, 49 U.S.C. 5332(b), provide that "no person in the United States shall on the grounds of race, color, religion, national origin, sex, or age be excluded from the participation in, be denied the benefits of, or be subjected to discrimination under any project, program or activity funded in whole or in part through financial assistance under this Act." This applies to employment and business opportunities and is considered to be in addition to the provisions of Title VI of the Civil Rights Act of 1964.

Title VI, 42 U.S.C. § 2000d et seq., enacted as part of the landmark Civil Rights Act of 1964. It prohibits discrimination on the basis of race, color, and national origin in programs and activities receiving federal financial assistance.

ACKNOWLEDGMENTS

This plan the plan was developed through a collaborative partnership with the **Atlanta Transit-Link Authority** and **Douglas County**.



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MARTA
Douglas County Planning and Zoning

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Douglas County
Connect Douglas
Douglas County Development Authority
Douglas County Chamber of Commerce
Travel and Tourism Board
Douglas County School System
Douglas County Library
City of Lithia Springs Public Library
Housing Authority
Douglas County Division of Family and Children
Services (DFCS)
WellStar Board, Hospital Authority of
Douglas County
Behavioral Health and Developmental
Disabilities Board
Connect Douglas
Douglas County

OTHER KEY STAKEHOLDERS

Douglas County Youth Forum
Douglas County School System
Douglas County Library Board
Connect Douglas Paratransit Advisory Committee
Elevate Douglas Economic Partnership
City of Lithia Springs
Partnership Gwinnett
Gwinnett Community Services

Gwinnett Clean & Beautiful
City of Lilburn
Lilburn CID
Korean American Public Action Committee
WellStar Health System



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1 INTRODUCTION & BACKGROUND

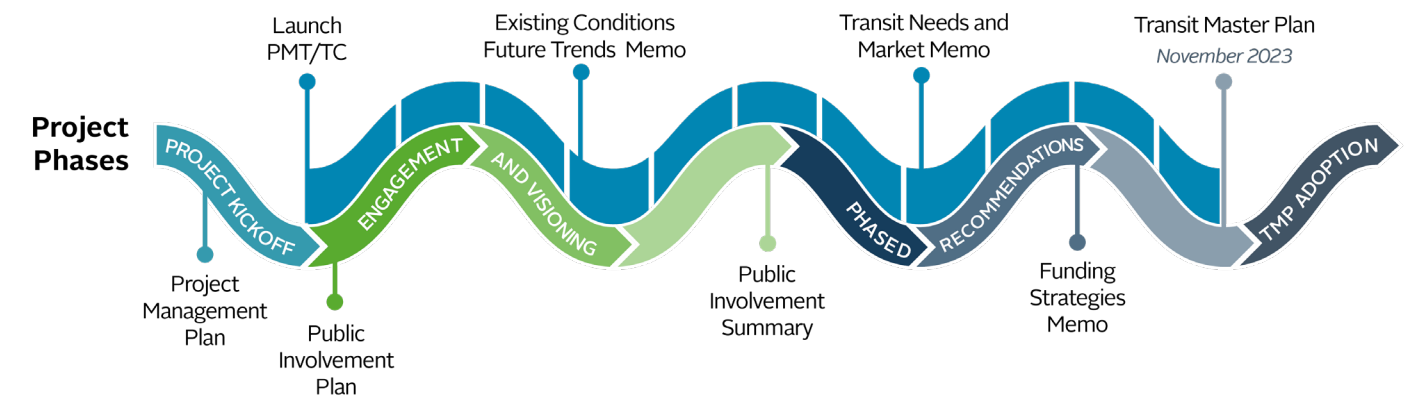
Douglas County has developed the county's first Transit Master Plan (TMP) since the implementation of Connect Douglas fixed route and ADA transit service in 2019.

The TMP planning process provided a forum for public and stakeholder input, and serves as a roadmap for improving public transit in the county. Additionally, the TMP prioritizes future investments for Connect Douglas.

TMP Key Purpose

- ▶ Informs County decision-makers of the most effective way to address public transportation needs while leveraging available funding to increase ridership and improve performance.
- ▶ Identifies short-, mid-, and long-term transit priorities.
- ▶ Provides direction and guidance for how Douglas County should enhance its public transportation program to best support continued growth and economic development.
- ▶ Serves as a tool to inform County and City officials as well as residents about future public transportation needs, projects that address those needs, and the cost and benefit implications of those projects based on an evaluation of potential funding sources.

Figure 1-1. TMP Project Phases



EXISTING PLANS AND POLICIES

The Douglas County TMP utilizes previous relevant local and regional plans and studies as a foundation, including the Comprehensive Plan (2018) and Comprehensive Transportation Plan (2021). A review of transit and transportation efforts by adjoining counties and regional planning partners provided a holistic, region-wide assessment of planned projects and services.

What Do Local and Regional Plans Say About Transit?

- ▶ The region as a whole is investing in transit
- ▶ Building a multimodal system is important for this region
- ▶ Communities across the region are planning to accommodate future growth by aligning transportation services and future development

Planning Documents We Reviewed

- ▶ Atlanta Region Plan 2040 Framework (2011)
- ▶ Atlanta Regional Transit Link Authority Regional Transit Plan (2020)
- ▶ Chattahoochee Hill County Regional Greenway Trail Master Plan (2003)
- ▶ Concept 3 Regional Transit Vision (2018)
- ▶ Douglas County Comprehensive Transportation Plan (2021)
- ▶ Douglas County, Georgia Comprehensive Plan Update (2018)
- ▶ Douglas County 2019 Title VI Program Plan
- ▶ Lee Road Small Area and Corridor Plan (2017)
- ▶ Highway 92 Corridor Livable Centers Initiative (LCI) Study (2008)
- ▶ Southwest Thornton Activity Center Sweetwater Master Plan (2017)



CURRENT CONDITIONS

Douglas County is located in northwest Georgia, about 20 miles due west of Atlanta on Interstate 20. The county is bordered on the south by the Chattahoochee River, east by Cobb County, north by Paulding County, and west by Carroll County. Three incorporated cities are located within Douglas County, including Austell, Douglasville, and Villa Rica.

Connect Douglas is the public transportation and mobility services provider offering fixed route bus service, complementary ADA Paratransit for eligible passengers, and transportation voucher assistance for elderly and disabled citizens.

The agency operates commuter work-trip vanpools, offers transportation assistance to senior adults and disabled individuals, provides carpool-matching assistance, builds and maintains commuter facilities and participates in transit and public transportation planning and marketing.

Connect Douglas has been serving Douglas County commuters since 1986 as Douglas County Rideshare.

How Far We’ve Come

Transit planning in Douglas County dates back to the early 1980s, when a Transit Feasibility Study recommended a Rideshare Program.

In 1986, Douglas County Rideshare was established. Fifteen years later, 21 vanpool routes were in operation, which increased to 58 routes by 2008. After another transportation study, the County established fixed route bus service for the first time in 2019, which was later named Connect Douglas.

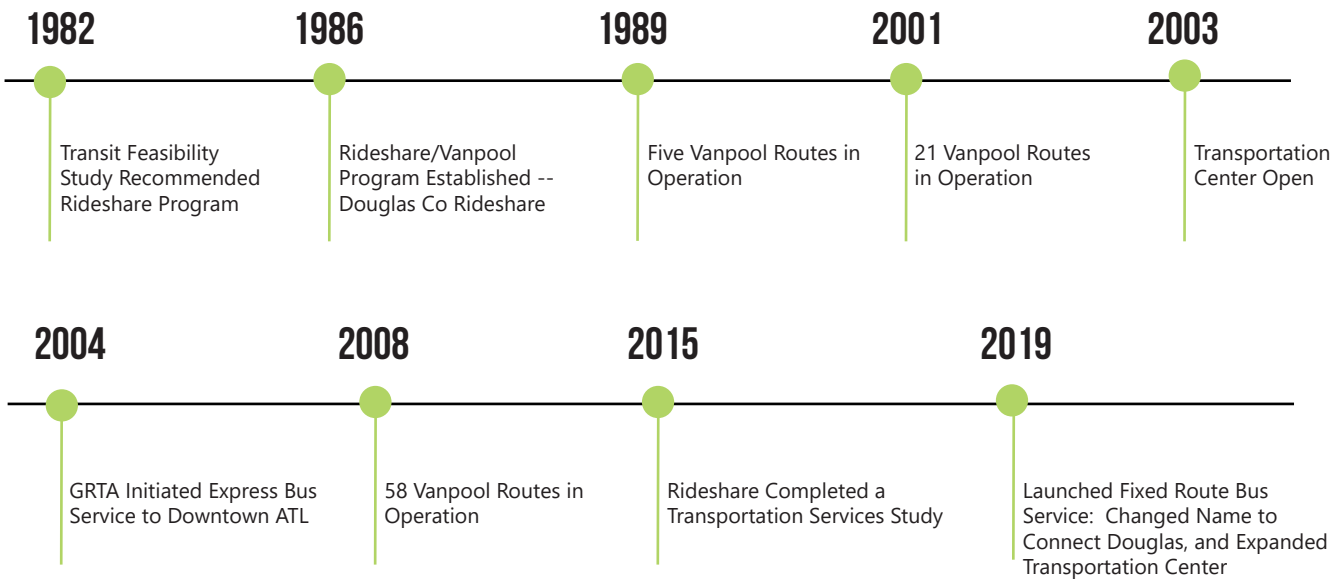
TRANSIT OPERATIONS

Douglas County currently offers the following services through the Connect Douglas Program:

- Fixed Route Bus Service**
Connect Douglas operates four fixed routes, which serve most of the major government, educational, medical, retail, and recreational locations in Douglas County. These routes include Route 10, Route 20, Route 30, and Route 40.
- ADA Paratransit Services**
Connect Douglas Paratransit Service is a shared-ride, curb-to-curb transportation service for eligible customers who are not able to use the regular bus service (also called “fixed route”) for some or all their trips because of a disability or other limitations.
- Commuter Work-Trip Vanpools**
Vanpools serve commuters who work in locations that are not served by Connect Douglas or Xpress bus service. This program was suspended during the global COVID-19 pandemic and has not resumed service.
- Xpress Bus Service to Atlanta**
Route 463 (SRTA Express), operated by the State Roads and Tollway Authority, provides bus service for commuters going to downtown Atlanta or Midtown.
- Mobility Assistance for Senior Adults and Disabled Individuals**
Connect Douglas offers a Voucher program that helps eligible seniors and persons with disabilities pay for Quality of Life trips. Vouchers can be used to pay private transportation providers for transport to doctors’ offices, the pharmacy, grocery store, mall, or to visit with friends and family.

Figure 1-2. Timeline of Transit Services

Douglas County Transit Services Timeline



In addition to the transit services listed above, Connect Douglas has several park and ride lots that can be used by commuters free of charge. Douglas County Transportation Center is the main lot, while other lots include I-20 and Thornton Road, I-20 and Post Road, and Post Road and Douglas Boulevard at Stewart Parkway.



Figure 1-3 depicts transit services currently offered in Douglas County. Existing service areas are clustered in the central and eastern portion of the county, primarily serving areas around Douglasville, Lithia Springs, and Austell. A snapshot of the regional transit network is shown below.

Figure 1-3. Study Area Transit Operations

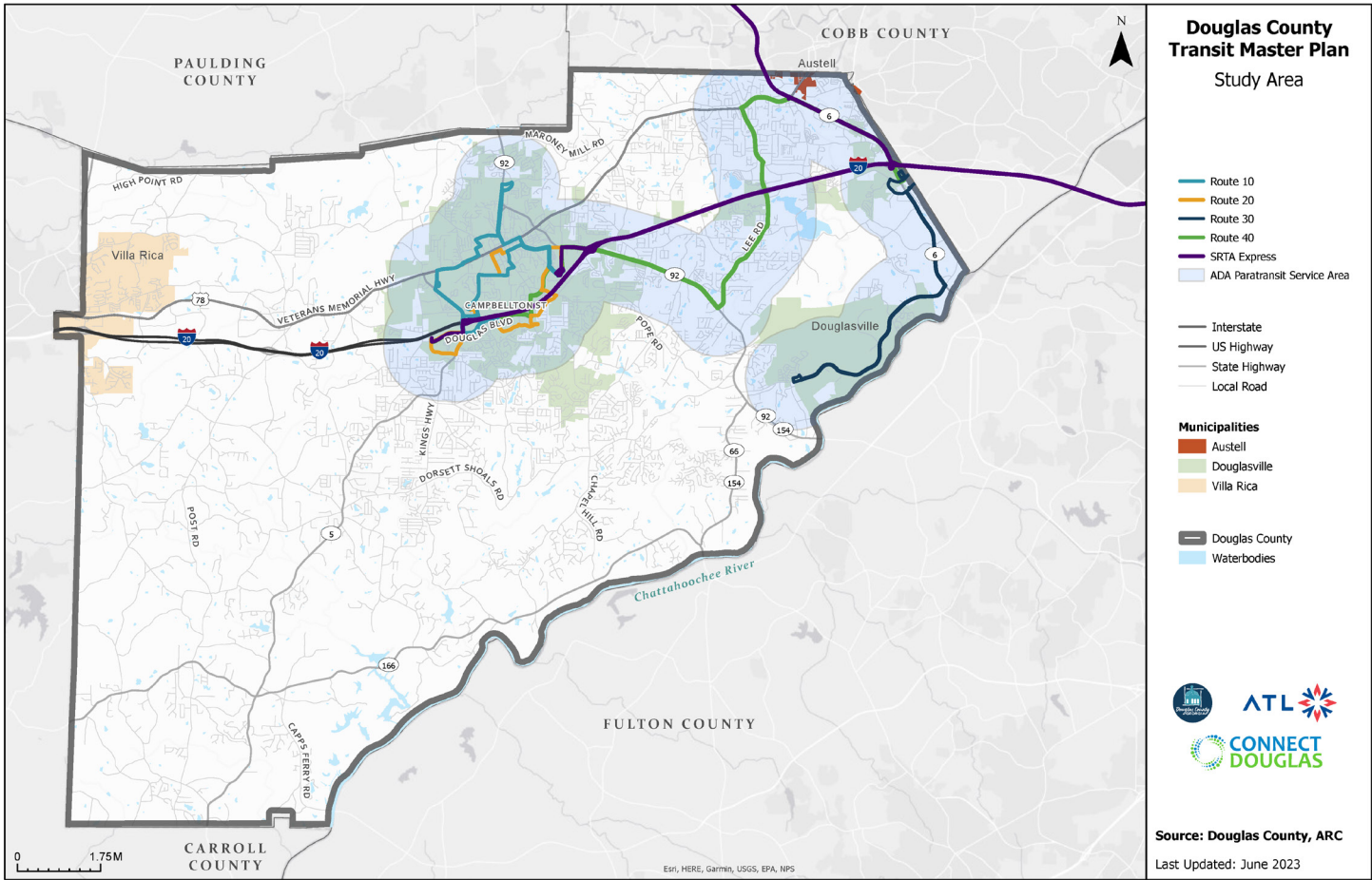
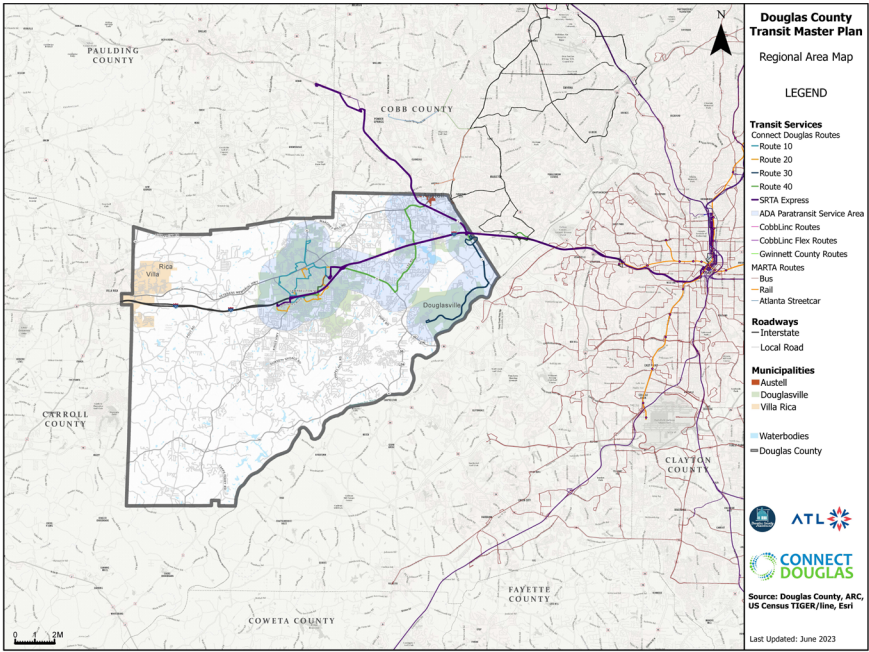


Figure 1-4. Regional Transit Operations

Figure 1-4 shows the regional transit network, highlighting the more dense transit operations coming out of the Atlanta region, which reinforces the importance of connections to the east of the county.



TRANSIT THRESHOLDS

Population and employment locations and density play a critical role in the design of transit services and strategies.

Typical thresholds are summarized below.

Transit service models are influenced by the number of people living and working in an area.

Higher density areas typically have higher ridership that can support more frequent transit service.

Figure 1-5. Transit Supportive Densities

LAND USE			SUPPORTED TRANSIT	
PLACE TYPE	RESIDENTS PER ACRE	JOBS PER ACRE	APPROPRIATE TRANSIT TYPES	FREQUENCY OF SERVICE
DOWNTOWNS & HIGH-DENSITY CORRIDORS	>45	>25	Rail, BRT, Rapid Bus, Local Bus	10 minutes or better
URBAN MIXED USE	30 - 45	15 - 25	BRT, Rapid Bus, Local Bus	10 - 15 minutes
NEIGHBORHOOD & SUBURBAN MIXED USE	15 - 30	10 - 15	Local Bus	15 - 30 minutes
MIXED NEIGHBORHOODS	10 - 15	5 - 10	Local Bus, On Demand	30 - 60 minutes
LOW DENSITY SUBURBAN	2 - 10	2 - 5	Rideshare, On Demand	up to 60 minutes or on demand
RURAL	<2	<2	Rideshare, On Demand	On demand

The next two sections explore transit propensity and demand factors.



TRANSIT PROPENSITY

A transit market analysis helps identify locations where people are most likely to use transit, based on demographic and other population data and known characteristics of people who are typically frequent transit riders. In those areas, there may be more underlying demand for additional service.

Transit Propensity Considerations:

- ▶ Zero Vehicle Households
- ▶ Median Household Income
- ▶ Low Income Households
- ▶ Supplemental Security Income
- ▶ Age
- ▶ Race and Ethnicity
- ▶ Population Density
- ▶ Employment Density

TRANSIT PROPENSITY ANALYSIS

A composite demand for transit based on adjusted population density and employment density.

TRANSIT MARKET ANALYSIS

Helps identify locations where people are most likely to use transit.

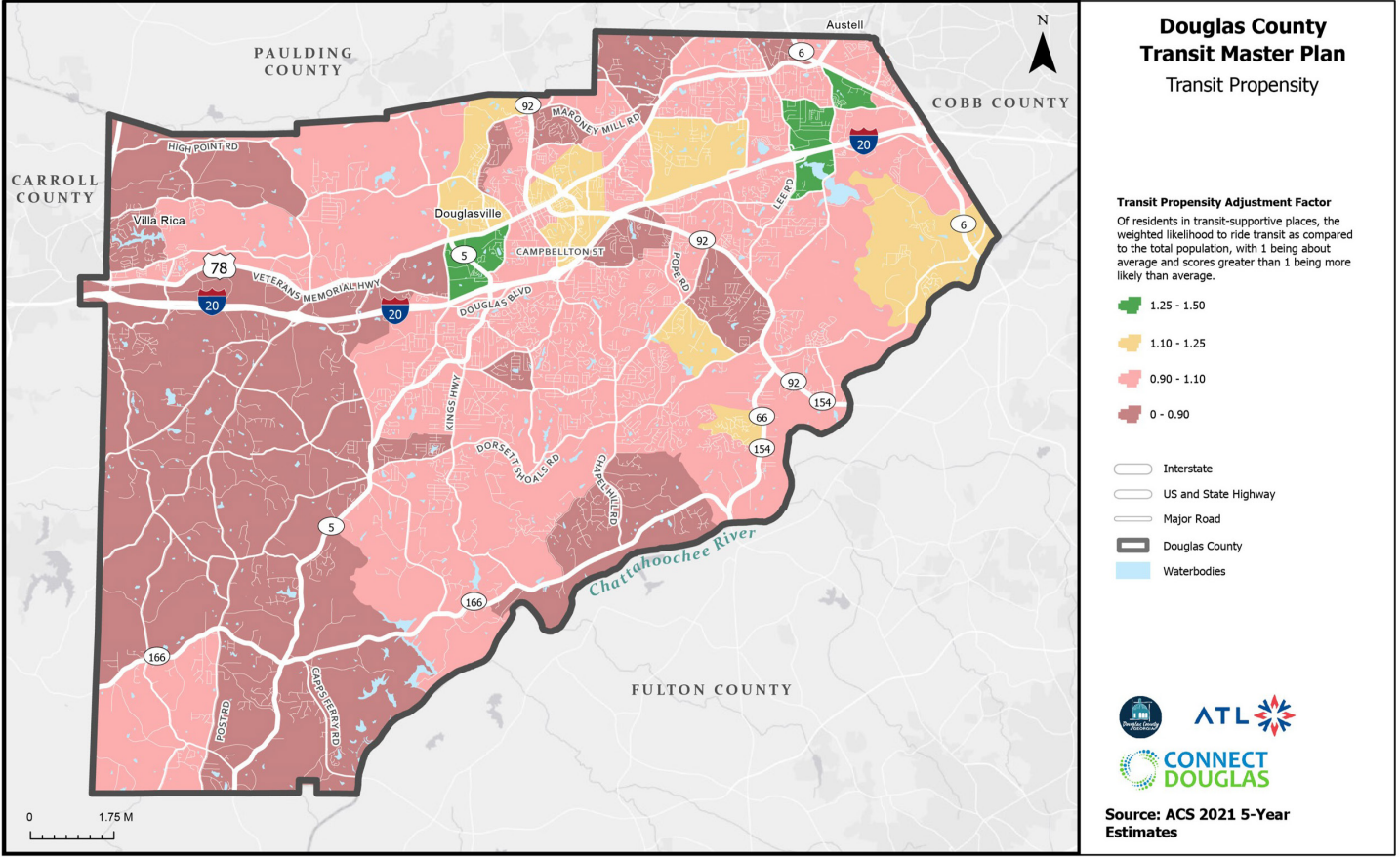
Local Context

Figure 1-6 depicts the share of potential transit riders across the county based on the transit index factor (TIF). The TIF is assigned to a census block group based on demographic breakdown to show likelihood of transit ridership. In Douglas, the areas shown in green show the highest transit propensity, or likelihood to utilize public transit. Chapter 5 explores transit propensity considerations in more detail.

- ▶ Bill Arp Rd and S Burnt Hickory Road between I-20 and US 78
- ▶ Lithia Springs around I-20 and GA 6
- ▶ Douglasville to the east and northwest of downtown
- ▶ Douglasville along the southern border of the county



Figure 1-6. Transit Propensity



The following section further explores how population and employment density impact transit ridership patterns in Douglas County.

COMPOSITE DEMAND

Most trips begin at home, and commuting is the most common and consistent reason for taking transit. As such, population characteristics and employment density are important indicators of potential transit use.

Douglas County is predominantly characterized by low-density suburban development patterns, with higher concentrations of people in and south of Douglasville as well as east of Villa Rica. Douglasville and the eastern portion of the County contain the highest concentration of jobs.

Figure 1-7 overlays composite demand, which considers both adjusted population density and employment density, with existing transit service. The composite transit demand analysis found the following:

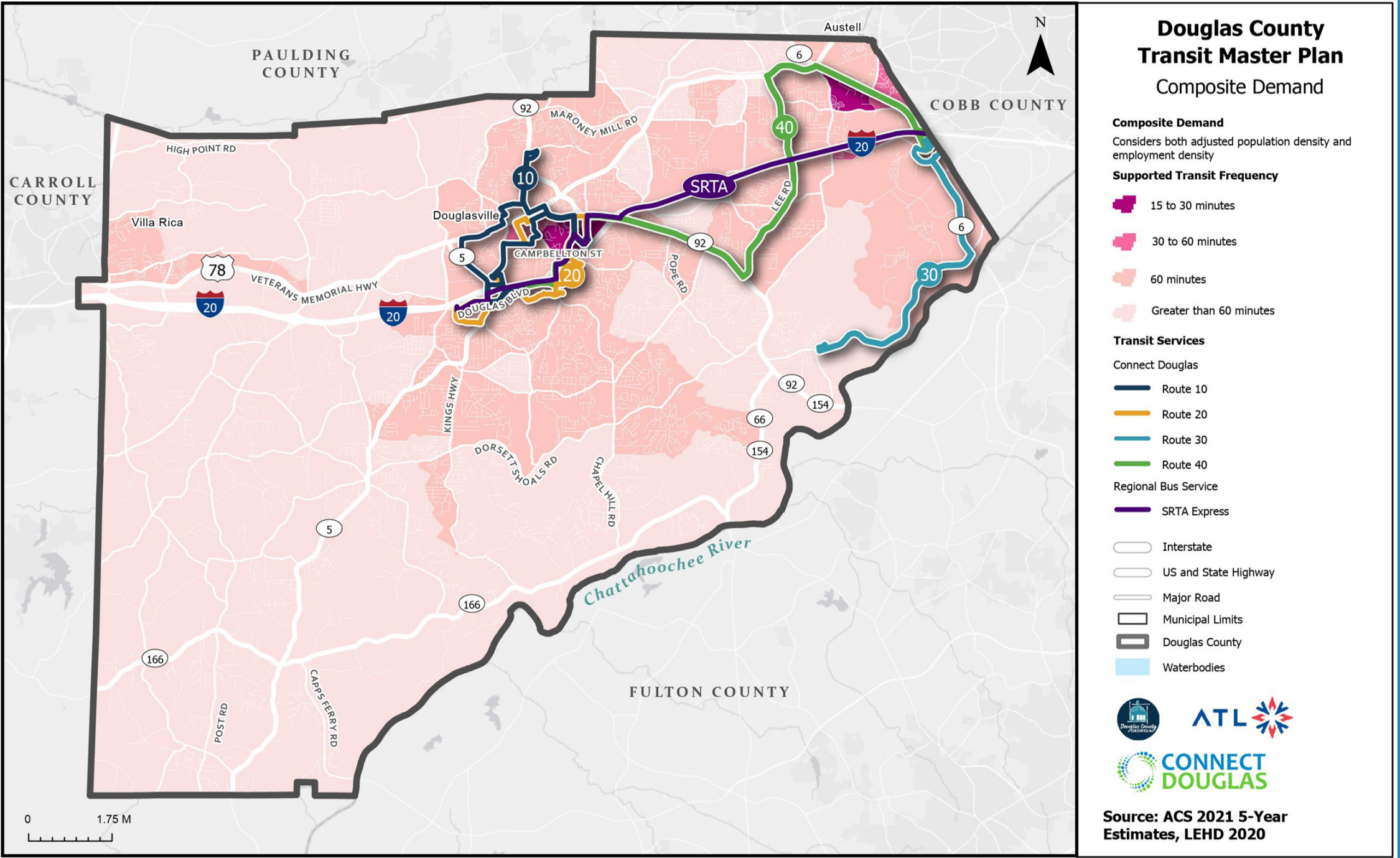
- ▶ Most of the Douglas County urban area can support 60-minute local fixed-route service, with some pockets exhibiting demand that may support 30-minute service.
- ▶ Existing Connect Douglas and Xpress services cover a significant portion of where transit demand exists, particularly around the highest levels of demand.
- ▶ Regions south of Douglasville and around Villa Rica are not currently served by existing transit but have demand to support fixed-route service.

The greatest concentrations of people and jobs are in and around Douglasville and Austell; these areas also correspond to the densest residential areas. Between 2023 and 2050, population and employment density are expected to increase.

What is *Adjusted* Population Density?

Population density that is adjusted to give more weight to groups that are more likely than average to use transit, like households without vehicles and lower-income households.

Figure 1-7. Composite Demand



TRANSIT MARKETS

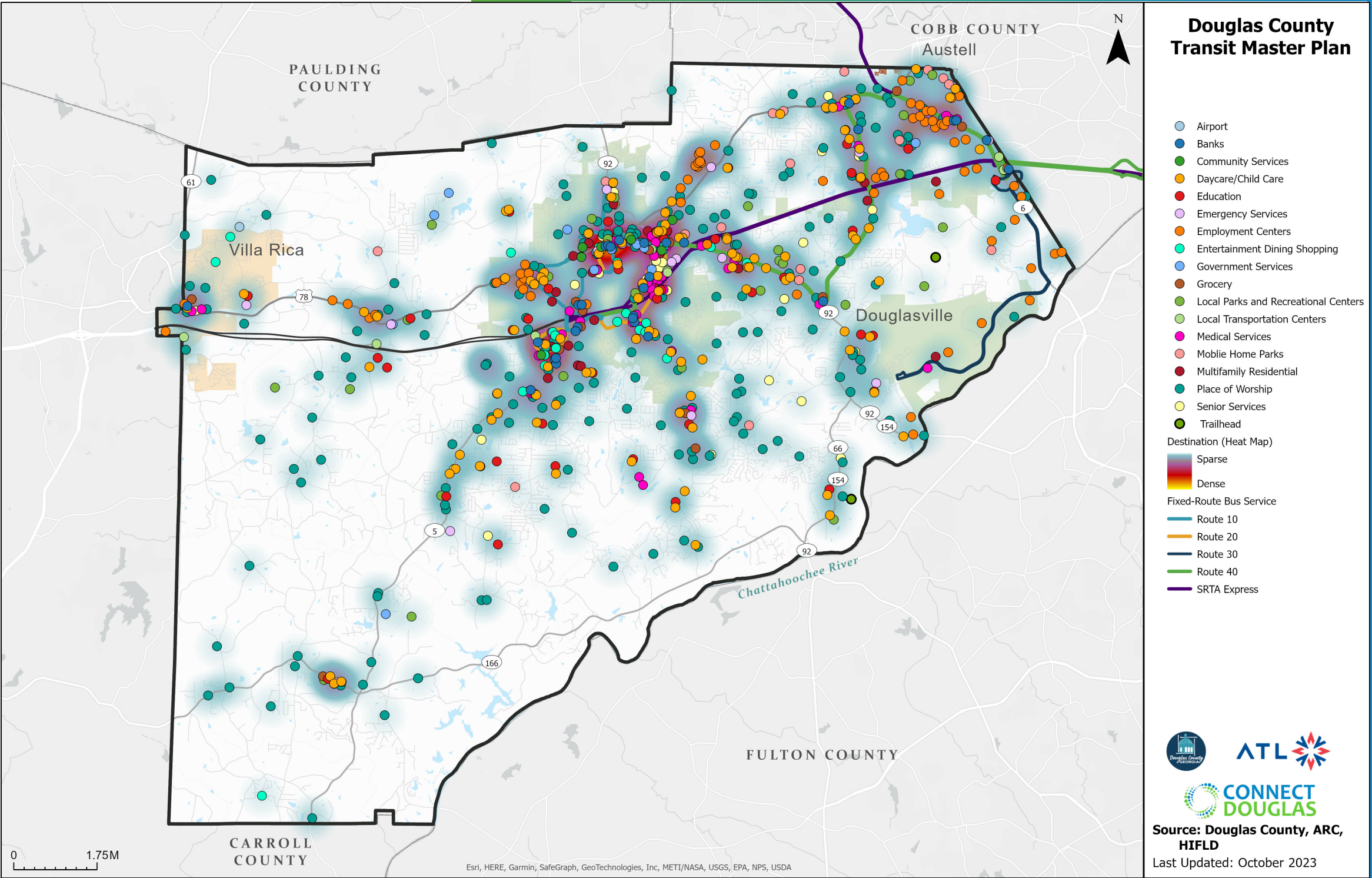
Local Trip Generators and Attractors

Analysis of transit markets focuses on trip generators and trip attractors. Trip generators are land uses from which trips originate, such as residential areas, and as such are also referred to as origins. Trip attractors refer to major local destinations, including employment and activity centers as well as projected future development areas, and are therefore also called destinations.

Figure 1-8 shows key destinations of various types throughout the County. Key takeaways from the analysis of trip attractors are as follows:

- ▶ The Thornton Road and Riverside Parkway corridors contain a high concentration of major employers and related facilities and are expected to attract further large-scale employers.
- ▶ Most current major employers are currently served by fixed-route transit, except in the central parts of the County.
- ▶ Emerging employment and activity nodes along Highway 78 between Villa Rica and Lithia Springs would be well-served by transit service expansion.
- ▶ Activity destinations are more prominent in urban areas of around large-scale commercial development.
- ▶ Small activity clusters are emerging around suburban and rural crossroad communities
- ▶ Existing clusters of trip attractors are expanding and densifying, with future development also primarily anticipated to occur along key corridors and established districts.

Figure 1-8. Douglas County Major Destinations



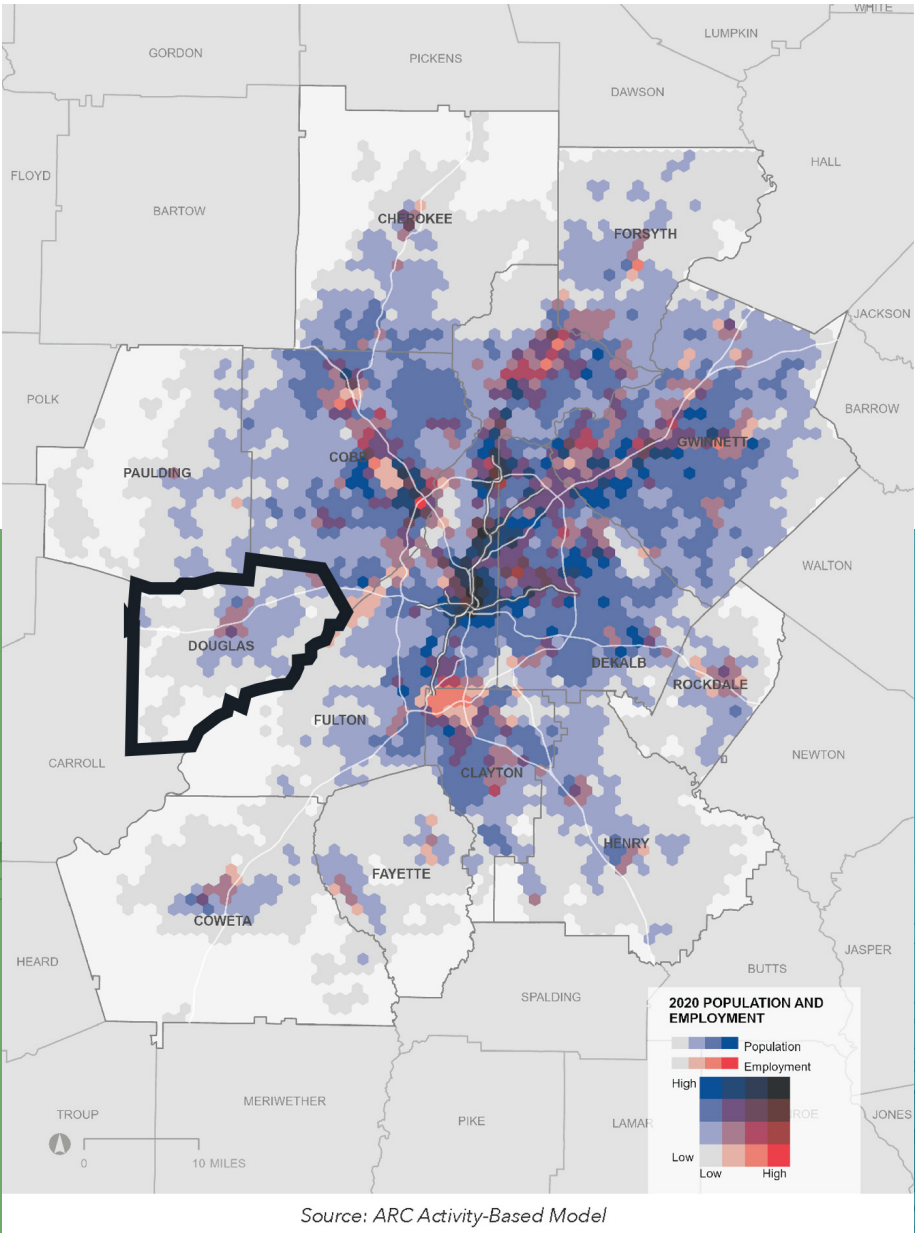
REGIONAL CONTEXT

Douglas County is a member of the Atlanta Regional Commission, which functions as the metropolitan planning organization (MPO) for metro Atlanta. It shares a border with Fulton, Cobb, Paulding, and Carroll Counties.

