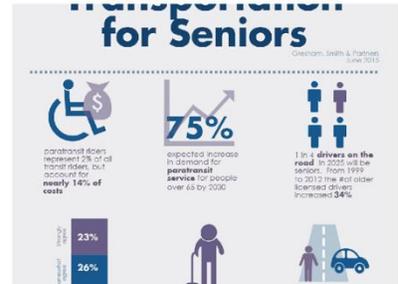
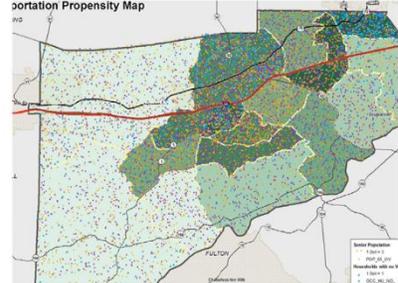




DOUGLAS COUNTY

TRANSPORTATION SERVICES STUDY

A Project Sponsored by the Douglas County Board of Commissioners



FINAL REPORT

DOUGLAS COUNTY TRANSPORTATION SERVICES STUDY

PREPARED FOR THE DOUGLAS COUNTY BOARD OF COMMISSIONERS

Prepared by Gresham, Smith and Partners in cooperation with VHB, Inc.

January 2016

Douglas County Transportation Services Study

This report is the final product of the Douglas County Transportation Services Study, commissioned by the Douglas County Board of Commissioners.

Prepared January 2016

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**Federal Transit
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EXECUTIVE SUMMARY

Over the past ten months, the Douglas County Transportation Services Study, led by the County's Multi-Modal/Rideshare Division, provided an **opportunity for County leaders and residents to help determine how well the current transportation services provided by the County and others are meeting residents' needs**. The study also helped the County and its citizens think about the **factors** that are **influencing residents' future transportation needs**. Such factors include the projected growth of the County, increases in its senior population, desired growth in jobs, and other changes. For the study, the project team:

- Evaluated the existing transportation services available to County residents,
- Analyzed important data, such as population and employment trends, statistics on certain sectors of the population, including seniors, disabled people, part-time workers, and others,
- Studied travel patterns within the County and to/from adjacent counties, and
- Researched case studies of similar transportation systems in Georgia and other states.

The study describes various types of **new transportation services** that could be put into place to serve the County as well as **suggestions for improving existing services and facilities**, such as the Multi-Modal Transportation Center and park-and-ride lots, to attract more users.

Under the direction of the County's Board of Commissioners, the study's **primary focus was on interacting with and listening to citizens and community members** about how existing services should be improved and how and where new services could meet specific needs, such as enabling more seniors to access medical care and shopping locations; helping workers access jobs; helping households with one or no vehicles get around; and other activities. The study sought to develop and evaluate a menu of transportation service options that had broad community support in order to make sure that County investments meet residents' travel needs and are targeted to the most important needs now and in the future. In this way, the study was able to consider transportation options for people regardless of age, income, ability, or travel purpose and to identify a comprehensive, flexible program of services that are able to be modified according to needs, technology, mobility, and resources.

Approach

- Focus on mobility and services for all areas of the county
- Identify a menu of viable options that are affordable and meet identified needs
- Address a range of trip purposes
- Ensure options are flexible to adapt to changing needs, demographics, and technology
- Build upon prior efforts to serve the mobility needs of residents
- Leverage existing and future services and assets
- Expedite implementation of new and improved services and facilities

The project team conducted extensive research to identify potential options, including expanded vanpool services, new flexible zone shuttle service, demand responsive transportation services, more park-and-ride lots to support carpooling, as well as community-based and volunteer programs to provide more choices. All of the options studied were based on public feedback received about gaps in current service. The result is a dynamic family of options that, when implemented, will help improve mobility throughout Douglas County.

Community Engagement

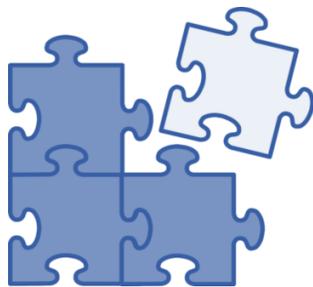
Through a series of engaging activities, including **attending community events**, holding **public meetings** and **town hall** events, **interviews** of community leaders, and an **online survey**, the study team gathered **input from over 1,400 community members** representing a range of people in terms of age, background, geography, and travel needs.

The goal of public involvement was to get input from a range of people and to make it convenient to participate. More than 80 people attended meetings in-person. Over 1,100 people completed the online survey and 875 individual comments were recorded throughout the study. The team spoke with hundreds of people at events and interviewed dozens of community leaders. One of the key outcomes of the public involvement activities was identifying what County residents' value most in transportation services. When asked about important characteristics of high quality transportation services, the top results were **affordability of services** for users and the **cost to the County**, **safety** and **security**, especially in parking areas, and **well-maintained vehicles**.



Figure 1-1. A study team member talking with residents at the Hydrangea Festival.

Fitting the Puzzle Together: A Menu of Transportation Options



This study identifies transportation service options that will improve accessibility and mobility for all Douglas County residents, especially those with transportation limitations such as senior citizens, residents with limited incomes, and people with disabilities. Recommendations were developed to work in concert with one another to provide transportation choices and improve mobility for all residents. They include the introduction of **new services**, enhancements to **existing services**, **capital projects**, and **programming** and operational **activities to support services** and programs that will benefit **all Douglas County residents**.

The study's recommendations represent a range of short, intermediate, and longer term actions to carry out services, projects, and activities. The service recommendations are designed to be integrated with and complement each other in a comprehensive system of transportation options. Each option is flexible and can adapt to changing needs of community members, funding priorities, and public and user feedback. The information in this report will help Douglas County prioritize, develop service or action plans, and implement new services according to County priorities and available resources. Cost estimates and actions steps are provided to facilitate prioritization and phased implementation of new and enhanced services.

Recommendations

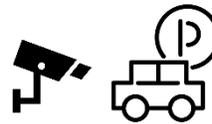
Modes and Services

- Flexible Zone Circulator (*new*)
- Demand-Response / Dial-a-Ride (*new*)
- Volunteer Transportation Program (*new*)
- Expansion of Vanpool Program (*enhancement*)
- Explore Possibility of Additional GRTA Xpress Bus Service (*enhancement*)
- Partnerships with Private Companies Providing On-Demand Service (*new*)



Capital Projects

- Additional Park-and-Ride Lots (*new*)
- Upgrades to Multi-Modal Transportation Center and Existing Park-and-Ride Lots (*enhancement*)
- Bicycle and Pedestrian Facilities (*new/enhancement*)



Programming and Management

- Marketing and Promotional Campaign (*new*)
- Integrate use of Real-Time Information and Mobile Applications (*new/enhancement*)
- Update County Website (*enhancement*)



Other Recommendations

- Expand Voucher Program for Seniors and People with Disabilities (*enhancement*)
- Add Operational Staff to Support Enhanced and New Services (*enhancement*)
- Increase Institutional Support for Transportation Services
 - Transportation Services Task Force (*new*)
 - Regular Transportation Services Briefings for County (*new*)
 - Communications Strategy (*new*)
- Electronic Asset Management (*new*)
- Explore Possible Mutually Beneficial Arrangement with Douglas County School System (*new*)

More information about the transportation in Douglas County and about the study can be found on the Douglas County website, www.DCTRansportationStudy.com.

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CHAPTER 1 INTRODUCTION

1.0 Overview

The Douglas County Transportation Services Study (“the study”) was designed to identify and evaluate the transportation services and needs of Douglas County citizens. Over the course of the year-long study, various inventory, research, assessment, analysis, and public engagement activities were conducted in order to assess the current state of transportation services, to understand and identify needs now and in the future, and to develop recommendations and implementation strategies for consideration by the County’s Board of Commissioners.

1.1 Purpose and Goals

The Douglas County Board of Commissioners commissioned this study in order to identify and develop a family of transportation options for consideration including possible new services or programs as well as to enhance and improve the existing vanpool program and other services. The County also wanted to consider rebranding existing programs to bring them into alignment with regional efforts, while at the same time retaining local control and local management of the services and a local identity. Specifically, the purpose of the TSS was to:

- **Identify improvements** for accessibility and mobility for all the citizens of Douglas County, with an emphasis on highlighting the needs of senior, disabled, and lower income citizens;
- **Examine the current state of transportation services** available to County residents, and **identify potential gaps** in service and/or population served;
- **Assess** the nature and extent of **current and potential future services**;
- **Identify potential new products and services** that could meet the identified needs now and into the future;
- **Gauge residents willingness to use and pay for** new services; and
- **Provide recommendations** for how the County can **meet transportation needs** and **a plan for implementing services** to address identified needs.

A major focus of the study was to work with and gather input and feedback from a broad range of Douglas County residents, employees, and other stakeholders. Throughout the process, the County and project team remained committed to a public involvement program that provided multiple avenues for stakeholders to learn about and participate in the study, providing meaningful input into the effort.

1.2 Planning and Study Process

The study, which took place from April 2015 to December 2015 was led by the County's Project Manager, Gary Watson, Director of the Multi-Modal Transportation Division and Rideshare Services. The County hired its consultant, Gresham, Smith and Partners (GS&P) to conduct the study. VHB, Inc. served as sub-consultant on the study. Working closely with the County Project Manager, the team developed a scope of work focused on documenting existing conditions, assessing and evaluating current conditions and potential alternatives, getting input from the community, and creating an implementation plan. The study comprised the following phases and tasks:

- Inventory and assessment of **existing conditions** (demographics, special populations, prior or existing plans and studies, existing services, and travel patterns);
- **Alternatives analysis** (case studies, interviews, menu of possible options, funding opportunities, economic and business opportunities, evaluation of alternatives);
- **Public involvement** (project kick-off, contact database and project updates, "pop-up" public information events, commission district meetings, open houses, online surveys, meetings with service providers/agencies, and community leader interviews); and
- **Implementation** (development of a strategy and action steps, cost estimation, final study report).

Throughout the course of the study, the project team met regularly with the County's project manager. Often these meeting corresponded with key project milestones and activities. Monthly progress reports kept the County Project Manager up-to-date on the status of tasks and progress of the study. On the following page is a list of key milestones accomplished during the course the study.

Table 1: Public involvement activities that were part of the study.

Activity	Summary	Date
Project Kick-Off	Introduction to project and explanation of approach and process; hand out survey; begin compiling database; Q&A.	April 7, 2015
District 2 Kick-Off	Introduction to project and explanation of approach and process; Q&A.	April 15, 2015
Online Survey	Gathered input from community about use of existing services and priorities for potential future services.	April – June 2015
Service Agency Meeting	Met with representatives from the County’s Accountability Court (Juvenile Services) and Senior Services Division to understand the transportation needs of their constituents and clients, as well as to get input on public involvement outreach and activities.	May 13, 2015
“Pop-Up” Event	Attended Douglas County Senior Picnic to tell citizens about the study, hand out fact-sheet, and get input via survey and activities.	May 21, 2015
“Pop- Up” Event	Attended Penny McHenry Hydrangea Festival to tell citizens about the study, hand out fact-sheet, and get input via survey and activities.	June 6, 2015
Assessment of Rideshare Operations	Telephone interview with Rideshare staff to gain insight into and clarification about Rideshare programs, services, and detailed operations.	August 7, 2015
Presentation to Board of Commissioners	Presentation to the Board of Commissioners with update on project status, including accomplishments to-date and next steps.	August 17, 2015
Progress Report	Prepare a progress report for the County Commissioners and public that describes accomplishments to-date and potential transportation service options being considered, as well as next steps. It was sent out via email and published on the project website.	September 2015
“Pop-Up” Event	Attended Gold Rush Festival in Villa Rica to assess early reactions to preliminary service ideas and recommendations. Conducted an interactive activity that asked participants how likely they would be to invest in services given their travel needs.	September 12, 2015
District Town Hall	Presentation on status of project and accomplishments to-date, followed by introduction to preliminary service ideas and concepts. Interactive break-out sessions and a questionnaire were used to gather input and gauge support for potential options.	September 28, 2015
District Town Hall	Presentation during regular Town Hall meeting on status of study. The presentation included a brief overview of preliminary service ideas and concepts. Attendees filled out questionnaires to help provide input and gauge support for potential options.	October 1, 2015
Progress Report	Prepared a progress report for the County Commissioners and public that provided an update on accomplishments, including Town Hall meetings. It was sent out via email and published on the project website.	October 2015
Community Leader Interviews	In-person and telephone interviews with key leaders representing government agencies and departments as well as major employers and important community groups.	September – November 2015

1.3 Project Context

Douglas County has been growing at a relatively steady pace since the 1960s. Projections show that as Metro Atlanta continues to grow, so too will Douglas County. The Douglas County population grew from 16,741 in 1960 to 133,486 in 2014 – a 697% increase. The Atlanta Regional Commission (ARC) projects that Douglas County will continue to grow over the next 25 years, reaching more than 200,000 people by 2040 (a 49% increase over 2014 population).

The County's *Comprehensive Plan* (2013) cited several challenges facing the county, including: preserving character and rural areas, while allowing for growth; provision of services to senior citizens; and workforce development. These themes were reiterated during the course of the Transportation Services Study. Key issues identified include transportation services for senior citizens; maintaining the character of various areas of the County, while staying economically competitive; providing connectivity between different areas of the county; better access to jobs, and to existing regional transportation services; relief from heavy traffic along major roadways; and the need to address the lack of options for people who are unable to drive.

As the U.S. population grows, the size of each generation of people continues to shift. Many of the 77 million people born during the Baby Boom (following World War II, generally from 1946 to 1964) are becoming senior citizens – the oldest of them being 69 in 2015. The older adult population in Metro Atlanta doubled between 1970 and 1990, and by 2030, one in five residents is expected to be over the age of 60. In Douglas County, currently adults age 65 and older make up about 9% of the population¹ and are growing in number in all areas of the county.

As people live longer, they are working later into life. The median age of the US workforce has risen and is projected to continue to rise through the year 2022, going from early 30s to age 42.² They are also outliving their ability to drive safely and must rely on forms of transportation other than driving. A 2002 study in the *Journal of Public Health* found that, on average, men in their 70s will need alternative transportation for up to seven years and women for ten years. Yet many people do not have access to alternatives. An analysis of Census data, by the organization Transportation for America, found that up to 90% of seniors ages 65-79 in Metro Atlanta were expected to have poor access to public transportation in 2015. This limited access is compounded by other factors and can have an overall negative effect on quality of life, including possible isolation from family, friends, and the community, and missed health care appointments. The group Community Transportation Association of America estimates that seniors who no longer drive make 15% fewer trips to the doctor and 59% fewer trips to visit friends and family.³

**In the U.S.,
1 in 5
people lives
with a disability**

Research data shows that an estimated one in five Americans currently lives with a disability. Census data show roughly 14,000 people in Douglas County or 11% of the total population, have a disability. Access to medical care and travel for day-to-day necessities may be even more difficult for these individuals, causing a rise in demand for transportation services to meet these needs.

¹ American Community Survey 5-year Estimates 2009-2013.

² <http://web1.ctaa.org/webmodules/webarticles/articlefiles/Trends2015.pdf>

³ <http://t4america.org/docs/SeniorsMobilityCrisis.pdf>

At the same time, communities must also consider the shifting needs and preferences of younger populations. The Census Bureau projects that during 2015, the Millennial generation (generally those born 1981 to 1997, also called *Generation Y*) is likely to become the biggest age cohort in the U.S., with 75 million people. Many studies have been done and articles have been written about this population group and reveal differing trends. However, many resources conclude that younger generations, including people up to age 40, are driving less than previous generations:

- The percentage of high school seniors with drivers' licenses has decreased from 85% in 1996 to 73% in 2010;⁴
- Nearly 70% of Millennials report using multiple modes of transportation in a given week;⁵
- About 15% of respondents to a survey of Generation Y member by the Urban Land Institute (ULI) say they have used Zipcar or other car sharing services, and 22% of them say they would use such options if they existed in their communities.⁶

Congestion is another key issue facing Douglas County. The county experiences heavy traffic, especially during commute periods, along Interstate 20 (I-20) and other important roadways, including SR 6/Thornton Road, Campbellton Street/Chapel Hill Road, and around the intersection of Bright Star Road and SR 5/Bill Arp Road, among others. This is certainly not unique to Douglas County. Metro Atlanta area residents waste 52 hours each year in traffic, according to this year's *Urban Mobility Scorecard*, published by the Texas A&M Transportation Institute.⁷



*Texas A&M Transportation Institute, 2015
Urban Mobility Scorecard*

Affordability of transportation services is also a key factor to consider. While more than half of households in Douglas County earn more than \$50,000 annually, significant percentages of households spend more than 35% of their monthly income on mortgages (28.4% of households with mortgages) and on rent (42% of rental households). In general, a rule of thumb in assessing housing affordability is whether the percentage of household income spent on housing is one-third or less. Households that spend more than one-third of their income on housing are often faced with difficult choices about other routine expenses, including transportation.

Research also points to an increasing number of jobs located in suburban areas, a rise in the number of voluntary part-time workers who may have atypical schedules, and the challenges for lower-income suburban commuters in accessing middle-skill jobs. All of these factors point to the potential need for transportation services.

Several factors are changing attitudes about transportation throughout the US population:

- Technology and the use of real-time information – for tracking vehicles, finding or matching rides;
- Use of managed lanes – which encourage carpooling;

⁴ AAA Foundation for Highway Safety

⁵ *Millennials and Mobility*, APTA, <http://www.aarp.org/content/dam/aarp/livable-communities/old-learn/transportation/apta-millennials-and-mobility.pdf>

⁶ <http://uli.org/wp-content/uploads/ULI-Documents/Gen-Y-and-Housing.pdf>

⁷ Published annually: <http://mobility.tamu.edu/ums/>.

- Rising costs of paratransit service;
- Congestion resulting from rapid growth;
- Environmental pollution; and
- The growth of the so-called “sharing economy.”

Deloitte University Press published an online tool called the *Alternative Transportation Atlas* and a companion report entitled, “*Smart Mobility: Reducing congestion and fostering faster, greener, and cheaper transportation options.*”⁸ The report estimates the potential benefits of expanded ride-sharing and other “smart mobility” strategies in 171 metro areas across the country, including Metro Atlanta (which included Douglas County). It estimates that with the right conditions, more than 500,000 commuters could potentially share rides, benefitting from collective savings of approximately \$391 million in direct operating costs, \$22 million in fuel costs, and \$283 million in delays due to traffic congestion.

It is in this context that Douglas County undertook the Transportation Services Study, seeking to identify the particular transportation challenges facing the County and its residents and employees, and to identify potential solutions to those challenges, not just in terms of infrastructure, but in terms of services that can increase accessibility, connectivity, and mobility throughout Douglas County.

See Appendix A for a collection of related research and recommended technical resources on these topics.

⁸ <http://dupress.com/articles/smart-mobility-trends/>

CHAPTER 2 EXISTING CONDITIONS

2.0 Overview

This chapter summarizes the existing travel, demographic, and other conditions in Douglas County today to help identify transportation needs of all residents and to use in developing potential options for new and/or improved services. It looks at the general characteristics and demographic composition of Douglas County, as well as factors that affect mobility such as employment, income, commuting patterns, the transportation networks and services available to Douglas County residents and employees. In an effort to ensure that this study takes into account the needs of **all** Douglas County residents, the report pays special attention to people with limited mobility – those who are unwilling or unable to drive because of age, income, lack of vehicles, ability, or other reasons. It also addresses previously written plans for the area, current travel patterns and services, and explores potential options for the future. The full *Existing Conditions Technical Report* is available on the [Douglas County website](#).

This chapter is organized as follows:

- 2.1 Douglas County Profile
- 2.2 Prior and Ongoing Plans and Studies
- 2.3 Existing Services and Travel Patterns

The study area for this analysis includes all of Douglas County and a three-mile buffer area around the county boundary, as shown below. The intent of the three-mile area of influence outside of Douglas County is to facilitate coordination of potential service options with neighboring jurisdictions and the Atlanta region as a whole.

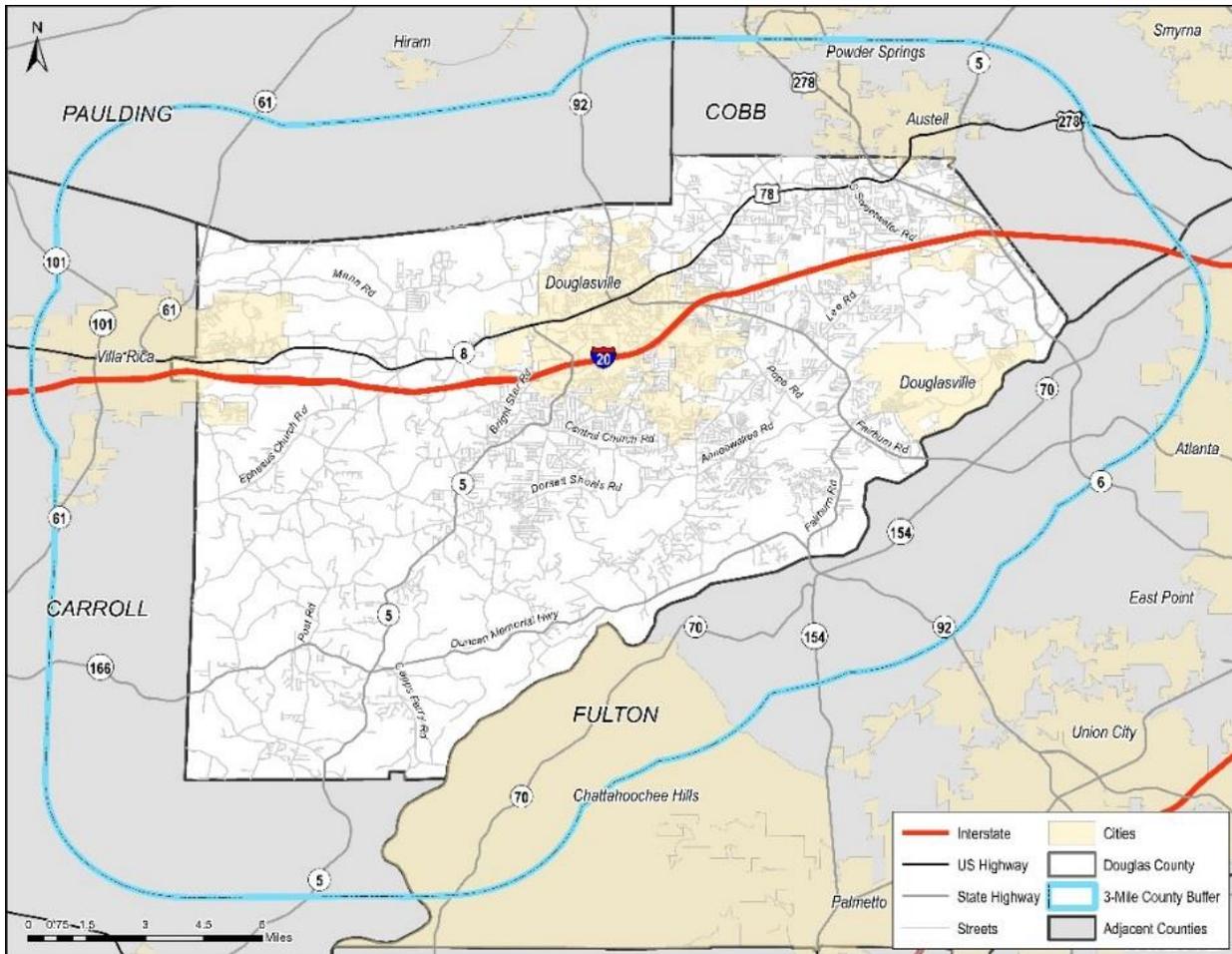


Figure 2-1: Study area with three-mile buffer.

2.1 Douglas County Profile

Douglas County, Georgia is located just west of the City of Atlanta, outside of Interstate 285 (I-285), locally known as “the Perimeter,” that rings in-town Atlanta neighborhoods. Douglas County is part of the ten-county metropolitan region, as well as the Atlanta-Roswell-Sandy Springs Metropolitan Statistical Area (MSA). Douglas County benefits from its close proximity to many employment centers and the City of Atlanta, as well as Hartsfield-Jackson Atlanta International Airport.

Today, Douglas County is characterized largely by suburban and rural land uses, including residential neighborhoods and subdivisions with a variety of



Figure 2-2: Douglas County Courthouse and government offices.

housing types, transitional and commercial corridors, and neighborhood centers. It also includes industrial sites, a significant regional mall (Arbor Place Mall), and numerous natural and recreational assets, including Sweetwater Creek State Park, the Clifton Nature Preserve, as well as several water bodies, including the Dog River. There is a county government complex, including the County Courthouse and county offices located immediately east of the Douglasville Medical Center, home to Wellstar Douglas Hospital, along Hospital Drive. The County's largest senior center and the County's Multi-Modal Transportation Center are also both located in this area.

Population Trends

Douglas County experienced rapid population growth during the 1970s and 1980s, growing by about 90% from 1970 to 1980 and by about 30% from 1980 to 1990, according to the Atlanta Regional Commission's (ARC) population estimates.⁹ Even during the Great Recession of the late 2000s, Douglas County's population grew. By the 2010 Census, population had grown to 132,403 and as of 2013, Douglas County was home to approximately 133,486 people according to American Community Survey five-year estimates. The ARC projects Douglas County will continue to grow over the next 25 years, reaching more than 200,000 people by 2040, or about 50% over its current level.

According to the 2010 decennial census, Douglas County is 53% white/Caucasian, 40% black/African American, 1% Asian, and 6% mixed or other races. About 8% of residents are Hispanic or Latino. ARC forecasts predict that the county will continue to grow more diverse over the next 25 years as many other communities across the U.S. will.

Douglas County is also growing in both the oldest and youngest subsets of the population. The median age of County residents is 35.3 years – about one year older than in Carroll and Paulding Counties, but one to two years younger than in Coweta and Cobb Counties. Douglas County's senior population (age 65 and older) rose by 38% from 2000 to 2010, and accounts for roughly 12% of the total population as of 2013. The percentage of children under 18 has also grown slightly, increasing from 27.6% in 2000 to 28.3% in 2010, and was estimated to be holding steady at about 27.9% in 2013.

⁹ The Atlanta Regional Commission (ARC) is the regional planning and intergovernmental coordination agency and designated Metropolitan Planning Organization (MPO) for the 10-county Atlanta region. ARC engages in a variety of planning and transportation activities, including providing demographic data and forecasting.

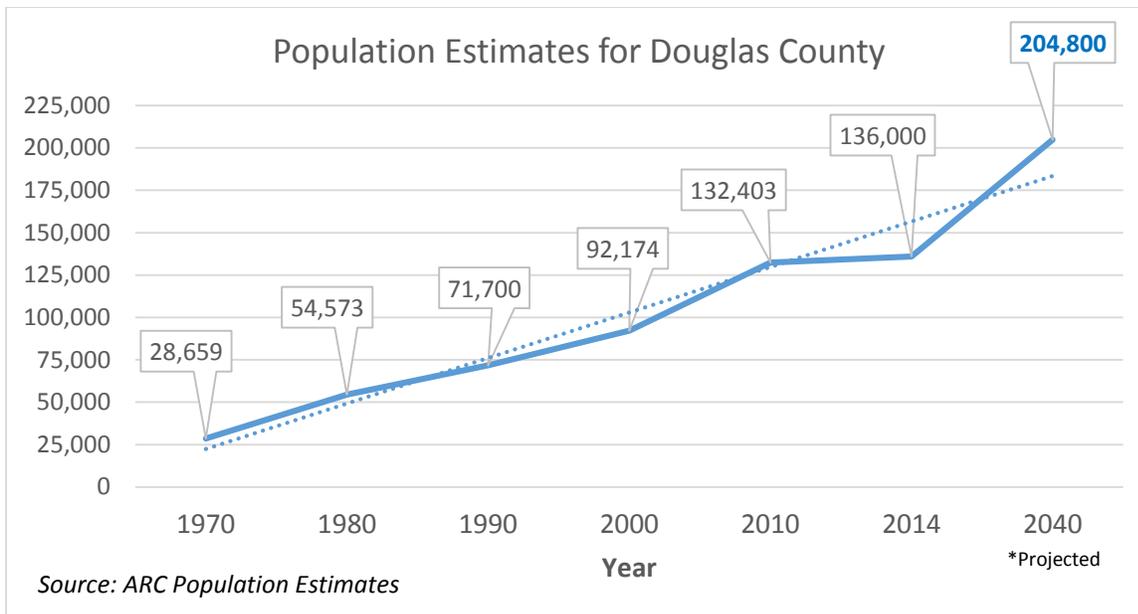


Figure 2-3: Population estimates 1970-2040.

Median annual household income in Douglas County was \$52,691 according to the American Community Survey five-year estimates (2009-2013). This is slightly lower than median annual household income for the Atlanta-Sandy Springs-Roswell MSA, which was \$56,605 over the same period. Compared to neighboring counties, Douglas is generally in the middle: median annual household income for the same period in Paulding County was \$61,837 and in Carroll County it was \$46,147.

About 16% of all individuals in Douglas County had below-poverty income during this same period. Poverty rates for families with children under 18 was slightly higher (19.7%), and poverty among senior adults over age 65 was lower (10.1%). Overall, Douglas County has slightly more residents living in poverty than the Atlanta-Sandy Springs-Roswell MSA, where about 15% of all individuals, 17% of families with children, and about 9% of seniors age 65 and older had income below the poverty level. Poverty in neighboring counties is both more and less prevalent. Paulding County has a slightly lower percentage of poverty overall, with 11% of all individuals, 13% of families with children, and 10.5% of seniors earning income below the poverty level. In Carroll County, percentages are slightly higher: 19% of all individuals, 20% of families with children, and 11% of seniors are considered low-income.

Transportation and Travel Patterns

Douglas County is bisected by I-20 which runs east-west along the entire length of the county, and has seven interchanges within Douglas County. Other major roads serving Douglas County include US 78 (Bankhead Highway), which runs parallel to and north of I-20 and provides connections to the surrounding counties and employment centers. State roads serving the county include SR 92/Fairburn Road, SR 5/Bill Arp Road, SR 6/Thornton Road, SR 166/Duncan Memorial Highway. SR 92 is a major north-south corridor, providing important connections between perpendicular east-west roads throughout the County, while SR 6 is a major link to the Hartsfield-Jackson Atlanta International Airport, I-20, and the Norfolk Southern Whitaker Intermodal Terminal in Austell.

Most people use a personal car to get around Douglas County for getting to work and for other daily activities. In fact, 79% of workers drive alone to and from work on a daily basis. About 12% carpool, and 5% of workers work at home. More than 35,000 people, or about 60% of workers in Douglas County, commute out of Douglas County to other counties and to Alabama every day for work. ***This is a higher proportion of out-of-county commuters than in all of the neighboring counties except for Paulding.*** While the average commute time for Douglas County residents is fairly typical of the national average – 32 minutes – more than 40% of workers spend between 30 and 60 minutes getting to and from work each day, and 14% commute more than one hour each way.

