

*CORE Connections-2035 LRTP
Transit Mobility Vision Plan*



FINAL REPORT



May 15, 2013

The opinions, findings, and conclusions in this publication are those of the author(s) and not necessarily those of the Department of Transportation, State of Georgia, or the Federal Highway Administration.

Prepared in cooperation with the Department of Transportation, Federal Highway Administration.

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Final Report Transit Mobility Vision Plan


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CHAPTER 1 - INTRODUCTION

Enhancing quality of life and economic competitiveness are at the core of developing sustainable, vital communities now and into the future. At the same time, measuring these factors is complicated and depends on the context under which these issues are being examined. One concept, however, binds these two overall goals- *creating choices*. Through the creation of choice, niche markets are identified and new economies can emerge. Quality of life for citizens is ultimately about creating choices as well, whether it is providing choices in education and job opportunities or options in accessing community activities and events. With regard to developing transportation solutions, *creating viable mobility choices* is critical to meeting these goals of quality of life and economic competitiveness.

As the regional coordinating body in the Georgia coastal region, the Coastal Regional Metropolitan Planning Organization (CORE MPO) has the responsibility to update the Long Range Transportation Plan, known as the 2035 CORE Connections Framework Mobility Plan. Recognizing that lasting transportation solutions should develop quality choices for citizens, a major component of this long range planning effort is developing a regional transit mobility vision. The purpose of this transit mobility vision is to provide a meaningful understanding of mobility needs within the region to frame and guide future public transportation policies and activities. This report details the planning process and results of this extensive effort, and provides recommendations to help move the regional transit mobility vision into actions that develop mobility choices over time.

Study Area

The rich cultural landscape, tourist amenities and natural resources within Georgia and South Carolina's coastal region have made this area an attractive location for both local residents and visitors alike. The study area for this Transit Mobility Vision Plan, shown in **Figure 1-1**, is comprised of five counties in Georgia (Bryan, Bulloch, Chatham, Effingham, and Liberty) and two counties in South Carolina (Beaufort and Jasper). This study area was selected based on the interconnected travel needs of citizens and to provide a sufficient regional context for improving transit mobility options. **Table 1-1** provides a brief overview of the counties and associated major cities comprising the study area. The following provides a brief overview of the counties comprising the study area. More specific demographic data may be found in Chapter 2.

Chatham County, Georgia

Chatham county, anchored by the city of Savannah, is the regional and economic center of the study area. The county spans 426 square miles in land area and is home to over 265,000 residents. As the most populous county in Georgia outside of the Atlanta regional area, Chatham county population and employment concentration impact the travel patterns of all of the neighboring counties in the region. With its rich historic, architectural, and natural resources, areas within the county also serve as major tourist destinations.

Beaufort County, South Carolina

Located between Charleston, South Carolina and Savannah, Georgia, Beaufort county is home to over 160,000 people and covers a land area of approximately 576 square miles. The city of Beaufort serves as the County Seat. The county's major attractors include the Parris Island Marine Corps Recruit Depot, Hilton Head Island resort area, and a number of beaches and natural resources.

Table 1-1 Study Area Counties and Cities

| COUNTY | STATE | CITIES (Incorporated Places) | |
|----------------|-------|--|---|
| Chatham County | GA | Savannah (County Seat) Blomingdale Garden City Vernonburg | Pooler Port Wentworth Tybee Island Thunderbolt |
| Beaufort | SC | Beaufort (County Seat) Bluffton Hilton Head Island | Laurel Bay Port Royal |
| Bulloch | GA | Statesboro (County Seat) Brooklet Portal | Register Hopeulikit |
| Liberty | GA | Hinesville (County Seat) Allenhurst Fleming Flemington Ft. Stewart | Gum Branch Midway Riceboro Walthourville |
| Effingham | GA | Springfield (County Seat) Guyton Rincon | Clyo Meldrim |
| Bryan | GA | Pembroke (County Seat) Richmond Hill Keller | Lanier Black Creek |
| Jasper | SC | Ridgeland (County Seat) Hardeeville | |

Bulloch County, Georgia

Bulloch county is a predominantly rural area, and is home to approximately 70,000 people. The county covers a land area of approximately 673 square miles, and Statesboro serves as the County Seat. The county’s major attractors include the Georgia Southern University (GSU) and the Magnolia and GSU Botanical Gardens. A downtown Center for the Arts and an Agribusiness Center are currently being developed and is expected to be an additional major attractor for the area.

Liberty County, Georgia

Liberty county is home to approximately 63,000 people. Hinesville serves as the County Seat. The county covers a land area of approximately 490 square miles, and almost half of the county’s usable land area is occupied by the U.S. Army installation, Fort Stewart.

Effingham County, Georgia

Effingham county is located north of Chatham county and just south of the South Carolina border. Covering approximately 478 square miles of land area, the county is home to over 52,000 residents. Springfield is the County Seat. The county has seen considerable growth in recent years, being designated

by the U.S. Census Bureau as one of the six fastest growing mid-size counties in the nation. Most of the growth has been concentrated in the southern part of the county around the city of Rincon. Several historic sites are located in the county, including the Effingham County Courthouse, the New Hope AME Church, the Guyton-Whitesville Historic District, the Jerusalem Church, and the New Ebenezer Town site.

Bryan County, Georgia

Bryan county, covering approximately 436 square miles in land area, is located just southwest of Savannah. The county is home to approximately 32,000 residents, and Pembroke is the County Seat. The northern and southern portions of the county are completely divided by a large U.S. Army training center, Fort Stewart. Given its proximity to Savannah, with I-16 providing east/west connections that link Atlanta, Macon and Savannah, and I-95 connecting north to south along the coastline, this area serves a number of regional travel needs.

Jasper County, South Carolina

Jasper county, with a population of almost 25,000, is located in South Carolina and is a primarily rural area. The county seat is Ridgeland, located just 30 miles from the city of Beaufort. Covering 655 square miles, it is located between the historic ports of Charleston and Savannah. Destinations include the county courthouse, libraries, parks, and nature trails.

Study Coordination

Several planning agencies are involved in developing transportation solutions in the study area, including CORE MPO, Coastal Regional Commission, Liberty County Planning Commission, Lowcountry Regional Transportation Authority, Chatham Area Transit, Liberty County Transit, Palmetto Breeze and county and municipal governments within the study area. These entities were brought together to foster coordination in transit planning to provide greater mobility to residents across jurisdictional boundaries.

Recognizing that the success of this regional plan would depend upon both effective coordination between local and regional plans and ongoing input and buy in from the community, a public involvement plan was developed. The study was designed to include as many of the regional stakeholders as possible, working together to develop consensus on needs and directions for future development throughout the study. A committee of stakeholders was formed for this study and included representatives from the region's cities, counties, transit providers, universities, and schools. Stakeholder interviews were conducted during December 2009 and January 2010 to obtain additional community feedback and consensus on the needs for this transit mobility vision. Stakeholders advisory meetings were also held throughout the study process to update members of the public on the study progress and to obtain feedback as phases of the analysis were completed.

Planning Process

A series of technical memorandums were completed throughout this project as a part of the development of the Transit Mobility Vision Plan:

- Technical Memorandum #1 – Existing Conditions
- Technical Memorandum #2 – Regional Mobility Framework
- Technical Memorandum #3 – Peer Analysis
- Technical Memorandum #4 – Corridor and Service Opportunities

- Technical Memorandum #5 – Governance and Finance Strategies
- Technical Memorandum #6 – Connector Strategies

These technical documents were used, in sum, to develop recommendations for improving regional transit options, and were updated to include recently released 2010 U.S. Census Bureau data.

As an essential first step in the process, an analysis of existing conditions, including socio-economic trends and current transit services, was conducted to identify travel patterns and mobility needs within the region. Population and employment densities, travel origins and destinations, and locations of transit dependent populations were investigated to identify the areas where transit services were most needed. Based on the results of the existing conditions analysis and input received from stakeholders on key transit issues facing the region, a needs analysis was completed to identify a list of short, intermediate, and long-term transit needs.

The next step in the plan development was to develop a range of corridor service alternatives that could be pursued to provide a clear direction for transit in the region. Priority corridors were identified through the analysis of regional demographics and travel patterns and based on input received from stakeholders. These potential corridors were then evaluated to identify high, medium, and low corridor priorities in the region. A series of service opportunities were also identified to illustrate a number of strategies that could be undertaken to provide transit service in priority corridors. The purpose of this prioritization process and assessment was to provide a range of options to be pursued in creating a regional transit system. As part of the review of opportunities, the study team also explored a range of amenities and strategies which would enhance the modes and services in the region and create a seamless vision for public transportation in the study area. Connector strategies, including the potential for implementation of intelligent transportation systems (ITS), park and ride lots, rideshare and commuter services, and intermodal facilities were investigated.

Given the number of coordinating bodies within the region and counties, an analysis of organizational structure was undertaken. Identifying existing organizational structures as well as insights on peer organizational structures was determined to be the best way to examine opportunities for maximizing coordination of the regional transit system. In addition, mechanisms and strategies for funding regional transit services were identified. In today's environment, it is essential to consider the value of different levels of partnership, both to maximize the use of available services but also to maximize the use of available funding sources. Reviewing funding programs at the federal, state, and local level as well as newer grant programming opportunities provides the region with options for pursuing partnerships that will bring this transit vision to meaningful action.

Based on the findings of this extensive analysis, recommendations to advance a long-term comprehensive regional transit mobility vision have been identified. Within this vision, implementation steps have been identified to start the region on a transition from an automobile oriented system to one with multiple modes and mobility choices. These recommendations are intended to serve as guidance for the elected and appointed leaders of the region to make informed decisions as growth and improvement opportunities are considered. These recommendations will serve local leaders and planners in making decisions that *create mobility choices* for their communities, thereby enhancing broader quality of life and economic development goals for the region.

Maintaining and improving regional transit mobility requires not only an understanding of the unique identity of each community, but also the factors that bring these communities together. This seven county study area, covering five counties in Georgia and two in South Carolina, is comprised of over 668,000 residents, over 309,000 households, and over 219,000 employees. Given the diverse array of urban, suburban and rural communities within the region, a variety of existing condition demographic factors help to define and determine mobility needs.

Identifying existing conditions provides a baseline for objectively defining mobility needs in the region. This chapter summarizes the demographic character, and existing public transportation services in the region, and forms the basis for an analysis of regional transportation needs and opportunities.

Demographic Analysis

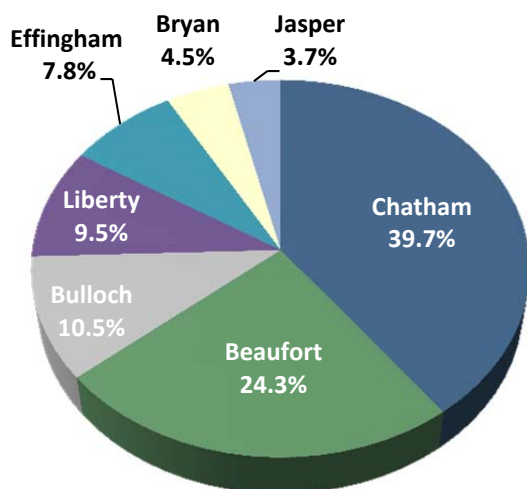
A detailed analysis was undertaken in early 2011 to document demographics in the study area, and a technical memorandum was developed (see Technical Memorandum #1 –Existing Conditions). Subsequently, new 2010 U.S. Census data has been released. Information in this chapter has therefore been updated to provide the most current demographics and profile of existing public transportation services within the region. Given the seven county study region, demographics were analyzed at county and tract level to identify key factors impacting transit provision. It should be noted that wherever possible, full dataset counts were used; however, much of the 2010 Census data now refers to three and five year American Community Survey (ACS) data. It is unknown which five-year period the data was used; however, it is likely from the 2006-2010 timeframe. This sample data was utilized where full count data is no longer available. The sources for each figure or table are shown on the following pages.

Population and Housing Characteristics

Population and Housing Totals

As shown in **Figure 2-1**, the population of the regional study area is 668,291. Of this total, approximately 64 percent of the study area population lives in Chatham and Beaufort Counties. Bulloch and Liberty Counties comprise 20 percent of the region’s population, while Effingham, Bryan and Jasper Counties combined make up the remaining 16 percent.

Figure 2-1: Regional Population by County



| County | Total Population |
|---------------|------------------|
| Chatham | 265,128 |
| Beaufort | 162,233 |
| Bulloch | 70,217 |
| Liberty | 63,453 |
| Effingham | 52,250 |
| Bryan | 30,233 |
| Jasper | 24,777 |
| TOTALS | 668,291 |

Source: 2010 U.S. Census, SF1-P1.
Population Totals

Population estimates for year 2035 are shown in **Table 2-1** and were taken from Georgia and South Carolina state data sources to provide a comparative look at county populations through the 2035 planning horizon. By 2035, population in the region is expected to exceed one million people. While Chatham and Beaufort Counties are anticipated to still comprise the greatest total numbers in population, greatest overall growth can be seen in Effingham and Bulloch Counties, which are expected to more than double through 2035. Bryan and Liberty Counties are also anticipated to nearly double in this same time period.

Table 2-1: Population Projections through 2035 by County

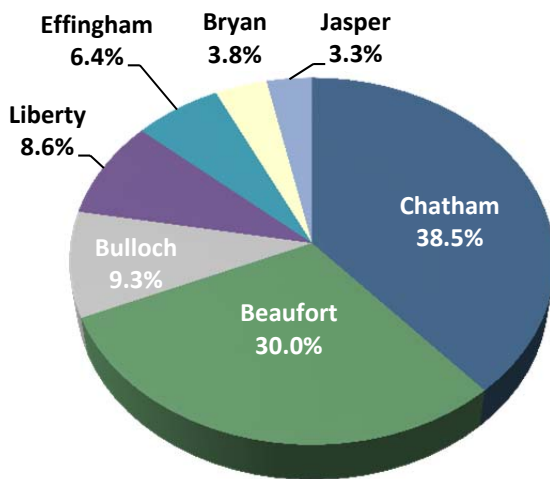
| County | 2010 | 2015 | 2020 | 2025 | 2030 | 2035* |
|---------------|----------------|----------------|----------------|----------------|----------------|------------------|
| Chatham | 265,128 | 273,756 | 290,615 | 307,576 | 324,098 | 341,508 |
| Liberty | 63,453 | 71,937 | 78,740 | 86,448 | 93,821 | 108,823 |
| Effingham | 52,250 | 67,492 | 80,563 | 96,094 | 112,062 | 130,683 |
| Bryan | 30,233 | 38,984 | 45,272 | 52,466 | 59,534 | 67,554 |
| Bulloch | 70,217 | 78,958 | 88,071 | 98,387 | 109,034 | 120,833 |
| Beaufort | 162,233 | 170,640 | 185,220 | 199,780 | 215,270 | 230,240 |
| Jasper | 24,777 | 24,530 | 26,130 | 27,730 | 29,000 | 30,460 |
| TOTALS | 668,291 | 726,297 | 794,611 | 868,481 | 942,819 | 1,030,101 |

Sources: *Georgia 2030: Population Projections*. State of Georgia, Office of Planning and Budget. March 2010.
South Carolina State and County Population Projections 2000-2035 Summary. South Carolina Budget and Control Board's Office of Research and Statistics, 2011.

* CDM Smith utilized Georgia 2030 growth factors to provide estimates through 2035 for the purposes of consistent analysis.

Total housing in the study region and for each county are shown in **Figure 2-2**. Housing units in the study area total 309,896, with 68.5 percent of housing located within Chatham and Beaufort Counties. Another 24.3 percent of housing is located in Bulloch, Liberty, and Effingham Counties. Bryan and Jasper Counties have the least number of housing units in the region, making up the remaining 7.1 percent.

Figure 2-2: Household Units by County



| County | Total Housing Units |
|---------------|---------------------|
| Chatham | 119,323 |
| Beaufort | 93,023 |
| Bulloch | 28,794 |
| Liberty | 26,731 |
| Effingham | 19,884 |
| Bryan | 11,842 |
| Jasper | 10,299 |
| TOTALS | 309,896 |

Source: 2010 U.S. Census, SF1-H1.
Housing Unit Totals.

Population Density

Population densities, expressed in terms of people living within a specified geographic area, are an important measure in planning for transit investments. Fixed-route public transit service works best when there is a sufficient concentration of persons desiring to make trips between two given points. Conversely, it is more difficult to connect many disparate points of origin and destination. ITE’s *Toolbox for Alleviating Traffic* provides some general guidance on transit supportive densities for effective public transit services. For 30-minute bus service, minimum gross population densities of 5,000 to 6,000 people per square mile is recommended. For 10-minute service, a minimum level of 8,000 to 10,000 people per square mile is recommended.

Table 2-2: Land Area and Population Density by County

| County | Land Area (Mi ²) | Pop Density (Persons/ per Mi ²) |
|-----------|------------------------------|---|
| Chatham | 426.44 | 621.7 |
| Beaufort | 576.28 | 281.5 |
| Bulloch | 672.81 | 104.4 |
| Liberty | 489.80 | 129.5 |
| Effingham | 477.70 | 109.4 |
| Bryan | 435.97 | 69.3 |
| Jasper | 655.32 | 37.8 |

Source: 2010 U.S. Census, SF1. Summary of Population and Housing Characteristics.

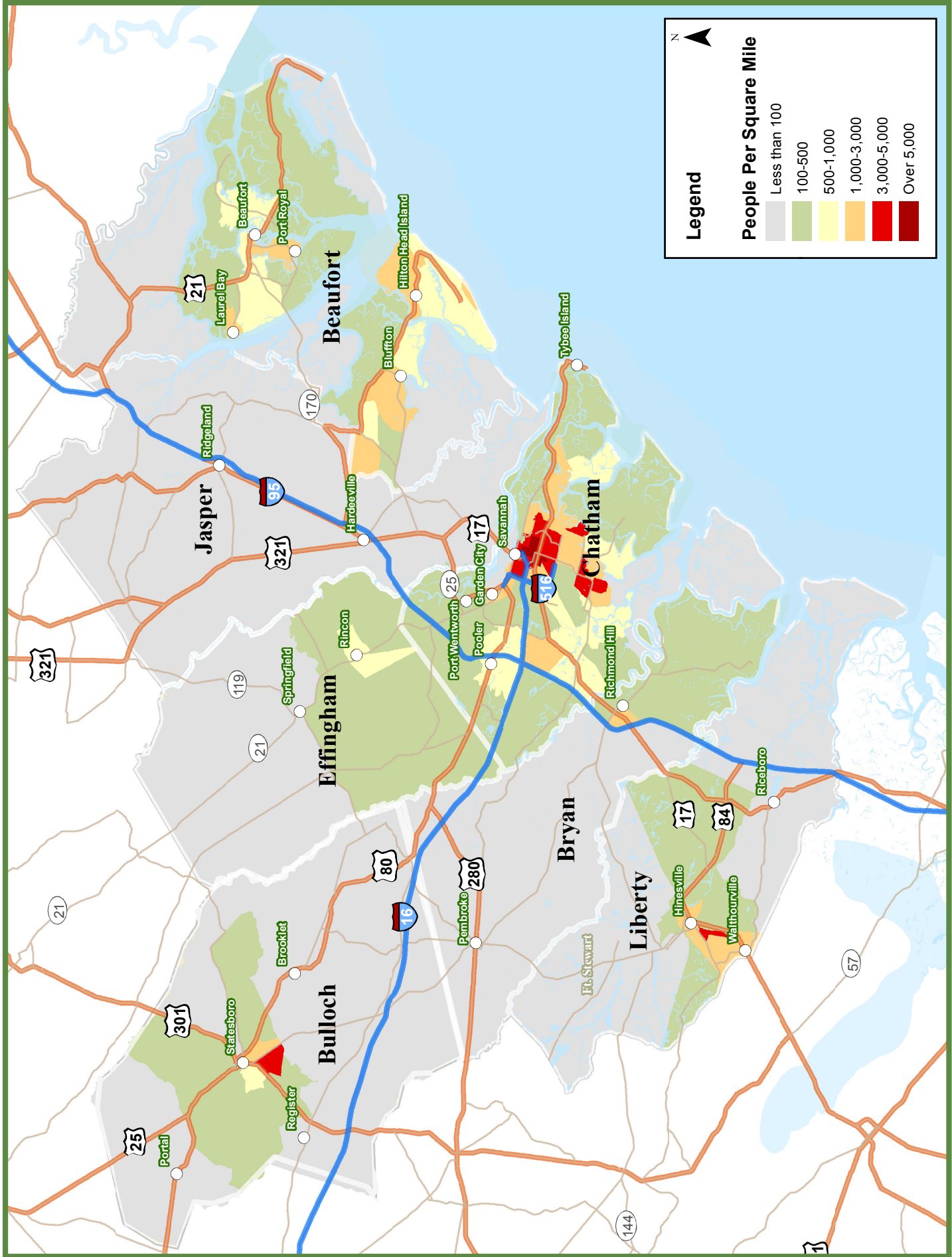
As shown in **Table 2-2**, population densities within the study area at a county wide level fall below these minimum recommended thresholds. Greatest overall population densities within the counties are located in Chatham and Beaufort Counties.

However, in reviewing tract level data within the region, there are a number of locations that do meet these criteria or are emerging urbanized area that could be supportive of transit investments into the future (see **Figure 2-3**). As the major urbanized area in the region, areas in and around Savannah in Chatham County provide the greatest overall population densities. Within Bulloch County, population densities are most supportive for transit in Statesboro and the Georgia Southern University areas. Liberty County, specifically near Hinesville and Ft. Stewart contain relatively higher population densities as well. Emerging medium level population densities can be seen in Beaufort County, particularly within Hilton Head Island, Bluffton, Laurel Bay and Port Royal.