Figure 1-9. Douglas County Regional Context



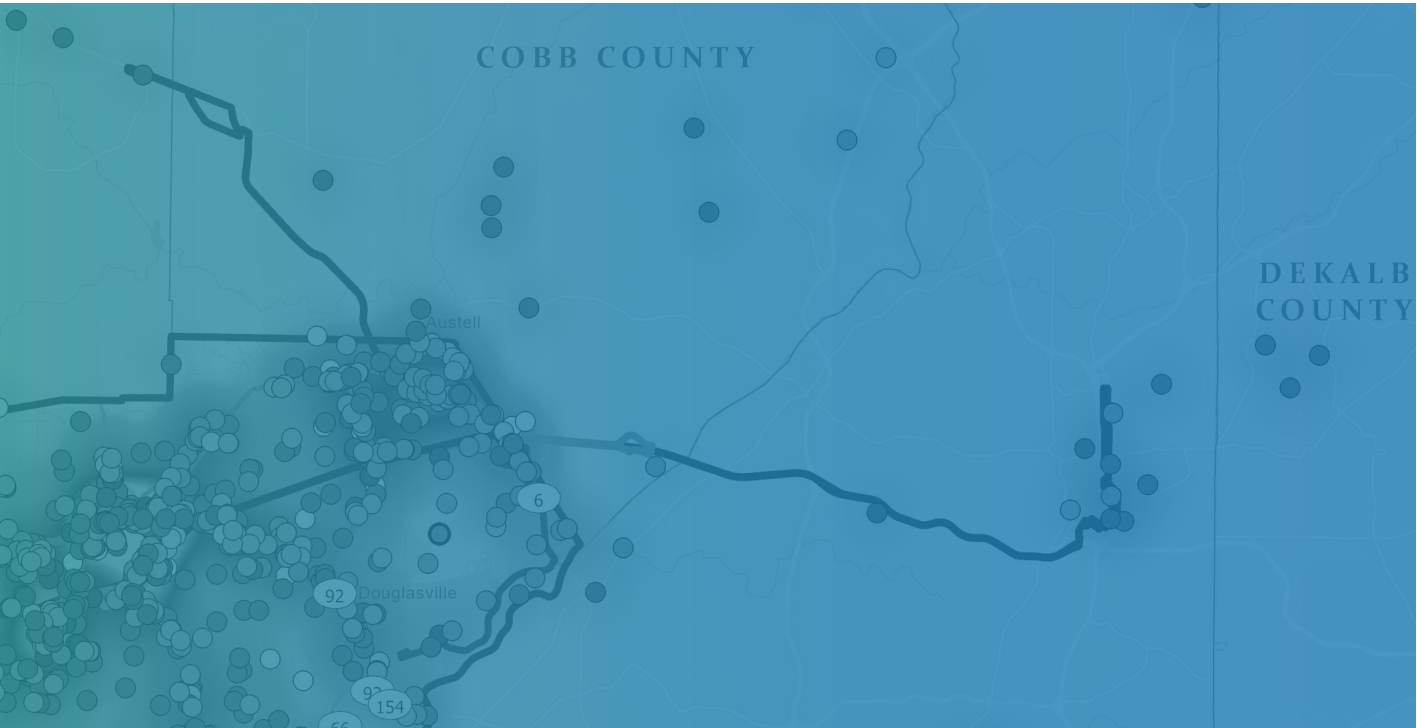
Figure 1-10. Regional Population and Employment Density Map (2020)



Source: ARC Activity-Based Model

In the region, population and employment density are clustered east of Douglas, primarily in Atlanta, emphasizing the need for improved connections to these areas.

Population density is shown in purple, while employment density is shown in red. Darker color shades indicate higher densities.



Major Employers in the Region

Major employers were identified through Georgia’s Department of Labor Local Area Profile and Elevate Douglas Economic Partnership, which indicated that top employment industries include governmental and healthcare services and private companies, including manufacturing and services industries.

- ▶ Atlanta Hartsfield-Jackson International Airport (Delta Air Lines)
- ▶ Hospitals (Emory, Grady, Northside, WellStar)
- ▶ Colleges/Universities
- ▶ Douglas County Schools
- ▶ Major Employers (Georgia Area Labor Profile)

Commuter Patterns

The Census Bureau’s Longitudinal Employer-Household Dynamics (LEHD) program informed the study of the surrounding region. This data indicates the top counties where Douglas County residents are commuting to for work (commuter outflow) and where people that work in Douglas County but live elsewhere are commuting from (commuter inflow).

Figure 1-11 shows the commuter inflow and outflow for Douglas County, as well as the total number of intra-county commuters. The County experiences a net outflow of nearly 18,000 workers.

Table 1-1 lists both the top counties Douglas residents commute to and the counties that Douglas workers commute from.

Figure 1-11. Douglas County Commuter Flow_

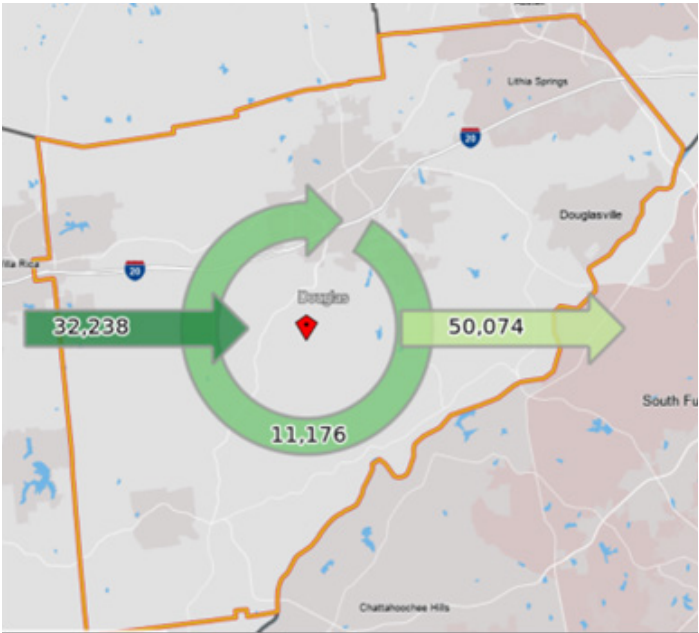


Table 1-1. Douglas County Commuter Flow

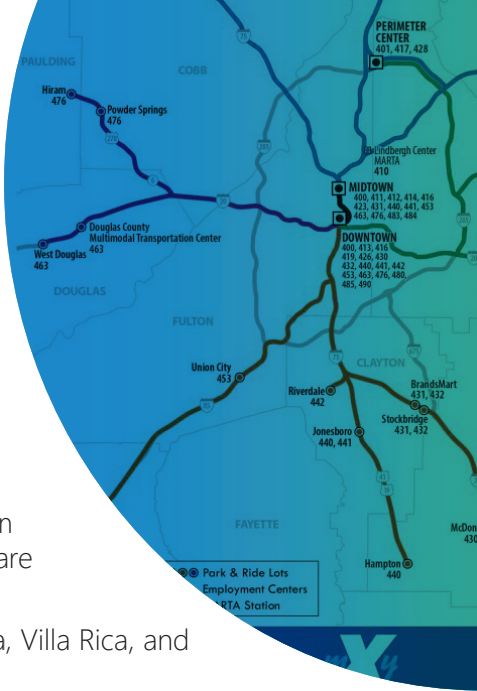
COMMUTER OUTFLOW	COMMUTER INFLOW
Fulton	Cobb
Cobb	Fulton
Carroll	Paulding
Clayton	Carroll
DeKalb	DeKalb
Gwinnett	Gwinnett
Paulding	Clayton

Regional Trip Generators & Attractors

As the heat map in Figure 1-12 shows, the deepest concentrations of employment destinations for Douglas County residents are along Fulton Industrial Boulevard, in south Cobb County, and in Downtown Atlanta.

Other key takeaways regarding regional employment and activity centers include:

- ▶ Regional destinations for County residents are located primarily to the north and east, including areas of Paulding, Cobb, and Fulton Counties.
- ▶ Some overlap exists between employment and activity destinations; Downtown and Midtown Atlanta, as well as the Battery and Cumberland Mall in Smyrna, are examples.
- ▶ Key regional activity destinations are found in Downtown and Midtown Atlanta, Villa Rica, and the area surrounding the Battery and Cumberland Mall in Cobb County.
- ▶ Manufacturing and industrial employers are prevalent in the region and play a large role in regional employment. Key industrial areas are highlighted in Figure 1-12 emphasized by shades of yellow and dark pink on the heat map. Carrollton is a key employment center in the area due to the presence of Southwire and the University of West Georgia.
- ▶ Medical facilities in Paulding and Cobb County are key destinations.
- ▶ Stakeholder input noted the need to bridge the gap between Connect Douglas and other regional transportation services.



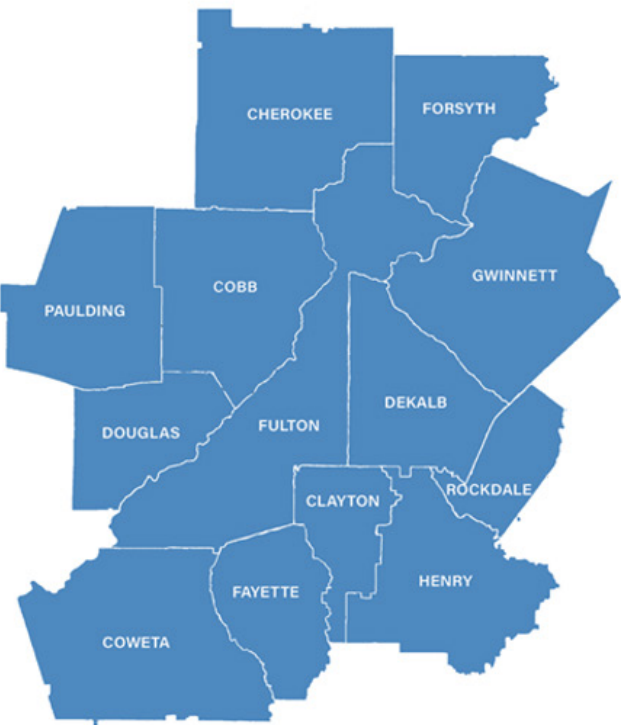
The ATL

The Georgia General Assembly created the Atlanta-Region Transit Link Authority (The ATL) during the 2018 legislative session to provide coordinated transit planning and funding for the metro Atlanta region.

The ATL is responsible for developing the Regional Transit Plan and identifying and prioritizing the projects and initiatives required to develop region-wide transit. Effective July 1, 2020, the ATL was legislatively authorized to oversee the state’s Xpress regional commuter transit system and the Atlanta region’s vanpool system.

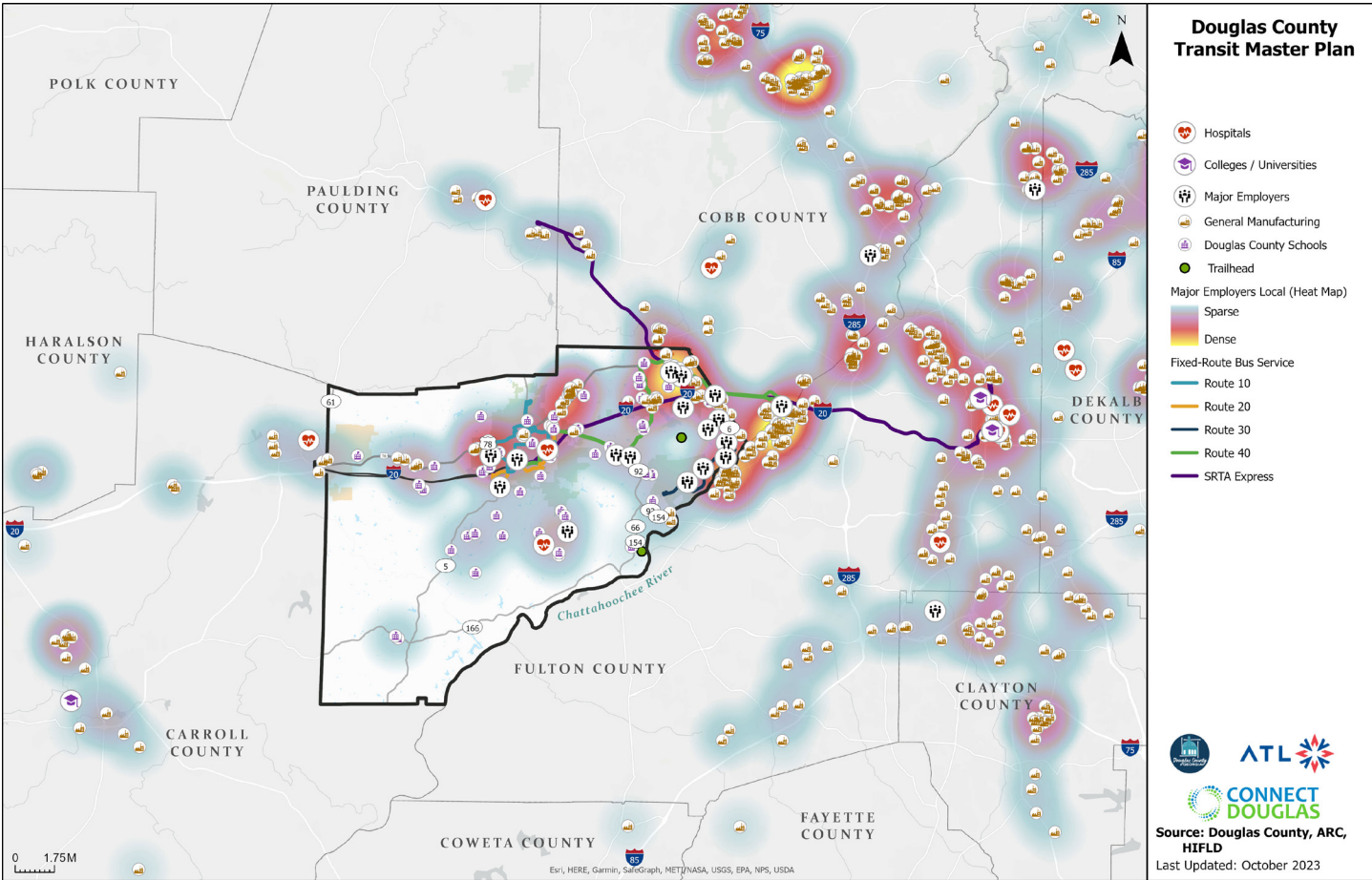
As a member agency, Connect Douglas is incorporated in regional plans and policies and receives financial and planning support from the ATL.

Figure 1-13. Transit Operators in the Region



Source: The ATL

Figure 1-12. Regional Destinations & Employment Centers



NATIONAL CONTEXT

Table 1-3 shows Census data on commuting characteristics for Douglas County, the state of Georgia, and the United States. Nearly 80 percent of Douglas County residents drive alone to work, compared to 73 percent nationwide. Additionally, fewer than 1 percent of workers in the County take public transportation, far lower than the 4 percent of American workers who use public transit.

Table 1-2. Means of Transportation to Work

	DOUGLAS COUNTY	GEORGIA	U.S.
Workers 16 years and over	67,361	4,926,936	153,284,955
Drove alone	79.5%	76.0%	73.2%
Carpooled	8.3%	9.1%	8.6%
Public Transportation (excluding taxicab)	0.7%	1.7%	4.2%
Walked	0.5%	1.4%	2.5%
Other means	1.6%	1.8%	1.8%
Worked at home	9.5%	10.1%	7.3%

Source: U.S. Census Bureau, 2021 American Community Survey (ACS), 5-Year Estimates Data Profiles, Table DP03

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2 OUTREACH & ENGAGEMENT

OVERVIEW & STRATEGY

Douglas County is committed to facilitating a community driven planning process that prioritizes the input gathered from the public and community stakeholders. This commitment was upheld throughout the planning process with significant opportunities offered for members of the public to engage and share their ideas, opportunities, concerns, and needs.

A robust public and stakeholder engagement plan was prepared to inform the public of the Douglas County Transit Master Plan (TMP) and ensure the process provided adequate engagement opportunities for the public and stakeholders.

A variety of communication tools and methods were utilized to effectively connect, engage, communicate, educate, and keep stakeholders informed.

Key Objectives

The following objectives guided the public engagement process throughout the project:

- Effectively communicate and educated about the TMP project
- Provide convenient engagement opportunities
- Facilitate an inclusive and accessible outreach and engagement process
- Leverage visualization tools, maps, infographics & activities to convey complex concepts in a digestible format
- Provide innovative opportunities to share and collect information

A Phased Approach






The engagement process was implemented in two phases.

- 1 Phase 1** focused on uncovering challenges faced by current transit riders and those who wish to have better access to transit and mobility services in addition to desires for future transit and mobility in the region.
- 2 Phase 2** focused on obtaining feedback on proposed solutions to the challenges and needs identified in Phase 1.

COMMUNICATION & OUTREACH TECHNIQUES

Several outreach and engagement methods were utilized to provide the most meaningful and intentional outreach efforts for the TMP within the study area.

Communication Techniques

-  Project Webpage
-  Project Fact Sheet
-  Publication Ads
-  Two Project Surveys
-  Marketing Collateral

Project Webpage

A dedicated project webpage maintained the latest project information, presentations, and other project-related collateral.

Project Fact Sheet

The project fact sheet summarized the overall project, project timeline, and promoted ways for the community to get involved and provide input.

Publication Ad

Ads in *Chapel Hills News and Views* and *Douglas Sentinel* ran throughout dedicated times of the community engagement process. Both publications are mailed to every home, business, and post office within two major zip codes covering approximately 30% of the population in Douglas County.

Project Survey

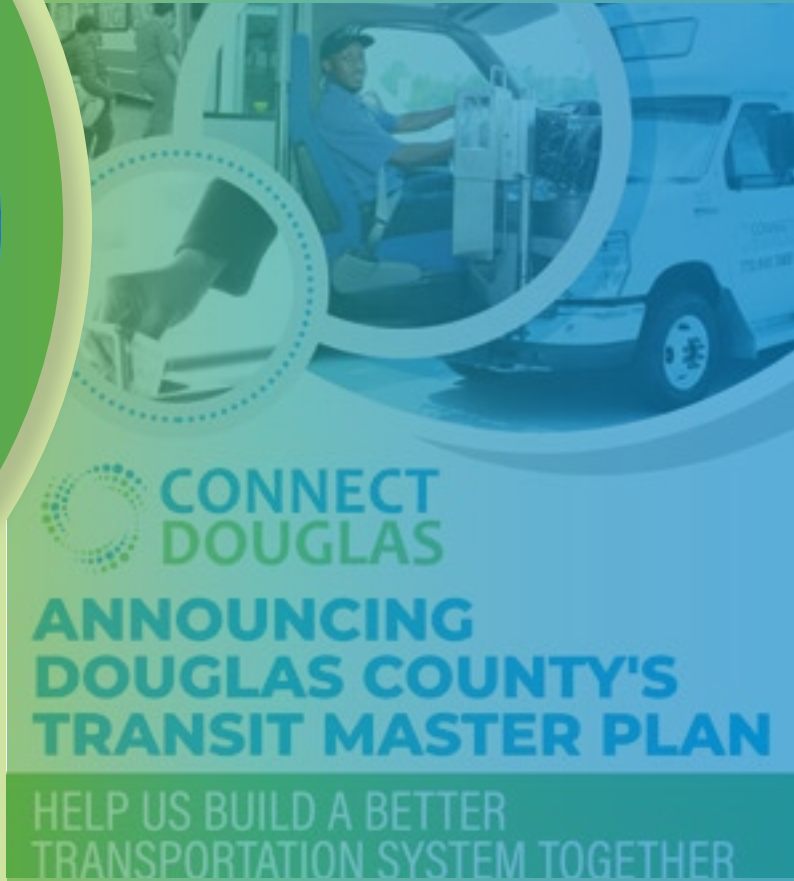
Two surveys were administered to obtain feedback on transit needs and priorities. Residents of Douglas County and current Connect Douglas and Xpress transit riders were invited to share their thoughts and ideas about their transit challenges and opportunities.

Surveys were available online and in print, in both English and Spanish. They were promoted and distributed through social media and during outreach activities including stakeholder interviews, pop-up events and at bus routes.

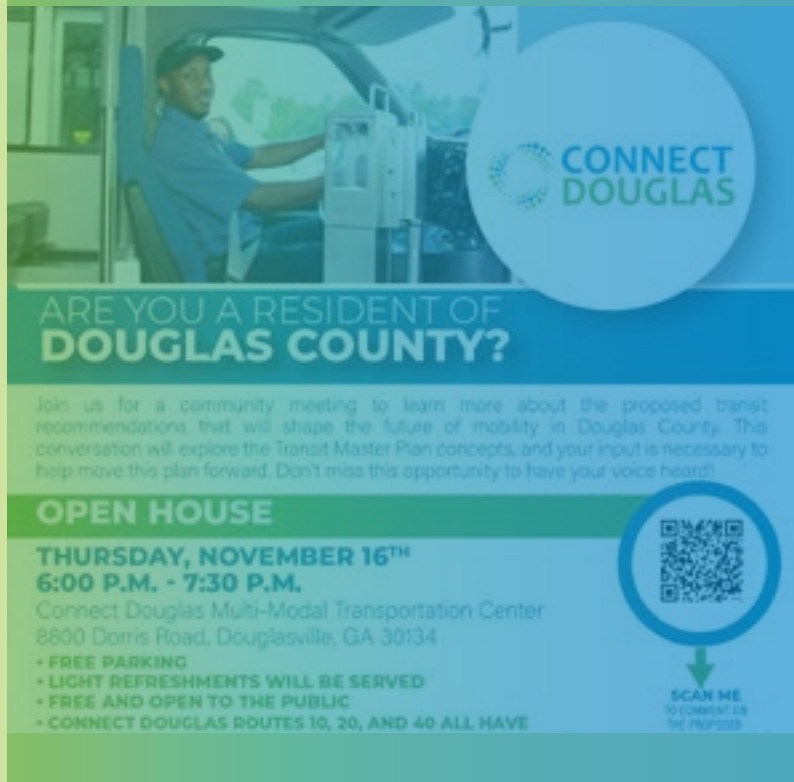
Marketing Collateral

Vibrant marketing materials were developed in both English and Spanish for distribution throughout the county. These materials included QR codes to direct the community to the project website, public surveys, and to promote various outreach activities.





COMMUNICATION TECHNIQUES



Outreach Activities

- Pop- Up Events
- Text Message Marketing
- Email Newsletter
- Social Media
- Stakeholder Interviews
- Stakeholder Committee Meetings
- Targeted Community Outreach
- Public Meetings

Pop Up Events

During Phase 1, the Project Team participated in community events in each district throughout Douglas County and engaged with over 1000 Douglas County residents to promote the TMP. Feedback gathered from these events provided insight into transit service needs and challenges.

The Project Team participated in the following pop up events in April - June 2023.

- Bark In the Park
- Douglasville Music Festival
- Taste of Douglasville
- Family Fish Fry
- Coffee with Commissioner Ricky Dobbs
- State of Douglas County

Text Message Marketing

The Project Team executed a text message campaign deployed to over 2,000 residents of Douglas County. Recipients received communication about the TMP and were encouraged to provide feedback through survey participation.

Email Newsletter

The Project Team partnered with Douglas County staff, stakeholders, and Board of Commissioners to disseminate project information via the electronic newsletter, Douglas County Happenings, to directly engage with residents and stakeholder groups.

Social Media

Social media promotions helped to expand reach and capture diverse audiences and influences who helped generate positive public awareness about the Douglas County TMP. The hashtag #ConnectDouglasTMP was used to help residents of the county follow project updates.

Stakeholder Engagement

The Project Team utilized workshops and one-on-one interviews to solicit input and feedback from key stakeholders across the county.

Aside from interviews, key stakeholders were also convened through multiple stakeholder committees to provide technical guidance and input as the TMP was developed.

Targeted Community Outreach

Targeted outreach was conducted to populations that include low-income, senior, and disabled as well as zero-car households. The public engagement process engaged segments of the population impacted by Environmental Justice, and ensured the inclusion of non-English and limited English proficiency populations in public involvement initiatives.

Public Meetings

Public meetings provided a forum for community members to learn about project objectives and recommendations and provided feedback.

A summary of key findings from the engagement process is presented in the Key Findings Summary Chapter of this report, with key highlights.

OUTREACH ACTIVITIES



ENGAGEMENT HIGHLIGHTS

Project Surveys

Project surveys enabled the project team to measure the opinions and sentiments of the study area population, increase awareness of the TMP process, rank the public’s transportation needs, present alternatives, and gather reactions. Each survey was provided in web-based and printed formats and was available in English and Spanish.

Two project surveys were conducted to collect input on to obtain input on transportation needs and priorities. A **Community Survey** was active from April 1, 2023, to June 25, 2023. This survey solicited feedback from the community on potential transportation opportunities and implementing public transportation in the future.

A **Customer Experience Survey** ran from May 1, 2023, to July 1, 2023. The objective of this second survey was to provide transit users with an opportunity to share their thoughts and ideas regarding their personal transportation needs, opportunities, and concerns within Douglas County.

Overarching themes and keywords that emerged from both surveys and the outreach series are presented below. A more detailed overview of key takeaways from the surveys and other outreach activities is provided in Chapter 4: Key Findings.

Convenience
Reliability
Safety
Location
Accessibility

OVERARCHING THEMES

Open House

An Open House style forum was hosted for Douglas County stakeholders, residents, community members, and transit enthusiasts on Thursday, November 16, 2023 at Douglas County’s Multi Modal Transportation Center. The meeting included an open house period, formal presentation, and a Q&A session. This forum provided an opportunity to engage in conversation that explored the Transit Master Plan’s concepts.

Feedback received during the Open House identified improvements and recommendations for several key categories presented in the adjacent graphic.

TRANSIT PREFERENCES & NEEDS

- ▶ Preferred transit types: Microtransit, On-Demand, Dial-A-Ride, Express Bus
- ▶ Connectivity & accessibility improvements
- ▶ Transportation and safety supportive infrastructure investments

STAKEHOLDER ENGAGEMENT

During each phase of engagement, the project team met with a variety of stakeholders to provide general education about transit issues, uncover specific mobility challenges, and discuss and identify roles that stakeholders might have in the implementation of the final plan. Stakeholder feedback was collected through interviews, virtual workshops, a youth forum, and stakeholder committee meetings with key stakeholders and elected officials.

Stakeholder Interviews

Stakeholder interviews enabled the project team to gather input and facilitate a clearer understanding of the intended outcomes for the project. Both individual and small group interviews were conducted, including two stakeholder workshops and ten interviews, which took place during the Existing Conditions and Future Conditions phase of the project.

Key Takeaways

Stakeholder input from these interviews and small group discussions identified the following needs and opportunities for the future of transit service in Douglas County:

- Increase residential density in and around Downtown Douglasville
- Ensure that seniors are a priority (connectivity to senior living communities)
- Facilitate access to jobs, reverse the trend of most Douglas County workers exiting County for jobs
- Create opportunities for youth to access jobs and schools by taking advantage of public transit options

Youth Forum

Nine high school students from Douglas County participated in a youth forum held on June 29, 2023, to discuss the future of transit in the County. Activities included map exercises and discussions around different modes of transit and desired destinations within Douglas County.

The participants were educated about transit resources available to them and they were provided with a 30-day transit pass to give them an opportunity to experience current transit options in Douglas County. The students also created a TikTok campaign to spread awareness to their peers about transit opportunities in their county.

Key Takeaways

The data gathered during the Youth Forum was used to help identify opportunities for current and future transit needs. Recommendations and ideas that derived from this discussion are presented below.

- Utilize App Accessibility, which offers a convenient payment option for riders
- Provide connections to after-school extracurricular activities
- Provide connections to the following areas:
 - The Braves Stadium/Battery
 - Airport and Downtown Atlanta
 - Connection to Entertainment & Parks

Stakeholder Committee Workshops

Key stakeholders, including representatives from local and regional agencies, partner agencies, and county leadership were also convened through multiple stakeholder committees including a Technical Advisory Committee (TAC), to provide technical guidance and input as the TMP was developed. Organizations represented on the TAC are presented in the adjacent graphic.

Board of Commissioners Workshops

The project team also facilitated a workshop with the Douglas County Board of Commissioners on June 17, 2023, which provided a valuable opportunity to engage in interactive conversations about the challenges facing transit. Mentimeter, a web-based polling tool, was used to capture responses from participants during the workshop.

Key Takeaways

Participants were asked about key policy direction during the Commissioners Workshop:

- Should Connect Douglas provide transit service outside the county?
Yes, but only to make logical connections for our residents.
- How should we be thinking about new transit service models?
All service types should be considered to provide the most effective service for our citizens.
- What should Connect Douglas be known for?
Connecting people and providing transportation options that enhance the safety, health and quality of life for Douglas County residents while effectively supporting our economic growth.

TECHNICAL ADVISORY COMMITTEE

- Douglas County
- Connect Douglas
- Atlanta-Region Transit Link
- Douglasville Development Authority
- GDOT Intermodal
- FTA
- Connect Douglas Paratransit Advisory Committee
- City of Douglasville / Bicycle and Pedestrian Advisory Committee
- SPLOST
- MARTA
- Douglas County Planning and Zoning
- Cobb County Department of Transportation (CobbLinc)
- Cobb County DOT
- Carroll County Transit

County Commissioners created mock newspaper headlines describing how they envision the County's transit system within the next five years:

- Thousands in Ridership
- Economic Engine for Eastern US
- Moving Families Along All Over GA
- Senior Living on the Rise
- 15 Years of Growth



3

VISION, MISSION & GOALS

Through the planning process of the TMP, Connect Douglas updated its mission statement and strategic direction, informed by feedback from key stakeholders including community members, transit riders, and County leadership. In addition, the TMP defines the Goals and Objectives for the system, which were informed by local and regional transportation plans.

CONNECT DOUGLAS MISSION

“Connect Douglas Transit is committed to providing safe, reliable, accessible transportation that will strengthen and enrich the lives of our citizens, our community, the economy, and the environment.”

STRATEGIC DIRECTION

Guided by County leadership including the Board of Commissioners, strategic direction for the future of transit in Douglas County includes the following key guiding principles:

- ▶ The County should invest in logical transit connections outside the county to better serve its residents.
- ▶ All service types need to be considered to provide the most effective transit service for citizens.

- ▶ Connect Douglas should prioritize connecting people and providing transit options that enhance the safety, health, and quality of life for Douglas County residents while also supporting economic growth.

Indicators of success were sourced from public survey responses where respondents were asked to select the top 3 themes that they believed define a successful transit system. County leadership also provided input.

Connectivity and Economic Impact were the top two responses, with Equity and Health tied for third. These indicators also signal the priorities to be made in transit improvements.

WHAT DOES SUCCESS LOOK LIKE?

- ▶ **Connectivity**
- ▶ **Economic Impact**
- ▶ **Equity**
- ▶ **Health**
- ▶ Ridership
- ▶ Productivity
- ▶ Customer Service
- ▶ Climate
- ▶ Congestion
- ▶ Community Relevance



GOALS & OBJECTIVES

The consultant team reviewed the goals, objectives, and priorities of the adopted plans and policies for the county and region to ensure consistency. The Douglas County Comprehensive Transportation Plan and the Atlanta Regional Transit Link's Regional Transportation Plan served as the foundation for the Connect Douglas Transit Master Plan's goals and objectives.

Six goals were established, each with associated objectives to guide the service scenario and recommendations development phase of the TMP.





GOAL 1

Promote Local and Regional Connectivity

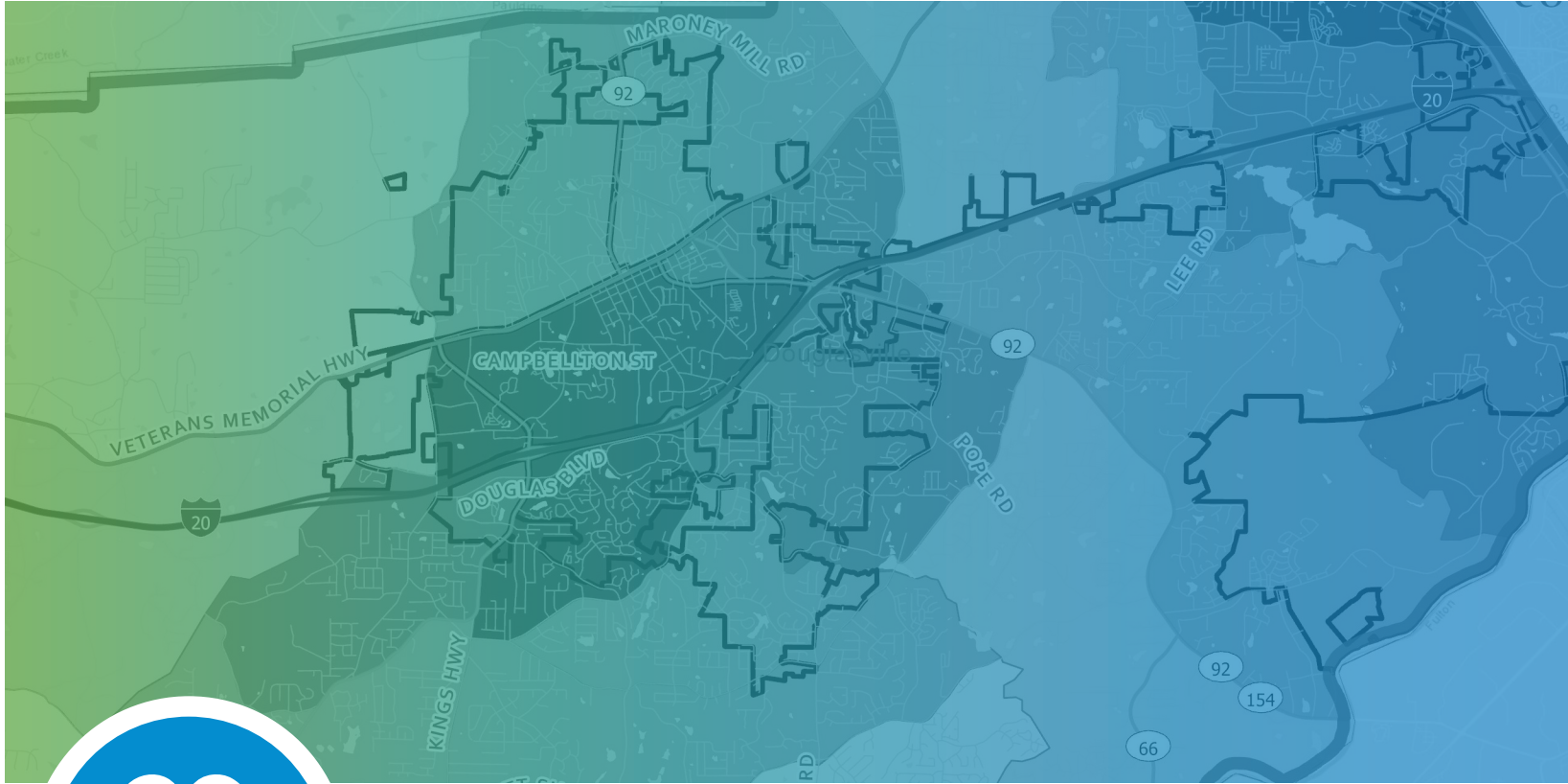
- ▶ Connect population, employment, and activity centers, using cross-jurisdictional services for regional connectivity.
- ▶ Identify opportunities to enhance regional partnerships with the common goal of improving connectivity through transportation investments.



GOAL 2

Enhance Mobility for all Travelers Through Equitable Transit Investments

- ▶ Expand trip choices through a well-connected network of sidewalks, bicycle facilities, and micro-mobility options connecting to transit solutions.
- ▶ Provide new or expanded service between low- and moderate-income areas and activity and employment centers to improve connectivity and focus on investments that better enable people to meet their day-to-day needs.
- ▶ Use technology and innovative solutions to improve rider experience, fare collection, cost savings, and integration with transit alternatives.
- ▶ Ensure that project financing plans are feasible and promote cost-efficient alternatives for new or enhanced mobility services.



GOAL 3

Leverage Transportation to Enhance Community Health and Quality of Life

- ▶ Prioritize connectivity to local activity centers, including recreational facilities, parks, and greenways.
- ▶ Use transportation investments to encourage development in economically depressed areas.
- ▶ Promote choice transit ridership through enhanced service alternatives to reduce single occupancy vehicle use and reduce associated emissions.
- ▶ Explore opportunities to promote the use of alternative fuels to support environmental sustainability.



GOAL 4

Promote Economic Growth by Coordinating Transportation Investments with Land Use

- ▶ Create or enhance access to employment and activity centers consistent with local and regional growth objectives.
- ▶ Invest in improved mobility in areas of growth and higher density.
- ▶ Maintain consistency with comprehensive land use plans.
- ▶ Implement Transit Oriented Development policies and ordinances to promote transit supportive densities.