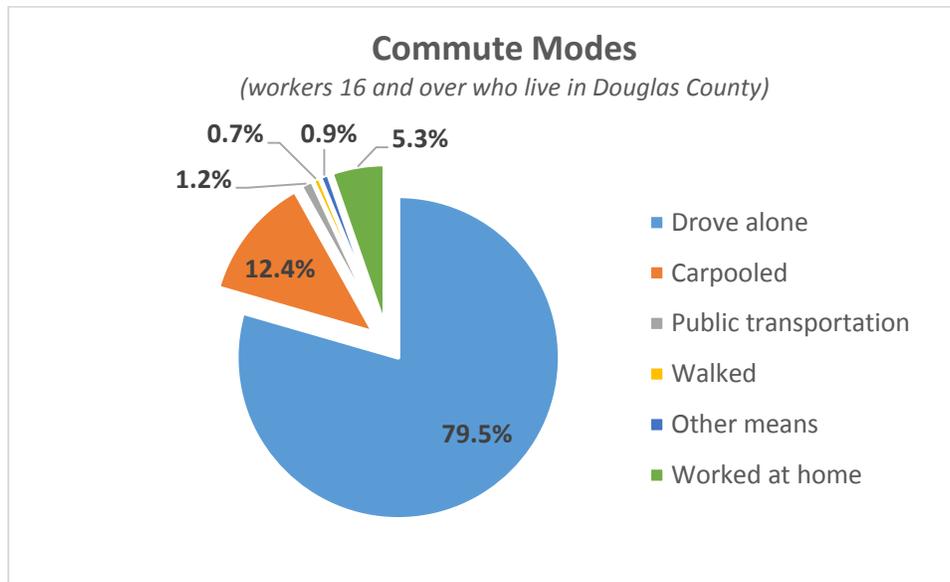


Figure 2-4: How Douglas County workers travel to and from work.

The County’s Multi-Modal Division Rideshare Services operates a commuter-oriented vanpool program, provides transportation assistance to senior adults and individuals with disabilities through a voucher program, offers carpool- or ride- matching assistance, and is involved in local and regional transit and transportation planning activities. The division also builds and maintains commuter facilities, including the Multi-Modal Transportation Center in Douglasville and four park-and-ride lots along the I-20 corridor.

As of 2015, the vanpool program has 58 commuter vanpools that serve approximately 500 regular participants. The vanpools are operated through Douglas County Rideshare in partnership with many different groups and organizations, including local Transportation Management Associations (TMAs), Community Improvement Districts (CIDs), and large employers throughout Metro Atlanta. Vanpool routes serve major employment centers, including but not limited to locations near Anniston, Alabama; Cobb County; Perimeter Center in North Fulton County; Downtown and Midtown Atlanta; the Chamblee-Tucker area; and Emory University/Centers for Disease Control and Prevention/Decatur in DeKalb County.



Figure 2-5: View of the Multi-Modal Transportation Center.

Douglas County also provides a transportation voucher program for senior adults (age 60 and over) and individuals with disabilities, to assist with “quality of life” trips for shopping, entertainment, and visiting friends or family. Vouchers can be purchased at a discounted rate from the County to use with private taxi companies when transportation is needed.

The Georgia Regional Transportation Authority (GRTA) currently operates express commuter bus service along three routes between Douglas County and Downtown and Midtown Atlanta during the week:

- Route 460 – Multi-Modal Transportation Center to Downtown Atlanta
- Route 461/462 - Douglas Boulevard to Multi-Modal Transportation Center to Midtown Atlanta
- Route 470 - Thornton Road to Downtown Atlanta

According to an analysis by ARC in 2012, the most common destinations for Douglas County workers based on the percentage of residents who work there are Hartsfield-Jackson Atlanta International Airport, Downtown Atlanta, Town Center, and Cumberland.

Table 2 Employment centers where Douglas County residents work.

Employment Center	% Douglas County workers
Hartsfield-Jackson	2.5%
City Center (Atlanta)	2.4%
Town Center	2.2%
Cumberland	2.2%
Midtown Atlanta	1.9%
Buckhead	1.4%
Perimeter	0.8%
Emory	0.7%
Peachtree Corners	0.6%
Gwinnett/I-85	0.5%

Source: ARC Regional Snapshot 2012

The largest employer in Douglas County is the school district, which employs more than 3,380 people.¹⁰ According to the Douglasville Development Authority and the Douglas County Economic Development Authority, the top employers in Douglas County collectively employ more than 8,100 people or about 14% of the working population and 6% of total population. Douglas County is also home to several universities and colleges, including Georgia Highlands College, Mercer University, the Tanner Technical Institute at Strayer University, and West Georgia Technical College. These schools enroll full- and part- time students, impacting both peak and off-peak travel and commute patterns. In 2013, according to the American Community Survey five-year estimates, Douglas County was home to more than 9,700 college or university students, but these schools also attract students from outside of Douglas County, though not many. In addition, colleges and universities provide jobs for many people, both from inside and outside of Douglas County.

Transportation Dependent Populations

Because this study focuses on identifying and recommending transportation services, it was important to consider those people and groups that are most likely to rely on transportation services, such as senior

¹⁰ Douglas County School System

citizens, people with disabilities, households without cars, young adults, non-drivers, and others who could choose to use new or expanded services. The study also looked at part-time workers and college or university students who are likely to travel at times outside of typical rush hours.

Table 3: Key populations likely to use transportation services.

Group	Population	% Total Population
Seniors (65+)	12,088	9%
Youth under 16	32,000	25%
People with Disabilities	14,535	11%
Households without Vehicles	1,500 households	3.4% (occupied households)
College and University Students	9,744	7%
Part-Time Workers	11,430	8%

Source: ACS 2009-2013 Estimates

Seniors and older adults (age 65+) live throughout all areas of Douglas County, but tend to be concentrated in the central and northeast portions. In total, there are an estimated 12,088 people age 65 and older, representing 9% of the total population. The highest concentrations of seniors per square mile are found near the center of the County, in the Douglasville area, and the northern sections of SR 5/Bill Arp Road and SR 92/Fairburn Road where they meet with I-20. Depending on location in the County, between 8% and 40% of seniors ages 65-74 were employed as of 2013 (average of 20% overall), an indication that seniors may require transportation to and from work, in addition to other errands.

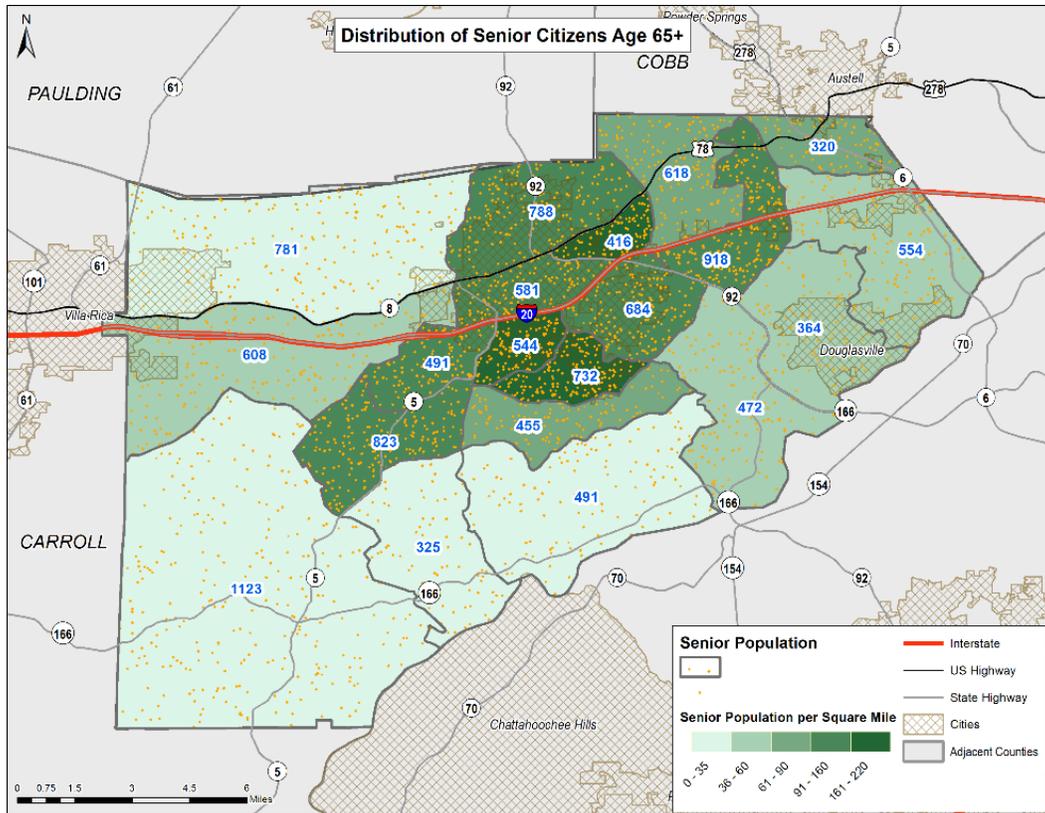


Figure 2-6: Distribution of senior citizens in Douglas County (Source: American Community Survey 2009-2013).

In total, there are about 32,000 individuals under age 16 in Douglas County, representing about 24.6% of the total population. Youth tend to be concentrated in the eastern portions of the county, in and around Douglasville and Austell, and near Cobb and Fulton Counties. These are shown in Figure 2-7 below.

According to 2009-2013 ACS estimates 14,535 Douglas County residents report living with a disability. This represents about 11% of the total population. Roughly 6% of persons ages 5-17, 10% of persons ages 18 to 64, and 36% of persons over age 65 live with a disability. The areas of the County where people with disabilities live are shown in Figure 2-8 below.

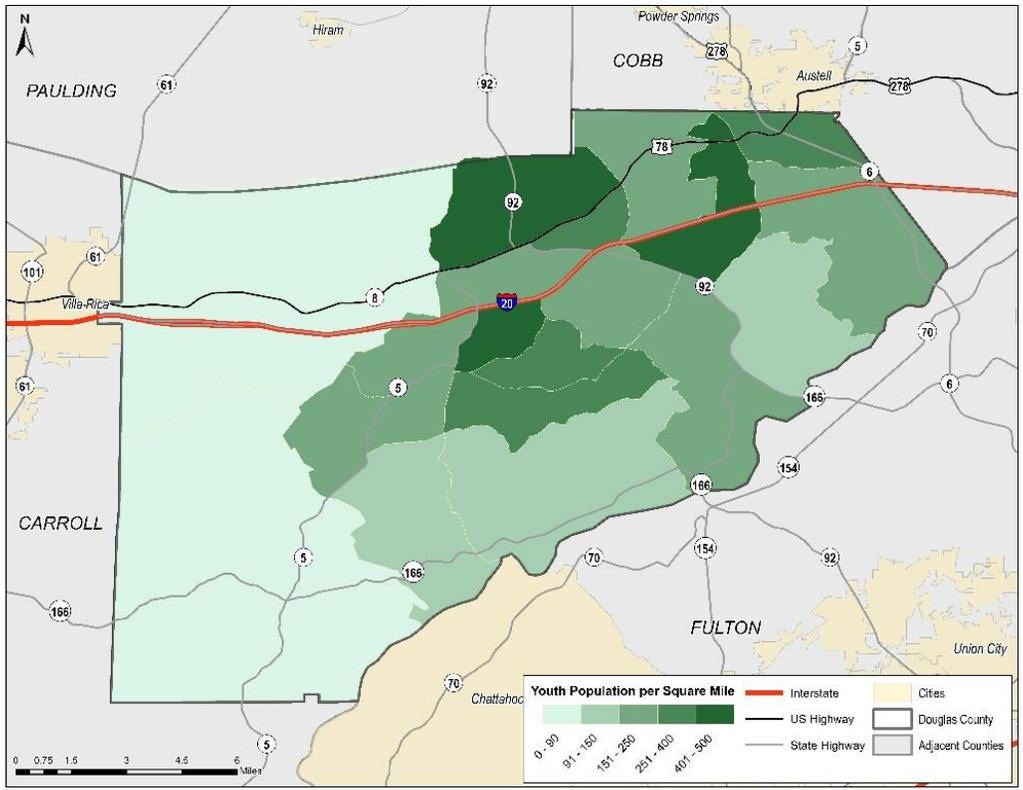


Figure 2-7: Distribution of youth under age 16 (Source: American Community Survey 2009-2013).

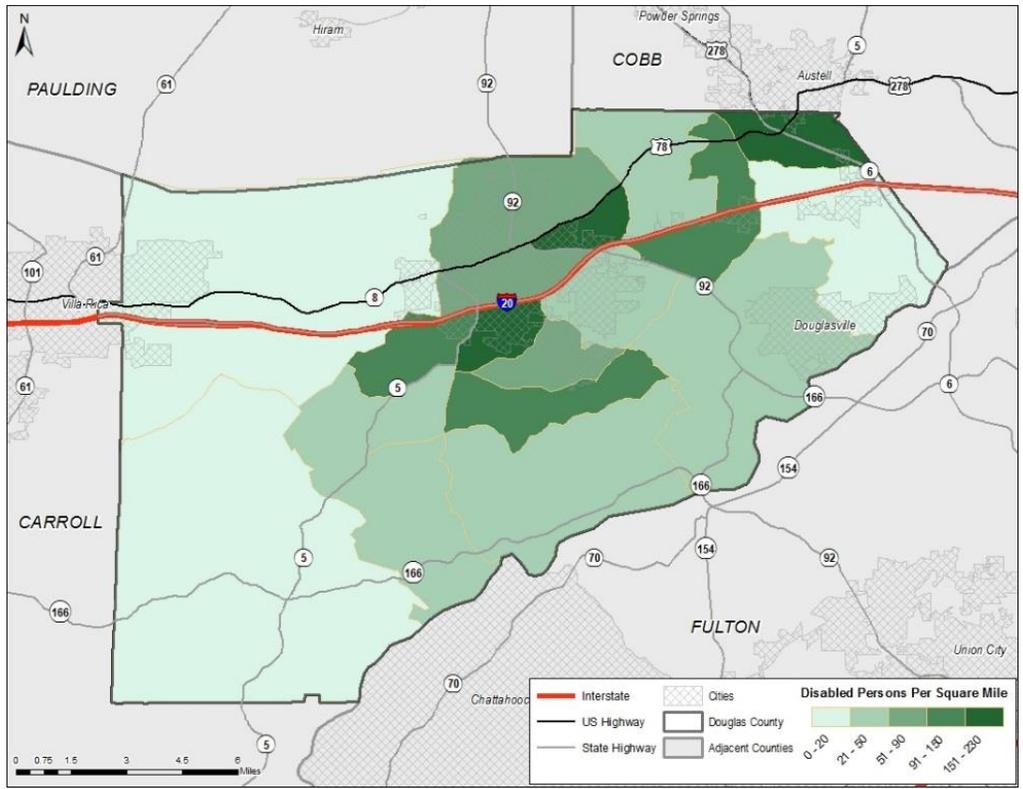


Figure 2-8: Distribution of people with disabilities (Source: American Community Survey 2009-2013)

Roughly 1,500 households in Douglas County (3% of all households) do not have access to personal vehicles, while nearly another 15,000 households (32%) only have one vehicle available, sometimes limiting travel options. The map in Figure 2-9 below shows that in some areas, especially in the north-central and northeast areas of the County, as many as 50-85 households per square mile do not have vehicles available. Furthermore, it is estimated that there are currently about 750 workers¹¹ (just over 3% of all workers) in Douglas County who do not have access to any vehicles, indicating these areas could benefit significantly from transportation services and improvements.

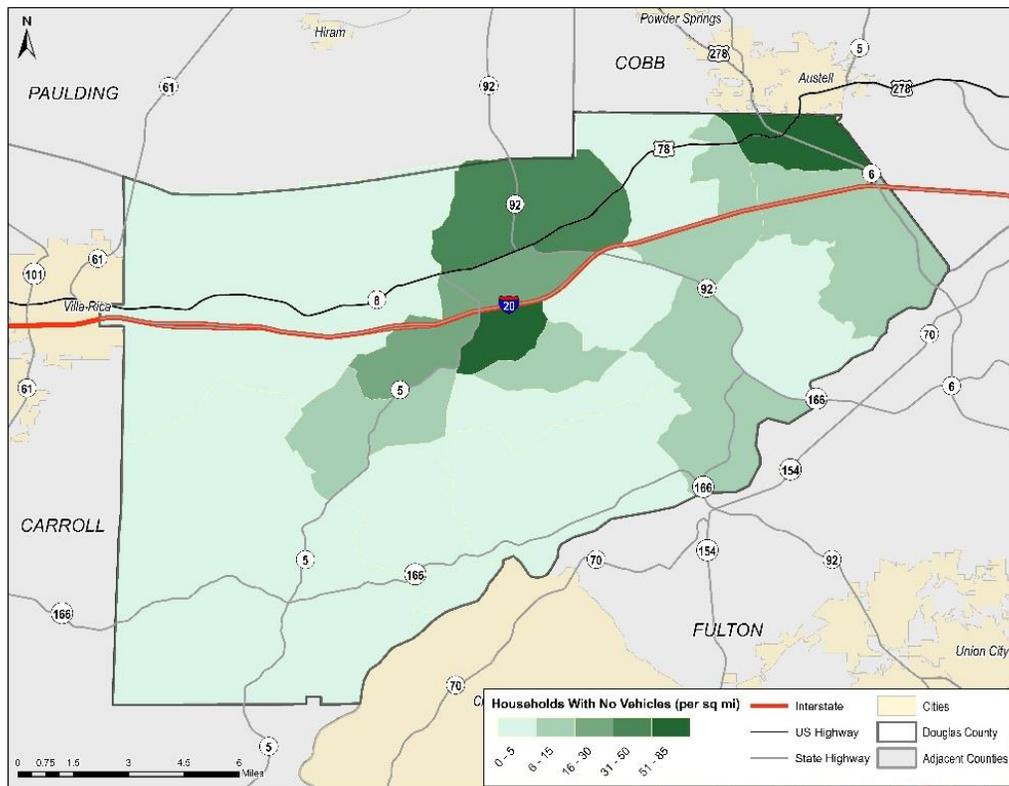


Figure 2-9: Distribution of occupied households with no vehicles (Source: American Community Survey 2009-2013).

Part-time workers, people with multiple jobs, and students are among the populations likely to have atypical schedules and may benefit from transportation services that operate outside of standard business and commute hours. In order to understand these populations, the study looked at part-time workers and people currently enrolled in college or university. About 9,700 Douglas County residents (7% of the population) were enrolled in college or graduate school according to ACS 2009-2013 estimates. Anecdotally, based upon information provided during community leader interviews, many of the students enrolled in colleges located within Douglas County, most students live in Douglas County; however, it is likely that some of the students captured in the ACS estimates are enrolled in schools elsewhere. Schools inside Douglas County offer a mix of daytime and evening classes to accommodate the varying schedules and needs of their students.

¹¹ The ACS defines “workers” as civilians and Armed Forces members who worked during the previous week.

The ACS provides estimates of the number of people who are employed on a part-time basis in various increments. An estimated 11,430 Douglas County residents or about 13% of the population (ages 16-64), reported working 15-35 hours per week on a regular basis. About 5,600 people worked up to 34 hours per week for 50-52 weeks during the year. The map below shows where part-time workers live in Douglas County.

In addition, according to ACS data, more than 30% of workers over the age of 16 who did not work at home, leave for work outside of normal morning commute times (5:00 AM – 9:00 AM). All of these population groups indicate a potential need for transportation services beyond typical commute and business hours.

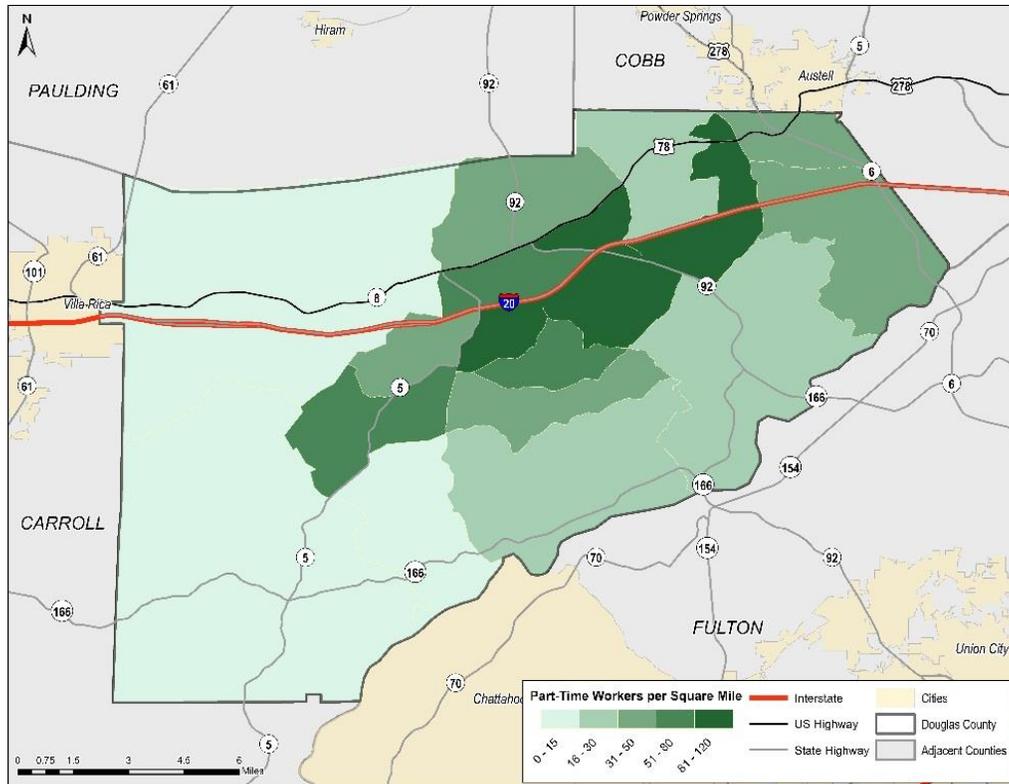


Figure 2-10: Distribution of part-time workers (Source: American Community Survey 2009-2013).

2.2 Prior and Ongoing Plans and Studies

A number of plans and studies were reviewed as part of the Transportation Services Study to help Douglas County understand possible implications for transportation service including relevant recommendations, significant developments, and changes to existing services. The list below shows studies that were reviewed. Other plans, studies, reports, and research papers were also consulted.

- City of Villa Rica *Comprehensive Plan*
- *Coordinated Public Transit – Human Services Transportation Interim Plan*
- *Coordinated Human Services Transportation Plan Technical Update*
- Douglas County *Comprehensive Plan* (2013)
- Douglas County *Comprehensive Transportation Plan* (2008)
- Georgia Regional Transportation Authority *Direct Xpress Horizons 1, 2, and 3 Service Plans*
- Georgia Regional Transportation Authority *Strategic Plan 2014-2016*
- *PLAN 2040*
- *PLAN 2040 “Community Development Report & Regional Snapshot: Access to Jobs”*
- Available portions of ARC’s *“The Region’s Plan”* (currently under development)
- *Regional Multi-Modal Public Transit Automated Fare Collection Study* (2014)
- *Regional Transportation Demand Management Plan* (2013)
 - *Regional Vanpool Assessment Report* (2013)

It should be noted that the next regional plan, titled *The Region’s Plan*, is still in development at the time of this study and is scheduled for completing in the spring of 2016.

Below is a brief summary of findings from the review of prior studies that are relevant to Douglas County Transportation Services, including several important themes:

- ***The imbalance that currently exists between job centers and residential areas will likely continue.***

Comparing 2010 conditions to projections for 2040, ARC predicts that job centers and areas with significant number of jobs will expand slightly outward from the central Atlanta core; however, many of the surrounding counties will continue to “export” worker, meaning commuters will continue to travel to jobs in other areas, outside the counties where they live. The pattern of imbalance between job-rich areas and primarily residential neighborhoods that are present throughout Metro Atlanta can be seen in Douglas County as well. Although Douglas County is home to several large employers and continues to focus on attracting new employers, the county is home to more residents than jobs and as a result “exports” workers to other areas. ARC’s April 2012 *Regional Snapshot* shows that Douglas County, at the time, had 35,446 filled jobs and 48,306 employed residents, for a combined net outflow of 13,161 jobs – the fourth highest in the region, after Paulding, Henry, and Coweta Counties. The 2013 American Community Survey data confirm these findings, showing that more than 60% of employed Douglas County residents commute to jobs outside the County.

- ***Transportation demand management strategies represent opportunities to link multiple types of services and leverage potential funding to meet travel needs.***

Transportation Demand Management (TDM), according to the Federal Highway Administration (FHWA) is a general term for strategies aimed at reducing demand for roadway travel, particularly in single

occupancy vehicles. Some TDM strategies seek to reduce total travel demand while others aim to lower peak period demand through a program of services, information, and incentives to help encourage more efficient use of transportation resources and all modes of available transportation services. TDM encompasses a range of traditional and more innovative technology-based services, such as high-occupancy vehicle (HOV) lanes, road pricing, parking management, transit services, car-sharing, carpool and transit incentives, and teleworking.

Three strategies from the *Regional Transportation Demand Management Plan* are applicable to Douglas County:

- *Strategy #4: Strategically link express bus service, local transit, vanpools, managed lanes, and park and ride lots* – it applies to existing express bus service, park and ride lots, and vanpool operations in Douglas County. An opportunity exists to improve connections between Douglas County transportation services and regional providers.
- *Strategy #5: Enhance integrated operations, branding, and marketing of the regional vanpool program*. This strategy presents an opportunity for potential cost savings by increasing the scale of the existing vanpool program through integration with the regional vanpool system, with the likely trade-off of a reduction in local control. This trade-off should be weighed carefully by Douglas County as it explores its vanpool options.
- *Strategy #6: Leverage and diversify existing and potential funding sources to support creative, long-term, and innovative strategies*. This is important to Douglas County, because increasing transportation services will require the identification of funding sources to support them.

- ***Demographic trends are driving the need for human service transportation in the Atlanta region.***

Persons with disabilities, the elderly, and low-income individuals rely on human service transportation (HST) to get to medical appointments, shop for basic necessities, and to access jobs. Regional population growth has occurred over many years, and will continue in areas accessible only by private automobile, which means the need for HST will be ongoing for those that currently rely on it. With the need for HST services expected to increase in the future, the ARC's *Coordinated HST Plan Update* reviewed potential funding sources. In addition to local and state sources, 63 federal funding sources can be used to provide HST services. The *Coordinated HST Plan Update* presents an opportunity for Douglas County to leverage new federal funding to provide HST services.

Recommendations from the plan applicable to Douglas County include the following:

- Develop a **regional inventory** – any HST services proposed by the Douglas County Transportation Services Study can be submitted to ARC for inclusion in the regional database.
- **Cost-benefit analysis** of coordinating services.
- **Track success with performance measures.**
- **Paratransit** – Douglas County does not currently offer paratransit, but it has populations that could benefit from such a service. During the initial public involvement outreach for this study, several Douglas County citizens indicated they need and would use this kind of service.

- **Flex routes during off-peak hours** – this is a potentially cost effective opportunity for Douglas County.
 - **Shuttles to employment centers.**
 - **Volunteer driver program** – during public outreach efforts, citizens have noted that a volunteer driver program could improve quality of life for seniors who are unable to drive themselves.
 - **Accessible taxis.**
 - **Transportation vouchers** – there is an opportunity to expand the existing service offered by Douglas County or through private providers.
 - **Seamless access to the regional system, including feeder service to existing regional services** – existing connections to the regional system could be enhanced.
 - **Technology**, including real-time traveler information.
 - **Job access and reverse commute options.**
 - **Extended service hours** (nights, weekends, and holidays). An opportunity exists to improve services for individuals that work part time or non-standard schedules who are unable to use the current vanpool and GRTA Xpress services.
- ***The transportation network is one of the four major priorities for investment in Douglas County.***

According to the County's *Comprehensive Plan*, the top four priorities for investment identified in the plan are economic development, transportation networks, public safety, and youth services. This indicates Douglas County citizens are willing to fund improved transportation services.

Many participants in the process expressed a desire to shorten trip times to shopping, restaurants, entertainment, and work locations. This indicates a need to reduce congestion and improve traffic flow. While Douglas County continues to work proactively to address traffic congestion, this goal could be supported by a larger array of transportation services for County residents.

- ***New equipment and facilities, as well as upgrades to existing equipment and facilities, and expanded modes of service are needed to help Multi-Modal Services/Rideshare continue to meet the needs of all citizens into the future.***

The following is a list of relevant recommendations from the County's Comprehensive Transportation Plan with notes based upon findings from this study:

- Upgrade the existing fleet with new low-emission vans. Replace all vans with more than 100,000 miles or five years of service. All new van purchases have specified low-emission vehicles. *(Note: The 2016 budget includes funding to purchase 10 new vehicles and there are plans to purchase additional vans in the coming years).*
- Upgrade and renovate Douglas County Transportation Center. *(Note: Douglas County is currently pursuing projects to accomplish this).*
- Add two new park and ride facilities. Potential locations included SR 6/Thornton Road south of I-20, Douglas Boulevard near Bright Star Road, and near I-20 and Blairs Bridge Road. *(Note: A facility located at Douglas Boulevard and Stewart Parkway (near Bright Star Road) has been constructed).*

The County anticipates building other lots to serve the Thornton Road corridor and west Douglas County in the future).

- Support the continued operation of the GRTA Xpress Service and promote new bus routes, including routes 462, 465, 463, and 466. *(Note: Route 462 was implemented, and GRTA's Direct Xpress Study from 2015 recommends consolidation of routes serving Douglas County. As part of the Transportation Services Study, the County has learned that the community is supportive of new and expanded Xpress routes).*
- Consult representatives of seniors and persons with disabilities to identify connectivity and accessibility needs. *(Note: Public involvement efforts of this study included a table staffed by project consultants at the Douglas County Senior Picnic and Commission District meetings were held to receive input on this topic).*
- Develop opportunities to increase service and modes served at the Douglas County Transportation Center for passenger transportation including, but not necessarily limited to, public and private buses, taxis, airport limousines, paratransit, private trolleys and shuttles, cars, and bicycles. *(Note: Transportation services recommendations from this study seek to connect with the Douglas County Transportation Center).*
- Consult peer agencies providing new fixed-route transit services to identify lessons learned in generating support and ridership for public transit at the local level. *(Note: The review of peer organizations that is part of this study extends this to identify lessons learned providing all types of transportation services).*
- Work with GRTA to initiate shuttle service from the Douglas County Transportation Center to Hartsfield-Jackson Atlanta International Airport. *(Note: Ideas for shuttle service to the airport are being considered as potential long-term outcomes of this study based upon input from County residents and GRTA is initiating shuttle service to the airport from other areas in Metro Atlanta; however, specific plans are not yet available).*

2.3 Existing Services and Travel Patterns

Service within Douglas County

Douglas County Rideshare and regional partners, such as GRTA, are currently providing a number of effective transportation services primarily focused on journey-to-work trips. Douglas County Rideshare operates work-trip vanpools, provides carpool-matching assistance, offers transportation assistance to senior adults and disabled individuals, and builds and maintains commuter facilities, such as park-and-ride lots. While transportation services that address other trip purposes are available, an opportunity exists to enhance them to better serve Douglas County residents.