Employment and Commute Characteristics

Commuting from home to work constitutes the greatest origin and destination for daily trips. Having an understanding of employment characteristics and commuting patterns is essential to identifying areas within the region that display the greatest need for transit service. 2009 ACS data from the U.S. Census Bureau was utilized for the purposes of this analysis. Given recent downturns in economic markets, this information on total workers was compared with the latest annual information for the U.S. Bureau of Labor Statistics (BLS) to ensure relative consistency in data. While data from BLS for 2010 to 2011 indicates slightly lower totals of workers in each county and slightly higher rates of unemployment than those provided through U.S. Census, the U.S. Census data represents data over a series of years and was therefore used to provide a long term outlook of employment trends in the region.

Figure 2-3: Population Density (People per Square Mile)



As shown in Table 2-3, there are over 219,000 employees within the study region.

Table 2-3: 2009 Employment by County

| County | Total Employees | % of Total Employees |
|---------------|-----------------|----------------------|
| Chatham | 118,943 | 54.3% |
| Beaufort | 47,333 | 21.6% |
| Bulloch | 20,861 | 9.5% |
| Liberty | 11,594 | 5.3% |
| Effingham | 8,442 | 3.9% |
| Bryan | 5,661 | 2.6% |
| Jasper | 6,180 | 2.8% |
| TOTALS | 219,014 | 100% |

Source: U.S. Census Bureau, 2009 Local Employment Dynamics, Inflow/Outflow Patterns.

Approximately 76 percent of these employees work in Chatham and Beaufort Counties. Employment is concentrated within the more urbanized area in each county, with greatest employment densities found in the cities of Savannah, Garden City, and Beaufort. Given the concentrations of employment in these areas, an inflow/outflow analysis was conducted for each county in the study area to identify the portion of the population that lives and works within their home county versus those that live in one county and commute to the study area counties. Tables 2-4 and 2-5 show employment and living commute factors within each county. Figure 2-4 provides a graphical depiction.

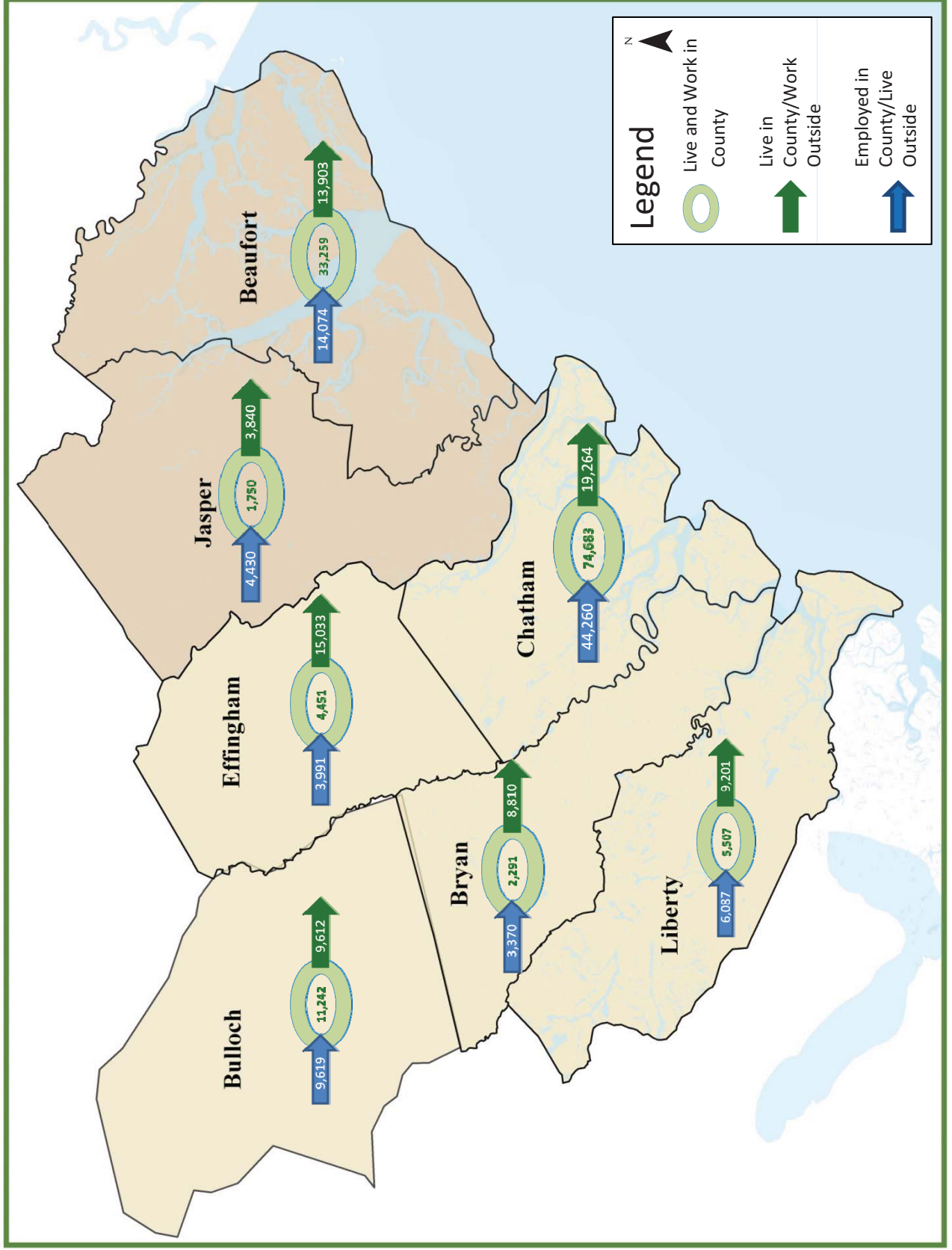
Table 2-4: Location Based Employment by Employees Living in Counties

| County | Employees Living in County | Employed and Living in County | | Living in County/Employed Outside | |
|-----------|----------------------------|-------------------------------|-------|-----------------------------------|-------|
| | | Count | Share | Count | Share |
| Chatham | 93,947 | 74,683 | 79.5% | 19,264 | 20.5% |
| Beaufort | 47,162 | 33,259 | 70.5% | 13,903 | 29.5% |
| Bulloch | 20,854 | 11,242 | 53.9% | 9,612 | 46.1% |
| Liberty | 14,708 | 5,507 | 37.4% | 9,201 | 62.6% |
| Effingham | 19,484 | 4,451 | 22.8% | 15,033 | 77.2% |
| Bryan | 11,101 | 2,291 | 20.6% | 8,810 | 79.4% |
| Jasper | 5,590 | 1,750 | 31.3% | 3,840 | 68.7% |

Table 2-5: Location Based Employment by Where Employees Work

| County | Total Employees | Employed and Living in County | | Employed in County/Living Outside | |
|-----------|-----------------|-------------------------------|-------|-----------------------------------|-------|
| | | Count | Share | Count | Share |
| Chatham | 118,943 | 74,683 | 62.8% | 44,260 | 37.2% |
| Beaufort | 47,333 | 33,259 | 70.3% | 14,074 | 29.7% |
| Bulloch | 20,861 | 11,242 | 53.9% | 9,619 | 46.1% |
| Liberty | 11,594 | 5,507 | 47.5% | 6,087 | 52.5% |
| Effingham | 8,442 | 4,451 | 52.7% | 3,991 | 47.3% |
| Bryan | 5,661 | 2,291 | 40.5% | 3,370 | 59.5% |
| Jasper | 6,180 | 1,750 | 28.3% | 4,430 | 71.7% |

Figure 2-4: Commuting Inflow/Outflow Patterns

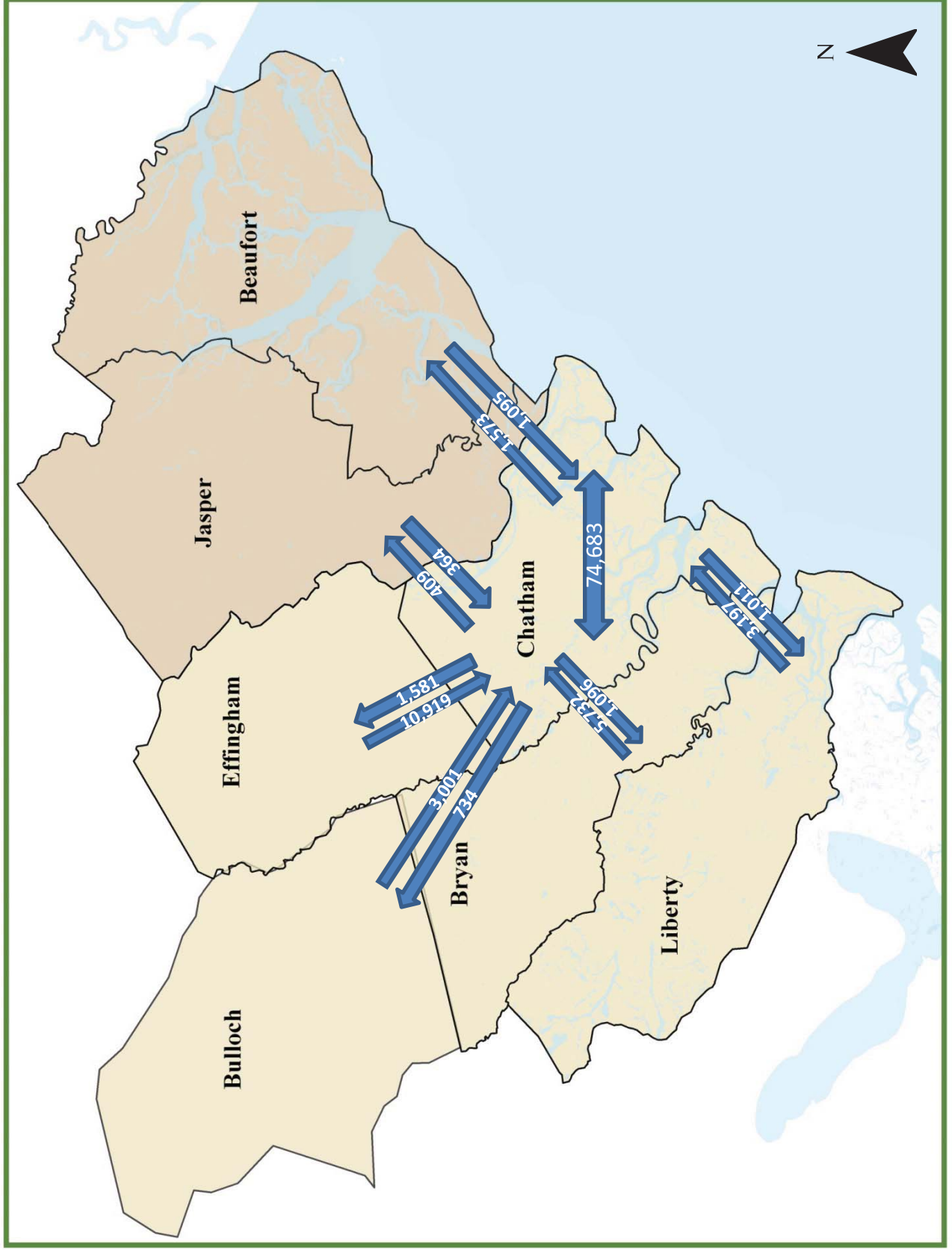


Approximately 80 percent of employees living in Chatham County also work in Chatham County and over 70 percent of workers living in Beaufort County work in Beaufort County. In a number of the other counties in the study region, employees often live and work in two different counties. Over three quarters of the employees living in Bryan (79.4%) and Effingham Counties (77.2%) work outside of their respective counties. Almost half of the employees living in Bulloch County and more than half of the population living in Liberty and Jasper Counties work outside of their home counties.

Understanding commuting patterns within the region is an integral part of the Transit Mobility Vision Plan process. **Figure 2-5** summarizes journey-to-work data for persons working in the study area based on data from 2009 U.S. Census employment data. Chatham County accounts for the greatest number of workers in the study region, and almost 25,000 commuters in the surrounding counties in the study area work in Chatham County. The majority of workers employed in Chatham County (62.8 percent) also live in Chatham County, with the remaining 37.2 percent living outside the County. Workers from Effingham County are the next largest component, making up 9.2 percent of the total Chatham County workforce. An additional 4.8 percent are from Bryan County, 2.7 percent from Liberty County, and 2.5 percent from Bulloch County. Beaufort and Jasper Counties in South Carolina also have residents who work in Chatham County, each with the remaining 1.6 percent of the workforce.

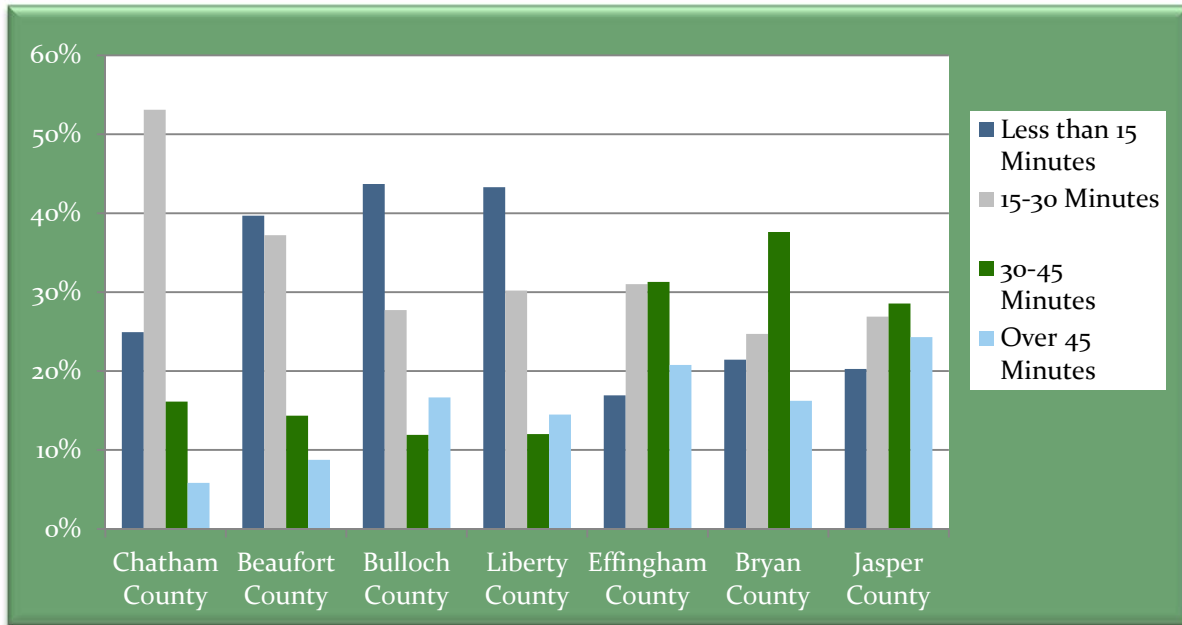
| Commuters to Chatham County | |
|-----------------------------|---------------|
| Beaufort | 1,573 |
| Bulloch | 3,001 |
| Liberty | 3,197 |
| Effingham | 10,919 |
| Bryan | 5,732 |
| Jasper | 364 |
| TOTAL | 24,786 |

Figure 2-5: Regional Commuting Patterns



As shown in **Figure 2-6**, commute times vary throughout the study area. Take as a whole, over 70 percent of commuters have a commute time of less than 30 minutes while approximately 30 percent have a commute time over half an hour. As shown in **Figure 2-7**, commute times of over 60 minutes are concentrated in Bulloch, Effingham, and Jasper Counties. Between five and fifteen percent of total commuters east of I-95 in Bryan County and those west of I-95 in Liberty County are also experiencing high commute times of over 60 minutes. These are also areas with minimal multimodal options and heavy concentrations of car use.

Figure 2-6: Commute Times by County



Source: 2010 U.S. Census Bureau, C08134, Means of Transportation by Travel Time to Work (Workers 16 Years and Over).

Contributing to these long commute times is an overwhelming share of single occupancy vehicles in the study area. As shown in **Table 2-6**, approximately 82 percent of commuters in the study region drive alone to work. Twelve percent carpool and less than two percent use public transit services to work.

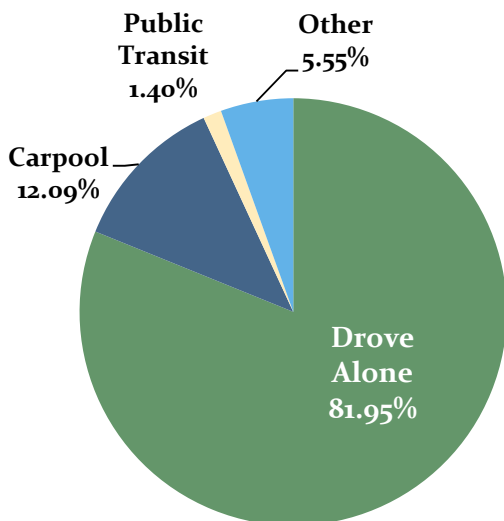
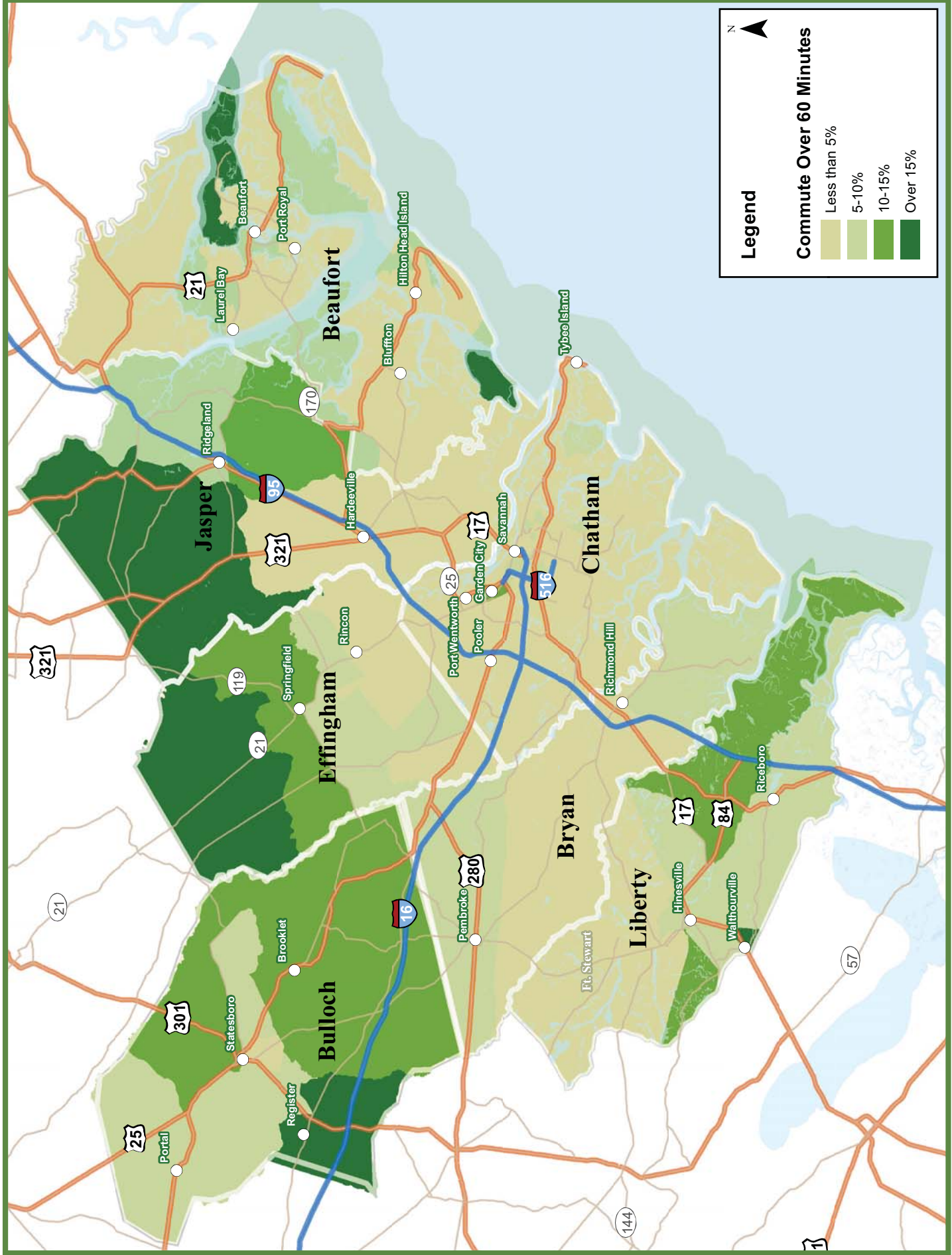


Table 2-6: Means of Transportation to Work

| | Drove Alone | Carpool | Public Transit | Taxi, Bike, Walk, Other |
|------------------|----------------|---------------|----------------|-------------------------|
| Chatham | 92,850 | 12,606 | 2,998 | 4,293 |
| Beaufort | 52,302 | 9,025 | 339 | 4,066 |
| Bulloch | 22,992 | 3,844 | 297 | 799 |
| Liberty | 22,974 | 2,966 | 120 | 2,173 |
| Effingham | 18,856 | 2,677 | 138 | 291 |
| Bryan | 11,280 | 1,272 | 35 | 827 |
| Jasper | 8,015 | 1,445 | 0 | 279 |
| TOTALS: | 229,269 | 33,835 | 3,927 | 12,728 |

Figure 2-7: Commute Times Over 60 Minutes



Congested Corridors

Given the regional employment patterns in the study area, it is important to identify areas where congestion is heaviest. These corridors represent potential opportunities for efficiencies in transportation by providing transit service options. Savannah’s central business district serves as a regional employment center and is accessed by a largely radial transportation system. During peak periods the commuter demand for the radial roadways leading to downtown far exceeds roadway capacity causing significant congestion on corridors connecting residential suburbs with the historic district. Major congested corridors for regional commuters include:

- Interstate 16 offers an option for Bryan County and west Chatham County commuters.
- US 17 accesses South Carolina including Beaufort and Jasper counties.
- SR 21 is congested during peak period transporting commuters from Effingham County.
- SR 204 (Abercorn Street) accesses Liberty and Bryan County.
- US 80 connects the islands southeast of town to downtown as well as offering alternative access from the west. US 80 also connects Islands Expressway and areas east of town.
- Truman Parkway is another commuter corridor offering connectivity internal to Chatham County.
- Interstate 516/DeRenne Avenue is congested at peak periods and offers access to the employment centers on the west side of the city. Interstate 516 connects Interstate 16, Interstate 95, and SR 21 which links Effingham County with hospitals, Hunter and Georgia ports.
- Interstate 95 is a major national connector through the region, connecting the southern areas, including Florida to the Carolinas. It is also a major truck and freight thoroughfare.
- SR 21 ports to Interstate 95 and communities in West Chatham County, Effingham, and the Port of Savannah.