GOAL 5

Provide Safe and Accessible Transportation Facilities for All

- ▶ Maintain and improve the condition of existing transportation infrastructure, vehicles, and transit supportive technology.
- ▶ Invest in bicycle and pedestrian facilities to promote safe and secure first and last mile connections to public transportation.
- ▶ Identify ADA barriers at bus stops and mobility hubs and prioritize solutions.
- ▶ Continue shelter installation efforts and procure additional shelters for prioritized stop locations within the service area.



GOAL 6

Maximize Operational and Service Efficiencies

- ▶ Expand ridership through strategic system modifications and targeted outreach.
- ▶ Eliminate under performing service segments and utilize capacity to enhance service in high demand sectors.
- ▶ Identify strategies to reduce system operating costs while maintaining current levels of service
- ▶ Leverage local, federal, state, and private funding for capital and operational investments.
- ▶ Identify and eliminate system and service redundancies.

4

KEY FINDINGS

The project identified several key findings that have been considered and incorporated to guide the recommended initiatives and tactics included in Chapter 5. This chapter summarizes the major takeaways from the Public and Stakeholder Engagement Process, the Existing Conditions Report, the Operational / Financial Analysis Report, and the Peer Assessment.

PUBLIC & STAKEHOLDER ENGAGEMENT

A robust public and stakeholder engagement program enabled the community to provide feedback in person and online throughout both phases of engagement.

A summary of emerging themes derived from feedback is presented below.

Convenience

- ▶ Expand service hours
- ▶ Expand service areas
- ▶ Expand transit service mode options

Reliability

- ▶ Increase frequency & consistent service
- ▶ provide on-demand service

Safety

- ▶ Improve bus stop facilities & pedestrian connections

Accessibility

- ▶ Enhance access for seniors and youth
- ▶ Expand ADA access
- ▶ Improve access to employment & activity centers

Connectivity

- ▶ Direct connection to HJAIA & MARTA
- ▶ Increase regional connections (Atlanta, Cobb County, Carroll County)

What People Are Saying about Transit?

A variety of communication tools and methods were utilized to effectively connect, engage, communicate, educate, and keep stakeholders informed. Surveys alone solicited over 1,700 responses.

Transit users indicated they want more diverse mobility options and improved connections to Atlanta and Cobb County. In addition, participants think enhanced connections to Atlanta's airport should be a priority.

KEY TAKEAWAYS

#1 purpose:

To provide mobility options for transit dependent populations

47%

Desire more direct Connections to Downtown Atlanta

#1

Destination is Hartsfield-Jackson Atlanta International Airport

56%

Desire better connections to Cobb County

Stakeholder Feedback

Additionally, stakeholder feedback was collected through small group interviews and virtual workshops. Their targeted direction included the following themes:



A desire to have more density from a residential standpoint in and around Downtown Douglasville



Ensuring that seniors are a priority (connectivity to senior living communities)



Facilitate access to jobs, reverse the trend of most Douglas County workers exiting County for jobs



Create opportunities for youth to access jobs and schools by taking advantage of public transit options

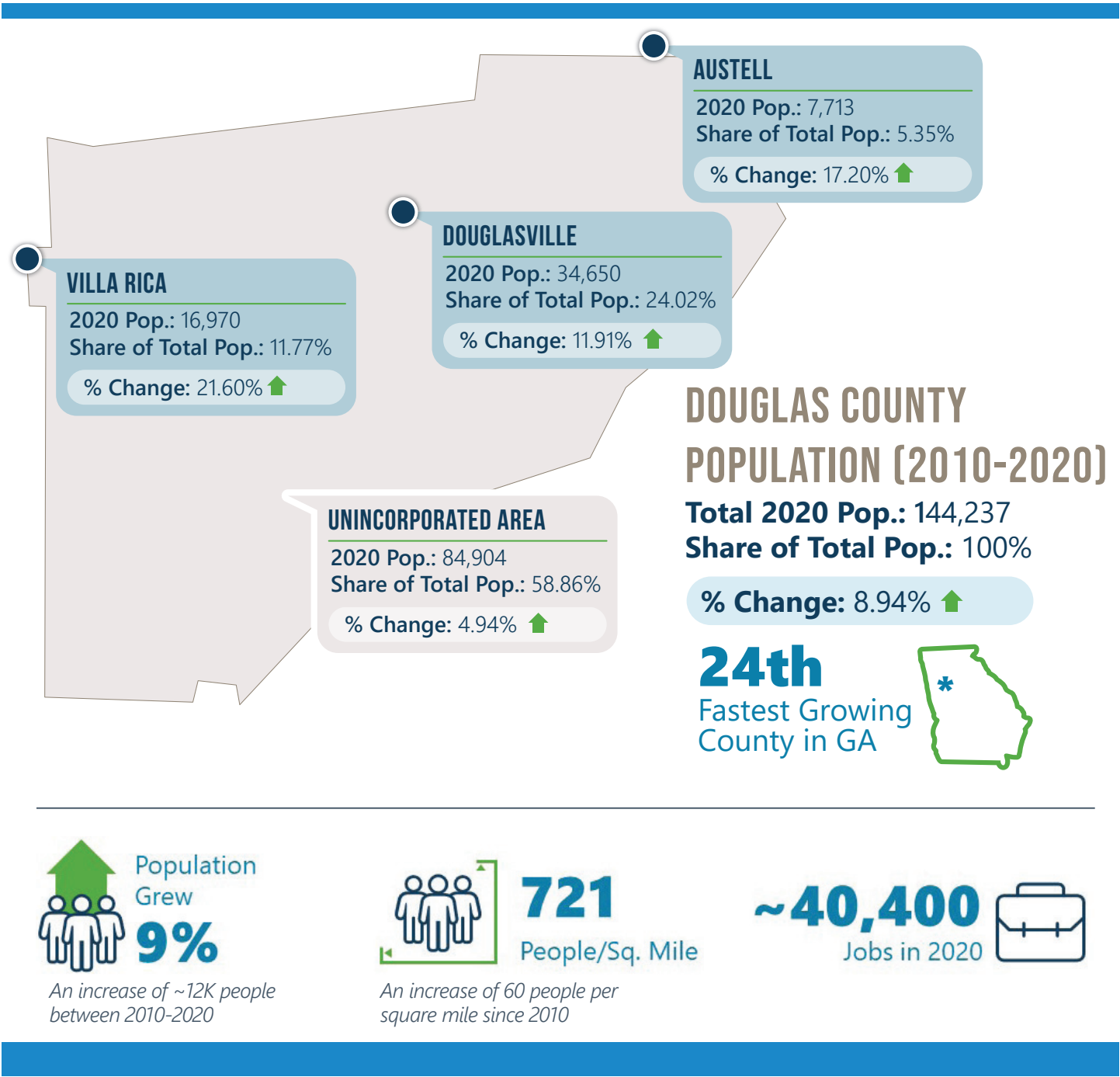
EXISTING CONDITIONS

The Existing Conditions Report reviews the population, demographic, and economic state of Douglas County as a snapshot in time to establish an understanding of the state of the County at the time of the project.

The infographic depicted in Figure 4-1 summarizes

the population and employment changes in Douglas County between 2010 and 2020.

Figure 4-1. Population & Employment Snapshot



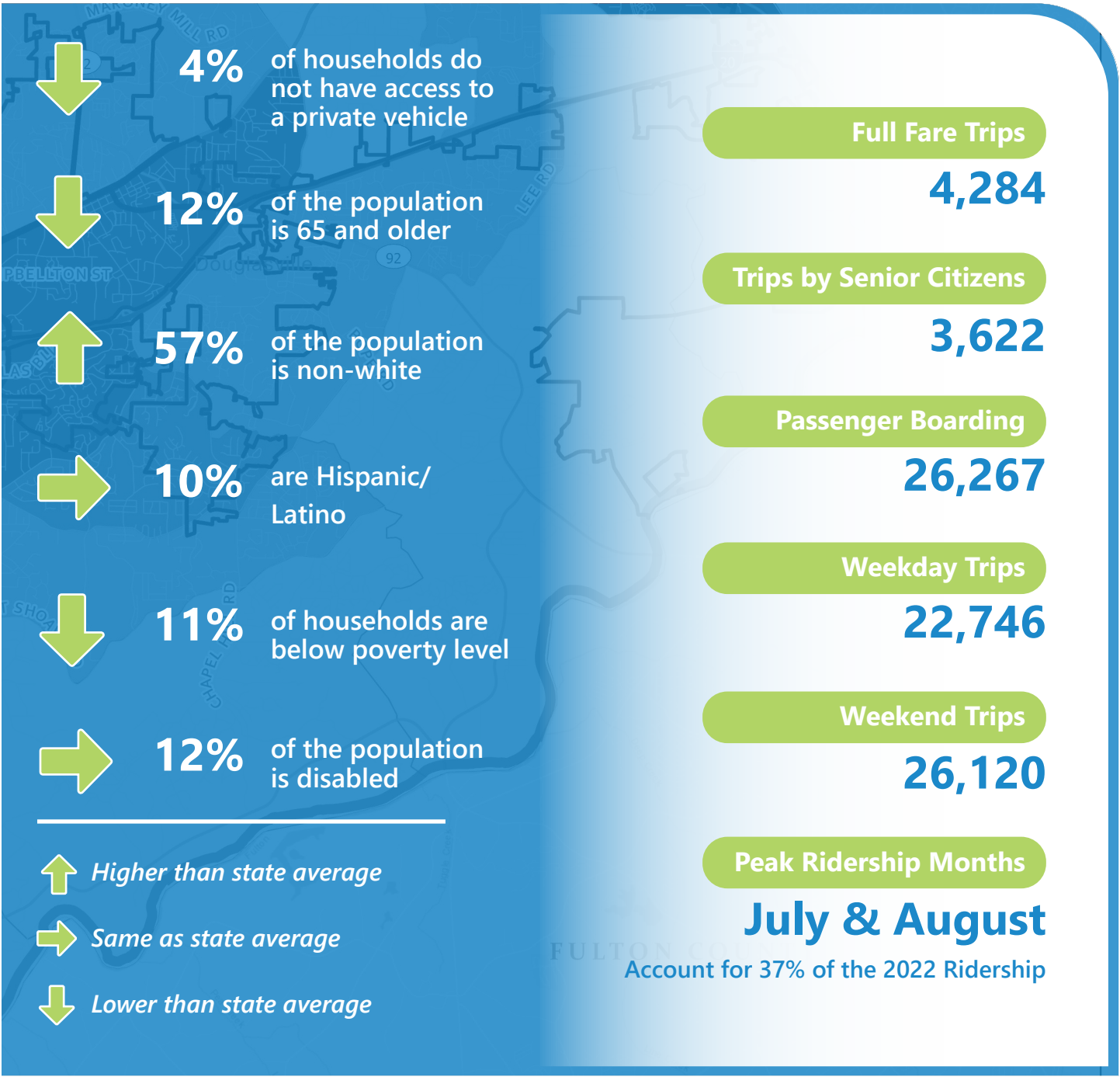
Population & Ridership Trends

A high-level snapshot of other demographics in Douglas County are highlighted below. The graphic compares Douglas County's population to the statewide averages.

Compared to the state, a lower percentage of the County's population is without a car, over 65, or below the poverty level. The percentage of non-white residents is higher than the state average. The percentage of the population who identify as

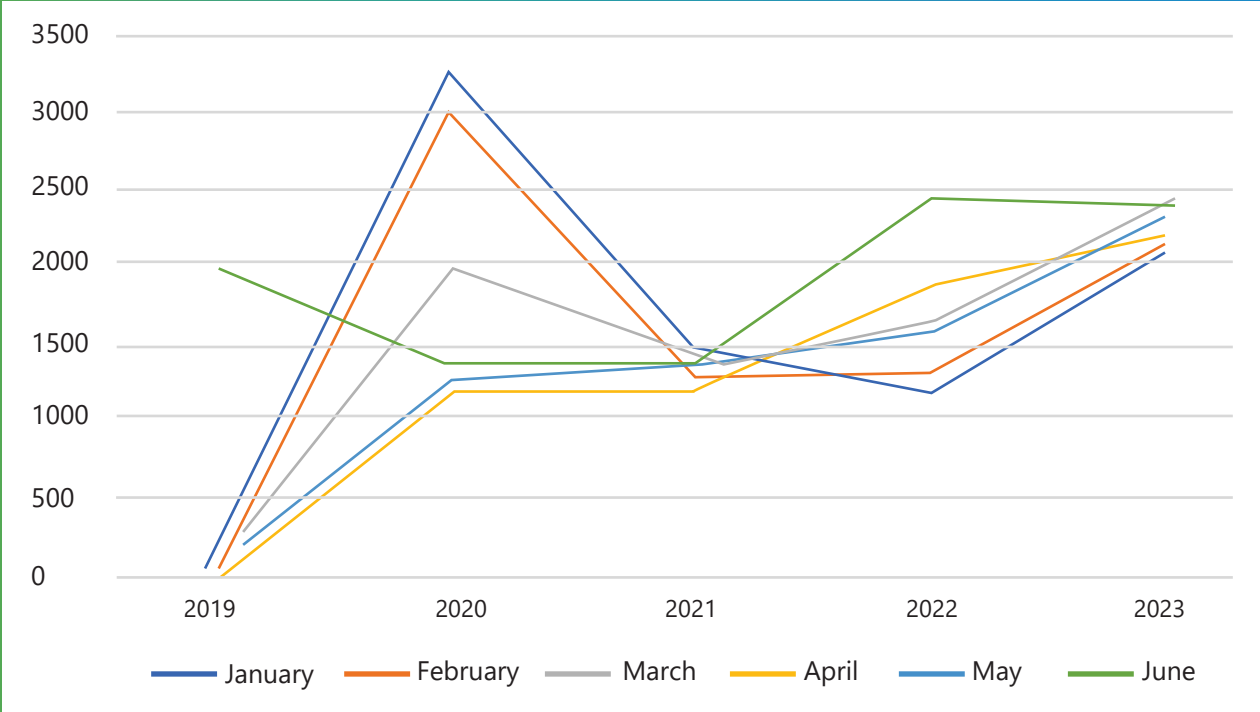
Hispanic/Latino or are disabled is the same as the state average.

Characteristics of the current transportation system were also considered, including existing Douglas County and Regional/Inter-County transit services.



The following statistics provide an operational snapshot of the Douglas County Transit system in 2022. Transit Ridership in Douglas County is bouncing back! After the impacts of the COVID-19 pandemic Q1 and Q2 month-to-date ridership trends for 2023 show a steady increase in ridership. This chart shows the Ridership Trends over the past five years on Douglas County Transit.

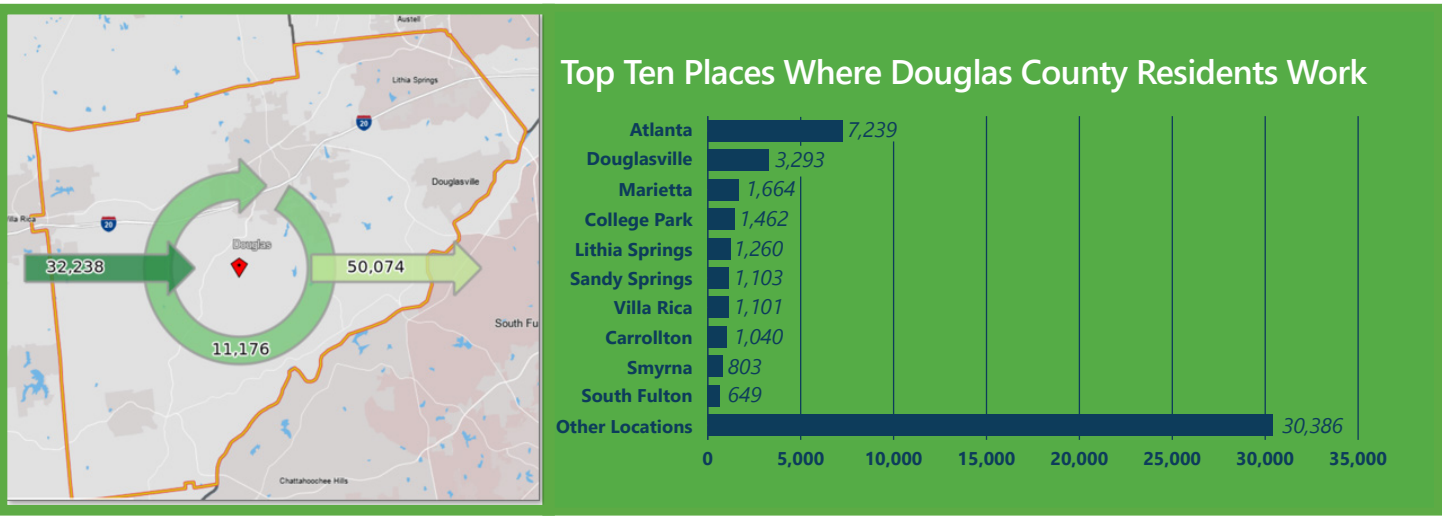
Figure 4-2. Douglas County Transit Ridership Trends (January - June)



Commuting Patterns

Other demographics highlighted in the report include commuter characteristics which are presented below. The majority of Douglas County residents are employed outside the county. Similarly, many of the workers employed in the county live elsewhere. Atlanta, Douglasville, and Marietta are top employment destinations for Douglas County residents that work outside the county.

Figure 4-3. Commuting Characteristics



LOCAL & REGIONAL TRENDS



East Douglas has highest concentration of transit propensity and future demand



Trip attractors concentrated in Douglasville, East Douglas, Cobb County, Fulton Industrial Blvd, and HIJIA



Regional employment travel is significant



Plans for regional service enhancements require upgrades to fare system technology and mobility hub infrastructure



Rural transit needs are not currently being met.



OPERATIONAL & FINANCIAL ANALYSIS

An operational and financial assessment of Douglas County's current transit system reveals that increased ridership is needed to balance the cost of operating transit services.

Operating transit services in Douglas County is more costly on average than in the nation as a whole; the average cost of each Connect Douglas passenger trip ranges from \$85 to \$111, compared to the national average of \$10.36 for a fixed-route bus trip.

Key contributing factors include low ridership associated with the COVID-19 global pandemic and third-party vendor overhead and costs which accounts for the largest Connect Douglas operating expense.

Key findings through the operational and financial analysis of Douglas County's transit system

- ▶ Ridership and productivity is low for Route 30 and Route 40
- ▶ Financial analysis shows opportunities for additional grant funding not currently utilized
- ▶ Level of service, frequency, directness and stop accessibility does not meet existing or projected demand
- ▶ Operational efficiency is consistent with peer system performance, but ridership and service levels are lower than peers
- ▶ Data collection software and technology upgrades are critical

PEER ASSESSMENT

A peer agency analysis was conducted between 2019 and 2021 to provide a comprehensive examination and comparison of Douglas County Transit's operations, performance, and practices with those of similar agencies or peers in other regions or cities.

By comparing its performance to that of peer agencies, Douglas County Transit was able to identify areas of strength and areas that need improvement. The agencies used in this peer analysis are located in the southeastern USA, with several peer agencies in the state of Georgia, as shown in the table below.

Table 4-1: Peer Agency Groups

TRANSIT AGENCY	SERVICE AREA (SQ. MILES)	SERVICE AREA POPULATION	SERVICE AREA DENSITY (POP/SQ MILE)	NUMBER OF FIXED ROUTES
Connect Douglas	201	142,224	708	4
Hall Area Transit (Gainesville)	361	199,999	554	0
City of Rome Transit Department	32	36,323	1,135	6
City of Fort Smith (Fort Smith Transit)	65	86,209	1,326	7
Greenville Area Transit	35	84,554	2,416	6
City of Concord (Concord Kannapolis Area Transit)	78	113,639	1,457	8
City of Burlington (Link Transit)	35	66,223	1,892	5
Lower Savannah COG (Aiken, SC)	222	86,200	388	3



Analysis & Key Findings

Key outcomes from the Peer Agency Analysis are presented through a series of maps and graphics on the following pages.

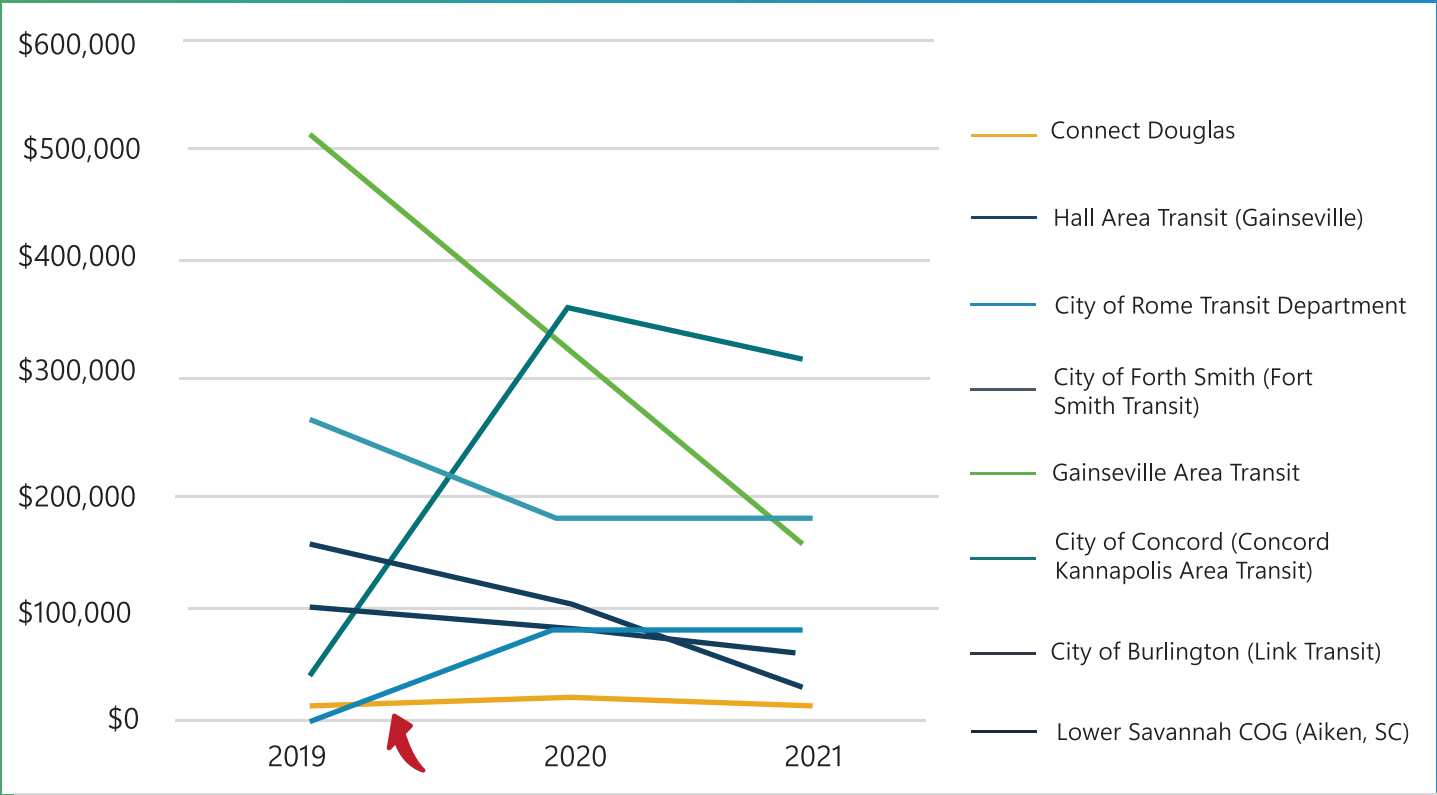
The Peer Agency Analysis considered the following metrics:

- ▶ Unlinked passenger trips
- ▶ Annual revenue miles and hours for fixed route service
- ▶ Average speed
- ▶ Annual total operating expenses for fixed route service

Annual unlinked passenger trips for fixed route service were analyzed, comparing Douglas’s transit system to peer agencies across the Southeast. The following trends were extracted:

- ▶ Annual ridership for Connect Douglas has increased since 2019, but remains relatively low compared to peers
- ▶ Compared to peer agencies, Connect Douglas has remained stable since COVID pandemic
- ▶ National ridership trends were tremendously impacted by COVID-19
- ▶ Connect Douglas is a new system still establishing base ridership

Figure 4-4: Annual Unlinked Passenger Trips

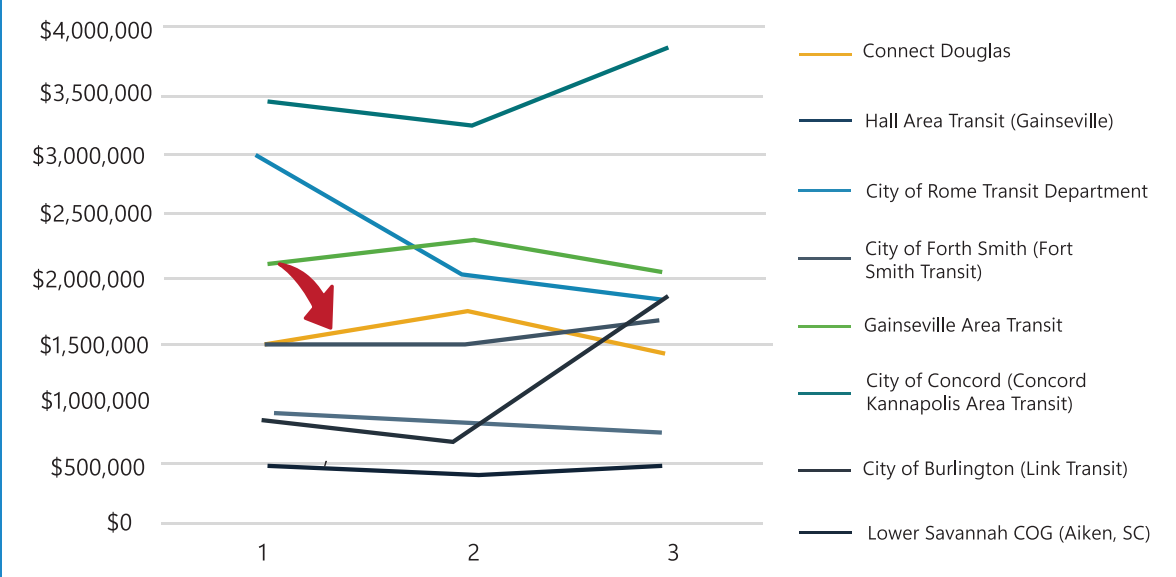


Source: NTD Agency Profiles, 2019-2021

Additionally, some of the key findings related to the annual total operating expenses for fixed route service, including:

- ▶ Annual operating expenses have decreased since 2019
- ▶ Compared to peer agencies, Connect Douglas has remained stable since COVID pandemic
- ▶ Connect Douglas is operating at 50th percentile for total expenses, in comparison to peers

Figure 4-5: Annual Operating Expenses for Fixed Route



Source: NTD Agency Profiles, 2019-2021

Table 4-2: Total Operating Expenses Per Revenue Mile & Hour

TRANSIT AGENCY	2021 COST PER REVENUE MILE	% CHANGE 2019-2021	2021 COST PER REVENUE HOUR	% CHANGE 2019 - 2021
Connect Douglas	\$4.13	-35.1%	70.02	-36%
Hall Area Transit (Gainesville)	\$5.26	34.0%	64.88	20%
City of Rome Transit Department	\$7.01	18.2%	125.33	23%
City of Fort Smith (Fort Smith Transit)	\$5.50	13.3%	81.51	17%
Greenville Area Transit	\$11.26	37.2%	153.83	35%
City of Concord (Concord Kannapolis Area Transit)	\$5.42	10.9%	95.13	11%
City of Burlington (Link Transit)	\$8.98	55.6%	113.35	55%
Lower Savannah COG (Aiken, SC)	\$3.58	-0.6%	68.97	7%

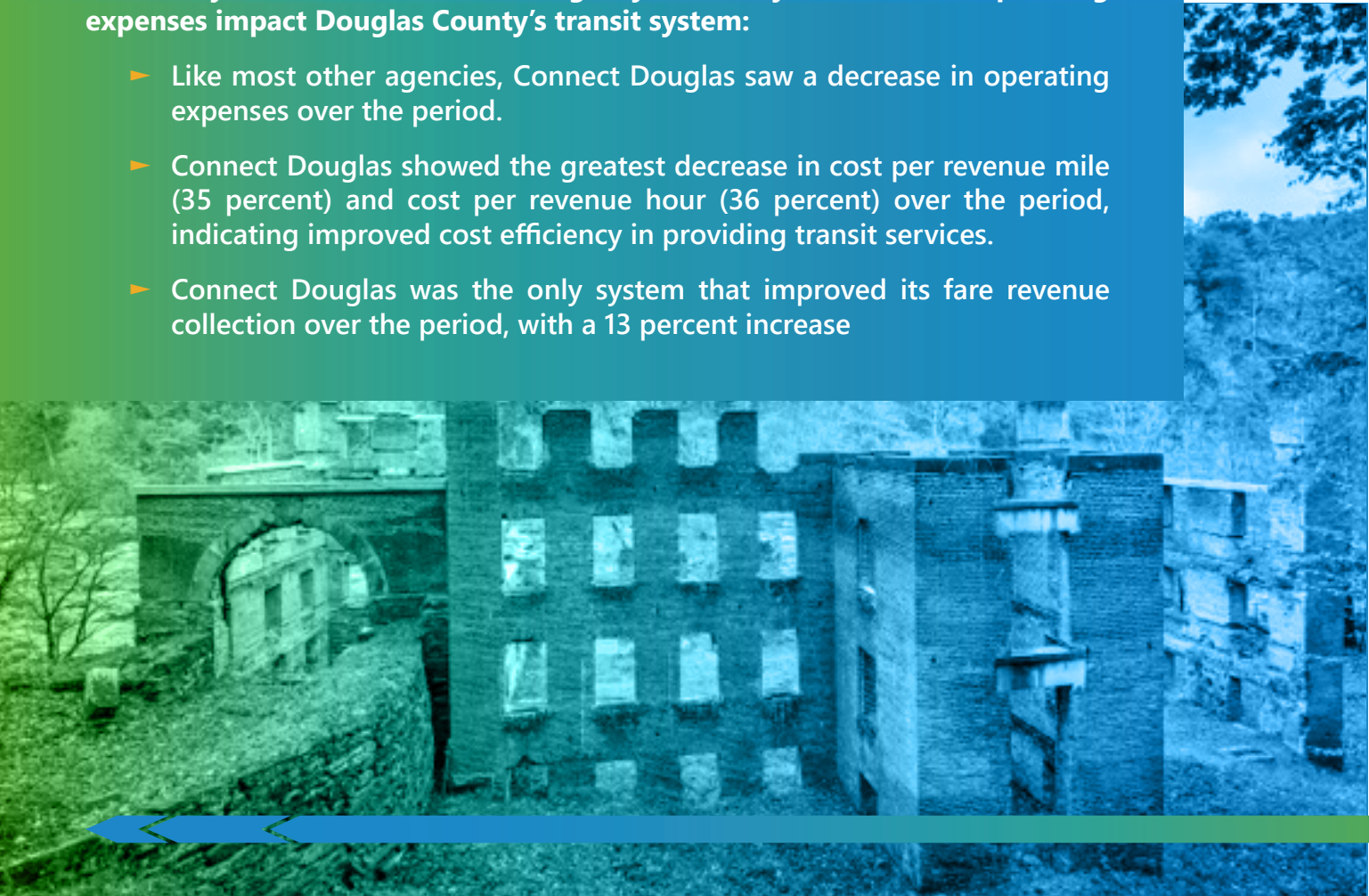
Table 4-3: Fare Revenue and Changes (2019 - 2021)

TRANSIT AGENCY	2019 FARE REVENUE	2021 FARE REVENUE	PERCENT CHANGE
Connect Douglas	\$20,679	\$23,723	13%
Hall Area Transit (Gainesville)	\$86,661	\$26,812	-223%
City of Rome Transit Department	\$661,707	\$40,373	-1,539%
City of Fort Smith (Fort Smith Transit)	\$135,887	\$100,205	-36%
Greenville Area Transit	\$222,009	\$12,018	-1,747%
City of Concord (Concord Kannapolis Area Transit)	\$299,640	\$1,272	-23,457%
City of Burlington (Link Transit)	\$43,161	\$26,556	-63%

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This analysis revealed the following key takeaways about how operating expenses impact Douglas County’s transit system:

- ▶ Like most other agencies, Connect Douglas saw a decrease in operating expenses over the period.
- ▶ Connect Douglas showed the greatest decrease in cost per revenue mile (35 percent) and cost per revenue hour (36 percent) over the period, indicating improved cost efficiency in providing transit services.
- ▶ Connect Douglas was the only system that improved its fare revenue collection over the period, with a 13 percent increase



5 INITIATIVES, STRATEGIES, & TACTICS

SYSTEMS AND SERVICE STRATEGY FRAMEWORK

The proposed solutions are presented through the system and services strategy framework. A system and service strategy focuses on developing and implementing strategies to deliver effective and efficient transit services by identifying who needs the services, where they can best be located, what mode works best for the community, and how to fund them.

A key goal of the draft system and services strategy is to improve the service models to better cater to the needs of different user groups. This involves customizing Connect Douglas services to meet the specific mobility needs of various community segments.

The system and services strategy calls for significant investments to improve service flexibility, speed, and accessibility. This includes modifications and additions to the fixed route service, expanding operating hours to provide more flexibility for passengers, and introducing microtransit zone service and rural demand response service to cater to the needs of the less dense urban and rural portions of the county.

The draft strategy also aims to strengthen regional connections by enhancing connectivity with existing and proposed CobbLinc routes, existing MARTA bus routes and the MARTA rail system, existing rural services in Carroll County, and providing direct service to Hartsfield-Jackson Atlanta International Airport (HJIA).

Proposed Solutions

The solution framework to implement the transit system service strategy is organized as follows:

- ▶ Transportation Services
- ▶ Capital & Infrastructure
- ▶ Policies & Partnerships
- ▶ Technology & Innovation

Proposed transit system service strategies are introduced first, followed by an overview of recommended investments to achieve an improved, expanded transit system.

System & Services Strategy Framework

The framework used to develop transit service strategies considers a series of questions that help define transit user groups, transit service areas, transit modes, and funding to provide transit service.

Who are we trying to serve?

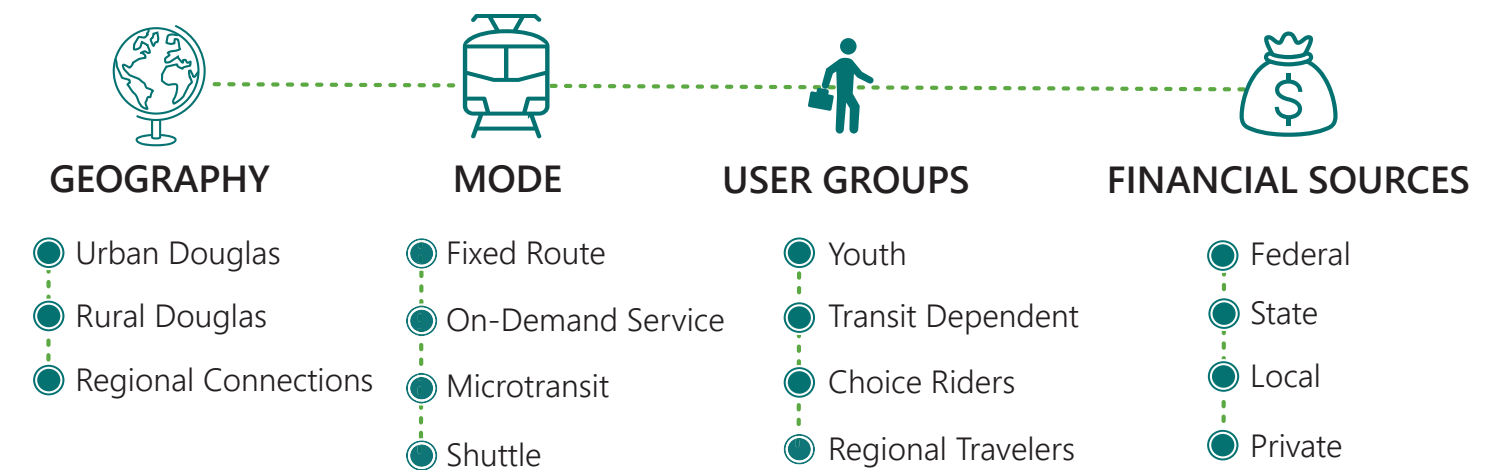
Where is the service needed and feasible, both now and in the future?

What mode best fits the needs and goals of the community?

What funding is available and how can it be used?

The following graphic summarizes the transit services strategy framework as related to the questions above.

Figure 5-1. Transit Services Strategy Framework



SERVICE STRATEGY CATEGORIES

Transit system and services strategies are presented in this chapter for four major categories of improvements:

- 1. **Fixed Route Improvements** in transit supportive portions of the urban area
- 2. **Network of Microtransit Service Zones** primarily in remaining portions of the urban area
- 3. **Demand Response Service** in the rural areas of the county
- 4. **Direct Connect Service** for regional connections

Improvements to these systems and services aim to address the questions presented on the previous page. Key strategies which are organized into three categories are indicated below, followed by key outcomes, representing transit service design objectives.