Vanpools

Douglas County Rideshare has been operating vanpools in partnership with employers and other agencies since December of 1986. Over that time, the program has grown to 58 routes and 78 vans serving employment destinations throughout the Atlanta region. The map in Figure 2-11 below shows vanpool destinations as of June 2015. Target customers of the vanpool service are employees commuting to and from work. Accommodations are made for passengers with physical limitations. Service hours vary by

vanpool, but are generally from 5 a.m. to 7 a.m. in the morning and 2:30 p.m. to 5 p.m. in the evening. The vans generally do not operate on holidays. Douglas County Rideshare will attempt to place passengers on a non-running van on a running van on holidays, if possible, to meet riders' needs.

Fares are different for each vanpool route based on the number of riders and round trip mileage. The majority of current riders pay between \$82.00 and \$98.00 per month. For some vanpools that operate to destinations outside of Metro Atlanta, the monthly fare can be over \$98.00 and the current highest fare is \$195.00 per month.

The vanpools serve a substantial number of trips in a cost effective manner. During 2013, just over 180,000 one-way trips were taken on the vanpools. Average weekday one-way trips were slightly more than 700. Based on the 2013 vanpool operating expenses, operating expense per passenger trip was \$4.43, and the operating expense per passenger mile was \$0.12.

Douglas County Rideshare offers a guaranteed ride home program for vanpool riders who have to leave work earlier than usual or are required to stay later than the vanpool pick-up time. This service is provided through the Guaranteed Ride Home program operated by Georgia Commute Options, a program administered by the Georgia Department of Transportation. It provides taxi service at no cost to the participants when they are unable to use their usual vanpool.

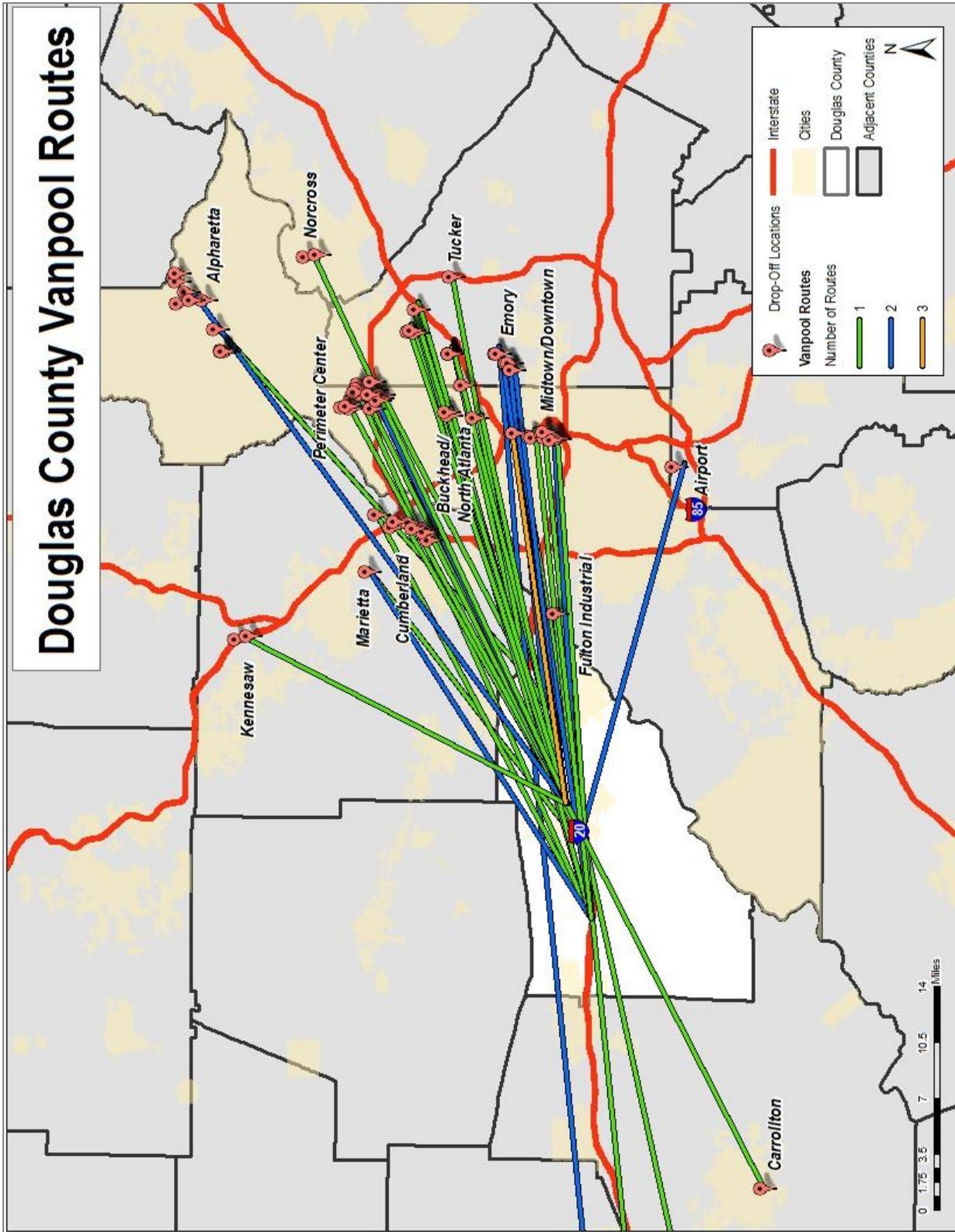


Figure 2-11: Map of vanpool origins and destinations (Source: Douglas County Rideshare, 2015).

Demand-Response and Voucher Program

Douglas County operates demand-response service to support the County's Senior Citizens' program and serve people with disabilities. Until recently, the County had one vehicle for these services, but in 2015 it acquired four 21-passenger buses, dramatically increasing demand-response service. This service requires advanced reservations, and is frequently booked several weeks in advance, indicating significant unmet demand and an opportunity for expansion. Seniors with no other way to get around in Douglas County or access regional transit systems are the target customers of this service. Although Douglas County Rideshare does not get many requests for service for people with disabilities at this time, the County has the capacity and is prepared to do so, whenever needed – it has one wheelchair accessible van. Staff are trained, for example, to help riders in and out of doors, and there are options for giving people with limited mobility the larger front seats of vans, as needed.

To assist seniors 60 years of age and over and persons with disabilities aged 18 to 59 with meeting their transportation needs, Douglas County offers a transportation voucher program. The program serves approximately 50 people per month and has a goal of serving 70 per month by the end of 2015. In 2015, the County Rideshare program received its second round of funding through the Federal Transit Administration (FTA). The County provides 20% of the program cost.

Target customers are citizens who are unable to drive or access any of the other transportation services to meet their needs. Seniors and persons with disabilities must be qualified as meeting certain criteria in advance to purchase vouchers. Participants must earn less than 200% of the federal poverty level and either be age 60 or older or be disabled. The vouchers are used to pay for trips arranged through transportation providers designated by Douglas County Rideshare, such as taxi companies, van services, and non-emergency medical transportation services. The primary focus of the service is quality-of-life trips; however, destinations can include, but are not limited to: shopping, visits with family members, medical appointments, government services, recreation, and social events.

Vouchers are purchased in advance at a substantial discount from Douglas County Rideshare's Mobility Coordinator. In addition to selling the vouchers, the Mobility Coordinator also provides qualified residents with assistance in planning trips and making transportation arrangements. Using the vouchers riders can connect with other regional systems such as Cobb Community Transit (CCT) and the Metropolitan Atlanta Rapid Transit Authority (MARTA). The County's Mobility Coordinator assists citizens in planning trips that take advantage of these systems.

In addition, some limited taxi service is available within Douglas County. Recently, private services often referred to as "ride-hailing," which are growing in popularity throughout Metro Atlanta and other areas of the country, have begun to serve Douglas County as well. These companies offer taxi-like service through mobile smartphone applications (apps) that allow users to request rides in real time and choose from a list of ride options provided by drivers in the area. Companies such as Uber and Lyft have expanded their service areas to include portions of Douglas County as demand for such services has grown. At the outset of the study, Uber was only available in a portion of Douglas County; however, as of October 2015, rides were available from nearly any locale within the County, provided drivers are available.

Ride-hailing service is available around the clock seven days per week (depending on how many drivers choose to drive at a given time of day). Fares vary based on distance, time, and demand, as well as the category of service requested. As an example, a fare quote from Uber traveling from Douglasville to

Downtown Atlanta ranged from a low of \$26.00 for basic service to a high of \$140.00 for service in an SUV (sport utility vehicle). A local fare quote from Douglasville to the Douglas Medical Center ranged from \$6.00 for basic service to \$25.00 for an SUV. Vehicles are privately owned and drivers keep a percentage of the fare, with the remainder of the fare going to Uber.

Regional Services

The Georgia Regional Transportation Authority (GRTA) operates express bus service (Xpress) in many areas of Metro Atlanta, including routes along I-20 from the West Douglasville Park-and-Ride and the Douglas County Multi-Modal Transportation Center, primarily to and from Midtown and Downtown Atlanta.

Other services in the region include those provided by CCT, which operates fixed, express, and paratransit service as well as a new flexible service known as FLEX, and Paulding Transit which operates human service transportation and demand-response van service throughout Paulding County.

MARTA operates fixed rail, bus, paratransit, and shuttle service throughout the City of Atlanta and in DeKalb and Fulton Counties (bus service is available in Clayton County). It serves locations just east of Douglas County, including Six Flags, Fulton Industrial Boulevard, and the Hamilton E. Holmes rail station. Four MARTA bus routes fall within the three-mile area of influence around Douglas County. MARTA Mobility offers paratransit service within $\frac{3}{4}$ of a mile of existing routes, some of which falls within the three-mile study area radius and just barely inside the study area, along Route 71, which follows Cascade Road and Ralph David Abernathy Boulevard from County Squire Apartments to the West End MARTA Station.

A map of the regional transportation network in and around Douglas County is shown on the following page. (A larger version can be seen in the Appendix).

For details on existing transportation services in and around Douglas County, see *Technical Report #1: Existing Conditions* prepared as part of this study.

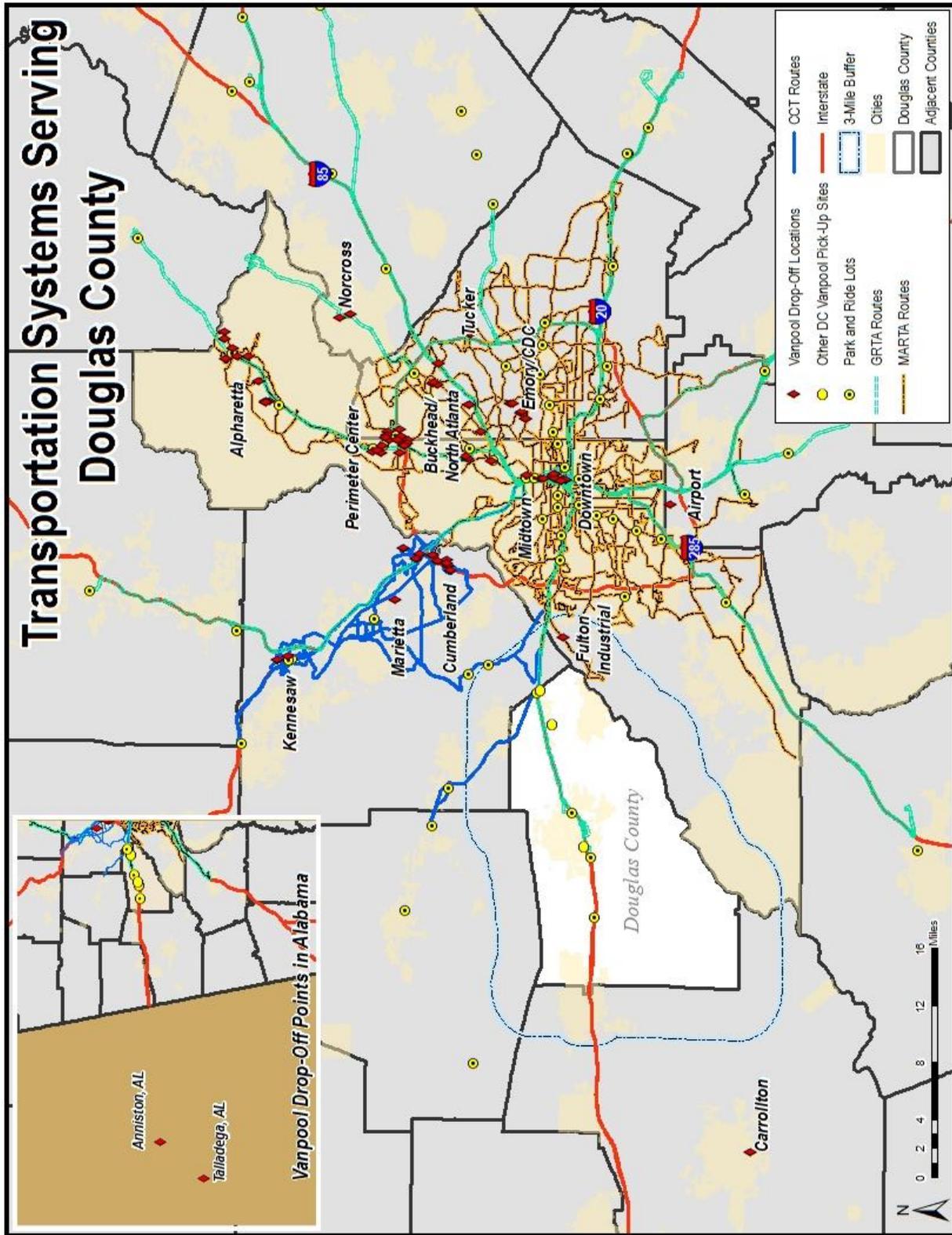


Figure 2-12: Map of transportation systems serving Douglas County (Source: MARTA, Cobb Community Transit, GRTA, ESRI, and Douglas County).

CHAPTER 3 ALTERNATIVES ANALYSIS

3.0 Overview

This chapter summarizes the process used to analyze potential alternative service options leading to proposed recommendations for implementation. It presents a menu of transportation services that aim to meet the needs of all Douglas County residents. Options identified connect with and leverage existing regional transportation services and provide new and/or expanded multi-modal services throughout Douglas County.

A brief summary of key input received through the public involvement activities is found in section 3.1, followed by a transportation services gap analysis, transportation services identification, and an overview of funding sources. Proposed implementation steps can be found in Chapter 5.

The chapter is organized as follows:

- 3.1 Summary of Public Feedback Related to Service Options
- 3.2 Transportation Services Gap Analysis
- 3.3 Peer Organizations
- 3.4 Transportation Services Identification and Description
- 3.5 Evaluation of Potential Options Transportation and Travel Patterns

3.1 Summary of Public Feedback Related to Service Options

Throughout the Douglas County Transportation Services Study, the general public and stakeholders were invited to participate through surveys, pop-up booths at events and festivals throughout Douglas County, public meetings, and stakeholder interviews. Interviews with key community leaders were also conducted to obtain additional input on opportunities, challenges, and to gather input about potential service options and recommendations. ***This section summarizes factors identified by the public and stakeholders that were considered in the development of potential transportation services and options.*** An expanded summary of the public involvement and stakeholder input throughout the study can be found in Chapter 4.

The following specific themes were expressed by Douglas County residents and stakeholders related to the need for new and/or expanded transportation services.

General Comments

- The approach of the study should be broad and think in terms of mobility and services, rather than infrastructure.
- Services should help people access well-paying jobs, but maintain the lower cost, high quality of life residents have in Douglas County.
- It is essential to recognize that there are currently no options for people living in Douglas County who do not have vehicles or who share one vehicle among many household members.

- There is a sense that small business owners would be open to any service that helps more customers get to them more easily.
- As the County population grows, it seems that public perception of transportation services is shifting. More and more people are open to the idea of new transportation services; however, this view is not held by everyone. There is growing awareness in Douglas County that it is important to stay current and relevant in transportation, and to not lose out on future economic growth and quality of life opportunities.

Services

- Douglas County should consider the needs of part-time workers, people taking night classes, or working second shifts or multiple jobs when creating schedules. Service should be available outside of typical business hours.
- Weekend and evening service outside of traditional commute periods on weekdays from 9:00 AM to 5:00 PM work hours is needed/desired.
- It would be helpful to provide connectivity around Douglas County in a loop manner. A service that links residential areas and provides access to shopping centers and helps people avoid traffic congestion on Highway 5 would be beneficial.
- Transportation for seniors to day-to-day activities as well as special events and trips is needed.
- Partnerships should be encouraged, where possible, to leverage and maximize opportunities to provide transportation services.
- New service should be implemented in steps.
- Douglas County should consider offering discounted fares for students and work with the school system and colleges to address the needs of young people and employees.
- New park-and-ride lots are needed, especially in the eastern and far west portions of the County.
- Future commuter or vanpool service should look at new and growing job centers outside of Downtown and Midtown Atlanta.

Related Comments

- Douglas County should provide more opportunities for safe walking and biking, especially around the Multi-Modal Transportation Center, schools, parks and recreational facilities, and future transportation service stops. This will also make it easier for people to make healthy, active choices for shorter trips or to complete trips taken via transportation service (instead of driving).
- Marketing and promotion of services is critical. If people are not aware of services, they will not be able to use them.
- Douglas County should identify metrics by which to measure the success of current and future services.

Connections

- Douglas County residents should be able to connect to regional transit, such as CCT, the GRTA Xpress system, Hamilton E. Holmes MARTA Station, and Hartsfield-Jackson Atlanta International Airport.
- Residents on the north side of Douglas County (generally north of US 78/Bankhead Hwy.) expressed a desire for easier and more convenient access to the Multi-Modal Transportation Center and other services in central Douglasville.

- Douglas County should consider opportunities to better connect areas in north and south Douglas County.
- It is important for potential future transportation services to connect residential neighborhoods to retail and commercial areas.

Desired Destinations and Areas to Serve

- Arbor Place Mall
- College Campuses
- Conners Senior Village (senior residential complex in Villa Rica)
- Corporate park area on east side of Douglas County
- Douglas County Courthouse and government offices
- Douglas County Multi-Modal Transportation Center
- Downtown Douglasville
- Grocery stores (including Walmart)
- Job centers throughout Metro Atlanta, including Perimeter Center, Cumberland, North Fulton County, and around the Hartsfield-Jackson Atlanta International Airport
- Lithia Springs area
- Medical services at Wellstar Douglas Hospital and other locations
- Old Douglas County Courthouse/County Museum
- Park-and-ride lots as well as other vanpool pick-up/drop-off locations
- Parks, trails, and other recreational opportunities, including Jessie Davis Park
- K-12 schools
- Shopping and retail outlets
- Veterans Administration offices and clinics
- Villa Rica area
- Woodie Fite Senior Center

Desired Corridors to Serve

- Bright Star Road
- Chapel Hill/Fairburn Road
- Lee Road area
- Riverside Parkway
- SR 5/Bill Arp Road
- SR 6/Thornton Road
- SR 92/Fairburn Road and the Highway 92 LCI corridor
- US 78/Bankhead Highway

3.2 Transportation Services Gap Analysis

Based on the public involvement and outreach and the *Existing Conditions Technical Report* (August 2015), a transportation services gap analysis was undertaken to identify service needs in Douglas County. The following demographic findings will inform the design of potential transportation services options:

- The Douglas County population has been growing since the 1970s and is forecasted to reach more than 200,000 people by 2040, a 50% increase over current conditions;
- The senior population rose 38% from 2000 to 2010 and will likely continue to increase;
- Senior populations are currently concentrated in the central and northeastern parts of the county;
- Persons under 16 years of age are concentrated in and around Douglasville and the north central and northeastern parts of the county;
- Households with no vehicles are located in and around Douglasville, the north central part of the county, and in the far northeastern corner of the county near Austell;
- Part-time workers generally live near the I-20 corridor from Douglasville east;
- Employment peaked in 2008, but has risen since 2010 and is forecasted to increase to 88,000 jobs in 2040, an increase of over 100%; and
- An estimated 35,000 Douglas County residents commute out of the county for work on a daily basis.
- More than 14,000 people in Douglas County have some type of disability.

To help clarify the areas where transportation service is likely most needed based upon demographics, a map was prepared showing the distribution of population (per square mile), senior citizens age 65 and older, households with no vehicles available, and people with disabilities. The map, shown in Figure 3-1, illustrates the concentrations of these key population groups, primarily in the central and northeastern areas of the county.

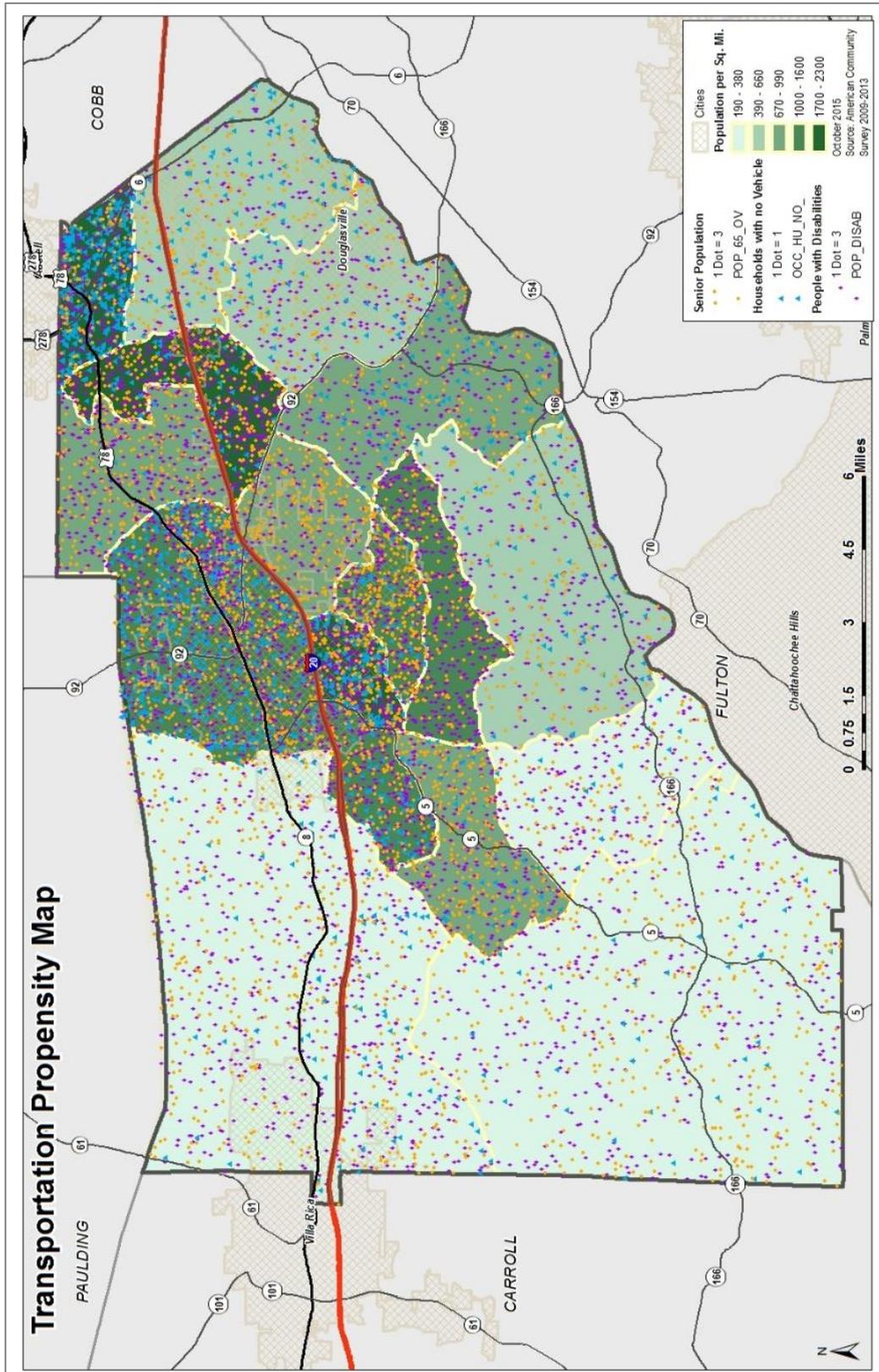


Figure 3-1: Distribution of key population groups and areas where transportation service is most likely needed. (A larger version of this map can be found in the Appendix).

The following gaps in transportation services were identified and were be used to help define potential options:

- Service within Douglas County – a need exists to connect residents to destinations throughout the county, especially to retail, medical services, and government services.
- Non-commute service – transportation services that run outside of normal morning and evening commute hours are needed, especially for those working atypical schedules, students, and special groups such as active seniors.
- Sufficient demand-response service – the existing Douglas County service is reserved weeks in advance, indicating need for additional capacity.
- Connections to regional transit services – improved access to Cobb Community Transit, GRTA, and MARTA regional systems was identified by the Douglas County community as a need.
- Marketing and awareness – a need exists to increase awareness of current transportation services and support the implementation of future services through expanded marketing efforts.

Analysis of Travel Flows

This section describes findings from an analysis of travel data collected by AirSage for morning and evening peak periods during the months of September 2014 and July 2015.

The project team analyzed anonymous trip data collected by AirSage from cellular phone companies and Global Positioning System (GPS) devices to identify major travel flows between various areas of Douglas County and neighboring areas. These data, which are average volumes for weekdays during the month in which the data were collected, indicate the number of trips made between each pair of zones (origin zone and destination zone). The morning peak period was defined as 5:00 AM to 9:00 AM and the evening peak period was defines as 4:00 PM to 8:00 PM.

Special efforts were made to understand trip patterns of Douglas County residents, to, from, and within Douglas County. The project team divided the study area and a substantial portion of Metro Atlanta that includes travel destinations important to Douglas County residents into zones for analysis (traffic analysis zones).

Findings

The predominant pattern in Douglas County shows that people travel **within** a given zone more often than **between** different zones. In other words, the origin zone and destination zone are the same. This is somewhat surprising given the large number of out-of-county commuters, but may reflect trips made for day-to-day errands and the relatively large number of commuters who use vanpools and GRTA Xpress buses for work trips.

It should be noted that the data show a high number of trips to and from the northwest corner of Douglas County (zone 17), which may be due, in part, to the relatively large size of the zone. The zones were drawn in part based on the existing road network, to capture travel along main roads in each area of Douglas County. This zone has very low intensity land uses, but also includes a portion of Villa Rica. Zone 26, just on the other side of the Douglas County line, in Carroll County, which includes the other portion of Villa Rica, also covers a large geographic area and has a high number of trip origins and destinations. The map below (Figure 3-2) shows those zones with high trip volumes.

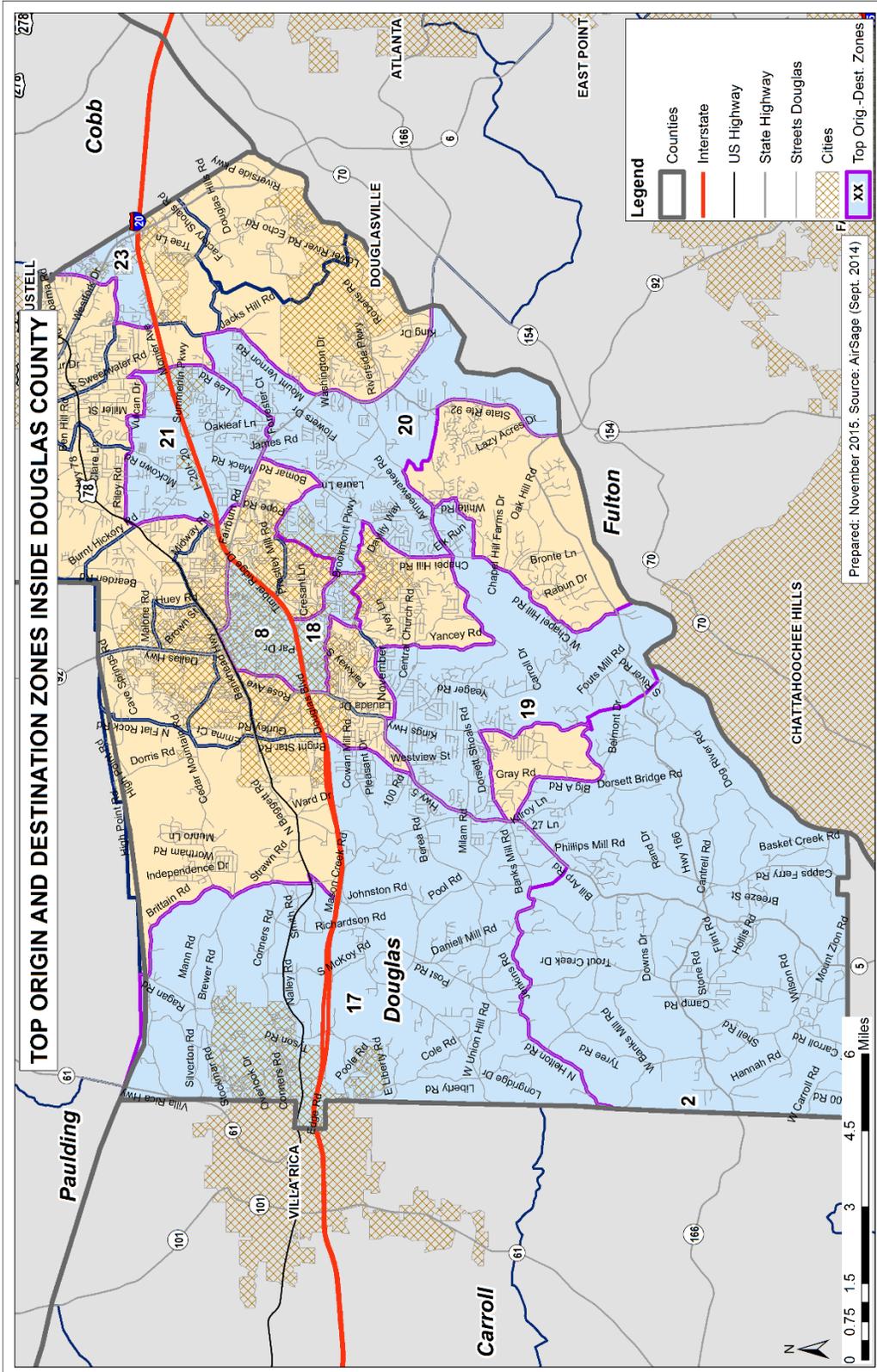


Figure 3-2: Top origin and destination zones inside Douglas County.

Morning Peak Period

- Of the top ten origin-destination pairs during the morning peak period, six of them indicate trips with both an origin and destination in the same zone inside Douglas County. These pairs represent travel within zones in west, south, and north-central areas of Douglas County.
- The remaining four top origin-destination pairs indicate travel activity between zones inside Douglas County and zones outside Douglas County. Specifically, these four origin-destination pairs show:
 - Travel to and from Carroll County and the far-west part of Douglas County;
 - Travel from Paulding County/Cobb County¹² to the northeast corner of Douglas County, near Thornton Road; and
 - Travel from Douglas County to the City of Atlanta.
- Outbound travel (trips with an origin within Douglas County and a destination outside of Douglas County) patterns during morning peak periods reveals:
 - Major flows from far-west, and central Douglas County to Atlanta and northern DeKalb County;
 - Heavy travel from far-west Douglas County to the northern portion of Carroll County (including the areas around Temple and Villa Rica);
 - Some travel from far-west, north, and northeast Douglas County to Cobb and Paulding Counties; and
 - Travel from far-west Douglas to the Carrollton area.
- Inbound travel (trips with an origin outside of Douglas County and a destination inside of Douglas County) patterns reveal that people are travelling **from** the following areas **into** the northern part of Douglas County and the City of Douglasville during morning peak periods.
 - Carroll County north of Carrollton (including the areas around Temple and Villa Rica);
 - Haralson County; and
 - Cobb and Paulding Counties.