Transit Dependent Populations

A number of factors contribute to transit dependency and were reviewed as part of this analysis. Factors include populations under 18 and over 65 years of age and low-income populations, zero car households. In addition, given the number of military bases within and surrounding the study area, veteran populations were also analyzed. Veterans, particularly older veterans aging in place, may constitute a demographic sector in need of public transportation over the planning horizon in the study region.

Table 2-7: Populations Under 16 and Over 65 Years Old by County

| County | Total Population | With Each County | | Within Region | |
|-----------|------------------|------------------|-----------------|------------------|-----------------|
| | | % Under 16 Years | % Over 65 Years | % Under 16 Years | % Over 65 Years |
| Chatham | 265,128 | 20.14% | 12.4% | 7.99% | 4.92% |
| Beaufort | 162,233 | 18.99% | 20.4% | 4.61% | 4.94% |
| Bulloch | 70,217 | 18.13% | 9.1% | 1.90% | 0.96% |
| Liberty | 63,453 | 27.27% | 6.3% | 2.59% | 0.59% |
| Effingham | 52,250 | 25.12% | 9.1% | 1.96% | 0.71% |
| Bryan | 30,233 | 27.43% | 9.0% | 1.24% | 0.41% |
| Jasper | 24,777 | 22.13% | 11.2% | 0.82% | 0.41% |

Source: 2010 U.S. Census Bureau, QT-P1. Age Groups and Sex: 2010.

Figure 2-8: Populations Under 16 and Over 65 Years Old for Region

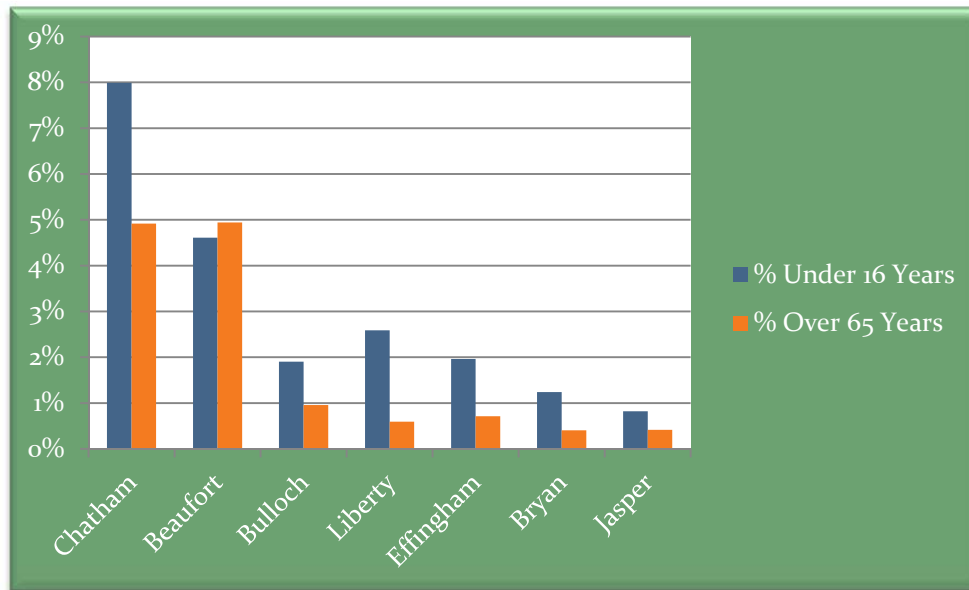


Table 2-7 and Figure 2-8 shows percentages of populations under 16 and over 65 by county and as a total of regional population. Populations under 18 (and particularly those under 16) and over 65 often depend upon public transit as a sole means for meeting transportation needs. Over age 65 populations are concentrated in a number of areas throughout the study region, but are greatest in terms of percentage in the areas with the greatest overall populations, Chatham and Beaufort Counties.

The greatest numbers of these populations reside in Beaufort County, where over 20 percent of the population in the county is age 65 or older. As shown in **Figure 2-9**, concentrations of populations over 65 are found east of I-95 along the coast in both Chatham and Beaufort Counties.

Total populations under 18 years of age, shown on **Figure 2-10**, are heaviest in Bryan, Liberty, and Effingham Counties. More than one quarter of the overall population in these counties is under the age of 16. Populations in Chatham and Jasper Counties are also notable, with over 20 percent of the population in each county constituting these younger age groups. In addition, areas just northwest and southwest of Savannah, west of US 17 contain a concentration of persons under 18 in Chatham County.

Low income populations represent a particularly vulnerable portion of the population in meeting transportation needs. While the cost of transportation and transit options are equal across the population income groups, the percentage of income being spent on transportation is often much higher for these citizens. Five-year ACS estimates for 2010 were available and utilized to identify populations below the poverty level over a twelve month period of time. Given recent economic downturns, these overall number estimates may be higher than what could be expected through the planning horizon; however, concentrations and comparative percentages of the population provide insight into areas where transit services are most needed to serve populations that are particularly vulnerable to fluctuations in transportation costs and overall economic factors.

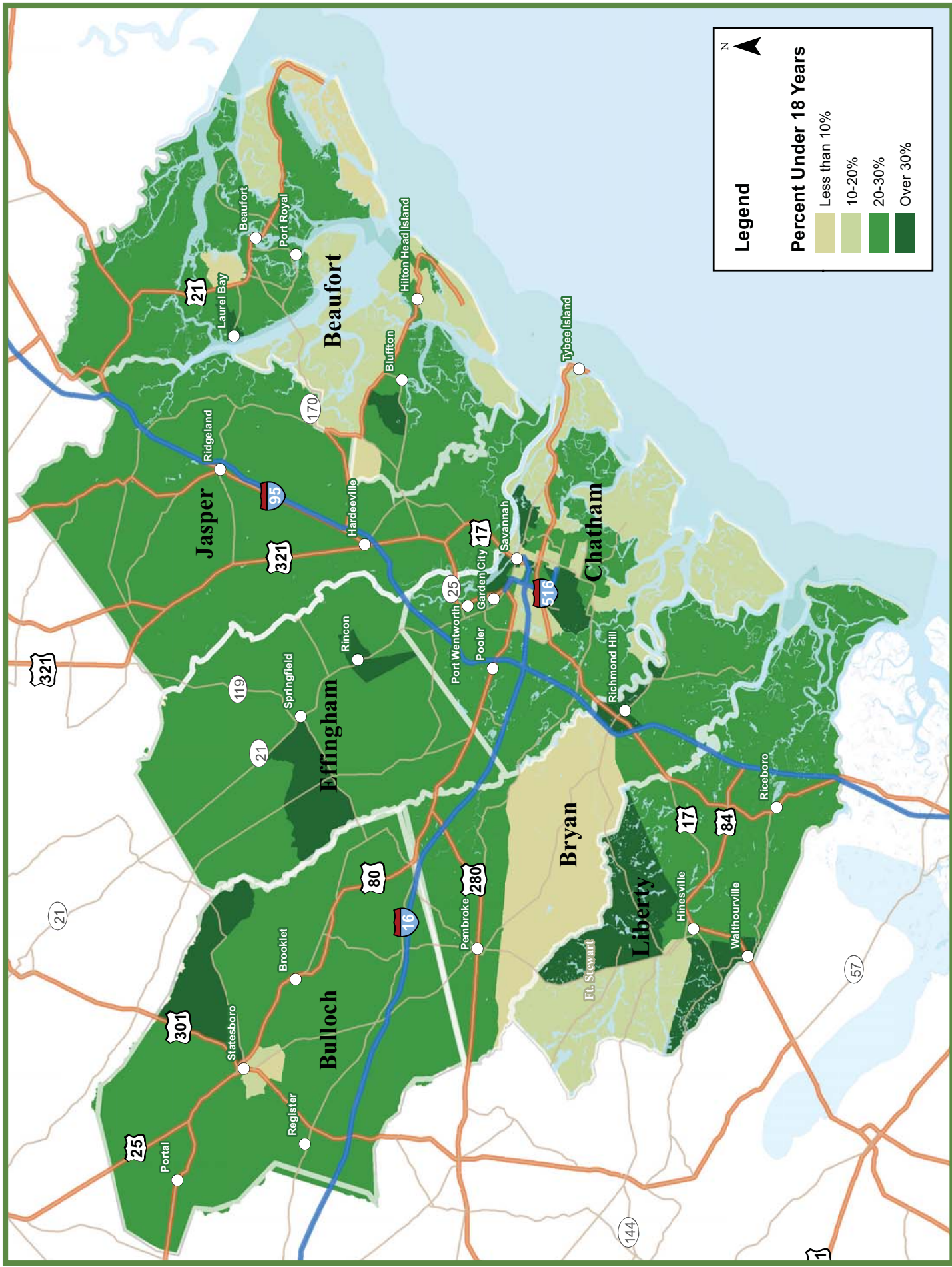
Table 2-8: Population Below Poverty Level in Last 12 Months by County

| | Chatham | Beaufort | Bulloch | Liberty | Effingham | Bryan | Jasper |
|--|---------|----------|---------|---------|-----------|--------|--------|
| Pop for Whom Poverty Status is Determined | 248,189 | 147,975 | 62,578 | 62,527 | 50,147 | 28,911 | 22,078 |
| Below Poverty | 41,102 | 15,564 | 17,795 | 11,113 | 5,189 | 3,176 | 4,750 |
| % Below Poverty | 16.6% | 10.5% | 28.4% | 17.8% | 10.3% | 11.0% | 21.5% |

Source: U.S. Census Bureau, S1701. ACS Five-Years Estimates. Poverty Status in the Past 12 Months.

As shown in **Table 2-8**, greatest overall low income populations within the region are located in Chatham, Bulloch and Beaufort Counties. Low income populations in these counties make up over 74,000 people, or roughly twelve percent of the region’s population for whom poverty status has been determined. In terms of percentage of populations in each county, the greatest concentrations of poverty are located in Bulloch, Jasper and Liberty Counties. As shown in **Figure 2-11**, concentrations of low income populations are found in the northern portion of Bulloch County both east and west of US 301, covering the entire eastern portion of Jasper County, near Riceboro and Ft. Stewart in Liberty County, and in the more urbanized areas of Savannah in Chatham County.

Figure 2-10: Percent Population Under 18 Years



Despite the number of low-income populations that are dispersed throughout the region, most households have access to at least one vehicle. As shown in **Table 2-9** and **Figure 2-12**, the greatest numbers of households without access to a vehicle in their home are found in the more urbanized areas surrounding Savannah in Chatham County. Other concentrations of zero car households can be found in Gum Branch in Liberty County, near Statesboro in Bulloch County, and Daufuskie Landing, Laurel Bay, and Frogmore in Beaufort County.

Table 2-9: Households with No Vehicles Available by County

| | Chatham | Beaufort | Bulloch | Liberty | Effingham | Bryan | Jasper |
|--------------------------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
| Households Estimated | 100,450 | 63,459 | 24,245 | 22,626 | 17,480 | 10,466 | 7,695 |
| No Vehicles Available | 8,626 | 3,246 | 1,478 | 1,342 | 473 | 405 | 490 |
| % No Vehicles Available | 8.6% | 5.1% | 6.1% | 5.9% | 2.7% | 3.9% | 6.4% |

Source: U.S. Census Bureau, B0820. ACS Five Year Estimates. Household Size by Vehicles Available.

Given the number of military bases and training centers within the regional study area, an analysis of veteran populations was also conducted as part of this demographic analysis. Veterans, particularly those aging in place, have unique transportation needs for both medical and Veteran’s Affairs appointments, among other types of destinations. Over the 2035 planning horizon, these populations may present unique challenges in developing transit systems to serve the community.

As shown in **Table 2-10**, the heaviest percentages of veteran populations overall are located in Liberty, Chatham and Beaufort Counties. In accounting for aging populations over age 65, the heaviest concentrations of these veteran populations reside in Beaufort, Chatham, Bulloch, and Jasper Counties. **Figure 2-13** shows concentrations of veteran populations throughout the study region.

Table 2-10: County Veteran Populations by Age Group

| County | Category | Population 18 years and over | Veterans | Age | | | |
|------------------|----------|------------------------------|----------|----------|----------|----------|--------|
| | | Estimated Population | Percent | 18 to 34 | 35 to 54 | 55 to 64 | Over65 |
| Bryan County | Total | 19,827 | 17.8% | 7.0% | 52.4% | 23.5% | 17.1% |
| | Veterans | 3,535 | | | | | |
| Bulloch County | Total | 53,340 | 8.4% | 12.1% | 34.0% | 22.7% | 31.2% |
| | Veterans | 4,484 | | | | | |
| Chatham County | Total | 194,281 | 12.7% | 14.5% | 31.2% | 22.8% | 31.5% |
| | Veterans | 24,577 | | | | | |
| Effingham County | Total | 35,653 | 13.0% | 8.7% | 40.4% | 23.9% | 27.0% |
| | Veterans | 4,629 | | | | | |
| Liberty County | Total | 38,320 | 26.5% | 23.8% | 48.1% | 16.9% | 11.2% |
| | Veterans | 10,139 | | | | | |
| Beaufort County | Total | 113,786 | 16.4% | 10.4% | 19.8% | 20.6% | 49.2% |
| | Veterans | 18,654 | | | | | |
| Jasper County | Total | 17,662 | 8.7% | 6.9% | 38.0% | 26.0% | 29.1% |
| | Veterans | 1,532 | | | | | |

Source: U.S. Census Bureau, S2101. ACS Five Year Estimates. Veteran Status.

Existing Transit Services

Before looking forward and developing the transit vision, one must understand existing services, how they operate, are funded, and organized. The regional study area is comprised of multiple transportation services and providers. A combination of fixed-route and demand response services exists, with the fixed-routes serving the more dense areas. The Chatham Area Transit (CAT) service radiates from downtown Savannah, the Palmetto Breeze services feed into Hilton Head for the Low Country area, the Liberty Transit System serves the Hinesville area, and developing services from the Coastal Regional Commission are providing service to the rural areas, west and north of Chatham County. This section provides the baseline data for current transportation providers in the region. The existing network and ridership patterns create the basis for analyzing potential opportunities for change.

Chatham Area Transit Authority (CAT)

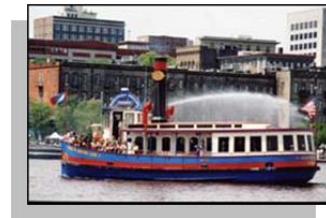


CAT is the Chatham County-owned fixed route and paratransit service within the Savannah metropolitan area. Fixed route service is provided within the City of Savannah, Garden City, Whitemarsh Island, Thunderbolt, Skidaway Island, Wilmington Island, and parts of unincorporated Chatham County. Seven municipalities do not currently participate in the Transit District (CAT's service area) - Bloomingdale, a portion of Garden City, Pooler, Port Wentworth, Thunderbolt, Tybee Island, and Vernonburg. Americans with Disabilities Act (ADA) paratransit service is provided through a CAT service called Teleride, which offers door-to-door service throughout all of Chatham County.

Fare-Free Downtown Services

In partnership with the Dot, Savannah's Fare Free Transportation System, a number of free transit services are available to residents and visitors to the Savannah downtown areas. These include the Savannah Belles Ferry, Dot Express Shuttle, CAT Express Shuttle, Liberty Street Parking Shuttle, and the River Street Streetcar.

The **Savannah Belles Ferry** connects across the Savannah River, from downtown Savannah to Hutchinson Island, which is home to the Westin Savannah, Savannah International Trade and Convention Center, and other planned community development. Service operates seven days a week, from 7 a.m. to midnight.



CAT is also the operator for the **Dot Express Shuttle** and the **CAT Express Shuttle**. The Dot Shuttle serves east-west destinations in and around the Savannah Historic District and operates every 20 minutes seven days per week, from 11:00 a.m. to 9:00 p.m. The CAT Shuttle serves north-south destinations in and around the historic district and operates every 20 minutes from approximately 7 a.m. to 7:30 p.m. Monday through Saturday, and from 9 a.m. to 5 p.m. on Sundays.

The **River Street Streetcar** is also operated by CAT and funded through the Savannah Mobility Management System. The Streetcar service operates Thursday through Sunday, from 12:00 p.m. to 9:00 p.m. with six stops along River Street between Montgomery Street and the Waving Girl Landing. The streetcar service began operation in February 2009 and operates with biodiesel engine technology.



In partnership with the City of Savannah, the **Liberty Street Parking Shuttle** provides a downtown circulator for commuters. The service stops at several key parking garages in the downtown area, including the Liberty, Robinson,

Ellis Square, and Bryan Street parking garages. Parking garage shuttles operate Monday through Friday from approximately 6 a.m. to 9 a.m. and 3:30 to 6:30 p.m.

Fixed Route Bus Service

In addition to the downtown fare-free services, CAT provides 19 fixed route bus service for residents and visitors in the county. A map of these services is shown in **Figure 2-14**. In addition to these fixed route bus services, four shuttles connecting Savannah State University and surrounding areas are provided. The SS Blue and Orange Shuttles operate every 15 to 20 minutes from 7:30 a.m. to 4:00 p.m. A Twilight Shuttle is available on Mondays, Wednesdays, and Fridays every 80 minutes from 4 p.m. to 9 p.m. The Prowler service offers late night connectivity into and out of the historic downtown area, and operated every 30 minutes from 8 p.m. to 2 a.m.

Paratransit Service

CAT also offers service required by the Americans with Disabilities Act (ADA) to eligible people throughout Chatham County, including persons who live beyond the ADA-required 3/4-mile distance from a CAT fixed-route bus route. The door-to-door paratransit service is called Teleride. Service is provided using 10-passenger cutaway vans, and is available to disabled patrons who have registered with CAT for ADA service and who are unable to use the regular fixed-route system due to a disability. Service is operated with a 16-vehicle fleet by Veolia Transport, the current contracted provider for both the fixed-route and paratransit service.

Service operates on Monday through Saturday between 6:00 a.m. and 12:00 a.m., and on Sunday from 7:00 a.m. until 7:00 p.m., which is the same as the fixed-route service. The fare charged to ADA-eligible riders is \$1.80. Cash advance tickets are available in booklets of ten tickets for \$18.00.

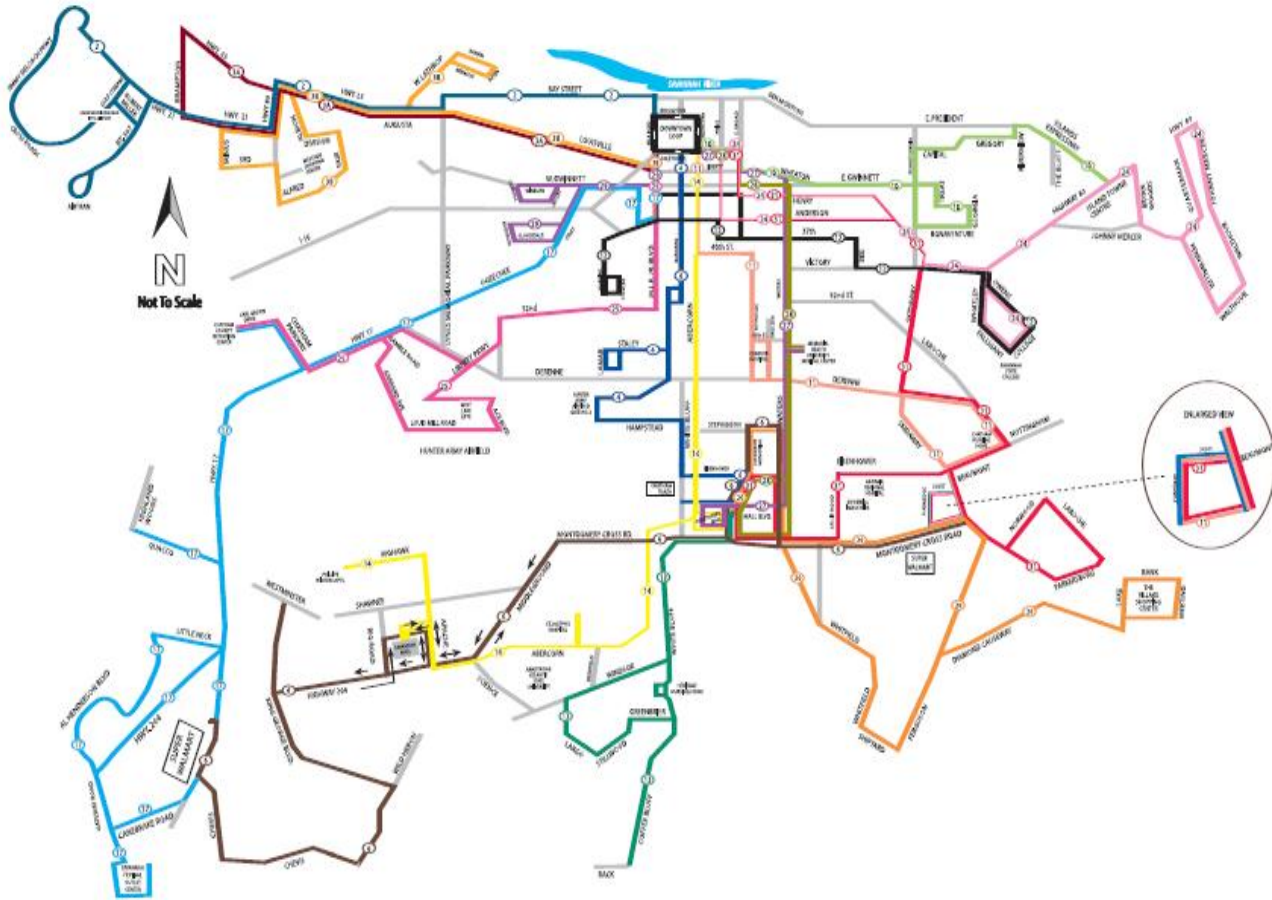
Passengers must make reservations no later than the day prior to their trip, and reservations can be taken up to seven days in advance through a call center.