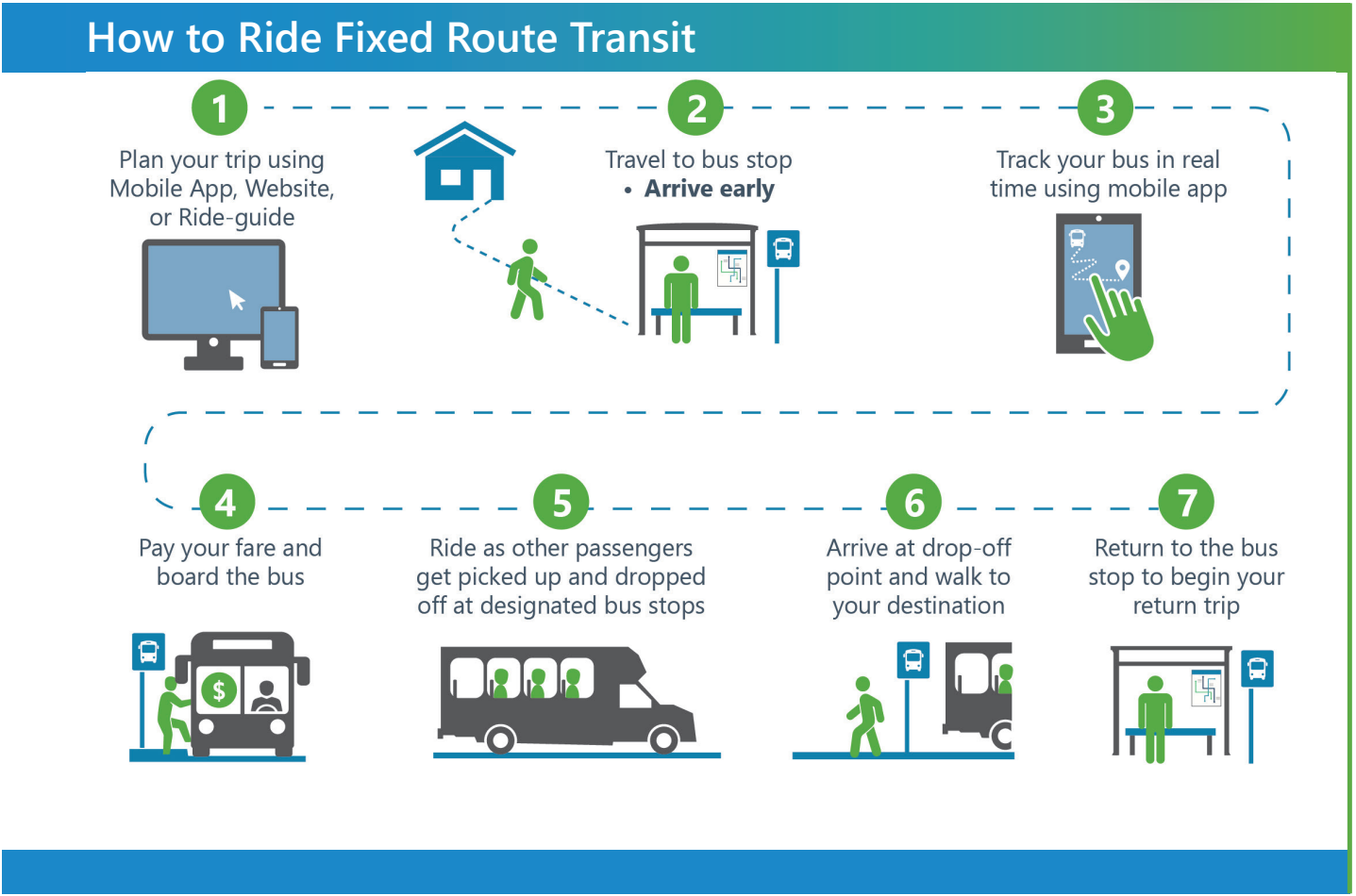


TRANSPORTATION SERVICES: FIXED ROUTE

The National Rural Transit Assistance Program (RTAP) A fixed route bus system is defined as “a system of transporting individuals in which a vehicle is operated along a prescribed route according to a fixed schedule.” In other words, if a public or private system transports the general public on a regular basis on vehicles that travel a designated route on a fixed schedule, the agency operates fixed route service.

The existing Connect Douglas fixed routes operate using cutaway buses and stop along the county’s major corridors, providing public transit service to multiple activity centers.

Service on the Connect Douglas system is currently offered from 7 a.m. to 8 p.m. Monday through Saturday



Existing Fixed Route Network

Douglas County’s existing fixed route service is shown in Figure 5-2, while proposed updates are illustrated in Figures 5-3 - 5-9. The projected impact of these improvements is also presented.

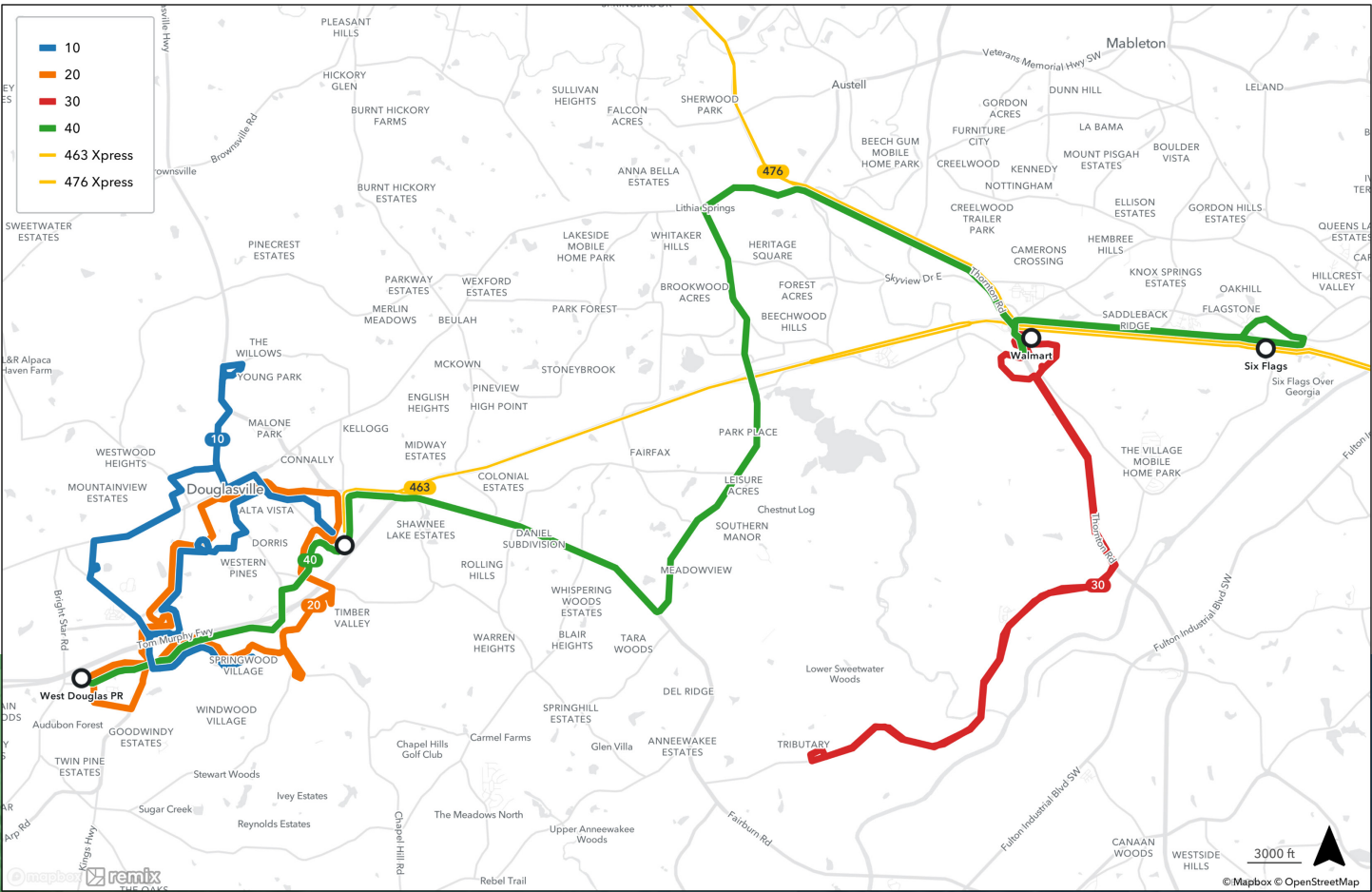
Connect Douglas currently operates a fixed route network consisting of four bus routes:

- ▶ **Route 10 (Blue): Douglasville North Loop**
- ▶ **Route 20 (Orange): Douglasville South Loop**
- ▶ **Route 30 (Red): Industrial Employment**
- ▶ **Route 40 (Green): East / West Connector**

This fixed route system is supplemented by a regional bus system including two Xpress bus regional routes operated by the State Road and Tollway Authority (SRTA). Only one of the Xpress routes stops in the County:

- ▶ **Route 463** services Douglas County at the MMTC and the West Douglas Park & Ride

Figure 5-2. Existing Fixed Route Service



Proposed Fixed Route Network

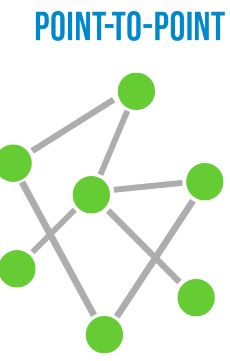
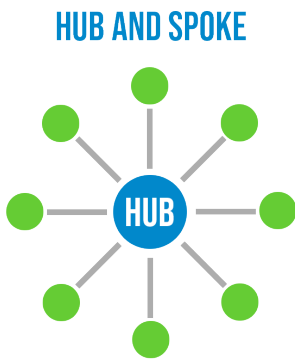
The proposed strategies to improve the existing fixed route network are described below and depicted in the maps that follow.

Key recommended improvements include:

- ▶ Redesign the existing 4 fixed routes:
 - Re-Route 10
 - Re-Route 20
 - Re-Route 30
 - Re-Route 40
- ▶ Create new fixed routes
 - New Route 50
 - New Direct Connect HE Holmes
 - New Direct Connect Hartsfield Jackson International Airport (HJIA)

The following pages illustrate the proposed fixed route network, the new Direct Connect route, and the new Airport Connect route.

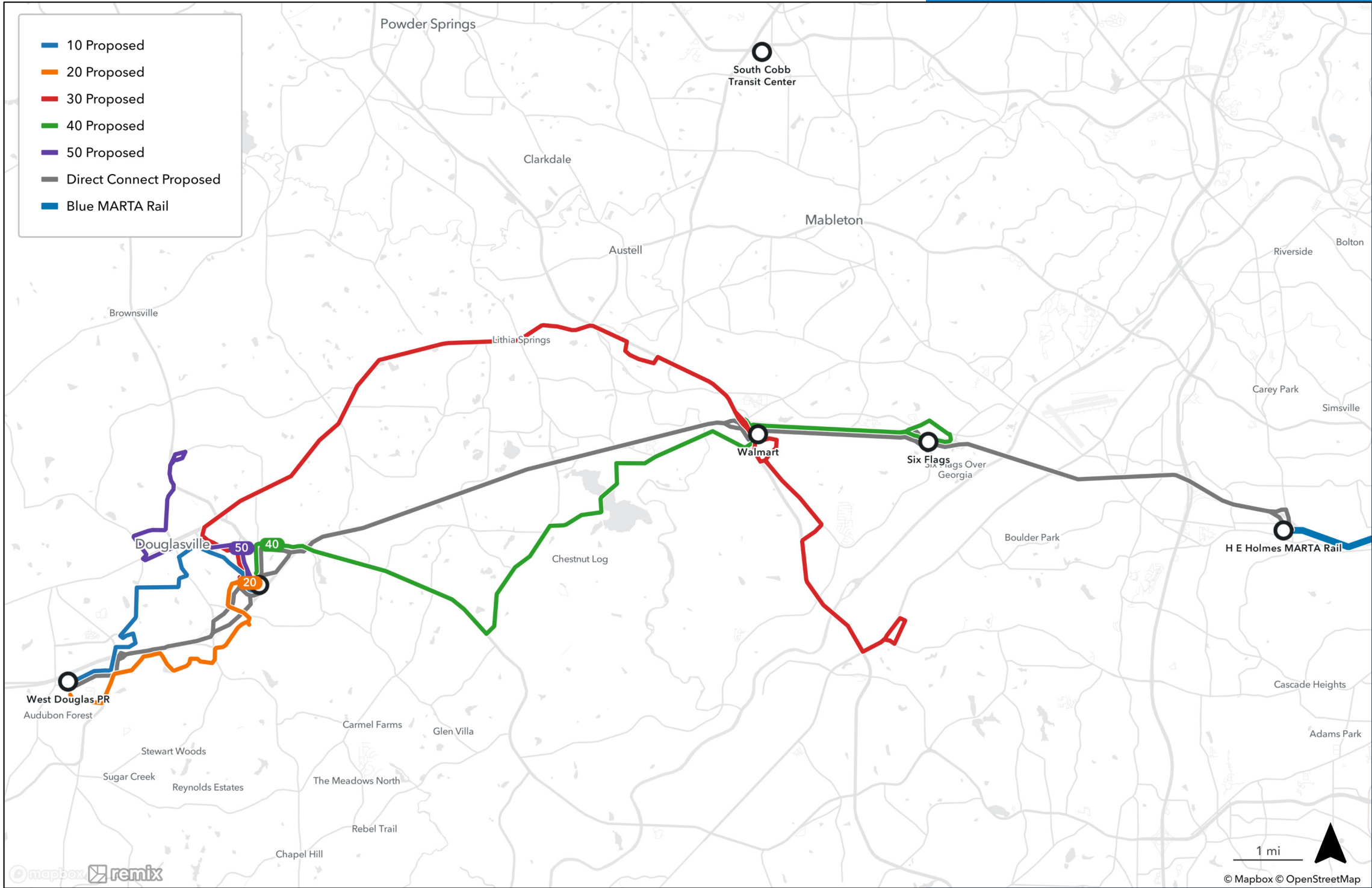
The proposed fixed route network includes a combination of techniques to eliminate operationally deficient loops and isolated routes to return the fragmented service to a hub and spoke model. The proposed network was designed as one element of a multifaceted system of transportation options that link to create a more connected and accessible system for Douglas County residents and visitors. The recommendations include a comprehensive reroute of all existing bus routes and implementation of three new fixed routes.



This rerouted structure provides more direct and accessible service by eliminating long waits and ride times associated with the existing looping service model. All routes connect at key mobility hubs including the Connect Douglas Multimodal Center.

Inefficient segments of service have been eliminated from the recommended fixed route alignments and are proposed to be serviced by alternative flexible transportation services better suited to the needs of these areas.

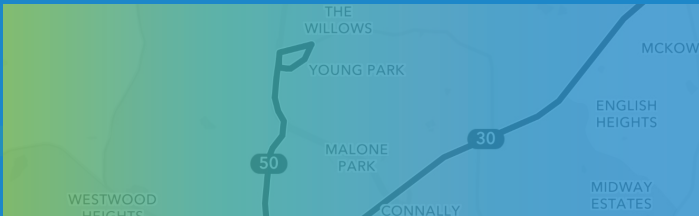
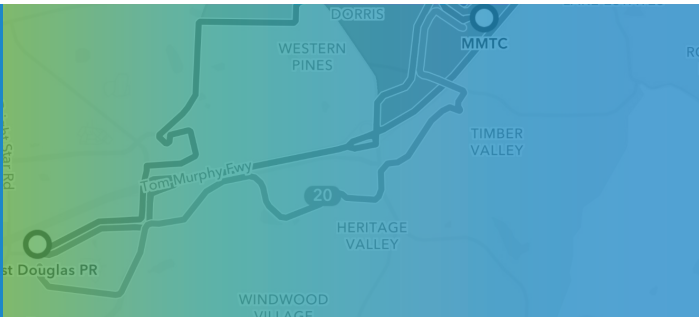
Figure 5-3 Recommended Fixed Route Service



Fixed Route Improvements & Key Connections

The following infographic presents proposed improvements to current routes and lists key connections serviced by these routes.

- Fixed Route 10: Replaced by 10 and 50 (Bi-directional)**
 - 10 - MMTC & W. Douglas P&R
 - 50 - MMTC
- Fixed Route 20 Replaced by 10 and 20**
 - 10 - MMTC & W. Douglas P&R
- Fixed Route 30: Replaced by 30**
 - 30 - MMTC & Walmart
 - 30 - Thornton Road (Cobb)
 - 30 - Fulton Ind. Blvd. (MARTA)
- Fixed Route 40: Replaced by 40A/40B**
 - 40 - MMTC & Walmart
 - 40 - Fulton Ind. Blvd. (MARTA)
- NEW: Direct Connect**
 - DC - West Douglas PR
 - DC - MMTC & Walmart
 - DC - Six Flags
 - DC - HE Holmes (MARTA Rail)
- NEW: Airport Connect**
 - AC: MMTC
 - AC: Walmart
 - AC: HJIA, Airport



Fixed Route 10 Proposal

Current Route 10 is one of the more productive routes for ridership, however the one-way loop design is not efficient or direct enough to meet the demand in the area. To correct these issues and provide more direct and faster service, the proposed route has been split into two bi-directional routes.

Figure 5-4. Proposed Route 10 & Route 50

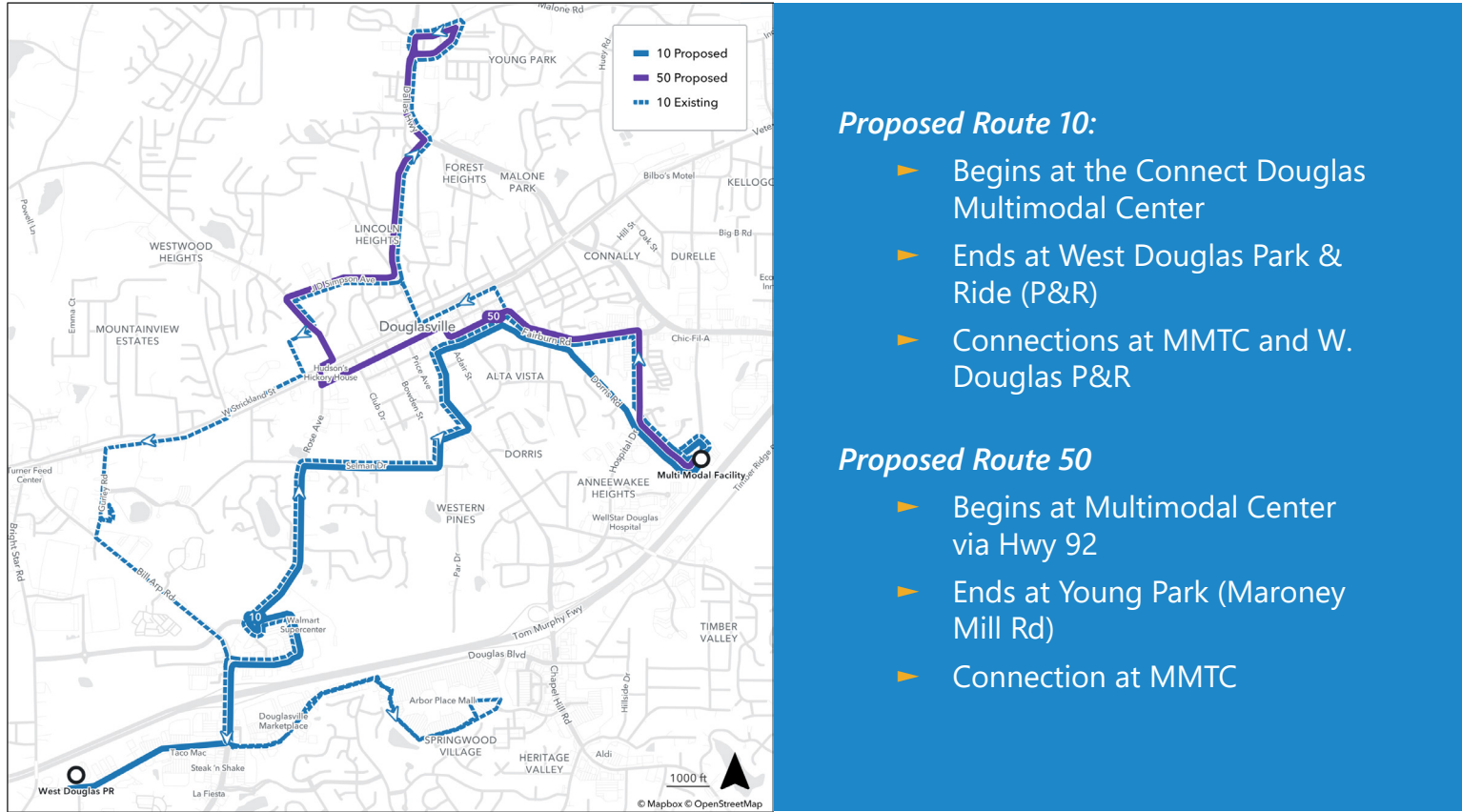


Table 5-1. Proposed Route 10 & Route 50 Service Area

ROUTE	ROUND TRIP	POPULATION	% LOW INCOME
Existing 10	17 mi	6,000	27%
10	11 mi	4,300	23%
50	9.6 mi	4,500	32%

Fixed Route 20 Proposal

Route 20 is the second most productive route, however the looping structure is inefficient and indirect which results in longer wait times for riders. To correct these issues the proposed route has been split into two routes.

Figure 5-5. Proposed Route 10 & Route 20

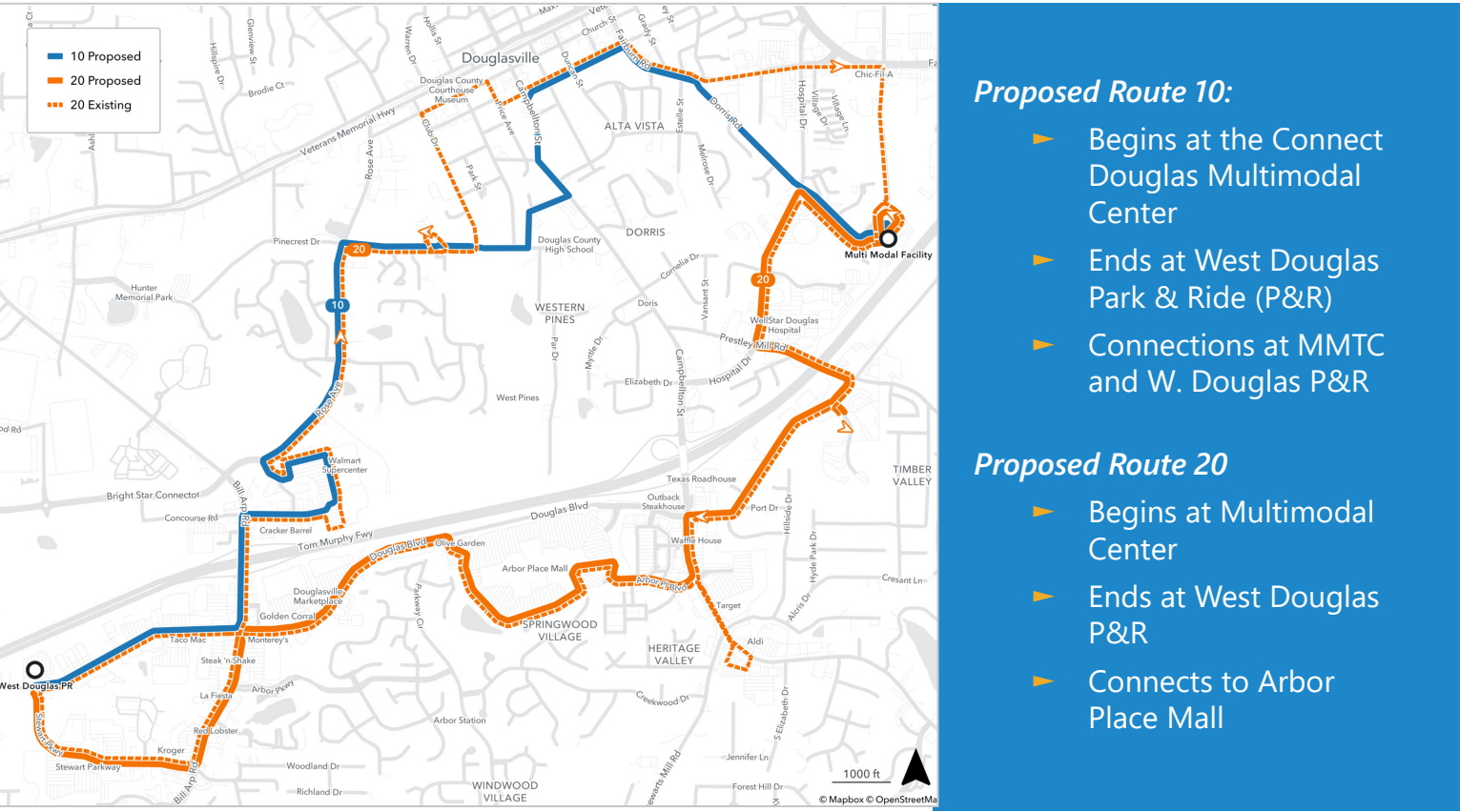
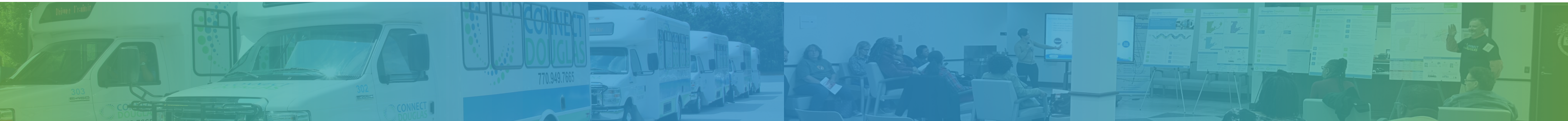


Table 5-2. Proposed Route 10 & Route 20 Service Area

ROUTE	ROUND TRIP	POPULATION	% LOW INCOME
Existing 20	12.7 mi	6,100	20%
10	11 mi	4,300	23%
20	11.1 mi	4,800	18%



Fixed Route 30 Proposal

The route currently operates within the US Census designated Rural Area which is prohibited by the Federal Transit Administration (FTA) when utilizing 5307 Urban Transit funding. The reroute eliminates the nonconforming segments and replaces these segments with compliant service strategies.

This route includes fixed connections at:

- ▶ MMTC & Walmart (Thornton Rd)
- ▶ Thorton Rd (CobbLinc)
- ▶ Fulton Ind. Blvd (MARTA)

Proposed Route 30:

- ▶ Begins at the Connect Douglas Multimodal Center
- ▶ Ends at Fulton Industrial Blvd. (MARTA Routes 71 & 73)
- ▶ Connections at Six Flags Industrial, Walmart, and CobbLinc proposed route 25 via Thornton Rd

Figure 5-6. Proposed Route 30

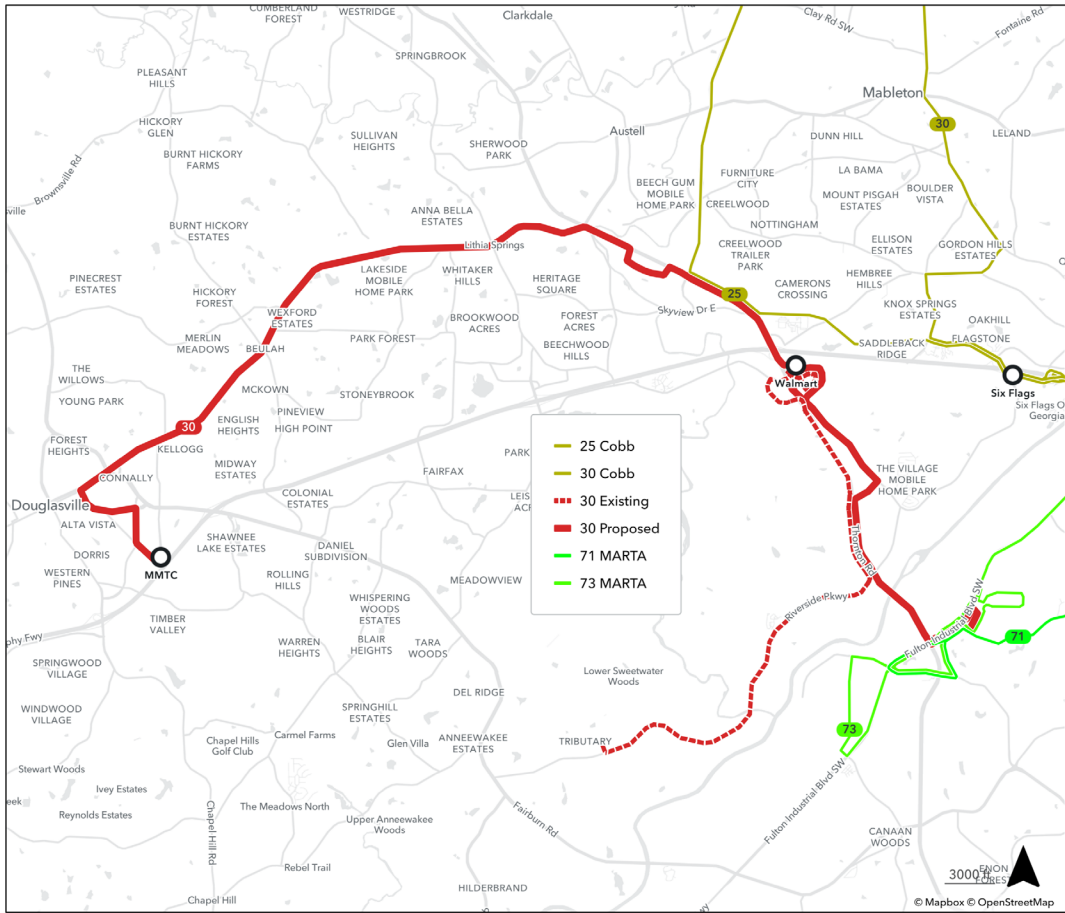


Table 5-3. Proposed Route 30 Service Area

ROUTE	ROUND TRIP	POPULATION	% LOW INCOME
Existing 30	15.8 mi	1,000	13%
30	34.3 mi	10,800	25%

Fixed Route 40 Proposal

Route 40 currently operates between the West Douglas Park-n-Ride, Connect Douglas Multimodal Center, and the Six Flags Industrial Walmart offering critical connections between high density residential and major employment centers. While the route supports the third highest ridership, the trips compared to the miles serviced by the route are disproportionate, which indicates that the route's geographical coverage is overextended.

These routes have fixed connections at:

- ▶ MMTC & Walmart (Thornton Rd)
- ▶ Sweetwater State Park
- ▶ Six Flags Over Georgia (MARTA & CobbLinc)

Proposed Route 40:

The following recommendations aim to alleviate the pressure on this under-performing route

- ▶ Rerouted 10, 20, and 40 alignments replace connections to W. Douglas Park-n-Ride and Lithia Springs
- ▶ Rerouted 40 offers an alternating 40A and 40B alignment that creates a direct connection to Sweetwater State Park during peak visitation hours and nearby commercial locations during peak business hours.

Figure 5-7. Proposed Route 40A & Route 40B

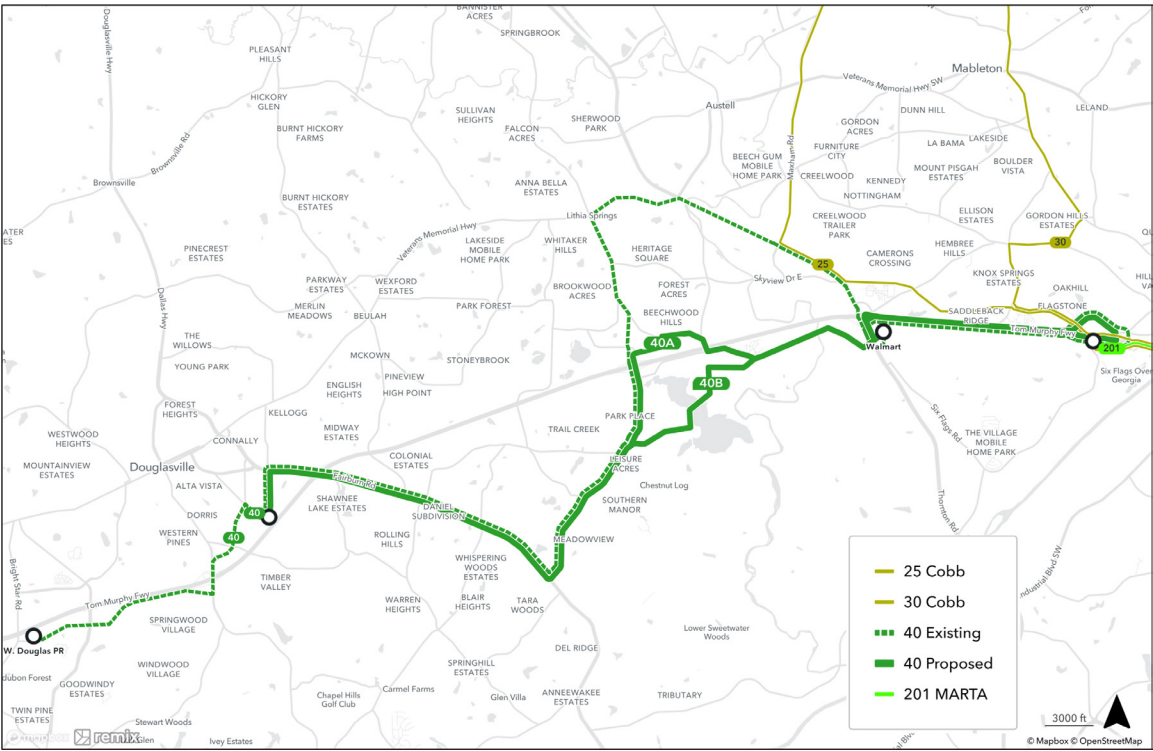


Table 5-4. Proposed Route 40 Service Area

ROUTE	ROUND TRIP	POPULATION	% LOW INCOME
Existing 40	44.5 mi	15,900	28%
40A	30.4 mi	11,000	33%
40B	28.9 mi	11,000	33%

H.E. Holmes Direct Connect

Direct Connect service is a new type of transit service that is proposed for Douglas County. The proposed route, shown in Figure 5-8, would provide an all-day, bi-directional connection between the following transit stops:

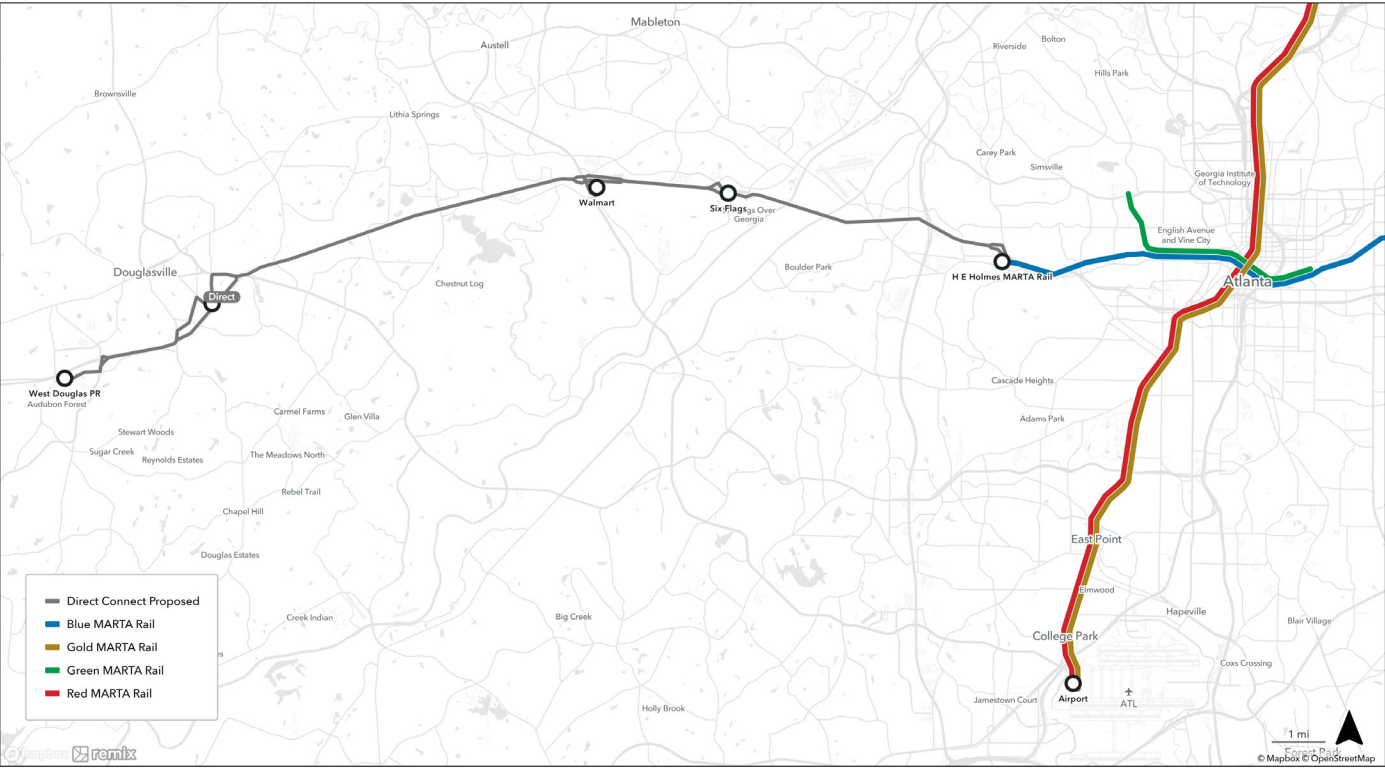
- ▶ West Douglas Park & Ride
- ▶ MMTc
- ▶ Walmart (Thornton Rd)
- ▶ Six Flags
- ▶ H.E. Holmes MARTA Station

This route would serve all-day transportation demand to access the regional transit network. Additionally, it would provide additional flexibility for Xpress Route 463 riders who may require access to their personal vehicles at off-peak times of day when Xpress service is not operating.