Table 4: Top ten origin-destination zone pairs during morning peak periods (Sept. 2014)

Origin Zone	Destination Zone	# Trips
17	17	4053
20	20	2977
19	19	2428
2	2	1637
26	17	1456
21	21	1398
17	26	1375
28	23	1253
20	6	1092
29	29	1057

Source: AirSage

¹² It should be noted that southern portions of Cobb and Paulding Counties were grouped into one zone for travel analysis purposes, in order to capture travel on SR 92 which provides access to local roads in both counties.

Evening Peak Period

- Of the top ten origin-destination pairs during the evening peak period, five of them indicate travel within zones inside Douglas County and have an origin and destination in the same zone. Similar to patterns in the morning, these zones represent travel *within* zones in areas in west, south, and north-central areas of Douglas County.
- The remaining five top origin-destination pairs reveal travel activity between zones inside Douglas County and zones outside Douglas County. Specifically, these five pairs show:
 - Travel to and from Carroll County and the far-west part of Douglas County;
 - Travel from the northern area of Douglasville to the far-west part of Douglas County;
 - Travel from the northeast are of Douglas County (near Thornton Road) to Cobb/Paulding Counties; and
 - Travel from Atlanta to the northeast part of Douglas County.
- Outbound travel (trips with an origin inside Douglas County and a destination outside of Douglas County) patterns during evening peak periods reveal the following:
 - Heavy travel from Douglasville to Cobb and Paulding Counties;
 - Heavy travel from northeast Douglas County to Cobb and Paulding Counties; and
 - Travel from far-west Douglas County to northern Carroll County (including the area around Temple and Villa Rica).
- Inbound travel (trips with an origin outside of Douglas County and a destination inside the county) patterns during evening peak periods show the following:
 - Heavy travel from northern Carroll County (including the area around Temple and Villa Rica) to far-west Douglas County;
 - Heavy travel from Atlanta and DeKalb County to northeast Douglas County;
 - Travel from Atlanta and DeKalb County to Douglasville and south Douglas County;
 - Travel from the Carrollton area to far-west Douglas County; and
 - Travel from Cobb and Paulding Counties to north central, far-west, and northeast areas of Douglas County.

Table 5: Top ten origin-destination zone pairs during evening peak periods (Sept. 2014).

Origin Zone	Destination Zone	# Trips
17	17	7293
20	20	5247
19	19	2890
23	28	2703
17	26	2319
2	2	2301
21	21	2138
26	17	2112
30	23	1722
18	17	1655

Source: AirSage

Major Origin and Destination Zones

In addition to looking at origin-destination trip pairs, the project team looked at those zones inside Douglas County in which the highest number of trips originate (origin zones), and those in which the highest number of trips end (destination zones) regardless of time of day. This analysis reveals similar patterns for morning and evening peak periods. A significant number of trips begin or end in the following areas:

- Zones 8 and 18 – around the central core of Douglasville, just north and south of I-20. This zone is, partially bordered by SR 92 north of I-20 and includes portions of Campbellton Street, Douglas Boulevard, as well as such notable locations as Arbor Place Mall, the County government center, and Wellstar Douglas Hospital.
- Zone 17 - the northwest corner (far-west) of Douglas County. This zone includes the western portions of I-20 and US 78/Bankhead Highway, and part of Post Road.
- Zone 19 – in the south-central part of Douglas County. This zone includes portions of and is partially bordered on the east/south by SR 5/Bill Arp Road, and includes portions of Kings Highway, and Dorsett Shoals Road.
- Zone 20 – in southeast part of Douglas County. This zone includes part of and is bordered by SR 92/Fairburn Road on the east, and also includes portions of Chapel Hill Road, and Annaweekee Road.
- Zone 21 – just east of central Douglasville, straddling I-20. This zone is bordered by Lee Road on the east, Fairburn Road to the south, and South Burnt Hickory Road to the west.
- Zone 23 – in the northeast corner of Douglas County, bordering Cobb County. This zone includes parts of SR 6/Thornton Road and Maxham Road, and is bordered by Mount Vernon Road on the west.

A detailed analysis of trip and travel data with maps can be found in the Appendix.

3.3 Peer Organizations

A review of three peer organizations was undertaken as part of the Douglas County Transportation Services Study and the full findings are available in the *Peer Organizations Review: Case Studies* technical memorandum dated August, 2015, which can be found in the Appendix. Lessons learned from the organizations reviewed were incorporated into the design of potential transportation services options for Douglas County, as appropriate.

3.4 Transportation Services Identification and Description

Transportation service concepts and scenarios were identified based on the services gap analysis, lessons learned from peer organizations, and public comments from Douglas County leaders and residents. Key themes included:

- Affordability and price;
- Safe and secure parking areas;
- Well-maintained vehicles;
- Cost efficient;

- Service available outside of typical business hours;
- Access to destinations, goods, and services in more populated areas;
- Easily understandable routes and schedule information;
- On-time service; and
- Courteous, friendly, and safe drivers.

Keeping these items in mind, the following transportation service options were developed to meet the needs of Douglas County residents and workers. Each option identified includes a brief description of the service, an overview of the concept, potential benefits, implementation challenges, and planning-level cost estimates.

In addition, some options were considered over the course of the study, but were not evaluated as part of the analysis because of lack of sufficient interest or willingness to pursue such options. These include car sharing service and airport shuttle service.

Option 1: Flexible Zone-Based Shuttle Service



Figure 3-3: An example of a shuttle style vehicle that could be used for flexible zone-based service.

A flexible zone-based shuttle service combines the schedule of a fixed route shuttle circulator and the convenience of a curb-to-curb demand response service. The shuttle vehicle travels along an established route with timed stops. Vehicles can deviate from the route within a defined zone (nearby or adjacent to the fixed route) to pick up and drop off customers who make reservations in advance. This type of service is ideal for meeting transportation service needs in areas with density and demand that is higher than general guidelines for demand-response service, but not high enough for conventional fixed

route bus service to be cost-effective. This service would use shuttle-style vehicles that can be configured to transport 8 to 25 passengers.

The flexible zone-based shuttle service would be open to all Douglas County citizens with a trip origin or destination inside the service area, for any trip purpose.

Concept Description

Four preliminary routes were identified based on the current transportation gaps and public input. Brief descriptions of the routes follow:

- **Central Circulator** – This is a two-way route beginning at the Douglas County Multi-Modal Transportation Center. The route proceeds north along Durelee Lane to SR 92 (Fairburn Road) where it turns west. At East Church Street, the route turns southwest and then in Downtown Douglasville, turns south on Price Avenue and then east on East Spring Street. At Campbellton Street, the route turns south and at Chapel Hill Road, the route continues to Stewart Mill Road, where it turns southwest and loops through the plaza where Kohl’s and Hobby Lobby are located, returning to Chapel Hill Road. On Chapel Hill Road, the route proceeds north, continuing on Campbellton Street

to Hospital Drive where it turns north and then turns southeast onto Dorris Road, services the Woodie Fite Senior Center, and continues south on Dorris Road back to the Transportation Center. This route has nine stops that serve a variety of retail, medical, and government services destinations as well as Downtown Douglasville. The flex zone for this route includes the residential areas south of Arbor Place Mall along Creekwood Drive, off of Stewart Mill Road, and adjacent to Chapel Hill Road.

- **SR 5/Bright Star Connector** – This is an out-and-back route starting at the Douglas County Transportation Center and running northwest along Dorris Road. At Hospital Drive, the route turns southwest and then turns south on Campbellton Street, continuing onto Chapel Hill Road. At Douglas Boulevard, the route turns west and serves the Arbor Place Mall. At SR 5/Bill Arp Road, the route turns south and terminates at the Publix, where it turns around and returns to the Transportation Center. The flex zone for this route is roughly bounded by SR 5/Bill Arp Road, Central Church Road, Bright Star Road, and Stewart Parkway. Destinations served by this route include a variety of retail, medical and government services. There are nine stops proposed for this service.
- **Lithia Springs** – This route connects Lithia Springs with employment and retail destinations as well as the Cobb Wellstar Hospital and CCT services, such as Route 30 and the Flex. Five stops are proposed along this route. The route begins at US 78/Veterans Memorial Highway/Bankhead Highway and Sweetwater Road where it proceeds east along US 78 to SR 6/Thornton Road, where it turns southeast. At Maxham Road, the route turns north and continues on SR 5 (Austell Road) to Hospital South Drive, where it turns west and loops through the hospital, exiting on Hospital North Drive. After leaving the hospital, the route turns south on SR 5/Austell Road and returns to its starting point. The flex zone for this route includes the residential areas around Lithia Springs, such as Ansley Park, Whitaker Springs, and Heritage Square.
- **Northside Connector/Downtown Circulator** – This is a loop route that connects the north side of Douglasville with the downtown area, shopping along Campbellton Street/Chapel Hill Road, Arbor Place Mall, and SR 5 (Bill Arp Road). Nine stops are proposed along this route, with two stops in Downtown Douglasville allowing for transfers to the Central Circulator and three stops along Douglas Boulevard providing transfers to the SR 5/Bright Star Connector. The route begins on Malone Street at Jessie Davis Park and proceeds south, with a stop at Stewart Middle School. The route then continues along Malone Street to Ridge Avenue where it turns west and then turns south along SR 92 (Campbellton Street) and crosses the railroad tracks, following Campbellton Street to Church Street, where it runs northeast. At Duncan Street, the route turns southeast and returns to Campbellton Street, where it again turns southeast and continues onto Chapel Hill Road. At Douglas Boulevard, the route turns west and serves the Arbor Place Mall. At SR 5/Bill Arp Road, the route turns north and proceeds to Gurley Road, where it again turns north. At US 78 (Broad Street), the route turns east and continues to Pray Street, where it turns southeast and then northeast onto Church Street. At Campbellton Street, the route turns northwest and returns to its origin at Parker Street and SR 92 (Dallas Parkway). The flex zone for this route is roughly bounded by the railroad tracks, Cedar Mountain Road, Cave Springs Road, Maroney Mill Road, and Industrial Access Road.

The Central Circulator and SR 5/Bright Star Connector Routes will be scheduled to allow transfers between the two at the Douglas County Transportation Center. Additionally, the Northside Connector/Downtown Circulator and Central Circulator routes will be scheduled to allow transfers between the two in the downtown area, so Northside Connector riders can continue on to the Douglas County Transportation Center on the Central Circulator.

Proposed service frequency for all routes is 60 minutes to allow sufficient time for passenger pick-ups and drop-offs in the flex zones. Additionally, this headway was chosen to balance cost considerations and the amount of service provided. Based on the need to connect with existing Douglas County vanpools and regional transit such as GRTA Xpress service, and on input gathered during the public involvement process, the proposed hours of service for the flexible zone-based shuttles are from 5:00 AM to 7:00 PM Monday through Friday. Saturday service was proposed by several individuals during the public and stakeholder outreach process. Additional costs to provide Saturday service are discussed in the Operating and Maintenance costs section. Proposed Saturday hours of service are from 9:00 AM to 4:00 PM on all routes.

Potential Ridership

To estimate potential ridership on the proposed flexible zone-based circulator routes, a sketch planning technique incorporating geographic information system (GIS) software and census data was used. Ridership estimates were then compared with service productivity benchmarks to determine potential feasibility of the flexible zone-based service. The estimation methodology and results are described below.

For each proposed flexible zone-based shuttle route, GIS software was used to calculate the total existing population within a half-mile (1/2 mile) of each fixed stop and within the defined flex zones. Census geography at the block level was the source of population data. To develop a range of ridership estimates for each proposed route, the total population along each route was multiplied by a projected transit mode share. The Atlanta regional mode share of 5.2% for work trips¹³ from household surveys was used as the projected transit mode share because the flexible zone-based circulator would be a new service that would serve all trip types and operate all day. As such, it is anticipated to attract a higher share of riders than existing transportation services that serve commute trips and operate only during the peak periods. A low ridership estimate was generated using transit mode share for all trip types of 3.1%, also from the household surveys.

Under both low and high ridership estimates, the projected ridership per vehicle revenue hour¹⁴ exceeded five, which is the lower bound for flexible zone transit service to be viable. Ridership per vehicle revenue hour was calculated by dividing the forecasted daily ridership on each route by the estimated number of vehicle revenue hours provided. The projected productivity for each of the flexible zone-based circulator routes and ridership estimates are as follows:

- Central Circulator: 5 - 9 riders per hour, approximately 300 – 510 daily riders;
- SR 5/Bright Star Connector: 5 - 9 riders per hour, roughly 300 – 510 daily riders;
- Lithia Springs: 7 -12 riders per hour, approximately 410 – 680 daily riders; and
- Northside Connector/Downtown Circulator: 5 - 8 riders per hour, about 390-660 daily riders.

Potential Public Benefits

The proposed Flexible Zone-Based Shuttle Service would provide public benefits to address four types of service gaps:

- New service within Douglas County – a need exists to connect residents to destinations throughout the county, especially to retail, medical services, and government services;

¹³ Atlanta Regional Commission Regional Travel Survey 2011

¹⁴ Vehicle revenue hours for each route were based on a high-level operations plan and may change slightly as routes are refined to be more efficient during the implementation phase.

- Non-commute service – transportation services that operate outside of normal morning and evening commute hours are needed;
- Increased demand response service – the existing service is reserved weeks in advance, indicating need for additional transportation service capacity; and
- Connections to regional transit services – improved access to CCT, GRTA, and MARTA regional systems was identified as a need by Douglas County residents.

Potential Implementation Challenges

The largest implementation challenge will be identifying a local funding source for ongoing operations and maintenance costs as well as the local match for capital costs. Construction of shelters for passengers is another implementation challenge, as getting permission and proper permits to build shelters in state-owned right-of-way along the state and national highway systems can be time-consuming and cause delays. Finally, contracting with the Georgia Department of Human Services (DHS) to provide human services transportation to target user groups may be complicated and negotiating reimbursement rates may require time.

Estimated Implementation Cost

Total cost to implement the system is estimated at \$3.9 million in capital costs, with ongoing annual operating and maintenance costs of \$2.2 to \$2.6 million dollars. Capital as well as operations and maintenance costs are broken out in further detail below and the projected Douglas County local match is discussed as well.

Capital Costs

Based on the preliminary route descriptions, 60 minute service frequencies, hours of operation from 5:00 AM to 7:00 PM, an estimated average bus speed of 15 miles per hour, and an industry standard spare ratio of 20%, it is anticipated that 22 vehicles will be needed for the proposed service. The following costs are based on the recent experience of other small transit agencies in the Atlanta region that have purchased vehicles and installed shelters:

- Vehicles (22 at \$60,000 each): \$1.3 million
- ADA Compliant shelters (32 at \$50,000 each): \$1.6 Million
- Maintenance Facility: \$1 Million
- Total capital cost: \$3.9 Million

Douglas County will be required to provide a local match of 20% of the capital costs, which is \$784,000. The federal share of 80% will be \$3.14 million.

Operating and Maintenance Costs

Total system operating costs are estimated at \$2.6 million dollars annually for all four routes. If an agreement can be worked out with Cobb County to share costs on the Lithia Springs route, for example, based on the route mileage in each county, the annual cost to Douglas County could be as low as \$2.2 million dollars. At system start-up, Congestion Mitigation and Air Quality (CMAQ) funding can be used to pay for up to 50% of system operating and maintenance costs for the first three years. Douglas County would need to provide a local match of \$1.1 million to \$1.3 million per year, depending on the results of any cost sharing agreement regarding the Lithia Springs Route.

To provide Saturday service on all four routes, the total additional annual operations and maintenance cost is estimated at between \$230,000 and \$280,000. The Douglas County local match would be between \$115,000 and \$140,000 per year.

After the first three years of operation, when CMAQ funding runs out, other sources of operating funds will need to be found. Because Douglas County will be operating fewer than 75 fixed route vehicles in peak service, they qualify as a small system and may use a portion of their Section 5307 allocation, which is generally dedicated to capital expenditures, for operating and maintenance. This exception is only available to agencies that operate fixed services and report to the National Transit Database (NTD) for at least two years. As such, Douglas County should begin reporting to the NTD at service inception to qualify after CMAQ funding expires. Douglas County Rideshare already reports vanpool statistics to NTD, so current staff have experience and will likely be able to report flex zone-based shuttle service with limited additional effort. Because Section 5307 funds are disbursed based on a formula that compares an agencies vehicle revenue hours as percentage of the regional total, it is unknown at this time how much Section 5307 funding may be available to operate the flexible zone-based shuttle system in the future. Based on recent experience with similar systems in the Atlanta region, it is unlikely that Douglas County's future 5307 allotment will be enough to replace the initial CMAQ funding.

Option 2: Demand-Response/Dial-a-Ride Service

This option is a curb-to-curb service that requires riders to schedule a trip with the service provider in advance over the phone or internet. This service is extremely flexible and does not operate on a fixed route



Figure 3-4: An example of a demand-response/dial-a-ride vehicle, equipped with a wheelchair lift.

or schedule. Demand-response services works best in lower density areas with a low demand for trips. This service is intended to complement the flexible zone-based shuttle service and may coordinate with it by dropping riders off at fixed collection points where they can transfer from the demand-response to the flexible zone-based service.

While service can be limited to seniors, persons with disabilities, or populations with limited incomes, this service could also be open to any Douglas County resident.

Concept Description

Proposed hours of operation for this demand-response service are from 5:00 AM to 7:00 PM Monday through Friday. Service will primarily be provided in rural and lower density areas of Douglas County that are not served by other services.

All Douglas County residents with an origin and destination within Douglas County that is not duplicated by the proposed flexible zone-based shuttle service (if implemented) would be eligible to use the demand-response service. Otherwise the demand-response service would be open to any resident of Douglas County with an origin and destination inside the county. Customers would need to schedule rides at least 24 hours in advance. This service is generally more costly because it cannot serve large numbers of riders at once.

Based on levels of demand-response service provided in nearby counties that are similar in population to Douglas County, it is anticipated that seven vehicles will be needed to provide the proposed demand-response service.

Potential Public Benefits

Key benefits of implementing demand-response service address three service gaps in Douglas County:

- Additional capacity would augment the existing limited demand-response service – a need for more service was identified, as the existing service cannot serve all the requests it received;
- The proposed service would connect residents without transportation services in farther-out areas with goods and services in activity centers, such as Douglasville, Lithia Springs, and Villa Rica – a need for better connections within Douglas County was identified; and
- It would connect residents to existing regional services such as GRTA Xpress bus, proposed local services (e.g. flexible zone-based shuttle), and the Multi-Modal Transportation Center where vanpool services are available – a need to improve access to regional services was identified.

Potential Implementation Challenges

The estimated ongoing operations and maintenance cost of the demand-response system is substantial and local funding sources may not be available in the near-term future. Additionally, contracting with the Georgia Department of Human Services (DHS) to provide human services transportation to clients may not be viable.

Estimated Implementation Cost

For demand-response service, the up-front capital cost is estimated at \$420,000 and annual operating costs are anticipated to be \$1.4 million. These costs are based on recent experiences of other counties in the Atlanta region that are similar in population to Douglas County and that currently operate demand-response services.

Capital Costs

Capital costs are estimated at \$420,000 for the seven vehicles. Each vehicle is estimated to cost \$60,000, including a wheelchair lift. A separate maintenance facility would not be required for the demand-response vehicles, as the service could either use the existing facility (with possible additions) or the one used by the flexible zone-based shuttle service if and when it is implemented. The Douglas County local match requirement is 20% of the capital costs, which is \$84,000. The federal share of 80% will be \$336,000.

Operating Costs

Based on the cost per vehicle revenue hour to operate demand response service in other counties in the Atlanta region that are similar to Douglas County with weekday service hours from 5:00 AM to 7:00 PM, the estimated cost to operate demand-response service is \$1.4 million annually. For the first three years, Congestion Mitigation and Air Quality (CMAQ) funding can be used to pay 50% of the operating costs, which would make the Douglas County share \$700,000 annually.

After the first three years, other sources of funding would be required to continue operating demand response service. According to the 2010 Census Urbanized Area Map, the southwestern portion of Douglas County falls outside of the Atlanta urbanized area, meaning the county is eligible for some Section 5311 (rural) funding based on the current Georgia Department of Transportation (GDOT) formula and how much

rural service is provided by the demand-response service. Due to the flexible nature of demand-response service, it is impossible to predict in advance how much of the service provided will be rural or urban.

Option 3: Volunteer Network

This option involves the creation of a network of volunteers willing to transport senior citizens, persons with disabilities, and anyone else who is unable to drive. Services could be arranged through a partnership between Douglas County and community groups, churches and religious groups, and other volunteer organizations. Drivers would be volunteers and may use their own vehicles. Alternately, groups that own vehicles could make them available when they are not otherwise in use. Persons would request rides in advance, either through a coordinator employed by the County using the phone or internet or a community ride board. The County would screen and register drivers allowed to carry passengers.

Concept Description

As a volunteer service, hours of service would likely vary significantly depending on the availability of drivers and vehicles. However, a goal of the system should be for volunteers to be available during the core hours of 9:00 AM to 4:00 PM Monday through Friday and Saturdays from 10:00 AM to 2:00 PM.

The service would cover all of Douglas County; however, trips must have an origin and destination within the county. Eligibility should be limited to senior citizens, persons with disabilities, and persons without a driver's license or vehicle in order to keep the service efficient and manageable.

Potential Public Benefits

A volunteer transportation network would have the following potential benefits for seniors, persons with disabilities, and others unable to drive, filling identified gaps:

- Improved connectivity within Douglas County – a need exists to connect residents to retail, medical, and government services;
- Flexibility of services – a need was identified, especially among senior citizens, for transportation service that is not limited to certain purposes, such as medical appointments;
- Wider hours of operation - service throughout the day and on Saturdays will benefit potential users – a need was identified for transportation services outside of normal commuting hours; and
- Service is provided at a much lower cost to Douglas County than other options.

Potential Implementation Challenges

Finding and retaining volunteer drivers may be challenging, as compensation would likely not be offered (although Douglas County could decide to offer a monetary stipend as compensation for regular or long-term volunteers). Additionally, some potential drivers that volunteer may not pass background and motor vehicle record checks. Finally, coordinating volunteer drivers and vehicles to provide consistent service during a specified time period on weekdays and Saturdays could be challenging.

Estimated Implementation Cost

Due to the flexible and volunteer nature of this alternative, implementation costs would likely be low, but are expected to vary.

Capital Costs

As the service is envisioned, drivers and community organizations will be providing vehicles, so capital costs are estimated at \$0.

Operating Costs

Operating costs are estimated at \$100,000 annually to fund an administrative position to coordinate the various volunteer drivers and organizations, match ride requests to volunteer providers, and perform background and motor vehicle record checks. At a minimum, some operating funding will be required to pay fees associated with background and motor vehicle record checks and some administrative time will be required to administer the checks. Operating costs for this limited effort are estimated at \$40,000 per year. If volunteers would receive compensation, these estimated operating costs would increase.

Option 4: Expansion of Vanpool Program



Figure 3-5: A Douglas County vanpool vehicle.

Expanding the vanpool program builds on the existing Douglas County Rideshare investment to serve work trips to new destinations outside of the county such as fast growing job centers in North Fulton County (expected to grow by over 400,000 jobs in the next five years), the Aerotropolis area around the Hartsfield-Jackson Atlanta International Airport, Perimeter Center, Carrollton, the Fulton Industrial Boulevard area, and other destinations in the region.

Concept Description

This service would increase the number of vanpools to both emerging and established employment centers that are growing, primarily on the northern side of the Atlanta region, such as the Central Perimeter area, the Alpharetta area, and Kennesaw. Additional job centers that could be targeted for vanpool expansion include the areas around Hartsfield-Jackson Atlanta International Airport and the Fulton Industrial Boulevard area. Commuters travelling to work and students attending colleges are the primary populations anticipated to be served by the expansion.

The proposed service expansion would operate during the same hours as the current vanpool program, generally from 5:00 AM to 7:00 AM in the morning and 2:30 PM to 5:00 PM in the evening Monday through Friday. Service will be provided from pick-up locations throughout Douglas County, generally park-and-ride lots and the Multi-Modal Center, to jobs within the Atlanta region. Exact pick-up and drop-off locations will vary based on the needs of vanpool participants. Fares will vary based on the distance the vanpool travels and the number of riders in each vanpool, but will likely range from \$82.00 per month to \$98.00 per month. The expanded vanpool service will be open to all Douglas County residents who register and pay the monthly fare.

It is anticipated that a total of 12 vehicles would be needed to expand the vanpool service, based on the proposed destinations listed below and an initial estimate of potential travel demand. Ten vehicles would be

operated in regular service and two would be spares. The following key destinations have been identified for vanpool service expansion:

- Alpharetta and John's Creek area: expand existing service to address employment growth (two new vanpools);
- Fulton Industrial Boulevard area: new service to provide access to existing jobs (two new vanpools);
- Hartsfield-Jackson Atlanta International Airport area: add vanpools as employment growth occurs at the Aerotropolis, Porsche North American Headquarters, and other nearby locations (two to three new vanpools); and
- Kennesaw/Town Center Area: new service to a growing employment center that includes Kennesaw State University (three new vanpools).

Potential Public Benefits

An expansion of the vanpool program will provide the following benefits to riders to address current service gaps:

- Increase access to a variety of jobs for persons who are unable to or uninterested in driving themselves;
- Provide potential time savings when the high-occupancy vehicle (HOV) system or future managed lane system can be used;
- Reduce the number of cars on the road, positively impacting congestion and air pollution;
- Save commuters money on gas and maintenance such as tires, oil changes, brakes, etc.;
- Reduce stress associated with driving in congested traffic.

Potential Implementation Challenges

The following challenges to the successful implementation of a vanpool program expansion have been identified:

- Marketing - getting the word out about the new vanpools and signing up new riders may be a challenge due to current funding and staffing constraints unless new staff resources are secured.
- Initial capital costs - over the five year period from 2009 to 2013, total capital expenditures on the vanpool program have averaged \$205,000 per year, significantly less than the \$600,000 to \$720,000 the expansion is projected to cost.
- Ongoing operations and maintenance costs - the estimated increase in annual costs is 18 to 21% higher than the current budget, but will likely be partially offset by increased fare revenues.

Estimated Implementation Cost

An estimated \$600,000 to \$720,000 in capital costs and ongoing annual operating and maintenance costs of \$140,000 to \$170,000 will be required for expansion of the vanpool service. Capital as well as operations and maintenance costs are broken out in further detail below. The projected Douglas County local match is provided as well.

Capital Costs

Based on the preliminary destinations, ridership demand estimates, and an industry standard spare ratio of 20 percent, 12 vehicles will be needed for the vanpool service expansion. A total capital cost estimate of

\$600,000 to \$720,000 is based on an estimate of \$50,000 - \$60,000 per vehicle, which is in line with the recent experience of other small transit agencies in the Atlanta region that have purchased vans.

Douglas County will be required to provide a local match of 20% of the capital costs, which is anticipated to be between \$120,000 and \$140,000. The federal share of 80% will likely be between \$480,000 and \$580,000.

Operating and Maintenance Costs

Total operating costs are estimated at between \$140,000 and \$170,000 annually for the proposed ten vanpools. The operating cost estimates are based on the operations and maintenance cost per revenue mile reported for the existing vanpool program and the estimated number of miles the proposed additional vanpools will travel.

Because Douglas County operates fewer than 75 fixed route vehicles in peak service, it qualifies as a small transit system and may use a portion of its Section 5307 allocation, which is generally dedicated to capital expenditures, for operating and maintenance. This exception is only available to agencies that operate fixed services and report to the National Transit Database (NTD) for at least two years. Douglas County Rideshare has been reporting vanpool operations to the NTD for many years and has qualified for this exception in the past. Based on recent federal operating assistance to the vanpool program, it is likely that Douglas County's future Section 5307 allotment will pay for approximately 21 to 24% of the operating cost of the expansion. Therefore, revenues from Section 5307 funding are expected to be between \$29,000 and \$41,000.

The Douglas County portion of operating and maintenance costs for the proposed vanpool service expansion is estimated at \$44,000 to \$62,000 per year. This estimate is based on the historic level of operations and maintenance funding Douglas County has provided for the vanpool program, expected Section 5307 funding, and anticipated fare revenues. Based on the current average of 11 passengers per vanpool and historical fare revenues, approximately \$67,000 annually in additional fares are expected to be collected from riders on the new vanpools.

Option 5: Explore Expanding GRTA Xpress Service

This option involves partnering with GRTA to increase Xpress bus service to and from Douglas County. This could include increasing the number of buses, extending the hours of service, or expanding the geographic area served to new destinations outside of Douglas County.

Concept Description

This option would increase GRTA Xpress service from Douglas County to employment centers in the Atlanta region. This could include new service to destinations such as Cumberland/Galleria and the Central Perimeter area, or increasing the frequency of service to current destinations such as Downtown Atlanta. Douglas County commuters travelling to work will be the primary beneficiaries of expanded GRTA Xpress service.

Potential Public Benefits

Expanding GRTA Xpress bus service to and from Douglas County would have the following potential benefits:

- Increased access to jobs for Douglas County residents;

- Increased convenience due to higher frequency service, expanded hours of service, or expanded geographic area served; and
- Reduction in traffic congestion and pollution.

Potential Implementation Challenges

Several challenges will need to be overcome to implement an expansion of GRTA service and some examples follow:

- GRTA controls the service and may not view expanding service to and from Douglas County as a high priority.
- While low ridership on existing routes may indicate lack of demand, expanding service may increase demand by improving access to jobs and more convenient service could attract new riders.
- Capital funding for the required local match might not be available.
- Operations funding for service expansion may be limited.

Estimated Implementation Cost

The implementation cost would vary based on the number of new routes, length of the routes, and the number of buses placed into service. At this time, all these variables are currently unknown. Therefore, the estimated costs provided here illustrate the costs to run one daily round-trip route to one representative destination.

Capital Costs

The capital cost for one vehicle is estimated at \$650,000, based on data included in GRTA's recent *Comprehensive Operations Analysis*. Douglas County, or GRTA, would be required to provide a local match of 20% of the capital costs, which is \$130,000 per vehicle. The federal share of 80% will be \$520,000 per vehicle.

Operating Costs

The anticipated operating cost is based on cost per mile for current GRTA Xpress Service and assumes a one-way trip length of 32 miles, which is approximately the distance between the Douglas County Multi-Modal Transportation Center and the Central Perimeter business district. Operating costs for routes to the Cumberland/Galleria employment center and Hartsfield-Jackson airport would be at the lower end of the range, because they are shorter. Annual operating costs for one round trip to one destination are estimated at \$100,000 to \$125,000 and will vary based on route length. The local share required from Douglas County is unknown at this time and would depend on the outcome of negotiations with GRTA.

Option 6: Partnerships with Private On-Demand Ride-Hailing Services

This option involves the expansion of privately operated services in which customers request rides on an as-needed basis without advanced reservations through mobile applications (apps) for smartphones. Service costs are paid for by users through the app. Examples of companies that offer this service include Uber and Lyft. Douglas County could encourage these companies to expand their service area into more of the county or enter into partnerships to offer rides for residents, similar to the current voucher program for senior citizens.