Coastal Regional Commission (CRC)

The CRC serves 10 counties and 35 cities. The region encompasses six coastal counties and four inland counties and has a total land area of over 5,110 square miles, as shown on **Figure 2-15**. The CRC provides local and regional comprehensive planning services as well as specialized planning services in transportation, water resources, and historic preservation. The CRC manages transportation services such as Coastal Regional Coaches and the Regional Vanpool Program. Some CRC transportation services are provided outside the study area for this plan; however, many services are within the region and have frequent requests for service to Savannah. The agency also serves as the Economic Development District for Coastal Georgia and the Area Agency on Aging.



Figure 2-14: Chatham Area Transit System Map



LEGEND

For Information:
912-233-5767 • catchacat.org

| | | | |
|----------------|------------------|---|-----------------------------------|
| 2 West Chatham | 10 East Savannah | 17 Silk Hope/ Savannah Festival Outlet | 25 MLK, Jr. Blvd/West Lake Apts. |
| 3A Augusta Ave | 11 Candler | 20 Montgomery | 27 Waters Road |
| 3B Augusta Ave | 12 Henry | 24 Savannah State/ Wilmington Island | 28 Waters Road |
| 4 Barnard | 13 Coffee Bluff | | 29 West Gwinnett/Cloverdale |
| 6 Cross-town | 14 Abercorn | | 31 Skidaway/Sandy/Oglethorpe Mall |

The CRC does not provide direct services, but instead contracts with various providers across the coastal region for service delivery, including:

- Bryan County Transit – Bryan County
- Long County Transit – Long County
- TF & S Transport – Liberty, Chatham, Bulloch, and Effingham counties
- MIDS, Inc. – Camden, Glynn, and McIntosh counties
- Pinelands Community Service Board – Bulloch County (Pinelands consumers only)
- Chatham Area Transit – Savannah –Chatham County
- Jerry Counts Transportation – Screven County

Programs currently in operation in the coastal region that are relevant to the study area include:

- **DHS Coordinated Transportation** - The CRC contracts with the Georgia Department of Human Services (DHS) to provide administrative oversight to the DHS Coordinated Transportation program. This service is restricted due to funding limitations and is based on eligibility criteria. “Eligible” DHS consumers include aging consumers as identified through an assessment by the Area Agency on Aging (AAA); recipients of the Georgia Department of Family & Children Services (DFCS) Temporary Assistance to Needy Families (TANF) program.

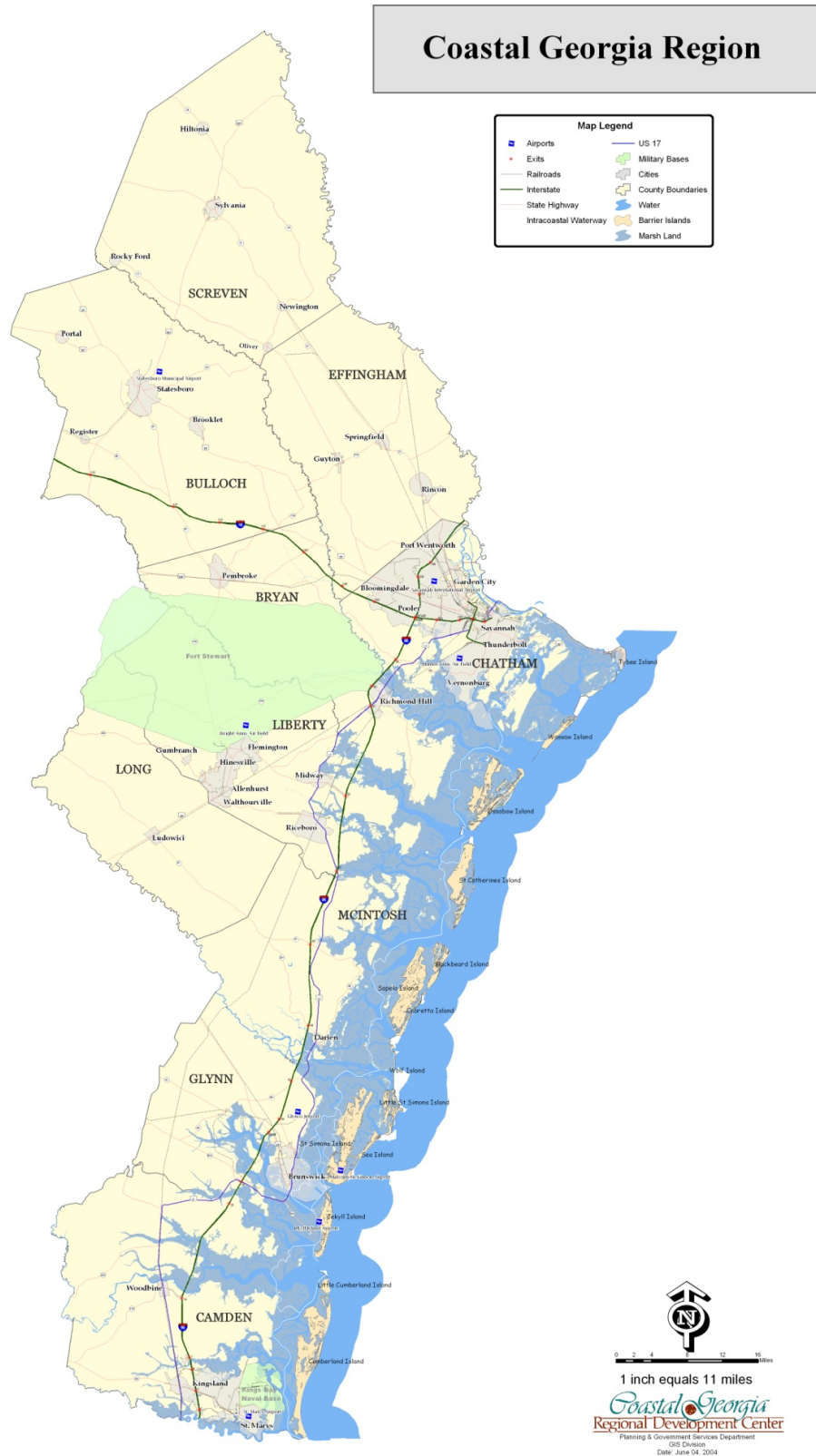
Expenses for FY 2009 were approximately \$2,028,120 for provision of DHS Coordinated Transportation. There were 94,618 aging trips provided; 113,060 DFCS/TANF trips (including swipe cards) provided; and 8,637 trips provided for Division of Behavioral Health, Developmental Disabilities, and Addictive Diseases (BHDDAD). Projections for FY 2010 indicate that approximately 85,545 aging trips, 7,378 BHDDAD trips, and 113,831 DFCS TANF trips can be provided under contract with DHS at a cost of \$1,826,506 (with match included).

- **Regional Rural Public Transportation** - Coastal Regional Coaches is the regional rural public transit program that provides general public transit service in the counties of Bryan, Camden, Chatham, Effingham, Glynn, Liberty, Long, McIntosh, and Screven. The regionally coordinated services began in August 2009. This service is available to anyone, for any purpose, and to any destination in the coastal region. Coastal Regional Coaches coordinates public transit service with a variety of other transportation services simultaneously in order to make the program more cost-effective and efficient. CRC is a demand-response, advance reservation service that operates Monday through Friday from 6:00 a.m. until 6:00 p.m. The CRC fare is \$3 per boarding (one-way trip) within your county of residence. If a trip is booked outside the county of residence, the fare is \$3 within the county of residence, plus an additional \$3 per county boundary crossed (for a one-way trip).



- **Regional Vanpool Program** - The Regional Vanpool Program is specifically designed for the labor force for work-related commutes. It is supported by state and federal funding, employee ridership shares, and program income from business and industry to offset the match costs. The program provides a convenient, reliable, and low-cost means of transportation for employees traveling to and from work. This service is available to “employees” that live or work in the ten counties of the coastal region. CRC contracts with VPSI, Inc. to manage all aspects of the vanpool program. A vanpool may consist of as few as five or up to 15 employees traveling to the same (or nearby) location at the same time. A vehicle is provided (by VPSI) and the drivers are the designated employees participating in the vanpool. The cost for participation is calculated according to the number of employees participating in the vanpool and the number of miles traveled.

Figure 2-15: Coastal Regional Commission Service Area



Palmetto Breeze

Lowcountry Regional Transportation Authority (LRTA) Palmetto Breeze, is the only public transit provider in South Carolina portion of the region. Services for the agency operate from 4:30 a.m. to 8:00 p.m., seven days per week. Palmetto Breeze was preceded by the Beaufort-Jasper Regional Transportation Authority, which was formed in 1978 to provide transit service in Beaufort and Jasper Counties. The transit program focused on transporting passengers to jobs on Hilton Head Island and points in between. In 1984, the Authority was expanded to include Allendale, Colleton, and Hampton Counties, with service continuing to focus on transporting residents of more rural areas to jobs in Beaufort County. To reflect the addition of these counties, the Authority's name was changed to Lowcountry Regional Transportation Authority, Palmetto Breeze.

Demand response service was initiated by Palmetto Breeze in 1997 to serve some Beaufort County destinations. Additional service focused on transporting employees to work was initiated under the Federal JARC Program in 2001. The agency provides a variety of fixed-route, demand response, and contracted trips throughout the region, as well as in Allendale and Bamberg Counties in the Lower Savannah region. **Figure 2-16**, shown on the following page, presents the Palmetto Breeze service. The agency also holds transportation contracts with several human service agencies in the region.

Liberty County

The Liberty Consolidated Planning Commission and the City of Hinesville inaugurated fixed-route transit service within Liberty County on July 1, 2010. Veolia Transport is the selected contractor for these new services. Three routes operate with a fleet of nine vehicles. The service was funded using funds garnered through the ARRA program of the USDOT. One of the primary generators which will benefit from this service will be Fort Stewart, which has 20,000 troops in residence.

Savannah College of Art and Design (SCAD)

SCAD operates fixed-route transit for its campus, which is located throughout Savannah and Chatham County. These services are exclusive to registered students and provide connectivity between university buildings and residence halls during each academic quarter.

Senior Citizens, Incorporated

Senior Citizens, Inc. provides multiple services to senior citizens throughout Chatham County. Transportation services are operated on a demand-response basis, consisting of assistance with trips such as medical appointments and grocery store shopping. The Sterling Rides Service, also operated by Senior Citizens, Inc., is similar to its traditional transportation service, but it is a volunteer-based transportation program that also assists riders at appointments or with shopping, if requested.

Greyhound

The Greyhound Terminal is located in downtown Savannah along West Oglethorpe Avenue. Greyhound employs a mixture of 22 full- and part-time employees. The existing facility has seven bus bays. Approximately 32 buses use this facility over a 24-hour period, seven days a week, for a total of 224 buses passing through Savannah weekly. Savannah is the origination or destination for between 60 to 300 passengers daily, and 300 to 700 passengers travel Savannah on their way to or from other destinations. The Greyhound Bus Line provides intercity bus transportation, linking Savannah to other cities throughout the Southeast.

Figure 2-16: Palmetto Breeze System Map



Existing Conditions Summary

Reviewing the regional travel patterns in the study area reveals a number of key factors for determining transit mobility needs. The study area is home to over 668,000 residents, 309,000 households, and 219,000 employees. By 2035, resident populations in the study area are expected to reach over one million. Higher population densities, however, are concentrated in only a few urbanized areas in the study region, namely Savannah in Chatham County, Statesboro in Bulloch County, and Hinesville in Liberty County. Additional emerging transit supportive areas are located in Beaufort County. Developing greater connectivity between these locations of higher population density will be needed to support job and population growth over the planning horizon.

Over 82 percent of commuters in the region drive alone to work, and the Savannah metropolitan region acts as the hub of these commutes. Travel times are longest in Bulloch, Effingham, and Jasper Counties, with a commute time of over 60 minutes in these areas. This situation creates heavy congestion and transit options offer efficiencies in meeting transportation demands now and into the future. Congested commuter corridors identified include I-95, I-16, US 17, SR 21, SR 204, US 80, Truman Parkway, and I-516/DeRenne Avenue.

Populations age 65 and older are prominent throughout the region, with particular concentrations along the coast in Chatham and Beaufort County. Notably, over 20 percent of Beaufort's population is comprised of aging populations. Bedroom communities in Bryan, Liberty and Effingham Counties show the highest under 18 populations.

The greatest numbers of low income populations are located in Chatham, Bulloch and Beaufort Counties. Low income populations in these counties make up over 74,000 people, or roughly twelve percent of the region's population for whom poverty status has been determined. In terms of percentage of populations in each county, the greatest concentrations of poverty are located in Bulloch, Jasper and Liberty Counties. Concentrations of low income populations are found in the northern portion of Bulloch County both east and west of US 301, covering the entire eastern portion of Jasper County, near Riceboro and Ft. Stewart in Liberty County, and in the more urbanized areas of Savannah in Chatham County.

Despite the number of low-income populations that are dispersed throughout the region, most households have access to at least one vehicle. The greatest numbers of households without access to a vehicle in their home are found in the more urbanized areas surrounding Savannah in Chatham County. Other concentrations of zero car households can be found in Gum Branch in Liberty County, near Statesboro in Bulloch County, and Daufuskie Landing, Laurel Bay, and Frogmore in Beaufort County.

Given the number of military bases and training centers within the regional study area, the study area is also home to a large contingency of military veterans. The heaviest concentrations of veteran populations overall are located in Liberty, Chatham and Beaufort Counties. For aging populations over age 65, the heaviest concentrations of these veteran populations reside in Beaufort, Chatham, Bulloch, and Jasper Counties. Over the 2035 planning horizon these populations may present unique challenges in developing transit systems to serve the community.

Public transit is dispersed throughout the study region, with the Coastal Regional Commission providing the only region-wide view of transit services; however, CRC does not directly provide these services and relies upon contracts with communities for these services. Chatham Area Transit is the major fixed-route operator in the study area, and serves the Savannah Metropolitan Region. CAT currently provides the only fixed-route public transit service offered to the over 78,000 commuters living within Chatham

County and the over 44,000 commuters employed in Chatham County but living in the surrounding counties.

CHAPTER 3 – NEEDS ANALYSIS

Determining the needs for transit services in a community is an iterative process, requiring the integration of a full set of quantitative and qualitative data for the region. Reviewing the existing characteristics of the study area such as socio-economic factors and travel markets, discussed in the previous chapter of this report, is a key first step in objectively identifying needs. This chapter builds upon the analysis of existing conditions in the previous chapter and describes feedback from key stakeholders and local staff for developing the needs for the regional strategic transit vision. In addition to stakeholder input, an analysis of relevant peer transit agencies and other best practices was conducted to provide greater information on the base needs of the organization and how other organizations address the challenges of providing regional public transportation. Combined, the existing conditions analysis, stakeholder input, peer analysis, and best practices data provide the basis for developing goals. These goals were then used to guide the range of potential alternatives and strategies discussed in subsequent chapters of this report.

Stakeholder Input

Residents and leaders throughout the region have been actively involved in the development of the regional transit vision, contributing a wide range of insights and ideas to be incorporated into the overall vision process. A series of meetings and interviews were undertaken with stakeholders and key members of the community beginning in December 2009. The information received during these meetings has been used to shape the overall direction of the Transit Mobility Vision Plan and identify the opportunities and challenges of creating a regional public transportation plan.

What is our vision for public transportation in our region?

How can we reach that vision?

The stakeholder outreach process involved a number of steps that together worked to define final mobility goals to be pursued in the regional vision and potential short-term, mid-term, and long-term needs. Initial discussions with key staff and stakeholders and a review of the adopted 2035 LRTP helped to identify regional themes and a list of key issues facing the region. The issues and opportunities resulting from these steps were then further delineated as part of the stakeholder outreach process into a Strengths, Weaknesses, Opportunities and Threats (SWOT) analysis.

Regional Themes

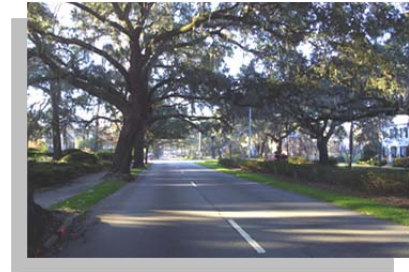
As a starting point to the development of the transit vision, the project team reviewed existing local and regional transportation and transit plans, which identified a number of regional themes in terms of strengths, needs and opportunities for Savannah and surrounding communities. The region has several strengths and opportunities that were identified as necessary to incorporate within this vision plan, such as:

- The region draws millions of tourists each year and wants to ensure the local economy is positioned for growth; in fact, approximately 30 percent of the region's economy is dependent upon its strong tourism market.
- The potential to retain the unique qualities of each community, while at the same time recognizing that trip patterns extend beyond county and state lines. Public transportation

provides an opportunity to increase regional connectivity by improving access to neighborhoods, jobs, recreational facilities, medical and other services, and cultural/ leisure activities.

Public transportation options provide an opportunity to enhance quality of life in the region in a variety of ways:

- Supports the health of our natural environment by consolidating travelers from single-occupant vehicles to public transit modes.
- Provides access to educational institutions in the Chatham County region, ensuring connections to urban centers, research facilities, employers, and government centers.
- Connects downtown Savannah with other regional activity centers.
- Supports development and revitalization sites by ensuring access to the entire region.
- Enhances economic development by providing access to employment and other business opportunities.



There is a need for the Transit Mobility Vision Plan to complement other local and regional ongoing projects that are focused on addressing overall quality of life issues for the Chatham County area. Given the number of agencies at work, the success of implementing any regional transit vision will require strong coordination among a variety of agency partners. Expanding the regional transit network will be the ultimate goal; however, that network must start by maintaining and sustaining existing public transportation services and by reconsidering policy, planning and financing decisions with respect to unserved communities and service areas to provide connectivity, access, and opportunity for area residents, visitors and businesses. Without continued support for the existing services through land use and transportation planning, future visions for regional transit service will be threatened.

Key Stakeholder Issues

To augment the insights on regional issues gained through existing plans, interviews were conducted with a number of diverse stakeholders throughout the region, and then further refined through discussions with the Stakeholder Advisory Committee. In general, initial conversations for a regional transit vision revealed that very few people or agencies identified a regionally coordinated transit system as a high priority, especially as a short-term priority. Participants recognized the potential need for expanded public transportation services in the future, based on continued regional growth, experiences from other regions, and expanded demand to serve the aging population. However, based on the current economic downturn and other competing demands for funding, there was some doubt regarding viability.

Some stakeholders were aware of some of the transit services offered in the region, but most were not familiar with all services. Given the number of agencies involved and the array of existing services provided, improved communication was determined to be a key first step in developing a regional approach. Understanding how the different services work collectively will allow for a more comprehensive view of regional transit, one that can effectively consider enhancing connectivity to other transit systems and coordinating services.

Stakeholders noted a number of strengths that are supportive of developing the Regional Transit Mobility Vision. The area itself, with its natural features and favorable climate, is an attractive place to live and work for residents. The existing CAT transit system serves the City of Savannah, with core routes that provide a good framework for expansion. CAT’s recent addition of hybrid buses provides a good model of sustainable transit growth focused on enhancing quality of life in the region.



Although these strengths help to support the development of a regional Transit Mobility Vision, there are also a number of challenges noted by stakeholders. Stakeholders noted that the large rural areas within the study area make providing regional service difficult. Secondly, a large number of commuters in the region are working in Chatham County. Projected population increases are expected to be accompanied by growing pains of longer commute distances and increasing traffic congestion. In addition, there is a high automobile dependency in the study region, which contributes to this congestion. A third challenge is in the perception of bus services. Many view bus service for transit dependent populations only and consider public transit options too slow to present a viable option. Overcoming this challenge will require an improved and ongoing marketing plan that can help to bring choice riders into the system and show that service is comparable with other modes. Finally, funding for transit continues to be a challenge. There is a need to obtain and maintain government and public support for transit improvements for this mobility vision to be successfully implemented.

Stakeholders also identified a number of specific perceptions and issues through the public outreach process:

- Most existing transit service is for ‘transit-dependent’ riders who use the service as a lifeline. To be successful in the future, transit must grow market share and attract new riders, specifically choice riders.
- Transit must be planned and scheduled as a real transportation choice to attract new riders. There is a need for direct routes and real “rapid” transit that can be competitive with the automobile.
- The image of transit must be safe, attractive, seamless, and easy to use and transfer to other systems. Customer-based strategies and increasing technology to provide these services are essential.
- Land use planning decisions have a direct effect on the provision of transit services. There is a need to incentivize new employers to locate along transit lines, not in suburbs.
- Land use patterns and development must change to have higher densities to support future transit.
- A major challenge for existing services and which is expected to continue is stable transit funding for capital and operations.
- There is a need to provide a transit network that supports regional mobility and accessibility, regardless of county and municipal boundaries.
- Transit service in downtown Savannah has wide support and should be maintained and enhanced into the future.

- Currently, CAT services only provide public transportation within its transit district boundaries. Service is needed throughout the region and should extend beyond these limits.
- There is a need to provide regional medical trips from counties outside Chatham and into Savannah, where a number of medical destinations are located.
- Aging populations are increasing, throughout the region. Future transit should be planned with this senior population and retirees in mind.

Best Practices/Livability Principle Guidance

In addition to stakeholder input on key issues and challenges in the region, the project team also identified the benefit of considering the applicability of new federal principles regarding livability and sustainability. These principles would appear to be the basis for the development of new federal policy and planning programs as well as influencing federal funding decisions in the long term. Considering these principles was determined to provide a goal framework that would contain the best practice principles and performance measures to promote sustainable community development in the region. In addition, considering these principles in the development of the regional goal framework was determined to provide an opportunity for public transportation to become a key component for communities in the region, and in providing a viable path to incorporate additional partners and complementary services into the total public transportation network.