As an all-day, bi-directional route with some stops spaced less than five miles apart, the Direct Connect route would most likely be categorized as a local route, rather than a commuter/express route as defined by the Federal Transit Administration (FTA), which would require ADA paratransit service.

The Connect Douglas paratransit service area for this route would include a paratransit buffer area of at least ¾ of a mile around the route within Douglas and Cobb counties, as well as around the stop at H. E. Homes MARTA Station.

Figure 5-8. Proposed HE Holmes Direct Connect



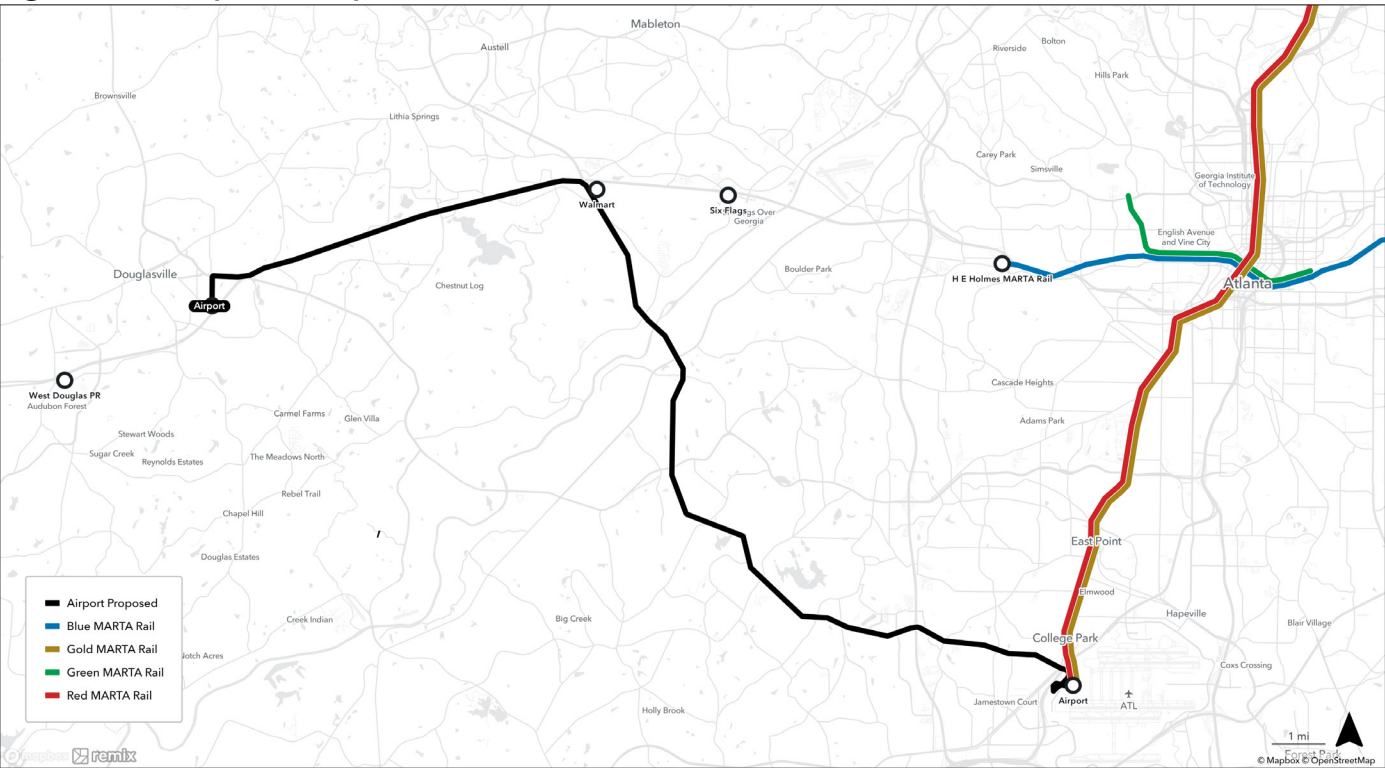
Airport Connect

Today, transit options for getting from Douglas County to the Atlanta airport (HJAIA) are limited, indirect, and time-consuming, especially when compared with the time it takes to reach the airport by private vehicle. Douglas County residents, whether as airport employees or air travelers, want direct and comfortable access to the airport via transit that is cost- and time-competitive compared to driving a private vehicle.

With the addition of the Direct Connect Route, Douglas County residents’ access to HJAIA via I-20, MARTA Blue rail line, and MARTA Red/Gold rail line would be improved significantly and available during all Connect Douglas operating hours. However, the trip would still be relatively long compared to a private vehicle and require multiple transfers.

Given the limited route structure, limited stops, and closed-door operation between stops exceeding five miles, the Airport Connect route would most likely be categorized as a commuter/express route as defined by the FTA, which means it would not be required to provide paratransit service within a ¾ mile buffer of the route. However, the vehicles would still be accessible to passengers with disabilities.

Figure 5-9. Proposed Airport Connect



A Phased Approach

Implementation of proposed service expansion and improvements to fixed route service have been organized into three key phases: **short-term**, **mid-term**, and **long-term**.

For each of these phases, two scenarios regarding operating hours have been developed. The Connect Douglas system is currently operating 7 am to 8 pm Monday through Saturday. There is strong interest in starting service at 6 am, an hour earlier, including weekdays and Saturday.

Service statistics for both of these scenarios have been calculated and are presented in the following pages. In addition, the projected impact of proposed improvements to the fixed route network are provided below.

1

SHORT-TERM

|

Years 1 - 2

2

MID-TERM

|

Years 3 - 5

3

LONG-TERM

|

Years 6 - 20

1

SHORT-TERM FIXED ROUTES

Implement the following routes at 60-minute headway

▶

Route 10

▶

Route 20

▶

Route 30

▶

Route 40

▶

New Route 50

2

MID-TERM FIXED ROUTES

▶

All routes from short-term

▶

Add HE Holmes Direct Connect at 60-minute headway

3

LONG-TERM FIXED ROUTES

▶

All routes from short-term with 30-minute headway

▶

Add Airport Direct Connect at 60-minute headway

CONNECT DOUGLAS

Fixed Route Bus Service

THE WAY TRIP

ANGER

driver as you board. This pass is only good for the Connect Douglas Fixed Route

transit system's vehicle may require payment of that system's fare.

00001966

ANGER

driver as you board. This pass is only good for the Connect Douglas Fixed Route

transit system's vehicle may require payment of that system's fare.

POPULATION SERVED

+12,900

↑

ROUND TRIP MILES

+25.7 MI

↑

AVERAGE % OF LOW-INCOME RIDERSHIP

+4%

↑

Short Term Fixed Route Network

The proposed fixed route network for the short-term phase is depicted in Figure 5-10, while the estimated operating statistics for the two operating scenarios are presented in Tables 5-5 and 5-6.

Key transfer points in this phase are as listed below:

Figure 5-10. Proposed Short-Term Fixed Route Network

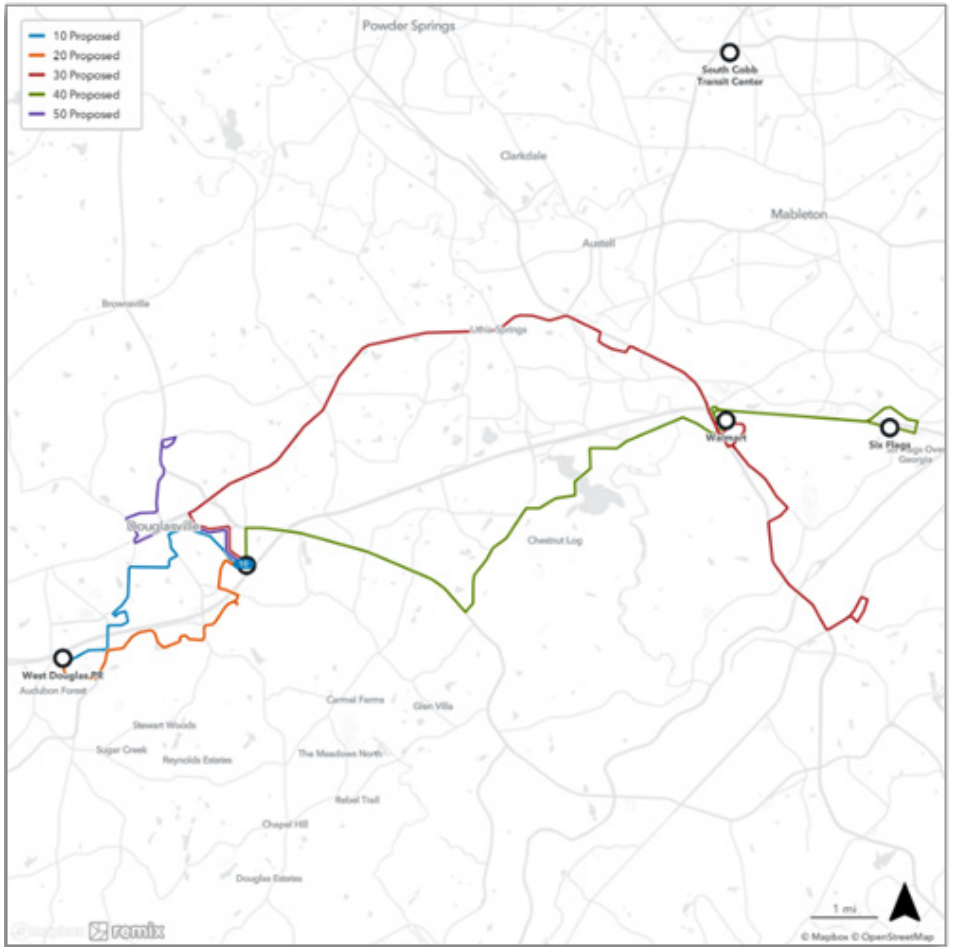


Table 5-5. Scenario 1: Monday - Saturday 6AM-8PM

ROUTE	REVENUE HOURS	REVENUE MILES	VEHICLES	HEADWAY
10	4,298	47,278	1	60
20	4,298	47,880	1	60
30	8,596	147,464	1	60
40	8,596	124,255	2	60
50	4,298	41,089	2	60
Total	30,086	407,966	7	

Table 5-6. Scenario 2: Monday - Saturday 7AM-8PM

ROUTE	REVENUE HOURS	REVENUE MILES	VEHICLES	HEADWAY
10	3,991	43,901	1	60
20	3,991	44,460	1	60
30	7,982	136,931	1	60
40	7,982	115,380	2	60
50	3,991	38,154	2	60
Total	27,937	378,826	7	

Mid-Term Fixed Route Network

The proposed mid-term phase fixed route network is shown in Figure 5-11, with the two operating scenarios presented in Tables 5-7 and 5-8.

Key transfer points in this phase are as listed below:

Figure 5-11. Proposed Mid-Term Fixed Route Network

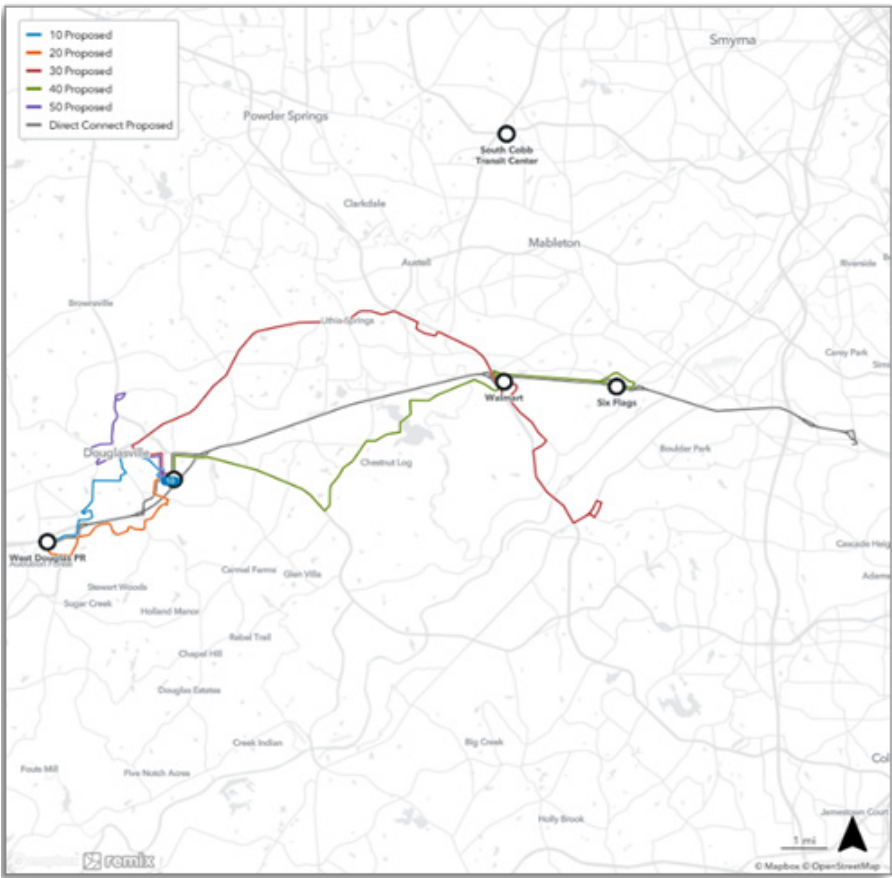


Table 5-7. Scenario 1: Monday-Saturday 6AM-8PM

ROUTE	REVENUE HOURS	REVENUE MILES	VEHICLES	HEADWAY
10	4,298	47,278	1	60
20	4,298	47,880	1	60
30	8,596	147,464	1	60
40W	8,596	124,255	2	60
50	4,298	41,089	2	60
Direct Connect	8,596	151,032	2	60
Total	38,682	558,998	9	

Table 5-8. Scenario 2: Monday-Saturday 7AM-8PM

ROUTE	REVENUE HOURS	REVENUE MILES	VEHICLES	HEADWAY
10	3,991	43,901	1	60
20	3,991	44,460	1	60
30	7,982	136,931	1	60
40	7,982	115,380	2	60
50	3,991	38,154	2	60
Direct Connect	7,982	140,244	2	60
Total	35,919	519,069	9	

Long Term Fixed Route Network

The proposed long-term phase fixed route network is presented along with the two operating scenarios. Key transfer points in this phase are as listed below:

Figure 5-12. Proposed Long-Term Fixed Route Network

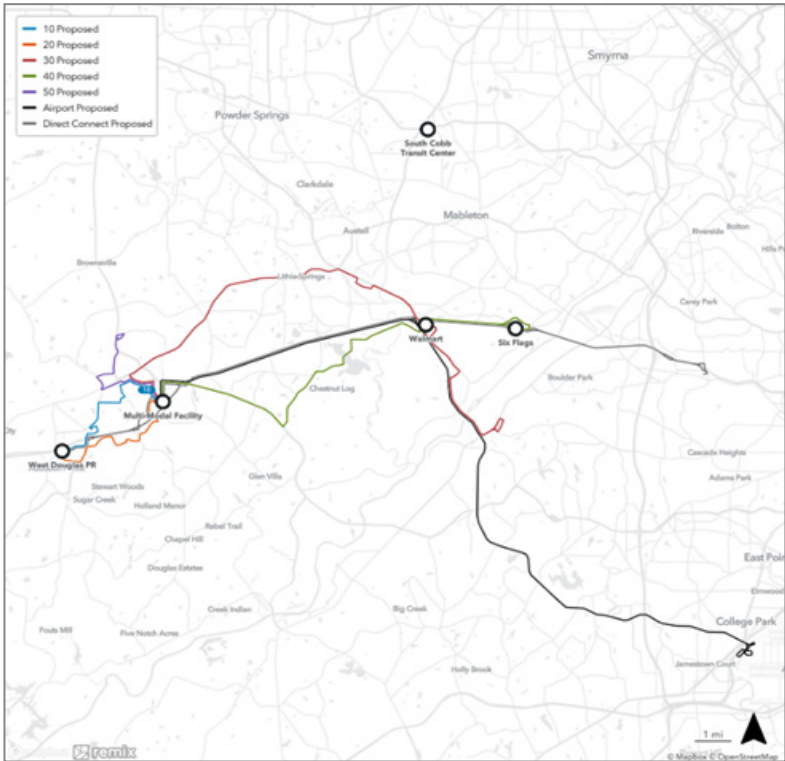


Table 5-9. Scenario 1: Monday-Saturday 6AM-8PM

ROUTE	REVENUE HOURS	REVENUE MILES	VEHICLES	HEADWAY
10	8,596	94,556	2	30
20	8,596	95,759	2	30
30	17,192	294,929	2	30
40	17,192	248,510	4	30
50	8,596	82,178	4	30
Airport	4,298	104,227	1	120
Direct Connect	17,192	302,063	4	30
Total	81,662	1,222,222	19	

Table 5-10. Scenario 2: Monday-Saturday 7AM-8PM

ROUTE	REVENUE HOURS	REVENUE MILES	VEHICLES	HEADWAY
10	7,982	87,802	2	30
20	7,982	88,919	2	30
30	15,964	273,862	2	30
40	15,964	230,760	4	30
50	7,982	76,308	4	30
Airport	3,991	96,782	1	120
Direct Connect	15,829	280,487	4	30
Total	75,829	1,134,921	19	

TRANSPORTATION SERVICES: MICROTRANSIT

What is Microtransit?

- ▶ **Tech-enabled shared transportation** that combines traditional fixed route transit and ride hailing technology
- ▶ **Flexible transit service** uses a mobile application to schedule trips between a requested pick-up and drop-off location
 - Similar to private ride hailing services
 - Service only offered within specified zones or qualified external stations
 - Trips are shared
 - Average Wait Time = 30 Minutes

Key Benefits

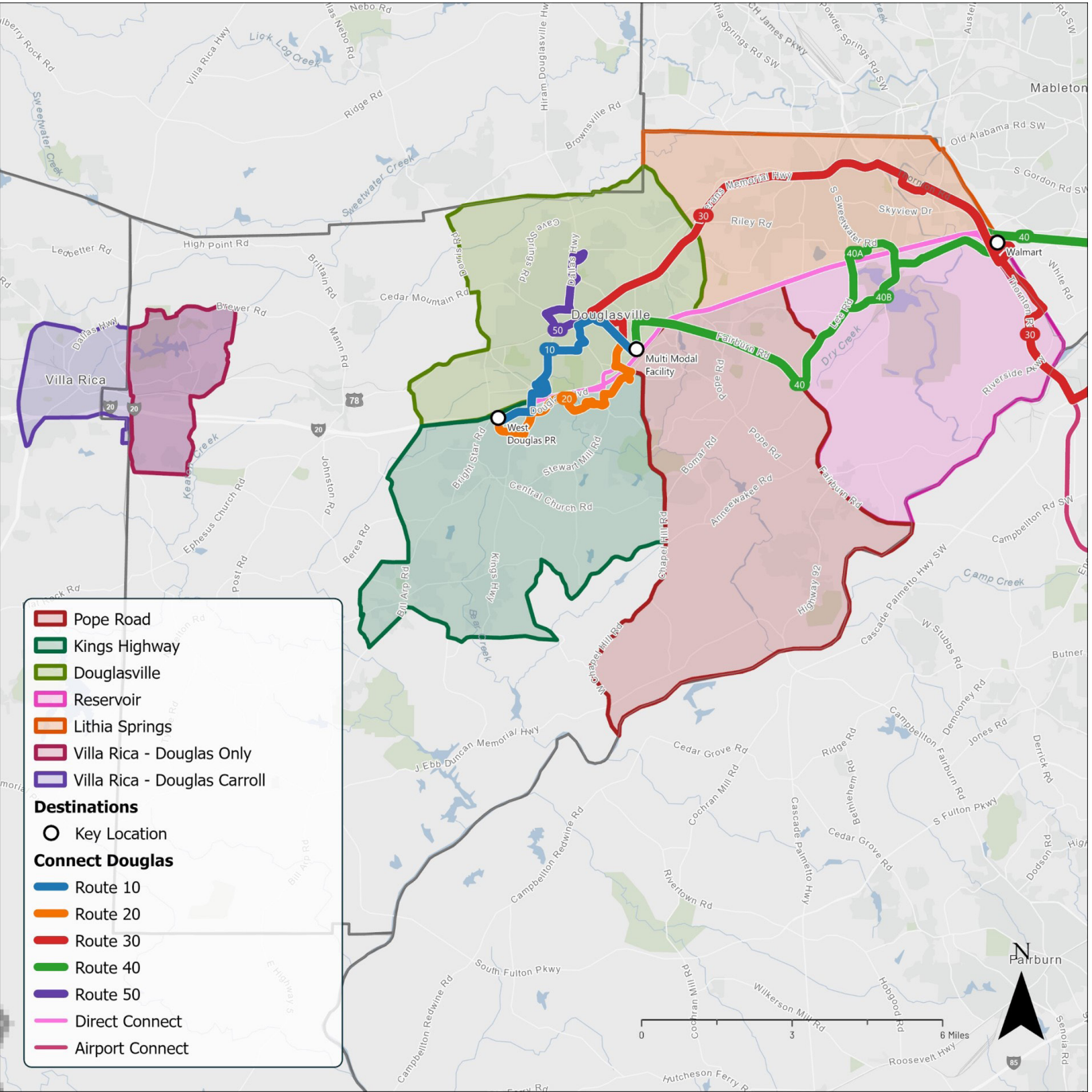
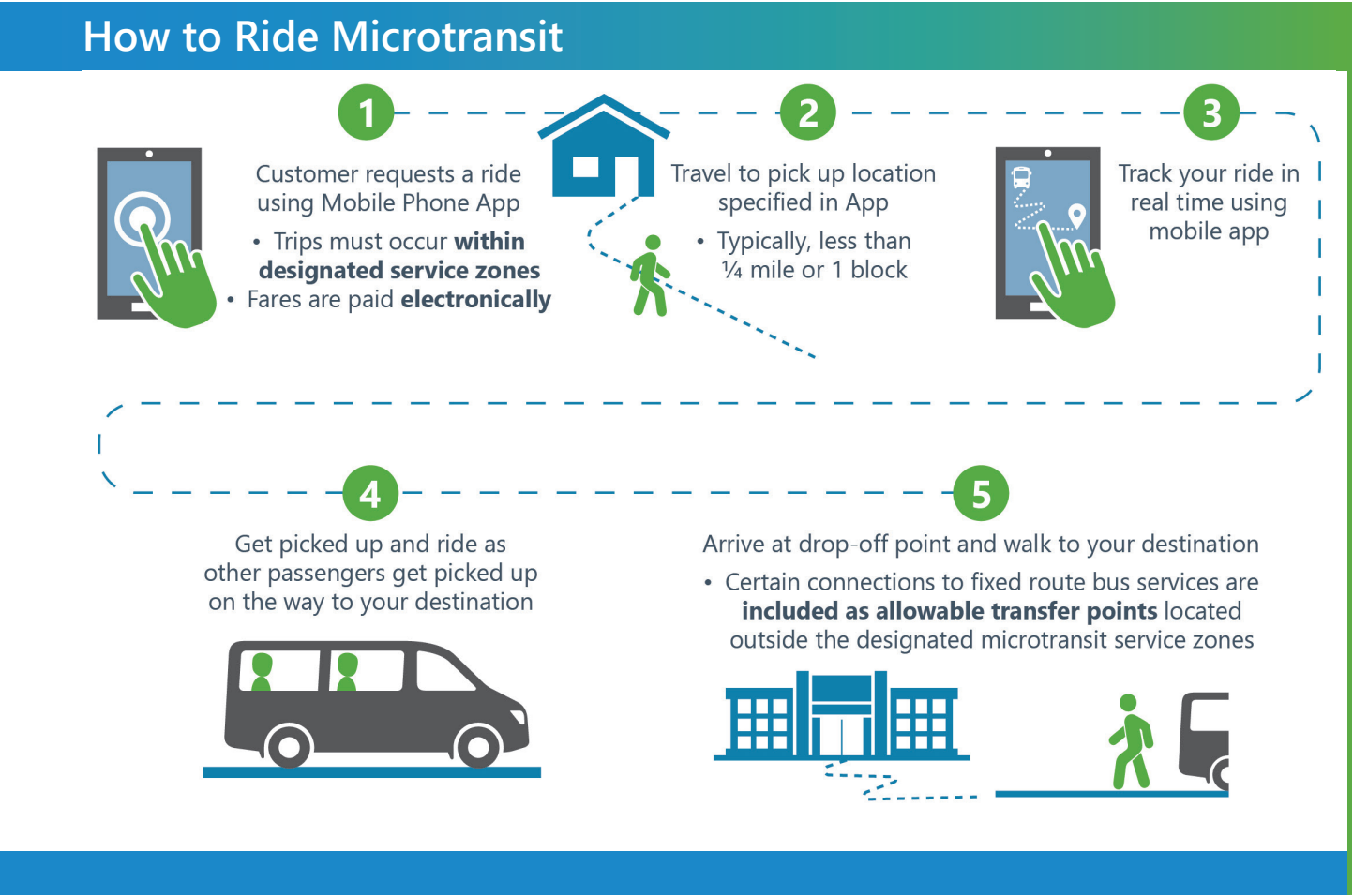
- ▶ **Accessibility**
- ▶ **Flexibility** in schedule and pick up/drop off location

Proposed Microtransit Service

The TMP identifies six zones where microtransit could be implemented, which are depicted in Figure 5-13. microtransit service is proposed to operate in defined geographic zones to complement and feed into the fixed route service within the urban area. While trips must start and end within a designated microtransit zone, external stations have been identified to allow key connections to fixed route bus service mobility hubs. Additionally, microtransit is identified as an option for Villa Rica in the rural area.

These zones were determined through analyzing composite demand based on the density of population and jobs per Census block group. In addition, clusters of key destinations were considered, which include commercial, community, education, residential, services, and transportation points of interest.

Figure 5-13. Proposed Microtransit Network

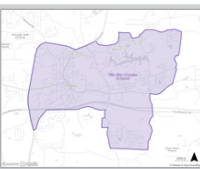

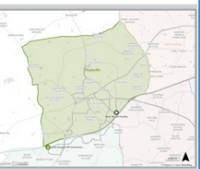

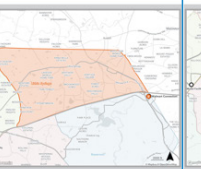
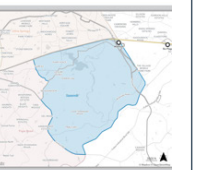


Proposed Microtransit Network

The table below compares geographic location and operational characteristics across the proposed microtransit zones, including size, population, number of riders, and number of vehicles. The six zones would cover an area of 101.4 square miles and serve 188,700 people using a maximum of 15 vehicles.

The Kings Highway Microtransit Area (green) serves the highest number of weekly riders, followed by the Douglasville Microtransit Area. The following sections detail characteristics of each microtransit zone.

Table 5-11. Proposed Microtransit Network Overview

	VILLA RICA (Douglas & Carroll)	KINGS HIGHWAY	DOUGLASVILLE	POPE ROAD	LITHIA SPRINGS	RESERVOIR
						
Size (sq. miles)	9.1	16.9	16.3	21.9	16.9	20.3
Population	8,500	24,900	23,100	26,300	19,800	16,100
Weekly Riders	100 (109 at 6AM)	704 (757)	499 (537)	364 (392)	348 (375)	204 (220)
Peak Vehicles	1	4	3	3	2	2

Villa Rica Microtransit Zone

Though the majority of the City of Villa Rica resides within the boundaries of Carroll County, the remaining 40% is in Douglas County. The traditional downtown area and much of the commercial development is on the Carroll County side, while the Villa Rica side has largely developed as a suburban enclave.

To address travel needs across the city of Villa Rica, a microtransit zone was defined that encompasses both the Douglas and Carroll county sides (Alternative 1). Should impediments to a bi-county microtransit zone become apparent, a second alternative limited to Douglas County was also defined (Alternative 2).

Alternative 1: Douglas & Carroll Counties

Figure 5-14 depicts the service area for this microtransit zone, which encompasses Villa Rica city limits in both Douglas and Carroll Counties.

Table 5-12. Alternative 1 Characteristics

SIZE	POPULATION	% LOW INCOME
9.1 sq. mi.	8,500	7%

CHARACTERISTICS	6AM-8PM	7AM-8PM
Weekly Riders	109	100
Peak Vehicles	1	1

Alternative 2: Villa Rica Area Within Douglas

Alternative 2 focuses on the portion of Villa Rica in Douglas County.

Table 5-13. Alternative 2 Characteristics

SIZE	POPULATION	% LOW INCOME
5.1 sq. mi.	4,100	5%

CHARACTERISTICS	6AM-8PM	7AM-8PM
Weekly Riders	27	25
Peak Vehicles	1	1

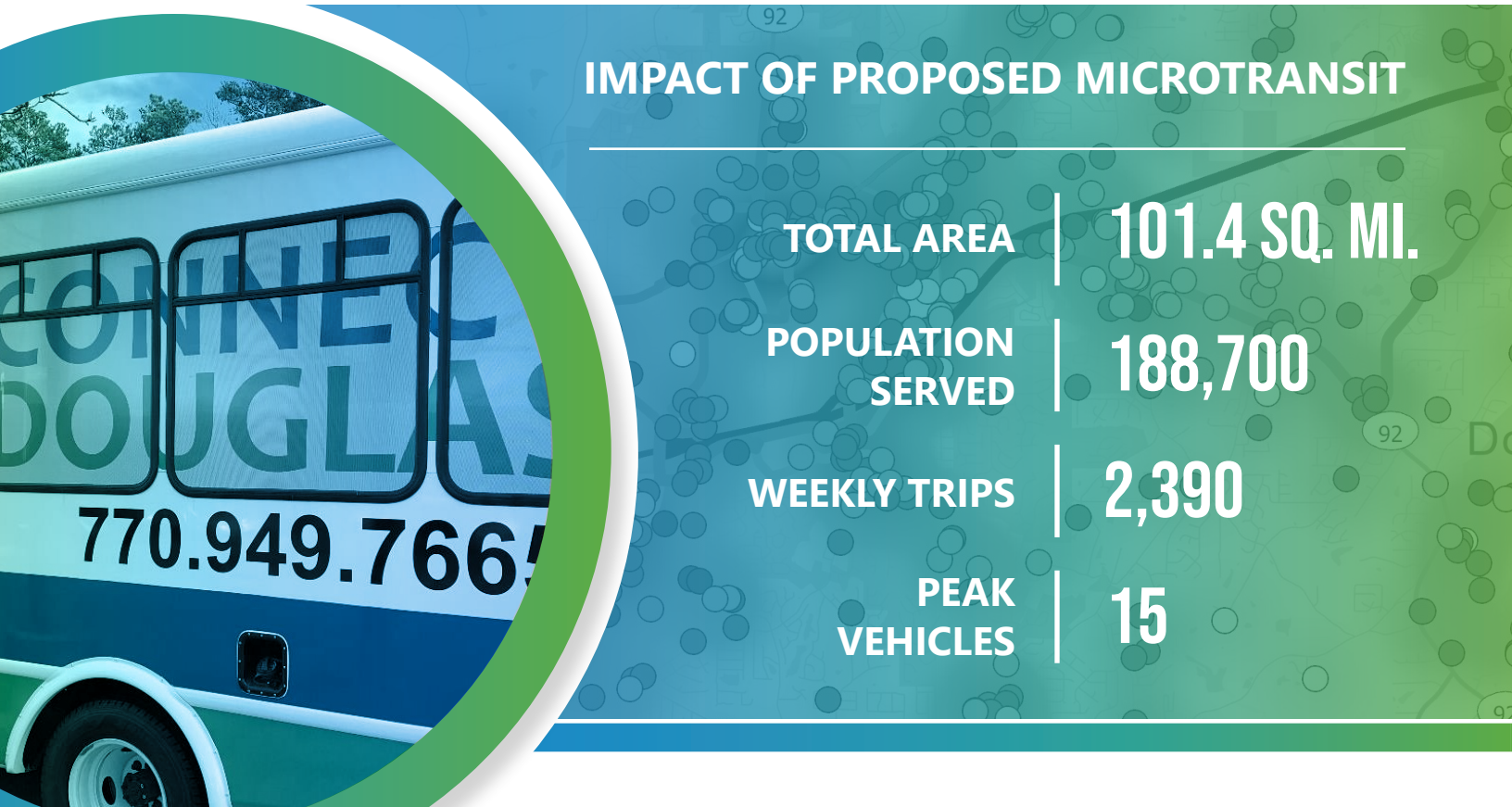


Figure 5-14. Villa Rica Microtransit Zone (Alternative 1)

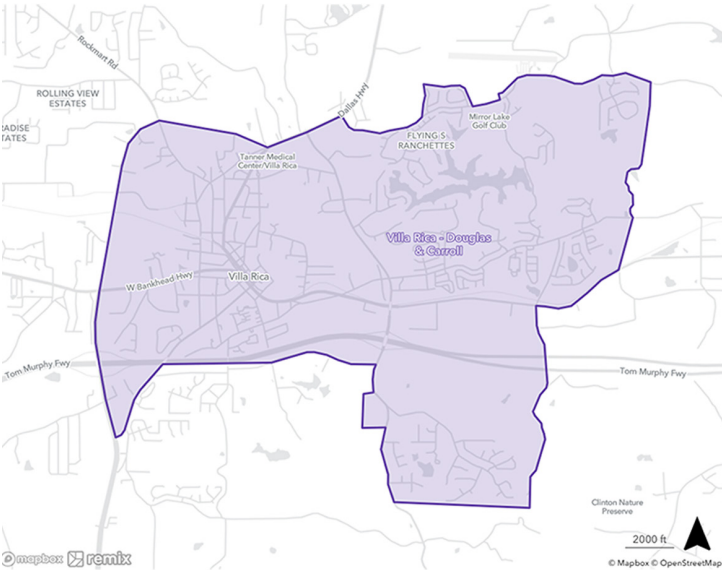
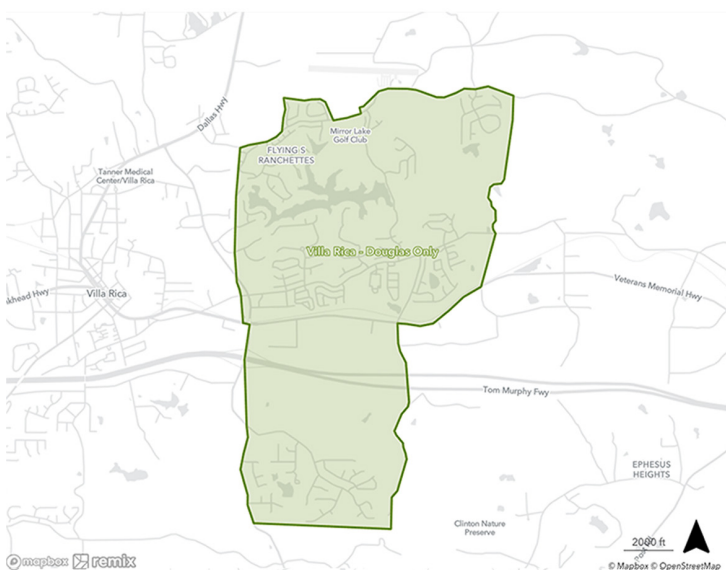


Figure 5-15. Villa Rica Microtransit Zone (Alternative 2)



Kings Highway

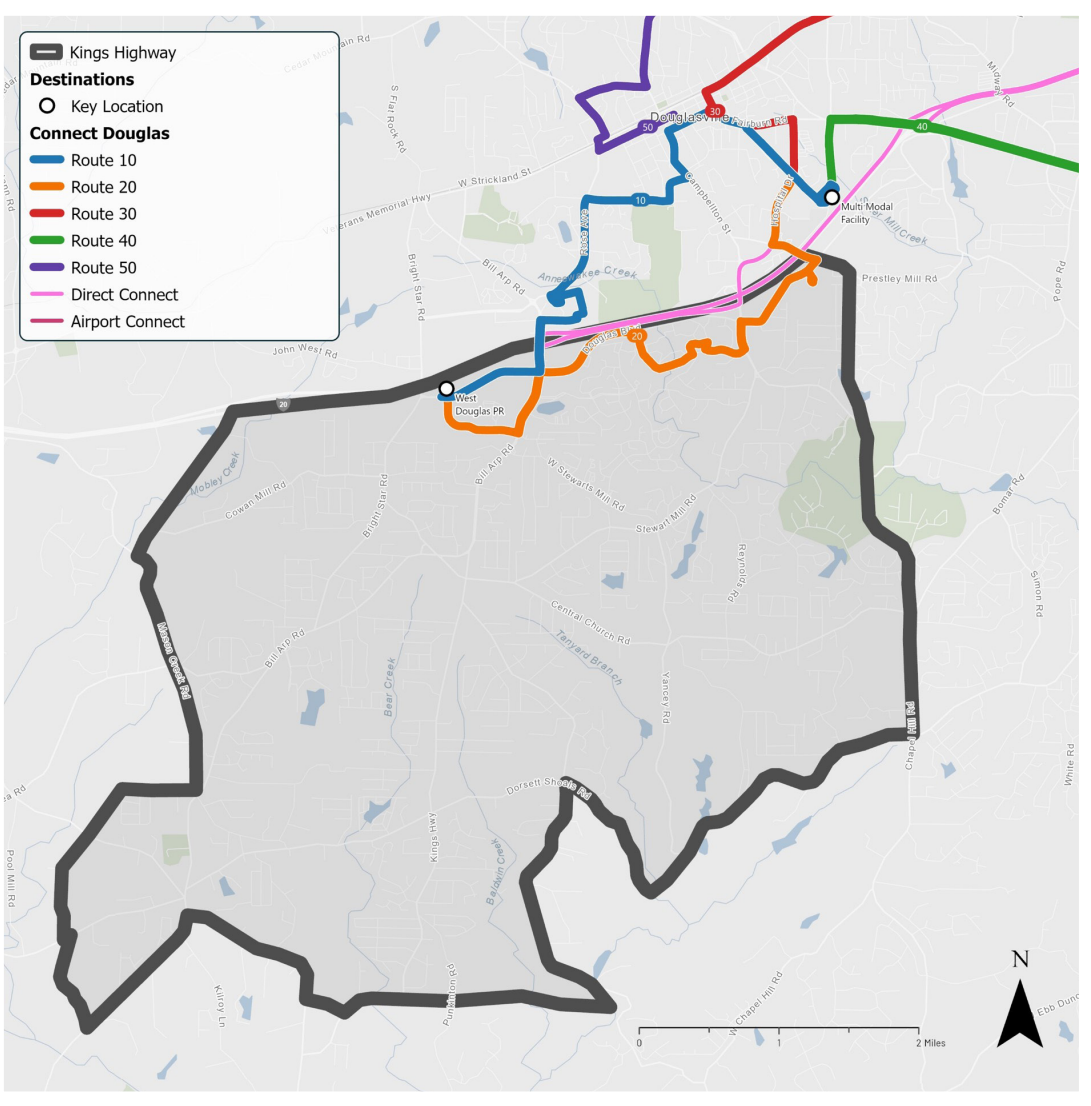
The Kings Highway microtransit zone covers the area west of Chapel Hill Road and south of I-20 in the central Douglasville area. This service area has the highest projected ridership along with the highest percentage of residents living below the poverty line.