Concept Description

Service hours are 24 hours a day/seven days a week. Customers make reservations at the time they need a ride and advance notice is unnecessary.

The service would be open to all Douglas County citizens and trips can have origins and destinations outside of Douglas County. If a voucher program is implemented, eligibility for discounts would be limited to senior citizens 60 years of age and over with an income that does not exceed 200% of the federal poverty level and persons with disabilities. Should a voucher program be implemented in partnership with ride-hailing companies, it is anticipated to serve approximately 70 persons per month, which is higher than the number served by existing taxi voucher system and based on the anticipated lower cost of purchased service from private ride-hailing companies.

Potential Public Benefits

The following public benefits are anticipated to result from a partnership between Douglas County and ride-hailing services, and address four types of service gaps:

- Affordable rides for residents, especially those eligible for discounts, if a voucher program is available. This service would partially fulfill the need for increased demand-response service;
- Shorter wait times than existing taxi services. At public outreach activities the project team heard from citizens that current taxi service wait times are too long and service is too expensive;
- Flexible scheduling allows trips to day-to-day activities. Better connections to destinations throughout the county was identified as a need; and
- Extended hours of service - a need for non-commute service was identified and the 24 hour/seven days a week availability of ride-hailing services meets this need.

Potential Implementation Challenges

A key obstacle to implementation is that companies providing ride-hailing services may be uninterested in partnering with the county. While the Section 5311 program encourages participation of private transportation providers to the maximum extent feasible, the legal status of ride-hailing companies is still in flux and sources of funding may be limited until it is resolved at the national level.

Estimated Implementation Cost

Costs would likely vary based on the amount of subsidy required and would depend on negotiations with the companies. Expanding the existing voucher system to include ride-hailing companies would have minimal upfront costs and ongoing annual costs of \$75,000 per year.

Capital Costs

Employees of ride-hailing services currently operate as independent contractors and own the vehicles used to provide service. Since the service is on-demand and curbside-to-curb, no shelters or other amenities are needed. Capital costs are estimated at \$0.

Operating Costs

Should Douglas County choose to provide subsidies to ride-hailing companies to expand their coverage to the entire county, annual operating costs will be the amount agreed upon between the county and the service providers. The County may also choose to encourage the use of these services by including them in informational materials about transportation services, at little-to-no cost to the County.

In order to expand the voucher program, the current part time administrator will need to be full time, or another part-time administrator would need to be hired. Based on this and the assumption that the ride-hailing part of the program will serve approximately 70 customers per month, the total estimated annual operating cost for increasing the voucher system to cover ride-hailing services is as follows:

- Part time administrator: \$37,500 per year
- Vouchers: \$37,500 per year
- Total: \$75,000 per year

For the administrative position, a local match of 20% is required of Douglas County, with federal funds cover the remaining 80%. The Douglas County match would amount to \$7,500 per year.

In general, federal funding sources such as Sections 5311 and 5317 (New Freedom Program) will cover 50% of operating costs, requiring a 50% local match from Douglas County. Therefore, the cost of vouchers would be split 50/50 between Douglas County and the federal government. Douglas County share would be \$18,750. Combining the staff time and voucher cost, the projected total annual cost to Douglas County is \$26,250 per year.

Option 7: New Park-and-Ride Lots

This option would involve planning for, designing, and constructing up to two new park-and-ride lots in locations that do not already have such lots where a need for them has been identified.

Concept Description

Douglas County is currently home to four park-and-ride or carpool lots, all positioned along the I-20 corridor. The lots are generally well-utilized, particularly those in the eastern half of the county, which help commuters access job centers in Atlanta and other points east. To accommodate travelers in areas without park-and-ride lots as well as population growth inside Douglas County and continued job growth outside the County, the County should plan for, design, and construct up to two new park-and-ride lots in areas not already served by existing lots.

New lots would be designed to accommodate carpoolers for any purpose and could serve as pick-up and drop-off locations for other transportation services now and in the future. Based on public input and feedback from County officials, lots should be targeted in the eastern portion of the County to serve the area around the Thornton Road and Lee Road corridors and the far west part of the County near I-20 in the vicinity of Liberty Road. Consideration should also be given to the southern part of the County, in the area where SR 92/Fairburn Road meets SR 166.

Douglas County has already set aside grant funds for land acquisition, design, and construction of park-and-ride lots. It is anticipated that in 2016, the County would identify parcels for new lots and begin acquiring land as needed and begin the design phase in 2017, with construction getting under way in 2018.

Potential Public Benefits

Anticipated public benefits of new park-and-ride lots include the following and would address four types of service gaps:

- Increase the number of people who carpool, especially for work trips, and take vehicles off area roads, thereby reducing congestion and improving air quality;
- Provide opportunities for nearly 31,000 people who drive alone to work outside of Douglas County to share rides;
- Serve the entire County population; and
- Help reduce travel time to certain destinations by giving people the ability to travel in high-occupancy vehicle (HOV) and high-occupancy toll (HOT) lanes, which are planned for I-20 in the Regional Transportation Plan (RTP).

Potential Implementation Challenges

Identifying appropriate, suitable land and acquiring it will be the primary challenge in constructing new park-and-ride lots. Based on an analysis of publicly owned land conducted as part of this study, there are no suitable publicly owned lands for park-and-ride lots based on lot size and ownership at this time. Douglas County does not currently own any land in potential suitable locations for park-and-ride lots, but could undertake a process to identify suitable parcels based on criteria used by similar park-and-ride programs in the U.S., including the Florida Department of Transportation.

Estimated Implementation Cost

Building new park-and-ride lots will incur both one-time capital costs and recurring annual costs for maintenance.

Capital Costs

Capital costs include land acquisition, design and engineering, and construction costs. Land acquisition costs will vary based upon a number of factors, including size, location, accessibility, other development in the area, and existing zoning. Design and engineering costs will typically include preliminary design and engineering, final design, construction plans, and specifications. Engineering costs are frequently derived as a percentage of construction costs (usually in the range of 10-12%).

Assuming 300 square feet per parking space for an off-street lot, including access lanes and landscaping, it is estimated that between ¾ of an acre (for a 100-space lot) and three acres (for a 400-space lot) would be needed for each new park-and-ride lot.

A recent estimate by the Chatham County Savannah Metropolitan Planning Commission (MPC) and Coastal Region MPO in Savannah used approximately \$11,500 per space for one-time land, engineering, and construction costs. Athens Clarke County estimated a unit cost per space of \$4,500 (adjusted from 2005 to 2014 dollars) for a paved surface lot, including improvements, but not land acquisition. In its *Direct Xpress* comprehensive operational analysis, GRTA assumed costs of \$15,000 per parking space and acquisition costs of \$1-2 million per lot. Based upon this research, estimated costs per park-and-ride lot for Douglas County are as follows:

Table 6: Estimated potential costs of park-and-ride lots.

Lot size	Low Estimate	High Estimate
100 spaces	\$1.15 million	\$2.5 million
400 spaces	\$4.6 million	\$7 million

These costs represent both ends of the cost spectrum and leased or publicly-owned locations may not be as expensive as newly acquired lots; therefore, the unit costs presented in this report are intended as estimates for initial planning purposes.

Operating Costs

There are recurring annual operating costs including those associated with maintenance and/or lease costs, where applicable. Routine maintenance is needed to maintain safe conditions for individuals using the lot and to extend the life of the lot before expensive repair or replacement is needed. This may include maintenance of pavement, striping, lighting, signage, landscaping, shelters, cameras, and litter removal. Assuming an estimate of \$100 per parking space for routine maintenance (based upon other park-and-ride lot studies for Georgia communities), a safe range for annual operating costs for two lots of 100-400 spaces each would be between \$20,000 and \$80,000 (or \$10,000 to \$40,000 per lot, depending on size).

Option 8: Multi-Modal Center and Park-and-Ride Lot Improvements

This option would upgrade the Douglas County Multi-Modal Center so that it continues to provide convenient, modern, and high quality service to Douglas County residents. Additionally, it would allow the County to continue to improve safety and security at park-and-ride lots.

Concept Description

This concept would involve installing new lighting, security cameras, Wi-Fi service, shelters and emergency call boxes at the Multi-Modal Transportation Center and the four existing park-and-ride lots in Douglas County.

Potential Public Benefits

Anticipated benefits of upgrades to the Multi-Modal Center and park-and-ride lots address the following service gaps:

- Increase security and improve amenities at the Multi-Modal Center and park-and-ride lots; and
- Likely increased use of the Multi-Modal Center and park-and-ride lots due to the improved security and amenities.

Potential Implementation Challenges

No potential challenges to implementing this option were identified.

Estimated Implementation Cost

The following capital and operating costs are based on the recent experience of other transportation services providers in the Atlanta region. There are a number of vendors providing the types of equipment that would be installed. Opportunities exist to negotiate lower prices and the following estimates are intended as rough guidelines.

Capital Costs

The capital cost to install safety-related upgrades and other amenities at the Multi-Modal Transportation Center and four existing park-and-ride lots in Douglas County are estimated to be between \$900,000 and \$1.1 million. Assuming a local match of 20%, the cost to Douglas County would be between \$180,000 and \$220,000.

Operating Costs

While operating and maintenance costs are dependent on the exact types of equipment installed, approximately \$10,000 a year would be required to maintain or replace malfunctioning equipment.

Option 9: Bicycle and Pedestrian Infrastructure

This option would improve non-motorized access to the proposed transportation services by building and repairing bicycle lanes, sidewalks, and multi-use paths. Additionally, provide non-motorized connections from the proposed transportation services to existing nearby parks and trails. It would also prioritize infrastructure improvements around activity centers, park-and-ride lots, recreational areas, schools, and existing parks and trails.

Concept Description

This concept involves building new or repairing existing bicycle lanes, multi-use paths, and sidewalks near the Douglas County Multi-Modal Center, existing and proposed park-and-ride lots, schools, shopping districts, and retail centers as well as near proposed parking lots and stops on the flexible zone-based shuttle service. In keeping with the regional bicycle and pedestrian plan for Metro Atlanta, the County should strive to provide safe, relatively easy opportunities for people to begin or end trips on bike or on foot by investing in bicycle and pedestrian facilities around transportation stops. Additionally, new or repaired pedestrian infrastructure will connect nearby trails and parks to transportation services. All Douglas County citizens could be served by these improvements.

For the purposes of this study, aerial photography was used to determine that on average approximately 1.5 miles of new sidewalk and 1.0 mile of new bicycle facilities will be needed for each proposed flexible zone-based shuttle stop. Additionally, approximately 16 miles of multi-use path connecting areas near proposed flexible zone-based shuttle stops to nearby parks and recreational trails would likely be needed.

Potential Public Benefits

Key benefits of investing in bicycle and pedestrian infrastructure address three types of service gaps:

- Allow non-drivers to access transportation services at existing and proposed park-and-ride lots;
- Improve access to destinations around the proposed flexible zone-based circulator stops;
- Improve safety and public health, and increase usage of sidewalks and bike paths; and
- Increase access to existing recreational amenities from proposed flexible zone-based circulator stops.

Potential Implementation Challenges

Obtaining funding is the primary challenge to implementation of bicycle and pedestrian infrastructure. However, there are special federal transportation programs and grant opportunities to support these efforts. State, local, and private funding sources could also be used to fund some improvements.

Estimated Implementation Cost

The implementation costs are estimated at between \$47.3 million and \$58.6 million in capital costs, with ongoing annual maintenance costs of \$300,000 to \$360,000. Actual costs may vary based on the amount and type of bicycle and pedestrian infrastructure constructed.

Capital Costs

A capital cost estimate of \$47.3 million to \$58.6 million for bicycle and pedestrian infrastructure was determined using a costing tool developed by the Atlanta Regional Commission. Assuming a local match of 20%, the Douglas County share will be between \$9.5 million and \$11.4 million for the entire set of improvements.

Operating Costs

Operating and maintenance costs of the proposed bicycle and pedestrian improvements are estimated at \$300,000 to \$360,000 per year. Operating and maintenance costs for sidewalks were based on the recent experience of other local jurisdictions, while multi-use trails are based on a five-year average of actual expenditures by the PATH Foundation.

Option 10: Marketing and Branding

This option would include the launch of a strategic, targeted, comprehensive marketing and branding campaign to promote the variety of transportation services available to Douglas County residents.

Concept Description

In order to sustain and grow a robust yet efficient family of transportation services for residents of Douglas County, the County should undertake a carefully crafted, targeted, and strategic marketing and promotional effort. There is a vast pool of potential users throughout Douglas County as well as individuals coming to jobs in Douglas County from surrounding counties.

The new brand should build upon previous recommendations from the 2008 *Comprehensive Transportation Plan* and consider using identifiers such as “Go! Douglas,” “Connect Douglas,” “Douglas Links,” or “Douglas County Connect” as its new moniker. The campaign should include a broad and comprehensive strategy that aims to reach as many people as possible through multiple outlets, including, but not limited to radio, print, and online and social media.

Potential Public Benefits

The anticipated benefits of a marketing and branding effort address these service gaps:

- Reach people in need of services who are not aware of their options and services available;
- Raise awareness to increase use of services, improve likelihood of receiving grants and other funding as well as providing additional revenue for services, and help reduce reliance on local funding;
- Reduce the number of vehicles on local roads, reduce traffic congestion, and improve air quality through increased use of transportation services; and
- Give residents more options for safe, healthy, and affordable travel.

Potential Implementation Challenges

The potential obstacles to mounting a marketing effort include securing funding for the initial campaign as well as a source of continued funding to sustain it over time.

Estimated Implementation Cost

The implementation of a marketing and branding campaign would include an initial investment of staff time to establish a mission and to agree upon a brand, and its primary messages. It would also involve identifying

potential partners and hiring outside experts, if needed. Ongoing operating costs would include those associated with periodic update and distribution of informational and marketing materials.

Capital Costs

Initially a substantial investment will be required in the form of hiring a marketing or public relations (PR) consultant to conduct an assessment, develop key messages, logos and colors, and to develop a strategy and action plan. It is anticipated that this initial cost will be in the \$200,000-\$300,000 range and may also cover the first year of publication and distribution of materials.

Operating Costs

In subsequent years, it will be important for the County to maintain ongoing promotional activities to continue to keep Douglas County aware of transportation services available to residents. It is estimated that ongoing operating costs will be in the range of \$40,000 per year, depending on the activities selected.

3.5 Evaluation of Potential Options

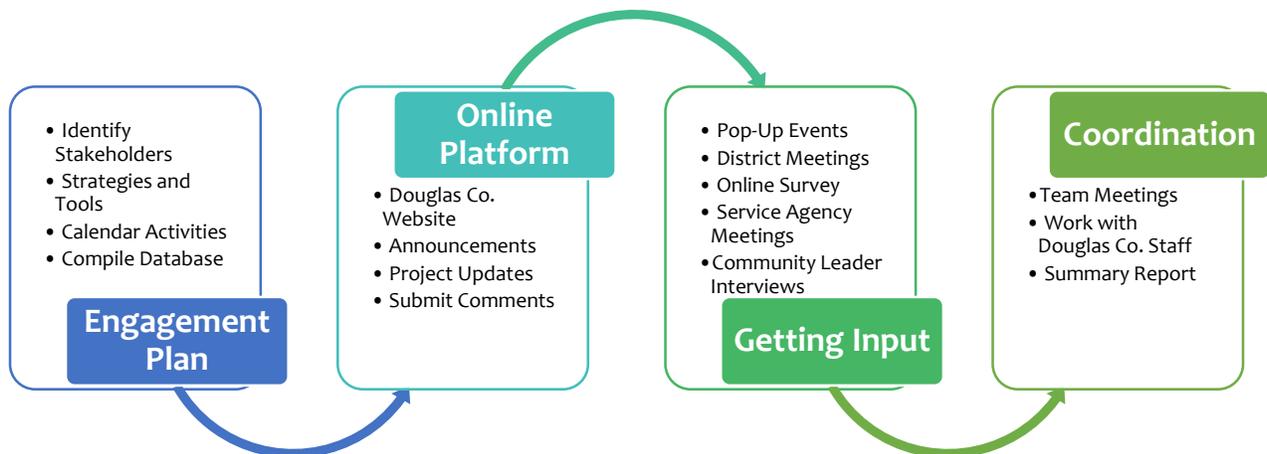
Since the various service options considered in the study fill a variety of service gaps and address the varied mobility needs of all sectors of the Douglas County community, it is extremely difficult to compare one service alternative to all the others. Each alternative was considered based upon its ability to meet identified transportation needs, potential benefits to the Douglas County community as a whole, estimated planning-level costs, and ease of implementation. This chapter was aimed at summarizing key differentiating factors of each potential service option and describing the strengths, challenges, and costs of each concept. Using the large amount of community feedback gathered during the study, the Douglas County Board of Commissioners can use this technical information, along with its financial data and forecasts, to determine which options can best meet residents' needs and when.

CHAPTER 4 PUBLIC INVOLVEMENT

4.0 Overview

To maximize public participation in the Transportation Services Study, the project team designed a robust public involvement plan for the Transportation Services Study. The plan focused on providing multiple avenues and mechanisms for people to participate and provide meaningful input to benefit the effort. Activities were held at different locations throughout Douglas County and in conjunction with various community events, giving people opportunities to participate without necessarily having to attend weekday or evening meetings. This strategy also yielded input from a broader audience than would normally participate in typical public meetings. The team was able to engage with residents young and old, people who have lived in Douglas County for a few months, and people who have been here their whole lives (sometimes more than 50 years). The study also included multiple opportunities for online engagement, making it easier for residents to participate at their convenience. Online engagement included a community survey (taken by more than 1,100 people), periodic project updates sent out via email, and a series of fun, informative, and engaging infographics. These materials were published to a page on the Douglas County website dedicated to the project along with project documents such as maps, meeting summaries, and technical reports.

Below is a summary of the public involvement components of the study, including the communication mechanisms, the activities conducted, and the input received.



This chapter is organized as follows:

- 4.1 Communication and Outreach
- 4.2 Public Participation Activities
- 4.3 Public Input: What We Heard

4.1 Communication and Outreach

Throughout the course of the study, the project team made an effort to communicate regularly and often with the community about the project, seeking both to inform them about the status of the project and work underway. Additionally, the team designed the program to help educate people about issues around transportation facing different groups of people in Douglas County, as well as to ensure residents were aware of opportunities to provide input into the study.

Both in-person and electronic communication were used throughout the course of the project; however, recognizing that not everyone has access to or is able to use the internet, the team made materials and notices available in printed or hard copy format. For example, while the project surveys were conducted mainly online, paper copies were brought to the pop-up events and district meetings, and were delivered to senior centers and residences. Staff collected the surveys periodically throughout the course of the project. The County served as the primary communicator, sending out notices and updates about the project as appropriate. GS&P staff interacted with community members mainly during public meetings and pop-up events. The County's Department of Communications and Community Relations was a valuable partner to the project team in reaching out to Douglas County residents.

Contact Database

To help organize contact information, the project team created and maintained a contact database to facilitate communication between the team, the County, and the public about the study, providing information volunteered by interested participants who wanted to keep up-to-date on project activities. The database included email addresses and other contact information, and also served as a record of participation, indicating how people were contacted and what activities they participated in. The database was updated and shared with the County Project Manager regularly during the project. By November 2015, the database contained 340 names and 301 unique email addresses for those actively engaged in the study.

Information Sharing

The project team also prepared informative and engaging resources such as fact sheets, infographics, and maps to help people learn more about transportation in general as well as specific conditions in and around Douglas County. These materials were posted to the website regularly in an effort to keep people engaged and provide insight into the work under way. Examples of the types of materials prepared are shown on the following pages (larger versions are available in the Appendix). These include, but are not limited to:

- Transportation Services Study Project Fact Sheet and Progress Reports
- Meeting Summaries
- Survey Summary
- Series of Infographics on:
 - The challenges of transportation for senior citizens
 - Transportation issues for people who work outside of the County
 - The challenges of transportation for people with disabilities
 - Navigating transportation when people have atypical schedules
- Maps:
 - Demographic data such as distribution of seniors over age 65, employment and part-time workers, people with disabilities, households with no vehicles, people under age 16, and workers living in Douglas County who commute to jobs outside the county

- Transportation service network in Douglas County, adjacent counties, and in the Metro Atlanta area
- Vanpool routes (within Metro Atlanta, West Georgia, and Alabama)

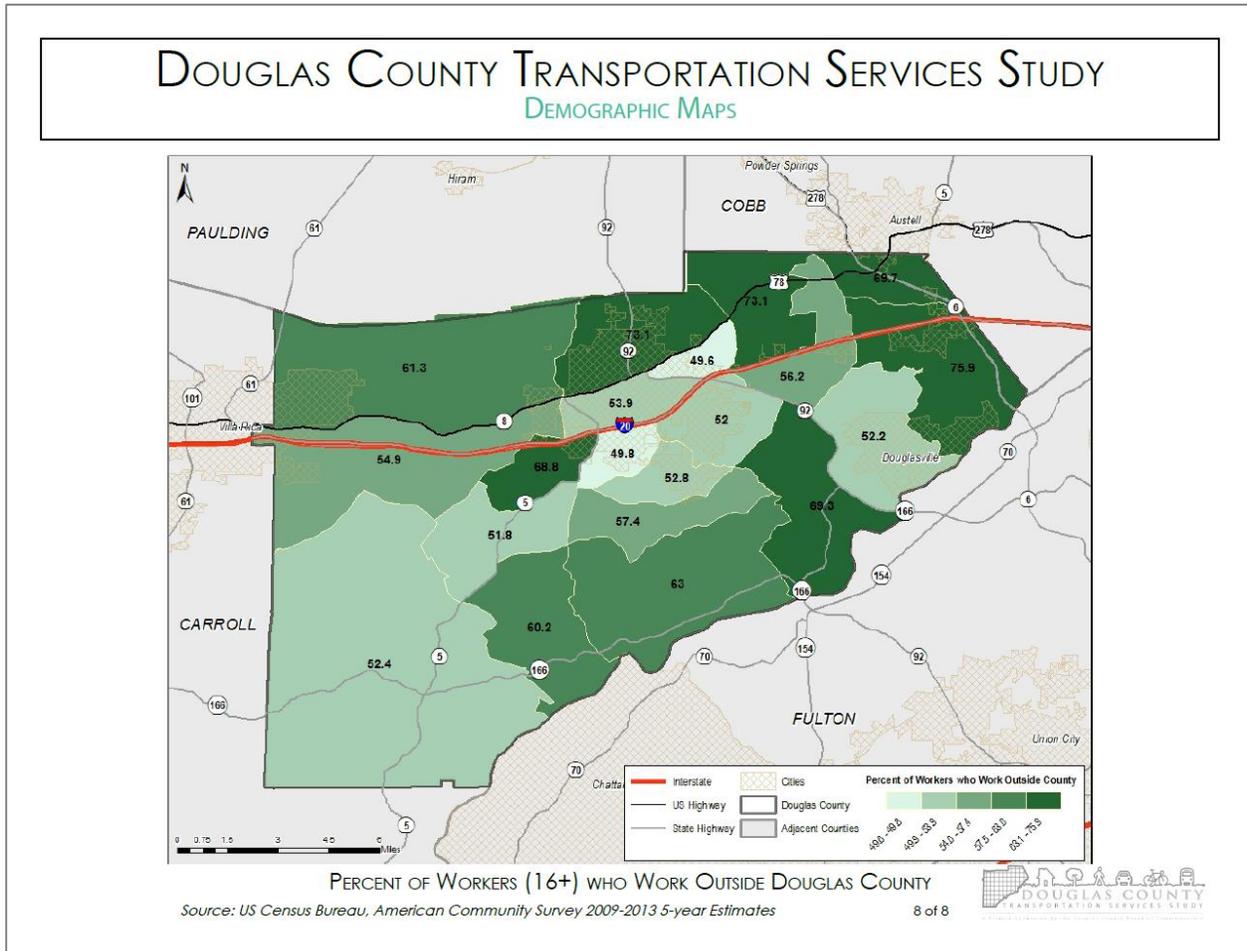


Figure 4-1: Example of informational maps prepared for online distribution.

navigating

Transportation for People with Disabilities

Gresham, Smith & Partners
June 2015



1 in 5 Americans
(56.7 million people)
has a disability



wait times for
paratransit service
often exceed
1 hour



Paratransit customers
represent **1.9%** of transit riders
but the service accounts
for **13.7%** of agency costs



3.6 million
Americans **miss or
delay** healthcare
appointments each year
due to transportation



560,000
Americans with disabilities
never leave home
**because of
transportation**



12.5% of Americans
with disabilities are
unemployed

Common concerns



inefficient,
cumbersome,
and unfriendly
**reservation &
information
systems**



maintenance
of equipment
and lifts



operators don't
announce
stops



barriers to access,
including lack of
**sidewalks,
ramps,
crosswalks &
parking**



lack of
**training &
sensitivity**
for drivers &
other employees

Sources: Community Transportation Association of America, Disability Rights Education & Defense Fund, American Public Transportation Association, American Association of People with Disabilities, Bureau of Labor Statistics

Figure 4-2: One example from a series of infographics prepared for the study.

Project Webpage

The Douglas County website

(www.celebratedouglascounty.com) and

a special webpage for the study

(www.dctransportationstudy.com)

served as home base for information and updates about the project. The website provides an overview of the project and scope of work involved, key materials and documents such as summaries of pop-up events, and announcements about opportunities to get involved and upcoming events. The team also made educational and background information, such as maps and fact sheets, available on the website. Contact information is also available on the site as a way of encouraging the public to share comments and ask questions.

Email

The project utilized email as one of

several forms of communication to

directly engage and inform Douglas

County residents and stakeholders about

the various activities, stages, and key

milestones of the project. Working closely with the County, the project team prepared information to share, such as project updates and announcements about upcoming events. The County's Department of Communications and Community Relations sent out information both to the entire Douglas County community via the *Douglas County Happenings* e-newsletter and to the individuals who signed up to receive project-specific information. Special emails were sent out to inform people of opportunities to provide input and participate in the project, as well as to share or distribute project information.



Figure 4-3: Screenshot of the Douglas County Transportation Services Study webpage.

4.2 Public Participation Activities

This section describes activities conducted as part of the study to directly engage and inform residents about the study and to provide opportunities for them to share their opinions and provide input into the study. These activities include public meetings open to all Douglas County residents, meetings hosted by County Commissioners for residents of their districts, an extensive survey, activities at community events, and informational materials distributed via the County website and email newsletters.

District and Community Meetings

Project Kick-Off (April 7, 2015) – Twenty-five people attended the project kick-off meeting which was held to introduce and formally launch the project. The project team explained the approach to the project and

facilitated a discussion about what factors should be used by the County Commission to make transportation service decisions to meet citizens' travel needs. This meeting was also the launch of the project survey and provided the initial contact information for the project database. A question-and-answer session followed a formal presentation.

District Meeting/Project Kick-Off (April 15, 2015) – A kick-off meeting was hosted by Commissioner Robinson for residents of District 2 and was attended by more than 20 people. The meeting consisted of an introduction to the study and an explanation of the approach and process being used. The survey was distributed to all attendees and a question-and-answer session followed the presentation.

Board of Commissioners Work Session (August 17, 2015) – The project team gave a presentation and update on project status, including an overview of what had been accomplished to-date and the anticipated next steps. Team members answered questions from the Commissioners.

District Town Hall Meeting (September 28, 2015)
– Commissioner Mitchell hosted a Transportation Town Hall meeting to provide citizens with an update on the study and so they could learn about potential services and options under consideration. About 20 attendees participated in an interactive break-out session, which followed a presentation given by the project team. Team members collected questionnaires to gauge interest in several potential service options.



Figure 4-4: Project Manager Gary Watson looks on during the break-out session at the Transportation Town Hall meeting held in District 1.

District Town Hall Meeting (October 1, 2015) – The project team was invited to give a brief presentation as part of a regular Town Hall meeting hosted by Commissioner Mulcare. The meeting was attended by nearly 30 residents. The team gave a brief presentation that focused mainly on describing the potential services and options under consideration. Following the presentation, attendees asked questions of the Commissioner and the project team. Questionnaires to gauge reactions to potential options were handed out.

“Pop-Up” Events

Douglas County Senior Picnic (May 21, 2015) - The event, hosted by the County Senior Services Division, was attended by more than 400 people. Project team members attended to speak with seniors about the study and to gather information and opinions about the transportation needs facing older adults. The team gave out copies of the fact sheet and project survey and collected 47 completed surveys. Another activity asked attendees about their day-to-day transportation needs, including frequent destinations and when they usually travel to those locations. General comment cards were also available as a way for people to provide additional input and feedback about transportation and the study in general.

Penny McHenry Hydrangea Festival (June 6, 2015) - The project team was invited to participate in the Hydrangea Festival to help build awareness about the study and get input from a broad range of community

members. Stationed in front of the courthouse, team members spoke with dozens of people passing by about the project, handing out the project fact sheet and asking participants about their transportation needs and common destinations throughout the County. Participants who had not already done so were invited to take the project survey, which was available online using portable tablets or in paper format. General comment cards were also available.

Villa Rica Gold Rush Festival (September 12, 2015) – The project team was invited to set up a booth at the Gold Rush Festival in order to engage citizens and gauge interest in and reactions to potential service options. Held at the Mill Amphitheater on Main Street, the event was a great opportunity to meet and greet citizens in the western portion of Douglas County. Staff set up an engaging activity that invited attendees to learn about potential options being considered and indicate which options they would be most likely to invest in by depositing slips of paper into boxes corresponding to each option. Over the course of the day, the team spoke with 55 attendees, many of whom participated in the interactive activity or committed to take the survey.

Summaries of each of these events can be found in the Appendix.

Progress Reports

Project progress reports were designed to correspond to key milestones over the course of the project, and were intended to let people know the status of the project, what had been accomplished at that point, and what the anticipated next steps would be. Internal progress reports were submitted the Project Manager on a monthly basis. Public progress reports were sent out via the *Douglas County Happenings* e-newsletter at the following milestones:

- July 2015 – Conclusion of summer pop-up events, winding down of project survey existing conditions.
- September 2015 – An update on the status of Commission District meetings and next steps in the study.



Figure 4-5: The County Project Manager stands with a member of the project team during the Gold Rush Festival.

Community Survey

A community survey was conducted to gain an understanding of who uses the existing transportation services available in Douglas County, whether people live and/or work in Douglas County, what residents feel are the most important characteristics of good transportation services, and what they would like the County to consider as it examines the need and opportunities for potential future services. The survey received 1,103 responses by October 2015. Nearly 900 individual comments were recorded as part of the survey. Various methods were used to distribute the survey to Douglas County residents.

- Email blasts were sent out via:
 - Douglas County Happenings e-newsletter May 12, 2015
 - Douglas County Chamber of Commerce e-newsletter May 14, 2015
- Announcements were made at Commission District meetings and the survey was mentioned during Community Leader Interviews.
- Handed out in-person at the project kick-off and flyers with links were distributed at Pop-Up Events over the summer of 2015.

Results of the survey are summarized in section 4.3 Public Input: What We Heard.