The following describes the six “Livability Principles” and examples of how their effect could be measured within the community. Recognizing that there are always concerns regarding measuring performance, there is a need to communicate the value added to communities when projects, development and investments are considered. The broader concepts offered from the principles and possible list of performance measures provided herein is to encourage the region’s communities to think of an entire mobility system, rather than each mode on its own, and include land use and other decisions to develop their communities as part of the regional vision.

1. **Provide more transportation choices:** Develop safe, reliable, and economical transportation choices to decrease household transportation costs, reduce our nation’s dependence on foreign oil, improve air quality, reduce greenhouse gas emissions, and promote public health.

Potential Performance Measures:

- Increase in transit, walk, bike share of trips
- Change in vehicle miles traveled per capita
- Percent of new homes built within a ½-mile of transit service

2. **Promote equitable, affordable housing:** Expand location- and energy-efficient housing choices for people of all ages, incomes, races, and ethnicities to increase mobility and lower the combined cost of housing and transportation.

Potential Performance Measures:

- Increased supply of affordable homes and rental units within a ½-mile of transit service
- Decrease in household transportation costs
- Percent of low income households within a 30-minute transit commute of major employment centers

3. **Enhance economic competitiveness:** Improve economic competitiveness through reliable and timely access to employment centers, educational opportunities, services and other basic needs by workers, as well as expanded business access to markets.

Potential Performance Measures:

- Percent of employment within a ¼-mile of transit services
- Increase in residential units within or close to major employment centers

4. **Support existing communities:** Target federal funding toward existing communities—through strategies like transit oriented, mixed-use development, and land recycling—to increase community revitalization and the efficiency of public works investments and safeguard rural landscapes.



Potential Performance Measures:

- Share of new residential and commercial construction on previously developed parcels
- Decrease in impervious surface per capita

5. **Coordinate and leverage federal policies and investment:** Align federal policies and funding to remove barriers to collaboration, leverage funding, and increase the accountability and effectiveness of all levels of government to plan for future growth, including making smart energy choices such as locally generated renewable energy.

Potential Performance Measures:

- Shared elements in regional transportation, housing, water, and air quality plans tied to local comprehensive land use or capital improvement plans
- Dollars of private sector investment within ½-mile of transit service

6. **Value communities and neighborhoods:** Enhance the unique characteristics of all communities by investing in healthy, safe, and walkable neighborhoods—rural, urban, or suburban.

Potential Performance Measures:

- Decrease in transportation related CO₂, PM, NO_x and VOC emissions per capita
- Increase in acres of public recreation and park land per capita

Peer Review

A Peer Analysis of transit systems in cities of similar size was conducted early in the process of developing the TMVP. Six cities were reviewed in the Peer Analysis and were documented as Technical Memorandum #3. The following cities were selected in coordination with the CORE MPO staff because they are multi-jurisdictional, have geographic limitations such as a river, and are areas with high tourism:

- Charleston, SC
- Memphis, TN
- Monterey, CA
- New Orleans, LA
- Providence, RI
- San Antonio, TX

Based on the peer analysis the following summarizes the information that was used to guide the development of the TMVP for the coastal region:

- Peer agencies recognize the importance of long-range vision for their communities. Some agencies, such as New Orleans have a transit vision in place, while others are in the process of developing a vision to meet the needs of the community.
- Coordination among local, regional and state agencies is apparent in all peer agencies. The coordination efforts range from reciprocal transfers to membership on local advisory committees.
- The majority of peer communities recognize the importance of a Mobility Manager or a Mobility Management Plan as a critical step to implementing coordination activities. Formula funds such as FTA 5307 or 5311 may be appropriate for funding this position.
- The peer agencies have a variety of revenue sources, with most receiving a portion of sales, property or gas tax revenue. The exception is Memphis, TN using the City's general fund as their primary funding source.
- Tourism was a major contributor to all of the systems analyzed. Tourism generated an average of \$2 billion to the local economy with an average of 4.4 million visitors annually.
- Each of the peer agencies has a streetcar or trolley service serving tourist areas.

Regional coordination was identified by project stakeholders as a major area of concern when looking at the vision for transit in the coastal region. As such, the study team conducted a brief peer review of three metropolitan areas to focusing on different mechanisms of regional coordination in addition to the Peer Analysis documented in Technical Memorandum #3. The following peer communities were selected for specific strategies on regional coordination:

- Charlotte, NC (CATS)
- Memphis, TN (MATA)
- Albany, NY (CDTA)

While socioeconomic characteristics and congestion influence the success of transit in a region, forging regional cooperation, identifying consistent funding sources, and coordinating land use and transportation decisions are also very important. Regional cooperation can be challenging; however, Charlotte and Albany demonstrate regional cooperation in a variety of ways. Charlotte has achieved this end by creating a separate multi-jurisdictional policy board. A regionally represented MPO board exists in Albany for coordinating and developing a collaborative relationship between the transit agency and MPO.

Dedicated and stable transit funding in Charlotte has resulted in ambitious transit plans. Clearly identified transit funding was also critical for the implementation of trolley service in downtown Memphis and advancing Bus Rapid Transit (BRT) in Albany.

Rapid transit plans have a greater chance of success if the service is also coordinated with land use. Successful trolley service in Memphis was tied with downtown economic development. An integrated land use transportation plan in Charlotte identified both the growth centers and corridors for the region served by preferred rapid transit modes. The transit agency and MPO in Albany recognize that transit does not make sense economically if it chases emerging development. A coordinated development plan is more appropriate.

In Charlotte, transit decision-making is made by one body (the MTC) that collects and administers dedicated funding for transit. This MTC has multi-jurisdictional representation and voting members have strong influence in shaping land use. The half-cent sales tax in Charlotte has proven to be a stable

funding mechanism with which the region can plan and develop transit improvements for corridors based on projected revenue from this source. This tax is strongly supported by voters in the region. A referendum to repeal the half cent sales tax for transit was soundly defeated in November 2007 with 70 percent voting to retain the tax. In addition, the State of North Carolina is demonstrating a long-term commitment to transit. The North Carolina Department of Transportation is implementing a system of Full Funding Grant Agreements similar to the FTA approach that provides a commitment for one half of the non-federal share. This allows CATS to confidently plan on the availability of state funding in the future.

In Albany, BRT is being implemented along a multi-jurisdictional corridor. The success of the plan can be attributed to cooperation between the Capital District Transportation Authority (CDTA), the Capital District Transportation Committee (CDTC), and the local jurisdictions. CDTA is currently working on implementing the BRT elements while CDTC, has worked with the municipalities in developing master plans for station areas. CDTA noted that when the cities and towns along the BRT corridor successfully worked to coordinate traffic signals between their jurisdictions, they accepted the possibility of cooperating to bring BRT to the region. While the region has a dedicated revenue stream (1.25% of mortgage recording tax revenue), CDTA is concerned that is not a stable, predictable source.

Memphis has been able to successfully implement its downtown trolley service and use it as an engine for economic development. Critical to the success of that service was identifying funding and having strong local support. Regional rapid transit is farther from being realized in Memphis where transit policy and planning is shaped principally through MATA and its board, which does not have regional representation. Advanced planning for light rail has been limited to only the Memphis portion of the identified priority corridor for rapid transit.



The region can learn several lessons from these three peer review regions. The more regional cooperation, dedicated funding, and coordinated land use/transportation planning are realized, the more ambitious and far reaching the provision of transit service can become. The peer regions integrate these elements to various degrees. Charlotte is the farthest along in integrating regional cooperation, funding, and land use coordination and consequently, Charlotte has the most ambitious plans. Albany has some elements in place with a dedicated funding source, regional representation in the CDTA board, and a collaborative relationship with the MPO. As a result, Albany is close to implementing a modest BRT plan. In Memphis, there is no dedicated source for transit funding, and the major transit decision making body is appointed by the City of Memphis with no regional representation. Implementation of their rapid transit plans has seen the least progress among the peer regions and is currently limited to the portion inside the city limits.

In addition, a number of regions across the nation have recognized the importance of a Mobility Manager or a Mobility Management Plan as a critical step to implement coordination activities. Several of the communities used the FTA 5316 funding to support the position, and this may be worthy of further consideration as the Transit Mobility Vision moves forward. This funding was reclassified under the latest transportation legislation, Moving Ahead for Progress in the 21st Century (MAP-21) as FTA 5307 for urban areas and FTA 5311 for rural areas.

Needs Assessment Results

The review of existing conditions, combined with stakeholder input, best practices research, and a peer review of transit agencies provides the basis for the transit needs assessment conducted for this Transit Mobility Plan. These factors helped to (1) identify regional mobility goals to frame the identification and evaluation of alternatives, (2) provide a list of short, mid, and long-term priorities for implementing the transit mobility vision, and (3) identify potential planning activities that could be funded to meet the identified needs in this analysis. Needs assessment results were presented to stakeholders to obtain additional public input and ensure support as alternatives and recommendations were developed for the Transit Mobility Vision Plan.

Regional Mobility Goals

Considering the input received throughout the stakeholder involvement process, plus the evolving national discussion regarding mobility, and a review of peer agencies, the following are initial mobility goals for the region to frame and evaluate potential alternatives in the development of the Transit Mobility Vision Plan.

| Regional Mobility Goals | |
|-------------------------|---|
| Goal 1: | Provide information on the variety of modes of transportation available to the user and maximize awareness of transportation options. |
| Goal 2: | Develop services to meet the demand of specific target groups such as students, commuters, military personnel, etc. |
| Goal 3: | Integrate land use and transportation policies and programs to effectively meet the mobility needs of the region. |
| Goal 4: | Create and expand alliances and partnerships with other community groups and affected agencies, a vital factor for improving transit access and creating a sustainable transit environment. |
| Goal 5: | Develop a family of services which effectively meets diverse needs and increases the connections to a more customer focused service network that in turn changes the current perception regarding services and users. |
| Goal 6: | Develop a regional public transportation network that responds to changing demographics, economic trends and other livability features. |
| Goal 7: | Achieve long-term financial stability to provide the levels of investment that will be needed to meet the growing demand for mobility options. |
| Goal 8: | Develop the Transit Mobility Vision Plan in a manner that is consistent with the Total Mobility Plan for the region. |

Transit Priorities

Based upon the key issues identified through the stakeholder outreach process and the review and presentation of livability principles and peer analyses conducted, the following list of potential near-, mid-, and long-term priorities were developed and approved by stakeholders. These priorities serve to further guide the review of alternatives and strategies to be pursued and to determine potential planning activities to pursue in meeting these needs.

Near-term (2010-2015):

- Create a process to develop consistent lines of communication between interested parties, including service providers, affected jurisdictions, agencies and the business community
- Consider opportunities to co-venture on specific programs or a joint grant application. New FTA funding has recently become available for veteran's programs and may be pursued
- Share information regarding existing or proposed studies or new projects, e.g. route study in Lowcountry, CAT comprehensive operations analysis, new service in Liberty County, expansion of Coastal Regional Commission services
- Develop potential for demonstration services:
 - Connections to Savannah for cultural outings, entertainment, etc.
 - Focus on specific client groups, such as long distance commuters, military facilities access, etc.
- Inclusion of car and vanpool opportunities
- Establish data collection and need determination methodology by first building off existing data sources
- Consider potential for dedicated staff, such as a Mobility Manager, to develop an ongoing process and incorporate involvement from Housing and Urban Development and Environmental Protection Agency officials to sustain livability and sustainability goals
- Need to review existing fare structures and infrastructure for fare coordination opportunities such as smart cards
- Develop standards for development review guidelines for new and/or infill development
- Identify transfer locations for connecting services
- Continue researching funding resources to update fleet
- Develop a universal marketing plan for all services in region
- Incorporate transit network into regional travel model



- Coordinate transit planning with regional bicycle/pedestrian plan to ensure future connectivity
- Enhance passenger facilities including high-activity bus stops and transfer centers
- Obtain community and local officials support and understanding, particularly with regard to the following:
 - How improved transit services could impact regional carbon footprint and climate change
 - Land use impact on public transportation system and coordination among stakeholders to incorporate land use changes
 - Benefit of affordable housing near transit routes and facilities

Mid-term (2016-2025):

- Standardize regional input process regarding data collection, planning coordination, financial sustainability, consistent voice in regional planning discussions, etc.
- Expansion of services, e.g. express bus routes connecting activity centers and rural areas
- Implement rapid transit services along commuting corridors into downtown Savannah, and feeder services
- Implement coordinated regional actions, such as marketing and communications plan
- Develop park and ride facilities and other regional facilities
- Enhance passenger facilities including high-activity bus stops and transfer centers



Long-term (2026-2035):

- Consider regional governance potential
- Implement second phase of rapid transit corridors
- Enhance passenger facilities including high-activity bus stops and transfer centers

Needs Plan Assessment Results

The final step in the needs plan assessment was to identify next steps which may be eligible for Federal Transit Administration (FTA) planning funds from Section 5303 grant programs. The steps were identified, based on the list of priorities and ultimate goals for the mobility plan. This list was identified to generate additional stakeholder discussion and to determine viable alternatives and strategies that might be pursued as part of the regional mobility framework.

1. **Coordination with Total Mobility Plan** - The Transit Mobility Vision Plan is part of a larger Total Mobility Plan effort to view a range of alternative modes which will enhance mobility within the region. The results of the Transit Mobility Vision Plan will become part of this larger plan. Additional planning efforts will be necessary to coordinate Transit Mobility Vision Plan actions as a part of that broader planning effort.

2. **Incorporation of Livability and Sustainability Initiatives with Transit Mobility Vision Plan Recommendations** - Commenced at the federal level during summer 2009, livability and sustainability initiatives have been developed through the partnership with the Department of Transportation, Housing and Urban Development, and the Environmental Protection Agency. The agencies developed six principles for incorporation into future programs. To date, the DOT has incorporated the six principles adopted by the Departments into a variety of programs, and has indicated they will be continued as an emphasis area in future federal funding programs.

Similarly, HUD has issued its own Sustainable Communities Program, intended to further incorporate principles such as livable communities, affordable housing, transit oriented development, etc. More opportunities regarding coordinated and integrated planning efforts for comprehensive projects will be in the near future. Thus, incorporating the ideas from the Transit Mobility Vision Plan, plus the mobility plans referenced above should be considered with regard to potential funding, partnering, and community development processes.



3. **Prioritization of Short-term Needs** – The Transit Mobility Vision Plan needs will need to be phased over time. It is recognized that an important component of any long range strategic effort is to maintain momentum with the participants and affected agencies. The projects that are readily implementable can provide the basis for the regional plan to evolve. Therefore, it is important to identify and prioritize a family of projects and programs to be implemented during particular timeframes of the planning horizon.
4. **Development and Implementation of Demonstration Projects** - At the stakeholder advisory committee meeting there was considerable discussion regarding types of services, groups of potential riders, which could be candidates for demonstration projects. For example, in the area of Information Technology, many areas are using software packages such as Trapeze and Route Match that facilitate availability of data information relative to services, client bases, etc. In addition, the USDOT has been developing a pilot project for ‘one call centers,’ including one for the Lower Savannah Council of Governments which will accommodate multiple providers and partners. Within the transit industry there is a growing emphasis to incorporate social networking capabilities that provide real time information and offer a variety of mobility options. For example in San Francisco, residents are able to use their mobile devices to consider a number of factors for making mobility choices including bicycle, pedestrian, traffic, etc.

Another example project is to focus on target markets. For example, there are many long distance commute trips being taken in the region with more housing being developed in the periphery while many employment growth areas, and thus work trips are focused on downtown Savannah, the port area, military bases, and other destinations. Commuters are one potential market. College students are another target group to consider for coordinated services.



5. **Pursue and Regular Monitoring of Grant Opportunities-** The grant application process requires considerable planning and information gathering, as well as developing support from a diverse group of affected parties and partners. Developing a monitoring program for grant opportunities is an important step in identifying regional opportunities for transit investments.

Given the region’s demographics, opportunities to partner with local veteran’s organizations and elderly service providers will lay the groundwork and enhance opportunities for grant funding as new opportunities arise over the next couple of years.

6. **Regional Needs Assessment** – To effectively develop the foundation for a regional system, it is essential to establish consistent principles and processes to collect information and data, which then could be used to support investments in various modes. A consistent process would be especially beneficial due to the multiple jurisdictions, including two states located within the region. The stakeholders discussed at length the fact that the current data gathered to measure the demand of services were based primarily on a combination of logic and demographic trends, along with anecdotal perspectives. A formal measureable method should be established for the region.
7. **Interregional Integrated Transit Services Plan, Connecting CAT, Palmetto Breeze, CRC, Liberty County** – Currently, a number of public transportation services operate in the region, which include demand responsive operations in rural areas, fixed-route services within Savannah and Hinesville, carpool and vanpool applications to various destinations, a new service to be implemented in Liberty County, as well as interregional services such as Greyhound, Amtrak, and future high speed rail. The potential for an inter-regional integration should begin by sharing information on how and where each of these services is currently provided. Once the agencies fully understand all services and the lines of communication are established, there would be opportunities for program connections. For example, one option is rural general public services connecting with extended fixed-route services.
8. **Exploration of Regional Mobility Council and Associated Management Functions-** The concept of mobility management has been successfully implemented in a number of areas around the country. The concept of mobility management varies from a focus on coordinating human service transportation, to a broader perspective of considering framing services from the customer, not the operator, perspective. Developing a framework or structure for consistent communication, local and regional education, development of projects, and pursuing ideas such as dedicated and sustainable funding sources would be part of this exploration.

In addition to these regional next steps, there are a number of opportunities that may be undertaken by CAT in developing various system components, including policy, planning, IT, operations, and financing. These planning activities may help to support regional enhancements over time. Examples for CAT include:

- **Operations Planning-** CAT reported they will conduct a Comprehensive Operations Analysis which will focus on current use of the system, which also logically has potential opportunities for expansion. The detailed level of analysis of the current system will assist with route modifications and service expansion potential. Those recommendations, as well as those from the Transit Development Plan, are included in this Transit Mobility Vision Plan by reference.
- **Financing-** As indicated above, future federal programs will contain emphasis on livability and sustainability; thus, in order for CAT to effectively respond to these new policy directions, CAT needs to be a well-connected participant in the planning process. This participation would increase potential for future funding opportunities from a federal perspective, and also create more partnering potential through collaboration with the agencies in the region. There also has been considerable debate at the state level regarding state funding or flexibility to develop local funding options to support underfunded systems. Being part of a regional collaboration effort to make the case for more dedicated and sustainable funding would be a significant positive for CAT.

- **Regional Coordination-** Savannah is the hub of the region, and CAT is the primary operator of public transportation services in the City of Savannah and parts of Chatham County. As other alternatives for increased public transportation investment are developed, it is in CAT's best interest to participate as a leader in those planning activities. Other modes may be streetcar, bus rapid transit, transit centers or transit-oriented development.

CHAPTER 4 – CORRIDOR AND SERVICE OPPORTUNITIES



The Needs Analysis provided the framework for the evaluation of regional significant corridors and the potential service options within those corridors. The analysis of the existing conditions and the needs assessment were used to identify the corridors to be further evaluated. This analysis was augmented with input from the Stakeholder Advisory Committee and 13 corridors were identified. The corridors that carry the majority of trips and link major activity centers, and residential and commercial areas were reviewed from a public transportation perspective with regard to how they could be developed to expand mobility options. The technical analysis is documented in Technical Memorandum #4 – Corridor and Service Opportunities. The 13 identified corridors are listed in Table 4-1.

Table 4-1: Transit Investment Corridor Descriptions

| | Transit Investment Corridors | Description | |
|----------|---|-----------------------------------|---------------------------|
| | | From | To |
| A | I-95 | US 84 (GA) | US 17(SC) |
| B | I-16 | SR 67 | Savannah |
| C | Abercorn/SR 204 | DeRenne Avenue | I-95 |
| D | SR 21 | I-516 | Springfield |
| E | US 278 (SC) | I-95 | Hilton Head |
| F | US 80 | SR 30/US 280 | Savannah and Tybee Island |
| G | 204 Spur/Diamond Causeway/ Skidaway Island | Whitfield/Harry Truman Parkway | Ferguson Avenue |
| H | I-516 | DeRenne Avenue | I-16 |
| I | US 17(GA) Ogeechee Road | I-516 | US 84 and Hinesville |
| J | SR 46 | SR 170 | US 278 |
| K | Jimmy Deloach Parkway | US 21 | US 80 |
| L | US 17 (SC) | Savannah | I-95 |
| M | SR 170 | SR 46 | Beaufort |

Corridor Prioritization

The next step in the study process was to prioritize the corridors. The prioritization focused on where opportunities exist for strategically improving mobility, mode shift, improving quality of life and environment for the study area. The nine criteria used to analyze each corridor were:

- Future employment growth
- Future population growth
- Congestion
- Existing transit services
- High priority in other studies
- Access to activity centers
- Equitable housing opportunities
- Redevelopment potential

- Multimodal connections

The criteria were applied and given an assessment using a scale between 1 and 3; 1 indicating low significance and 3 indicating high significance.

- A score of 1 or 2 resulted in a rating shown with a ●, designating a medium priority.
- A score of 3 resulted in a rating shown with a +, denoting a high priority.

This evaluation was presented to the Stakeholder Advisory Committee and there was concurrence that the appropriate transit priority corridors had been identified. Table 4-2 provides the criteria scoring by corridor. The four highest priority corridors are summarized below and shown in Figure 4-1.