Table 5-14. Kings Highway Characteristics

SIZE	POPULATION	% LOW INCOME
16.9 sq. mi.	24,900	16%

CHARACTERISTICS	6AM-8PM	7AM-8PM
Weekly Riders	757	703
Peak Vehicles	4	4

Figure 5-16. Kings Highway Microtransit Zone



Key Transit Connections

- ▶ Primary Fixed Route Connections to Connect Douglas Routes 10,20 and Express 463
- ▶ External Connection Points: MultiModal Transportation Center

Douglasville

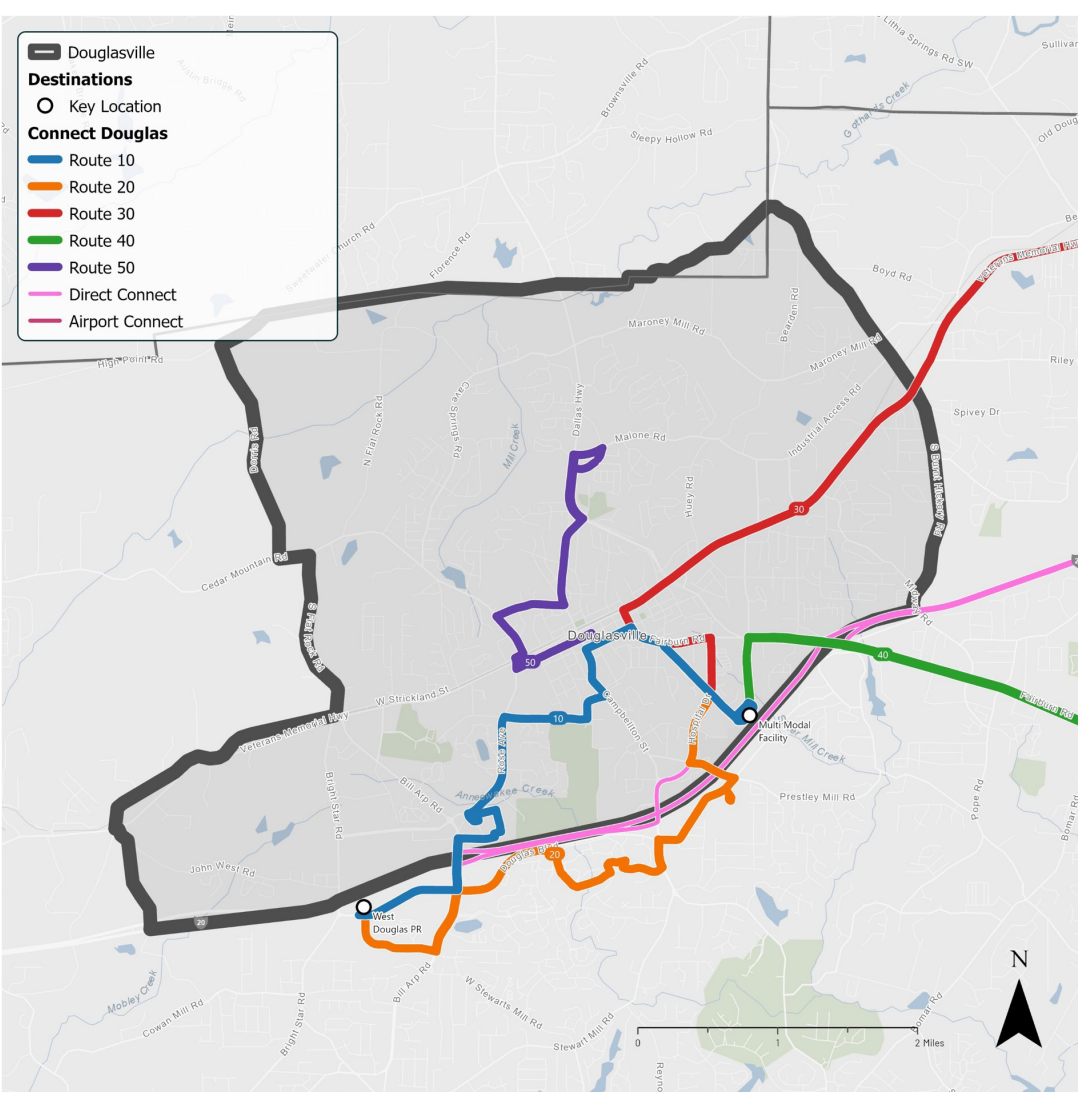
Douglasville microtransit zone covers the area west of Burnt Hickory Road and north of I-20 in the central Douglasville area.

Table 5-15. Douglasville Characteristics

SIZE	POPULATION	% LOW INCOME
16.3 sq. mi.	23,100	15%

CHARACTERISTICS	6AM-8PM	7AM-8PM
Weekly Riders	537	499
Peak Vehicles	3	3

Figure 5-17. Douglasville Microtransit Zone



Key Transit Connections

- ▶ Primary Fixed Route Connections - Connect Douglas Routes 10, 20, 30, 40, 50 Airport, Direct; Xpress 463
- ▶ External Connection Points - West Douglas PR, Arbor Place Mall

Pope Road

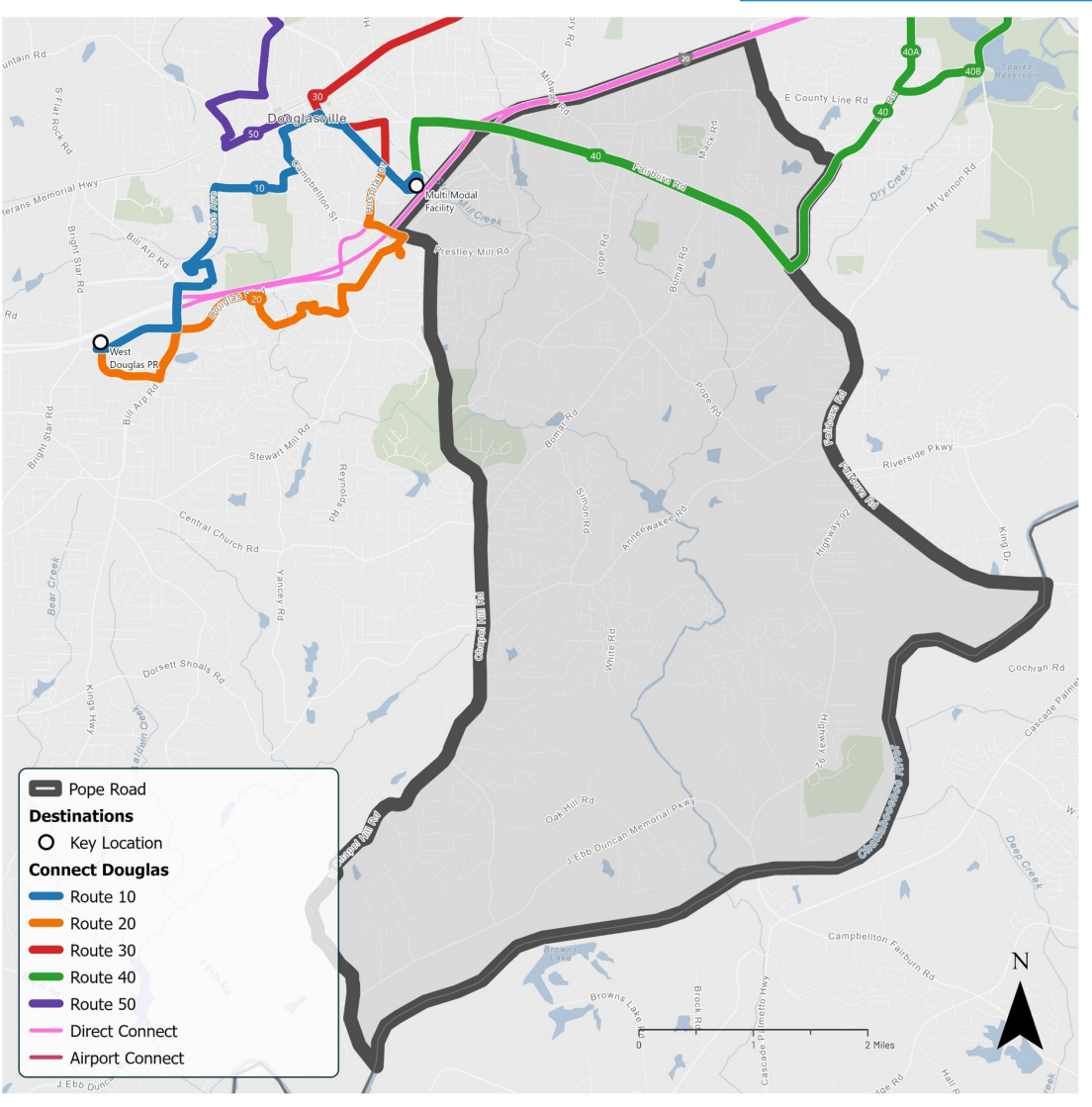
The Pope Road microtransit zone covers the area east of Chapel Hill Rd, west of Fairburn Rd and south of I-20 in central Douglas County.

Table 5-16. Pope Road Characteristics

SIZE	POPULATION	% LOW INCOME
28.1 sq. mi.	28,800	11%

CHARACTERISTICS	6AM-8PM	7AM-8PM
Weekly Riders	392	364
Peak Vehicles	3	3

Figure 5-18. Pope Road Microtransit Zone



Key Transit Connections

- ▶ Primary Fixed Route Connections - Connect Douglas Route 40
- ▶ External Connection Points - Multi-Modal Transportation Center

Lithia Springs

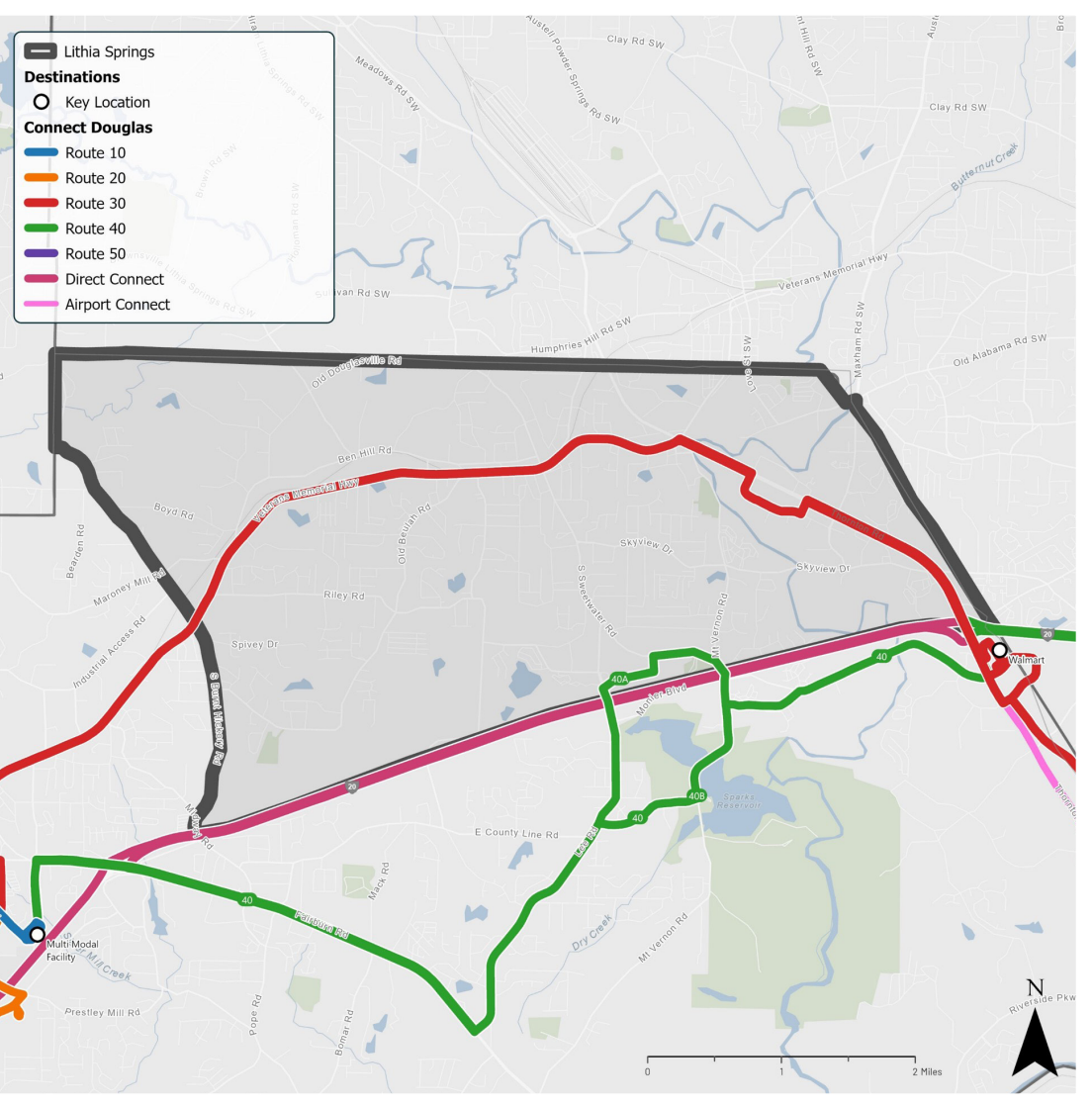
The Lithia Springs microtransit zone service area covers the area east of Burnt Hickory Rd and north of I-20 in northeastern Douglas County

Table 5-17. Lithia Springs Characteristics

SIZE	POPULATION	% LOW INCOME
16.9 sq. mi.	19,800	13%

CHARACTERISTICS	6AM-8PM	7AM-8PM
Weekly Riders	375	348
Peak Vehicles	2	2

Figure 5-19. Lithia Springs Microtransit Zone



Key Transit Connections

- ▶ Primary Fixed Route Connections - Connect Douglas Route 30; Xpress 476
- ▶ External Connection Points – Walmart

Reservoir

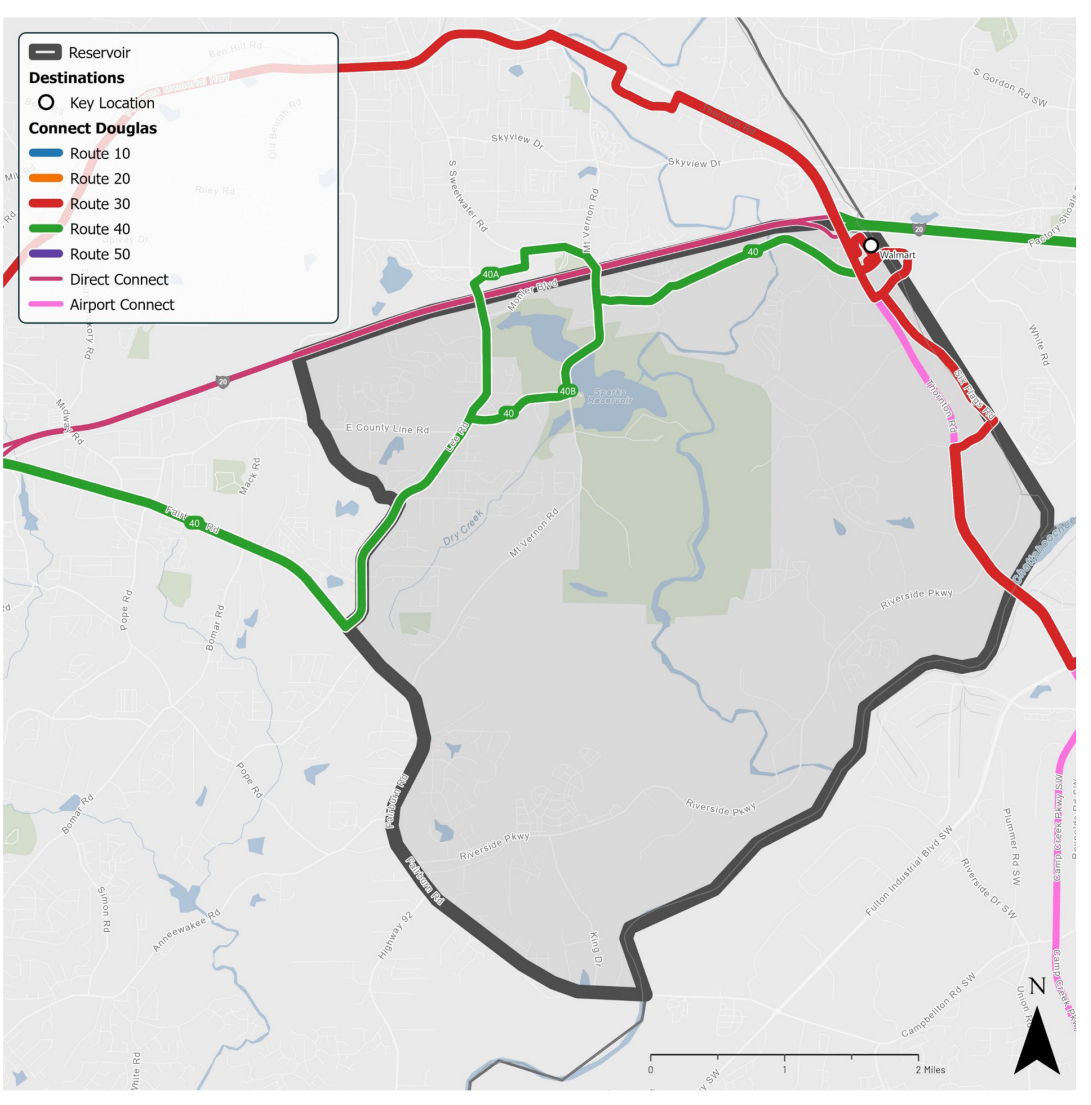
The Reservoir microtransit zone covers the area east of Fairburn Road and south of I-20 in southeastern Douglas County.

Table 5-18. Reservoir Zone Characteristics

SIZE	POPULATION	% LOW INCOME
20.3 sq. mi.	16,100	11%

CHARACTERISTICS	6AM-8PM	7AM-8PM
Weekly Riders	220	204
Peak Vehicles	2	2

Figure 5-20. Reservoir Microtransit Zone



Key Transit Connections

- ▶ Primary Fixed Route Connections - Connect Douglas Routes 30, 40, Airport, Direct
- ▶ External Connection Points - Thornton Road Walmart

TRANSPORTATION SERVICES:
RURAL DEMAND RESPONSE

Rural public transportation systems serve communities outside of US Census defined urban areas using a range of service solutions to connect residents and visitors to essential destinations like employment, schools, goods, and services.

The addition of this type of service would ensure countywide access to transit and would involve exploring new funding sources and fostering regional partnerships to meet service demands.

Rural demand response service is summarized in the following infographic and operates in concert with the requirements of the Federal Transit Authority.

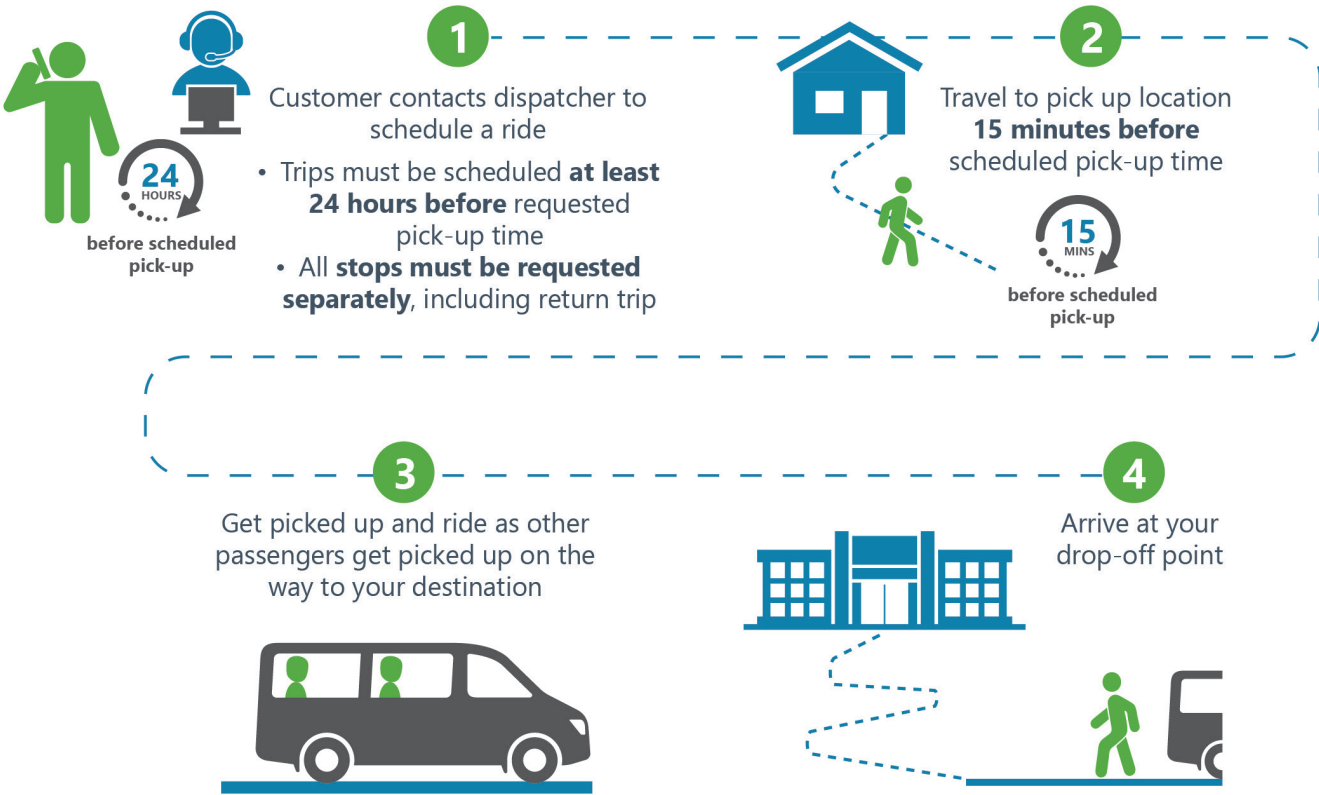
SERVICE STRATEGIES OVERVIEW

- ▶ New Funding Sources: 5311, DHS, NEHS
- ▶ 24-hour advanced reservation
- ▶ Countywide access to transportation
- ▶ Door to door service
- ▶ Scaleable solutions

POSSIBLE REGIONAL PARTNERSHPS

- ▶ Regional services operated in Carroll County
- ▶ Significant trips occure between rural Carroll County and rural Douglas County

How to Ride Rural Demand Response Transit



Rural Transit Funding

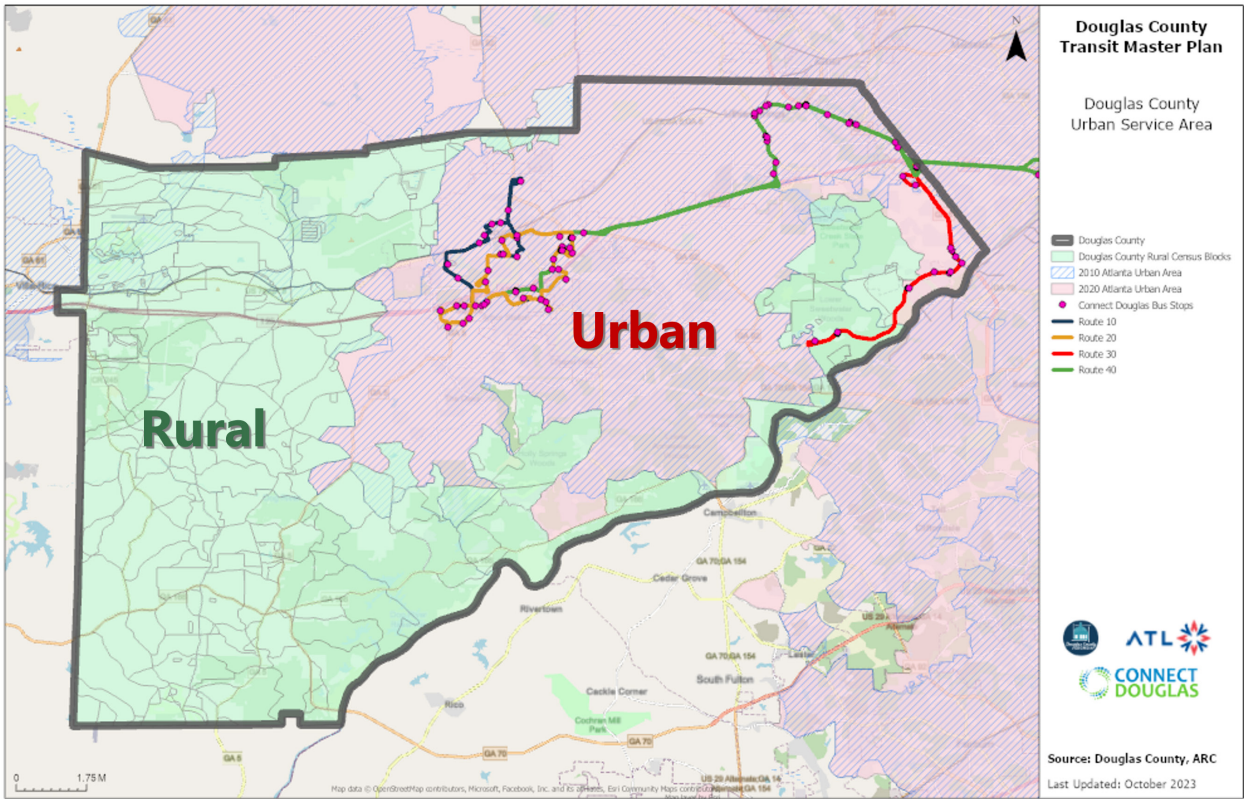
Different FTA rules and funding sources are applied to urban versus rural public transit. This section outlines how funding sources are allocated towards transit projects in designated rural and urban areas. The County’s Urban Service Area Map designates areas as Urban or Rural, thus determining what type of funding is available to different regions of the county.

The primary funding source for rural transit services is through the FTA, although there are other available sources, such as programs within the Department of Human Services (DHS) for eligible recipients.

Increased service in Douglas County will allow use of 5311 funding, which supports rural transit services.

The County’s designated Urban and Rural areas are depicted in the map below.

Figure 5-21. Douglas County Urban Service Area Map



ALL ABOUT FUNDING

FUNDING SOURCES

5311 Rural Funding

Federal Transit Administration funding program established in 1978 to support rural transit services

URBAN VS. RURAL FUNDING

5307 Funding

- Urban Formula grants serving UZA’s 50,000+ people
- Urban trips must be provided within the designated urban boundary

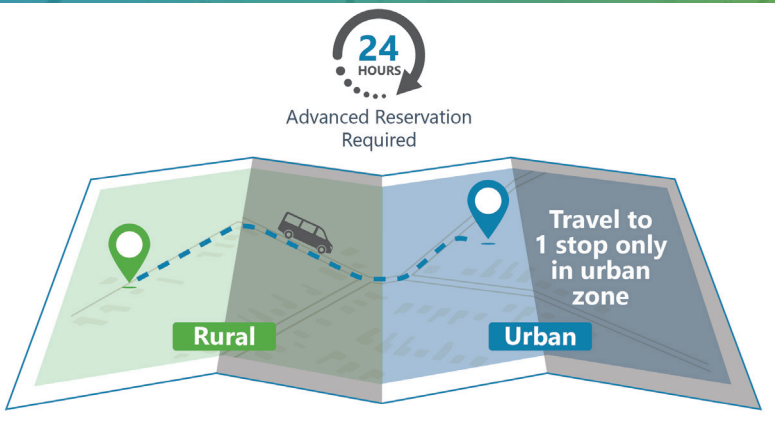
5311 Funding

- For non-urbanized/rural areas
- Rural trips must start or end in the rural designated boundary
- The trip can begin or end in an urban area

FTA Rules for Rural Service

To assist riders in the rural area reach key destinations in the urban area, such as employment, healthcare, or social services, rural trips are allowed to either begin or end in the urban area. However, a rural trip may only serve one stop within the urban area, as illustrated in the adjacent graphic.

Figure 5-22. FTA Rules for Rural Service



Proposed Rural Demand Response Transit

The TMP proposes rural demand response solutions which are scalable, meaning they can be adjusted according to the needs and resources available. The proposed solutions are categorized into three scenarios:

- Scenario 1: Entire rural area in Douglas County
- Scenario 2: Rural area, excluding all areas covered by microtransit
- Scenario 3: Rural area, excluding the urban microtransit zones and including Villa Rica

Service area characteristics and operational statistics are provided for each scenario. The rural demand response map series presented on the following pages depicts portions of the County’s designated rural areas in color.

Table 5-19. Proposed Rural Demand Response Transit Operating Statistics

*ESTIMATED STATISTICS	SCENARIO 1	SCENARIO 2	SCENARIO 3
Peak Vehicles	3	2	3
Annual Revenue Hours	4,000	2,700	3,600
Annual Revenue Miles	62,500	41,500	56,000
Annual Ridership	4,100	3,700	5,000

*Statistics based on population-based ratios derived from Three Rivers Regional Commission Transit Program 2021 NTD statistics

Scenario 1:
Entire Rural Area

Scenario 1 provides the greatest geographical coverage for the entire rural population in Douglas County. The larger coverage area would be most cost beneficial before Microtransit is implemented. Expanded rural service areas can result in longer wait times and higher operating cost.

SCENARIO 1 QUICKFACTS

- Provides 24-hour advanced reservation service to all rural areas of Douglas County.
- Trips originating in rural area (yellow) can access urban areas including Douglasville, Lithia Springs, etc.
- On-Demand service is only provided if trips are scheduled.

Scenario 2:
Rural Area, Excluding Microtransit Zones

This scenario covers the entire rural area of Douglas County, except for areas covered by microtransit zones. This area includes most of western Douglas County, excluding Villa Rica, which would host a microtransit zone, as shown in Figure 5-24.

SCENARIO 2 QUICKFACTS

- Provides 24-hour advanced reservation service to most rural areas of Douglas County but eliminates services that overlap with microtransit zones.
- Trips originating in rural areas (yellow) can access urban area, including Douglasville and surrounding areas.
- This model is more cost effective and efficient but eliminates trips starting in Villa Rica and Tributary.