Service Agency and Provider Meetings

The project team met with representatives of agencies that have significant transportation needs and/or that are interested in exploring opportunities to provide transportation to their customers, clients, and constituents. The purpose of these meetings was to gain an understanding of these needs in order to determine synergy between their needs and any findings or recommendations that might come out of the Transportation Services Study. The team met with representatives from the Senior Services Division, the Accountability Courts, the Department of Transportation, and the County Commissioners. Representatives of the Douglas County School System, Douglas County Planning and Zoning, Douglas County Communications and Community Relations, City of Douglasville Planning and Zoning, and the Villa Rica Community Development Department participated in community leader interviews.

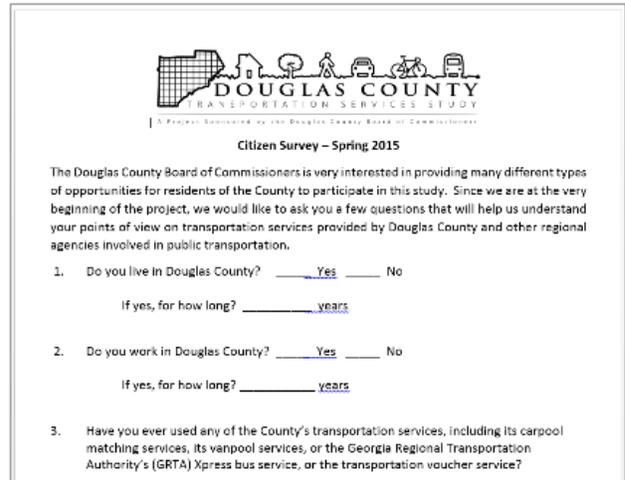


Figure 4-6: The community survey received more than 1,100 responses.

4.3 Public Input: What We Heard

This section summarizes information and input gathered over the course of the study through the events and activities described in the previous section.

Common Themes

- **Elderly people** need ways to get to day-to-day activities and senior citizens should be a priority in the transportation services considered. Seniors would like service that is **more responsive to their day-to-day needs**. It can be difficult to predict when transportation is needed and schedule rides days or weeks in advance.
- Funding is among the most important considerations based on citizen feedback: it is essential that services are financially sustainable. Funding to support service and infrastructure such as sidewalks is needed. Participating residents believe the County Commissioners should **consider the financial and economic impact on the County** as well as the **cost to users of services**.
- People have been observed **walking** in areas of the Fairburn Road, Campbellton Road, and Chapel Hill Road corridors, and near the County Courthouse, which **may indicate a need for transportation services and improved sidewalks** in these areas.
- **Connectivity between** Douglas County regional **activity centers, jobs and services** are essential. Douglas County is part of a larger region and citizens would like better access to them.
- People in Douglas County need **options for getting to day-to-day activities**, such as the mall, grocery stores, medical facilities, and government offices, as well as retail stores.
- **Taxis** tend to be **expensive** (up to \$30 for a short trip) in Douglas County.
- According to input from participants, **visitors** come from neighboring areas and nearby counties for services and activities in Douglasville, such as Arbor Place mall, restaurants, the movie theater, and other retail outlets. Residents think it would be great to have **more travel options for them** besides driving, which contributes to traffic congestion.
- While commuter-oriented services are an important component of the County's transportation services, **options should be available for people to travel around at times of day other than rush hours**, including mid-day, evenings, and perhaps weekends.
- Based on data gathered through various public involvement activities, Douglas County residents need and want to travel to, from, and along the following roads and areas: Chapel Hill Road, SR 92/Fairburn Road, Lee Road, SR 5/Bill Arp Road, Hospital Drive, downtown Atlanta, Lithia Springs, Villa Rica, Hartsfield-Jackson Airport, Perimeter Center, Downtown Douglasville, and Wellstar Douglas Hospital, among other destinations.
- **Partnerships** will be important for the new/expanded transportation services. These may include individuals, faith-based groups, volunteers, private companies, community groups, and government agencies.
- It is important that service **not be limited to typical business or rush hours**, and services for seniors should **not require reservations several weeks in advance**.
- **Safety, cost and affordability, reliability or dependability, location, and area served** are important factors in a transportation system and citizens decisions to use them.
- A **variety** of services should be considered and offered so as to provide options for **all** residents.
- **Road improvements are needed** as part of the overall transportation system. Traffic congestion is an issue, as is the number of limited routes into and out of the County. There are places where signals

are timed such that drivers wait long times at red lights with no traffic coming in the opposite direction, as reported by some participants in activities and the community survey.

- Transportation services should be part of a **strategy to reduce automobile traffic** and **give people options** to connect to transportation service in the region.
- Community members would like to see more **investment in sidewalks and bike paths** both to help people get around, but also for recreational purposes, and to connect existing paths and trails throughout the County and into adjacent communities. At the high school, kids walk along dirt paths to reach school. Building roads is great, but safety is an issue.
- **Preserve the comfortable lifestyle** Douglas County offers while helping make and keep people mobile.

Senior Citizens

Senior citizens were an important focus of the public engagement efforts for this study. According to the American Community Survey, more than 12,000 people over the age of 65 lived in Douglas County in 2012. It was important to the County to consider the needs of and hear from senior citizens, who are an important constituency when it comes to transportation services. As people live longer, they tend to work later into life, and research by AARP (formerly the American Association for Retired Persons, AARP dropped its full name in 1999) shows that in recent years seniors tend to outlive their ability to drive safely by an average of seven to ten years. The Douglas County Senior Services Division indicated that the number one complaint it receives is in regards to the lack of transportation options for seniors. With that mind, this section summarizes input received specifically from seniors through the team's attendance at the Senior Picnic and public comments regarding needs and opportunities for seniors during the study.

More than 12,000 people 65 and older live in Douglas County



Figure 4-7: A member of the project team speaks with an attendee at the senior picnic.

Overall, attendees of the 2015 Senior Picnic expressed strong support for the study, commenting that this type of study is much-needed. Feedback received indicates that Douglas County is difficult to get around in without a private automobile. Seniors were generally supportive of the idea of some type of additional transportation service to help them travel to various destinations and activities. Common challenges and opportunities mentioned are listed in the table below.

Table 7: Transportation Challenges and Opportunities Facing Seniors

Challenges	Opportunities
Transportation to medical services and appointments, grocery stores and other necessities or essential services.	Consider offering demand-response service and consider seniors needs for other types of services.
Many services require advanced booking, and it can be difficult to predict when transportation services will be needed.	Service hours: seniors would like to be able to get around outside of typical business hours, including evenings and weekends; offer service that is flexible and does not require advanced scheduling.
Traffic congestion on State Route 5.	Make use of volunteers. There are people in the community who volunteer their time to help seniors get around.
Taxi and other private transport services are expensive.	Provide information to Douglas County residents about the availability of these and other services.

The team collected 47 completed surveys from Senior Picnic attendees. Responses to the survey from this group illustrate that priorities for older adults include the following:

- Serving desirable or needed destinations, such as Arbor Place Mall, grocery stores, doctors’ offices and the hospital, commuter lots, government offices and the Woodie Fite Senior Center, restaurants, commercial areas, and neighborhoods
- Affordability
- Safety and security
- Well-maintained vehicles
- Service that runs at least every 30 minutes
- Courteous, friendly drivers, and
- Access for people with disabilities

Although a number of attendees said that they still drive (and were therefore reluctant to talk about transportation services), a significant proportion indicated they no longer drive and rely on friends and family to get around. Attendees primarily indicated a need for transportation services during weekday mornings and afternoons, although people do regularly attend church on weekends as well. It was noted that the current model that requires booking service weeks in advance is not practical and leaves people without last-minute options, such as in cases when an appointment is rescheduled, a vehicle breaks down, or other family issues arise.

Community Survey Results

As of November 2015, 1,103 people had taken the community survey. The vast majority (92%) of respondents live in Douglas County. On average, respondents are long-time residents, having lived in Douglas County for an average of 21.35 years. About 12% of respondents have lived in the County fewer than five years, while 20% each have lived in the county for 6-10 years and for 26-40 years. More than half of respondents (64%) do not now or did not work in Douglas County.

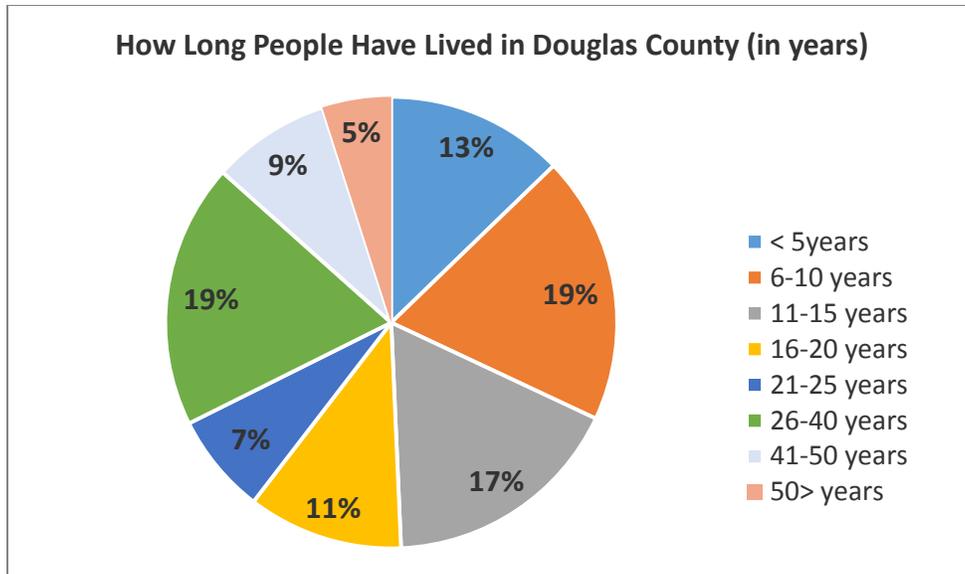


Figure 4-8: Breakdown of length of time survey respondents have lived in Douglas County.

Most respondents (79%) have never used any of the transportation services available to residents of Douglas County, including the vanpool program, vouchers for seniors and people with disabilities, or GRTA Xpress buses. When asked if they have family, co-workers, or friends who have ever used County transportation services, only 37% said yes, while nearly half (46%) said no. The others were not sure.

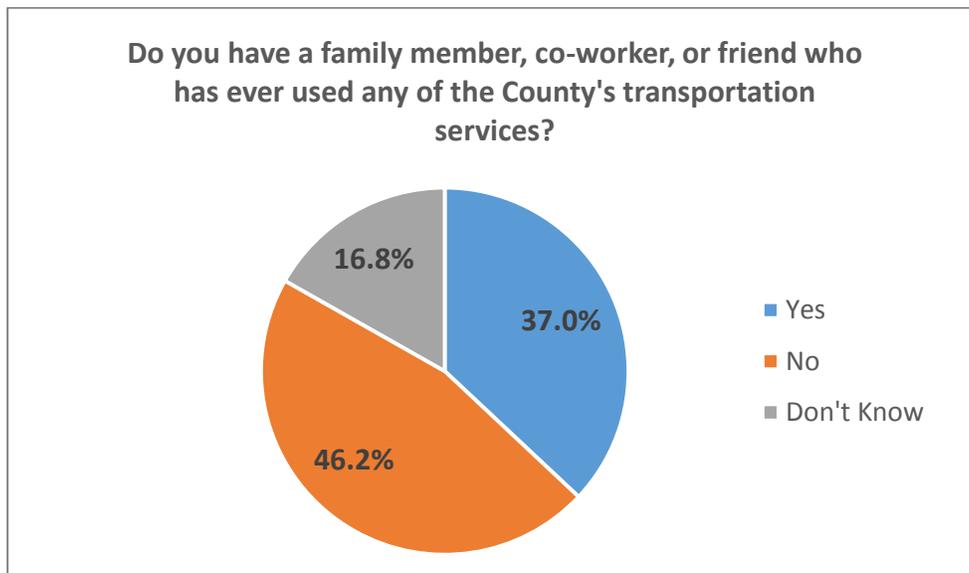


Figure 4-9: The percentage of respondents who have friends, family members, or co-workers who have used transportation services in Douglas County.

Respondents were asked about the qualities they think are most important in making a transportation service a high quality one. The top responses are: (1) affordable price; (2) safe and secure parking areas; and (3) well-maintained vehicles. “Easy-to-understand route and schedule information” and “nearly always on time” were also chosen by more than half of respondents.

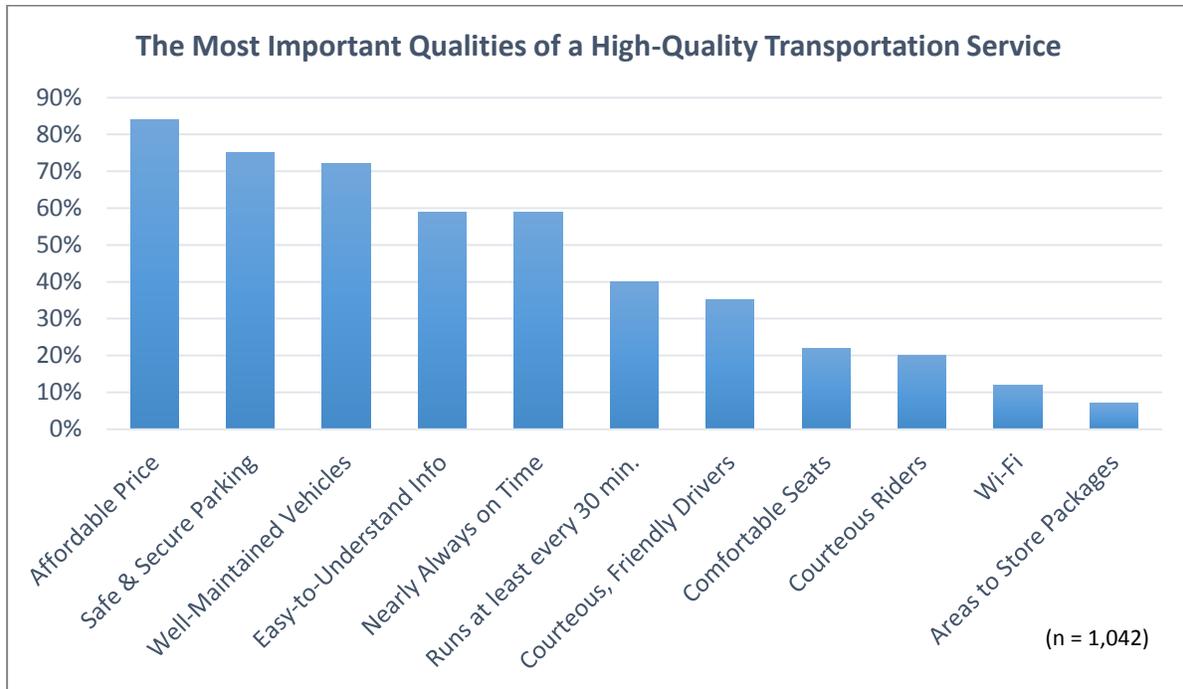


Figure 4-10: Survey responses to a question about the most important qualities of transportation services.

The 129 comments received in response to this question generally fell into one of several categories. The categories and percentage of comments with some examples of the types of comments offered by respondents are listed in Table 8 below.

Table 8: Categories of additional comments made in response to a survey question about the most important characteristics of a high quality transportation service.

Category of Comment	% of Comments	Notes on Comments
Routes to important destinations with convenient stops	29%	Respondents would like service to and from the following: Villa Rica, Lithia Springs, SR 92, amusements, job centers, shopping, health care, parks, and recreation destinations.
Do not want or would not use service	14%	Several comments specified that the County should fix roads before providing transportation services.
Safety, courtesy, and reliability	12%	Want to ensure safe, reliable drivers, and safety in general.
Frequency of service or hours of operation	10%	Some would not want service after 9pm; others would like service after 5pm, including for 2 nd shift or overnight workers. Service should reduce travel time to Atlanta. Would like service from Atlanta after 6pm.
Accessible for wheelchairs	5%	
Connections to regional service	5%	
Service to areas outside of Douglas County	4%	Service should include areas outside of Douglas County like to Decatur, the Centers for Disease Control and Prevention (CDC)
Service for seniors	4%	Respondents would like services geared toward senior citizens.
Should be self-funded, should not use tax dollars	3%	Respondents do not want taxpayer funding to support transportation services.
Useful information about service	2%	Would like useful, easy-to-understand information about available services.
Other assorted comments	14%	Various responses, including: <ul style="list-style-type: none"> - Only want private service - Use strategic routing to avoid traffic congestion - Only want service for commuters - Important to provide friendly, efficient customer service - Minimize transfers - Should be affordable - Should offer a pay-per-ride option for vanpools

The survey also asked a question about what respondents think are the three most important things the Douglas County Commission should consider when making decisions about future transportation systems. Of the 746 responses to this question, roughly **35% addressed cost, pricing, and affordability**, including the cost to operate systems as well as costs to potential riders. About **25% of responses mentioned routes, stops/destinations, and area served**. **Safety** was also a common topic, appearing in **about 19% of responses**. Need, utility, or demand for service was another common theme, as was the economic impact on or cost to the County. Both were mentioned in roughly 12% of comments. Hours of operation or frequency

of service was addressed in 11% of responses. Roughly 8% of these responses indicated participants do not want or are opposed to any type of transportation system in Douglas County, citing various concerns, primarily about taxes and maintaining “quality of life.” Specific comments were made on these topics:

- The need for service outside of rush hours, and for the vanpool in particular, a mid-day or later evening option from Downtown Atlanta;
- Working with other suburban counties;
- Impact on existing traffic;
- Using funds efficiently;
- Ensuring parking areas are safe and secure, especially for commuter-oriented services; and
- Helping to relieve congestion.

Below are some quotes taken directly from the responses to this question, illustrating the types input provided.

-
- *“Something that can benefit residents regardless of their age or disability.”*
 - *“It is important to have times that work for different schedules.”*
 - *“Provide for easy transfers to neighboring transportation systems.”*
 - *“Develop and encourage the types of transportation that foster the type of growth and economic development we want in this community.”*
-

The project team also performed a text-analysis of the responses to determine which words were used most frequently. The most frequently used words or phrases were: safe/safety, cost, people, service, need, affordable, and routes. The results of this analysis are shown below as a word cloud.

- Private on-demand service (Uber, Lyft, or similar)
- Expanding vanpool and GRTA Xpress bus services
- Improvements to the Multi-Modal Center and existing park-and-ride lots
- New park-and-ride lots
- Creating a network of volunteer drivers
- Car-sharing programs
- Bicycle and pedestrian infrastructure
- Marketing and promotion of available transportation services

The diagram on the following page shows the proportion of participants who indicated that services are either “somewhat” or “very” needed (in black) and what percentage of those respondents believe services are needed now (in green) or in the future (in blue).

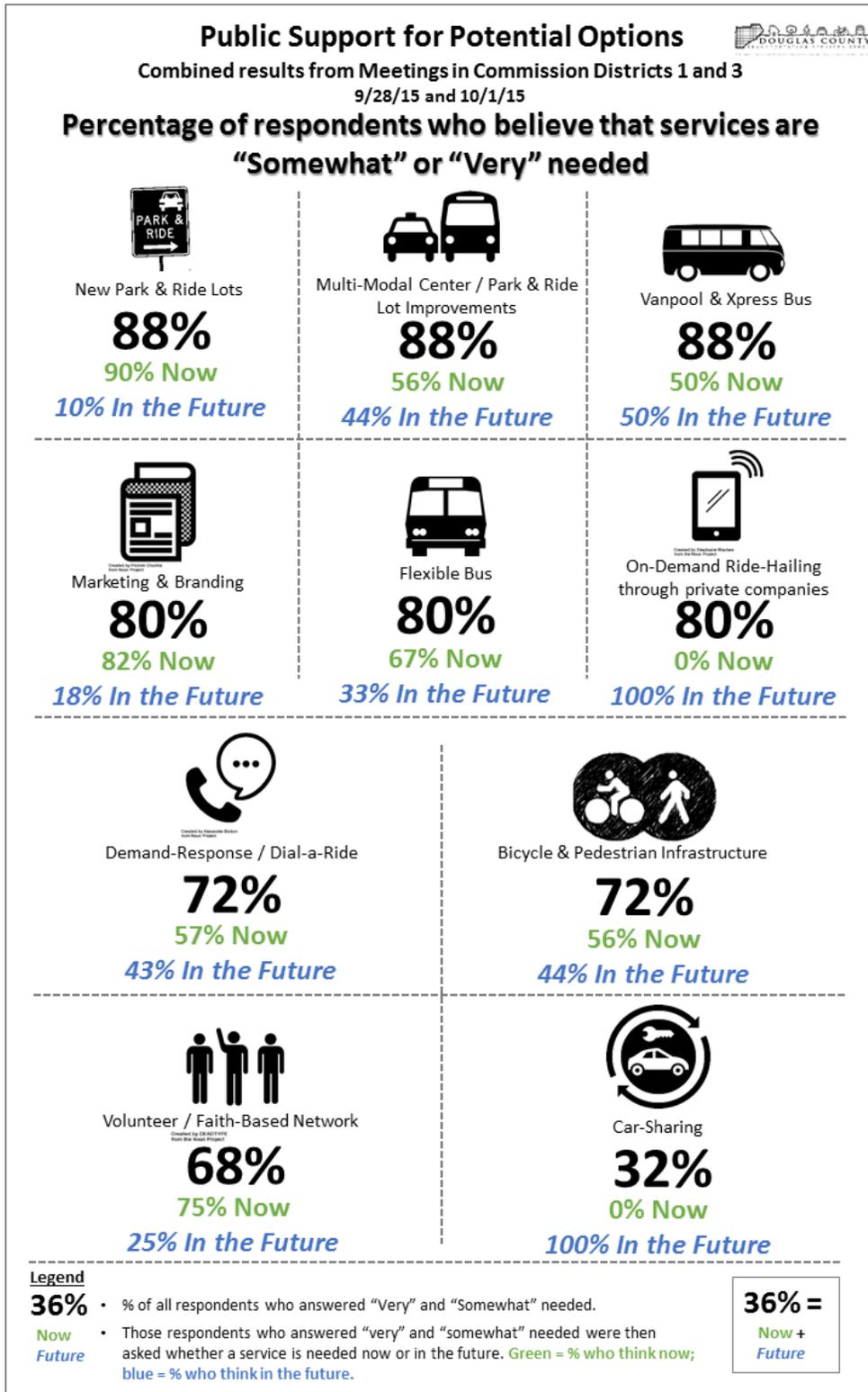


Figure 4-12: Diagram showing public support for potential transportation service options as presented at District meetings in the fall of 2015.

Based upon responses to a similar activity at the Gold Rush Festival and to the potential options questionnaires at the two fall Commission District meetings, support is strongest for **new park-and-ride lots** and for **marketing and branding of transportation services**. Strong support was also expressed for **improvements to the park-and-ride lots and Multi-Modal Transportation Center** and for **expansion of the County’s vanpool program and GRTA Xpress bus service**. Following close behind is a flexible zone-based shuttle or circulator service, on-demand service provided by private companies, and dial-a-ride service. Moderate support was expressed for bicycle and pedestrian infrastructure and a volunteer-based transportation network. The chart below shows public support for various potential options at the **Commission District meetings (in orange)**, **the Gold Rush Festival (in blue)**, and the **combined support (the gray line)** - based upon an average of ratings from total respondents at the two events). It should be noted that new park-and-ride lots and marketing and branding were not presented as possible options at the Gold Rush Festival so as to focus more on service oriented options.

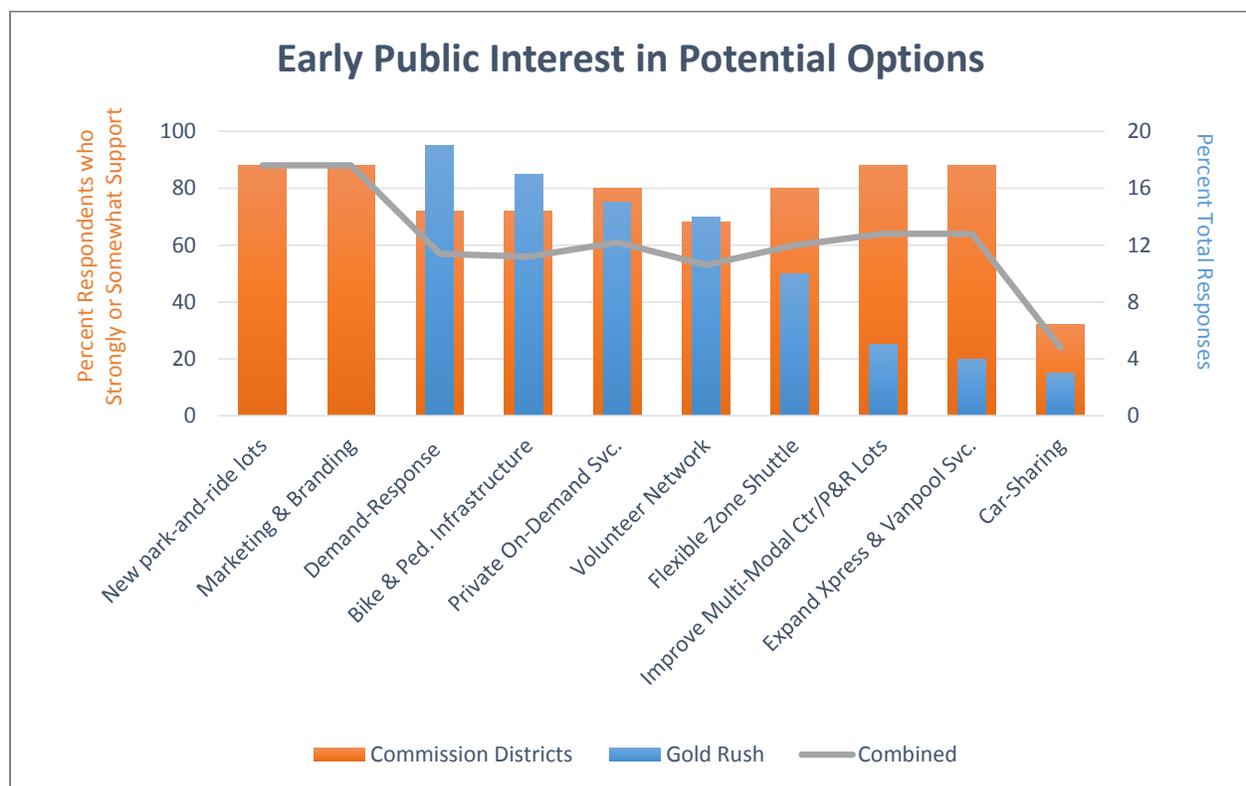


Figure 4-13: Chart showing interest in potential transportation service options based upon input from meetings and events during the fall of 2015. The orange bars represent the percentage of attendees who expressed support for options during District Meetings. The blue bars show the percentage of total responses to activities at the Gold Rush Festival. The gray line shows the combined results from both activities based upon a combined number and percentage of responses.

Overall response to the Transportation Services Study was positive and there is a desire among a portion of the population for transportation services. There is interest in and generally strong support for services that will enhance or improve existing services, such as the vanpool program, park-and-ride lots, and marketing and branding. It is important to residents of Douglas County to also continue to work on maintenance of existing infrastructure such as roads and bridges. People would generally like any service to benefit all residents, regardless of age or ability, and they would like the service to be cost efficient for the County.

Many people also indicated support for services to help seniors and the elderly get around more freely. It is also generally recognized that there is a need for transportation service to help people get around within and between more populated activity centers such as in Douglasville and Lithia Springs on a regular basis, including during evenings and weekends. Many people also expressed frustration with traffic congestion on area roads and would likely support efforts to reduce congestion. Nearly all of the transportation service options presented in the questionnaires and activities provide some degree of congestion relieve by providing opportunities for people to reduce the need for automobile travel.

CHAPTER 5 IMPLEMENTATION STRATEGY

5.0 Overview

This chapter contains an overview of recommendations and an overall strategy for implementing improvements to existing transportation services as well as for initiating new services in Douglas County. It summarizes concepts for new recommended services, projects to enhance or expand to existing services, and activities to support new and existing services, ensuring services meet the needs of Douglas County residents into the future.

These recommendations represent the culmination of months of research, analysis, and outreach to thousands of Douglas County residents, officials, and community leaders. Service concepts were identified based upon feedback and input obtained through extensive public engagement, including surveys, pop-up booths at community events, public meetings, and community leader interviews. They are also informed by findings from analysis of demographics and existing conditions, case studies of peer organizations in Georgia and elsewhere, and a transportation services gap analysis to identify service needs in Douglas County.

The Transportation Services Study looked not only at potential transportation services (i.e. transportation demand management programs, transit circulator services, etc.), but also complementary investments that could serve to enhance or expand existing services, as well as to make services more accessible to the public (i.e. improvements to the County's bicycle and pedestrian infrastructure and park-and-ride lots). The goal was to provide a menu or family of services that increase mobility throughout Douglas County and provide people with new and improved options for getting around. Service options and recommendations were evaluated based upon several factors:

- Improved mobility for the general public as well as key target groups, such as seniors, disabled people, and those who, for various reasons, are not able to drive;
- Initial and ongoing operations and maintenance costs;
- Level of public support;
- Connectivity to regional services and access to critical areas or destinations;
- Enhancement of existing services; and
- Level of support for current and future travel and development patterns.

The study team weighed each of the service options considered for the alternatives analysis and identified those options which make the most efficient use of resources and meet Douglas County's stated goal of improving accessibility and mobility for all citizens, including providing options for seniors, people with disabilities, and people of lower economic means. The study sought to identify gaps in the current transportation system and to identify services that could fill those gaps efficiently, serving to move people around the County, build upon or leverage services and programs already offered by the County, and provide access to existing transportation services within the Metro Atlanta region.

Each of the service alternatives described in Chapter 4 have been reviewed against key criteria, including (1) level of community support; (2) potential public benefits and service gaps addressed; (3) level of effort

and/or ease of implementation; (4) estimated capital and operating and maintenance (O&M) costs; and (5) implementation timeframe.

However, it should be noted that because the options considered for improving mobility address different types of services gaps, improve mobility to varying levels, and either introduce new service or improve existing services, it is difficult to compare each alternative option to each of the others. This report was intended to provide objective data and information about the benefits and costs of each alternative and any differentiators that would make it more or less desirable than the others. This information can be used by the Board of Commissioners and Douglas County staff, along with data on financial considerations, expressions of community support, and opportunities to partner with the private and non-profit sectors, to choose which options over time provide the most value in meeting the County’s mobility goals.

Recommended services, programs, and investments will likely require further study and to be validated based on County priorities, changing needs, and available resources. Additional analysis may be needed in order to determine the viability at the time services are being put in place as well as to develop detailed implementation and service plans, such as precise routes for the flexible zone-based shuttle.

Each of the potential service options have also been grouped into four major categories that represent the project type: (1) modes and services; (2) capital projects; (3) programming and management; and (4) other recommendations. Descriptions of community support, the level of effort anticipated to implement the recommendation, estimated costs, and anticipated timeframe are provided for each recommendation. Steps for implementing each recommendation are also provided.