- Corridor A: I-95, from US 84 (GA) to US 17 (SC)
- Corridor D: SR 21, from I-516 to Springfield
- Corridor H: I-516, from DeRenne Avenue to I-16
- Corridor I: US 17 (GA) Ogeechee Road, from I-516 to US 84 to Hinesville

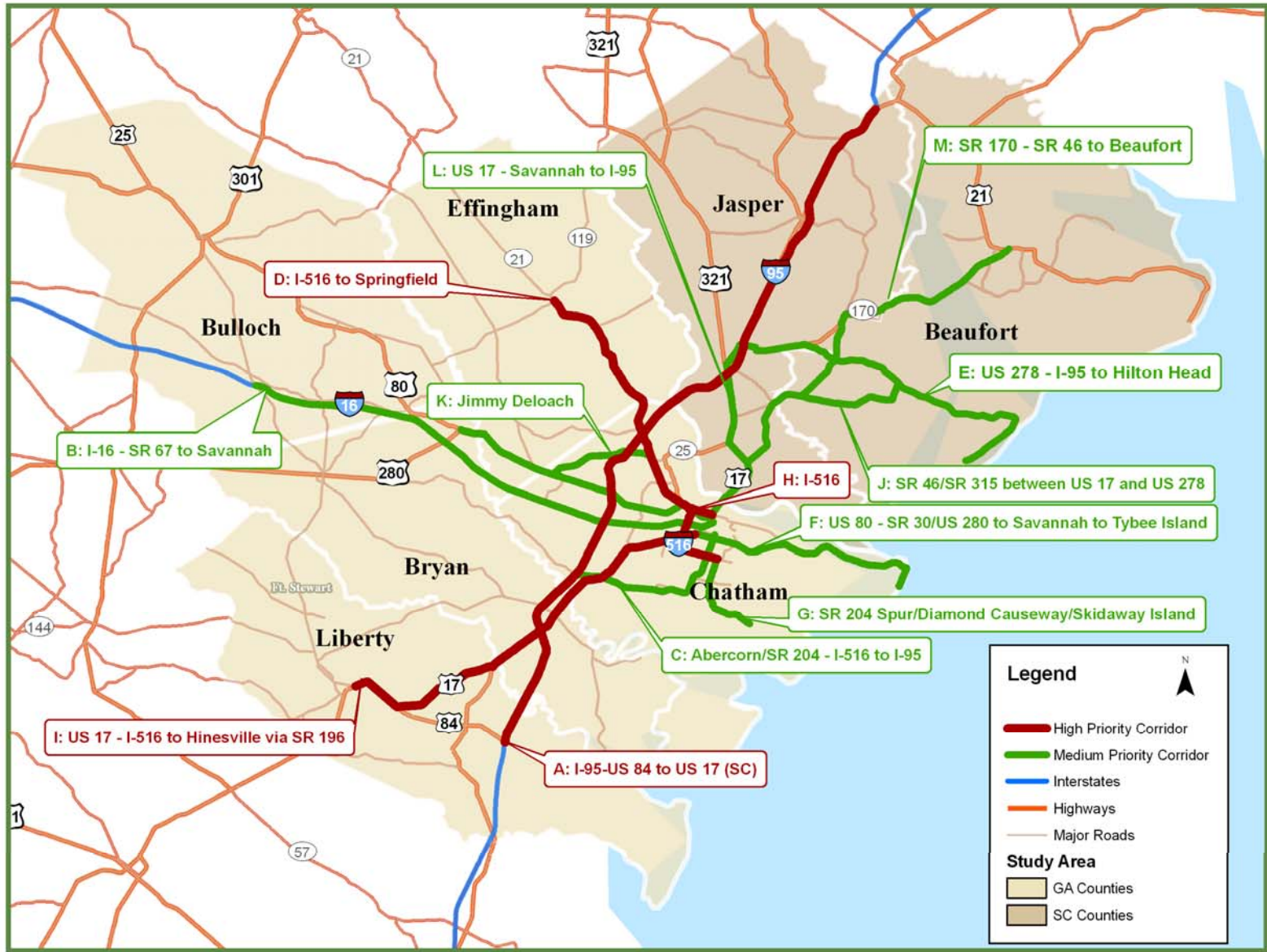
Table 4-2: Corridor Criteria Scoring

| | | | | Ranking Criteria | | | | | | | | | |
|----|---|---------------------------------------|---|---------------------------------|---------------------------------|---------------------|------------------|--------------------------------|-----------------------|------------------------------------|------------------------|-------------------------|---------------------|
| | | Transit Investment Corridors | Description | Serves future employment growth | Serves future population growth | Corridor congestion | Existing Transit | High Priority in other studies | Serves activity areas | Promotes equitable housing opport. | Redevel. opportunities | Multi-modal connections | Total High Priority |
| 1 | A | I-95 | From US84 (GA) to US17 (SC) | + | + | + | ● | + | + | ● | + | + | 7 |
| 2 | B | I-16 | From SR67 to Savannah | + | + | + | ● | + | ● | ● | ● | ● | 4 |
| 3 | C | Abercorn/SR 204 | I-516 to I-95 | ● | ● | + | + | + | + | ● | ● | + | 5 |
| 4 | D | SR 21 | I-516 to Springfield | + | + | + | + | + | + | + | + | + | 9 |
| 5 | E | US 278 (SC) | I-95 to Hilton Head | + | + | + | + | ● | ● | ● | ● | + | 5 |
| 6 | F | US 80 | SR 30/US280 to Savannah to Tybee Island | + | + | + | ● | + | + | ● | ● | ● | 5 |
| 7 | G | 204 Spur/Diamond Cswy/Skidaway Island | From Whitfield/Harry Truman Pkwy/Ferguson Ave | ● | ● | + | ● | ● | + | + | + | ● | 4 |
| 8 | H | I-516 | From DeRenne to I-16 | + | + | + | + | + | + | + | + | + | 9 |
| 9 | I | US 17 (GA) Ogeechee Rd | I-516 to US84 to Hinesville | + | + | + | + | + | + | + | + | + | 9 |
| 10 | J | SR46 | SRI70 to US278 | + | + | + | ● | + | ● | ● | ● | ● | 4 |
| 11 | K | Jimmy Deloach | US 21 to US80 | + | + | ● | ● | + | + | ● | + | ● | 5 |
| 12 | L | US 17 (SC) | Savannah to I-95 | ● | ● | + | ● | ● | ● | ● | ● | ● | 1 |
| 13 | M | SR170 | SR46 to Beaufort | + | + | + | + | ● | + | ● | ● | + | 6 |

Score: + High
 ● Medium

High Priority Corridors

Figure 4-1: Transit Priority Corridors



Service Opportunities

The transit modes and service opportunities/alternatives could include:

- **Regional Bus Service:** Fixed route bus service provided on a fixed schedule along specific routes, with vehicles stopping to pick up and drop off passengers to specific locations.
- **HOV Lanes:** A high-occupancy vehicle lane is reserved for vehicles with more than one person, including public transit vehicles, and rideshare program options
- **Bus-Only Shoulders:** This alternative allows bus use of shoulder areas when congestion reduces vehicle speeds on the travelled lanes.
- **Priority at Highway On/off-ramps:** Public transportation services are able to exit and enter the ramp areas, either connecting to park and ride facilities or stopping to connect with other public transportation services, sometimes bypassing areas of congestion.
- **Travel Demand Management:** These include a number of strategies and policies to reduce travel time, such as subsidizing transit costs for employees or residents, congestion pricing tolls, flex-time work schedules, telecommuting, as well as priority treatment for HOV use such as queue jumps, signal priority, etc.
- **Rideshare:** Typically service alternatives to driving alone that could consist of a car, van, and buspools, with incentives for employers and employees, including tax incentives, frequent user benefits, etc.
- **Express Bus:** This bus service usually includes reduced stops and more comfortable vehicles and other amenities to attract discretionary riders to public transportation.
- **Bus Rapid Transit:** BRT combines many of the attributes of a rail system (such as a dedicated right-of-way, off-board fare payment, etc.) with the lower costs associated with bus service, to attract new riders to the system. Typically, BRT operations may include limited stop service, signal priority, queue jump lanes, and service branding and marketing.
- **Streetcar:** This service has increased in operation recently, using both rails or rubber tires to connect activity points, sometimes related to transit oriented development activities. Vehicles are typically lighter and shorter than light rail operations.
- **Enhanced Local Bus Service:** Enhancements can include increased frequencies, more coordination with other services and designated transfer facilities.
- **Park & Ride Facilities:** These services typically increase parking at major transfer locations that could include rideshare, bus and/or rail service.

Corridor Alternatives

The following section suggests some ideas regarding phased service opportunities for the corridors.

- **Corridor A: I-95, from US 84 (GA) to US 17 (SC):** The I-95 corridor is the longest corridor in the study area traversing from US 84 near Midway, Georgia, passing near Richmond Hill, the Savannah airport, and crossing into South Carolina through Hardeeville, Ridgeland to junction US 17 in South Carolina. As discussed previously, this corridor is more of an inter-regional

connector between South Carolina and Florida, although both Greyhound and Southeastern Stages provide service into Savannah. In addition to serving as a connecting corridor using regional intercity buses, or as a corridor for regional rail service, this corridor serves as a logical connection point for multi-modal options, such as the Savannah-Hilton Head Airport, Amtrak, Greyhound terminals and the Port area.

- Corridor D: SR 21, from I-516 to Springfield: The State Route 21 corridor travels from Springfield in Effingham County to Interstate 516 near downtown Savannah. The corridor travels through Rincon in Effingham County, Port Wentworth, and Garden City. As indicated in the Employment Patterns map, there is significant work trip demand from Effingham County into Savannah and to the Port area, which suggests the potential for commute service alternatives. That potential is also reinforced by numerous housing developments along the SR 21 corridor. Potential service opportunities could start with rideshare activities, perhaps augmented by park and ride facilities, and phasing into commuter service connections.
- Corridor H: I-516, from DeRenne Avenue to I-16: The Interstate 516 corridor is the shortest corridor near downtown Savannah and provides peripheral connections to I-16, SR 21, US 80, SR 204/Abercorne Street. Although this corridor ranks high using the criteria described previously, it is not a standalone public transportation corridor. Rather, it can potentially offer the ability for services to access Derenne Avenue, Abercorn Street, and other streets within Chatham County and downtown Savannah.
- Corridor I: US 17 (GA) Ogeechee Road, from I-516 to US 84 to Hinesville: The US 17 (GA) Ogeechee Road corridor connects downtown Savannah to Hinesville in Liberty County, south of Garden City, near Georgetown, through Richmond Hill, south of Fort Stewart, through Flemington, and into Hinesville. This corridor is somewhat similar to SR 21 since there are a number of housing developments, particularly in the area approaching Richmond Hill. However, there may also be some additional service demand into the Hinesville area to Fort Stewart and also to interact with the local service.

The service model here would also include an intermodal transfer facility that would include CRC rural services. Generally, the potential for more public transportation use is enhanced by the presence of more services and providers, especially when the availability of services is appropriately communicated to users and the public, and particularly when various service components are conveniently scheduled to benefit riders. These connections also reinforce that the services are a part of the community and can add value by increasing mobility options for customers.

A potential start point could be to examine rideshare options and consider some two-directional limited stop and fixed route connections, perhaps initially to Richmond Hill as part of a phased service plan.

Table 4-3 includes additional information about the service potential for these four corridors.

| Corridor | Service Alternative |
|---|--|
| <p>Corridor A: I-95, from US 84 (GA) to US 17 (SC)</p> | <ol style="list-style-type: none"> 1. Implement regional bus service connecting Beaufort, Ridgeland, Yemassee, Savannah airport, Airport employers, and areas of Liberty Co. 2. Coordinate existing CRC and MPC rideshare programs. 3. Implement express bus service from Ridgeland to downtown Savannah and to airport business employment centers. 4. Implement marketing campaign from airport to Hilton Head Island along I-95 to US 278 in SC. 5. Develop Park and Ride facilities in Richmond Hill, at SR 21 and I-95 junction, and in Ridgeland. 6. Implement special services to/from airport, Amtrak, and Hilton Head Island. Ferry services to Hilton Head Island should be a consideration. 7. Coordinate regional services with existing rural transit services in the counties to ensure seamless connections. 8. Coordinate regional services with CAT service and Palmetto Breeze service to Hilton Head. |
| <p>Corridor D: SR 21, from I-516 to Springfield</p> | <ol style="list-style-type: none"> 1. Expand MPC rideshare program to Effingham County and employers. 2. Coordinate MPC and CRC rideshare program. 3. Implement express bus service from Effingham County to downtown Savannah. This could initiate with peak hour limited stop services. 4. Coordinate with rural transit service in Effingham County to ensure seamless connections. 5. Develop Park and Ride facilities in Springfield, Rincon, and at the I-95/SR 21 junction. Implement transit priority along corridors, such as bus-only shoulders and signal preemption. |
| <p>Corridor H: I-516, from DeRenne Avenue to I-16</p> | <ol style="list-style-type: none"> 1. Increase rideshare marketing efforts within the county. 2. Enhance local bus service along corridor and also neighborhood routes to feed into downtown Savannah. 3. Implement bus-only shoulder, ramp metering, signal priority, and HOV lanes. |
| <p>Corridor I: US 17 (GA) Ogeechee Road, from I-516 to US 84 to Hinesville</p> | <ol style="list-style-type: none"> 1. Provide connections to regional bus service connecting Hinesville and Richmond Hill to downtown Savannah, with connections to the Savannah airport and airport employers. 2. Expand MPC rideshare programs to Liberty and Long Counties. 3. Implement express bus service from Richmond Hill to downtown Savannah and to airport business employment centers. 4. Develop Park and Ride facilities in Richmond Hill and in Hinesville. |

| Corridor | Service Alternative |
|----------|---|
| | 5. Coordinate regional services with existing rural transit services in Long and Liberty counties, and to the proposed Hinesville service. Connections among all services should be seamless. |

CHAPTER 5 – MOBILITY AND CONNECTOR STRATEGIES

The intent of this chapter is to identify potential connecting strategies that will enhance mobility in the region. Connecting strategies regarding transit include technology/program improvements and structural improvements. Generally, technology improvements are lower cost options that can be implemented quickly. Structural improvements typically involve construction of facilities that will improve the overall transportation network. The following report discusses the applicability of intelligent transportation systems (ITS), park and ride lots, rideshare and commuter services, and intermodal facilities and how they can be connected in a regional framework. The technical analysis is documented in Technical Memorandum #5 – Mobility and Connector Strategies.

Intelligent Transportation Systems

The public transportation industry has significantly increased the use of intelligent transportation systems (ITS) and other technology, by developing connections with the public and private sector through advanced software and hardware options. Much of the initial ITS work in transit was focused on improving internal systems, such as linking the technical elements within vehicles and monitoring maintenance activities. More ITS options are now available with advances in technology and communications and transit use of ITS has expanded to include vehicle location for monitoring schedules, connecting scheduling and dispatch functions for both fixed-route and demand response services.

Increasing volumes of system related information has improved the ability to communicate with both current and potential customers by showing how to use the services and offering real time arrival information for the next bus or train.

ITS operations in the transit industry have become more customer-related in focus as demonstrated through Mobility Services for All Americans. This is a program sponsored by USDOT to promote ITS in Travel Management Coordination Centers. Call centers offer participating agencies the potential to include a number of different activities: information, order taking, scheduling, dispatching, marketing, shared fare media, billing and accounting, and other communications.

This concept focuses on the needs of the customer, as opposed to the role of each service provider, and has become known as Mobility Management. The customer focus results in more opportunities for coordination of services as well as more opportunities to add partners to the service plan such as public works and regional planning agencies, which typically work on customer concepts like complete streets and improved pedestrian and bicycle access.

Types of ITS

The use of ITS for public transportation agencies varies depending upon the agency's need and available resources. A number of technology strategies have been deployed, including communication systems, scheduling and dispatching software, automatic vehicle location (AVL)/mobile data terminal (MDT) systems, traveler information systems, and electronic fare systems. In some cases, agencies have installed and integrated multiple technologies over large service areas with demand responsive and paratransit services.

Implementing new ITS solutions can involve a significant change in the way that everyday operations are conducted. Primary reasons for improving technology:

- Develop a rider-friendly system that identifies the location of buses in real time;
- Implement communication among multiple agency vehicles;
- Facilitate multiple agency billing process;
- Improve customer service;
- Coordinate and/or expand availability of service;
- Increase operational and administrative functions.

Technologies that are used to meet goals are:

- Radio Communication Systems
- Scheduling and Dispatch Software
- Automated Vehicle Locators/Mobile Data Terminals (AVL/MDT)
- Electronic Farecards/Media
- Customer Service Solutions

Opportunities for technology expansion have also been recognized by ITS America, an organization supporting the federal legislation entitled *Smart Technologies for Communities Act*. As part of recent testimony regarding the legislative bill, it was noted that smart technology has:

- Decreased congestion by 10-15 percent
- Reduced the amount of vehicles in transit fleets by 2-5 percent
- Increased schedule reliability by 9-23 percent
- Earned a 9:1 return on investment.

The Smart Technologies for Communities Act (introduced in March 2011) was not enacted, but was referred to legislative committee. ITS American continues to look for future funding opportunities.

Regional ITS Partners and Development

The key to connecting multiple providers will be through the use of technology. At the initial meeting of the Stakeholder Advisory Committee, several members noted the potential to use ITS as a preliminary way of establishing lines of communication and initiating inter-agency coordination. As the Transit Mobility Vision Plan process progressed, a regional ITS development concept working group was established.

The participating agencies discussed the following plans:

Coastal Regional Coaches (CRC): The agency received federal funding for a broad system plan that would include: call center, scheduling/dispatching, mobile data computers, and fare media. They are currently awaiting GDOT approval for a statewide IT coordination contractor.

Lowcountry Regional Transportation Authority (LCOG): The agency selected a contractor, RouteMatch, for a demonstration program coordinating scheduling/dispatching with several agencies. The program began in May 2011.

City of Savannah – The City has issued two RFPs for on-street and off-street parking space/lot management, which include the capability to incorporate a proximity card into the payment process to minimize the volume of cash payments.

Liberty County – The agency will be monitoring the progress of the CRC project for potential participation and coordination. For example, they will have the capability to upgrade existing fare boxes to accept proximity cards.

Chatham Area Transit (CAT) – The agency currently has two ITS software packages for services, Trapeze for fixed-route and RouteMatch for demand response, but is reviewing opportunities for consolidation. They are moving forward with several grant funded ITS projects including:

- fare box upgrades to accept multiple types of fare media
- expanded interactive website
- real time information for customers
- the use of Google Transit; and
- updated passenger amenities.

Park and Ride Facilities

Park and Ride facilities have become an integral component of effective transportation systems. In urban and suburban areas across the United States, lots have been established to provide more efficient access to public transportation services, and have also served to assist communities in greenhouse gas/carbon reduction programs. The lots are typically parking facilities located a significant distance from the central business district, where a commuter changes from a single occupant vehicle to some form of public transportation including ridesharing. As a result, vehicle miles traveled (VMT), congestion, accidents, vehicle emissions, and energy consumption are reduced. They are most successful with long distance commutes.

Park and ride lots can increase the efficiency of parking facilities that are under-utilized during the work day. Shared-use park and ride lots take advantage of excess parking available at stadiums, churches, and shopping centers. Opportunities to partner with private property owners for the development of park and ride facilities are widely available.

It is typically more effective to proactively plan park and ride facilities as part of a coordinated transportation system, than to acquire individual facilities and retroactively incorporate facilities into the system. Park and ride facilities cannot function well without direct linkages to the surrounding transit and highway infrastructure. It is important to develop a comprehensive system plan inclusive of park and ride facilities before developing individual elements. Success of individual park and ride facilities directly correlates to connectivity with the regional transportation network.

Existing Park and Ride Locations

The TMVP service area currently has several park and ride lots in Georgia. In the South Carolina portion of the study area, only informally designated park and ride lots exist. The location of currently available

park and ride lots in the study area and the proposed locations are shown in the following map. Existing park and ride lot locations include:

- SR 21 at I-95 (Chatham County)
- SR 204 at I-95 (Chatham County)
- Effingham County Courthouse
- SR 17 in Guyton (Effingham County)
- US 280/SR 30 at I-16 (Bryan County)
- US 80/SR 26 North of Statesboro (Bulloch County)
- Courthouse Street in Claxton (Evans County)

These park and ride lots predominantly capture I-95 and I-16 commuters accessing major employers in Savannah and Chatham County. The existing lots do not have high visibility and are not promoted along the major highways. The lot sizes range from between 20 and 50 spaces.