Figure 5-23. Scenario 1 Rural Demand Response Service Area

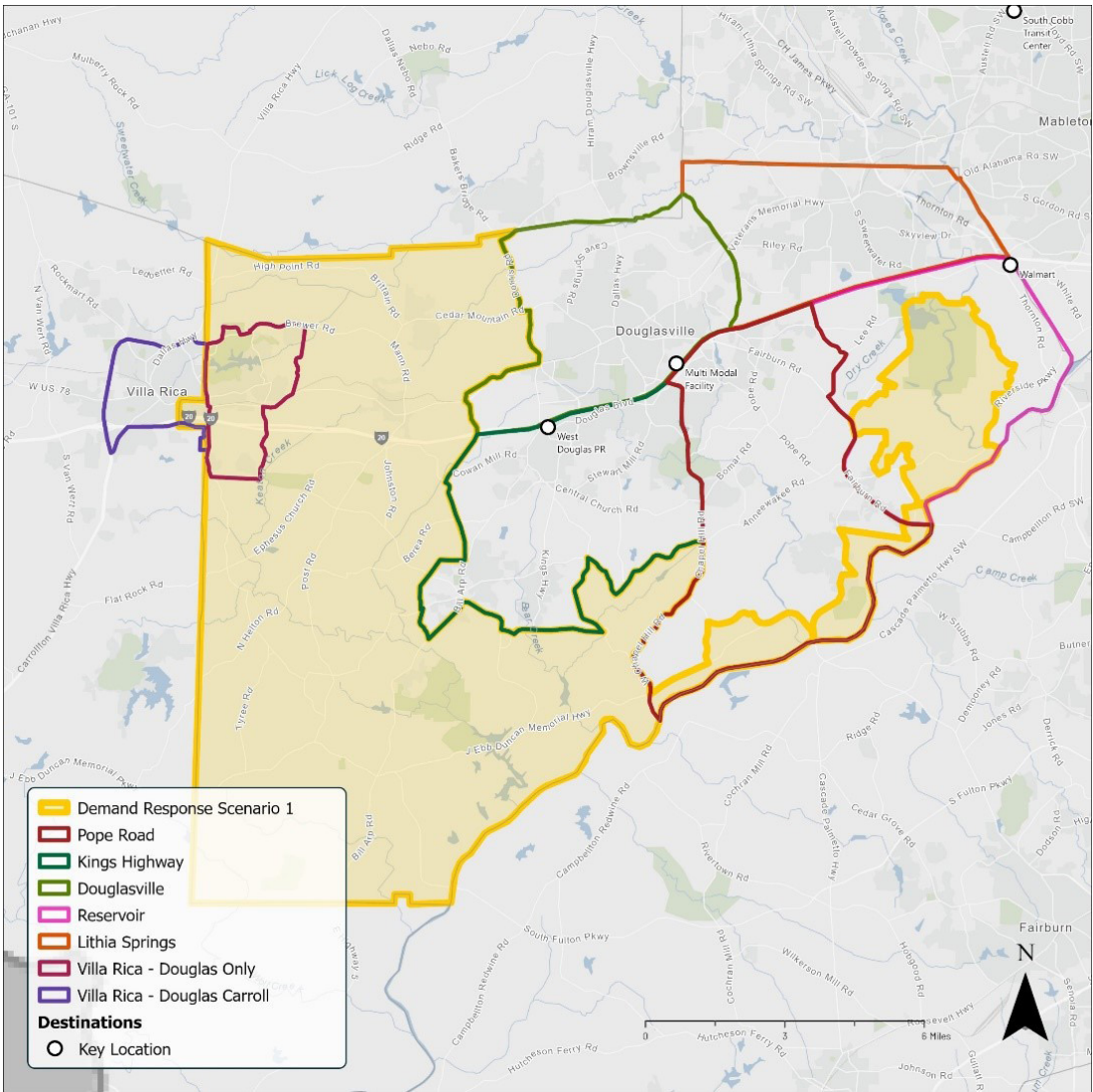
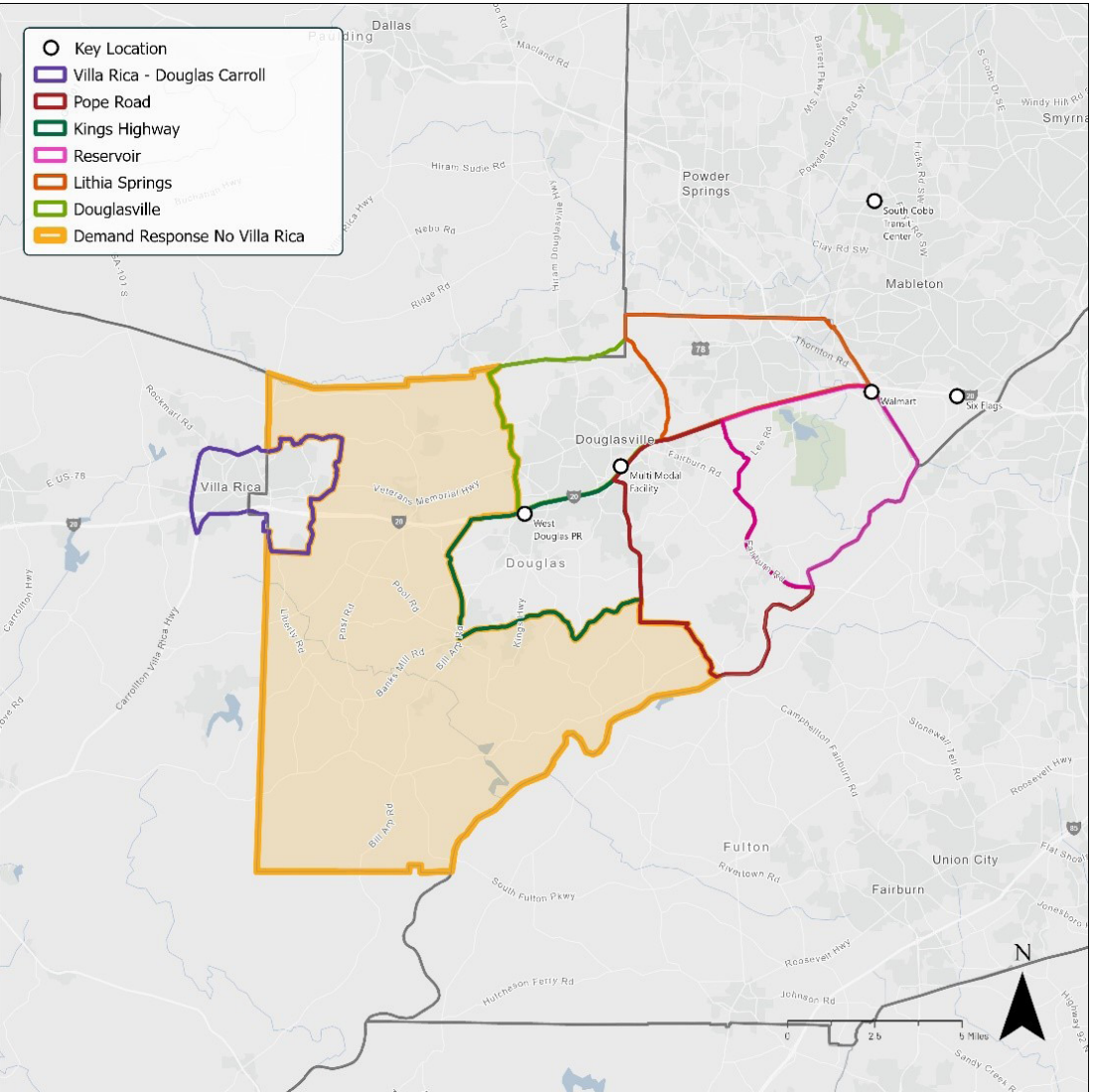


Figure 5-24. Scenario 2 Rural Demand Response Service Area



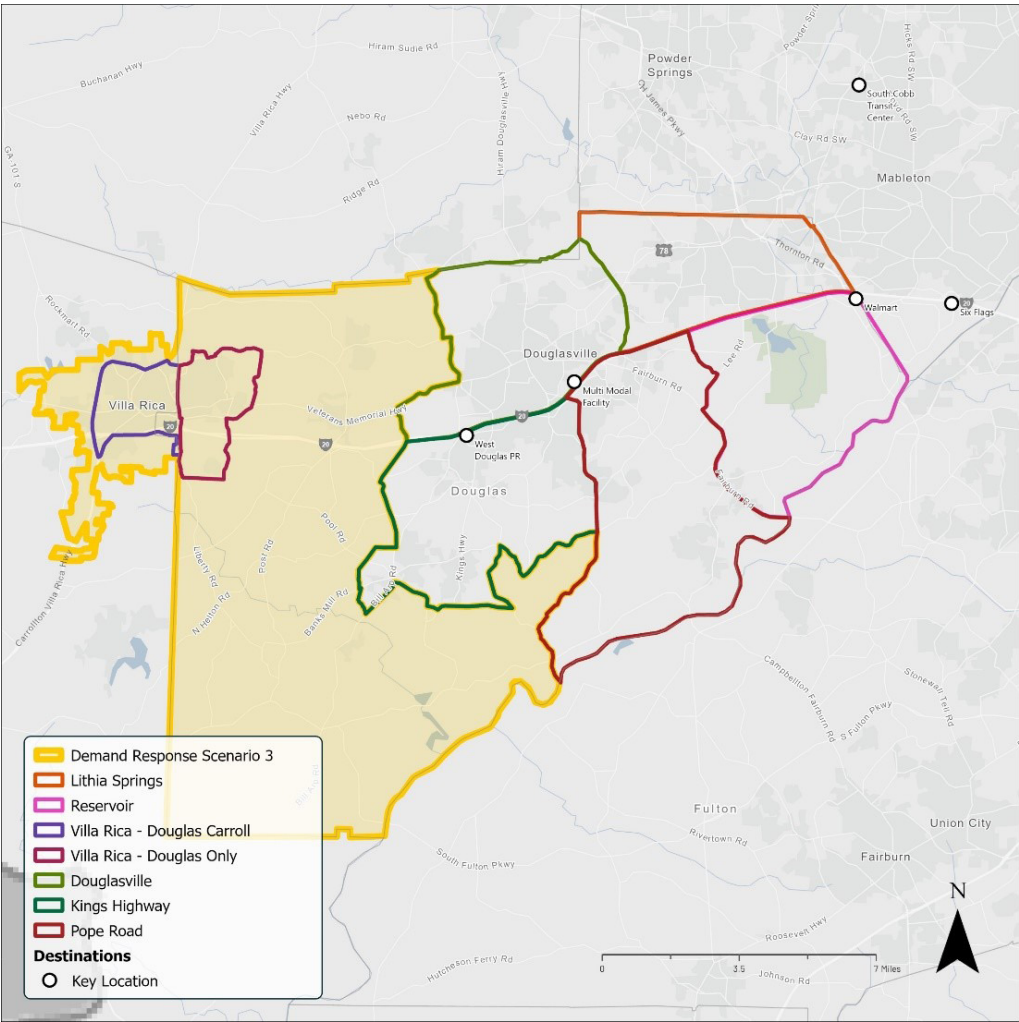
Scenario 3: Excluding Microtransit Zones, including Villa Rica

Scenario 3 covers the entire rural area of Douglas County, except for areas covered by microtransit zones, but including the entire city of Villa Rica. If this scenario moves towards implementation, the Douglas and Carroll County portions of Villa Rica would be served by rural demand response, not microtransit. Scenario 3 reduces redundancy of services while still maintaining the connection to Villa Rica. Villa Rica is included due to high trip demands within this area and the need to create a meaningful connection between Villa Rica and Urban Douglas County.

SCENARIO 3 QUICKFACTS

- Provides 24-hour advanced reservation service to most rural areas of Douglas County but eliminates services that overlap with East Douglas microtransit zones.
- Trips originating in rural areas (yellow) can access urban area, including Douglasville and surrounding areas.
- This model is more cost effective and efficient than the countywide scenario (Scenario 1), while reintroducing services to Villa Rica. This scenario still limits trips starting in microtransit zones with the exception of Villa Rica.

Figure 5-25. Scenario 3: Excluding Microtransit Zones, Including Villa Rica



Service Area Snapshot

- % of Low-Income Ridership: **8%**
- Population Served: **32,800**
- Square Miles: **105.7**

Operating Statistics

- Peak Vehicles: **3**
- Annual Revenue Hours: **3,600**
- Annual Revenue Miles: **56,000**
- Estimated Ridership: **5,000**

CAPITAL INFRASTRUCTURE INVESTMENTS

The Douglas County Transit Master Plan provides a multifaceted and complex suite of recommendations that will require administrative efforts, development of new policies and partnerships, capital procurement, community engagement and education, and operational service changes.

Capital & Infrastructure

MOBILITY HUBS / ENHANCED STEPS

- New mobility hub locations (Thornton Road, Liberty Road)
- Bus stop improvement program including stops & information, shelters, lighting and security, and ADA accessible ramps and sidewalks

STORAGE AND SAFETY

- Expanded vehicle storage
- Enhanced security footage
- New Bike Share Pilot Program located at the proposed Route 40B stop on Mt Vernon Road to provide active transportation options and last mile connectivity to the Sweetwater State Park Visitor Center

REPLACEMENT AND EXPANSION OF ROLLING STOCK

- Maintain state of good repair for current rolling stock
- Procure expansion buses, vans, and support vehicles

CAPITAL PLANNING

- 5-Year TMP Update
- Technology Studies
- Electric Charging Infrastructure Study

Shelter and Shade

Safety and Comfort

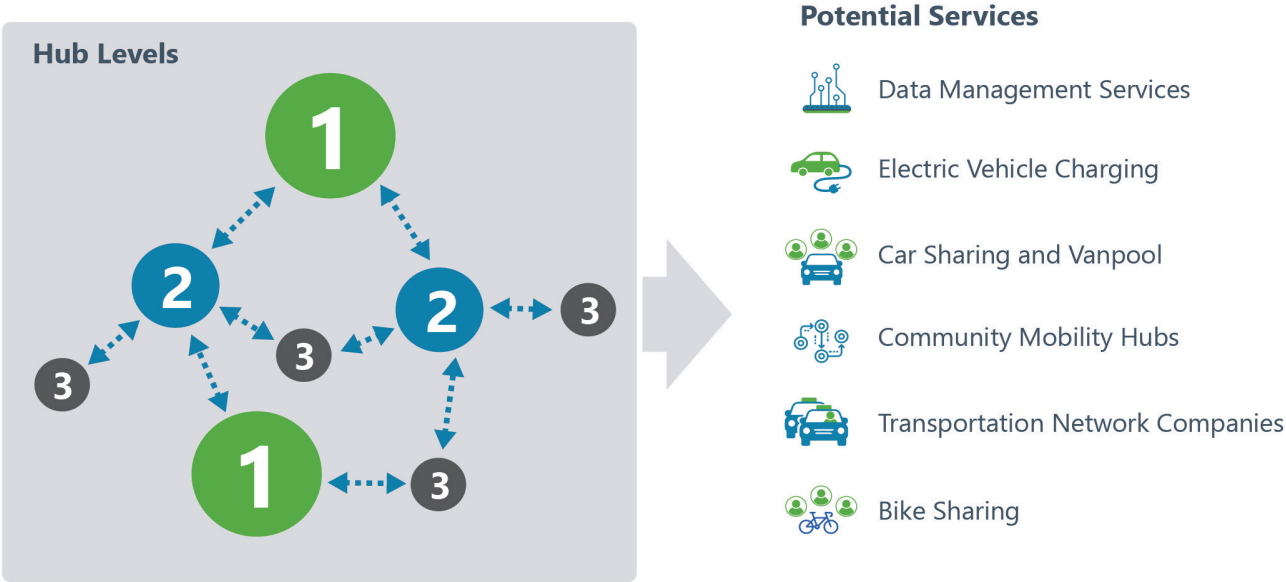
Innovation / Technology

Accessibility / Equity

Mobility Hubs

Mobility hubs enable access to multiple transportation modes in a central location, including public transit, bike shares, ride shares and vanpools, EV charging stations, and more!

Figure 5-26. Mobility Hubs



Transit Vehicles

Maintaining transit vehicles and support equipment is crucial to providing high-quality service. Recommended investments related to capital rolling stock include:

- **Replacement and Expansion of Rolling Stock** to maintain a state of good repair for current rolling stock and procure expansion buses, vans, and support vehicles
- **Capital Planning** including a 5 year update to the TMP, technology studies, and an electric charging infrastructure study.

Table 5-20. Rolling Stock Investments

	EXISTING	SHORT-TERM	MID-TERM	LONG-TERM
Buses	14*	7	9	19
Microtransit	0	4	10	15
Demand Response	0	3	5	5
Support Vehicles	2	3	3	4
Vanpool Vehicles	-	10	20	40

POLICIES AND PARTNERSHIPS

Updating policies and pursuing strategic partnerships represent another subset of recommendations for Connect Douglas. In particular, working with other agencies and organizations to identify multimodal connection points can enhance the reach and convenience of transit service. Similarly, specific plans and policies focused on increasing mobility for transit users should be pursued.

Policies & Partnerships

MULTIMODAL PARTNERSHIPS

- National and State park access (service routes, bike share hubs)
- Six flags (enhance stop facilities, parking/transit shuttles)
- System integration (CobbLinc Stops, MARTA stops)
- HIIA Airport Access

MOBILITY PLANS AND POLICIES

- Bus Stop Improvement Program (BSIP)
- First/Last Mile Infrastructure Program

UPDATE LOCAL CODES / ORDINANCES

- Transit review of proposed development plans
- Access easements
- Dedicated stop and shelter zones
- Transit Oriented Development (TOD) Ordinance

MARKETING, PROMOTIONS, AND AWARENESS

- Annual event shuttle program
- Fare free events
- Updated regional ride guides & rider training events
- Biannual open house

TECHNOLOGY AND INNOVATION

Finally, advances and innovations in technology allow for a more seamless experience for riders and simplify logistics and data collection for operators. Examples of specific items to implement are listed below.

Technology & Innovation



AUTOMATED PASSENGER COUNTERS (APCS)

- ▶ Stop level ridership data
- ▶ Georgia State Transit Plan Recommendation



UPGRADED FARE COLLECTION

- ▶ Smart Passes
- ▶ Regional Integration / One Pass



UPGRADED MOBILE APP / WEBSITE

- ▶ Complete trip planning / regional interface



UPGRADED ROUTING SOFTWARE

- ▶ Enhanced route and trip scheduling software

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6

IMPLEMENTING THE PLAN

The Douglas County Transit Master Plan provides a multifaceted and complex suite of recommendations that will require administrative efforts, development of new policies and partnerships, capital procurement, community engagement and education, and operational service changes to successfully implement the Plan.

In order to position Connect Douglas for success, an Implementation Plan was developed which provides a detailed roadmap for how to achieve specific goals related to improving or expanding transit services.

This Implementation Plan will guide the County in making informed decisions about how to allocate resources, prioritize projects, and overcome obstacles to implementation. Additionally, key partnership strategies are provided to ensure cohesive implementation of recommendations at the local and regional levels.

KEY COMPONENTS

- Implementation Strategies
- Implementation Schedule
- Financial Plan
- Monitoring Program

Implementation Approach

This Implementation Plan includes several components that are vital to the advancement of the Connect Douglas Transit Master Plan.

These components are outlined below.

Implementation Strategies

- ▶ Financial Phasing
- ▶ Initiate New Partnerships
- ▶ Procurement & Talent Acquisition
- ▶ Implementation

Implementation Schedule

- ▶ Short-Term: 0 to 2 years
- ▶ Medium-Term: 2 to 5 years
- ▶ Long-Term: 5 to 20 years

Financial Plan

- ▶ Detailed Project Cost Estimates
- ▶ Anticipated Revenues Source
- ▶ Discretionary Funding Opportunities
- ▶ Financial Partnerships

Monitoring Program

- ▶ Monitoring Cycle
- ▶ Monitoring System
 - ▶ Quantitative
 - ▶ Qualitative

IMPLEMENTATION STRATEGIES

The following table summarizes key strategies needed to position Connect Douglas for successful TMP implementation.

Implementation Strategies



FINANCIAL PHASING

- ▶ Utilize existing resources to begin implementation-ready recommendations
- ▶ Apply for NEW grant sources for TMP recommended services and initiatives
- ▶ Incorporate local, state, and federal funding in Connect Douglas’ annual budget



INITIATE NEW PARTNERSHIPS

- ▶ Schedule meetings with new/existing partners to identify opportunities and barriers
- ▶ Develop agreements, contracts, and memorandums to codify partnerships



PROCUREMENT & TALENT ACQUISITION

- ▶ Prepare advertisements for competitive and procurement bids and new staff positions
- ▶ Procure vehicles, support equipment, and technology
- ▶ Hire, train, and retain Connect Douglas staff



IMPLEMENTATION

- ▶ Prepare public information strategies and service roll-out schedule
- ▶ Advertise planned changes, and host public meetings/rider training events
- ▶ Complete bus stop signage, ride guide, website, and mobile app updates
- ▶ Launch service changes

Financial Phasing

This report details existing resources that would support the implementation of recommendations that are ready to roll out. Service recommendations were grouped into three phases: short-, mid-, and long-term. Short-term scenarios cover the 0 to 2 year timeframe, including 2024 and 2025, mid-term scenarios include the 2 to 5 year timeframe, focused on 2026 - 2028, while long-term scenarios begin in 2029.

Connect Douglas can incorporate local, state and federal funding into the annual budget. The ATL is the designated FTA recipient for Atlanta Urbanized Area (UZA) which encompasses 23 counties in the region, including Douglas County. As the Designated Recipient for Atlanta Urbanized Area, the ATL is responsible for receiving and sub-allocating federal transit funding. The ATL also compiles regional transit operators’ federally funded projects into the Transit Program of Projects.

Initiate New Partnerships

The Douglas TMP recommendations include a number of services that extend into the surrounding region to facilitate travel demands between various communities and key destinations. These regional service recommendations present opportunities for partnerships with peer service providers, economic and community development agencies, and private businesses / employers.

Connect Douglas could partner with the Hartsfield-Jackson Atlanta International Airport to support the proposed Airport Connect route, part of the long-term service recommendation, which provides express service to the airport. Other potential partnerships include agreements with the County’s Economic Development Authority, Travel and Tourism Bureau, an dsimilar entities. Private companies could also support Connect Douglas’ vanpool program to help facilitate transportation for their employees.

In addition, Connect Douglas can explore other partnership opportunities with nonprofit organizations or other public entities. For example, Connect Douglas could partner with Sweetwater Creek State Park to help fund and implement the bike share pilot and program.



Procurement & Talent Acquisition

Public transit providers across the country are facing a shortage of drivers and mechanics causing steep budget increases for recruitment and retention, and forcing many agencies to reduce service. The recommendations of the TMP include options for vendor-operated and County-operated services and provides detailed estimates of staff required for each recommended service strategy. Talent acquisition will be a fundamental requirement for service expansion to ensure adequate and qualified staffing.

Investing in transit vehicles, technology, and other equipment and focusing on strategies to hire, train, and retain Connect Douglas staff sets the foundation for a strong transit program and service.



Implementation

A community-oriented service launch would focus on community education, with an emphasis on promoting planned changes through advertising and public meetings or rider training events.

Another key component of implementing transit service improvements is to complete transit wayfinding, a ride guide, website, and mobile app updates leading up to launching changes to service. Each of these components can build on each other for a successful implementation strategy.



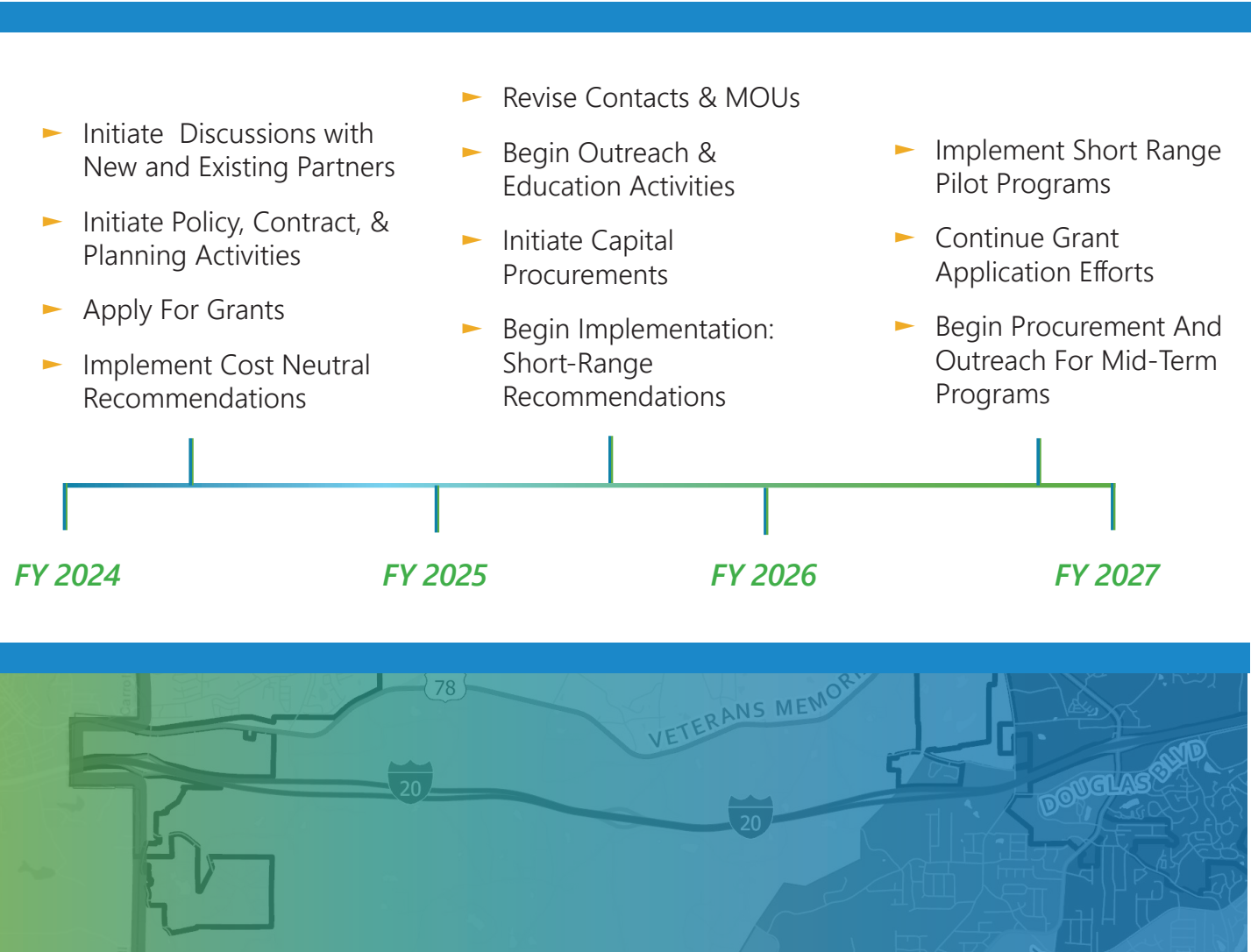
IMPLEMENTATION SCHEDULE

The implementation timeline presented below provides a sequential view of implementation tasks for key short-term (0-2 years) and mid-term (2-5 years) recommendations. This timeline demonstrates how tasks are scheduled to strategically position Connect Douglas for implementation.

The primary focus of the short-term service framework is to maintain the existing fixed route, ADA paratransit, and regional express service while critical capital investments are prioritized, and grant funding is secured for new and expanded services. It is anticipated that cost neutral improvements currently included in the Connect Douglas fiscal budget would begin implementation stages within the first 12-18 months following the adoption of the TMP.

The primary focus of the mid-term service framework is to build on short-term initiatives and expand services to meet demand using upgraded technology and expanded capital and operational resources; while the long-term service framework focuses on continued efforts to expand services to meet demand.

Figure 6-1. Key Implementation Dates



The following implementation schedule provides a more detailed description of the recommended improvements and identifies improvements that have a recommended start and end date, versus activities that continue after implementation, or reoccur on an annual basis.

Table 6-1. Short and Mid-Term Recommendations Implementation Schedule

IMPROVEMENT CLASSIFICATION	RECOMMENDATION	2024	2025	2026	2027	2028	2029
Administrative	Support ATL's ARTP Update to Incorporate Douglas TMP						
Operational	Initiate Marketing, Public Information, and Training Campaign						
Policy	Initiate Policy, Contractual, and Implementation Planning Activities						
Policy	Coordinate with Targeted Agencies and Secure Implementation Partnerships						
Administrative	Apply for NEW Formula and Discretionary Grants						
Capital	Purchase Upgraded Scheduling and Data Collection Software (APCs)						
Capital	Purchase Short-Term Replacement Fleet and Vanpool Vehicles (Previously Budgeted)						
Capital	Purchase / Install Short-Range Optimization Bus Stop Amenities						
Capital	Purchase Upgraded Regional Fare Collection Equipment: Phase I						
Planning	Conduct Bus Stop Improvement Program (BSIP) and Fuel Alternatives Studies						
Capital	Purchase Service Expansion Vehicles - Short-Range						
Operational	Develop New Regional Ride Guides and Upgrade Connect Douglas Website / App						
Operational	Initiate Short-Term Fixed Route Improvements						
Operational	Initiate Microtransit Pilot Program: Phase I						
Operational	Initiate Bike Share Pilot Program: Sweetwater State Park Micromobility Hub						
Capital	Procure Mid-Term New Service Vehicles: Regional Direct Connect, On-Demand						
Capital	Procure Mid-Term Expansion Vehicles: Fixed, Microtransit Phase II, Vanpool						
Capital	Procure Fare Collection Equipment for Expansion Vehicles						
Capital	Procure Remote Ticket Sales Vending Stations						
Capital	Expand Secure Vehicle Storage and Procure Lighting, and Surveillance Equipment						
Operational	Update Regional Ride Guides and Connect Douglas Website / App						
Operational	Initiate Rural Service <i>(May be Expedited via Regional Partnerships)</i>						
Operational	Expand Microtransit Zones: Phase II						
Planning	Regional Hub Initiative: Site Selection Study						
Capital	Implement BSIP Phase I Recommendations: 20 Stops						
Capital	Procure Remote Ticket Sales Vending Stations						
Capital	Procure Customer Service Fare Management System						
Planning	Perform NEPA and Site Design for Mobility Hubs						
Operational	Update Regional Ride Guides and Connect Douglas Website / App						
Operational	Expand Microtransit Zones: Phase III						
Capital	Initiate Site Development for Mobility Hubs						
Planning	Complete Transit Master Plan Update with Comprehensive Operational Analysis						



FINANCIAL PLAN

This section presents existing and potential future revenue sources, as well as a revenue forecast that considers future funding in alignment with operating and capital expenses presented in the previous chapter.

Current Revenue Sources

Connect Douglas is currently funded through local and federal funding sources including Douglas County general funds, fares and federal grants.

The following funds provided supplemental appropriations to public transit agencies during the COVID-19 public health emergency. This funding will expire before TMP recommendations are initiated.

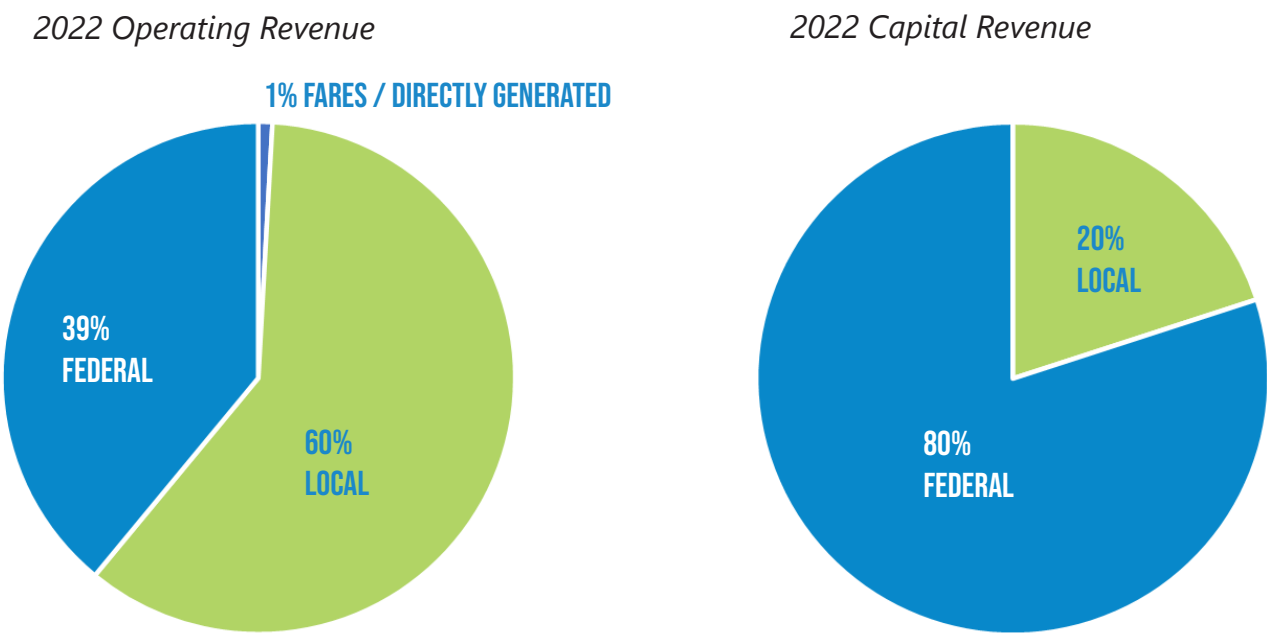
- ▶ American Rescue Plan Act (ARPA)
- ▶ FTA Section 5307 CARES Act

The following federal funds are received through the ATL, the designated recipient for the Atlanta region’s urbanized area FTA formula fund apportionments:

- ▶ FTA Section 5307 Urbanized Area Formula Program funds
- ▶ FTA Section 5339 Bus and Bus Facilities Program funds

Federal sources made up 80% of capital revenue and 39% of operating revenue. From 2020-2022, Connect Douglas received an average of \$1,152,039 annually in federal operating funding, and an average of \$487,097 annually in federal capital funding. In those years, annual federal capital funding ranged from \$89,000 to \$1.2 million. Fares generated approximately 1% of operating revenue, providing a relatively low percentage of the overall operating budget.

Figure 6-2. Current Revenue Sources



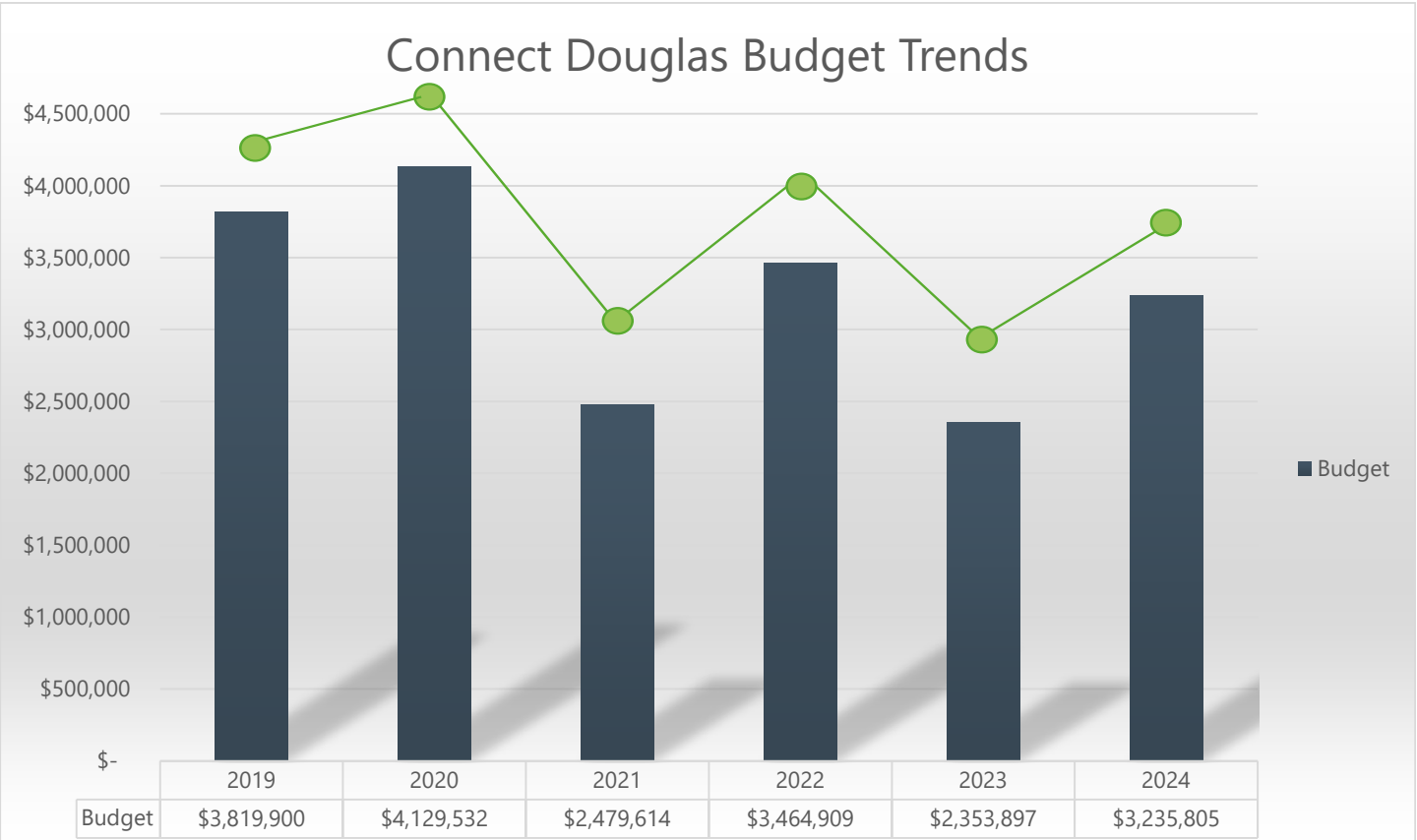
Limitations of Current Funding Approach

- ▶ Connect Douglas has no local, dedicated funding source, which requires annual appropriation from Douglas County. Annual appropriations limit the ability to plan for the long-term growth and system maintenance, including attracting federal grants.
- ▶ Low farebox recovery (< 1% in 2022), meaning minimal contributions to the overall operating budget.
- ▶ Along with Douglas County general funds, Connect Douglas’ major source of funding is federal grants, which require reporting and compliance. Federal grants have rules for sources of funding, local match requirements and limitations on pilot program duration. Navigating the process requires professional expertise and expert financial management to ensure reporting and spending compliance.

Connect Douglas Funding Trends

The graph below summarizes Connect Douglas’s Funding Trends over the past five years, between 2019 and 2023. In addition, projects for 2024 are depicted. The drop between 2020 and 2021 reflects impacts of the COVID-19 pandemic. Since that time, the budget has fluctuated but is expected to increase again in 2024.

Figure 6-3. Historical Funding Trends



Capital & operating expenses are organized into the following categories:

- ▶ Advertising and Public Relations (2%)
- ▶ Miscellaneous (1%)
- ▶ Other Materials and Supplies (6%)
- ▶ Rideshare New Freedom Grant (10%)
- ▶ Salaries and Wages (24%)
- ▶ Services (45%)
- ▶ Special Projects (2%)
- ▶ Utilities (1%)
- ▶ Vehicle Maintenance (9%)
- ▶ Capital (Varies)

Future Funding Strategies

Future revenue opportunities come from federal, state, local, and other sources. The following graphic presents current and future sources for Connect Douglas to consider.



Anticipated Revenues by Sources

Revenue forecasts include existing and anticipated federal formula funds and fare revenue based on Connect Douglas’ previous allocations. Forecasts do not include discretionary grants. A 1.5% annual escalation rate was applied to each revenue source.