Key

Community Support	Level of Effort for Implementation	Estimated Cost	Timeframe
Low 	Low <i>Some effort will be required in short-term or with minimal involvement of staff</i>	\$ (Low) <i>Capital - < \$500K O&M – < \$100K</i>	Short Term <i>1-2 years</i>
Medium 	Moderate <i>Some effort will be required on ongoing basis or more intensely in short-term</i>	\$\$ (Medium) <i>Capital - \$500K - \$1M O&M - \$100K - \$500K</i>	Intermediate <i>2-5 years</i>
High 	High <i>Significant effort will be required of staff on ongoing basis</i>	\$\$\$ (High) <i>Capital - \$1M+ O&M – \$500K+</i>	Long Term <i>More than 5 years</i>

This section is organized as follows:

- 5.1 Recommendations
 - Modes and Services
 - Capital Projects
 - Programming and Management
 - Other Recommendations
- 5.2 Potential Funding Sources
- 5.3 Implementation Strategy and Program

Each of the recommended service options is described below along with measures of performance related to the level of community support it has; the level of effort or ease of implementation; its capital, operating and maintenance costs, and implementation timeframe.

A matrix of the action steps recommended to implement each of these service improvements is provided in Chapter 5.3.

5.1 Recommendations

Modes and Services

- **Recommendation 1: Establish Flexible Zone-Based Circulator Service**

Community Support	Level of Effort for Implementation	Estimated Cost	Timeframe
★ ★ ★	High	\$\$\$	Intermediate



Figure 5-1: An example of a vehicle that could be used for a flexible circulator service.

Based on the analysis of current and future demographic conditions in Douglas County, expressions of community support, and input from key community stakeholders, it is recommended that Douglas County establish a flexible zone-based circulator service that combines the schedule of a fixed route shuttle circulator and the convenience of a curb-to-curb demand response service. The shuttle vehicle would travel along an established route with timed stops and deviate from the route within a defined zone to pick up and drop off customers who make reservations in advance. This type of service is ideal for meeting transportation service needs in areas with density and

demand that is higher than general guidelines for demand response service, but not high enough for fixed route service to be cost-effective. Figure 5-2, Figure 5-3, and 5-4 show the location of each proposed flex service area.

It is recommended that this service should:

- Use shuttle style vehicles that can be configured to transport 8 to 25 passengers;
- Be open to all Douglas County citizens with an origin or destination inside the service area, for any trip purpose;
- Operate on an hourly frequency (every 60 minutes) to allow sufficient time for passenger pick-ups and drop-offs in the flex zones, in order to balance cost considerations and the amount of service provided with anticipated ridership;
- Operate between the hours of 5:00 AM and 7:00 PM Monday through Friday;
- Include testing or a pilot phase to provide Saturday service between 9:00 AM and 4:00 PM, if warranted by demand;
- Provide connections with existing Douglas County vanpools and GRTA Xpress buses;
- Allow transfers between two proposed routes at the Multi-Modal Transportation Center; and
- Connect Lithia Springs to Downtown Douglasville in the future with a fixed route between the recommended Lithia Springs and Northside Connector/Downtown Circulators, if there is sufficient demand.

Four preliminary suggested routes were identified based on the transportation gaps and public input. Each of these routes is described in detail in Chapter 3.0. They include (1) the Central Circulator; (2) the SR 5/ Bright Star Connector; (3) the Lithia Springs; and (4) the Northside Connector/Downtown Circulator zones.

Flexible Zone-Based Circulator Prioritization

Implementing all four circulator services at the same time may not be possible due to funding or operational constraints. Therefore, the routes were prioritized using criteria such as ridership, public comments received during the outreach efforts, and how the routes support the overall circulator network. Based on the dynamic nature of flexible zone-based circulator service, the following priority recommendations are intended as a guideline and the actual implementation order of the routes may change. At this time, the highest priority routes are the following:

- Northside Connector/Downtown Circulator: second highest estimated ridership, strong public feedback
- Central Circulator: serves as the central link in the system and connects with the Douglas County Multi-Modal Center

The following routes are recommended for implementation next:

- Lithia Springs: highest estimated ridership, coordination with Cobb County and CCT to serve WellStar Cobb Hospital may increase the time required to implement the service
- SR 5/Bright Star Connector: complements the proposed Central Circulator and extends service to the southwest of I-20 and SR 5 (Bill Arp Road)

Lithia Springs to Downtown Douglasville Connector

During the public outreach process, a need to connect the Lithia Springs area to Downtown Douglasville was identified. The proposed demand response service, discussed in the next section, will serve this need. Based on an analysis of existing travel flows using AirSage data, it is unlikely there is enough demand to justify a

shuttle service at this time. However, it is recommended that Douglas County monitor trips between the Lithia Springs area and Downtown Douglasville on the demand response service and implement a pilot shuttle connector with a fixed route and scheduled stops between the two destinations if demand is high to test the feasibility of permanent service. Additionally, the implementation of the flexible zone-based circulator routes will increase accessibility in Lithia Springs, Downtown Douglasville, and the area near the Arbor Place Mall. As such, a shuttle connector may be viable at this point and implementation of a pilot shuttle connector should be explored.

Next Steps for Flexible Zone-Based Circulator Implementation

For the purposes of this report, a high level operating plan for the flexible zone-based circulator was developed to provide order of magnitude capital and operating and maintenance costs as well as general ridership estimates. As such, the recommended routes and stops include several assumptions that will need to be verified prior to service implementation. The first two steps below are interrelated and will need to take place before service implementation, while the last two steps should be undertaken periodically after the service is running:

- Prepare a detailed operating plan: the four preliminary routes should be refined to make the operations as efficient as possible, using potential strategies such as:
 - Optimizing the number of bus stops to reduce running times
 - Modifying routes to reduce the number of vehicles required
 - Interlining routes to increase vehicle utilization
- Develop a schedule:
 - Preliminary time points should be identified along each route and the routes should be driven during peak and off-peak periods to determine running times
 - Blocking: determine the set of trips each vehicle performs during a day
 - Run-cutting: each block is broken up and assigned to specific drivers
- Partnering: coordinate with agencies in need of human services transportation (HST), such as the Georgia Department of Human Services, to explore providing contracted transportation services
- Monitoring: after the service is up and running, periodic on-board surveys should record ridership at the line and stop levels, on-time performance should be tracked, and opportunities should be provided for customer and public feedback through comment forms and surveys
- Changes and refinement: the flexible zone-based circulator is designed as a dynamic service with flexibility as a key component. As such, routes and stops should be changed as needed based on ridership, schedule performance, and feedback from customers and the public

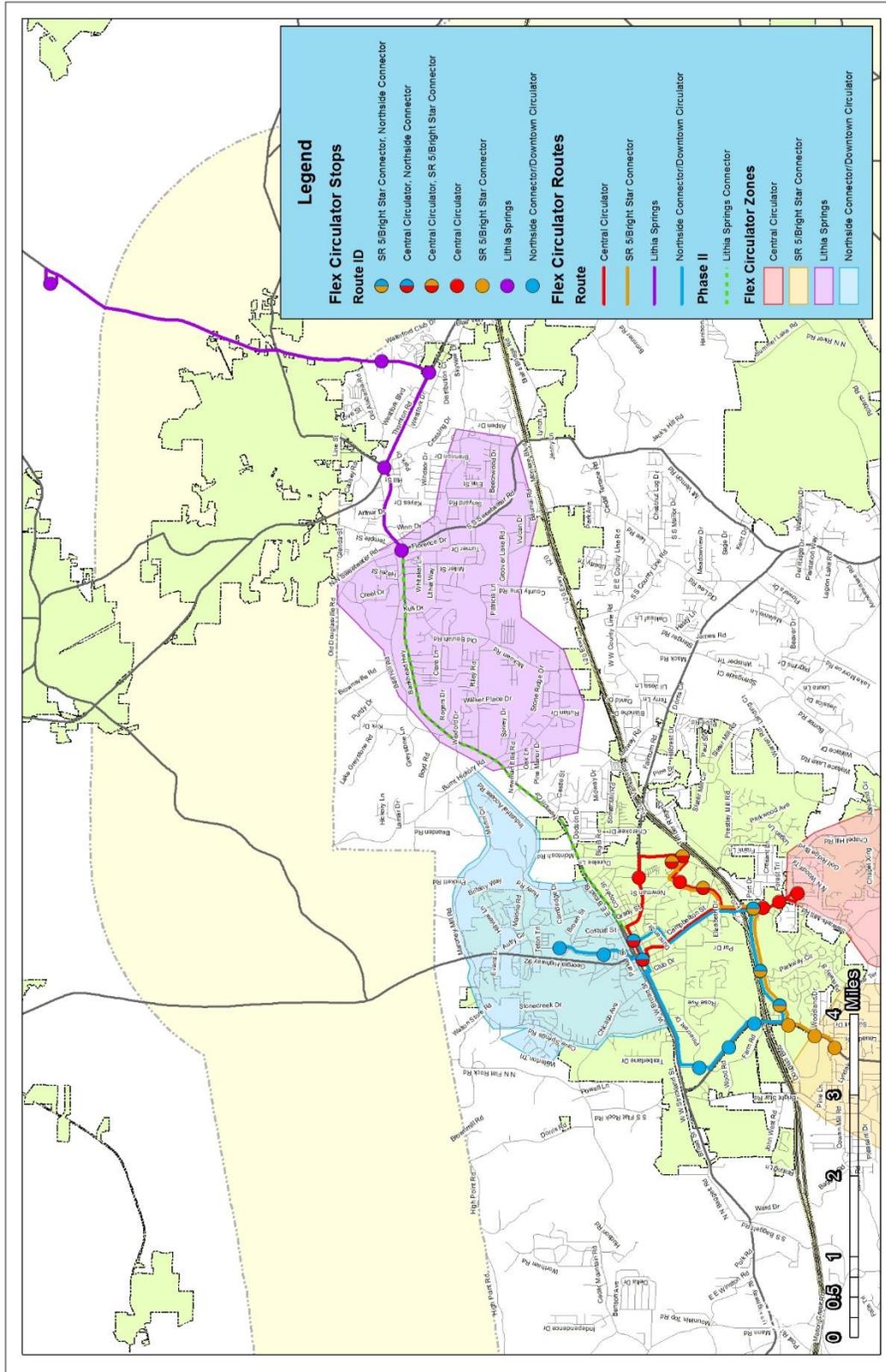


Figure 5-2: This map illustrates the four proposed Flexible Zone Circulator routes and stops.

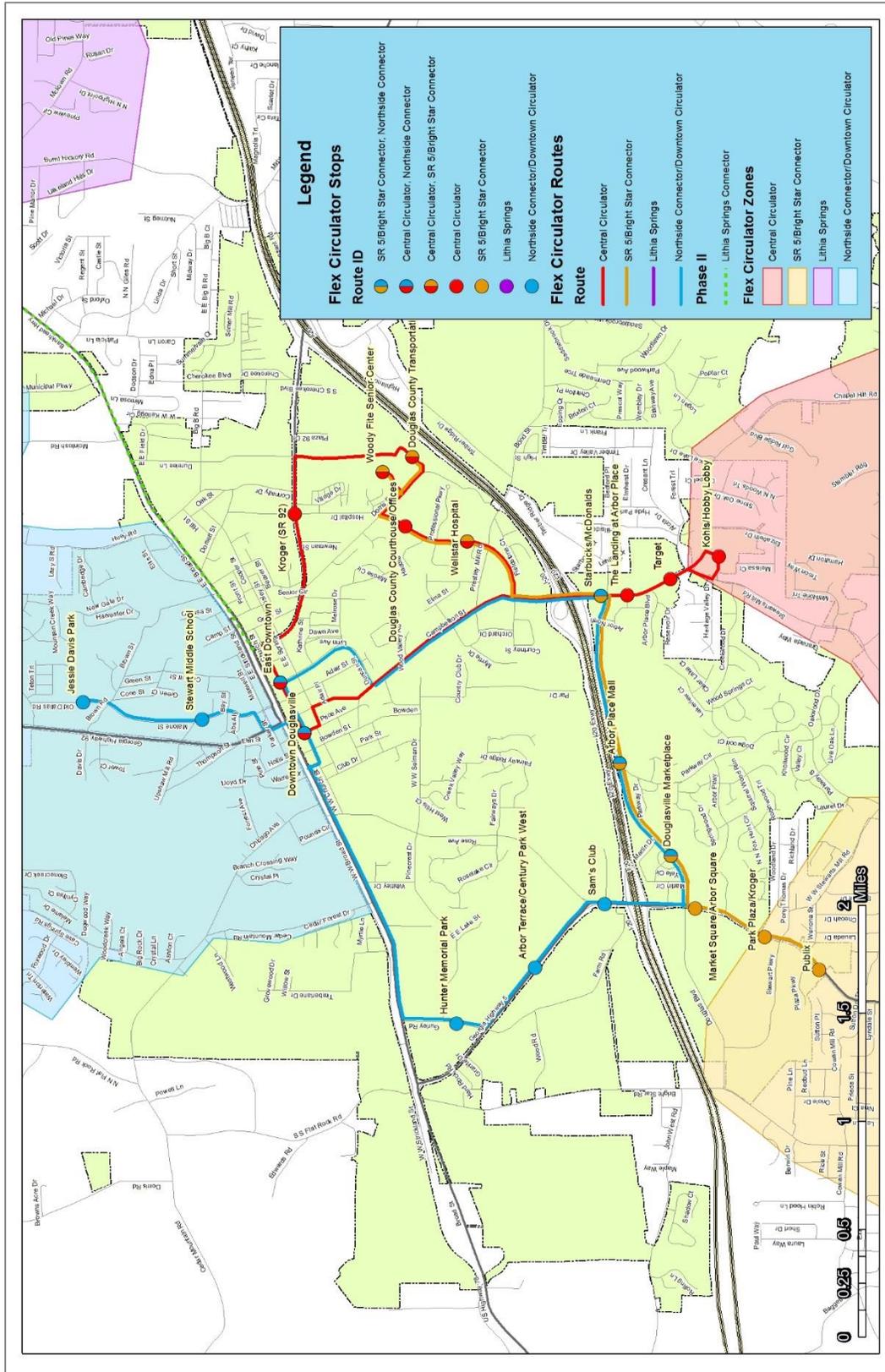


Figure 5-3: This map shows the proposed routes and stops for the Central Circulator, SR 5/Bright Star Connector, and the Northside Connector/Downtown Circulator service.

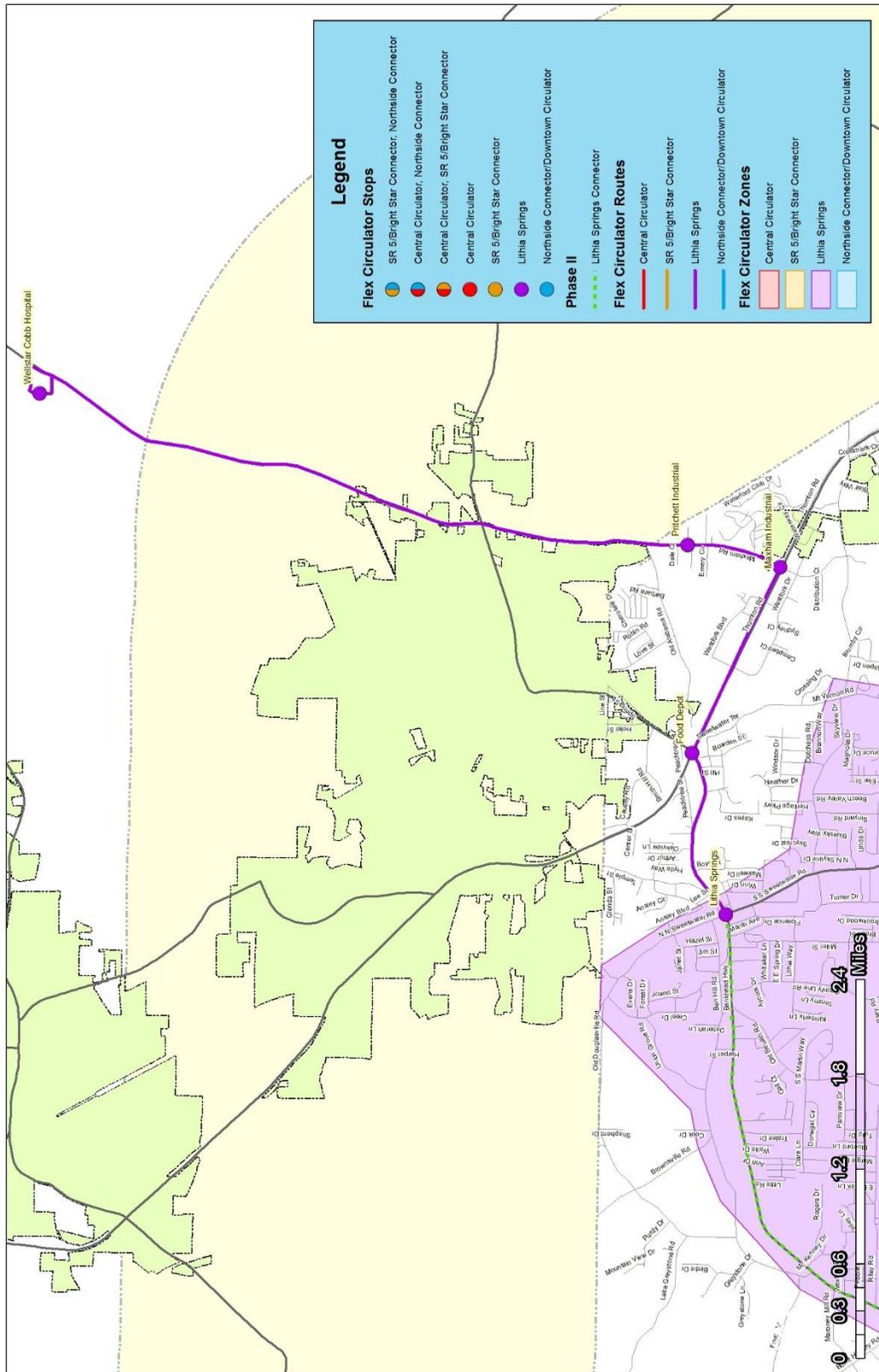


Figure 5-4. This map shows the proposed routes and stops for the Lithia Springs route.

- **Recommendation 2:** Establish demand-response or dial-a-ride service that is open to anyone in the County.

Community Support	Level of Effort for Implementation	Estimated Cost	Timeframe
★ ★	High	\$\$	Intermediate



Figure 5-5: An example of a demand-response / dial-a-ride vehicle, equipped with a wheelchair lift. Credit: Michael Hicks, via Flickr.

Based on the analysis of transportation service gaps, demographic conditions, and input from the community, it is recommended that Douglas County establish a curb-to-curb transportation service that is open to any Douglas County resident. This service would require riders to schedule a trip with the service provider in advance over the phone or internet that is open to any resident of the County. This type of service would be extremely flexible and would not operate on a fixed route or schedule. It would primarily serve lower density areas of the County, especially if or when a flexible zone circulator is implemented.

Because of the County's large size, dispersed land development patterns, and potential cost of providing service, the County should conduct a limited-duration pilot or test phase of demand-response service prior to implementing full service throughout all of Douglas County on a permanent basis. While there is clearly a need for such a service as indicated in Chapter 3.0, especially for those persons having significant physical, financial, and other impediments to travel, the County needs to fully consider the financial trade-offs with the public benefits of this option. Implementation of this service as an initial pilot program would help mitigate the risks of a full countywide launch of the service.

The service should:

- Operate from 5:00 AM to 7:00 PM Monday through Friday.
- Serve all Douglas County residents with an origin and destination within Douglas County. If the proposed flex zone-based circulator service is implemented, demand-response service could be limited to exclude those areas served by the flex service except for people with physical limitations.
- Require customers to schedule rides at least 24 hours in advance.
- Utilize up to seven vehicles to provide service, subject to change based upon demand.

By focusing service in areas other than those that will ultimately be served primarily by the flexible zone-based circulator, the demand-response service would potentially reach:

- Census tracts that are home to more than 50% of the County's seniors (over age 65)
- Nearly 58% of all residents with disabilities

Additionally, this service provides a connection between Lithia Springs and Downtown Douglasville, which could become a fixed route service in the future as expansion of the Flexible Zone-Based Circulator service based upon demand.

- **Recommendation 3: Create a volunteer transportation program to supplement current and future transportation services.**

Community Support	Level of Effort for Implementation	Estimated Cost	Timeframe
★ ★	Moderate	\$	Short Term



Based on the findings of this study, it is recommended that Douglas County establish a network of volunteers willing to transport senior citizens, persons with disabilities, and anyone else who is unable to drive to supplement the existing available services. The County should establish partnerships with community groups, churches and religious groups, and other volunteer organizations, or even private companies. Individual citizens should also be encouraged to participate as drivers.

This service is intended to complement all existing and future services. It is envisioned to be primarily be used by individuals who are unable to take advantage of the proposed flexible zone-based shuttle or demand-response service or people needing to travel outside of hours of operation for those services (i.e. on weekends).

The County should establish a volunteer transportation program that has two features: a) service coordinated by a ride coordinator at the County during core hours; and b) a self-service community “ride-board” where people could offer and request rides through an online message board. When other services are not available or not suitable, ride coordinator can contact volunteers on behalf of customers to request rides. The coordinator would put the volunteer and customer in contact. If people have more flexibility in their schedules, they would be able to post a request for a ride in the online system and volunteers who are able to help them out could reply to their message directly and the two parties coordinate amongst themselves.

The online component could serve not only to connect people who are unable to drive themselves with volunteers, but also to eventually allow people interested in carpooling to connect with one another directly. Examples of similar online carpool matching systems and message boards are listed below and may be useful resources as Douglas County looks to establish its own volunteer program.

“Coverage is important; i.e., the system must cover the entire community, go many places, and work in synchronicity with other systems and pedestrian options. There are no pedestrian options afforded whatsoever in my community, Lithia Springs, limiting the effectiveness of any proposed or current transportation possibility.”

(Comment from survey response)

- Volunteer Transport: <http://volunteertransport.proboards.com/>
- Metropolitan Washington Council of Governments: <http://boards.mwcog.org/>
- California State University at Fullerton: <http://www.parking.fullerton.edu/CarpoolBoard/>
- Southeastern Louisiana University: <https://www2.southeastern.edu/external/carpool/login.php>

Features of the recommended volunteer network are described below.

- Drivers would be volunteers and primarily use their own vehicles. Alternately, groups that own vehicles, such as churches, could make them available when they are not otherwise in use, based upon an agreement for usage.
- The County should screen drivers to ensure safety, similar to how current vanpool drivers are screened.
- People needing rides would request them in advance, either through a coordinator using the phone or email, or via an internet-based community ride board.
 - The coordinator would make arrangements for rides by coordinating with a registered pool of volunteer drivers during core hours.
 - Alternatively, participants can also post messages on an online bulletin board either offering to drive people (bring them along when they run errands, for example) or requesting a ride to or from specific locations at certain times.
- Eligibility for riders should be limited to senior citizens, persons with disabilities, and those without a driver's license or vehicle (in an effort to keep the program manageable).
- Specific availability would vary based upon volunteer drivers, but the County should set recommended service hours as 7:00 AM to 7:00 PM Monday-Friday and 10:00 AM-2:00 PM on Saturdays.
- Eventually, based upon interest in and use of service, a model could be established to collect a small fee to offset the cost of trips provided by volunteers (stipend). Alternatively, the County could offer incentives such as give-aways to encourage participation or rewards for long-term service.
- The County should coordinate with ARC and monitor development of local Independent Transportation Network of America (ITNAmerica) affiliates (under consideration in DeKalb County and in Lanier) to assess whether Douglas County should become an affiliate of this membership organization.

- **Recommendation 4:** Expand the vanpool program to serve new destinations and provide additional service to growing job centers.

Community Support	Level of Effort for Implementation	Estimated Cost	Timeframe
★ ★ ★	Low	\$\$	Short Term

An analysis of mobility needs and an assessment of community input indicates that it would be beneficial for Douglas County to build upon its existing investment in the vanpool program by adding new destinations inside and outside of the county. These would include the rapidly growing job centers in North Fulton County (expected to grow by over 400,000 jobs in the next five years), the Aerotropolis area around the Hartsfield-Jackson Atlanta International Airport, the Carrollton area, the Fulton Industrial Boulevard area, Kennesaw/Kennesaw State University area, and other destinations in Metro Atlanta.



Douglas County should offer expanded vanpool service during the same hours as the current vanpool program, generally from 5:00 AM to 7:00 AM in the morning and 2:30 PM to 5:00 PM in the evening Monday through Friday, but should also consider mid-day and late evening return service from Atlanta to Douglas County, as indicated by comments in the community survey and public engagement activities.

The County should provide service from pick-up locations throughout Douglas County, generally park-and-ride lots and the Multi-Modal Center, to job centers or employers within the Atlanta region. Exact pick-up and drop-off locations will vary based on the needs of vanpool participants. Fares will vary based on the distance the vanpool travels and the number of riders in each vanpool, but will likely range from \$82.00 per month to \$98.00 per month. The expanded vanpool service should be open to all Douglas County residents who register and pay the monthly fare.

- **Recommendation 5: Partner with the Georgia Regional Transportation Authority to increase Xpress bus service to and from Douglas County.**

Community Support	Level of Effort for Implementation	Estimated Cost	Timeframe
★ ★ ★	Low	Variable	Short Term to Intermediate



Currently, there are limited GRTA Xpress routes serving the residents of Douglas County. Given the County’s growth and the need for its residents to access new job centers in Metro Atlanta served by this GRTA service, the County should continue to proactively partner with GRTA to increase Xpress bus service to and from Douglas County over time. This could include improving the frequency of existing service, introducing new routes to expand the geographic area served, and extending the hours of service to provide more flexibility to County residents.

This expanded partnership will provide opportunities for the County to better allocate workforce development resources and provide residents with access to high-wage jobs in growing and emerging fields, including STEM (science, technology, engineering, and mathematics) sectors. Possible new destinations may include the Cumberland/Galleria area (site of the new Atlanta Braves stadium and associated retail, office, and new mixed use development); the Central Perimeter (where major new office and retail opportunities are growing); and the area surrounding Hartsfield-Jackson International Airport, a major focal area for regional economic development initiatives. The airport provides 9,000 jobs just at the airport alone and 27,000 jobs throughout the region. It is recommended that the County should also reevaluate the frequency of service offered to current popular destinations, such as Downtown and Midtown Atlanta which are also attracting new enterprises and job opportunities.

In its recent comprehensive operations analysis, *Direct Xpress - Horizon 1 Plan*, GRTA reported low ridership on one Douglas County route at certain times of the day, while other times were found to be more popular. The previous or existing routes (460, 461/462) were recommended to be consolidated into a new route 463 that will hopefully better serve the entire Douglas County market better. Details on the proposed new route can be found in GRTA’s [Direct Xpress](#) Horizon 1 Plan.

- **Recommendation 6: Explore/establish partnerships with private companies that provide on-demand transportation services.**

Community Support	Level of Effort for Implementation	Estimated Cost	Timeframe
★ ★ ★	Low	Low	Intermediate



The opportunities for people to use private on-demand transportation services are increasing rapidly with new services being launched as innovation in this arena expands. On-demand transportation services allow users to request rides on an as-needed basis without advanced reservations through the use of mobile applications for smartphones. These companies operate similarly to taxis, except that rides are booked and paid for through the application(s). These services are sometimes referred to as “ride-hailing” services since users “hail” the vehicles supplying the service similarly to hailing taxis.

Using global positioning systems (GPS) technology, customers can see where available vehicles are in relation to their current location, and can select options based on estimated time of arrival and price. Examples of companies that offer this service include Uber and Lyft, both of which already have drivers serving portions of Douglas County, and are growing in popularity throughout Metro Atlanta. These services are supplementing and in some locations, taking the place of, private taxi services.

Douglas County should monitor and continue to build upon the various private on-demand services already available in the County in two ways:

- Douglas County should welcome private on-demand service providers to grow and expand within the County, especially as a way of providing so-called “first and last mile” connections for trips made via other transportation services (such as the flexible circulator or Xpress bus). In the future, the County may choose to promote these services as one of several options for getting around, particularly to destinations that are not accessible by other modes of transportation service.
- Douglas County should also consider entering into partnerships with private on-demand ride service companies to provide additional options for individuals who use the County voucher program. ***It is recommended this arrangement be developed and tested as a pilot to gauge interest and effectiveness.***

Any version of private ride-hailing service should supplement, rather than replace, service offered by Douglas County. It is likely that it will take time for enough providers of ride-hailing service are available in the County to provide the level of service that County residents would desire. However, over time, they could serve an important function for some trips. Private services such as these would be open to all Douglas County citizens for trips to any destination and at any time drivers are available.

While the Federal Transit Administration’s (FTA’s) Section 5311 program encourages participation of private transportation providers by federally-funded public transportation systems to the maximum extent feasible, the legal status of ride hailing companies is still in flux and sources of funding may be limited until it is resolved.

Capital Projects

- **Recommendation 7: Plan for, design, and construct new up to two new park-and-ride lots in areas not served by existing lots.**

Community Support	Level of Effort for Implementation	Estimated Cost	Timeframe
★ ★ ★	Moderate	\$\$\$	Intermediate



Based on the technical findings of the study and input from the public, county agencies, and key stakeholders, it is recommended that Douglas County should plan for, design, and construct up to two new park-and-ride lots. They should be located in areas not already served by existing lots to accommodate continued future growth and make it easier for people to access jobs and other important venues.

Douglas County is currently home to four park-and-ride or carpool lots, all positioned along the I-20 corridor. As described in Chapter 3, the new lots should be designed to accommodate carpoolers for any purpose and could serve as pick-up and drop-off locations for other transportation services now and in the future. They would benefit all residents of Douglas County.

New lots should be designed to accommodate between 100 and 400 vehicles, depending upon demand and available land. Recommended potential locations are:

- Just off of I-20 in the northeast portion of the county, to replace the lot that was removed to accommodate the new Lee Road interchange at I-20;
- Just off of I-20 in the western portion of the county, west of the existing West Douglas (Post Road) lot, in the area of the Liberty Road interchange; and
- In the southeastern portion of the county, in the area where SR 92/Fairburn Road meets with SR 166.

As funding becomes available over time, new park-and-ride lots should be implemented by the County as the public need grows and potential new sites are identified. It should be noted that Douglas County has already set aside grant funds for land acquisition, design, and construction of park-and-ride lots. It is recommended that in 2016, the County should identify parcels for new lots and begin acquiring land as needed and begin the design phase in 2017, with construction getting under way in 2018.

- **Recommendation 8: Enhance Multi-Modal Transportation Center and the County’s existing park-and-ride lots.**

Community Support	Level of Effort for Implementation	Estimated Cost	Timeframe
★ ★	Moderate	\$\$\$	Short Term

The results of the study indicate that it is very important that Douglas County continue to procure equipment to modernize and upgrade the Multi-Modal Transportation Center and its existing park-and-ride lots. These assets are viewed by County residents as important features of the transportation system based on community input. It is recommended that the County consider the purchase and installation of improvements, including, but not limited to:

- Emergency call boxes
- Lighting fixtures
- Security cameras
- Passenger shelters



Figure 5-6: Douglas County Multi-Modal Transportation Center.

The Multi-Modal Transportation Center is 12 years old and the County has plans to design an expansion to the Center and upgrade the on-site camera system. During this process, it is recommended that additional safety, security, and comfort features such as emergency call boxes, security cameras, lighting, and shelters to protect riders from inclement weather be installed as needed. In addition, modern technology features such as Wi-Fi for waiting passengers at the Multi-Modal Center should also be considered.