Existing Park and Ride Lots

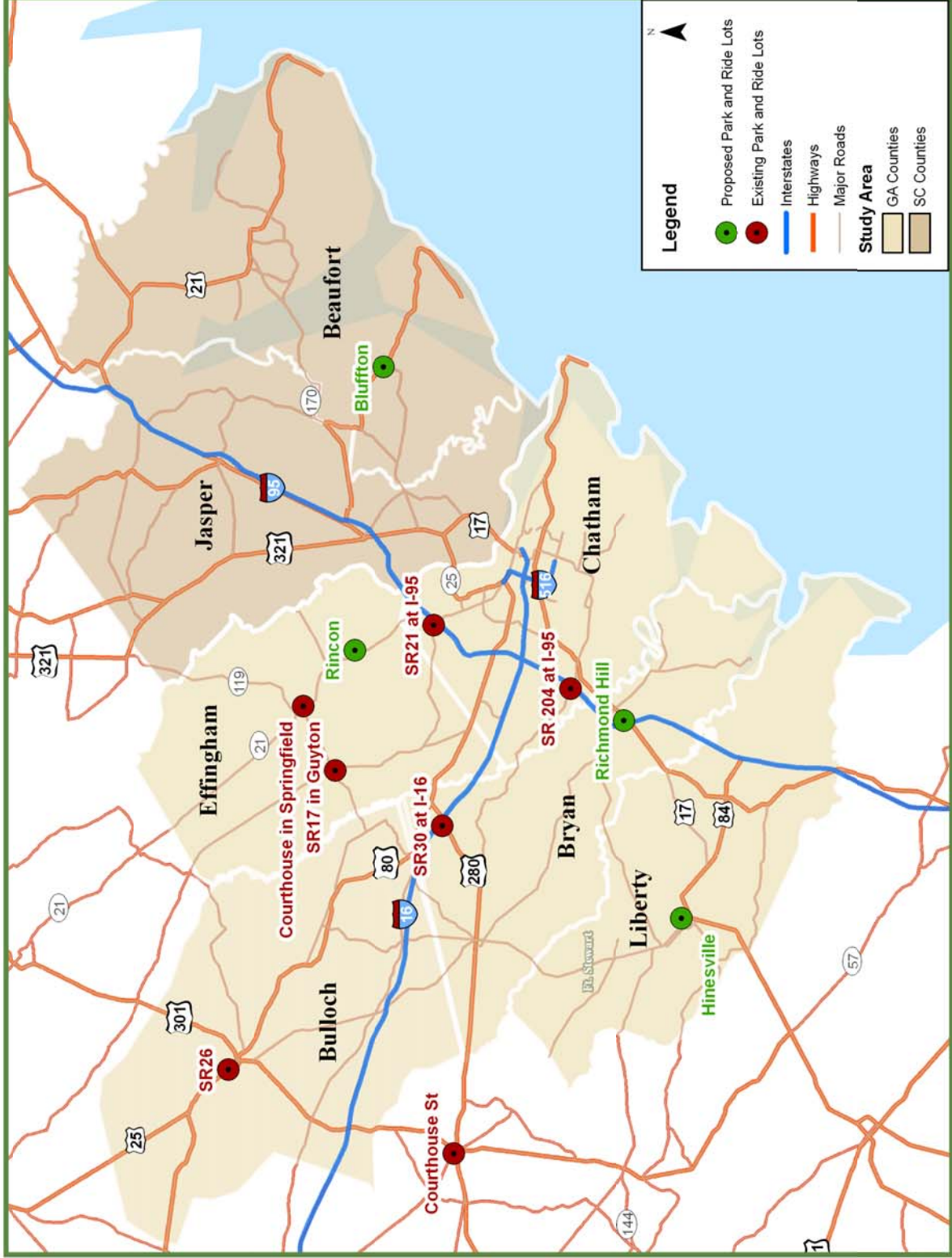
Chatham Area Transit identified four new potential park and ride lots strategically placed within the region to serve a proposed network of express bus services. These projects were submitted as part of the Georgia Transportation Investment Act of 2010 on the unconstrained investment project list.

The five proposed lots, shown on the following pages, are located in Hinesville, Pooler, Rincon, Richmond Hill, and Bluffton. They are strategically positioned to serve the regional commuter market shed within the greater Chatham County area where CAT is the primary fixed-route service transit provider. From these park and ride locations, linkages can be developed with the region's other transportation partners including Liberty Transit and Coastal Regional Coaches. Regional employment patterns described in Corridor and Service Opportunities Technical Memorandum, determined that the majority of the employment for the region is within Chatham County supporting the need for outlying park and ride facilities that would provide greater commute options including access to express bus.

Conceptual locations based on demographic analysis of the region have been determined through this study. Specific locations should be determined as a part of regional planning efforts through a detailed park and ride assessment. The assessment would apply the travel demand model to forecast future commute patterns based on development. Based on model results, the assessment will determine the appropriate size of the facility and identify potential locations within Hinesville, Bluffton, Richmond Hill, and Rincon that meet the demand. Potential park and ride lot sites could be vacant property, new housing or commercial development properties, city/county or state right-of-way, or park and ride lots incorporated into highway interchange projects. Potential sites should be evaluated based on the availability of developable property in the service area, accessibility of the site for transit vehicles and park and ride users, and the sites proximity to connecting transit services (shuttles, connectors, etc.).

The estimated construction cost for a 50-parking space facility ranges from \$500,000 to \$800,000, which does not include land acquisition or IT infrastructure for security or real-time bus information. As mentioned above, a detailed analysis should be conducted for each site to determine park and ride demand for current and future conditions. For the purposes of this high level study, the proposed four new lots should create a demand for 50 parking spaces initially for each site.

Figure 5-1: Park and Ride Lots



Several ITS options are available that could provide benefits to the park and ride facilities, such as closed-circuit television (CCTV) or video surveillance cameras, which would enhance safety at park and rides by providing observation and recording of activities within the site. Other ITS options are emergency communication and traveler information displaying real-time information of parking availability and next bus service.

If ITS options are included in the project, would require a fiber optic networks established along the freeway or roadway corridors to relay data to a central control center. If possible, the ITS options would tap into available fiber optic networks in the area. In some locations, communication options may be limited due to topography, constrained conditions, or lack of adjacent utilities. As suggested above, a detailed analysis for each site should be conducted, and within that study, the existing fiber networks would be identified to determine immediate ITS projects or whether connections to the fiber network need to be made. Any major reconstruction or widening projects adjacent to the potential sites should include the installation of fiber optics. The approximate cost for fiber optic cable is just under \$100,000 per mile.

Rideshare

Several rideshare and vanpool programs are offered in Savannah and surrounding region. The rideshare programs benefit from the implementation of park and ride facilities and should be coordinated with improved mobility options. Rideshare programs in the area include:

- Coastal Commuters
- Coastal Regional Commission - Regional Vanpool Program
- Low Country Rideshare Program/Palmetto Breeze
- eRideShare.com

Network of Services

Developing a network of services for Savannah and the surrounding region will improve mobility for residents and coordination among transit agencies. To encourage people to leave their cars at home, transit must compete with the automobile in terms of speed, reliability, and convenience. Riders should be able to move freely from one transit system to another. Connections between systems are as important as the routes within each system.

Central to this report's recommendations is the concept that a network of public transportation strategies, from improved local fixed-route bus service to ridesharing, vanpool programs, technology and development of transfer stations are supported by transit-oriented land uses. Service should be tailored to local conditions, with flexible routing in low-density suburban areas, and more direct, frequent service on major roads with concentrated demand.

The alternatives within the report are not presented as a single package that must be accepted as a whole. It is recommended that investment in public transportation build from the introduction of regional bus service to additional service elements or modes over time. Initial investments for local agencies are relatively modest. Additional elements, such as express bus service, vanpool programs, and higher capacity transit investments, should be introduced based on an evaluation of the previously introduced service. The established Stakeholder Advisory Committee to coordinate to develop evaluation criteria for service implementation and in the establishment of performance measures for determining the effectiveness of the implemented service. If performance goals are met, subsequent incremental steps

should be taken. The overall vision plan should be converted to a regional transit development plan, similar to the CORE MPO's Long Range Transportation Plan, with updates every three to five years to evaluate and prioritize existing and proposed transit projects. The transit development plan would detail the analysis and prioritization of transit projects and document the evaluation criteria and performance measures.

These four high priority transit corridors are the backbone of the region's transportation network, including future transit services. The corridors are the drivers to begin implementation of the TMVP recommendations to connect people to jobs and activity centers.

A summary table presents the four primary corridors and modal connections for each service, including shuttle service, feeder service, rail connections, and rideshare alternatives.

Table 5-1: Corridor Comparison Matrix

| Corridor | Connections | | | | | |
|---|--|--|---|---|--|--|
| | Shuttle Service | Feeder Service | Rail Service | Local Service | Regional Service | Rideshare Program |
| Corridor A: I-95, from US 84 (GA) to US 17 (SC) | ★ | ★ | ★ | ★ | ★ | ★ |
| Service description | Shuttle service should operate to/from Hilton Head, airport, Amtrak station, and ferry service to Hilton Head. Operate year-round, 12 hrs daily, 6 vehicles, estimated \$75 cost per hour. | CAT, Palmetto Breeze, Liberty Co Transit, CRC should restructure existing routes to feed into the new regional service. 12 daily hrs, 312 days, 1 veh per agency - CAT, PB, LCT, CRC | Rail service connection to proposed high speed rail line. | CAT, Palmetto Breeze, Liberty Co Transit, CRC would continue local service, providing connections to the corridor, as feasible. | Regional and express service should operate along the corridor between Ridgeland, SC to other intercity services in Savannah or Richmond Hill. Service 7 days wk, 16 hours day, 6 vehicles. | Implement campaign for rideshare programs along the corridor. \$50K every other yr. Build and/or upgrade four park and ride lots @ \$500K each. Implement website coordination of rideshare programs - contract out \$25K yr. |
| Estimated Operating Cost | \$ 1,971,000 | \$ 1,123,200 | Study underway w/ costs TBD. | No change in existing budget | \$ 2,628,000 | \$ 75,000 |
| Estimated Capital Cost | \$ 2,450,000 | \$ 1,400,000 | Study underway w/ costs TBD. | No change in existing budget | \$ 2,450,000 | \$ 2,000,000 |
| Corridor D: SR 21, from I-516 to Springfield | | ★ | ★ | ★ | ★ | ★ |
| Service description | | CAT and CRC should restructure existing routes to feed into the new express bus service. | Rail service connection to proposed high speed rail line. | CAT and CRC would continue local service, providing connections to the express bus service, as feasible. | Express service should operate along the corridor between Springfield and downtown Savannah. Service 7 days wk, 16 hours day, 5 vehicles. - \$2.19M: Implement transit signal priority - \$10M | Implement campaign for rideshare programs along the corridor. \$50K every other yr. Build and/or upgrade three park and ride lots @ \$500K each. Implement website coordination of rideshare programs - contract out \$25K yr. |
| Estimated Operating Cost | | No change in existing budget | Study underway w/ costs TBD. | No change in existing budget | \$ 4,690,000 | \$ 75,000 |
| Estimated Capital Cost | | No change in existing budget | Study underway w/ costs TBD. | No change in existing budget | \$ 12,100,000 | \$ 1,500,000 |
| Corridor H: I-516, from DeRenne Avenue to I-16 | | | ★ | ★ | | ★ |
| Service description | | | Rail service connection to proposed high speed rail line. | CAT would increase local transit service to feed into downtown Savannah. 12 hrs daily, 3 vehicles, 6 days week. | | Implement campaign for rideshare programs along the corridor. \$50K every other yr. Implement website coordination of rideshare programs - contract out \$25K yr. Implement transit signal priority - \$10M |
| Estimated Operating Cost | | | Study underway w/ costs TBD. | \$ 842,400 | | \$ 75,000 |
| Estimated Capital Cost | | | Study underway w/ costs TBD. | \$ 1,050,000 | | \$ 10,000,000 |
| Corridor I: US 17 (GA), Ogeechee Road, from I-516 to US 84 to Hinesville | | ★ | ★ | ★ | ★ | ★ |
| Service description | | CAT and CRC should restructure existing routes to feed into the new express bus service. | Rail service connection to proposed high speed rail line. | CAT and CRC would continue local service, providing connections to the express bus service, as feasible. | Express service should operate along the corridor between Hinesville and downtown Savannah. Service 7 days wk, 16 hours day, 5 vehicles. | Implement campaign for rideshare programs along the corridor. \$50K every other yr. Build and/or upgrade two park and ride lots @ \$500K each. Implement website coordination of rideshare programs - contract out \$25K yr. |
| Estimated Operating Cost | | No change in existing budget | Study underway w/ costs TBD. | No change in existing budget | \$ 2,190,000 | \$ 75,000 |
| Estimated Capital Cost | | No change in existing budget | Study underway w/ costs TBD. | No change in existing budget | \$ 2,100,000 | \$ 1,000,000 |

NOTE: It is assumed that Park and Ride lots will be used to enhance Feeder Service, Local Service, Regional Service and the Rideshare Program. See Appendix A for breakout of cost information.

CHAPTER 6 – GOVERNANCE AND FINANCE STRATEGIES



The following chapter summarizes information on the various forms of coordination, ranging from verbal understandings between agencies to formalized governance and institutional structures described in Technical Memorandum #5 – Governance and Finance Strategies. The CORE MPO and study partners recognize the unique characteristics of the Savannah region and want a future process that is sustainable and builds relationships to support overall improvement of mobility options in the region.

Governance Strategies

The changing environment, particularly related to economic and demographic factors, presents a challenge to transit agencies across the United States to meet growing needs of local communities. For example, the recent increase in the price of gas has resulted in spikes in transit demand exceeding 20 percent in some markets. This growth is coupled with the shrinking resources of the past few years due to the downturn of the economy. These factors are leading organizations to reinvent the way they do business to meet future demand. Coordination and partnerships among local and regional agencies is one method being used to meet these needs.

Coordination of transit services has a varying degree of involvement among local and regional agencies depending upon the project or transit service. The goals of coordination are to:

- Do more with limited resources
- Enhance mobility within and between communities
- Generate new revenues and new partnerships
- Preserve agency services
- Enhance the quality of life in the region

For some regions, information sharing and informal agreements may accomplish the desired goals. For others, the end result may be a fully integrated, seamless regional transportation system. Regardless of the type and degree of coordination sought, success will depend on the support of all involved. Successful coordination will survive and thrive when built on trust, integrated data and services, and support from the local communities.

A shared or consensus vision for policy direction, daily management, and areas of authority facilitates the coordination effort. Decisions can then include clear lines of responsibility, designation of financial arrangements, and transportation service parameters. A number of configurations are used for coordinating services across jurisdictional and agency boundaries. Organizations can maintain independence working principally through coordination agreements or new organizations can be established encompassing all services.

Governance models vary and have no particular hierarchy; each has distinct characteristics suited to a region's coordination effort. Some models allow for a fully-enabled state-authorized agency or authority. Other models limit the policy-making or taxing powers of a coordinated transit system. Individual transit providers, both public and private, can realize a number of substantial operating and managerial benefits through cooperation and coordination.

The challenges to coordination include determining how best to structure the organization to represent the mobility needs of all participating communities, how best to protect the service quality to all customers, and how best to equitably support services, both financially and operationally, across what may be a large and disparate region. Coordination creates a more efficient allocation of existing resources. It does not automatically mean more services. Potentially, with the right governance structure as a start, coordination can contribute toward additional services.

Several governance models have been used across the country for public transit coordination efforts. Determining which governance model can best meet the needs of a given region is unique to each area. The information discussed within this chapter identifies specific characteristics of different models and provides the typical framework for common models.

Five Public Transportation Governance Models

Governance models come in numerous forms, most of which correspond to one of the following five models:

- State transit agencies - A transit agency created by a state government, with transit operations owned, funded and managed by the state. Examples include New Jersey Transit (NJT), Massachusetts Bay Transportation Authority (MBTA), Rhode Island Public Transit Authority (RIPTA), and the Maryland Transit Administration (MTA).
- General purpose transit authorities - A transit authority, usually with an accompanying funding mechanism, created through the joint approval of leaders and voters in multiple local jurisdictions under state law. In this case, the state law allows the establishment of a “general purpose” authority, separate from local government, by local action. Examples include the Public Transit Benefit Areas of Washington State; the Ohio transit authorities in Cleveland, Akron, Toledo, Columbus and Cincinnati; the individual county transit districts in Florida; and the recently-created New Mexico general purpose regional transit authorities (which have enabled Regional Transit Districts in the North Central New Mexico, Albuquerque, and Las Cruces regions).
- Special purpose regional transit authorities - Created by a special act of the state legislature, and applying only to a specific, single region of the state. Examples include the Washington Metropolitan Area Transportation Authority (WMATA, which required actions by two state legislatures, Congress and the District of Columbia), the Bay Area Rapid Transit District (BART), the Regional Transit District (RTD) in Denver, the Regional Transportation Authority (RTA) for the Chicago region, including the “service boards” for the Chicago Transit Authority (CTA), Metra and Pace, and TransLink in Vancouver, British Columbia. This is the most common transit governance model for larger urban areas.
- Municipal transit agencies - Assumption of transit services by an existing local government, without special state legislation, as one part of its municipal functions. Examples include Honolulu, Santa Fe, Charlotte, and the many municipal operators in the Los Angeles and Phoenix regions. This is the most common governance model, particularly among small transit agencies and in small and mid-sized urban areas.
- Joint exercise of powers or joint powers authorities - Agreements between two or more existing local governments to create a new transit agency by jointly exercising the powers they each have to build or operate transit. Examples include Caltrain, the commuter rail operator created by Santa Clara, San Mateo and San Francisco Counties; the construction and operation of Trinity Railway Express (TRE) by two Texas transit authorities, Dallas Area Rapid Transit (DART) and Fort Worth Transit; and the operation of Virginia Railway Express (VRE) commuter rail, a joint

project of the Northern Virginia Transportation Commission and the Potomac and Rappahannock Transportation Commission.

The five models are distinguished by their specific authorities for creation. For instance, the municipal transit agency governance model is enabled through existing local government powers, whereas a special purpose regional transit authority is created by a special act of a state legislature. Table 6-1 summarizes the five models.

Table 6-1: Models of governance for Public Transportation

| Governance Model | Authority for Creation | Example Agencies |
|--|---|--|
| State Transit Agency | State powers | <ul style="list-style-type: none"> ▪ Maryland ▪ Massachusetts ▪ New Jersey ▪ Rhode Island |
| General Purpose Transit Authority or District | General state law or enabling statutes, coupled with local initiative | <ul style="list-style-type: none"> ▪ Texas (metropolitan, urban, rural) ▪ Washington State Public Transit Benefit Areas ▪ Ohio Transit Authorities (Cleveland, Akron, Cincinnati, Toledo, Columbus) ▪ Florida County Transit Districts ▪ New Mexico RTAs (North Central New Mexico Regional Transit District) |
| Special Purpose Regional Transit Authority | Special statutes (special act of state legislature) | <ul style="list-style-type: none"> ▪ BART (San Francisco) ▪ WMATA (Washington DC) ▪ UTA (Utah) ▪ RTD (Denver) ▪ CTA, Pace, Metra (Chicago) |
| Municipal Transit Agency | Existing local government (City, County) powers | <ul style="list-style-type: none"> ▪ Honolulu Transit (City of Honolulu) ▪ CATS (Charlotte, NC) ▪ City of Phoenix Public Transit Department ▪ SF Muni – City and County of San Francisco ▪ King County (WA) Metro |
| Joint Exercise of Powers or Joint Powers Authority | Local arrangements | <ul style="list-style-type: none"> ▪ JPB/Caltrain (Santa Clara, San Mateo, San Francisco Counties) ▪ Trinity Railway Express (DART and Fort Worth Transit) ▪ Virginia Railway Express (Northern Virginia and Potomac and Rappahannock Transportation Commissions) |

From experience at other transit agencies and through information gained during this study process, it is evident that every region is unique and local governance choices are different in each area. The models presented in this section are just that – models. It is clear that the governance structure must be tailored to the needs of Savannah and the surrounding region. The next section presents peer regions who have successfully implemented a coordination infrastructure to fit the local communities. These sections build

off of one another to develop specific governance recommendations that will meet the needs of the region.

Governance in Peer Regions

The project team conducted a brief peer review of three metropolitan areas to demonstrate different mechanisms of regional coordination:

- Charlotte, NC (CATS)
- Memphis, TN (MATA)
- Albany, NY (CDTA)

While socioeconomic characteristics and congestion influence the success of transit in a region, forging regional cooperation, finding consistent funding sources, and coordinating land use and transportation decisions are also important. Regional cooperation can be challenging; however, Charlotte and Albany demonstrate regional cooperation in a variety of ways (Charlotte - by creating a separate multi-jurisdictional policy board, Albany - by having a regionally represented board and having a collaborative relationship between transit agency and MPO).

Dedicated and stable transit funding in Charlotte has resulted in ambitious transit plans. Clearly identified transit funding was also critical for the implementation of trolley service in downtown Memphis and advancing Bus Rapid Transit (BRT) in Albany. Rapid transit plans have a greater chance of success if the service is also coordinated with land use. Successful trolley service in Memphis was tied with downtown economic development. An integrated land use transportation plan in Charlotte identified both the growth centers and corridors for the region served by preferred rapid transit modes. The transit agency and MPO in Albany recognize that transit does not make sense economically if it chases emerging development. A coordinated development plan is more appropriate.

In Albany, BRT is being implemented along a multi-jurisdictional corridor. The success of the plan can be attributed to cooperation between the Capital District Transportation Authority, the Capital District Transportation Committee (CDTC), and the local jurisdictions. CDTA is currently working on implementing the BRT elements while CDTC, has worked with the municipalities in developing master plans for station areas. CDTA noted that when the cities and towns along the BRT corridor successfully worked to coordinate traffic signals between their jurisdictions, they accepted the possibility of cooperating to bring BRT to the region. While the region has a dedicated revenue stream (1.25% of mortgage recording tax revenue), CDTA is concerned that is not a stable, predictable source.

Memphis has been able to successfully implement its downtown trolley service and use it as an engine for economic development. Critical to the success of that service was identifying funding and having strong local support. Regional rapid transit is farther from being realized in Memphis where transit policy and planning is shaped principally through MATA and its board, which does not have regional representation. Advanced planning for light rail has been limited to only the Memphis portion of the identified priority corridor for rapid transit.

Savannah and the surrounding counties can learn several lessons from these three peer review regions. The more regional cooperation, dedicated funding, and coordinated land use/transportation planning are realized, the more ambitious and far reaching the provision of transit service can become. The peer regions integrate these elements to various degrees. Charlotte is the farthest along in integrating regional cooperation, funding, and land use coordination and consequently, Charlotte has the most ambitious plans. Albany has some elements in place with a dedicated funding source, regional representation in the CDTA board, and a collaborative relationship with the MPO. As a result, Albany is close to implementing

a modest BRT plan. In Memphis, there is no dedicated source for transit funding, and the major transit decision making body is appointed by the City of Memphis with no regional representation. Implementation of their rapid transit plans has seen the least progress among the peer regions and is currently limited to the portion inside the city limits.

Governance Implementation Strategies

The CORE MPO, Advisory Committee members, and project stakeholders were supportive throughout the vision plan that the Savannah region would benefit from expanded transit service. Projections of the growth in population, employment and personal vehicle travel indicate that congestion will become a greater issue over the next 25 years. Anticipated development patterns follow traditional suburban models that are challenging to support with public transportation because of the lower densities. Current institutional arrangement makes the local transit agencies dependent on annual appropriations from local governments, and discourages regional planners or the transit agency from taking pro-active positions for the concurrent development of transit facilities because of competition between providers. If transit is to play a more significant role in serving the future travel needs of the Savannah region, changes in both development and organization are needed.