Table 6-2. Operating Expenses & Revenue

	SHORT TERM		MEDIUM-TERM			LONG-TERM
	2024	2025	2026	2027	2028	2029
Operating Expenses	\$2,891,149	\$4,027,365	\$5,606,369	\$6,544,393	\$6,688,354	\$11,341,335
Fare Revenue	\$30,907	\$60,154	\$61,056	\$106,060	\$107,651	\$109,265
Section 5307	\$1,186,859	\$1,204,662	\$1,222,732	\$1,241,073	\$1,259,585	\$1,278,585
Section 5311	\$360,579	\$365,987	\$371,477	\$377,049	\$382,705	\$388,446
Revenue	\$1,578,345	\$1,630,804	\$1,655,266	\$1,724,182	\$1,750,045	\$1,776,296

Table 6-3. Capital Expenses & Revenue

	SHORT TERM		MEDIUM-TERM			LONG-TERM
	2024	2025	2026	2027	2028	2029
Capital Expenses	\$1,236,689	\$3,201,940	\$2,025,020	\$57,426	\$488,011	\$4,801,639
Federal Capital Funding	\$501,820	\$509,347	\$516,987	\$524,742	\$532,613	\$540,602



Funding Opportunities & Considerations

The following sections present estimated operating and capital costs for the service recommendations presented in Chapter 5: Initiatives, Strategies, and Tactics. Operating costs are presented by mode, scenario and phase, as well as directly-operated and vendor-operated options. Capital costs are presented by phase. The Appendix of this report provides a detailed methodology for how operating and capital costs estimates and projections were developed.

Operating Costs

Operating costs fall into three primary categories: unit costs, directly-operated services, and vendor-operated services.

Unit Costs

- ▶ Units costs were developed for directly-operated and vendor-operated alternatives for each scenario and phase
- ▶ Costs vary by vehicle hour, vehicle mile and vehicles operated in maximum service (VOMS)
 - **Vehicle Operations Cost per Vehicle Hour**
Vehicle Operations Cost includes “wages, salaries and expenses related to all activities associated with dispatching and running vehicles to carry passengers, including management, administrative and clerical support.”
 - **Vehicle Maintenance Cost per Vehicle Mile**
Vehicle Maintenance Cost includes “wages, salaries and expenses incurred during all activities related to keeping vehicles operational and in good repair, including administrative and clerical support.”
 - **Facility and General Administration Cost per VOMS**
Facility Maintenance Cost includes “all activities related to keeping buildings, structures, roadways, track, and other non-vehicle assets operational and in good repair, including administrative and clerical support.”*
General Administration Cost includes “wages, salaries, and expenses incurred to perform support and administrative activities.”
- ▶ Annual escalation calculated using the Consumer Price Index from Congressional Budget Office projections



Directly-Operated Services

- ▶ Transit service where Connect Douglas would conduct all operations and own all capital required to run the transit system. Douglas County would employ all staff to run the transit system.
- ▶ Current fixed route bus and complementary ADA paratransit service services are operated through a vendor.
- ▶ Operating costs were estimated for Connect Douglas to operate services directly:
 - The 2023 budget was adjusted to remove vendor-specific costs
 - Overall reduction of operating costs was approximately 11%.
 - When forecasting the hours, miles and vehicles needed for each service scenario, total vehicle hours and miles were used to calculate operating costs because Connect Douglas would be responsible for the costs of labor during all hours of operation.

Vendor-Operated Services

- ▶ Transit service that contracts with an external vendor to conduct operations of capital investments in the transit system. Douglas County would have staff to direct and oversee the vendor.
- ▶ Annual estimates for vendor-operated services were developed using detailed historical and projected budget data.
- ▶ Directly-operated expenses are lower for fixed route bus service because of eliminated vendor expenses and minimal deadhead hours and miles.
- ▶ Vendor and directly-operated options for paratransit and rural on-demand service are comparable because deadhead hours and miles add to directly-operated costs.
- ▶ Microtransit vendor-operated expenses are much lower than directly-operated due to proprietary scheduling technology subscription costs. Providing service from 6am-7am was deemed infeasible in the short-term for all modes.

Estimated annual operating costs for each mode, phase, scenario and operating model are shown in the following table series.

Table 6-4. Fixed Route Bus Operating Costs

	7 AM - 8 PM SPAN		6 AM - 8 PM SPAN	
	Directly-Operated	Vendor-Operated	Directly-Operated	Vendor-Operated
Short-Term	\$2,220,005	\$2,487,180	-	-
Medium-Term	\$3,021,228	\$3,384,830	\$3,137,835	\$3,515,470
Long-Term	\$6,660,523	\$7,462,110	\$6,931,545	\$7,765,749





Table 6-5. ADA Paratransit Operating Costs

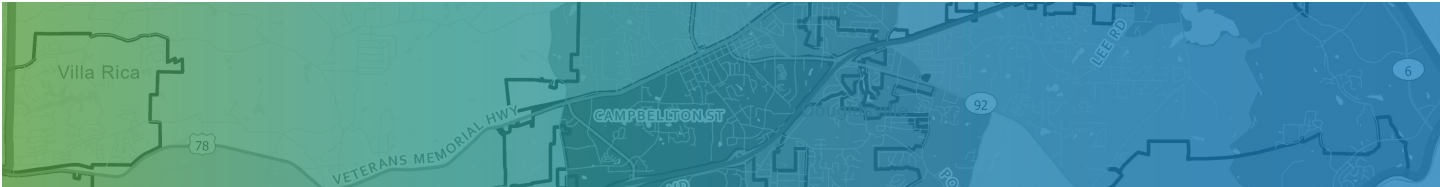
	7 AM - 8 PM SPAN		6 AM - 8 PM SPAN	
	<i>Directly-Operated</i>	<i>Vendor-Operated</i>	<i>Directly-Operated</i>	<i>Vendor-Operated</i>
Short-Term	\$804,894	\$801,130	-	-
Medium-Term	\$847,840	\$843,876	\$871,309	\$867,124
Long-Term	\$885,622	\$881,481	\$910,137	\$905,766

Table 6-6. Rural On-Demand Operating Costs

	ENTIRE RURAL AREA		EXCLUDING MICROTRANSIT ZONES		EXCLUDING MICROTRANSIT OPTIONS, BUT INCLUDING VILLA RICA	
	<i>Directly-Operated</i>	<i>Vendor-Operated</i>	<i>Directly-Operated</i>	<i>Vendor-Operated</i>	<i>Directly-Operated</i>	<i>Vendor-Operated</i>
Short-Term	-	-	-	-		
Medium-Term	\$579,510	\$581,244	\$389,435	\$390,608	\$571,217	\$572,921
Long-Term	\$605,335	\$607,147	\$406,790	\$408,790	\$562,672	\$598,453

Table 6-7. Microtransit Operating Costs

	7 AM - 8 PM SPAN		6 AM - 8 PM SPAN	
	<i>Directly-Operated</i>	<i>Vendor-Operated</i>	<i>Directly-Operated</i>	<i>Vendor-Operated</i>
Short-Term	\$1,613,032	\$959,450	-	-
Medium-Term	\$3,343,142	\$2,048,304	\$3,461,494	\$2,149,706
Long-Term	\$4,793,455	\$2,944,575	\$4,966,531	\$3,092,863



The next table series demonstrates the recommended scenarios and service model for each mode and phase, as well as operating costs.

Table 6-8. Service Recommendations

MODE	SHORT-TERM	MEDIUM-TERM	LONG-TERM
Fixed Route Bus	<ul style="list-style-type: none">Routes 10, 20, 30, 40 & 5060-minute headways7am - 8pmDirectly-operated	<ul style="list-style-type: none">All routes from Short-TermDirect Connect Route60-minute headways6am - 8pmDirectly-operated	<ul style="list-style-type: none">All routes from Short-Term30-minute headwaysAirport Connect Route with 120-minute headways6am - 8pmDirectly-operated
ADA Paratransit	<ul style="list-style-type: none">3/4 mile of fixed route bus7am - 8pmDirectly-operated	<ul style="list-style-type: none">3/4 mile of fixed route bus6am - 8pmDirectly-operated	<ul style="list-style-type: none">3/4 mile of fixed route bus6am - 8pmDirectly-operated
Rural On-Demand	-	<ul style="list-style-type: none">Rural area excluding Microtransit zones6am - 8pmDirectly-operated	<ul style="list-style-type: none">Rural area excluding Microtransit zones6am - 8pmDirectly-operated
Microtransit	<ul style="list-style-type: none">Pilot: 2 Microtransit zones7am - 8pmVendor-operated	<ul style="list-style-type: none">Microtransit zones 1, 2, 3 & 46am - 8pmVendor-operated	<ul style="list-style-type: none">All Microtransit zones6am - 8pmVendor-operated

Table 6-9. Operating Costs

MODE	SHORT TERM		MEDIUM-TERM			LONG-TERM
	<i>2024</i>	<i>2025</i>	<i>2026</i>	<i>2027</i>	<i>2028</i>	<i>2029</i>
Fixed Route Bus	\$2,028,269	\$2,243,973	\$2,289,825	\$3,135,970	\$3,204,954	\$6,931,545
ADA Paratransit	\$862,882	\$813,584	\$830,208	\$870,791	\$889,946	\$910,137
Rural On-Demand	-	-	\$381,336	\$389,204	\$397,755	\$406,790
Microtransit	-	\$969,809	\$2,105,000	\$2,148,428	\$2,195,689	\$3,092,863
TOTAL	\$2,891,149	\$4,047,365	\$5,606,369	\$6,544,393	\$6,688,354	\$11,341,335

Capital Costs

The table below presents capital recommendations by phase, followed by Table 6-11 that shows capital costs by Year of Expenditure (YOE). The capital cost analysis focuses on four primary categories, indicated in the adjacent graphic.

CAPITAL COST CATEGORIES

Capital Infrastructure

Bus Stop Improvement Program

Capital Rolling Stock

Technology

Table 6-10. Capital Recommendations by Phase

CATEGORY	SHORT-TERM	MEDIUM-TERM	LONG-TERM
Capital Rolling Stock	<div><div>6 vehicles for Microtransit pilot</div><div>10 replacement vanpool vehicles</div><div>2 support vehicles</div></div>	<div><div>9 new vehicles for fixed route</div><div>14 replacement vehicles for fixed route and ADA Paratransit</div><div>4 on-demand vehicles</div><div>12 vehicles for remaining Microtransit zones</div><div>10 new vanpool vehicles</div><div>1 support vehicles</div></div>	<div><div>Replacement vehicles identified by useful life benchmarks</div></div>
Capital Infrastructure	<div><div>Bike share pilot</div></div>	<div><div>Expanded Vehicle Storage</div><div>Enhanced Security Fencing</div><div>Bike Share Station Phase I: Equipment & Station</div></div>	<div><div>Mobility Hubs</div></div>
Bus Stop Improvements	<div><div>Bus Stop Signage: Phase I</div><div>Shelters: Phase 1</div></div>	<div><div>Bus Stop Signage: Phase II</div><div>Shelters: Phase II</div><div>ADA Accessible Ramps/Sidewalks</div><div>Lighting/Safety</div></div>	<div><div>Maintenance and expansion equipment to maintain a state of good repair</div></div>
Technology	<div><div>On-Board Fare Collection System: Phase I</div><div>Automated Passenger Counters: Phase I</div><div>Enhanced Scheduling Software</div></div>	<div><div>On-Board Fare Collection System: Phase II</div><div>Automated Passenger Counters: Phase II</div><div>Remote Ticket Sales Vending Stations</div><div>Customer Service Fare Management System</div></div>	<div><div>Technology maintenance and replacement units scheduled by useful life benchmarks</div></div>

Table 6-11. Capital Costs by YOE

MODE	SHORT TERM		MEDIUM-TERM			LONG-TERM
	2024	2025	2026	2027	2028	2029
Capital Rolling Stock	\$675,595	\$1,691,234	\$1,174,654	-	\$253,255	-
Capital Infrastructure	-	\$731,038	-	-	-	\$4,801,639
Bus Stop Improvements	\$98,021	\$220,553	\$464,243	-	-	-
Technology	\$463,072	\$559,095	\$386,122	\$57,426	-	-
TOTAL	\$1,236,689	\$3,201,940	\$2,025,020	\$57,426	\$253,255	\$4,801,639

**Long-term capital rolling stock and state of good repair maintenance costs to be identified in Regional TAM Plan and during implementation activities for specific equipment procured.*



Funding Requirements

The following tables demonstrate the projected cost for enhanced transit recommended by the Douglas TMP. The funding projections only consider formula funding and do not consider other discretionary funds or financial partnerships recommended by this plan.

The tables are provided as a tool to aide Douglas County in the coordination with peer agencies for funding partnerships and to provide the technical under-pining for discretionary grant applications.

Table 6-12. Funding Requirements by Phase & Transit Mode

	EXISTING (2023)	SHORT-TERM	MEDIUM- TERM	LONG-TERM
Operating Total	\$2,938,241	\$3,984,349	\$6,524,815	\$11,045,798
Fixed Route Bus & Paratransit	\$2,938,241	\$3,024,898	\$3,985,674	\$7,546,146
On-Demand	-	-	\$389,435	\$406,790
Microtransit	-	\$959,450	\$2,149,706	\$3,092,863
Federal Operating Funding*		\$1,643,035	\$1,750,174	\$1,835,736
Fare		\$60,605	\$107,659	\$174,422
Net		\$2,341,314	\$4,774,641	\$9,210,062

	EXISTING (2023)	SHORT-TERM	MEDIUM- TERM	LONG-TERM
Capital Total		\$1,335,836	\$1,724,494	\$11,247,919
Federal Capital Funding		\$487,907	\$487,907	\$487,907
Net		\$847,929	\$1,236,587	\$4,544,357

*2020-2022 NTD average federal funding

Future Funding Opportunities

The following are two key potential funding sources that Connect Douglas could tap into as the Plan is implemented.

FTA Section 5310 - Enhanced Mobility of Seniors & Individuals with Disabilities

This federal grant program provides formula funding to states for the purpose of assisting private nonprofit groups in meeting the transportation needs of older adults and people with disabilities when the transportation service provided is unavailable, insufficient, or inappropriate to meeting these needs.

Funds are apportioned based on each state's share of the population for these two groups. FDOT serves as the direct recipient for these formula funds for rural and small urban areas, while in large urban areas, a designated recipient is chosen by the Governor.

Direct recipients have flexibility in how they select sub-recipient projects for funding, but their decision process must be clearly noted in a state/program management plan. The selection process may be formula-based, competitive or discretionary, and sub-recipients can include states or local government authorities, private non-profit organizations, and/or operators.

FTA Section 5311 - Formula Grants for Rural Areas

This grant program provides capital, planning, and operating assistance to states to support public transportation in rural areas with populations of less than 50,000, where many residents often rely on public transit to reach their destinations.

Sub-recipients for the 5311 program may include state or local government authorities, nonprofit organizations, and operators of public transportation or intercity bus service. Additionally, the federal share is 80 percent for capital projects, 50 percent for operating assistance, and 80 percent for Americans with Disabilities Act (ADA) non-fixed route paratransit service.

These funds are available to the States during the fiscal year of apportionment plus two additional years (total of three years and are apportioned to States based on a formula that includes land area, population, revenue vehicle miles, and low-income individuals in rural areas.



The new BIL/IIJA provides advance apportions for certain public transportation programs as it focuses on improving safety, modernizing bus and rail facilities, climate change and equity.

The table below provides an overview of other potential funding opportunities for Douglas County that are not currently being utilized to support capital and operating needs and could be a source to support proposed recommendations.

Table 6-13. Other Potential Funding Sources

POTENTIAL FUNDING SOURCES	DESCRIPTION	ELIGIBILITY	FUNDING MATCH/ REQUIREMENTS	CAPITAL/ OPERATING
FTA Section 5339 - Bus and Bus Facilities	Funds to replace, rehabilitate and purchase buses and related equipment and to construct bus-related facilities including technological changes or innovations to modify low or no emission vehicles or facilities.	State and local government entities that operate fixed route bus service and that are eligible to receive direct grants under 5307 and 5311 may now be direct recipients of Section 5339 funds, regardless of their designated recipient status.	80% Federal	Capital
FTA Section 5309-Capital Investment Grants Program	Funds fixed guideway investments including new and expanded rapid rail, commuter rail, light rail, streetcars, bus rapid transit, and ferries, as well as corridor-based bus rapid transit investments that emulate the features of rail.	State and local government agencies, including transit agencies.	The maximum CIG (Sec 5309) share varies by project type: ▶ <i>New Starts:</i> 60 percent ▶ <i>Small Starts:</i> 80 percent ▶ <i>Core Capacity:</i> 80 percent. Total federal funds for any project type may not exceed 80 percent.	Capital
Expedited Project Delivery	Project Delivery (EPD) Pilot program is intended to expedite the delivery of new fixed guideway capital projects, small starts projects, or core capacity improvement projects that utilize public-private partnerships	Up to eight grants from state and local government agencies, including transit agencies.	80% Federal	Capital

POTENTIAL FUNDING SOURCES	DESCRIPTION	ELIGIBILITY	FUNDING MATCH/ REQUIREMENTS	CAPITAL/ OPERATING
Innovative Coordinated Access and Mobility Grants	Funding to support innovative projects for the transportation disadvantaged that will improve the coordination of transportation services and non-emergency medical transportation services.	Eligible applicants are organizations that are eligible to be recipients and sub-recipients of the Enhanced Mobility for Seniors and Individuals with Disabilities Program, (defined under 49 U.S.C. 5310): designated recipients, states and local governmental authorities, private nonprofit organizations, and operators of public transportation	80% Federal & 20% local can be in-kind contributions	Capital
Joint Development Program	Joint Development is the coordinated development of transit facilities with non-transit commercial and residential projects. The Joint Development program allows FTA grant recipients to use FTA capital grant program funds or FTA-funded real property for joint development.	An FTA grant recipient may propose a joint development project that either (a) will be financed with an FTA grant, or (b) will make use of project property that is subject to the federal interest	80% Federal	Capital / Operating
Technical Assistance and Workforce Development	Carry out technical assistance activities that enable more effective and efficient delivery of transportation services, foster compliance with federal laws, and improve public transportation service. Develop standards and best practices for the transit industry Address public transportation workforce needs through research, outreach, training, and the implementation of a frontline workforce grant program and conduct training and educational programs in support of the public transportation industry	Federal government departments, agencies, and instrumentalities of the government; Metropolitan Planning Organizations; state and local governmental entities; providers of public transportation; and national nonprofit organizations that have the appropriate demonstrated capacity to provide public transportation-related technical assistance.	80% Federal	Capital/ Operating



POTENTIAL FUNDING SOURCES	DESCRIPTION	ELIGIBILITY	FUNDING MATCH/ REQUIREMENTS	CAPITAL/ OPERATING
Pilot Program for Transit-Oriented Development Planning	Provides funding to local communities to integrate land use and transportation planning with a new fixed guideway or core capacity transit capital investment. The grants help organizations plan for transportation projects that connect communities and improve access to transit and affordable housing.	Eligible project partners and sub-recipients may include, but are not limited to: <ul style="list-style-type: none">Public transportation systemsPrivate for-profit and nonprofit organizations, including technology system suppliers and bus manufacturersOperators of transportation, such as employee shuttle services or airport connector services or university transportation systemsState or local government entitiesOther organizations that may contribute to the success of the project team including consultants, research consortia or nonprofit industry organizations, and institutions of higher educationStandard Development Organizations	80% Federal	Capital
Transit Asset Management	The TAM program enables transit agencies to implement strategic approaches to monitoring, maintaining, and replacing transit assets.	Any recipient or sub-recipient that owns, operates, or manages capital assets used for providing public transportation.	80% Federal	Capital

POTENTIAL FUNDING SOURCES	DESCRIPTION	ELIGIBILITY	FUNDING MATCH/ REQUIREMENTS	CAPITAL/ OPERATING
Public Transportation Innovation	Funding to advance innovative public transportation research and development.	Federal Government departments, agencies, and instrumentalities of the Government, including Federal laboratories; State and local governmental entities; providers of public transportation; private or non-profit organizations; institutions of higher education; and technical and community colleges.	80% Federal	Capital
FHWA Carbon Reduction Program (CRP)	<p>Funds for projects designed to reduce transportation emissions, defined as carbon dioxide (CO2) emissions from on-road highway sources. For example:</p> <p>A public transportation project eligible under 23 U.S.C. 142;</p> <p>A transportation alternative project including, but not limited to, the construction, planning, and design of on-road and off-road trail facilities for pedestrians, bicyclists, and other non-motorized forms of transportation</p>	<p>The BIL directs FHWA to apportion funding as a lump sum for each State then divide that total among apportioned programs. Each State's CRP apportionment is calculated based on a percentage specified in law. This is then apportioned to MPOs, and the state based on population. 65% of the funding is proportioned by population.</p> <p>Before obligating CRP funds for an eligible project in an urbanized area that is not a transportation management area, a State shall coordinate with any MPO that represents the urbanized area prior to determining which activities should be carried out under the project</p>	80% Federal	Capital



POTENTIAL FUNDING SOURCES	DESCRIPTION	ELIGIBILITY	FUNDING MATCH/ REQUIREMENTS	CAPITAL/ OPERATING
FHWA Carbon Reduction Program (CRP)	<p>Funds for projects designed to reduce transportation emissions, defined as carbon dioxide (CO2) emissions from on-road highway sources. For example:</p> <ul style="list-style-type: none">▶ Public transportation project eligible under 23 U.S.C. 142▶ A transportation alternative project including, but not limited to, the construction, planning, and design of on-road and off-road trail facilities for pedestrians, bicyclists, and other non-motorized forms of transportation	<p>The BIL directs FHWA to apportion funding as a lump sum for each State then divide that total among apportioned programs. Each State’s CRP apportionment is calculated based on a percentage specified in law. This is then apportioned to MPOs, and the state based on population. 65% of the funding is proportioned by population.</p> <p>Before obligating CRP funds for an eligible project in an urbanized area that is not a transportation management area, a State shall coordinate with any MPO that represents the urbanized area prior to determining which activities should be carried out under the project</p>	80% Federal	Capital
TSPLOST / Transit SPLOST	<p>Transportation Special Purpose Local Option Sales Tax (TSPLOST) funds for local transportation projects funded through a 1% sales tax.</p>	<p>TSPLOST:</p> <ul style="list-style-type: none">▶ Funds for transportation purposes, does not include operations & maintenance <p>Transit SPLOST:</p> <ul style="list-style-type: none">▶ The ATL approves/ denies all projects for Transit SPLOST▶ “Transit projects” means purposes to establish, enhance, operate, and maintain, or improve access to transit		<p>TSPLOST:</p> <p>Capital</p> <p>Transit SPLOST</p> <p>Capital/Operating</p>

MONITORING PROGRAM

To effectively track and measure the performance of the TMP recommendations, a Monitoring Program was established. This process provides a comprehensive method to monitor and quantify the implemented recommendations after the TMP is adopted.

SMART Planning Approach

In keeping with the national shift to a performance-based planning approach, the TMP performance monitoring program utilizes both the FTA recommended SMART approach and Douglas County’s recent shift to Key Performance Indicators reporting.

The **SMART approach** is defined as:

- ▶ Specific
- ▶ Measurable
- ▶ Agreed-upon
- ▶ Realistic
- ▶ Time-bound

This SMART principle focuses on the utilization of available data that will provide measurable results over a defined time period; data should have multiple applications and an undue burden should not be placed on staff to collect data or measure the results.

Based on the SMART planning approach, the recommendations of the TMP should be assessed on a regular basis to determine the current status, issues impeding the anticipated implementation schedule, and potential strategies to overcome these issues.

These assessments should be conducted a minimum of once per fiscal year, in conjunction with the annual budget development process. The SMART principles for each recommendation should also be applied following implementation, to ensure the anticipated outcomes of the program are performing as designed.

These thresholds should be established prior to implementation and ongoing performance results should be made available to officials, as well as the general public.

This approach provides full transparency and limits confusion if pilot programs are not able to continue due to poor performance.

Key steps to implementation of an effective monitoring process include:

- ▶ Identifying a program of projects for each fiscal year
- ▶ Assigning project managers and support staff
- ▶ Anticipating outcomes/targets for agency review and approval
- ▶ Setting achievable deadlines for program delivery and monitoring.



Monitoring Cycle & System

The monitoring cycle includes three phases: **Plan and Prepare**, **Implement**, and **Monitor**. During the planning and preparation phase goals and metrics are assigned. Critical evaluative data are collected before, during, and after implementation of recommendations to establish baseline statistics and to track changes in key performance indicators over a set timeframe.

The monitoring program identifies three types of data including **quantitative**, **qualitative**, and **evaluative**. Utilizing this strategic collection of data sources establishes the platform for performance based analysis while also providing an equitable measure of success for accessibility and quality of life factors.

The following figure summarizes the monitoring program for tracking performance measures

Figure 6-4. Performance Based Monitoring Program



Quantitative Performance Monitoring

According to The FTA Performance Measures for Public Transit Mobility Management, the following data must be collected in order to measure the performance of an urban transportation system.

The collected information is used to develop industry standard performance measure variables including the following examples.

- ▶ Revenue hours (All Modes)
- ▶ Revenue miles (All Modes)
- ▶ Vehicle hours (All Modes)
- ▶ Vehicle miles (All Modes)
- ▶ Passengers / Trips (All Modes)
- ▶ Passenger miles (All Modes)
- ▶ Operating expense (All Modes)
- ▶ Accidents—major and non-major (All Modes)
- ▶ Requested trips (DR and Flex)
- ▶ Scheduled trips (DR and Flex)
- ▶ Completed trips (DR and Flex)
- ▶ Cancellation—advanced, same day, and late (DR and Flex)
- ▶ No-show (DR and Flex)
- ▶ Missed trip (DR and Flex)
- ▶ Trip denial (DR and Flex)
- ▶ Trip length (All Modes)
- ▶ Travel time
- ▶ Complaints
- ▶ Operating cost per passenger trip and mile
- ▶ Operating cost per vehicle hour and mile
- ▶ Passenger revenue per total operating cost or fare recovery ratio
- ▶ Unlinked Passenger trips per vehicle hour and miles
- ▶ Accidents per 100,000 miles
- ▶ No-shows per scheduled trips
- ▶ On-time pick-ups to total pick-ups (on-time performance)
- ▶ Complaints per 1,000 passenger trips
- ▶ Average trip length
- ▶ Average vehicle travel time
- ▶ System speed
- ▶ Response time
- ▶ Trip denials per trip requested
- ▶ Vehicles operated at maximum services (VOMS)
- ▶ Regular service days for each month

While much of the required data is already routinely collected for Connect Douglas, key data collection technology upgrades were recommended in the first year of the TMP implementation schedule to ensure that the data needed for effective and accurate quantitative reporting can be collected for enhanced performance monitoring.

Qualitative Performance Monitoring

In 2020, FTA published additional performance monitoring criteria in FTA Report No. 0152 Mobility Performance Metrics (MPM) for Integrated Mobility, which is presented here.

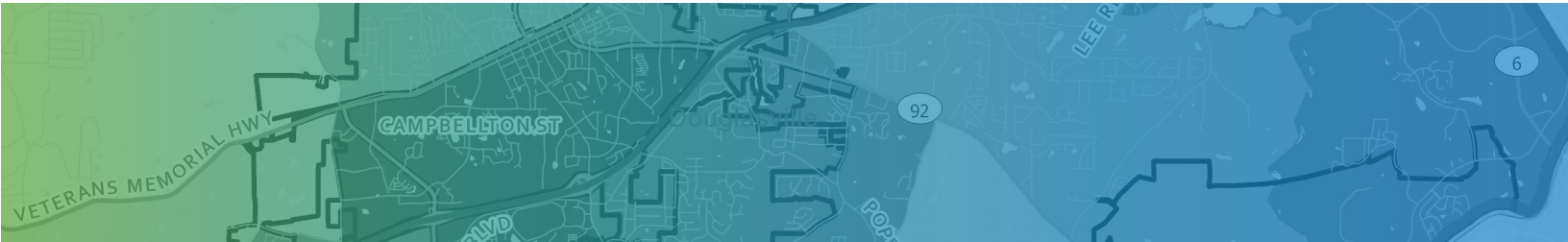
“The goal of developing and using a new set of performance metrics is to measure how well an integrated mobility system meets the needs of individual travelers, how well the system performs while meeting overall travel demand, and what the system’s impact is locally and nationally. By measuring transportation performance from the traveler’s perspective, agencies and operators can be incentivized to improve service based on what matters most to travelers.

In addition, performance metrics should be selected and designed to evaluate progress toward an agency’s overall goals and objectives. As such, it is important to reassess public transportation’s goals, how progress toward those goals can be measured comprehensively from traveler and system perspectives, what the federal government’s role is in setting national transportation goals, and facilitating progress toward the achievement of national goals.”

The following qualitative assessment criteria were developed based on applicable FTA recommended metrics and should serve as a foundation for evaluating the TMP performance.

SURVEY RESPONSE METRICS

- ▶ Ease of Use
- ▶ Accuracy of Predicted Wait Times
- ▶ Accuracy of Predicted Journey Time
- ▶ Availability of Accurate and Reliable Information
- ▶ Safety and Security
- ▶ Customer Satisfaction:
 - Travel time
 - Wait time
 - Connecting Time
 - Cost / Price
 - Mobile App Purchases Initiated vs Completed
 - Percentage of Population with Transit Access
 - Number of Incidents
 - Net Job Growth within Proximity to Transit Services
 - New Access to Essential Amenities
 - First and Last Mile Connectivity (measured in investment levels)



Additional resources including performance management tables are included in the Data Assessment tool kit provided by FTA and should be utilized to track and monitor performance for all recommended improvements.

7 CONCLUSION

WHY WAS THE TMP CREATED?

Douglas County developed the county's first Transit Master Plan (TMP) since the implementation of transit service to serve as a road map for improving public transit to meet the current needs and future goals for the community. Understanding the goals, existing conditions, potential solutions, and path to implementation provides the foundation from which Connect Douglas can grow and flourish.

- **1** Promote local and regional connectivity
- **2** Enhance mobility for all travelers through equitable transit investments
- **3** Leverage transportation to enhance community health and quality of life
- **4** Promote economic growth by coordinating transportation investments with land use
- **5** Provide safe and accessible transportation facilities for all
- **6** Maximize operational and service efficiencies

What Does the TMP Do?

- ▶ Informs County decision-makers of the most effective way to address public transportation needs while leveraging available funding to increase ridership and improve performance.
- ▶ Identifies short-, mid-, and long-term transit priorities.
- ▶ Provides direction and guidance for how Douglas County should enhance its public transportation program to best support continued growth and economic development.
- ▶ Serve as a tool to inform County and City officials, as well as residents, about future public transportation needs, projects that address those needs, and the cost and benefit implications of those projects based on an evaluation of potential funding sources.

WHY SHOULD CONNECT DOUGLAS MOVE TOWARD IMPLEMENTATION?

The Connect Douglas TMP provided a forum for discussion amongst officials, stakeholders, transit providers, and members of the public to express their goals and priorities for the community and the role transit plays in achieving those goals.

Douglas County residents and leaders share a common vision of a thriving and healthy community with connectivity serving as a fundamental component for future growth and success. Investments in transit and multi-modal infrastructure will serve as a critical component of a comprehensive and connected transportation system as the county continues to grow and transportation needs continue to shift.

Making the case for transit varies based on the unique characteristics and needs of each community, however four key factors remain consistent: Economic Return on Investment, Reduction in Travel Time Delays / Congestion, Improved Independence and Opportunity, and Healthier Communities.

Economic Impact

Access to jobs improves local employment rates and reduces dependence on public support funding. Every \$1 billion spent on public transportation yields \$2.9 billion in business and sales volumes.

- APTA Economic Impacts of Public Transit

Independence and Opportunity

Vulnerable populations depend on public transportation to remain connected to the community and maintain access to basic goods, services, and opportunities.

Douglas County's community has a high rate of independent seniors, youth, and adults living below the poverty line that are statistically more likely to depend on public transportation.

A connected community allows aging populations to remain independent, promotes safe and healthy options for the youth, and elevates the most vulnerable populations through greater access to opportunities.

Traffic and Congestion

Atlanta Regional Commission Travel Demand Model predicts X% increase in Average Annual Daily Traffic by the year 2050 which will include increased vehicle trips, longer vehicle delays, and substantial financial investment in upgraded vehicular infrastructure.

Investments in local and regional transit options serves as a critical component to offset the negative impacts of vehicular traffic on the local road network and the associated omissions degrading

Healthier Communities

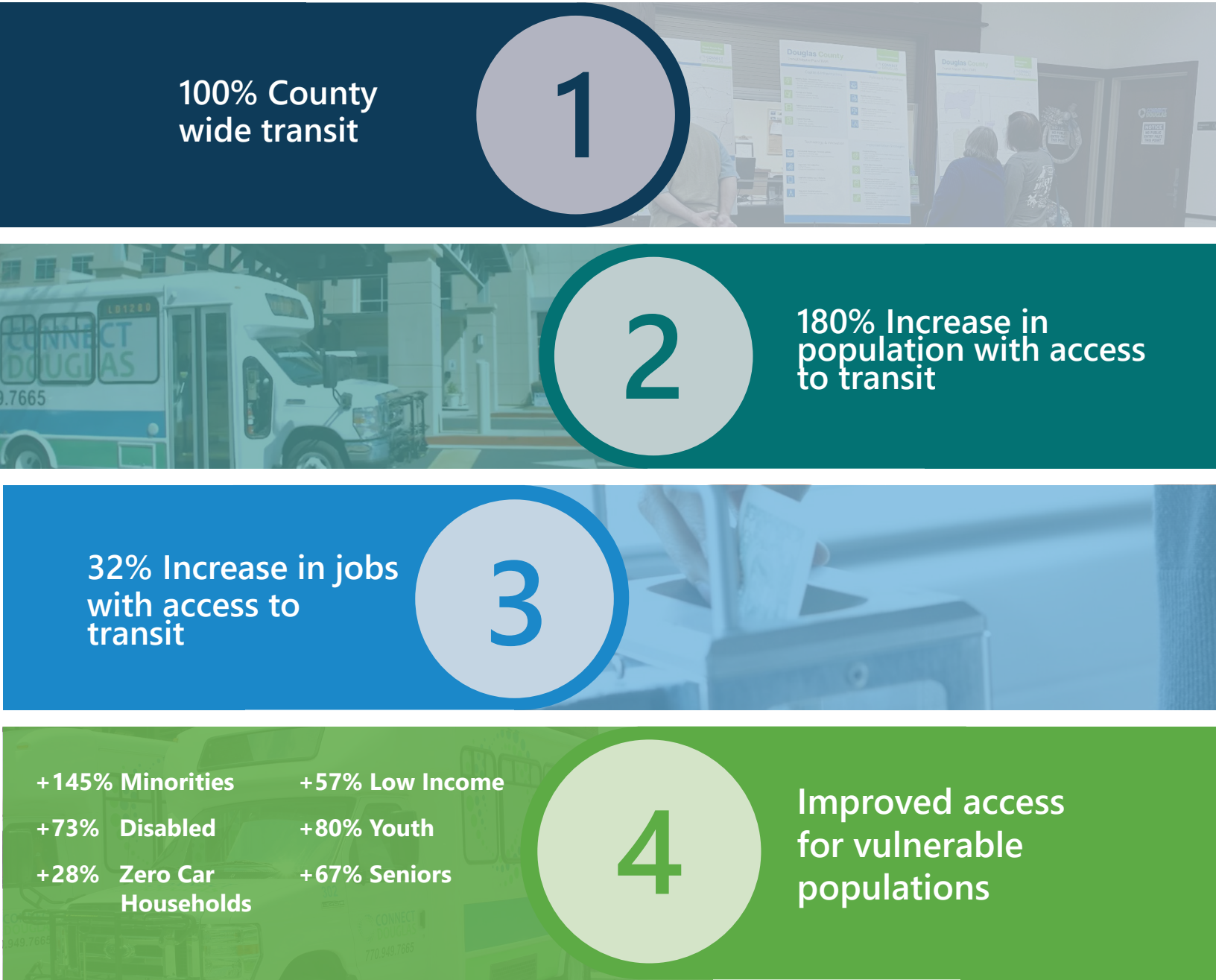
Transportation impacts community health in two fundamental ways. Congestion caused by traffic delays is degrading to air quality and contributes to the global environmental crisis, and lack of transportation options directly results in limited access to healthy foods, medical services, and preventative care.

Investments in public transportation and supporting multi-modal infrastructure are statistically proven to improve community health through reduced vehicular emissions and by enhancing access to fresh foods and medical.

WHAT WILL RESULT FROM IMPLEMENTING THESE IDEAS?

The resulting transit system will expand transit services to the current and projected residents and workers in Douglas County, providing enhanced opportunities for residents to more easily reach their destinations and age in place, as well as movement of the workforce for existing and potential employers.

Increasing the services provided by Connect Douglas will enhance the quality of life in Douglas County.





connectdouglas.com/DouglasCountyTMP