These upgrades will enable the Multi-Modal Center to continue to provide convenient, modern, and high quality service to Douglas County residents and will enhance safety and security. Maintaining facilities in good working order will be visible to current and potential new customers, improving their sense of security and enhancing the value of services offered by the County. These will also set the stage for more seamless integration of mobile technology in the future.

▪ **Recommendation 9: Improve bicycle and pedestrian access to transportation services.**

Community Support	Level of Effort for Implementation	Estimated Cost	Timeframe
★ ★	Moderate	\$\$\$	Intermediate to Long Term



During the study, a great deal of support from the public was expressed related to the County’s being able to improve opportunities for safe bicycling and walking. This is due to an increased awareness of walking and bicycling providing health benefits as well as providing an affordable travel option for many people.

Accordingly, it is recommended that the County improve pedestrian and bicycle access to existing and proposed transportation services by designing, constructing, and installing facilities that enable safe walking and bicycling in phases as appropriate in conjunction with other projects. The County should prioritize providing access for all users to existing facilities such as the Multi-Modal Center and park-and-ride lots. In the intermediate future, improved bicycle and pedestrian access should also be considered to link with nearby parks, trails, and schools. Improvements may include construction of new sidewalks, installation of crosswalks, pedestrian crossing signals, bicycle racks, and possibly multi-use trails.

In keeping with the regional bicycle and pedestrian plan for Metro Atlanta, Douglas County should strive to provide safe, relatively easy opportunities for people to begin or end trips on bike or on foot by investing in bicycle and pedestrian facilities around transportation stops. Where possible, these amenities should connect to existing parks, nearby trails, other recreational destinations, schools and other community locations where these types of activities are desired. All Douglas County citizens would be served by these improvements.

Specifically, the County should:

- Work with the County Department of Transportation to purchase and install equipment such as signals, crosswalks, and/or bicycle racks in close proximity to transportation services.
- Build new or repair existing bicycle lanes, multi-use paths, and sidewalks near the Douglas County Multi-Modal Center, existing and proposed park-and-ride lots, and stops along the proposed flexible zone-based circulator service. It is anticipated that approximately 1.5 miles of new sidewalks and one mile of new bicycle facilities will be needed for each proposed stop along the flexible circulator routes.
- Build new or repair existing bicycle lanes, multi-use paths, and sidewalks in close proximity to schools, shopping districts, and retail centers.
- Provide connections between transportation services, above-mentioned facilities, and residential neighborhoods, to nearby trails and parks.

▪ **Recommendation 10: Initiate a marketing and promotional campaign.**

Community Support	Level of Effort for Implementation	Estimated Cost	Timeframe
★ ★ ★	Moderate	\$\$	Short Term



“Well advertised information. I do not know what services are offered by Douglas County for Transportation. I investigated in the past and did not find useful information.”

- (response to survey question about important components of a high-quality transportation system)

As described previously, one of the major impediments to increased use of the transportation services open to residents of Douglas County is the lack of awareness of their availability. Thus, it is recommended that the County strongly consider launching a cost-effective, targeted, strategic marketing and promotional campaign that includes development of a marketing and branding plan, development of key messages, and marketing strategies, and wide distribution of materials through a variety of channels to promote the transportation services available to Douglas County residents and workers.

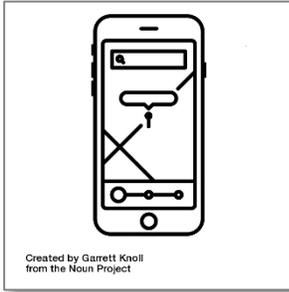
There is a large pool of potential customers throughout Douglas County for current transportation services, including those who travel to jobs inside and outside Douglas County, as well as those who come to jobs in Douglas County from surrounding areas. This workforce is especially important to firms and enterprises located in Douglas County. The new brand should build upon previous recommendations from the *2008 Comprehensive Transportation Plan* and consider using a new moniker. Some possible options include:

- Go! Douglas
- Connect Douglas
- Douglas County Connect
- DouglasLinks

The campaign should include a broad and comprehensive strategy that aims to reach as many people as possible through multiple outlets, including, but not limited to billboards, radio, print, and online and social media.

- **Recommendation 11: Promote the use of real-time information and develop a mobile application to access Douglas County transportation services.**

Community Support	Level of Effort for Implementation	Estimated Cost	Timeframe
N/A	Moderate	\$	Intermediate



In order to maximize the benefits available to its citizens from available technology, Douglas County should consider having a smartphone application (app) developed to enable citizens to obtain real-time information about existing and future transportation services. Specifically, Douglas County should recruit or hire an application developer to build an app so that customers on-the-go can access information about services, plan trips, and obtain information about vehicle arrival and departure times.

The County’s Multi-Modal/Rideshare Program has recently begun the process of streamlining its fare collection system and enabling more efficient online payment. The next step in making the system more accessible and convenient is to provide more information to users who are increasingly mobile. Douglas County Multi-Modal Services has requested authorization in the 2016 budget for on-board security cameras and real-time data collection for its van fleet. In the future, such equipment should also be provided for new vehicles such as those use for flexible zone-based circulators or demand-response/dial-a-ride service, as appropriate.

An increasing percentage of people are accessing information via mobile devices – smartphones, tablets, etc. The County should strive to make information readily available in these formats as financial resources

Example: The Fresno Council of Governments (California) has partnered with MeasureC.Com to create a fully integrated carpool services website and mobile applications for Apple and Android systems.
[\(http://www.valleyrides.com/download-our-application-for-your-smartphone/\)](http://www.valleyrides.com/download-our-application-for-your-smartphone/)

permit. The County will need to decide whether to develop a customized app or work with third party app developers who create free and commercial web-based and mobile applications for transportation services.

When selecting an app developer it is important to consider examples of past apps the company has developed, fees and terms of service contract, available features, communication during the development process, ownership of the app (once developed), testing, and the process for making future upgrades. A list of free and commercial third party transportation apps is available on the [511.org](http://www.511.org) website.

- **Recommendation 12: Improve and upgrade the transportation services website.**

Community Support	Level of Effort for Implementation	Estimated Cost	Timeframe
N/A	Low	\$	Short Term

Douglas County has already established a very useful and functional website to facilitate the public’s interaction with its County leaders, individual departments, and on-line services. This option involves enhancing the existing webpage for the County’s Multi-Modal Services to provide more user-friendly resources for planning trips and using other available services.



Figure 5-7. Screenshot of the Douglas County Transportation Services Study page on the County website.

Multi-Modal Services should work with the County’s Department of Communications and Community Relations to upgrade the existing website to include features to enhance the user experience and make transportation systems easier for all residents to use. The County should also consider including a portable linked mobile “information kiosk” which could be moved around to key locations in the County, such as shopping malls, hospitals and medical centers, major work sites, educational institutions, city halls, and other locations where large numbers of people could be engaged in learning about available transportation services.

The website should be updated to include the same types of information that will be made available through the mobile application, in a user-friendly web-based format, including, but not limited to:

- Available services;
- Schedules, maps, and routes (if applicable);
- Fares and payment information (including ability to pay online);
- Directions, routes, and trip planning features (link to Google Maps or MapQuest for example);
- Request form for volunteer transportation services;
- Educational information and tools that encourage the use of transportation services such as commuting and/or gas cost calculators, showing how much time and money they could potentially save.

The portable information kiosk could be used to demonstrate the extent of information readily available to users and to demonstrate the County’s commitment to high quality, customer-oriented transportation services.

Other Recommendations

This section includes recommendations that were not conceived as part of proposed service concepts, but will enhance the efficient delivery of transportation service, provide increased opportunities to attract new customers, and increase the capacity of Douglas County to provide transportation services that meet the needs of all residents.

- **Expansion of the County's voucher program** - Douglas County should seek to expand the current voucher program for seniors and people with disabilities by partnering with the County's Senior Services division along with outside organizations that work with these populations to promote the availability of the voucher service. The County should also consider recruiting new transportation providers, such as local taxi companies and private-non-profit organizations involved in providing transportation services into the program to increase the County's capacity to transport these persons. Eventually, it is possible this program could include some private ride-hailing service.
- **Advocate for funding from ARC:** Douglas County should continue to proactively advocate for additional funding from ARC to support existing and future services, especially for marketing support, development of technology improvements (an app), and other efforts that could attract federal, state, or regional funding. ***In many respects, Douglas County is providing the same types of services that Transportation Management Agencies or Community Improvement Districts are providing throughout Metro Atlanta in key regional activity centers. The County's efforts should be recognized as such and accorded the same funding priorities as those organizations.***
- **Hire additional operations staff:** Douglas County should assess future workload that is likely to result from new and expanded services and hire additional staff as needed or convert part-time positions to full-time positions. Initially, it is recommended that one additional staff person be brought on to support expanded services. As new services are planned for and implemented in the future, additional staff will be needed to support those services. The general duties of this new position are described below.

The position(s) would support operational activities for new services, including but not limited to demand-response/dial-a-ride, partnerships with ride-hailing services, expanded vanpools, and flexible zone circulator service. Dedicated operational staff to support new and expanded services will result in more efficient services that benefit the public.

- A coordinator could explore and implement ride-hailing voucher service will increase availability of affordable on-demand transportation for seniors and people with disabilities
- Operational staff could assist with vanpool service will increase the efficiency of existing staff, allowing them to focus on growth and expansion of the system to service more customers and destinations
- Planning and roll-out of flexible zone circulator service will occupy a good deal of operational staff time and bringing on new staff to help with this effort will allow existing operational staff to focus on making current services more efficient.

It is anticipated that additional operational staff can be brought on for an annual Operating and Maintenance cost of between \$75,000 and \$150,000 depending on work load and level of expertise.

Costs will be lower in the short term and as more staff are brought on to support expanded services, they can be expected to rise.

- **Increase institutional support for transportation services:** Douglas County should increase the institutional support for transportation service countywide by taking the following actions to engage external agencies in the overall planning and development of new and expanded transportation services. ***Among the key stakeholders interviewed, transportation services was viewed as a critically important function for the County to serve.***
 - **Establish a Transportation Services Task Force:** The Task Force should be comprised of representatives of agencies whose clients and constituents utilize transportation services, such as the Senior Services Division, Accountability Courts, the School District, the cities in the County, and others. The Task Force should meet at least twice per year and discuss status of services, upcoming opportunities for funding and/or partnerships, and new and emerging transportation needs, etc.
 - **Initiate periodic briefings of the County Board of Commissioners:** Due to the importance of the County's transportation services to support quality of life, mobility, and economic development goals, it is recommended that at least twice per year Douglas County Multi-Modal/Rideshare staff and DOT representatives brief the County Commission on the progress being made in this area of County operations. These presentations should focus on updates about new services, the status of new partnerships and institutional capacity-building across agencies, program improvements, the status of program utilization, and future plans.
 - **Develop and execute a communications strategy:** Douglas County should develop and carry out a strategy for promoting and communicating information about the multi-modal menu of services that are available to Douglas County residents. This should include regular features in the Douglas County Happenings E-Newsletter, a strong web presence, social media accounts, and periodic publications of editorials or other types of press and communication. This type of communication will serve not only to boost ridership, but can positively impact partnerships and the ability to leverage external financial resources.
 - **Meet periodically with potential partners:** Douglas County should set up periodic meetings with representatives of cities within Douglas County and neighboring communities to discuss opportunities for partnerships and enhanced service.
- **Purchase and implement an electronic asset management system:** Douglas County should consider developing its own transportation services asset management system or purchase and implement an electronic system to help manage assets of this division. Electronic asset management systems are efficient tools for tracking and maintaining records on equipment and assets. Electronic systems reduce the need for paper and streamline record-keeping by using a centralized set of records. It is recommended that the County purchase equipment (laptop, GPS equipment, and printer) to initiate electronic management of Douglas County's transportation assets (equipment, vehicles, tools, etc.).

Such a system will streamline data collection and allow long-term monitoring of condition, status, and location of assets to enable future rehabilitation and replacement of assets. Such a system will:

- Centralize and streamline record-keeping for all transportation assets
- Increase efficiency in reporting and upkeep of maintenance logs
- Maximize the impact of operations and maintenance funding
- Increase operating capacity of existing system in a resource-efficient manner
- Maximize useful life of capital investments
- Align plans and work to strategic goals

Initial capital costs are estimated to be in the range of \$10,000 to \$ 12,000. Ongoing operations and maintenance costs associated with electronic asset management include staff time needed to maintain the system, including initial placement of assets into database and entering new assets on ongoing basis, as well as to produce annual reports as needed.

- **Work with Douglas County School System to explore a mutually beneficial service arrangement:**

As indicated in one of the community leader interviews, there may be future opportunities for the County's Multi-Modal Services/Rideshare Program to partner with the County's school system to help meet the travel needs of public school students. The two parties should explore opportunities for service agreements in which students would be able to use transportation services at free or reduced rates, possibly subsidized by the school system.

The Douglas County School System currently provides transportation for 16,000 students within the district; however, in recent years it has become increasingly difficult to recruit and retain drivers for the system. Additionally, the school system may not be able to fully fund expansions of its own transportation system over the next few years. As new transportation services become available in Douglas County, it may be possible to work out arrangements for those services to help students continue to have reliable transportation to and from school each day.

- The Douglas County School System transportation program serves approximately 16,000 students (out of 26,000 enrolled) and is currently facing a shortage of drivers that may eventually force the system to reduce its routes.
- The State of Georgia provides funding for the transportation of students living more than 1.5 miles from school and the Douglas County school system provides service for anyone more than 0.5 miles from school at its own cost.
- Students could provide an additional pool of riders for the County's transportation services.
- Service contracts or guaranteed fare payment arrangements between the parties could help reduce or offset operational costs for taxpayers in the County.
- These could also help provide options for the 1,500 households that do not have vehicles available.
- These arrangements could be especially beneficial to the approximately 20% of families with children under age 18 who live below the poverty level in Douglas County.

5.2 Potential Funding Sources

Overview

This section of the report provides an overview of potential sources of funding for the new and/or expanded transportation services, programs, and related investments recommended in this study. Currently, the County's transportation services program are being financially supported through County funds and federal grants through the Federal Transit Administration. ***As new service options are brought on line, a wider array of funding sources will need to be accessed to support critically-needed capital and operational investments to improve transportation services in Douglas County. This section describes potential new funding sources beyond those being currently used to support transportation services for Douglas County residents.***

Job Access and Reverse Commute (JARC) Program (FTA Section 5316)

The federal Job Access and Reverse Commute Program, known as JARC, administered by the FTA, was established as part of the Transportation Equity Act (TEA-21) to address the unique transportation challenges faced by welfare recipients and low-income persons seeking to get and keep jobs. The program is intended to help local, regional, and state entities to provide maximum flexibility to job access projects that are designed to meet the needs of people who are not effectively serviced by public transportation. It is intended to provide an equitable funding distribution to states and communities in order to implement locally developed, coordinated public transit-human services transportation plans. As such, recipients are required to certify that projects selected are derived from a locally developed coordinated public transit human services transportation plan.

Federal JARC funds (and their associated local matching funds) may be used to finance capital, planning, and operating expenses. Eligible activities include, but are not limited to the following:

- Late-night and weekend service;
- Guaranteed ride home service;
- Shuttle service;
- Expansion of fixed-routes;
- Demand-responsive van service;
- Ridesharing and carpooling service;
- Promotion through marketing of:
 - Use of transit by workers with non-traditional schedules;
 - Use of transit voucher programs by appropriate agencies for welfare recipients and low-income individuals;
 - Development of employer-provided transportation (shuttles, ridesharing, carpooling); or
 - Use of transit pass programs.
- Supporting administration and expenses related to voucher programs;
- Acquiring geographic information system (GIS) tools, such as software, etc.;
- Intelligent transportation system (ITS) features, including customer trip information technology and deploying vehicle-position monitoring systems;

- Subsidizing the purchase or lease by a non-profit organization or public agency of a van or bus dedicated to shuttling employees from their residences to a suburban workplace; and
- Otherwise facilitating the provision of public transportation services to suburban employment opportunities.

The federal share of eligible capital and planning costs may not exceed 80% of the net cost of the proposed project and the federal share of the eligible operating costs may not exceed 50% of the net operating costs of the activity. Recipients may use up to 10% of their apportionment to support program administrative costs, including administration, planning, and technical assistance, which may be funded at a 100% federal share. The local share of eligible capital and planning costs shall be no less than 20% of the net cost of the activity, and the local share for eligible operating costs shall be no less than 50% of the net operating costs. More information about JARC is available online at: http://www.fta.dot.gov/grants/13093_3550.html.

Georgia State Road and Tollway Authority (SRTA)

The Georgia State Road and Tollway Authority (SRTA) is a state-level, independent authority created by the Georgia General Assembly to operate tolled transportation facilities within the State and act as the transportation financing arm for the State. Recently, SRTA has been working to expand its financing to focus on increasing and managing mobility. The Authority has selected two private sector vanpool operators in Metro Atlanta to participate in a flat-payment incentive program. It is possible that SRTA would be willing to help incentivize public sector vanpool program operators who provide similar services, such as Douglas County. It is recommended that Douglas County meet with SRTA officials to discuss the possibilities.

In 2015, SRTA announced the availability of a new \$75 million General Obligation Bond Transit Capital Program known as the **GO! Transit Capital Program**. The program is designed to fund transit capital projects with a useful life of ten (10) or more years in which the State can have a legal ownership interest and that are operated by an existing public transportation operator. The maximum available award is \$37.5 million. Local and/or state transportation organizations may apply for program funding. The application process is currently underway (as of early December, 2015).

Existing public transportation operators that are government units as well as local, regional, and state government units, including Community Improvement Districts, are all eligible to apply. Applicants will be classified as urban or rural, and projects will be evaluated on cost efficiency, matching funds available, and project readiness. Applications are encouraged to focus on and quantify the benefits projects would provide to transit system users or conditions and cost efficiency. Eligible capital costs include, but are not limited to:

- Professional services (e.g. engineering and architectural)
- Acquisition of land
- Construction of new buildings/facilities/amenities
- Renovation of existing buildings/facilities/amenities
- Purchase of major equipment of a long-term nature used in an operation or activity
- Purchase of permanently attached fixtures/improvements or machinery that cannot be removed without impairing the facility
- Construction of parking lots, park and ride lots, etc.

In a recent presentation, SRTA officials emphasized the importance of technology in the future of transportation services and it may be possible that SRTA would be willing to consider funding for technologies that maximize the use and cost-effectiveness of capital assets as part of transit capital program funding requests.

The funding application process began on October 30, 2015 and will remain open until January 31, 2016. Douglas County is currently in the process of considering a project proposal to access funding from this source. For more information, visit <http://www.georgiatolls.com/gotransit>.

Transportation Investment Generating Economic Recovery (TIGER) Discretionary Grants

The federally-funded Transportation Investment Generating Economic Recovery (TIGER) competitive grant program funds capital investments in surface transportation infrastructure across the U.S. that will have a significant impact on the nation, a region, or a metropolitan area. It is a highly competitive program that typically attracts applications for upwards of five times the available funding. Recipients of the seventh round of TIGER grants were announced October 29, 2015 and include 39 projects in 34 states at a cost of \$500 million. TIGER funds support transformative projects that provide significant and measurable improvements over existing conditions and that advance key transportation goals: safety, innovation, and opportunity.

The TIGER program can provide capital funding directly to any public entity, including municipalities, counties, port authorities, tribal governments, MPOs, or others. It can be used to fund multi-modal, multi-jurisdictional projects that are often difficult to fund through traditional DOT programs. Categories of projects include transit, planning, rail, port, road, and bicycle and pedestrian.

Applications must include descriptions of the benefits they would deliver in terms of five long-term outcomes: safety, economic competitiveness, state of good repair, quality of life, and environmental sustainability. Projects are evaluated on innovation, partnerships, project readiness, benefit-cost analysis, and cost share. In addition to registering on Grants.gov, there is a pre-application that must be submitted along with a final application. More detailed information on this funding source can be found at: <https://www.transportation.gov/tiger#sthash.TegHOsVs.dpuf>

Congestion Mitigation and Air Quality Improvement (CMAQ) Program

The federal Congestion Mitigation and Air Quality Improvement Program (CMAQ) is jointly administered by the Federal Highway Administration (FHWA) and FTA. It has been reauthorized under three separate transportation funding acts, MAP-21. At this writing, a new federal transportation authorization has been approved by the U.S. Congress and the CMAQ program has been continued in the new authorization. ***The CMAQ program is an important resource for Douglas County to utilize in providing transportation services since many of those provided support mobility in many parts of Metro Atlanta which is designated as an air quality non-attainment area.***

The CMAQ program is a flexible funding source for state and local transportation projects and programs that help meet the requirements of the Clean Air Act. Funding is provided to reduce congestion and improve air quality for areas that do not meet the National Ambient Air Quality Standards for ozone, carbon monoxide, or particulate matter (nonattainment areas) and for former nonattainment areas that are now in compliance (maintenance areas). Douglas County is currently included in the Metro Atlanta air quality nonattainment area.

The CMAQ funds may be used for transportation projects that are likely to help an area attain or maintain national ambient air quality standards and that are effective at reducing air pollution. Projects must be included in the regional MPO's current transportation plan and transportation improvement program (TIP) or the current state transportation improvement program (STIP) in areas without an MPO.

The list of eligible project activities includes:

- Projects to improve traffic flow, such as improving signalization, construction of high-occupancy-vehicle lanes, improving intersections, improving transportation system management and operations, and those that improve incident and emergency response or improve mobility, such as real-time traffic, transit, and multimodal traveler information
- Projects that shift demand to non-peak hours or modes of travel other than solo driving, increasing vehicle occupancy rates, or otherwise reduce demand
- Purchase of diesel retrofits or conducting related outreach activities

For more information on CMAQ funding, please refer to the following FHWA webpage:

<http://www.fhwa.dot.gov/map21/factsheets/cmaq.cfm>.

Surface Transportation Program (STP)

The federal Surface Transportation Program (STP) is a flexible funding program, authorized under MAP-21, that may be used (as capital funding) for public transportation capital improvements, car and vanpool projects, fringe and corridor parking facilities, bicycle and pedestrian facilities, and intercity or intra-city bus terminals and bus facilities. Funds can also be used for surface transportation planning, transit research and development, transit safety improvements, and environmental analysis. ***It should be noted that as of this writing, a new federal transportation bill has just been reauthorized by the U.S. Congress and signed by the President. Specific program requirements for the STP funding may be modified from previous versions and should be verified.***

Federal STP funds are distributed by population and programmatic categories within states. Some funds are specifically designated for metropolitan planning areas over 200,000 population and some are specified for areas with populations in the range of 50,000-200,000. About half of STP funds may be used anywhere within the State. More information about the STP funding program can be found at:

<http://www.fhwa.dot.gov/map21/factsheets/stp.cfm>.

Transportation Alternatives Program (TAP)

The federal Transportation Alternatives Program (TAP) was authorized under MAP-21 to provide funding for programs and projects defined as "transportation alternatives," including on- and off-road pedestrian and bicycle facilities, infrastructure projects to improve non-driver access to public transportation and enhanced mobility, community improvement activities, and environmental mitigation; recreational trails; safe routes to schools; and projects for planning, designing, or constructing boulevards and other roadways largely in the right-of-way of former divided highways.

It should be noted that as of this writing, a new federal transportation bill has been reauthorized by the U.S. Congress and signed by the President. Specific program requirements for the TAP funding may be modified from previous versions and should be verified.

States are awarded TAP funding and may obligate the funds for projects or activities in the following categories:

- Transportation alternatives, as defined in Section 101 of the MAP-21 federal legislation include eligible activities such as construction, planning, and design of on-road and off-road trail facilities, including sidewalks, signals, traffic calming techniques; infrastructure projects that provide safe routes for non-drivers; conversion and use of abandoned railroad corridors for trails; construction of turnouts, overlooks, and viewing areas; preservation and rehabilitation of historic transportation facilities;
- Recreational trails program under Section 206 of the MAP-21 law;
- The safe routes to school program under Section 1404 of the SAFETEA-LU law (23 U.S.C. 402 note; Public Law 109-59); and
- Planning, designing, or constructing boulevards and other roadways largely in the right-of-way of former Interstate System routes or other divided highways.

Federal Funding for Bicycle and Pedestrian Projects

There are a number of federal programs and funds that can be used effectively to pay for improvements to the bicycle and pedestrian environment, including infrastructure, equipment, and trail or path planning, development, and construction. Below is a partial listing of some bicycle and pedestrian infrastructure projects that can be funded in whole or in part through federal programs (a list of abbreviations and acronyms can be found in the Appendix).

- Access enhancements to public transportation (includes benches, bus pads) – Transportation Investment Generating Economic Recovery (TIGER), Federal Transit Administration (FTA), Congestion Mitigation and Air Quality (CMAQ) Improvement Program, and STP funds
- Bike racks on transit – TIGER, FTA, CMAQ, and STP funds
- Bus shelters and benches – TIGER, FTA, CMAQ, and STP funds
- Crosswalks (new or retrofit) - TIGER, FTA, CMAQ, Federal Highway Administration (FHWA) Highway Safety Improvement Program (HSIP), National High Priority Program (NHPP) funds, National Highway System (NHS) funds, STP, Safe Routes to School (SRTS) funding (until expended)
- Curb cuts and ramps - TIGER, FTA funds, CMAQ, HSIP, NHPP, NHS, STP, and SRTS (until expended)
- Sidewalks (new or retrofit) - TIGER, FTA, CMAQ, HSIP, NHPP, NHS, STP, RTP, and SRTS (until expended)

For details, see a recent report from FHWA on the use of federal funding for bicycle and pedestrian projects can be found at:

http://www.fhwa.dot.gov/environment/bicycle_pedestrian/funding/funding_opportunities.pdf.

State Transportation Funding Act of 2015

In May of 2015, the Georgia State Legislature passed HB 170, known as the *Transportation Funding Act of 2015*, or TFA2015, to provide an estimated increase of \$1 billion annually using a combination of sales (gasoline and diesel) tax provisions at the state level, hotel/motel fees, and heavy vehicle impact fees. The Georgia Department of Transportation (GDOT) administers these state funds. GDOT is currently in the process of identifying the allocation and potential use of these funds for transportation purposes. It is expected that the majority of these funds will be directly to critically needed infrastructure maintenance and

rehabilitation projects for roads and bridges that have had to be deferred in recent years due to severe funding constraints.

The TFA2015 also allows a county-level Transportation Special Purpose Local Option Sales Tax (T-SPLOST) to be shared between cities and a county in lieu of participating in a regional T-SPLOST, and allows a fractional percentage (up to 1%) levy for a period of up to five (5) years. At least 30% of T-SPLOST revenue estimates must be used on projects identified in the Statewide Strategic Transportation Plan (SSTP). Funds raised may be used for “transportation purposes” defined in the bill as meaning roads, bridges, public transit, rails, airports, buses, and seaports ... and all accompanying infrastructure and services necessary to provide access to these transportation facilities.”¹⁵ This means that operating and other noncapital expenses are an eligible use of funds for transportation purposes under the county-level SPLOST program.

A small portion of the proceeds of the tax must be paid to the state to defray the costs of administration, but beyond that, funds are to be distributed according either to an intergovernmental agreement or, in absence of an intergovernmental agreement, proportionately based upon average expenditures on transportation in three prior fiscal years, including on operations and maintenance. This could become an important source of funding for transportation service enhancements in Douglas County.

For more information, visit: <http://www.dot.ga.gov/IS/TransportationFunding#tab-4> or <http://www.legis.ga.gov/Legislation/en-US/display/20152016/HB/170>.

¹⁵ Companion legislation to HB 170, HB 106 (signed by the Governor May 12, 2015), clarifies components of TFA2015 related to county-level TSPLOSTs, including changing the date counties in regional transportation systems may begin the process of instituting a County TSPLOST to July 1, 2016 (<http://www.legis.ga.gov/Legislation/20152016/153773.pdf>).

5.3 Implementation Strategy and Program

As Douglas County moves forward to implement new and expanded transportation service improvements, a well-thought out set of strategies should be employed to carry out implementation activities. Through the study process, Douglas County leaders and staff members have gained valuable information on which aspects of their transportation services are especially valued as well as the potential future services they think would be important for them to access. As the new and expanded services come on line, it is especially important for the County leaders and staff to keep its residents aware of the transportation improvements and continue to actively engage them in helping to guide transportation investment decisions.

As one of the primary providers of public transportation services in Metro Atlanta, Douglas County is a member of the ARC Transportation Operations Subcommittee (TOS), the region's primary technical advisory committee on transit issues to ARC's transportation policy committee. As the advancements in transportation services in Douglas County proceeds, the County will continue to work closely with the TOS, especially to collaborate on service improvements with adjacent local jurisdictions, such as Cobb Community Transit (CCT) provided by Cobb County, Paulding Transit (operated by Paulding County), and any new services coming on line.

Additionally, due to the funding structure for transportation services at the federal, state, and local levels, it is important that Douglas County staff continue to proactively keep its public sector partners, particularly ARC, the GDOT Office of Intermodal Programs, and GRTA (with respect to its Xpress service), and the Georgia State Toll Road Authority (SRTA) updated and aware of the County's plans to advance its transportation services. All of these partners can play a role in helping Douglas County accomplish its future plans for improving its transportation services and can contribute to opportunities to leverage various funding sources to support the County's efforts.

As an initial implementation step in implementing transportation service improvements, it is recommended that Douglas County Department of Transportation (DOT) and Multi-Modal/Rideshare staff request an opportunity to brief the staff (and the leadership group, if possible) about the County's future plans for transportation services. Among the topics to be discussed include:

- Overall findings and recommendations of the study, including results of public and stakeholder engagement activities;
- Identification of ways the partner agencies can help support the County's efforts; and
- Discussion of the best methods to keep the partner agencies continuously informed on the County's process for launching transportation services improvements.

Another topic to be discussed with ARC is how the County might access unexpended transit funding assigned to other local jurisdictions in Metro Atlanta to fast-track near-term service improvements in Douglas County. The Metro Atlanta region has a process to allocate federal transit program funding to each county in the area. If a county or county elects not to use the funding, it is summed and then reallocated to those counties able to utilize the unused funding.

In order to provide a good opportunity for key transit officials from the various public sector entities to learn more about the Douglas County system and its plans, a special event hosted at the County's Multi-Modal Center could be valuable. The County's Multi-Modal Transportation Center is an impressive asset that could be a model for other jurisdictions to emulate in Metro Atlanta.

At the local level (within Douglas County), it is also important to create opportunities for local partners to engage and discuss topics of mutual interest related to transportation services. As described in Chapter 5.1, there are opportunities to create a local group of the various agency representations that have an interest in transportation services, including the County's Department of Senior Services, its Accountability Courts office, the Douglas County School System, and representatives of the business community, medical/wellness facilities, and educational institutions in the County. Starting to build and strengthen these relationships as new and expanded transportation service improvements are implemented can create a greater awareness across the County about available resources for transportation services. This group would also be valuable in identifying strategies for launching service improvements, especially on increasing the level of awareness by citizens of the new travel-related opportunities.

The Douglas County DOT and its Multi-Modal/Rideshare services division have a very strong background in implementing transportation improvements and a statewide and regional reputation for quality infrastructure, transportation services, and public sector management. The County should continue to build upon this asset and use it as it interacts with its public agency partners to leverage new financial resources and other assistance to expand the County's transportation program.

To assist the County in its transportation service implementation activities, an implementation matrix (on the following pages) provides detailed information on the action steps needed to proceed with the study's recommendations.