To move ahead will require the cooperation and coordination of all the jurisdictions in the region. The public, the planning bodies, and elected officials must adopt the vision of a transit future. They will need to agree that concentration and density will be not only permitted, but encouraged in locations designated for transit investment. They must agree on a level of support and seek a dedicated and predictable source of funding. Local governmental entities will need to grant to transit agencies the right to comment on development proposals, with the goal of assuring that efficient and effective transit services can be provided. With these tools in place, the region can work to achieve the transit concepts presented in this vision plan.

Transportation Land Use Connection

Providing good transit service is only one part of the equation to build an effective public transportation network. To encourage greater use of public transportation, area local governments must begin to work cooperatively toward development of transit-friendly land use plans and policies.

Land use plans and transit-oriented design standards should be coordinated and developed for the key transit corridors and surrounding areas. For the four high priority transit corridors, it is recommended that municipalities develop joint development policies for development and redevelopment plans. The plans should create a more intensive land use patterns that denser development at transit nodes, such as retail, apartments and offices around major activity areas.

Concentration of population and jobs in areas with interconnected street patterns makes it easier and less expensive to provide convenient and reliable transit service. Better transit service increases the likelihood of travelers choosing to use services offered. Areas that are targeted for transit-oriented development with supported land uses should include policies for establishing or improving area roadway patterns that support transit service.

Regional Coordination

The next steps for the CORE MPO are to bring the regional partners together with a formal coordination plan for implementing the transit vision for the region.

- The path to coordination begins by recognizing successful strategies:
- Every region is unique and governance for public transit must adapt to each region.

- Coordination takes time and is never static.
- Leadership and champions are critical to change in public transportation.
- Advocacy groups and individuals should be included in the process.
- Good working relationships with other public agencies are critical to successful organizational transformation in public transportation.

A regional coordination committee should be established to integrate transit planning activities and project implementation. Planning activities related to transit are far reaching and combine many other elements of transportation and land use planning. The regional coordination committee should work to develop regional policies and criteria for the inclusion of public transportation in each jurisdiction planning activities. These accepted policies can guide project evaluation such as the use of ITS and how it is connected in the regional architecture, the location of park and ride facilities, the centralization of transportation management controls, design standards for transit-oriented development, procedures for flexible or deviated routes in rural and suburban areas.

Overview Implementation Steps

The following steps chart the path from study to startup, and provide an overview of essential processes to implement a successful governance process.

- Sustain stakeholder advisory committee
- Develop guidelines and goals
- Seek more partners
- Conduct assessment of services for increased coordination
- Conduct management assessment of providers to identify opportunities for policy level participation

Finance Strategies

The availability and sustainability of funding is typically the most important factor in developing, maintaining, and expanding public transportation services. The TMVP, therefore, should include services that are both realistic and implementable from a financial perspective, and consider both current and future public and private funding, and investment strategies. The following text includes a review of financial opportunities from federal, state, and local perspectives and indicates other potential alternatives based on increased participation by other partnering entities.

Federal Funding

Historically, the reauthorization of the Surface Transportation Act has had the largest impact on public transportation programs throughout the country. It both sets the policies and programs at the federal level and also provides guidance and potential fund leveraging by cascading to the states, regions, counties and locals, who often establish similar programs.

Although public transportation only represents approximately 20 percent of the total federal transportation program, the industry has been successful in the past in achieving funding and program guarantees. These guarantees have provided stability by removing the potential for significant differences in dollars authorized versus dollars appropriated, which can occur during downturns in the economy.

Moving Ahead for Progress in the 21st Century (MAP-21) was signed into law on July 6, 2012. The legislation authorizes transportation funding through September 30, 2014. The most recent legislation

modified the funding programs for FTA. New formula programs were added, some removed and others consolidated or modified. The changes that are most relevant to the TMVP are the modifications to FTA 5310, which now includes New Freedom (previously 5317, repealed); and changes to the Urban and Rural Area Formula grants (FTA 5307 and FTA 5311), which now include Job Access and Reverse Commute (previously 5316, repealed).

The TMVP federal financing strategy should develop more lines of communication and experience working with multiple partners to be in a position to respond to opportunities, such as the current Sustainable Communities process that combines DOT, HUD and EPA resources. Arguably more multi-department programs with streamlined processes can deliver more services for the dollars allocated.

Section 5307 - Urbanized Area Formula Program

These funds are provided directly to transit agencies in urbanized areas. Funds are used for capital and planning in large urban areas and for capital, planning, and operating assistance in small urban areas. State funds provide the required 20 percent match for capital and planning, state and local funds provide the required 50 percent match for operating. MAP-21 preserves the same basic apportionment formula as previous legislation, which was based on population, population density, and service data reported to the National Transit Database. The formula was expanded by the creation of two new formula tiers, one that distributes funding to small urban areas fewer than 200,000 using population and population density, while areas over 200,000 base the formula on population, population density and transit data.

The program provides 90 percent federal share for the incremental costs of vehicle-related equipment needed to comply with the Clean Air Act Amendments and the Americans with Disabilities Act requirements; all other eligible costs have an 80 percent federal share. This program, along with 5309 capital investments, are the backbone of the federal transit program and will continue to assist Savannah in capital facilities and operating funds.

MAP-21 consolidated FTA 5316 Job Access and Reverse Commute (JARC) into this program. The intent of this program is to improve access to transportation services to employment and employment related activities for low-income individuals and welfare recipients.

Section 5310 – Enhanced Mobility of Seniors and Individuals with Disabilities

The FTA Section 5310 program was established by the Federal Transit Administration (FTA) to meet the transportation needs of elderly persons and persons with disabilities in areas where public mass transit services are otherwise unavailable, insufficient or unequipped to handle their needs. The Program provides funding to non-profit social service and qualified public agencies for the procurement of accessible vans and buses; communication equipment; mobility management activities; and computer hardware and software to serve elderly persons and individuals with disabilities where existing transportation is unavailable, insufficient or inappropriate.

MAP-21 consolidated FTA 5317 New Freedom into this program. The purpose of the New Freedom program is to reduce barriers to transportation services and expand the transportation mobility options available to persons with disabilities beyond the requirements of the ADA, that assist individuals with disabilities with transportation, including transportation to and from jobs and employment support services. The New Freedom formula grant program aims to provide additional tools to overcome existing barriers facing persons with disabilities who seek integration into the work force and full participation in society, noting that lack of transportation is a primary barrier to work for individuals with disabilities.

Section 5311 – Rural Area Formula Program

The Section 5311 program has formula funds provided to the states for capital and operating assistance to nonurban areas with a population of less than 50,000. Under SAFETEA-LU, this program received an increased share of the total federal transit program to help systems meet escalating costs and allow for modest service expansion. Apportionments include funding from the new growing states and high density states formula tier and creates a new funding tier apportioned based on land area. Indian tribes are added as eligible recipients and a portion of the funding is set aside each year for tribal nations. Program administration costs are also eligible.

MAP-21 consolidated FTA 5316 Job Access and Reverse Commute (JARC) into this program. The intent of this program is to improve access to transportation services to employment and employment related activities for low-income individuals and welfare recipients.

State Funding

Georgia

GA SPLOST - The Special Purpose Local Option Sales Tax (SPLOST) has enabled Chatham County, a community of about 265,000 citizens, to invest approximately \$1.5 billion in capital improvements. This valuable economic engine has not only provided a popular way to fund necessary capital improvements in roads, drainage, recreation, economic development and civic projects, but also helped to fuel the local economy in jobs and construction. The Savannah Area Chamber of Commerce estimates that buyers from outside of Chatham County pay 38 percent of the sales tax.

Of Georgia's 159 counties, only Chatham County has the distinction of implementing SPLOST when it first became authorized (1985) and continuing it every year thereafter. Under the law, the one percent (1%) increase in the sales tax can be used for a specific period/dollar amount for certain capital projects (i.e. roads, courthouses, recreation, and libraries) and other projects by inter-local agreement. In December 2010, the CAT board authorized the use of SPLOST funds to purchase nine paratransit vehicles.

Coastal Regional Commission - The CRC receives Federal Transportation Administration (FTA) funds through Georgia DOT and in coordination with the Department of Human Resources (DHR). FTA funds include monies from programs described earlier, including 5310, 5311, 5316, and 5317 which are matched with County, local, and private sources. CRC is also the primary provider of transportation to human services agencies. They also receive funds through the Department of Aging, Department of Labor, and other DHR programs.

South Carolina

Transportation in South Carolina is primarily funded with federal programs as described previously, including federal 5307, 5310, 5311, 5316, and 5317. These grants are matched primarily with County or locally generated resources.

State funding for transit in South Carolina is restricted to ¼ of 1 cent from the state Motor Fuel User Fee. This level of funding generates approximately \$6 million per year for transit in the State. These funds are distributed by formula by SCDOT to the State's public transit providers, and the monies are typically used as required matching funds for federal grants. This level of funding, similar to Georgia, is significantly lower than the state funding for transit provided in the neighboring states of North Carolina, Virginia, and Tennessee.

Counties in South Carolina are eligible to have tax referenda to provide local funding for transportation, including Charleston, which has a local sales tax base. The two South Carolina counties, Jasper and Beaufort, included in this study have not been able to generate local sales tax revenue for transportation projects.

Local Funding

Chatham Area Transit (CAT)

CAT receives its funding through a number of sources, including the FTA 5307, 5310, 5316, and 5317 programs, farebox revenues and from a local sales tax. Approximately \$7M of CAT's \$17M budget is generated by the local tax. CAT has a number of different agreements for funding and service:

- City of Savannah funds the CAT downtown shuttle and Liberty parking shuttle
- The Management Mobility Board (which consists of City and hotel representatives and generates funds through a hotel tax) funds the Dot shuttle and River Street Streetcar, which are operated by CAT
- Another agreement with the Trade Center provides funds for the water ferry. This includes the use of some 5316 (JARC) funds.

CAT raises its local funds from its member municipalities. Through their enabling legislation, CAT could provide a wider service network within Chatham County, which would provide a broader tax base.

Liberty County Transportation

Liberty County recently initiated intracounty service, designed to provide mobility to the growing military community. Funds to operate this service are being generated through negotiations with the Department of Defense. These funds are used to reimburse transportation for military personnel traveling to and from the base.

Palmetto Breeze

The Palmetto Breeze service receives the 5310, 5311, 5316, and 5317 federal funds through South Carolina DOT. Matching funds are supported locally through funds generated by its district, including Hilton Head, and the five Counties, including Allendale, Beaufort, Jasper, Colleton and Hampton. County funds are generated loosely based on population and service levels.

Bus Livability

The Low Country Region of South Carolina, led by its primary public partners - City and County of Beaufort, Town of Port Royal, Palmetto Breeze, Lowcountry COG and the Marine Corps through the Department of Defense Tri Command, received 2010 Federal Bus Livability funding to initiate public transportation capital improvements and supporting infrastructure, such as access to services, pedestrian paths, and trails.

CHAPTER 7 – RECOMMENDATIONS



The Transit Mobility Vision Plan (Transit Mobility Vision Plan) includes a variety of concepts designed to reinforce the development of a regional vision for public transportation in the study area. The intent of the plan is not only to recommend service improvements but also to identify and recommend strategies for regional connections between numerous providers that will enhance overall regional mobility.

Combining these perspectives reinforces a seamless vision for public transportation in the study area, recognizing the system will be strengthened by the various modes, operations, and partners working to develop a “one system” approach to regional public transportation. The vision provides workable solutions and seeks to:

- Provide support and focus to the CORE MPO long range planning process;
- Link transit elements to existing, planned or potential activity centers in the area;
- Promote more walkable, bikable, livable activity centers that are supported by transit service; and
- Generate strong local support for greater transit investment in the region.

Transportation Choices

The current debate about transportation in Georgia and across the nation is centered on funding. The main culprit may not be a lack of funding, but a failure to make the difficult decisions that will change land use patterns and improve our transportation system’s efficiency.

To become more efficient our transportation system needs a network of high quality transit routes throughout the region. By high quality, we mean modern transit technology, which is reliable, frequent, with modern information technology and attractive accessible bus stops and transfer locations. This report identifies future plausible recommendations and related components to the regional transit system.

Coordination Levels

The framework for future regional activities for the Savannah region is based on three broad coordination tiers. The different tier levels, discussed below, address an incremental approach to developing regional public transportation services.

Tier 1 Coordination

The CORE MPO will bring the regional partners together through a formal coordination process that will implement the transit vision for the region.

Develop an organizational infrastructure to support collaboration. This structure may include a standing coordination committee or formalized inter-agency agreements to build sustainable programs and functional opportunities such as marketing, communication strategy development, community education, ADA paratransit liaison, and others.

These first step activities provide regional agencies the opportunity to compare services and find common ground for future coordination efforts. Bringing agencies together to share information and build relationships serves as the foundation for more extensive coordination in the future.

Through the coordination committee, develop project priorities for programs and services. For example, a first service project should be to develop express bus and regional service along the high priority corridors, identified in Chapter 4. The local agencies, in coordination with the CORE MPO, should jointly pursue start-up funding from the state and/or from the FTA Job Access and Reverse Commute (JARC) program to begin operation of the service. The local match funds should be allocated across the governmental entities. This initial project would provide express transit service along SR 21 and service from Liberty County. Additional regional service would be provided from Savannah metro area to Hilton Head and Beaufort County. Existing transit agencies would provide these services with coordinated grant and local funding.

As the coordination committee sets project priorities for each fiscal year, action steps should be assigned to ensure the project does not lose momentum. Other high priority projects for Tier 1 are:

- Hire a mobility manager to ensure regional coordination continues to build. The mobility manager also has the responsibility to oversee implementation of priority projects.
- Meet with GDOT to discuss existing and future park and ride locations. Funding for site improvements and future locations should be discussed so the CORE MPO has an understanding of project year implementation for local park and ride services.
- Develop, in coordination with existing transit agencies, transfer locations that provide a safe and convenient environment for passengers. These locations would be used by express services, rural services, and local transit service.
- Contact city, county, and state engineers and transportation departments to identify scheduled projects for the upcoming six months to a year. Identify projects that have transit routes or identified future service. Each location should include a thorough review of design to determine if a bus stop, sidewalk, curb cuts, or bus-only shoulder could be incorporated into the design. Determine the cost for transit improvement and allocate funding to coordinated transit agencies.
- Coordinate with the city and CAT to continue momentum for rapid transit services throughout the city and downtown area, including analysis for bus rapid transit, streetcar, and other services. A feasibility study for the city should be conducted, including elements for an Alternatives Analysis, which would position the local agencies for future federal funding.
- Conduct an assessment of existing transit services that identifies areas for coordination. One recent example is the ongoing initial discussions with Liberty County Transit and CRC for Medicaid trips within their service area.

Examples of other projects for the CORE MPO to initiate with the Coordination Committee area:

- Joint development and marketing materials
- Inclusive brochure with all agencies and contact information included:
 - Common brochure
 - Shared information phone line
- Support services
 - Driver training
 - Travel training
- Joint use/purchase of software

- Alternatives such as rental of multi-use license vs. purchasing complete software package; inclusion in regional program
- Joint purchase of IT, including hardware and software and associated programs such as smartcard and real time customer information
- Joint public education campaigns
- Expanded coordination of rideshare programs

Tier 1 Immediate Steps:

- Develop the formal infrastructure for the stakeholder Coordination Committee
- Review guidelines and goals within this report and refine as necessary
- Develop transit project priorities
- Identify additional strategic partners for advancing and promoting transit initiatives
- Conduct assessment of services for increased coordination
- Conduct management assessment of providers to identify opportunities for policy level participation
- Hire a Mobility Manager

Tier 2 Coordination

Tier 2 requires a higher degree and more extensive commitment from agencies than Tier 1. Throughout the coordination planning process, the participating agencies will work together to set priorities for programs and services in Tier 2. The ability for agencies to coordinate will depend on their willingness to participate, which is why it is advantageous to start small with broad participation and build a base of support for future activities. Finding the optimal level of coordination for Savannah and the surrounding counties will take hard work and time, but has the potential to realize significant improvements for transit service in region, both from agency and rider perspectives. This tier should increase formal coordination, with responsibilities defined by agencies potentially through contractual terms, such as:

- Regional connections for CAT, Palmetto Breeze, CRC, Liberty County, and other fixed-route services and paratransit services, etc.
- Network of park and ride lots and intermodal connectors to serve as hubs for the services

Chapter 4 of this report includes a summary of recommended services for the high priority corridors. The Coordination Committee should review these recommendations, prioritize services and projects, then assign an agency who will responsible for each project as it begins and evolves. Partner agencies should support each of the projects.

Providing good transit service is only one part of the Tier 2 equation to build an effective public transportation network. To encourage greater use of public transportation, area local governments must begin to work cooperatively toward development of transit-friendly land use plans and policies.

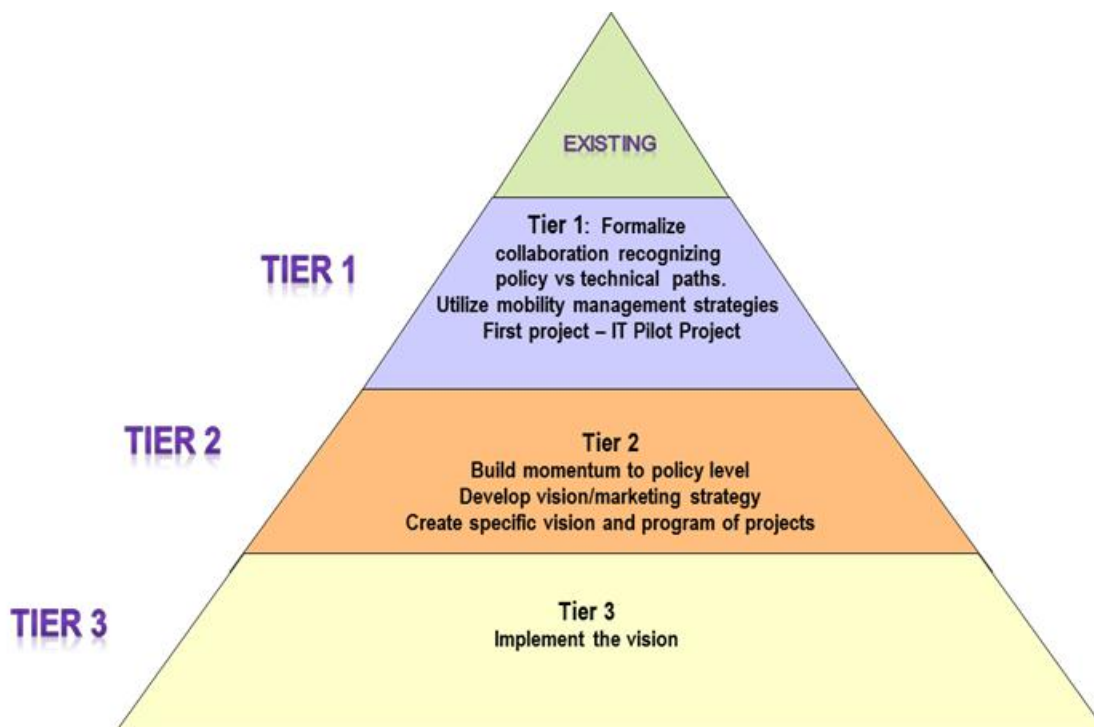
Land use plans and transit-oriented design standards should be coordinated and developed for the key transit corridors and surrounding areas. For the high priority transit corridors, it is recommended that municipalities develop joint development policies for development and redevelopment plans. The plans should create a more intensive land use patterns with denser development at transit nodes, such as retail, apartments and offices around major activity areas.

Concentration of population and jobs in areas with interconnected street patterns makes it easier and less expensive to provide convenient and reliable transit service. Better transit service increases the likelihood of travelers choosing to use services offered. Areas that are targeted for transit-oriented development

with supported land uses should include policies for establishing or improving area roadway patterns that support transit service. A recent example of connectivity is the MLK Corridor Redevelopment Plan that envisions transportation options for all users.

Tier 3 Coordination

Tier 3 is the maximum level of coordination among all agencies. More formalized processes will include many scenarios including joint service contracts, development of enhanced services throughout the region. At this level, as change becomes more systemic, the process would likely be more diverse and include items such as financial agreements, joint grant pursuits, etc. As shown in the following pyramid, Tier 3 is implementing the vision of a regional transit system with coordination in place among all agencies.



Developing a network of services for Savannah and the surrounding region improves mobility for residents and coordination among transit agencies. To encourage people to leave their cars at home, transit must compete with the automobile in terms of speed, reliability, and convenience. Riders should be able to move freely from one transit system to another. Connections between systems are as important as the routes within each system.

Central to this report’s recommendations is the concept that a network of public transportation strategies, from improved local fixed-route bus service to ridesharing, vanpool programs, technology and development of transfer stations are supported by transit-oriented land uses. Service should be tailored to local conditions, with flexible routing in low-density suburban areas, and more direct, frequent service on major roads with concentrated demand.

The alternatives within the report are not presented as a single package that must be accepted as a whole. It is recommended that investment in public transportation build from the introduction of regional bus service to additional service elements or modes over time. Initial investments for local agencies are relatively modest. Additional elements, such as express bus service, vanpool programs, and higher capacity transit investments, should be introduced based on an evaluation of the previously introduced service.

The established Advisory Committee will develop evaluation criteria for service implementation and establish performance measures for determining the effectiveness of the implemented service. If performance goals are met, subsequent incremental steps should be taken. The overall vision plan should be converted to a regional transit development plan, similar to the CORE MPO's Long Range Transportation Plan, with updates every three to five years to evaluate and prioritize existing and proposed transit projects. The transit development plan would detail the analysis and prioritization of transit projects and document the evaluation criteria and performance measures.

The high priority transit corridors identified within this report are the backbone of the region's transportation network, including future transit services. The corridors are the drivers to begin implementation of the Transit Mobility Vision Plan recommendations to connect people to jobs and activity centers.